

Eager 300 Report

Page: 1 Sample: CCB (A100420044)

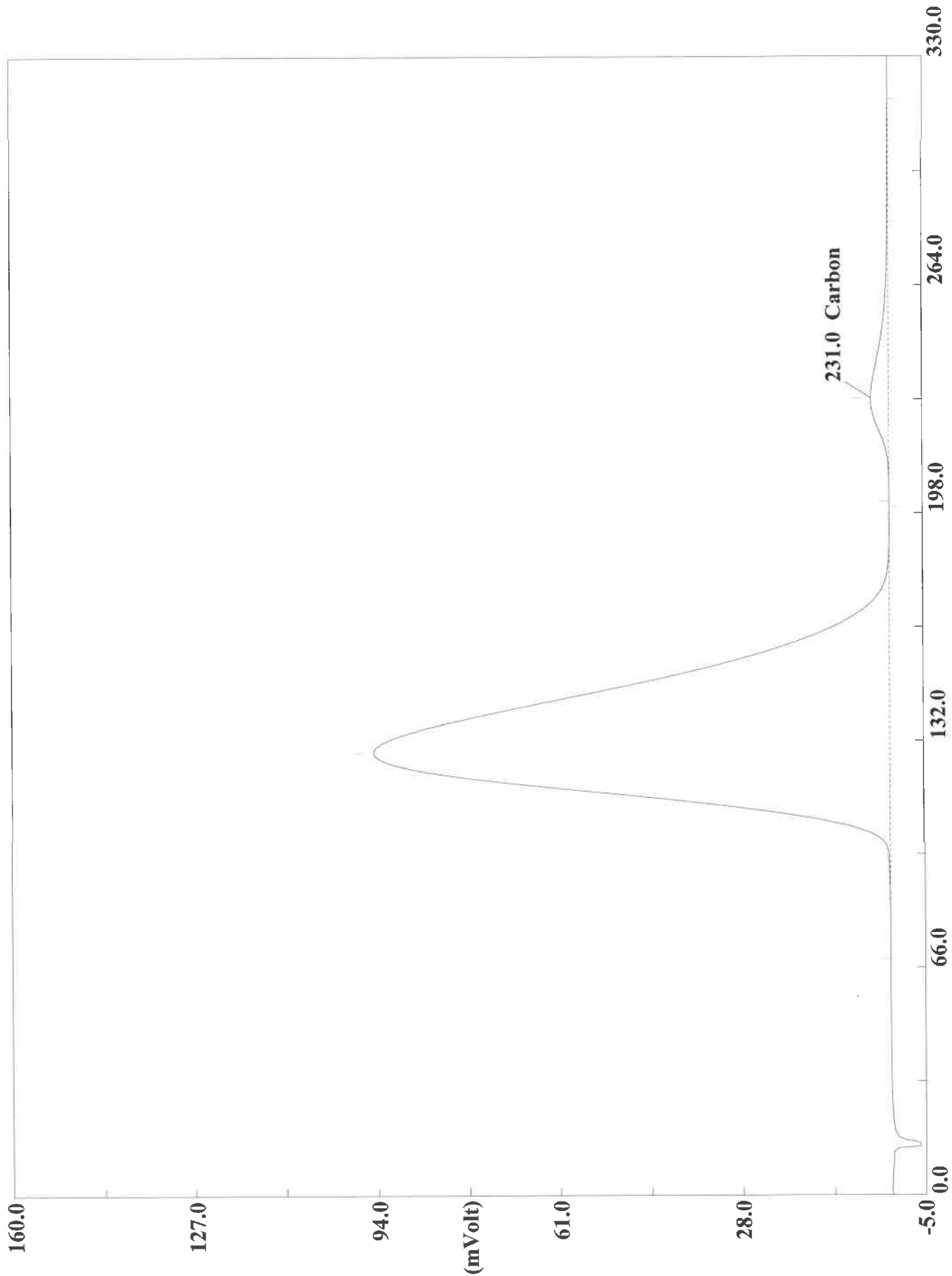
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420044
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 16:48 Printed : 10/5/2020 06:59
Sample ID : CCB (# 55)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420045.DAT

Sample name : 180-111287-A-123 Analysed : 10/04/2020 16:54

Eager 300 Report

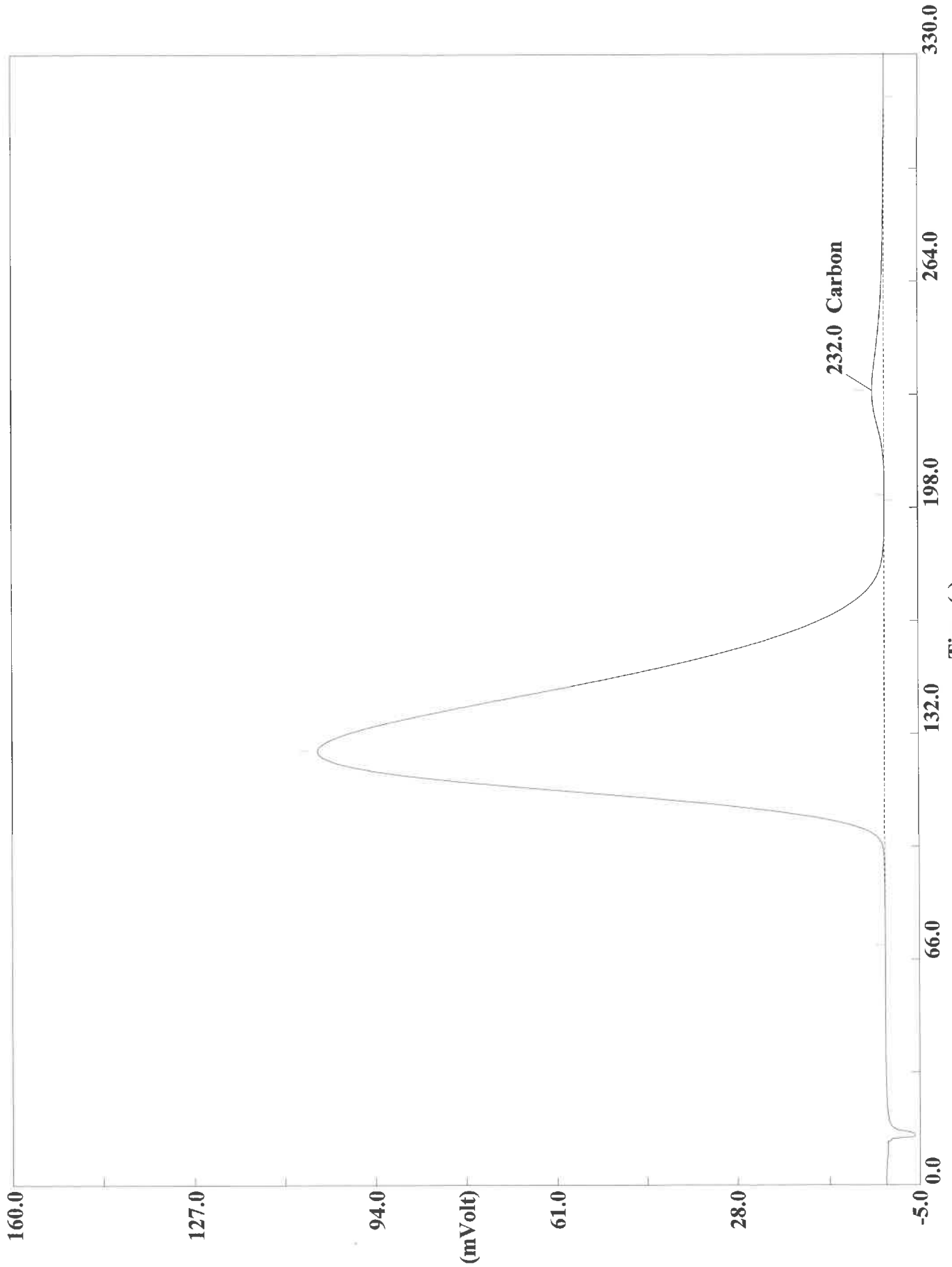
Page: 1 Sample: 180-111287-A-123 (A100420045)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420045
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 16:54 Printed : 10/5/2020 06:59
Sample ID : 180-111287-A-123 (# 56)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.8634	231	954623	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420046.DAT
Sample name : 180-111287-A-123 Analysed : 10/04/2020 16:59

Eager 300 Report

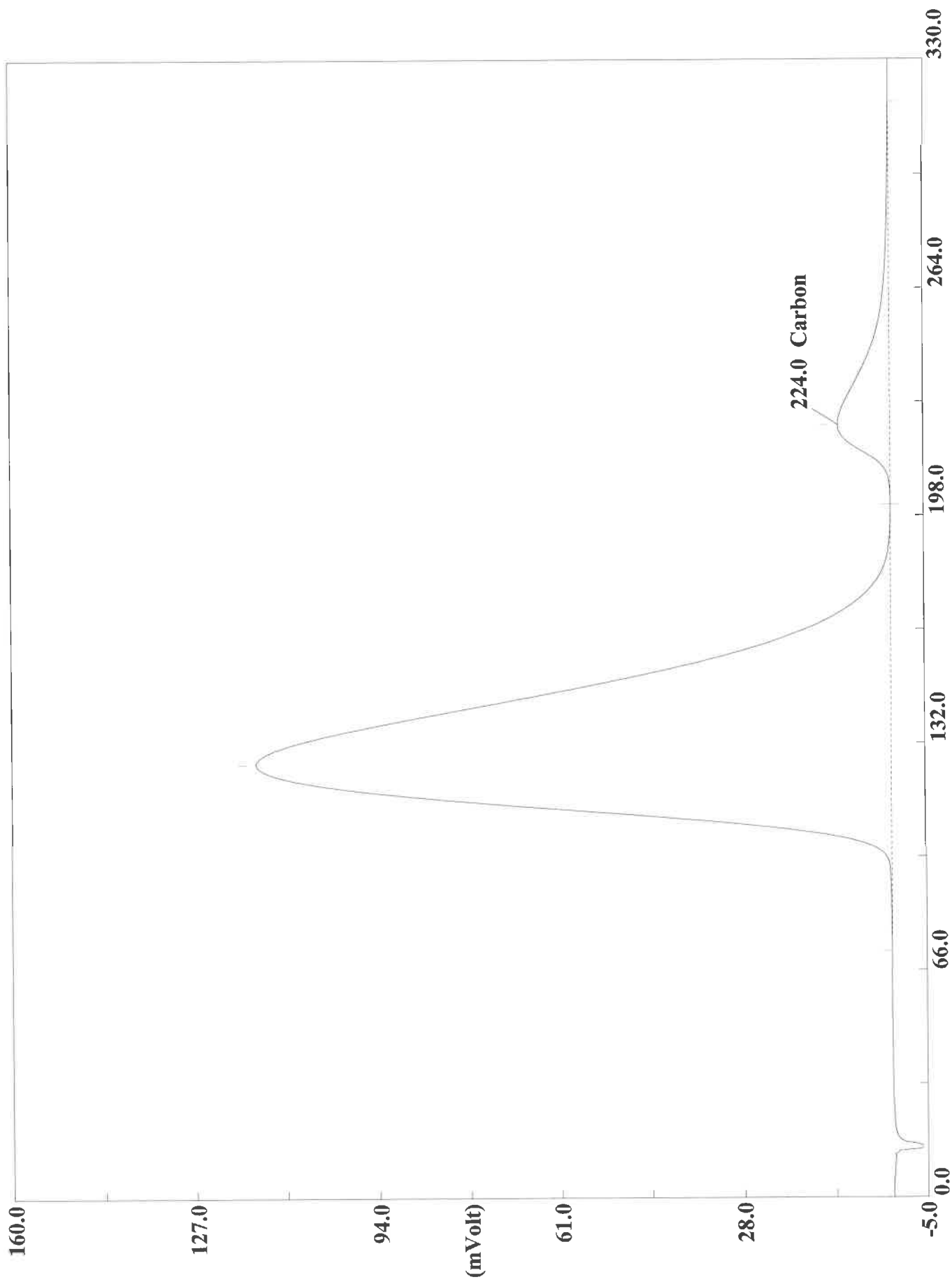
Page: 1 Sample: 180-111287-A-123 (A100420046)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420046
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 16:59 Printed : 10/5/2020 06:59
Sample ID : 180-111287-A-123 (# 57)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.7817	232	698841	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420048.DAT
Sample name : 180-111287-A-124 Analysed : 10/04/2020 17:11

Eager 300 Report

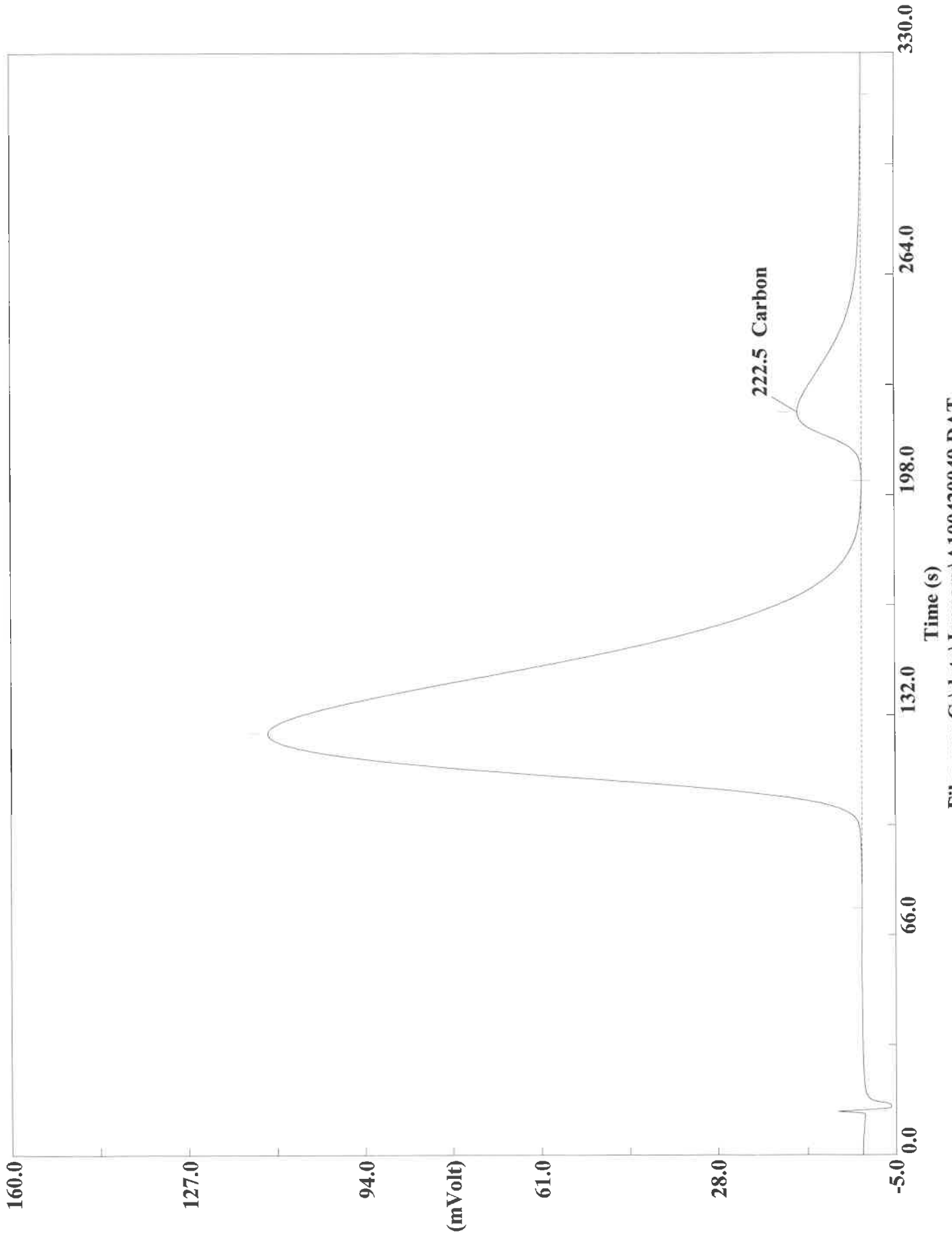
Page: 1 Sample: 180-111287-A-124 (A100420048)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420048
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 17:11 Printed : 10/5/2020 06:59
Sample ID : 180-111287-A-124 (# 59)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.9938	224	2758697	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420049.DAT
Sample name : 180-111287-A-124 Analysed : 10/04/2020 17:16

Eager 300 Report

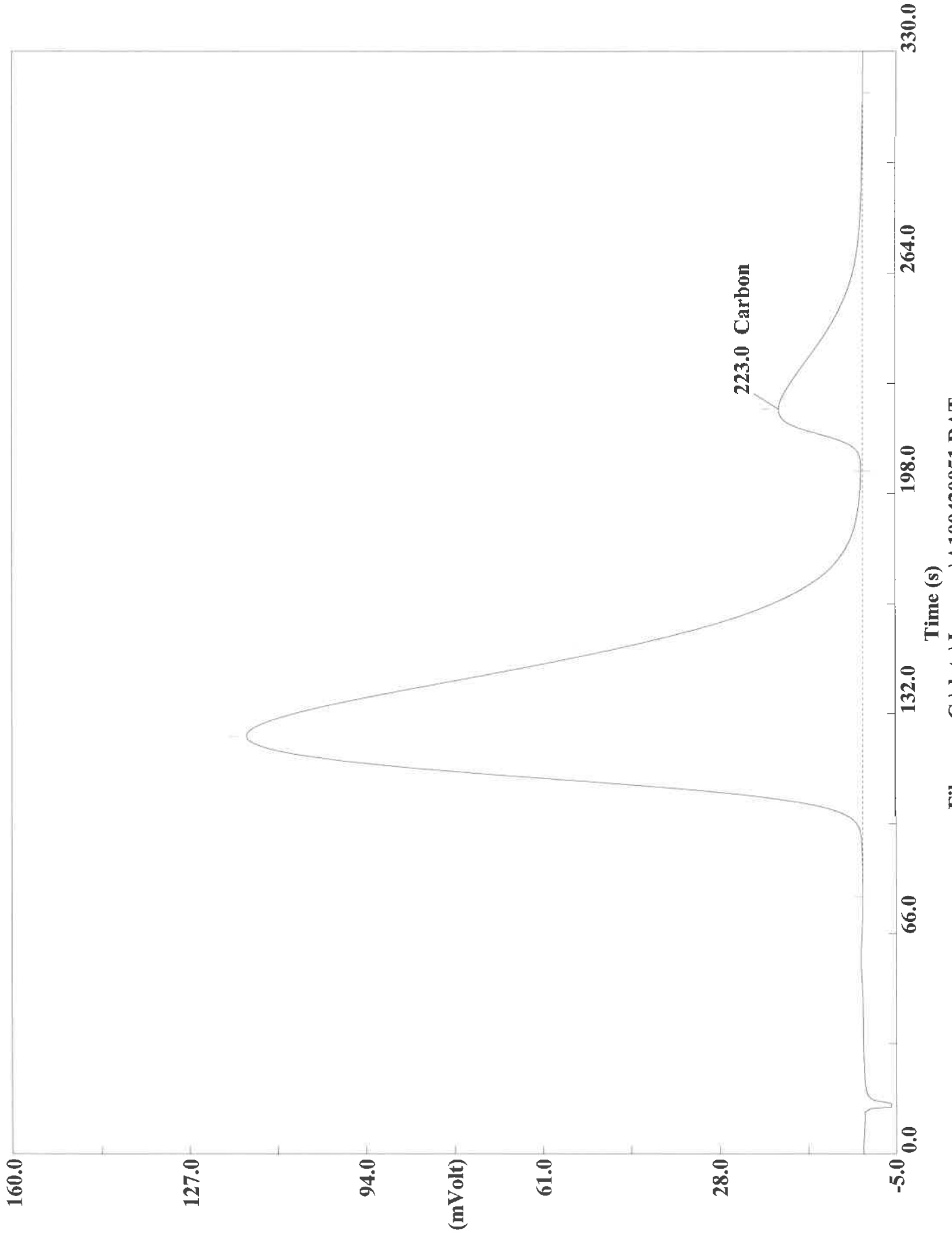
Page: 1 Sample: 180-111287-A-124 (A100420049)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420049
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 17:16 Printed : 10/5/2020 06:59
Sample ID : 180-111287-A-124 (# 60)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.5187	223	3393522	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420051.DAT

Sample name :180-111287-A-124 MS Analysed :10/04/2020 17:27

Eager 300 Report

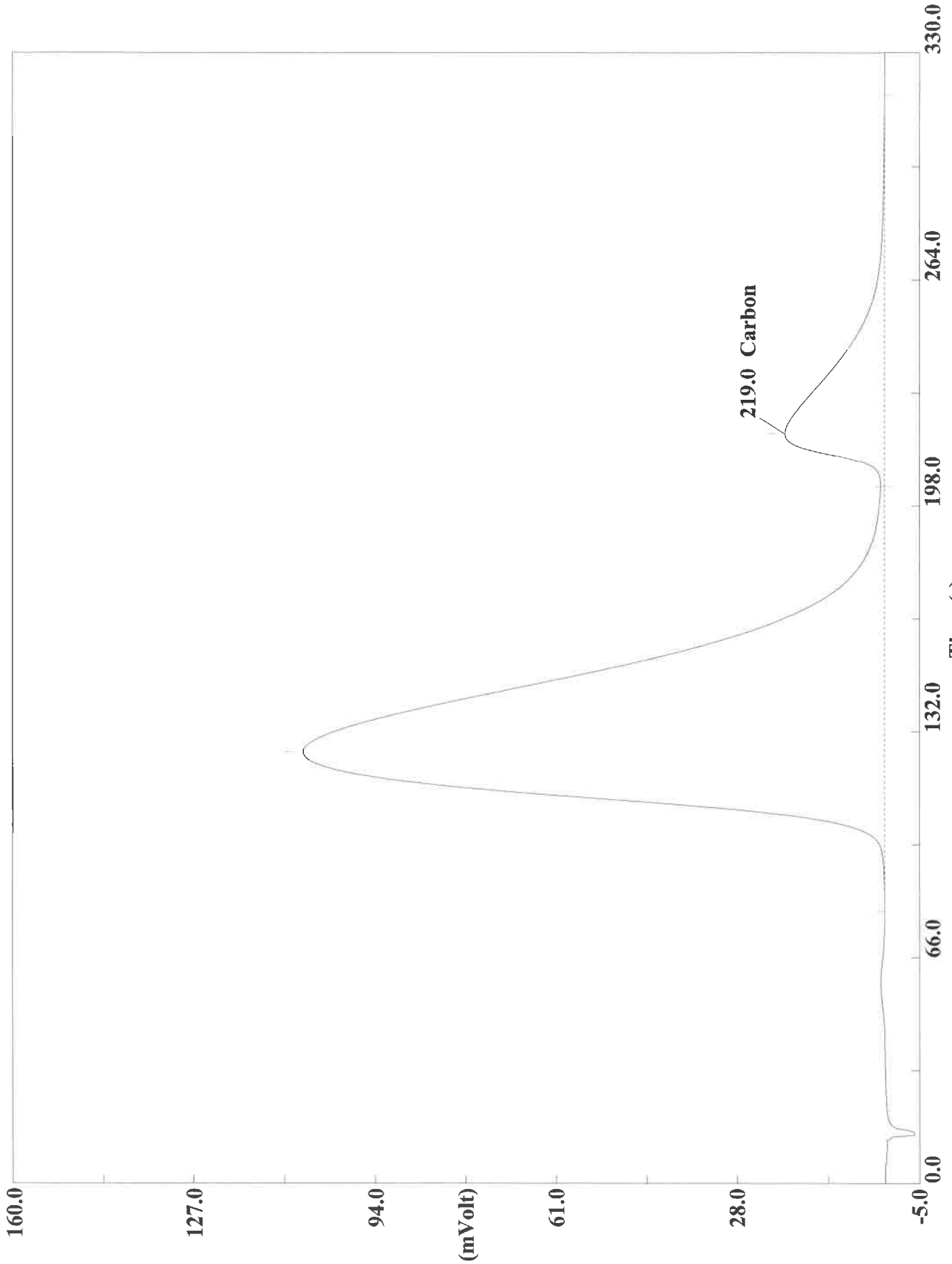
Page: 1 Sample: 180-111287-A-124 MS (A100420051)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420051
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 17:27 Printed : 10/5/2020 07:00
Sample ID : 180-111287-A-124 MS (# 62)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.9

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.4946	223	4880940	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420052.DAT

Sample name : 180-111287-A-124 MS Analysed : 10/04/2020 17:33

Eager 300 Report

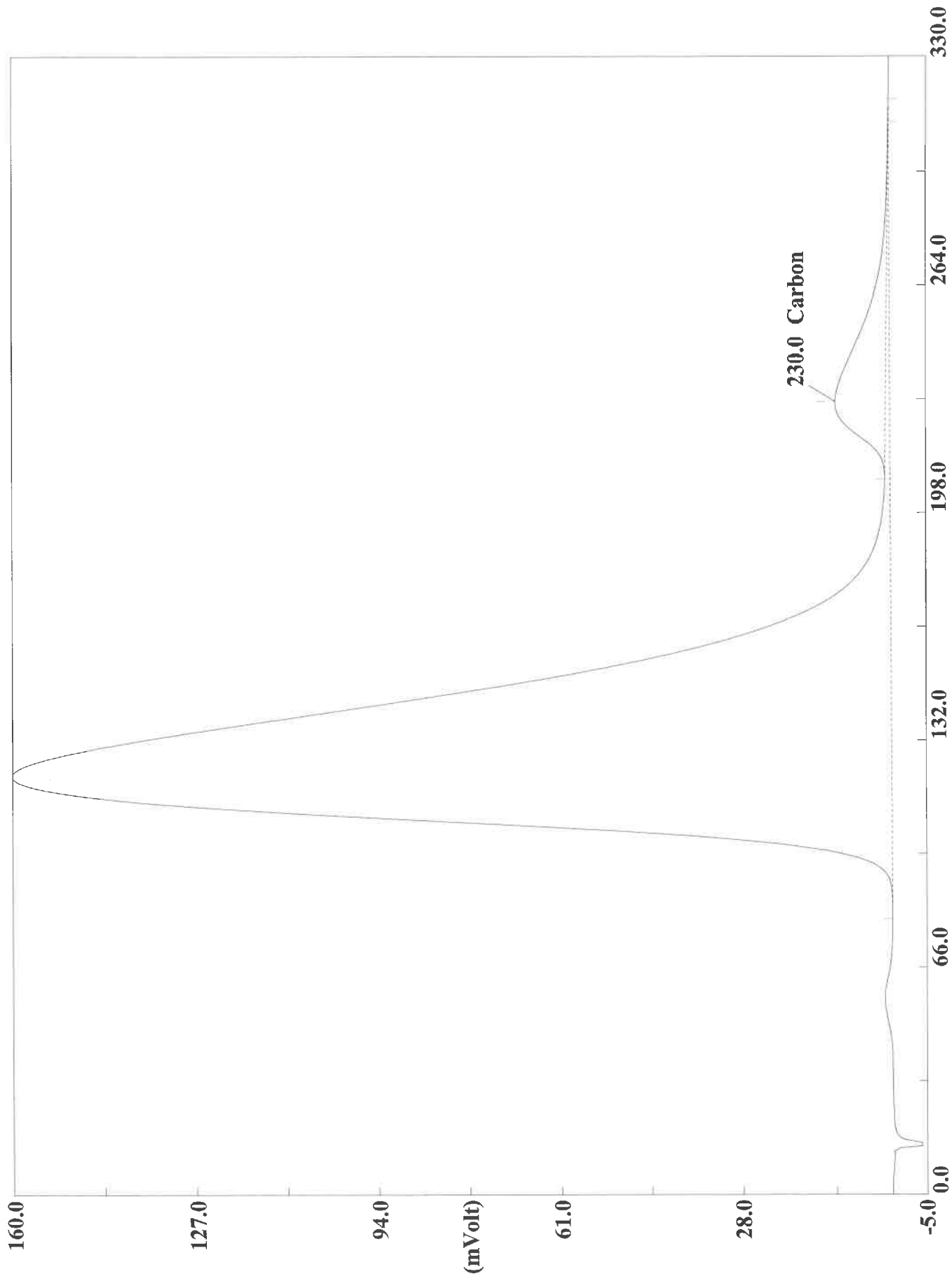
Page: 1 Sample: 180-111287-A-124 MS (A100420052)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420052
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 17:33 Printed : 10/5/2020 07:00
Sample ID : 180-111287-A-124 MS (# 63)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	5.3056	219	5128809	FU	1.000000	

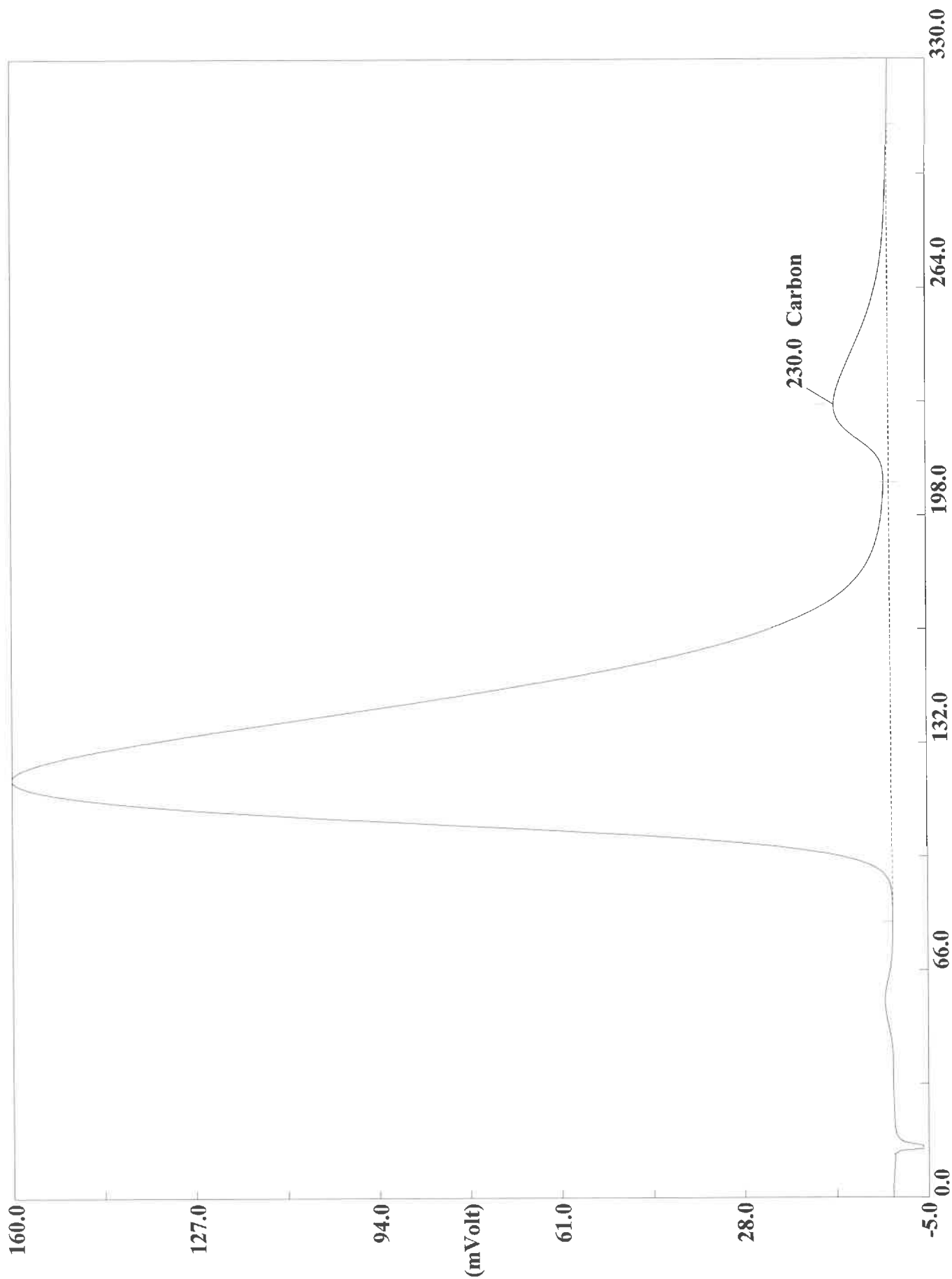
NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420054.DAT

Sample name : 180-111287-A-124 MSD Analysed : 10/04/2020 17:44

MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420054.DAT
Sample name :180-111287-A-124 MSD Analysed :10/04/2020 17:44

Eager 300 Report

Page: 1 Sample: 180-111287-A-124 MSD (A100420054)

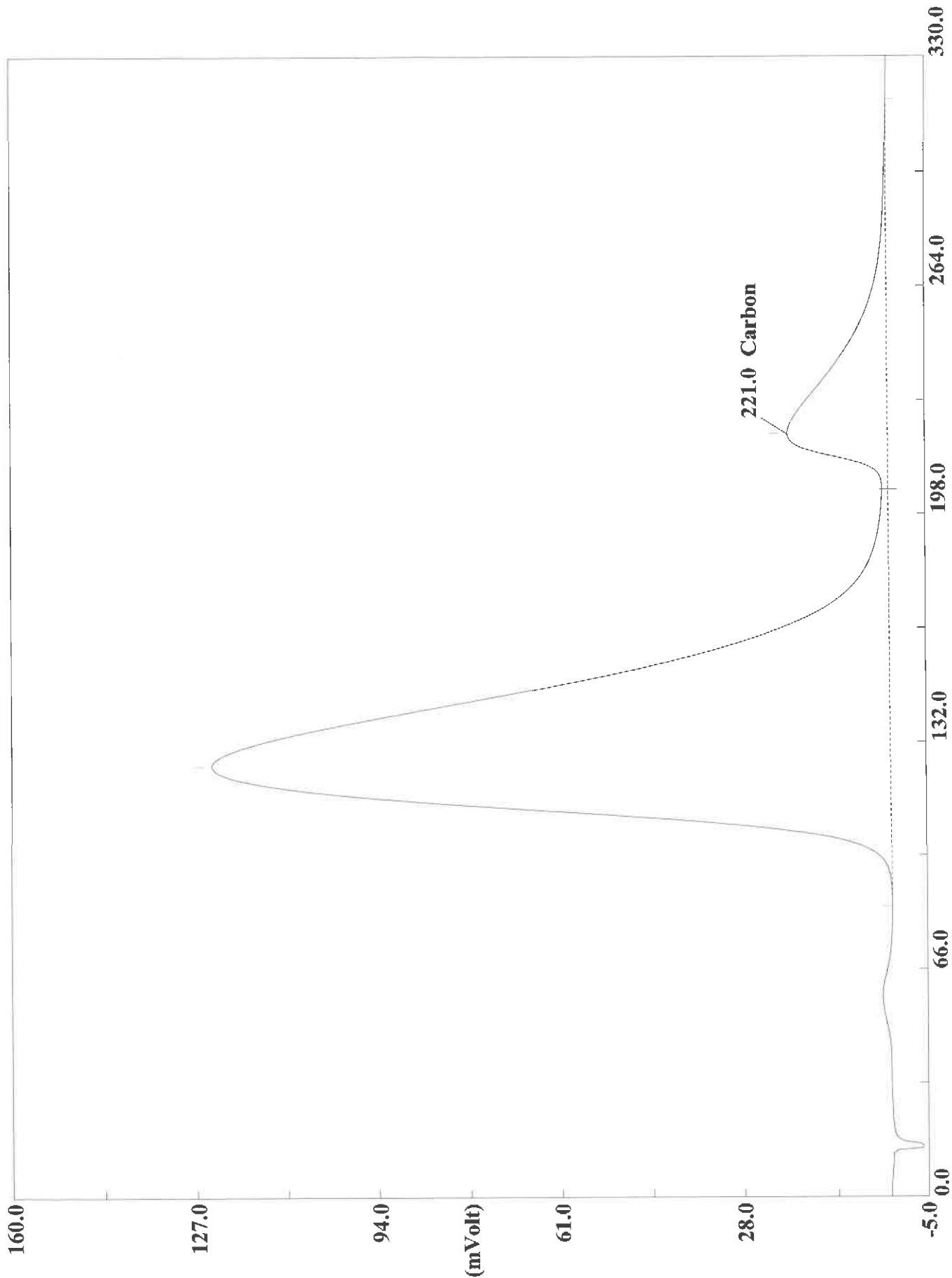
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420054
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 17:44 Printed : 10/5/2020 08:28
Sample ID : 180-111287-A-124 MSD (# 65)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.1

Calib. method : using 'Least Squares to Linear fit'

Warning Chromatogram has been subjected to manual integration.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.7627	230	3532248	mi	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420055.DAT

Sample name :180-111287-A-124 MSD Analysed :10/04/2020 17:50

Eager 300 Report

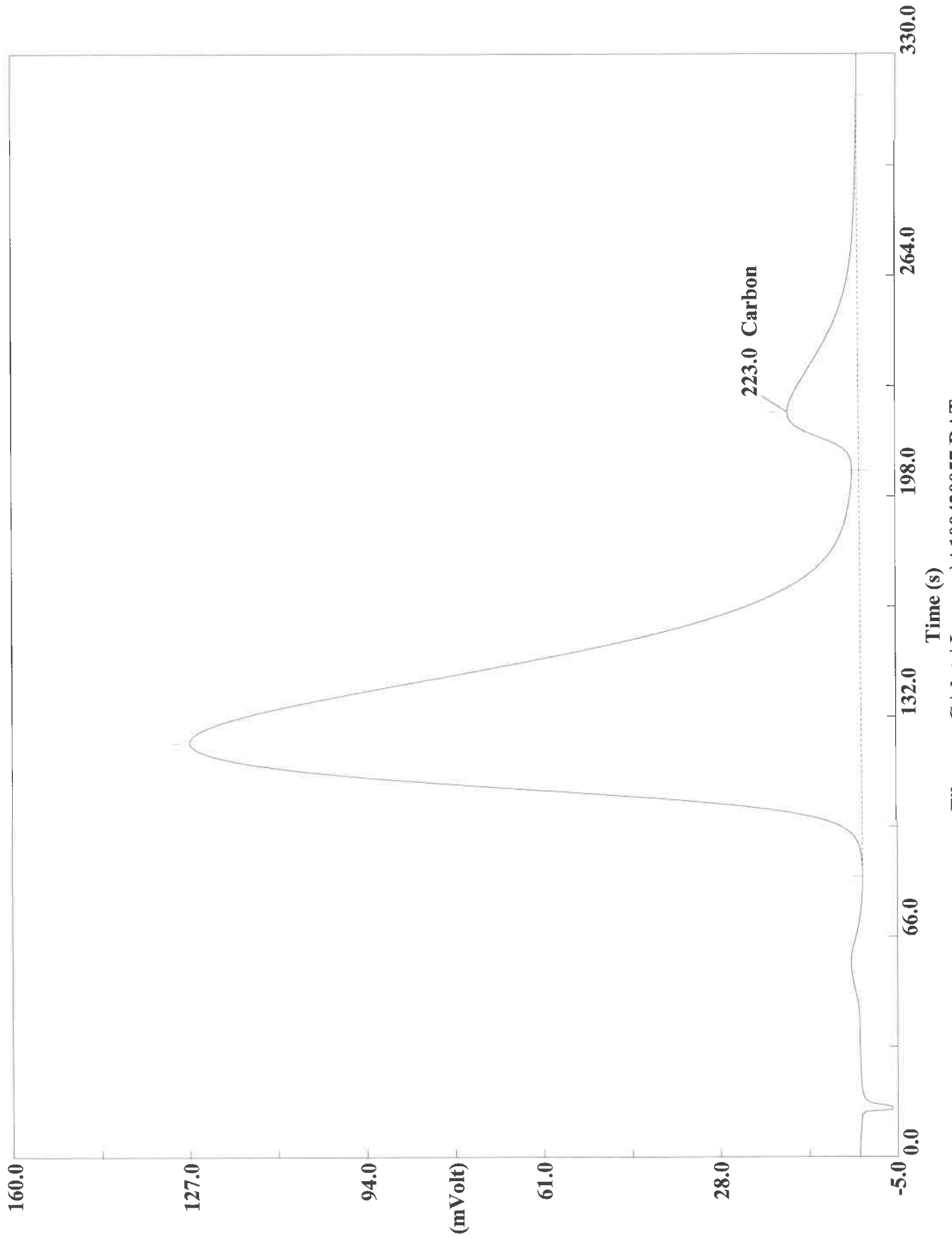
Page: 1 Sample: 180-111287-A-124 MSD (A100420055)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420055
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 17:50 Printed : 10/5/2020 07:00
Sample ID : 180-111287-A-124 MSD (# 66)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	5.0228	221	5745785	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420057.DAT
Sample name : 180-111287-A-126 Analysed : 10/04/2020 18:01

Eager 300 Report

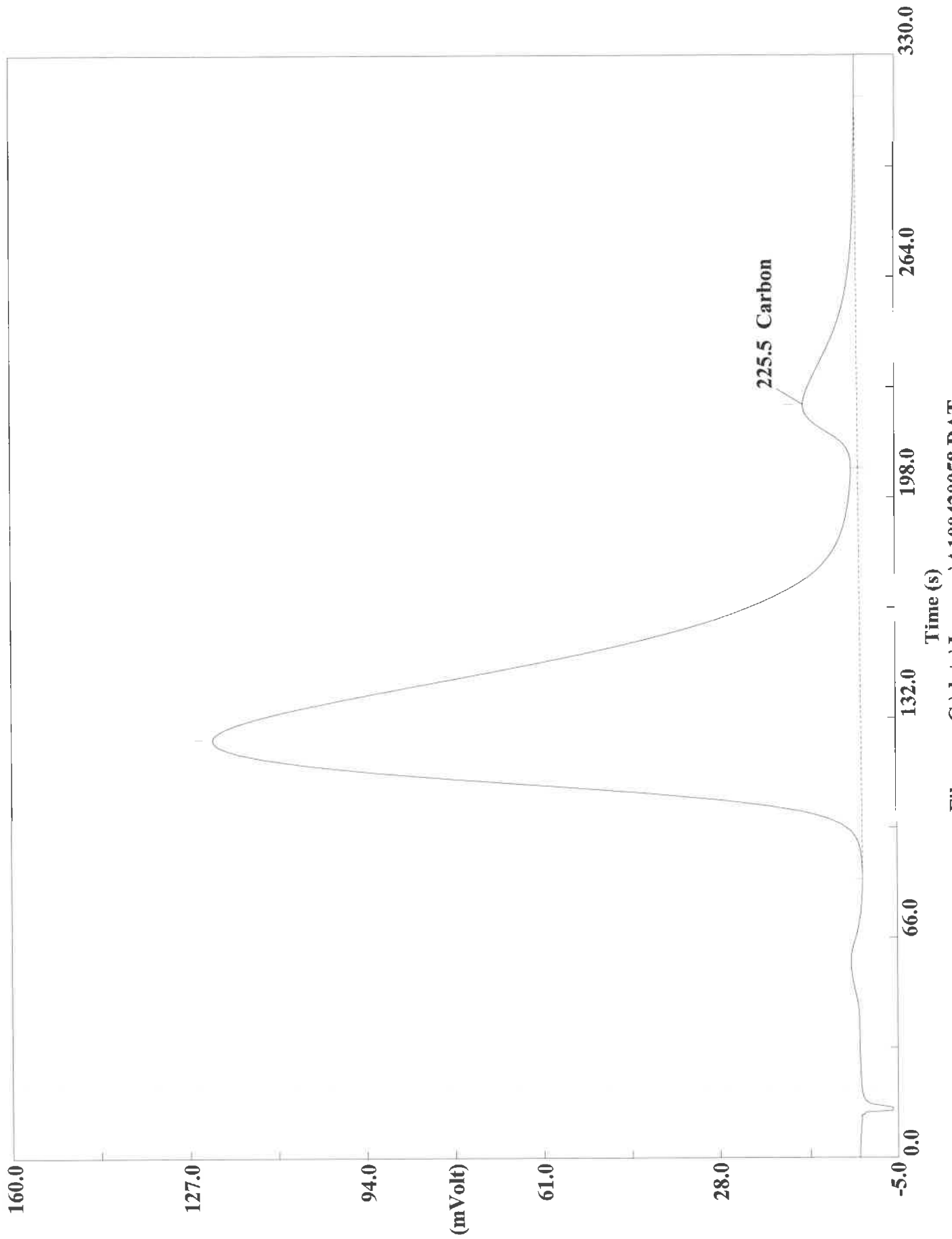
Page: 1 Sample: 180-111287-A-126 (A100420057)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420057
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 18:01 Printed : 10/5/2020 07:00
Sample ID : 180-111287-A-126 (# 68)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.1475	223	4328976	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420058.DAT
Sample name : 180-111287-A-126 Analysed : 10/04/2020 18:06

Eager 300 Report

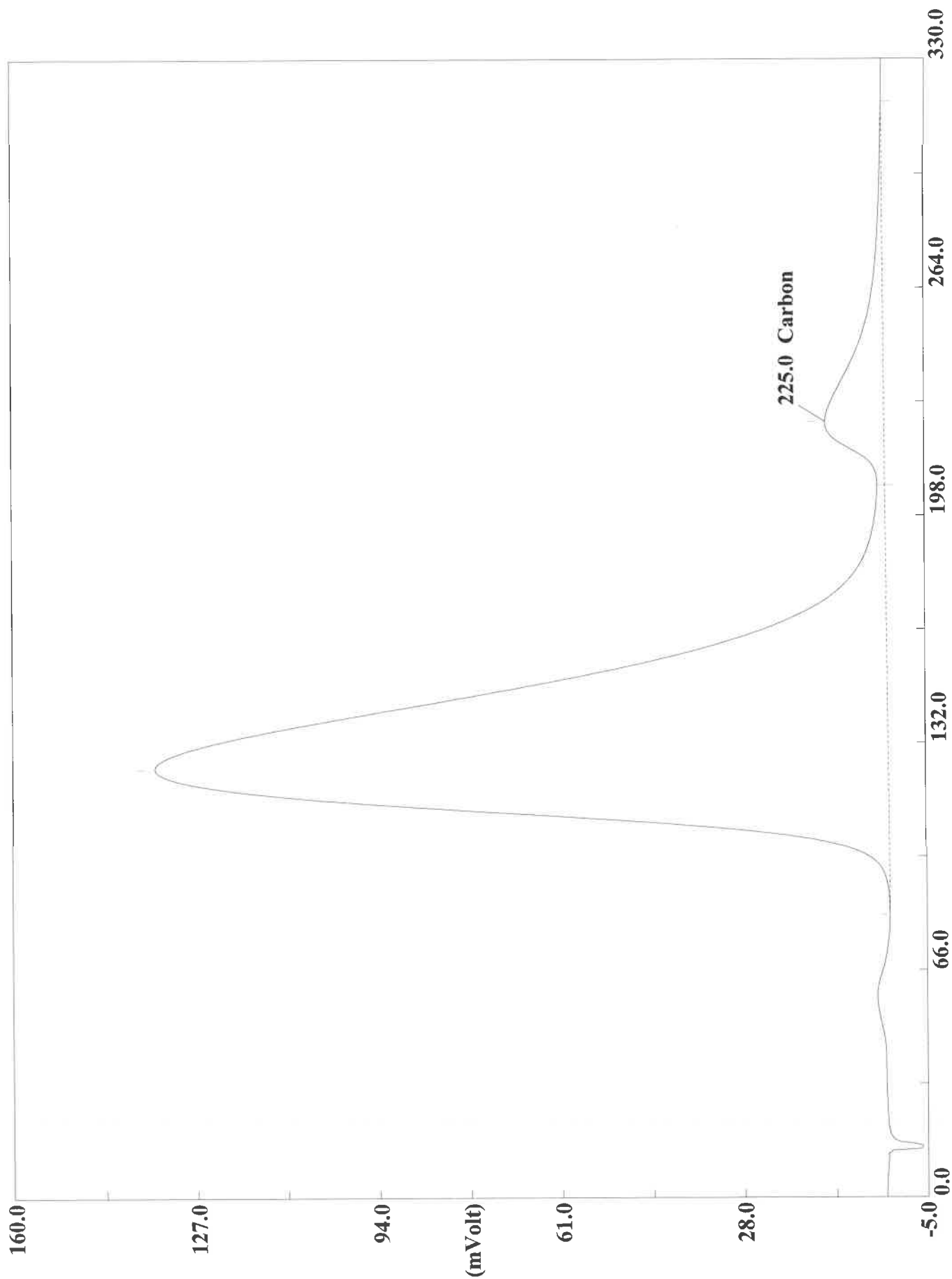
Page: 1 Sample: 180-111287-A-126 (A100420058)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420058
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 18:06 Printed : 10/5/2020 07:00
Sample ID : 180-111287-A-126 (# 69)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.6298	226	3330842	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420060.DAT
Sample name : 180-111287-A-127 Analysed : 10/04/2020 18:18

Eager 300 Report

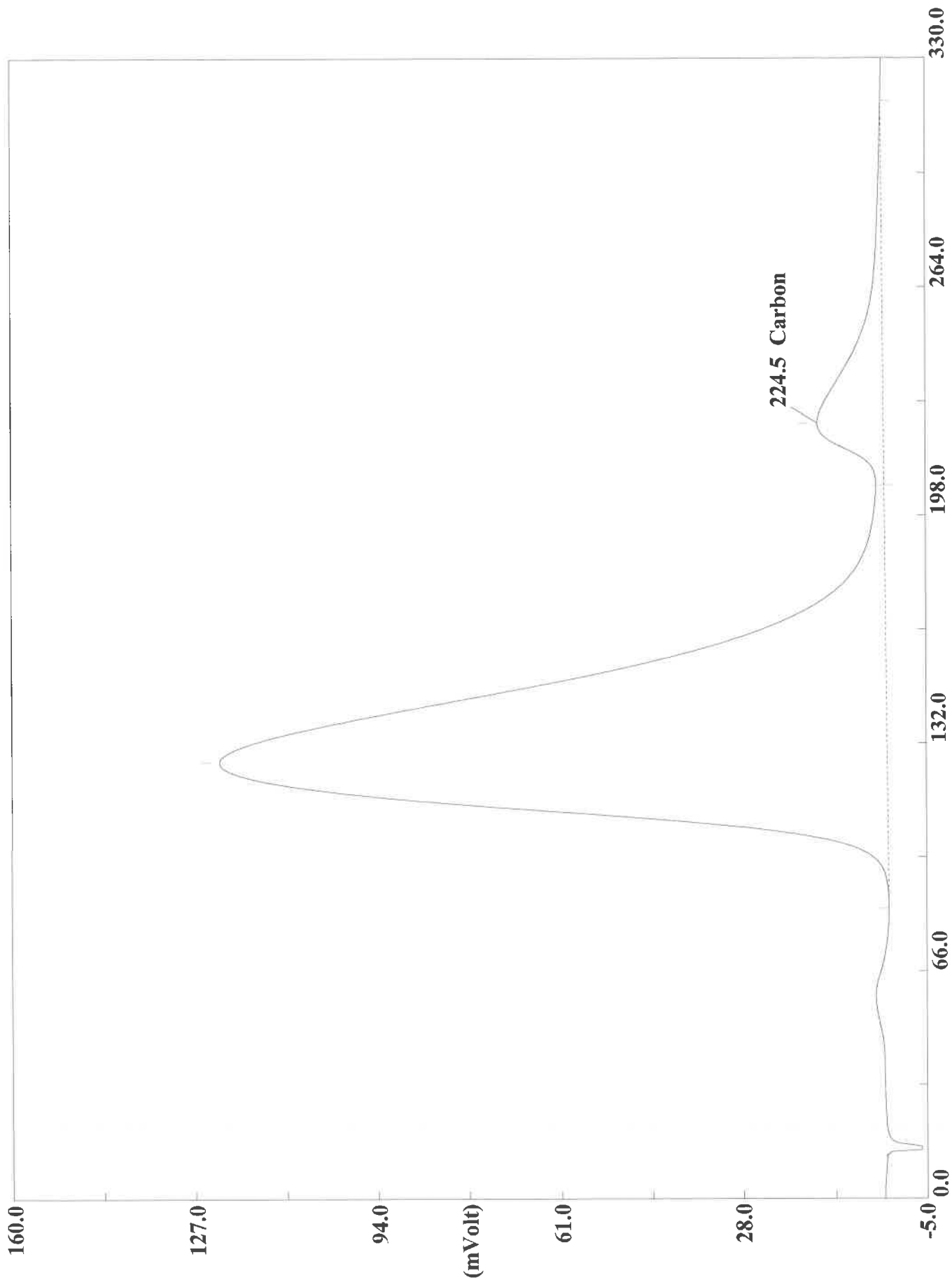
Page: 1 Sample: 180-111287-A-127 (A100420060)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420060
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 18:18 Printed : 10/5/2020 07:00
Sample ID : 180-111287-A-127 (# 71)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.3449	225	3608963	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420061.DAT
Sample name :180-111287-A-127 Analysed :10/04/2020 18:23

Eager 300 Report

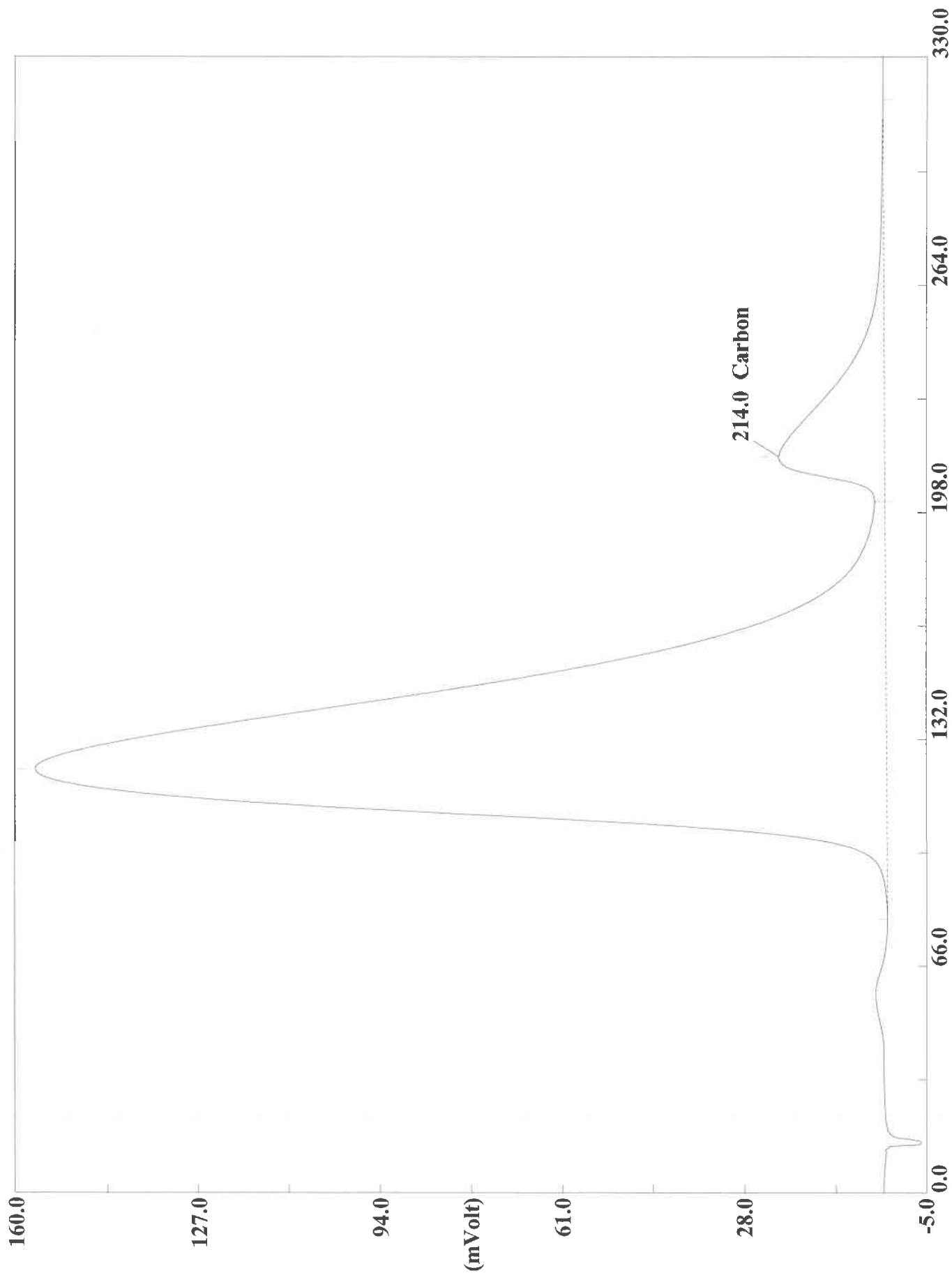
Page: 1 Sample: 180-111287-A-127 (A100420061)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420061
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 18:23 Printed : 10/5/2020 07:00
Sample ID : 180-111287-A-127 (# 72)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.6116	225	3804262	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420063.DAT
Sample name :CCV Analysed :10/04/2020 18:34

Eager 300 Report

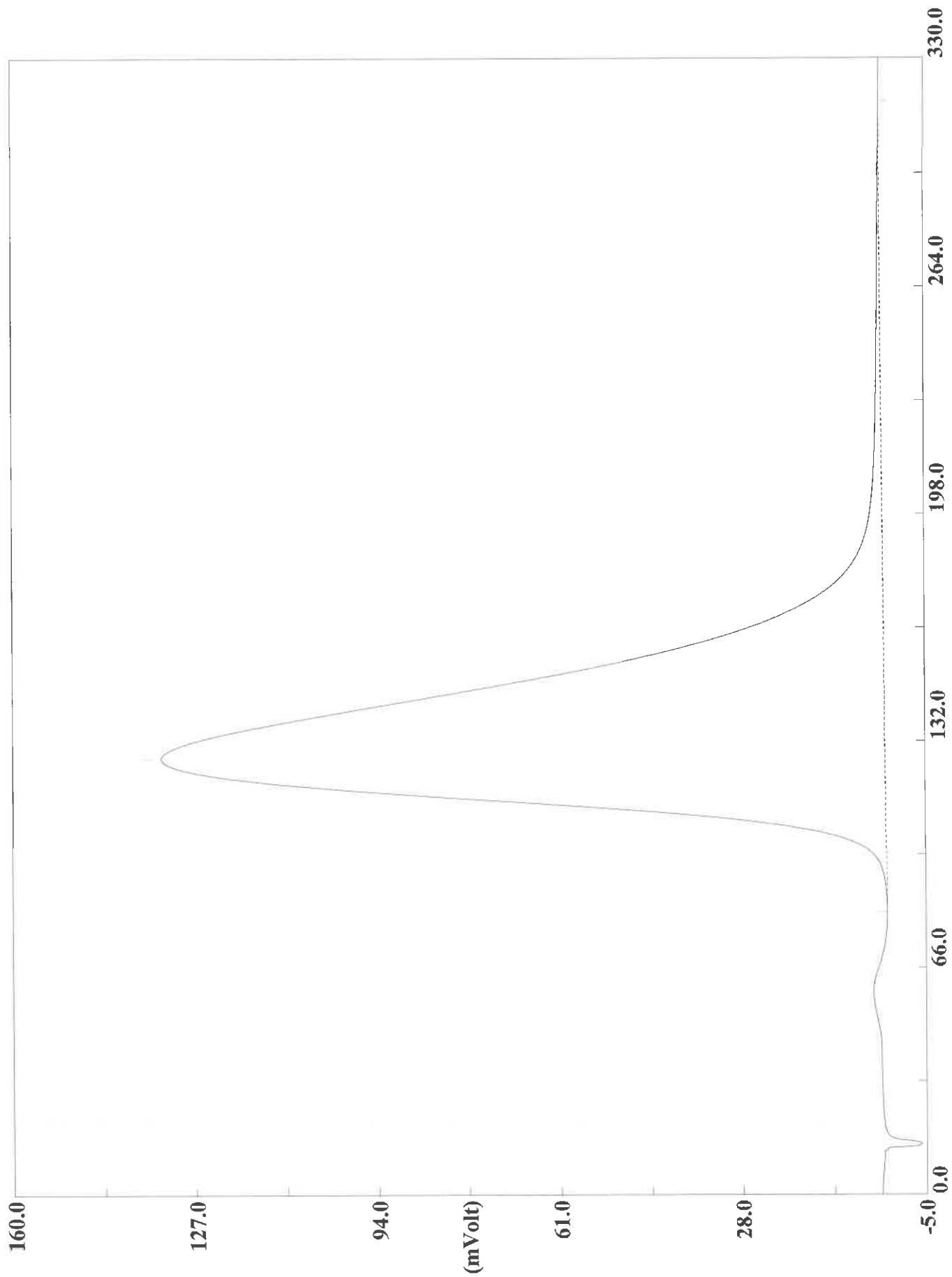
Page: 1 Sample: CCV (A100420063)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420063
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 18:34 Printed : 10/5/2020 07:00
Sample ID : CCV (# 74)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0794	214	5611919	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420064.DAT

Sample name :CCB Analysed :10/04/2020 18:40

Eager 300 Report

Page: 1 Sample: CCB (A100420064)

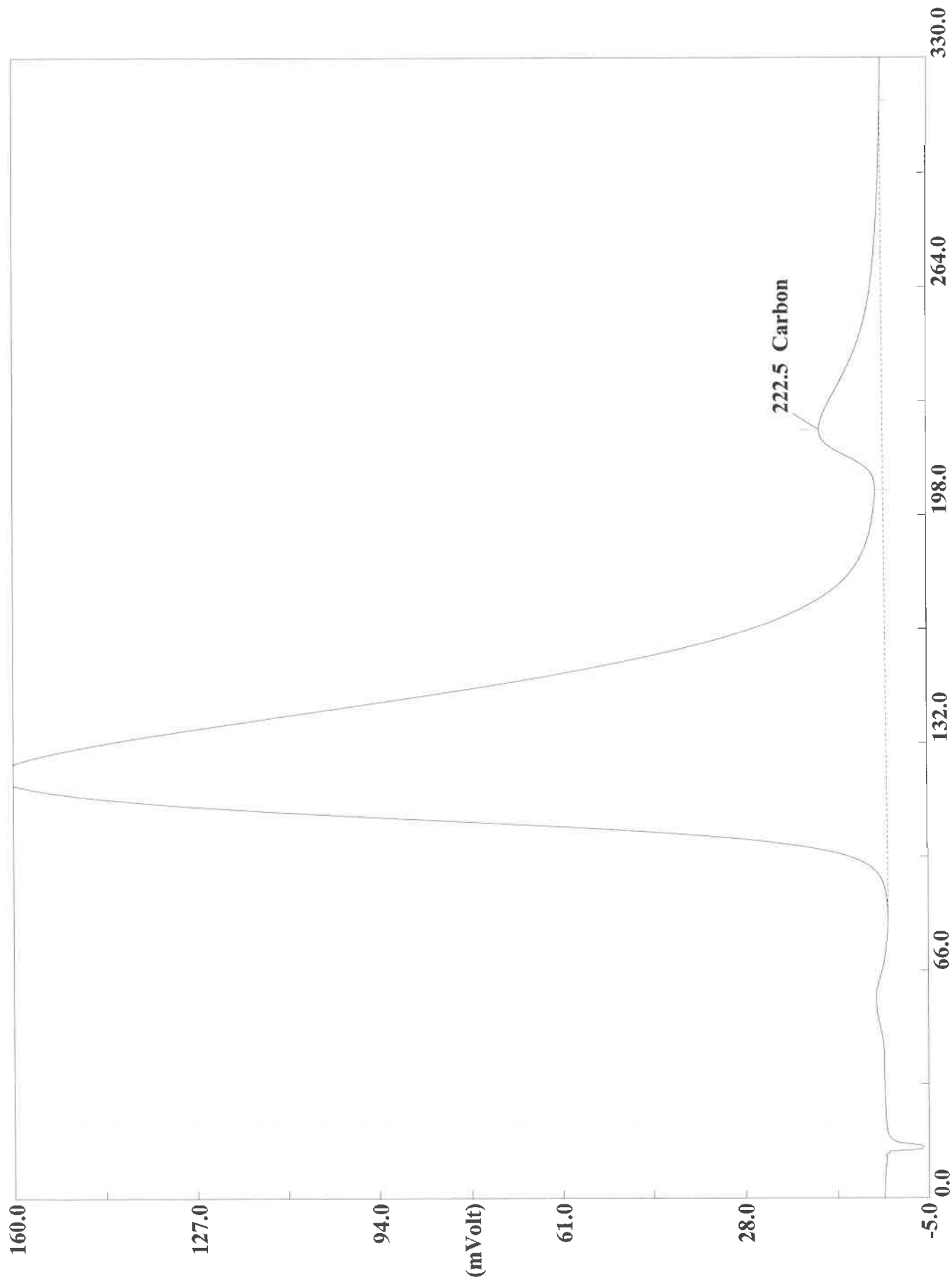
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420064
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 18:40 Printed : 10/5/2020 07:00
Sample ID : CCB (# 75)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420065.DAT

Sample name : 180-111287-A-128 Analysed : 10/04/2020 18:45

Eager 300 Report

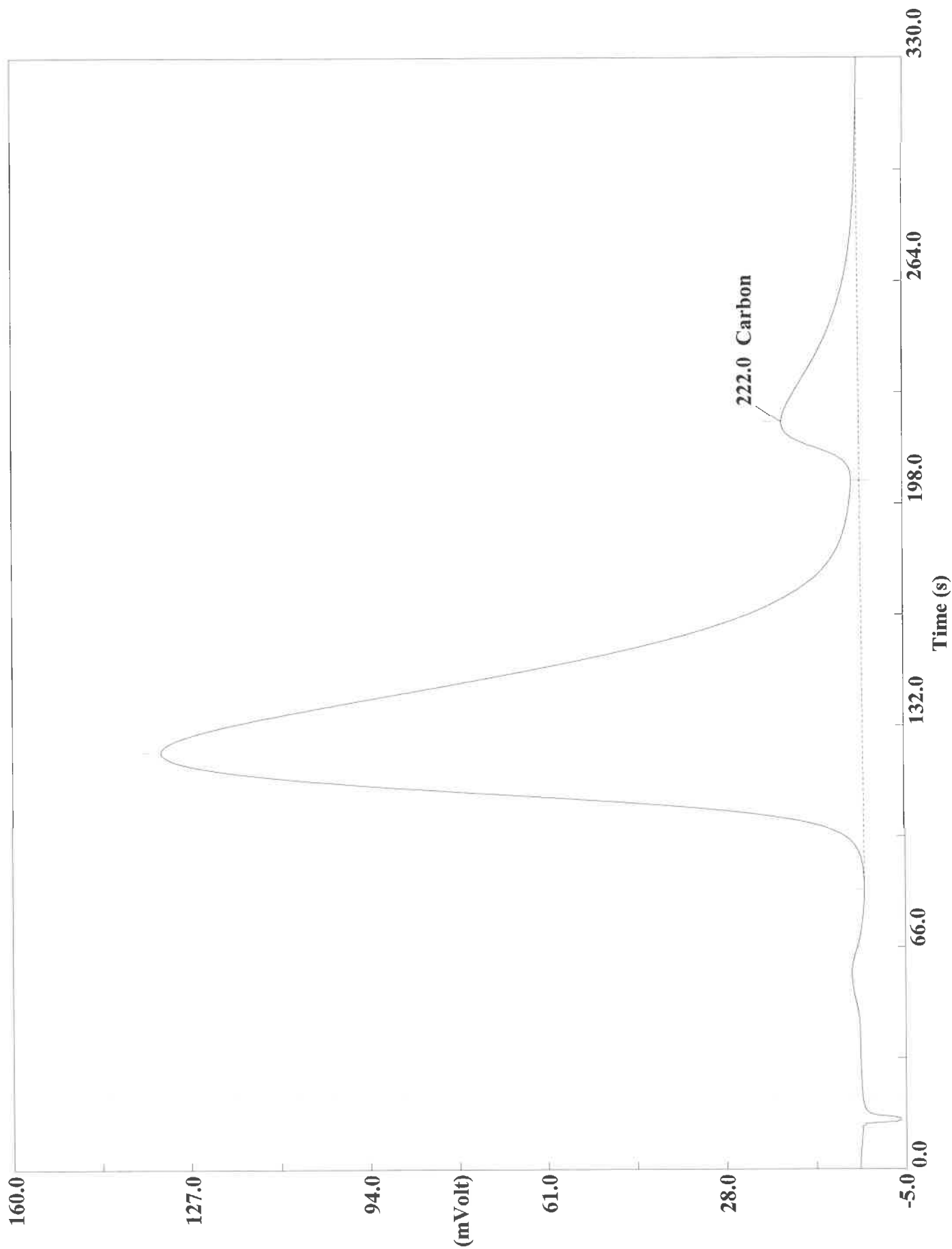
Page: 1 Sample: 180-111287-A-128 (A100420065)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420065
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 18:45 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-128 (# 76)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 24.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.1542	223	3961831	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420066.DAT
Sample name : 180-111287-A-128 Analysed : 10/04/2020 18:51

Eager 300 Report

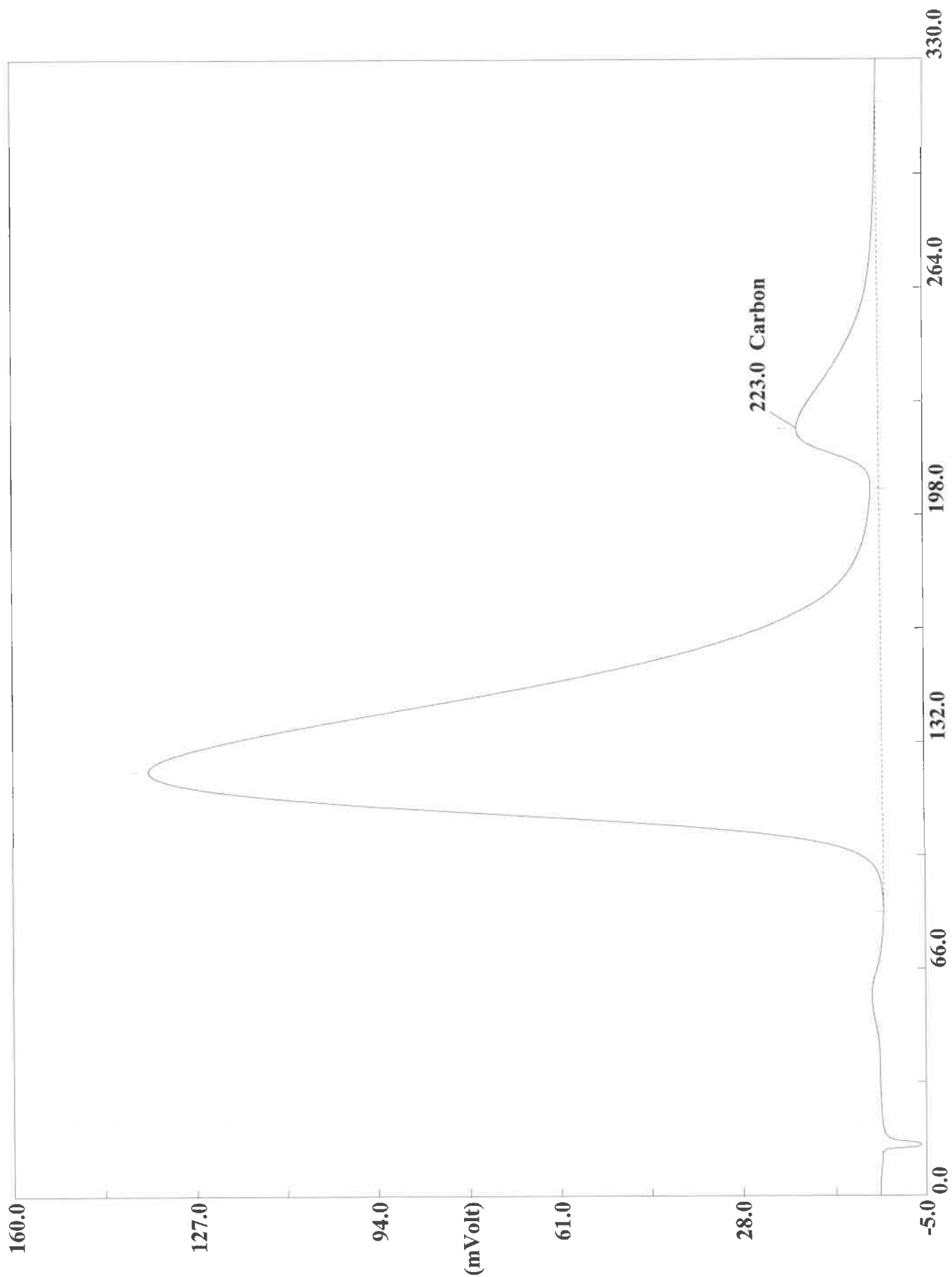
Page: 1 Sample: 180-111287-A-128 (A100420066)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420066
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 18:51 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-128 (# 77)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 24.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.9772	222	5043175	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420068.DAT
Sample name : 180-111287-A-129 Analysed : 10/04/2020 19:02

Eager 300 Report

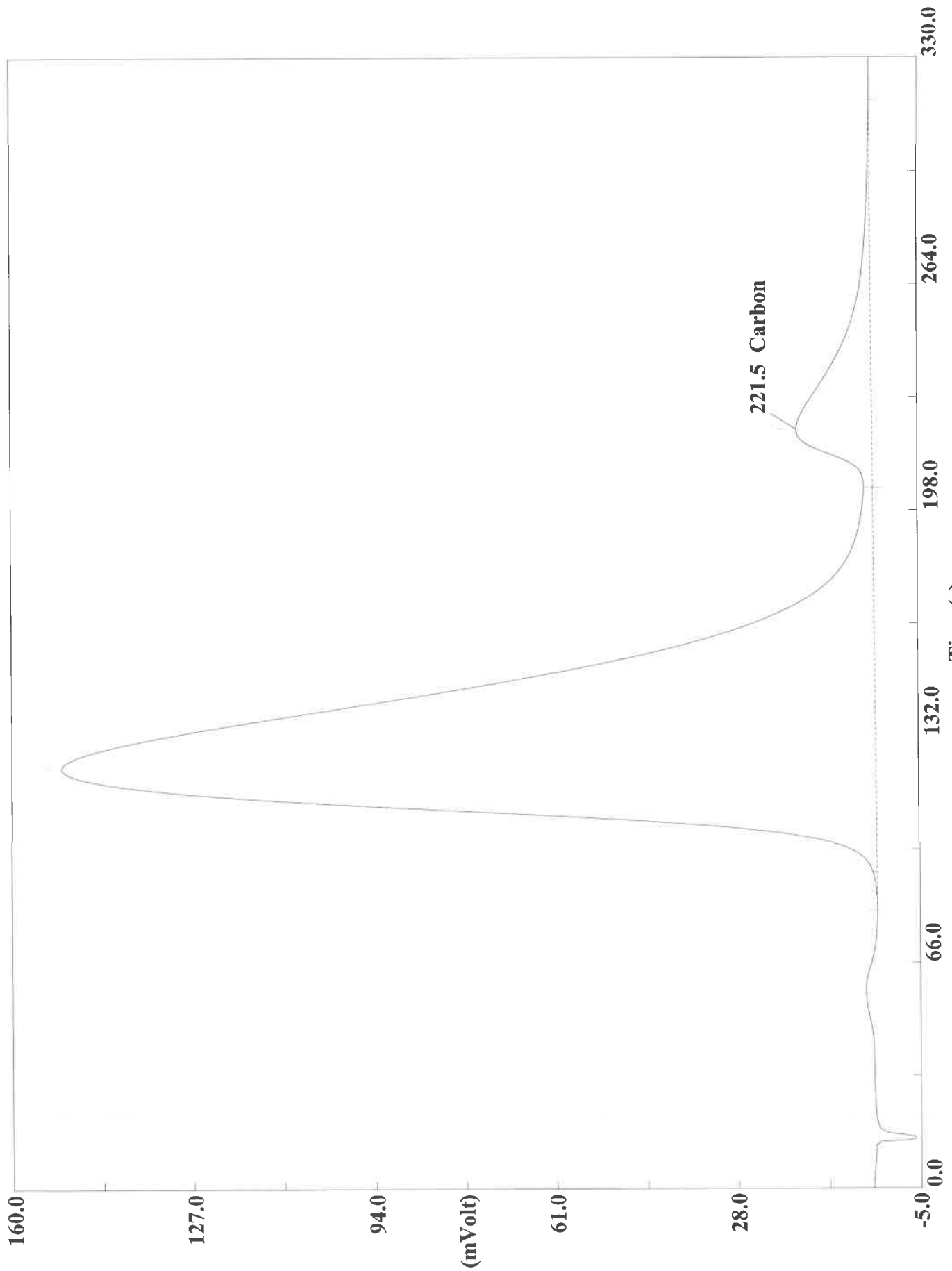
Page: 1 Sample: 180-111287-A-129 (A100420068)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420068
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 19:02 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-129 (# 79)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.7570	223	4844425	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420069.DAT
Sample name : 180-111287-A-129 Analysed : 10/04/2020 19:08

Eager 300 Report

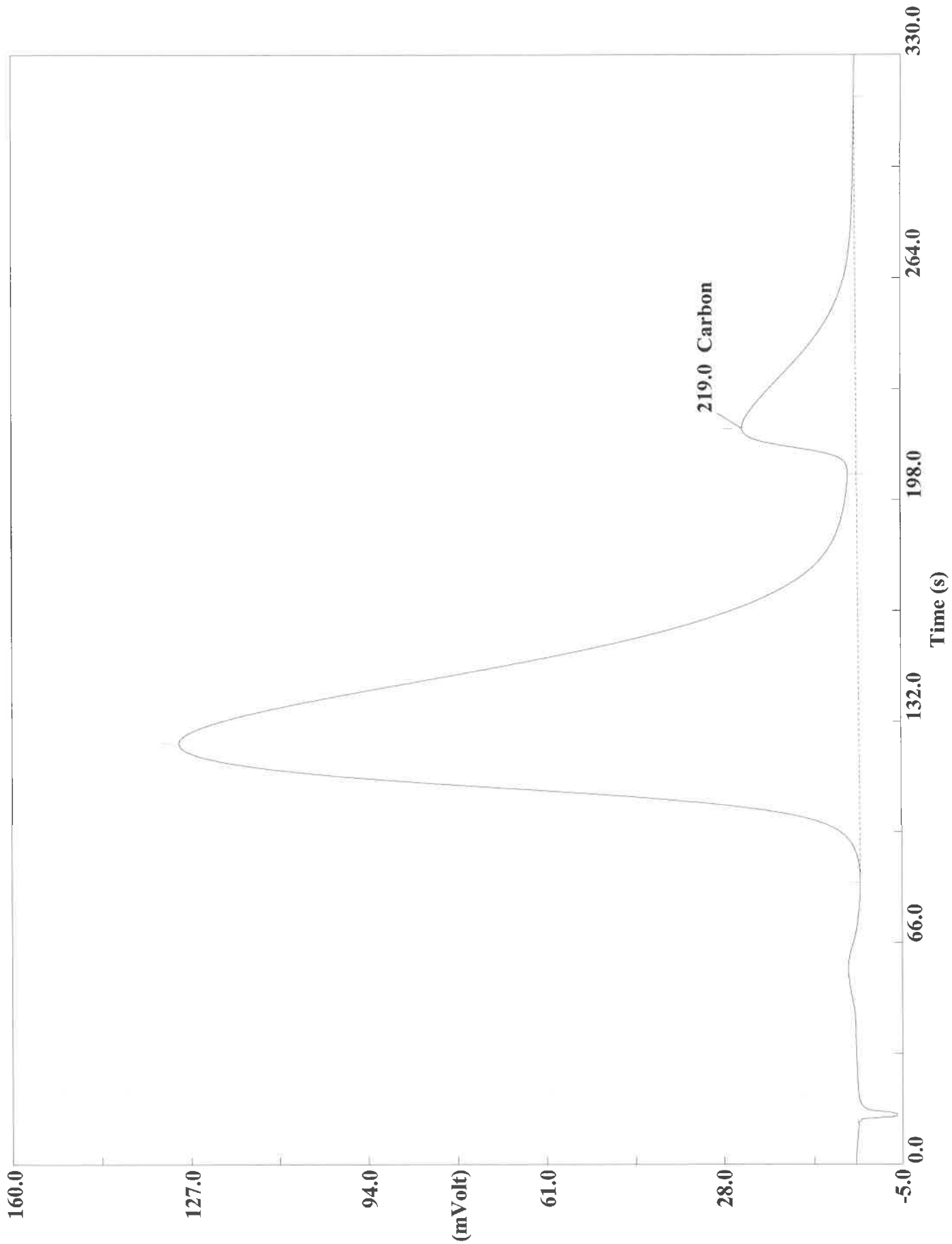
Page: 1 Sample: 180-111287-A-129 (A100420069)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420069
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 19:08 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-129 (# 80)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.7562	222	4447839	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420071.DAT
Sample name : 180-111287-A-130 Analysed : 10/04/2020 19:19

Eager 300 Report

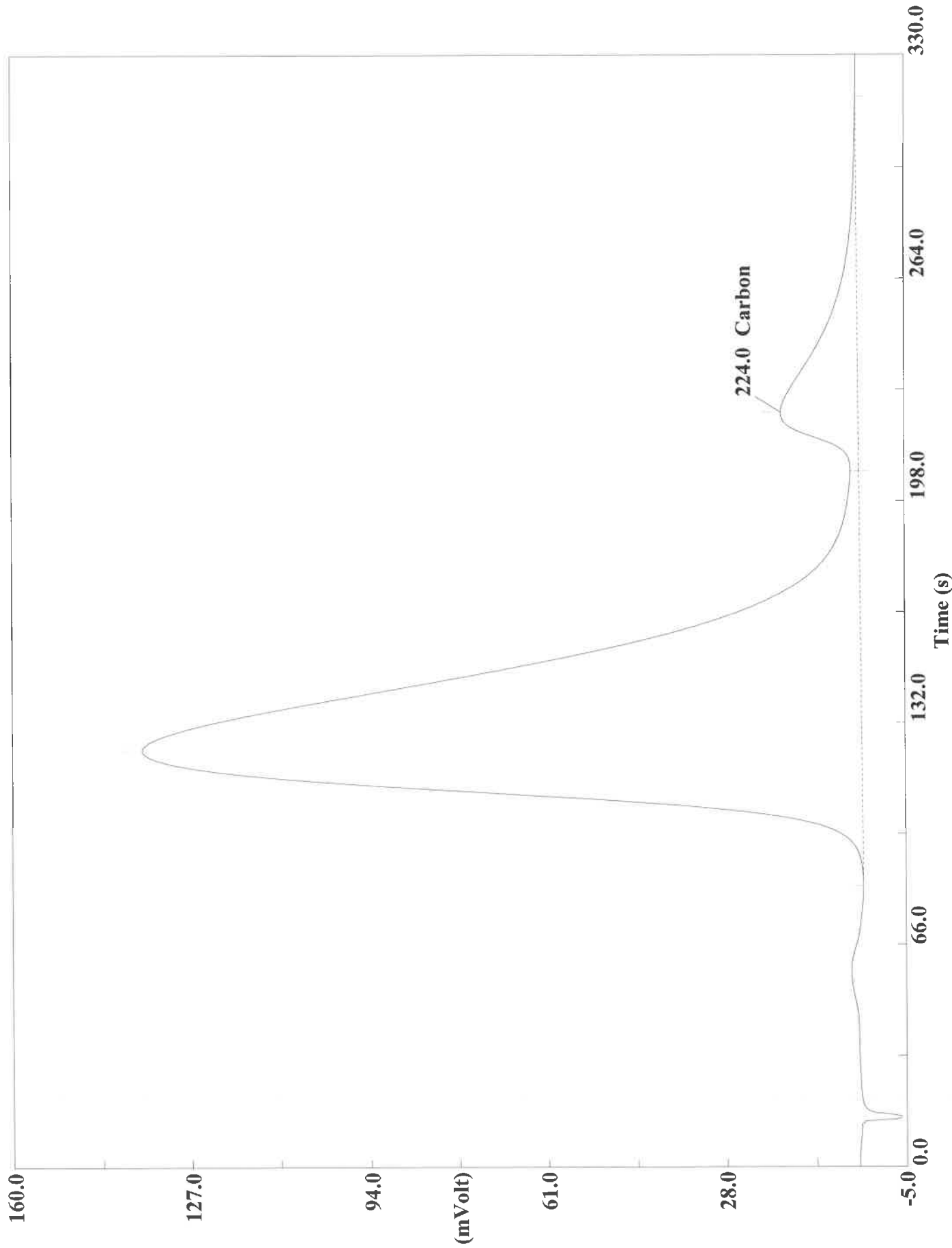
Page: 1 Sample: 180-111287-A-130 (A100420071)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420071
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 19:19 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-130 (# 82)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 24.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	5.0490	219	6461279	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420072.DAT

Sample name : 180-111287-A-130 Analysed : 10/04/2020 19:25

Eager 300 Report

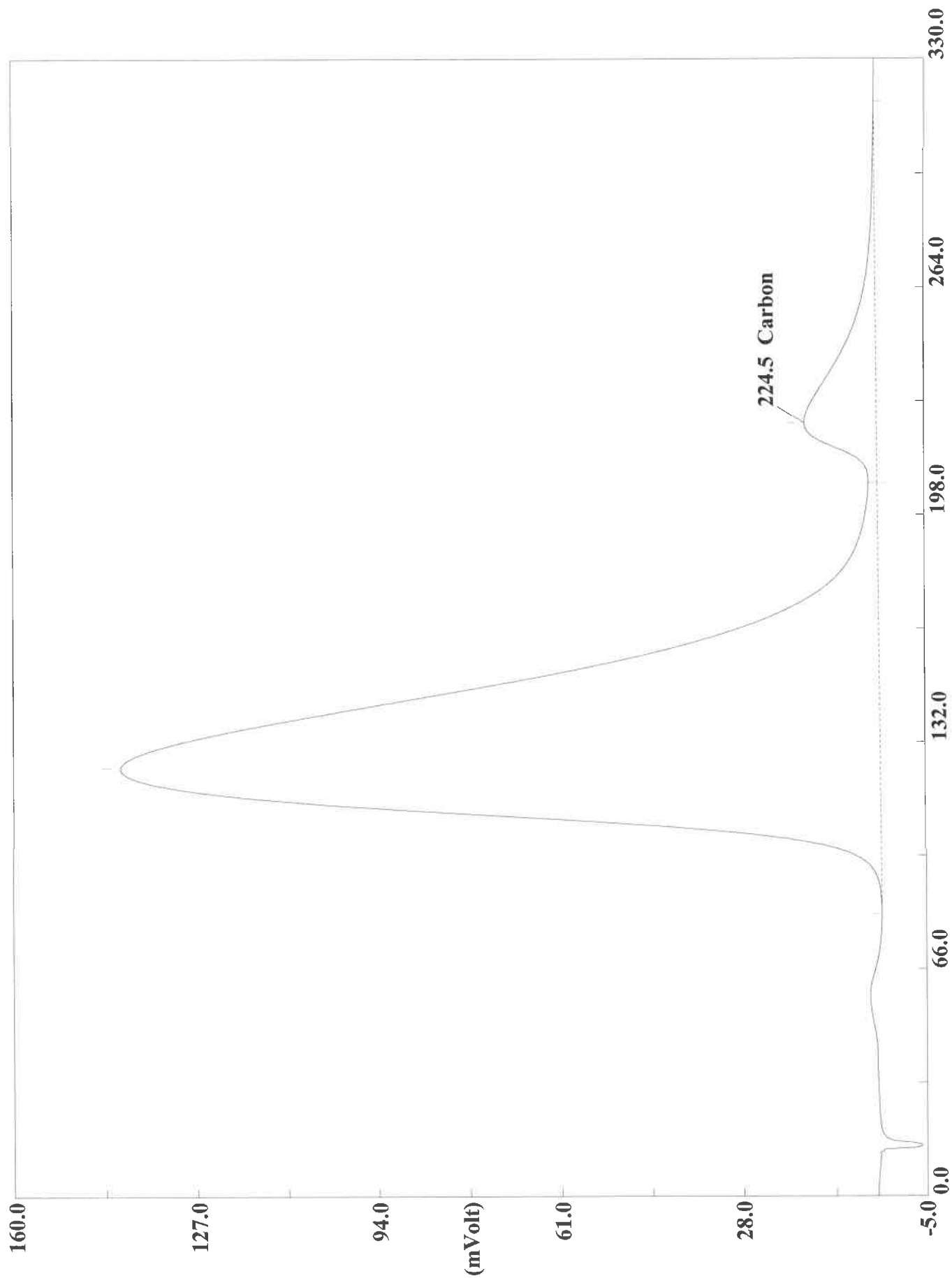
Page: 1 Sample: 180-111287-A-130 (A100420072)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420072
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 19:25 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-130 (# 83)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.3434	224	4806660	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420074.DAT
Sample name : 180-111287-A-131 Analysed : 10/04/2020 19:36

Eager 300 Report

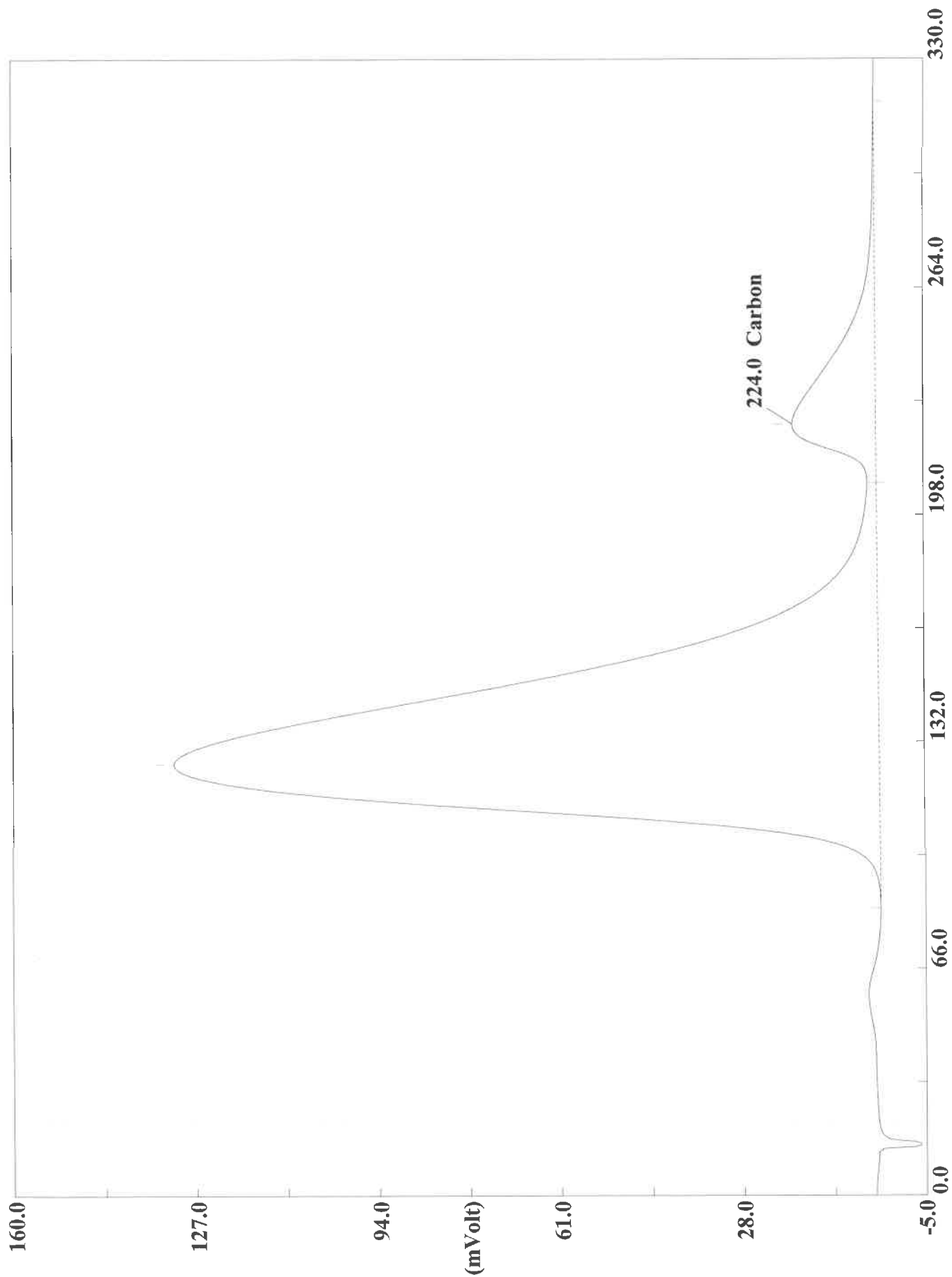
Page: 1 Sample: 180-111287-A-131 (A100420074)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420074
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 19:36 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-131 (# 85)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.3709	225	4221108	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420075.DAT
Sample name : 180-111287-A-131 Analysed : 10/04/2020 19:41

Eager 300 Report

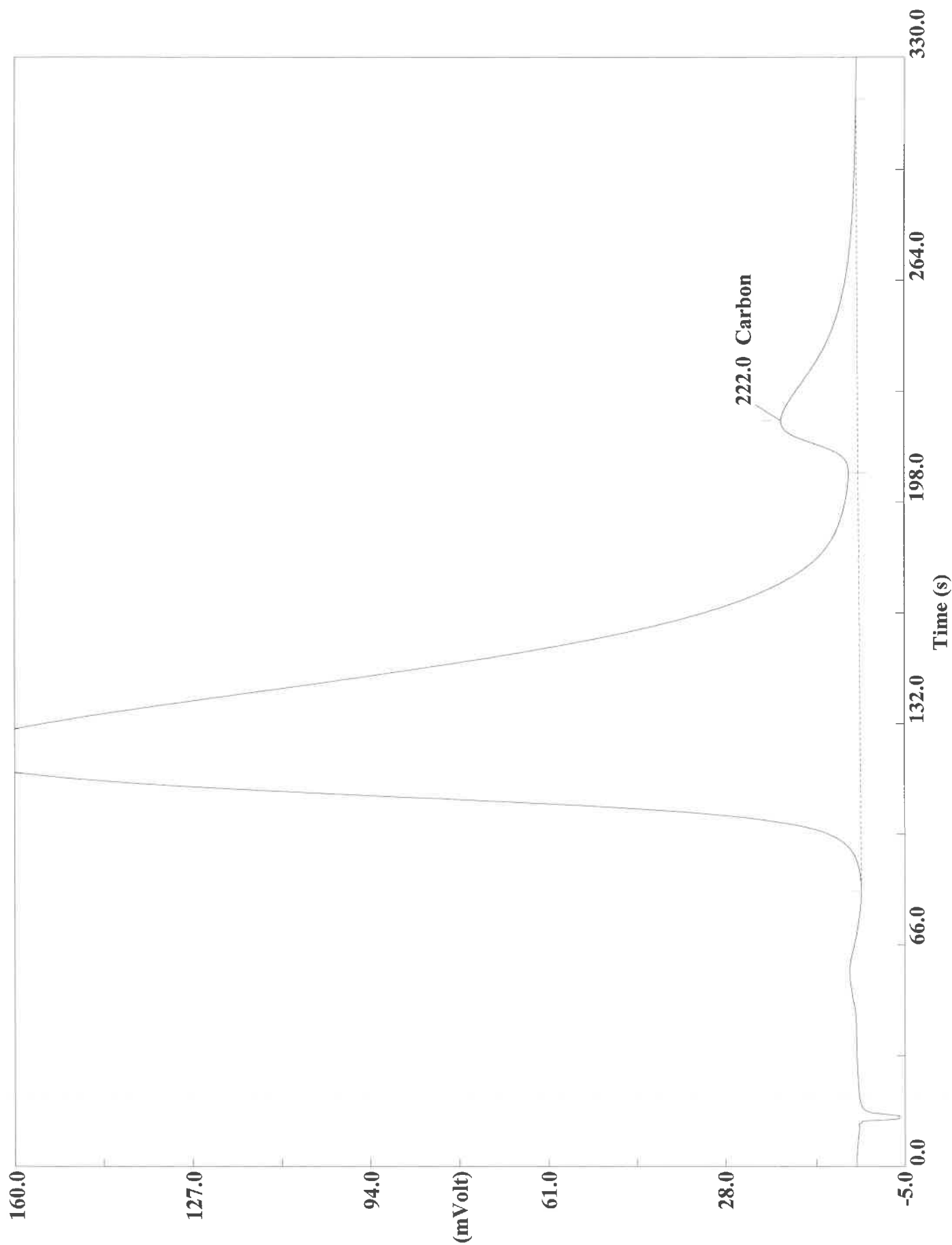
Page: 1 Sample: 180-111287-A-131 (A100420075)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420075
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 19:41 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-131 (# 86)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	5.1658	224	4723338	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420077.DAT
Sample name :180-111287-A-132 Analysed :10/04/2020 19:52

Eager 300 Report

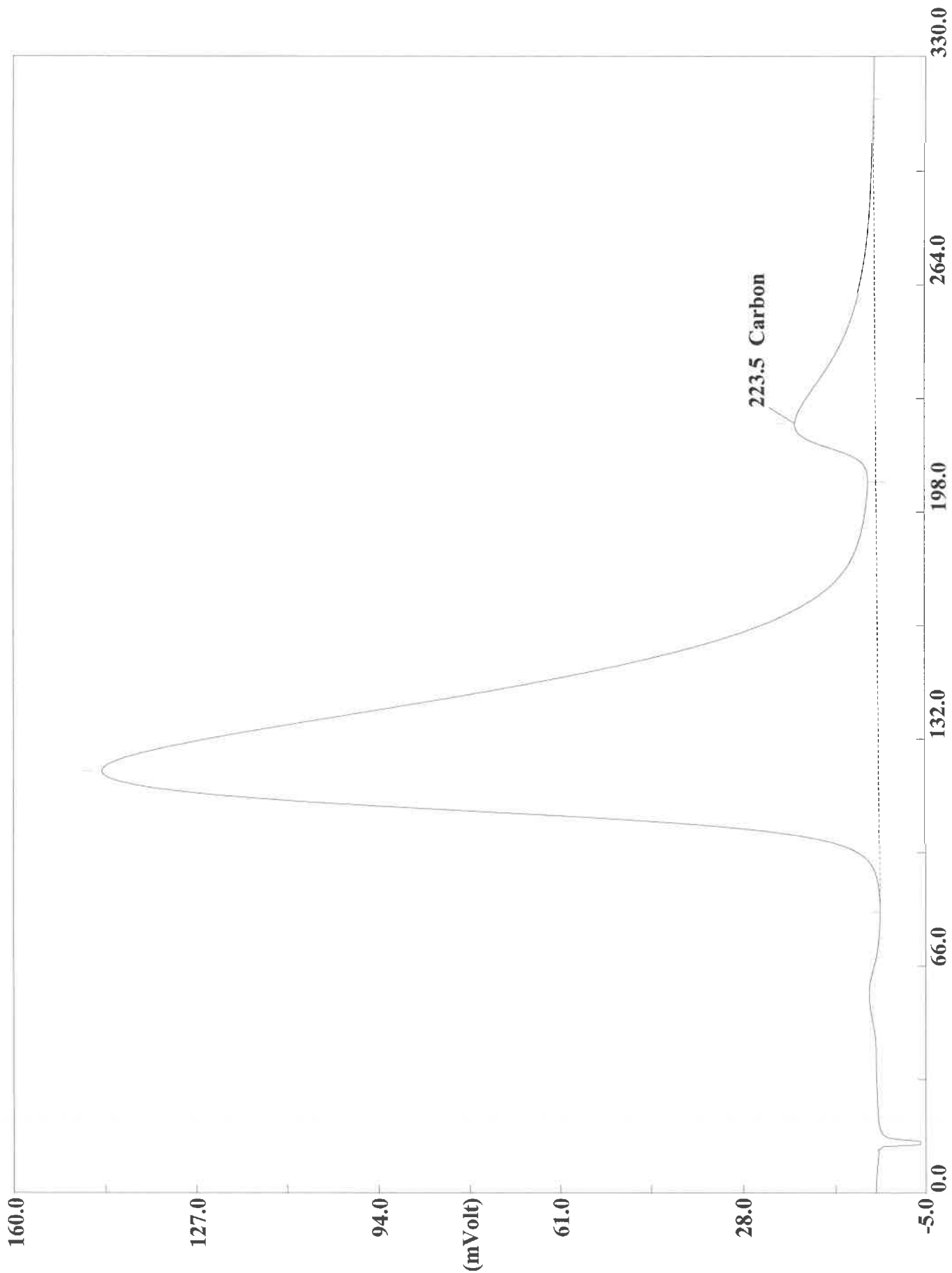
Page: 1 Sample: 180-111287-A-132 (A100420077)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420077
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 19:52 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-132 (# 88)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.6925	222	4487706	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420078.DAT
Sample name : 180-111287-A-132 Analysed : 10/04/2020 19:58

Eager 300 Report

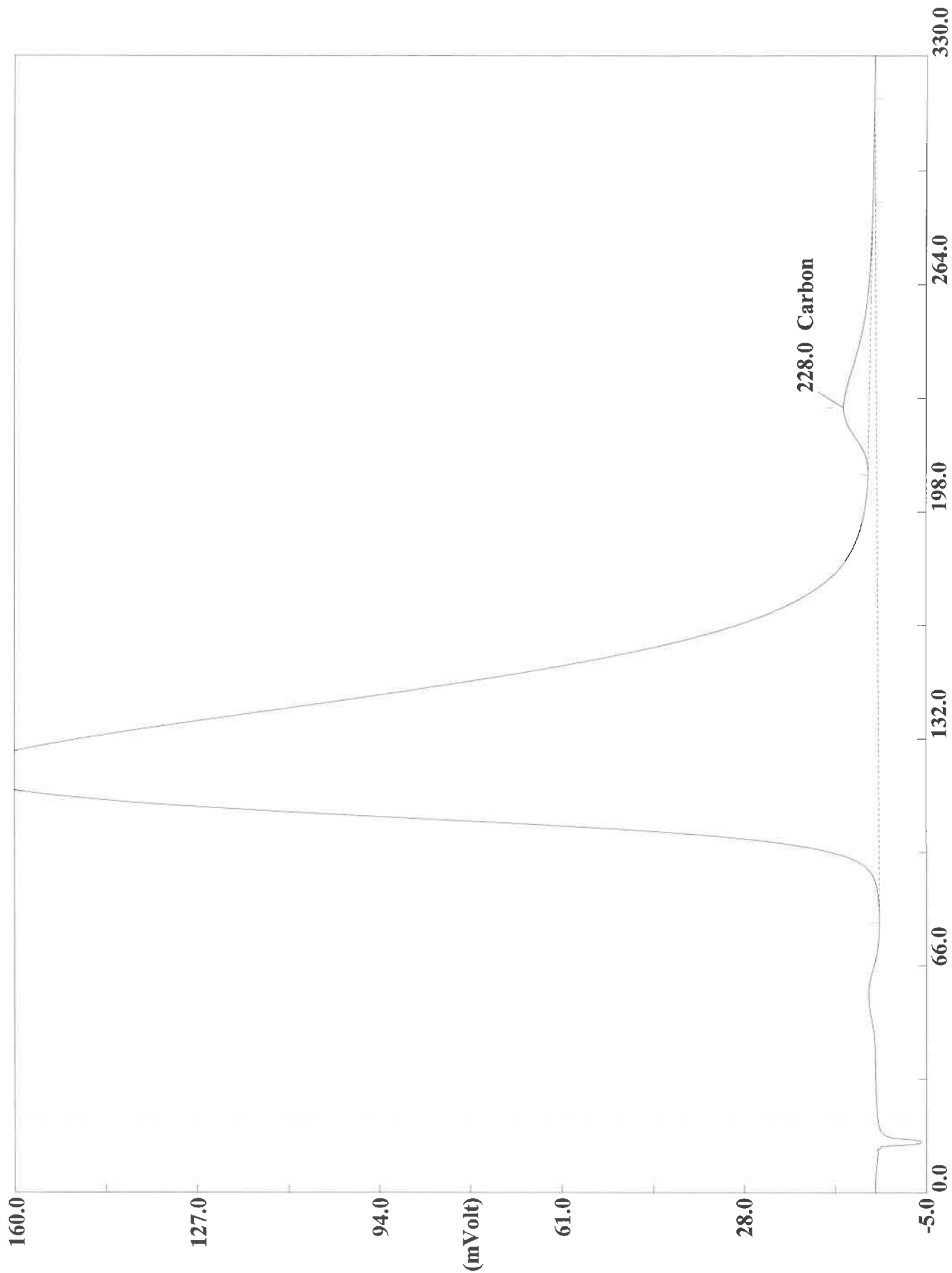
Page: 1 Sample: 180-111287-A-132 (A100420078)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420078
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 19:58 Printed : 10/5/2020 07:01
Sample ID : 180-111287-A-132 (# 89)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23

Calib. method : using 'Least Squares to Linear fit'

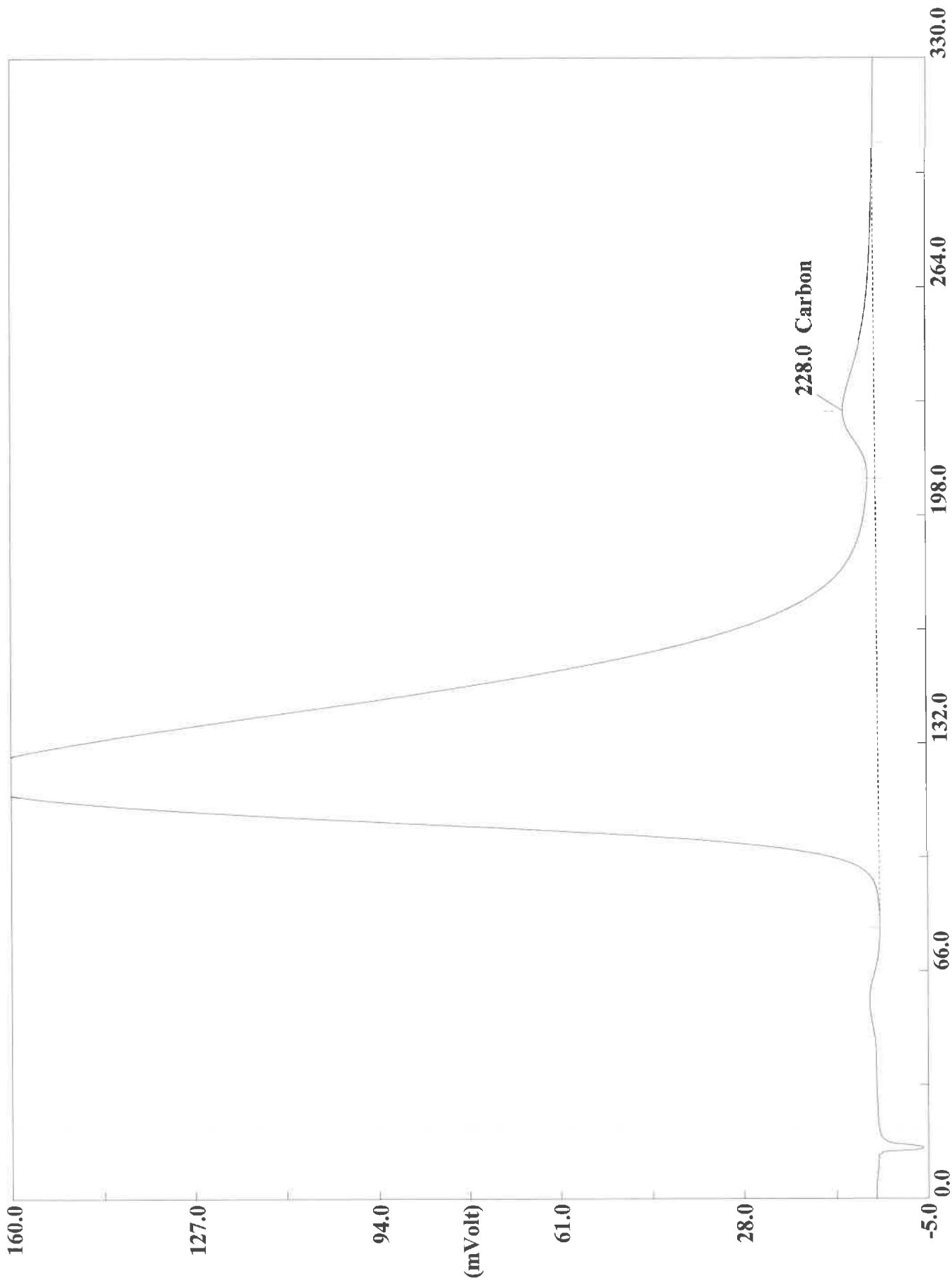
Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.0806	224	4876623	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420080.DAT
Sample name : 180-111287-A-133 Analysed : 10/04/2020 20:09

MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420080.DAT
Sample name :180-111287-A-133 Analysed :10/04/2020 20:09

Eager 300 Report

Page: 1 Sample: 180-111287-A-133 (A100420080)

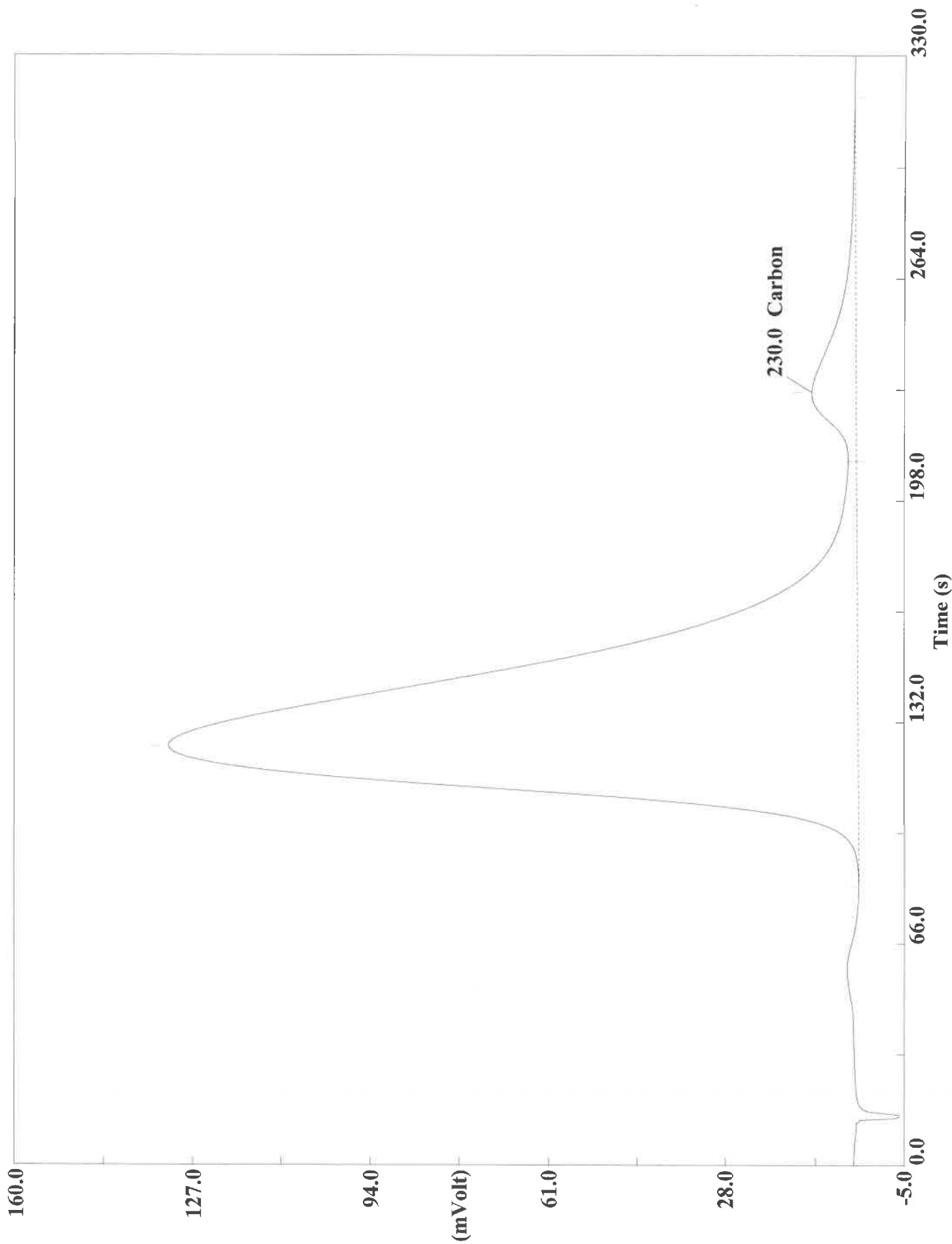
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420080
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 20:09 Printed : 10/5/2020 08:29
Sample ID : 180-111287-A-133 (# 91)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.1

Calib. method : using 'Least Squares to Linear fit'

Warning Chromatogram has been subjected to manual integration.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.0392	228	2010018	mi	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420081.DAT
Sample name : 180-111287-A-133 Analysed : 10/04/2020 20:15

Eager 300 Report

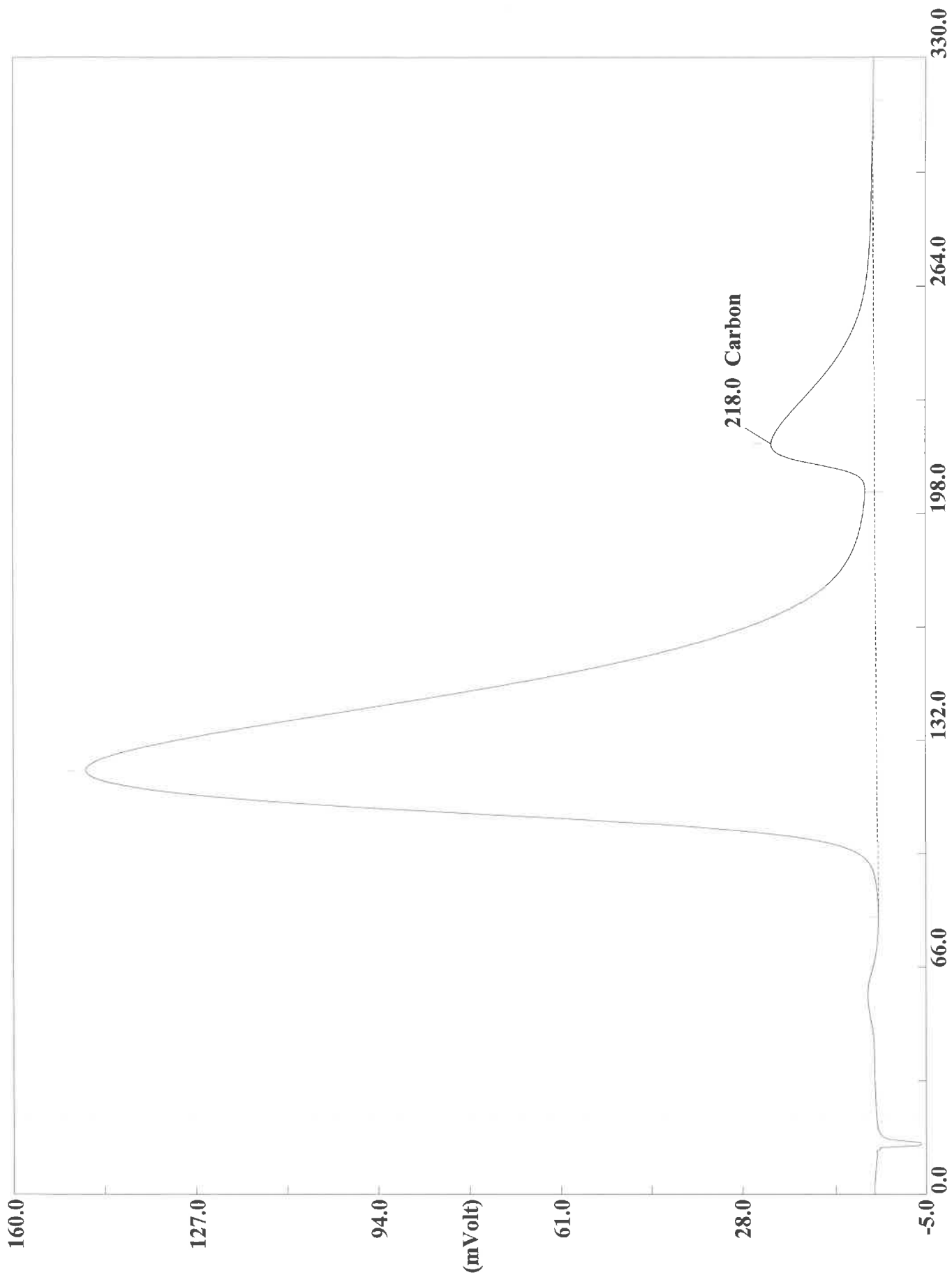
Page: 1 Sample: 180-111287-A-133 (A100420081)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420081
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 20:15 Printed : 10/5/2020 07:02
Sample ID : 180-111287-A-133 (# 92)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.7531	230	2721902	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420083.DAT
Sample name :CCV Analysed :10/04/2020 20:26

Eager 300 Report

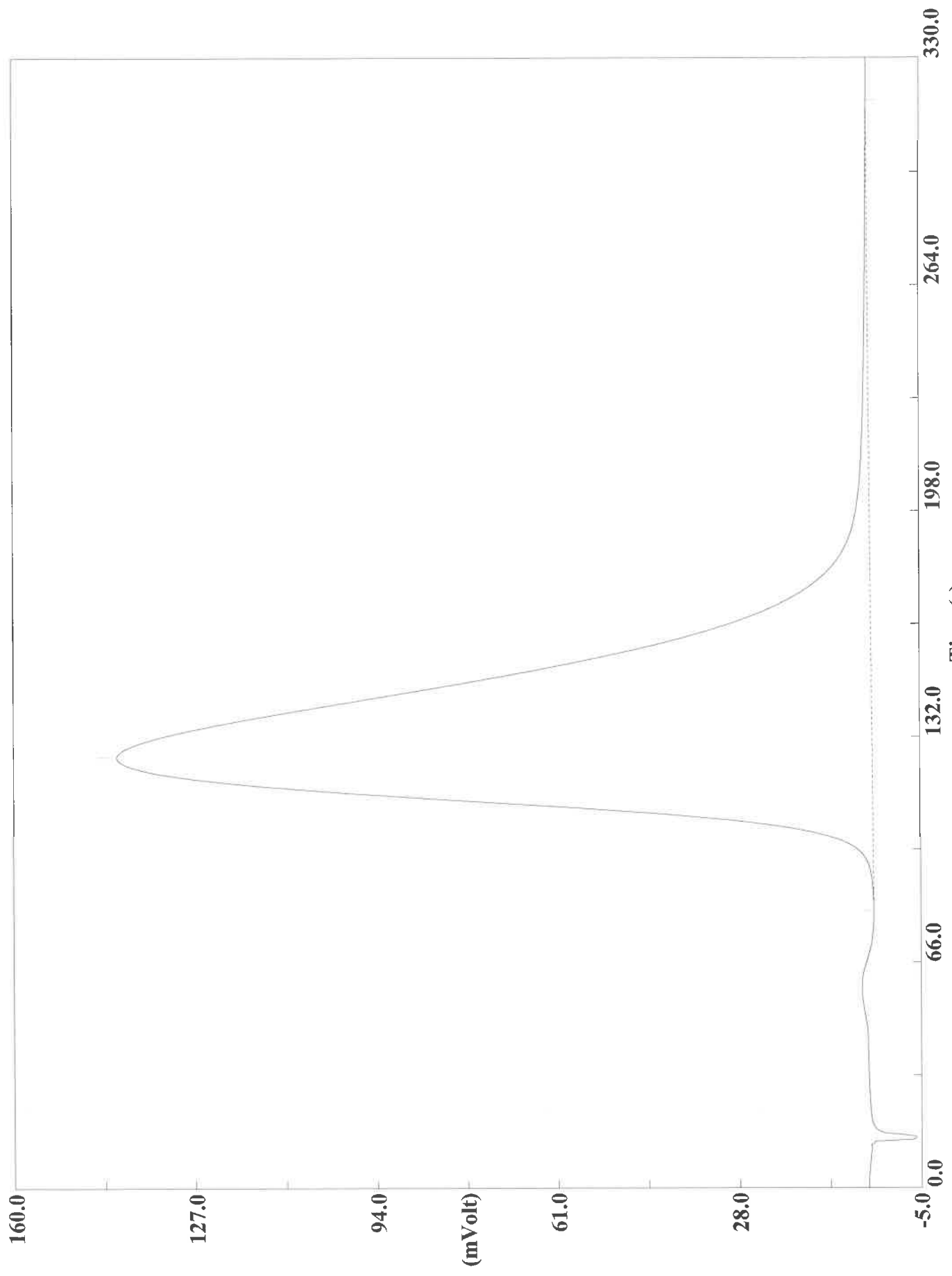
Page: 1 Sample: CCV (A100420083)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420083
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 20:26 Printed : 10/5/2020 07:02
Sample ID : CCV (# 94)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0491	218	5454104	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420084.DAT
Sample name :CCB Analysed :10/04/2020 20:32

Eager 300 Report

Page: 1 Sample: CCB (A100420084)

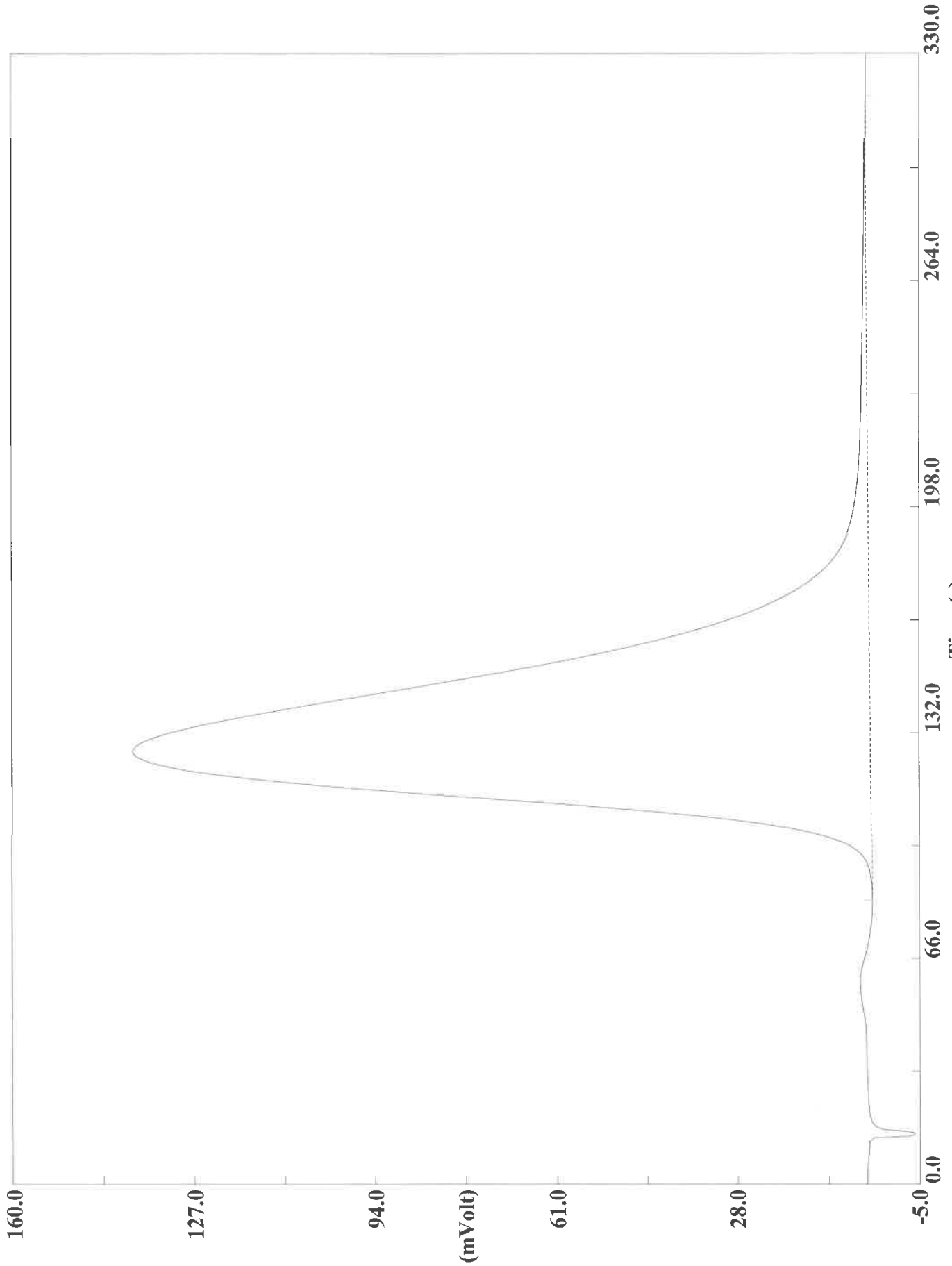
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420084
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 20:32 Printed : 10/5/2020 07:02
Sample ID : CCB (# 95)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420085.DAT
Sample name :MB Analysed :10/04/2020 20:37

Eager 300 Report

Page: 1 Sample: MB (A100420085)

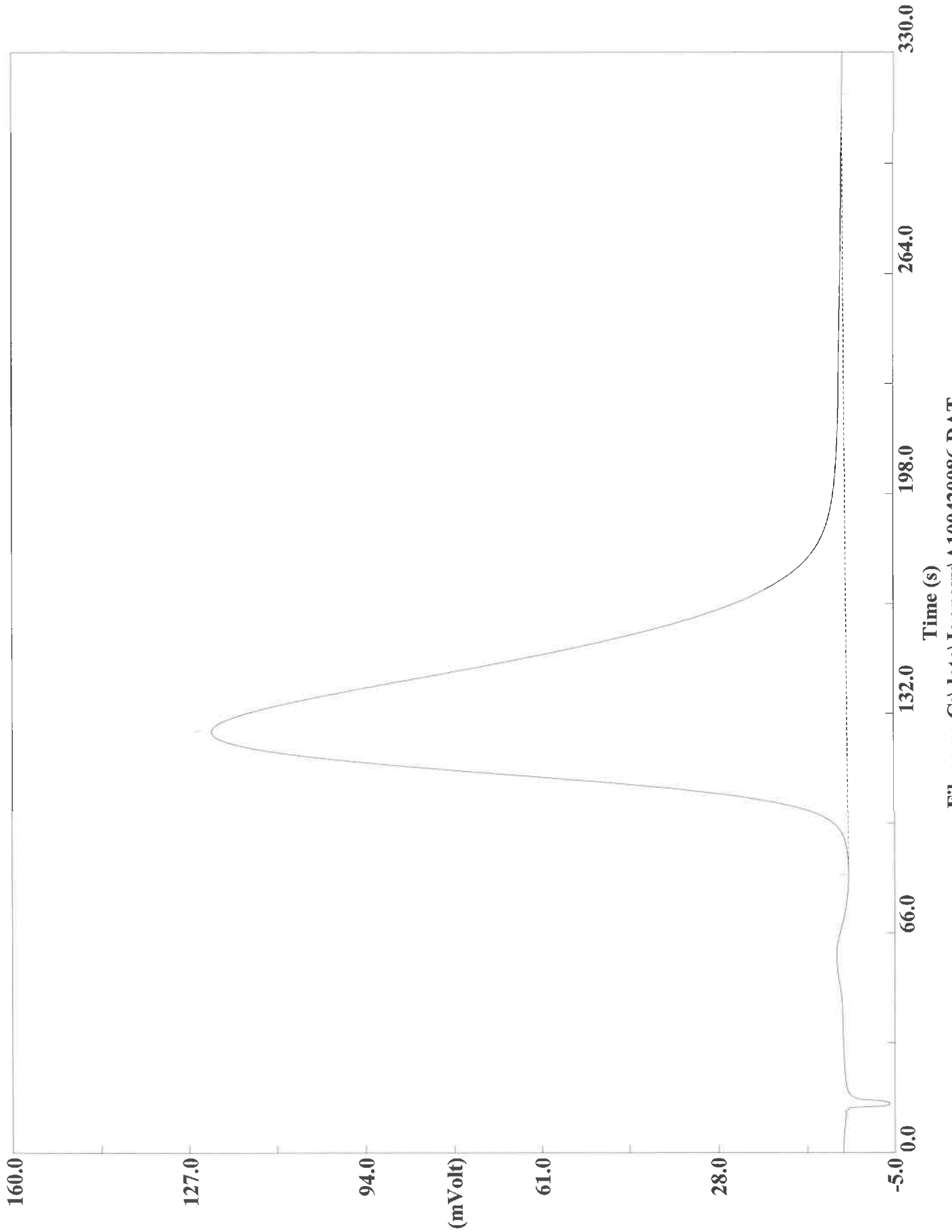
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420085
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 20:37 Printed : 10/5/2020 07:02
Sample ID : MB (# 96)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.6

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420086.DAT
Sample name : MB Analysed : 10/04/2020 20:43

Eager 300 Report

Page: 1 Sample: MB (A100420086)

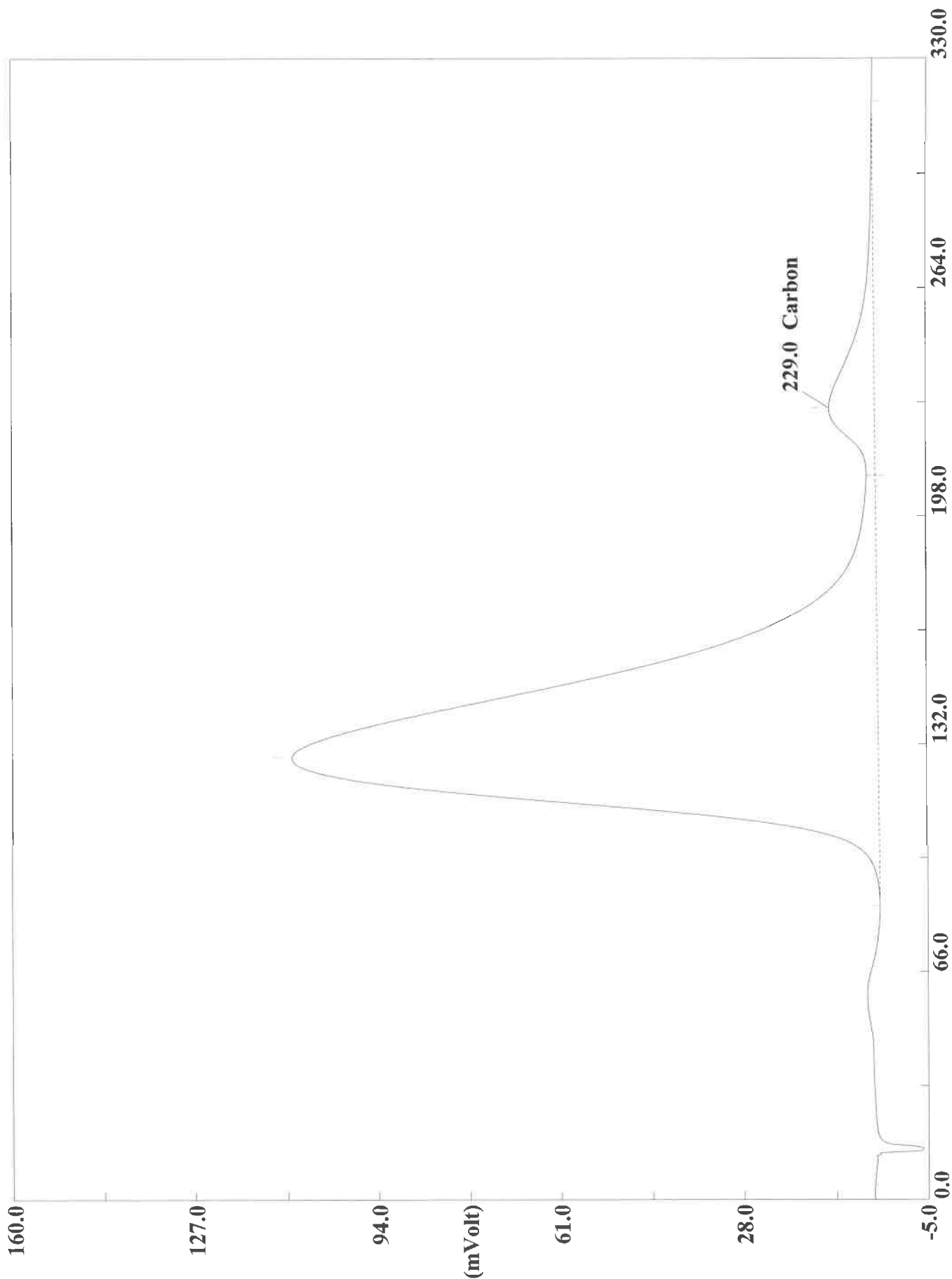
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420086
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 20:43 Printed : 10/5/2020 07:02
Sample ID : MB (# 97)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22.6

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420087.DAT
Sample name :LCS Analysed :10/04/2020 20:48

Eager 300 Report

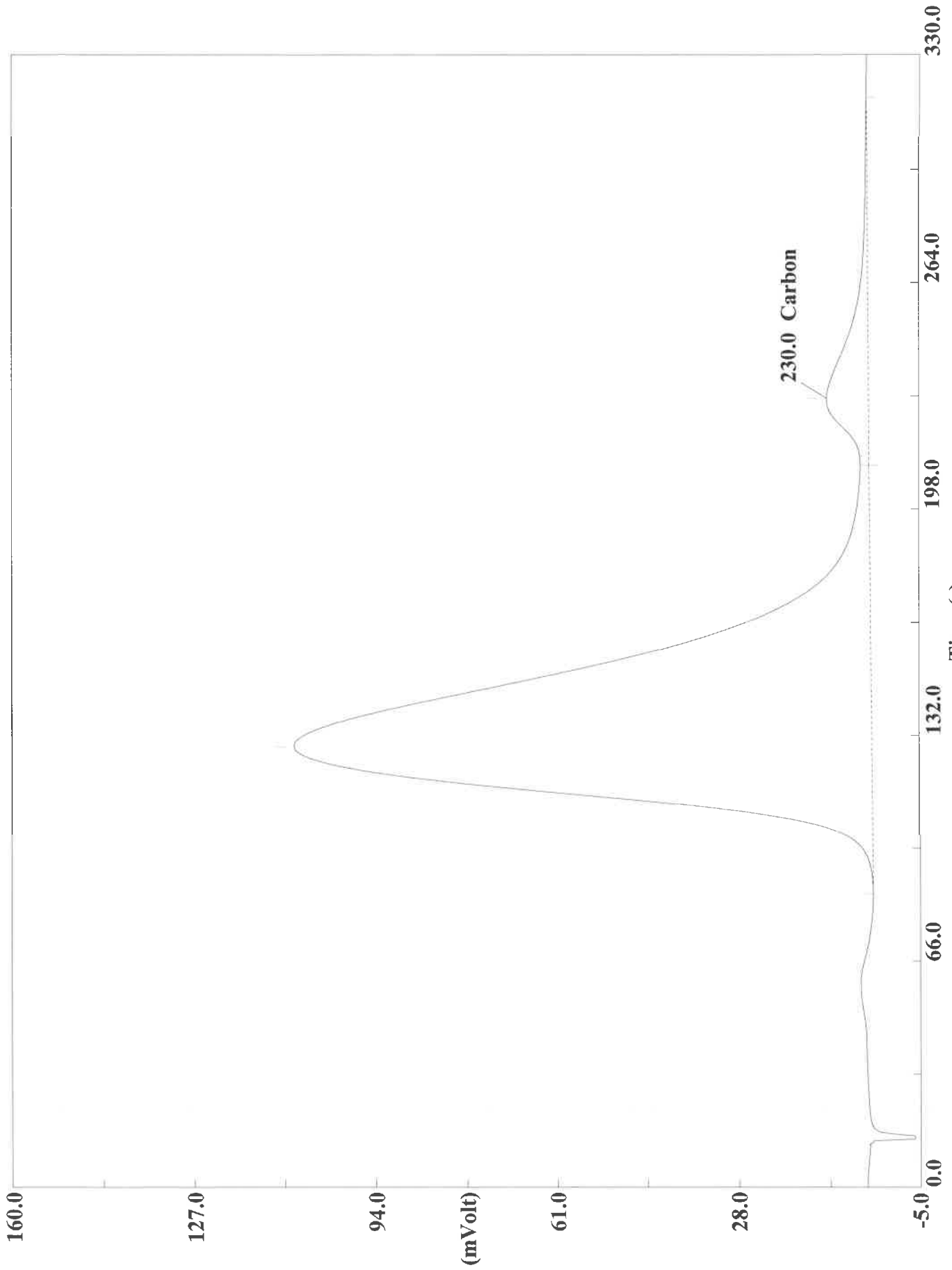
Page: 1 Sample: LCS (A100420087)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420087
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 20:48 Printed : 10/5/2020 07:02
Sample ID : LCS (# 98)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 10.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.7646	229	2613341	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420088.DAT
Sample name :LCS Analysed :10/04/2020 20:54

Eager 300 Report

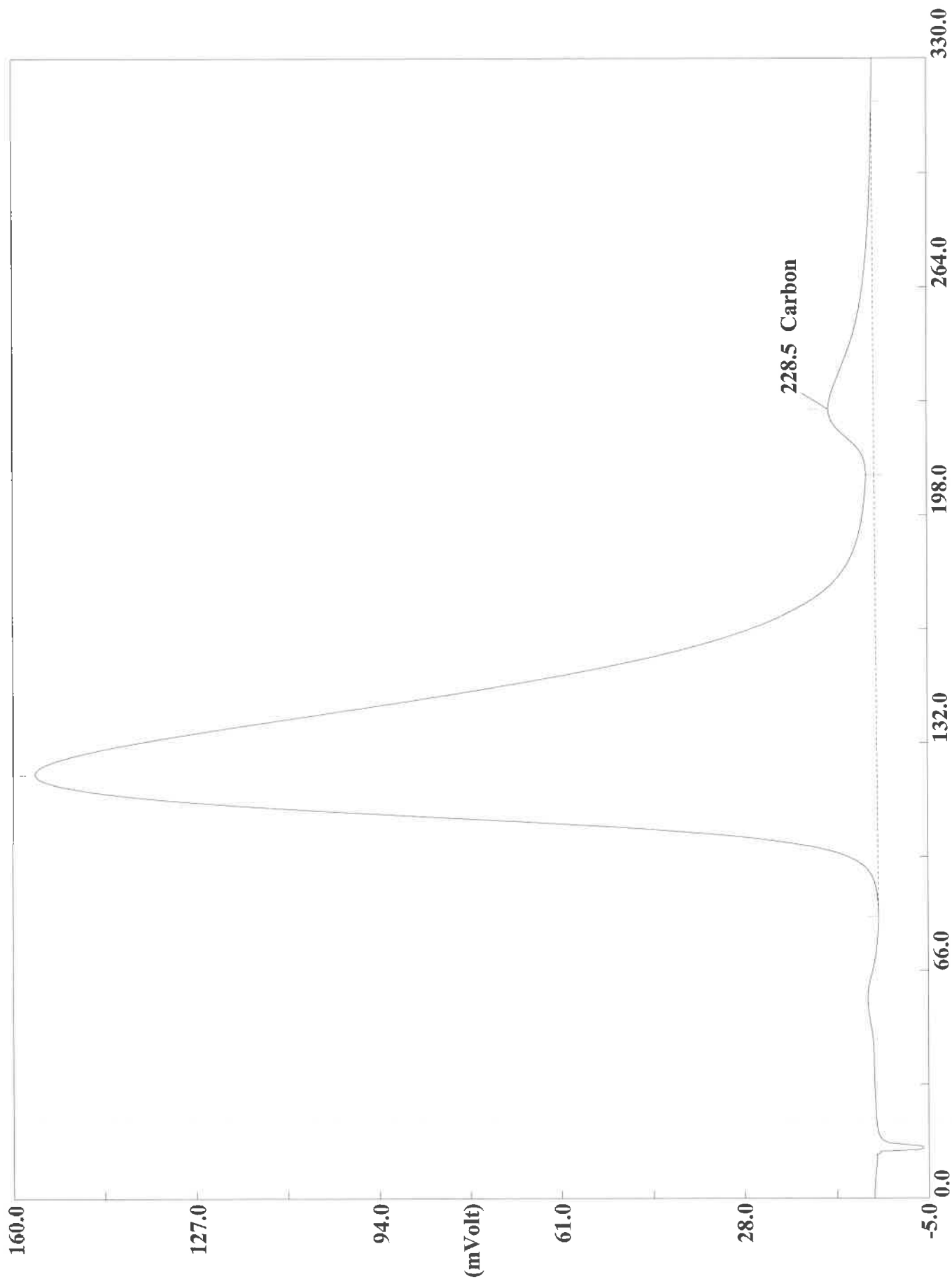
Page: 1 Sample: LCS (A100420088)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420088
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 20:54 Printed : 10/5/2020 07:02
Sample ID : LCS (# 99)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 12

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.9664	230	2461519	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420089.DAT

Sample name :180-11287-A-125 Analysed :10/04/2020 20:59

Eager 300 Report

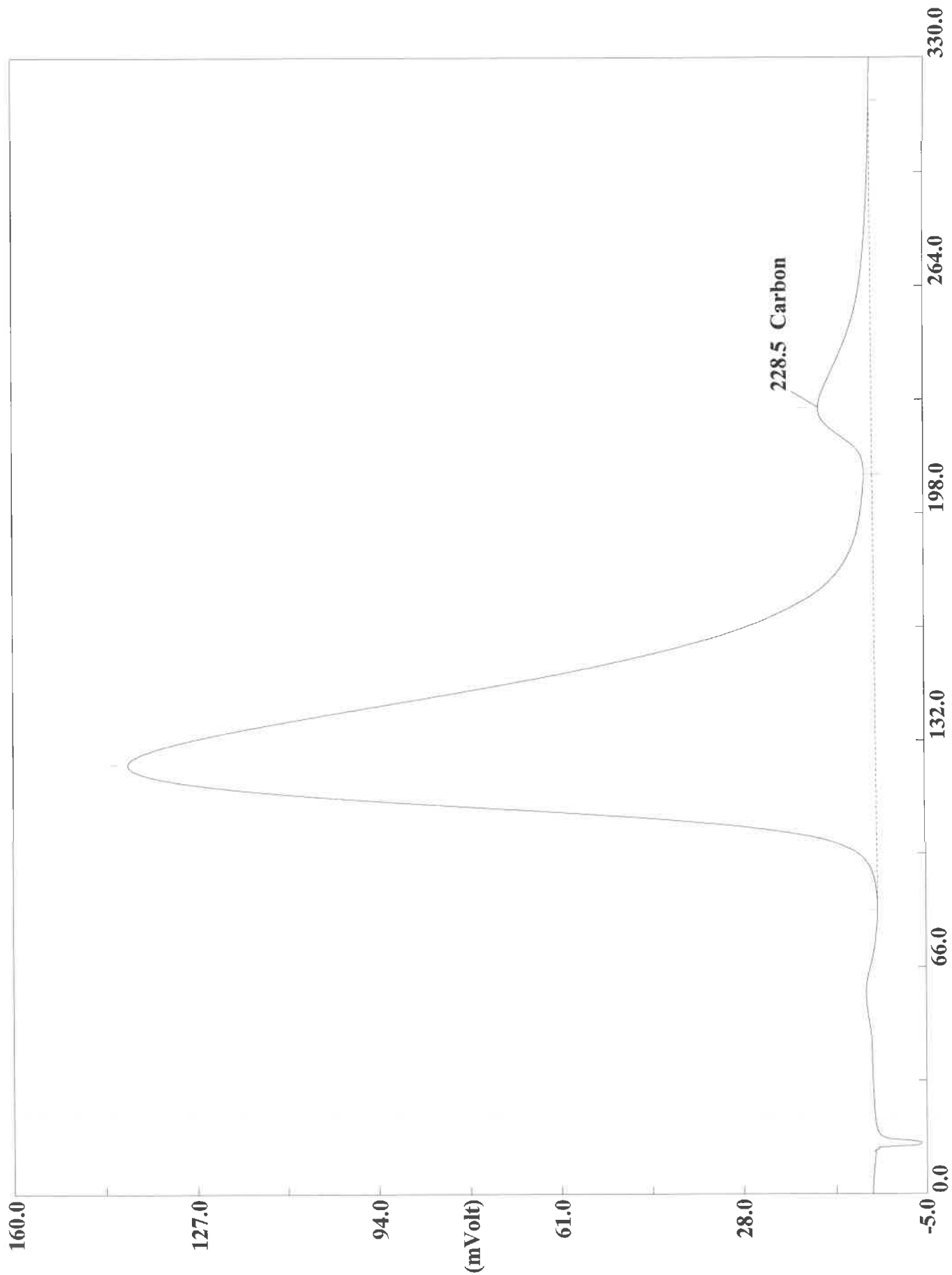
Page: 1 Sample: 180-111287-A-125 (A100420089)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420089
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 20:59 Printed : 10/5/2020 07:02
Sample ID : 180-111287-A-125 (# 100)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2404	229	2852543	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420090.DAT
Sample name :180-111287-A-125 Analysed :10/04/2020 21:05

Eager 300 Report

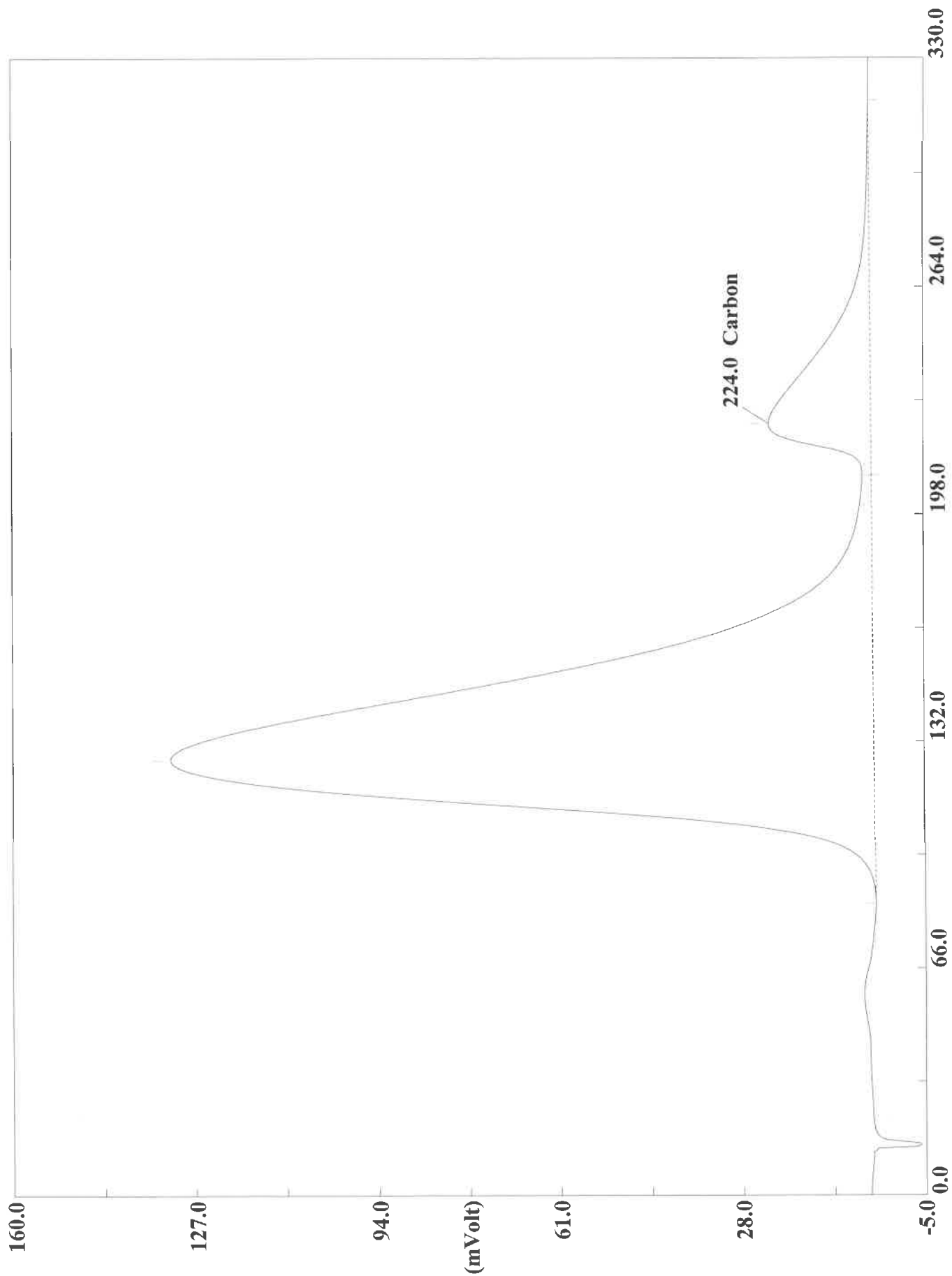
Page: 1 Sample: 180-111287-A-125 (A100420090)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420090
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 21:05 Printed : 10/5/2020 07:02
Sample ID : 180-111287-A-125 (# 101)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.7015	229	3377761	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420092.DAT

Sample name : 180-111287-A-125 MS Analysed : 10/04/2020 21:16

Eager 300 Report

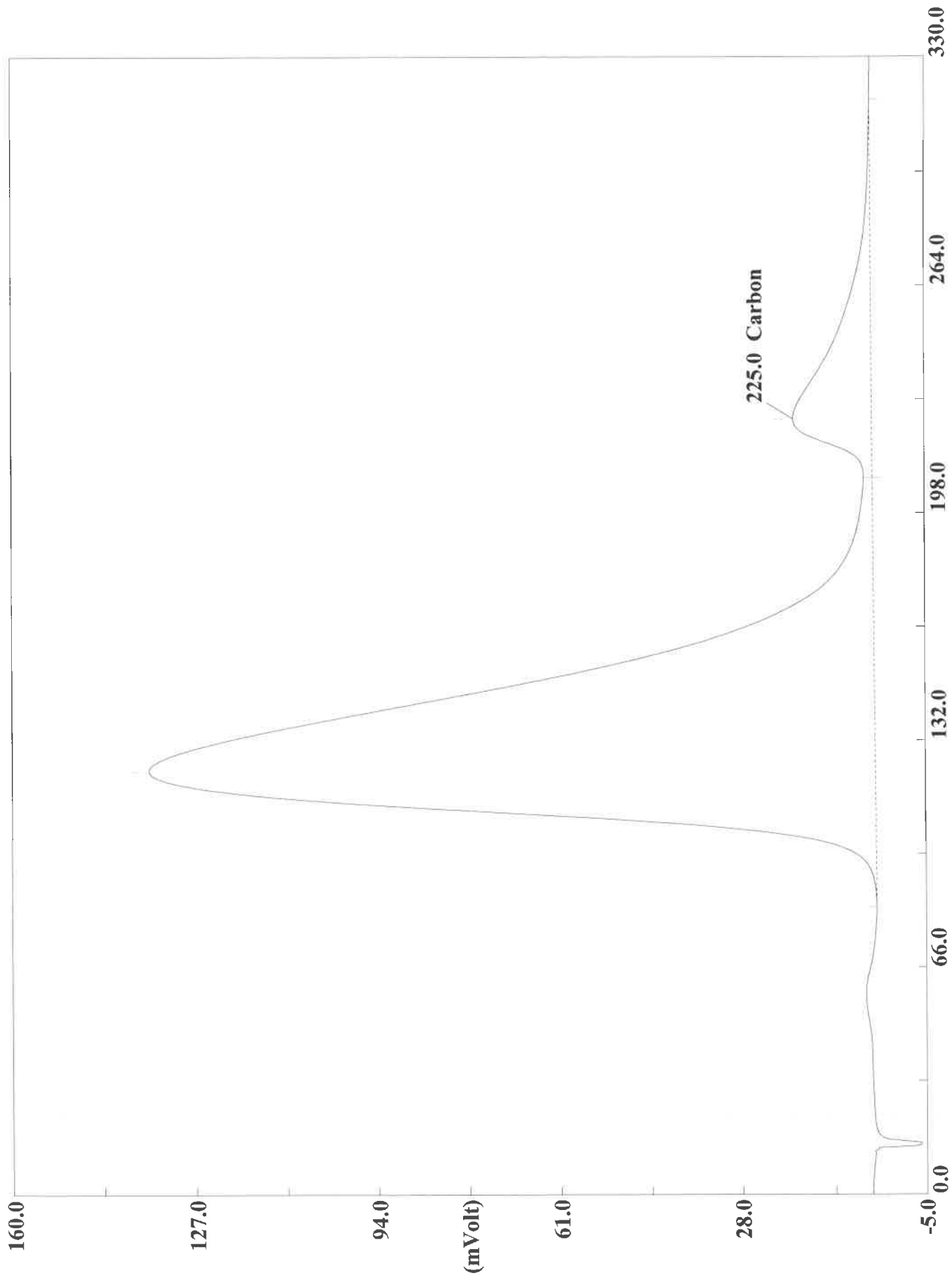
Page: 1 Sample: 180-111287-A-125 MS (A100420092)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420092
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 21:16 Printed : 10/5/2020 07:02
Sample ID : 180-111287-A-125 MS (# 103)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	6.4496	224	5734670	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420093.DAT

Sample name :180-111287-A-125 MS Analysed :10/04/2020 21:22

Eager 300 Report

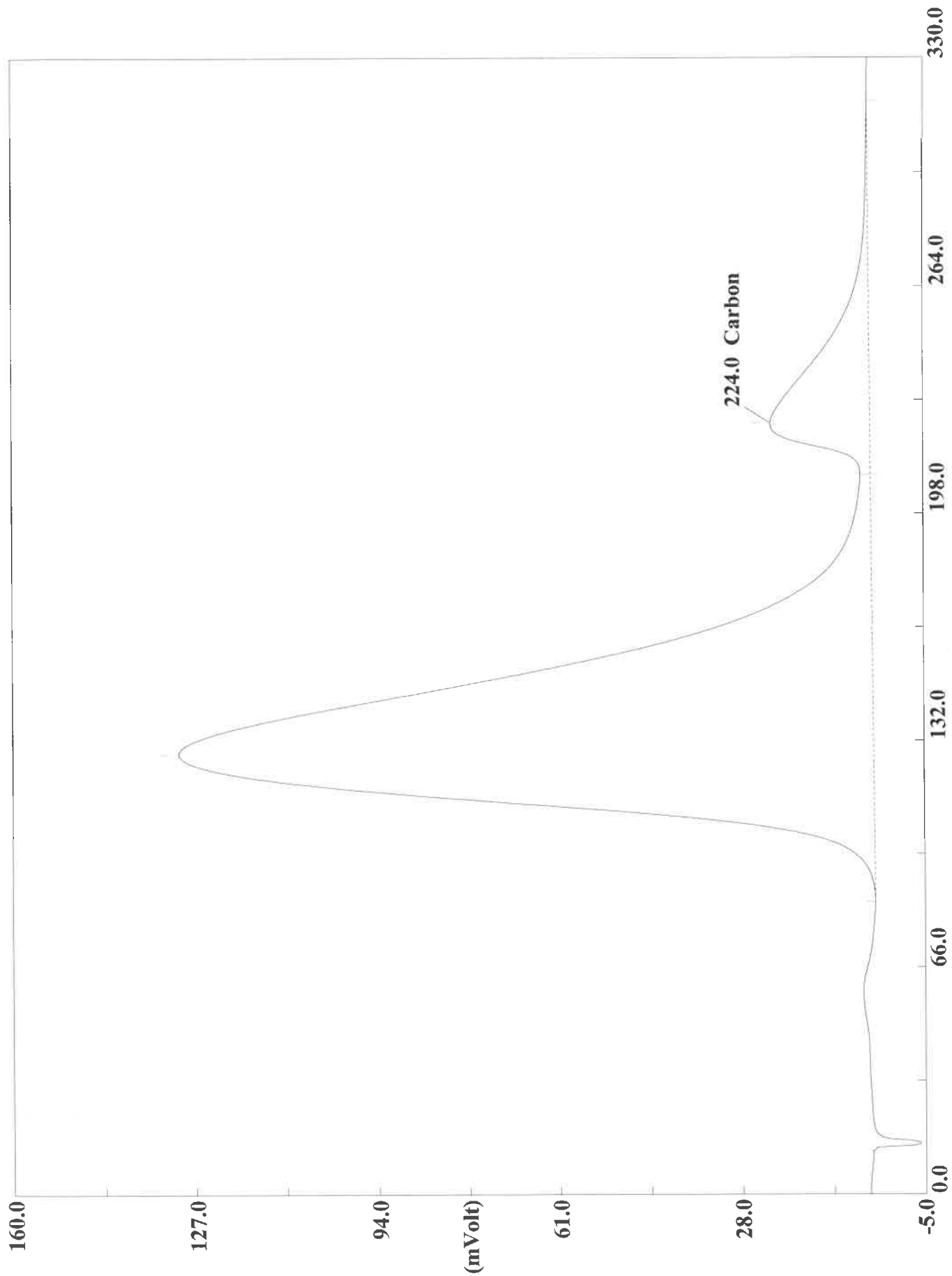
Page: 1 Sample: 180-111287-A-125 MS (A100420093)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420093
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 21:22 Printed : 10/5/2020 07:02
Sample ID : 180-111287-A-125 MS (# 104)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	5.3800	225	4807845	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420095.DAT

Sample name :180-111287-A-125 MSD Analysed :10/04/2020 21:33

Eager 300 Report

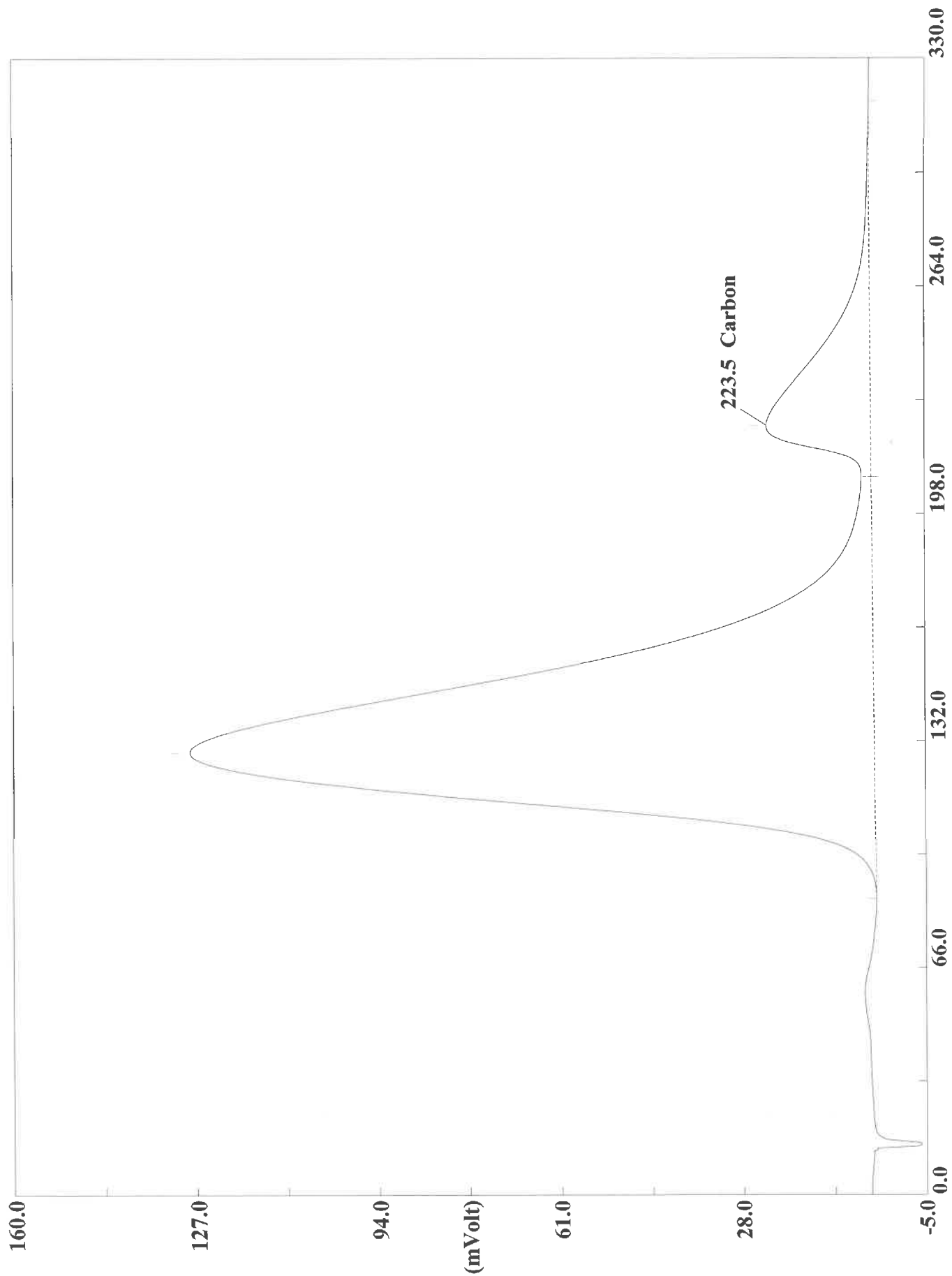
Page: 1 Sample: 180-111287-A-125 MSD (A100420095)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420095
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 21:33 Printed : 10/5/2020 07:03
Sample ID : 180-111287-A-125 MSD (# 106)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	5.9222	224	5480241	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420096.DAT

Sample name : 180-111287-A-125 MSD Analysed : 10/04/2020 21:39

Eager 300 Report

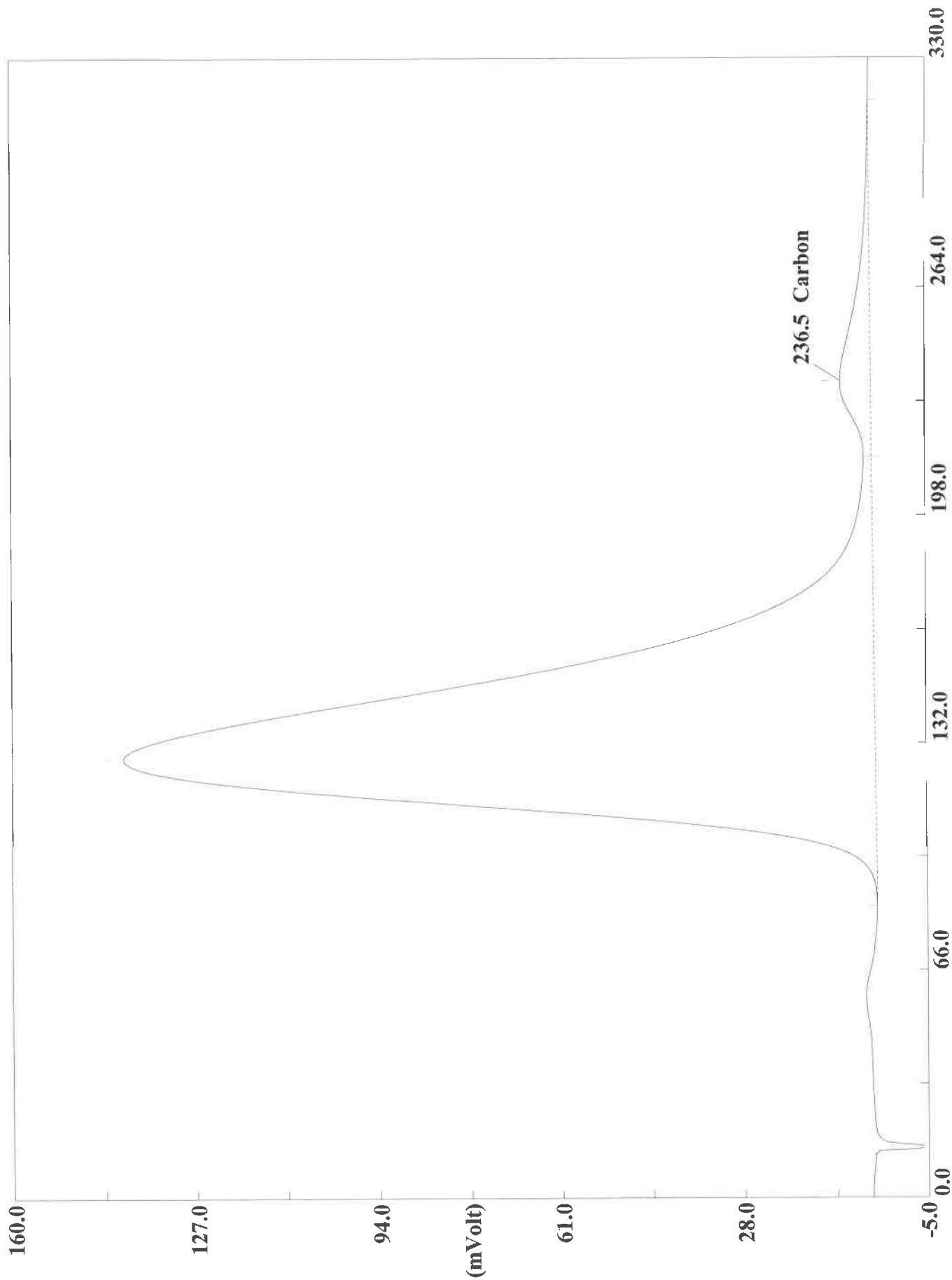
Page: 1 Sample: 180-111287-A-125 MSD (A100420096)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420096
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 21:39 Printed : 10/5/2020 07:03
Sample ID : 180-111287-A-125 MSD (# 107)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.5

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	6.4523	224	5871837	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420098.DAT
Sample name :180-111287-A-134 Analysed :10/04/2020 21:50

Eager 300 Report

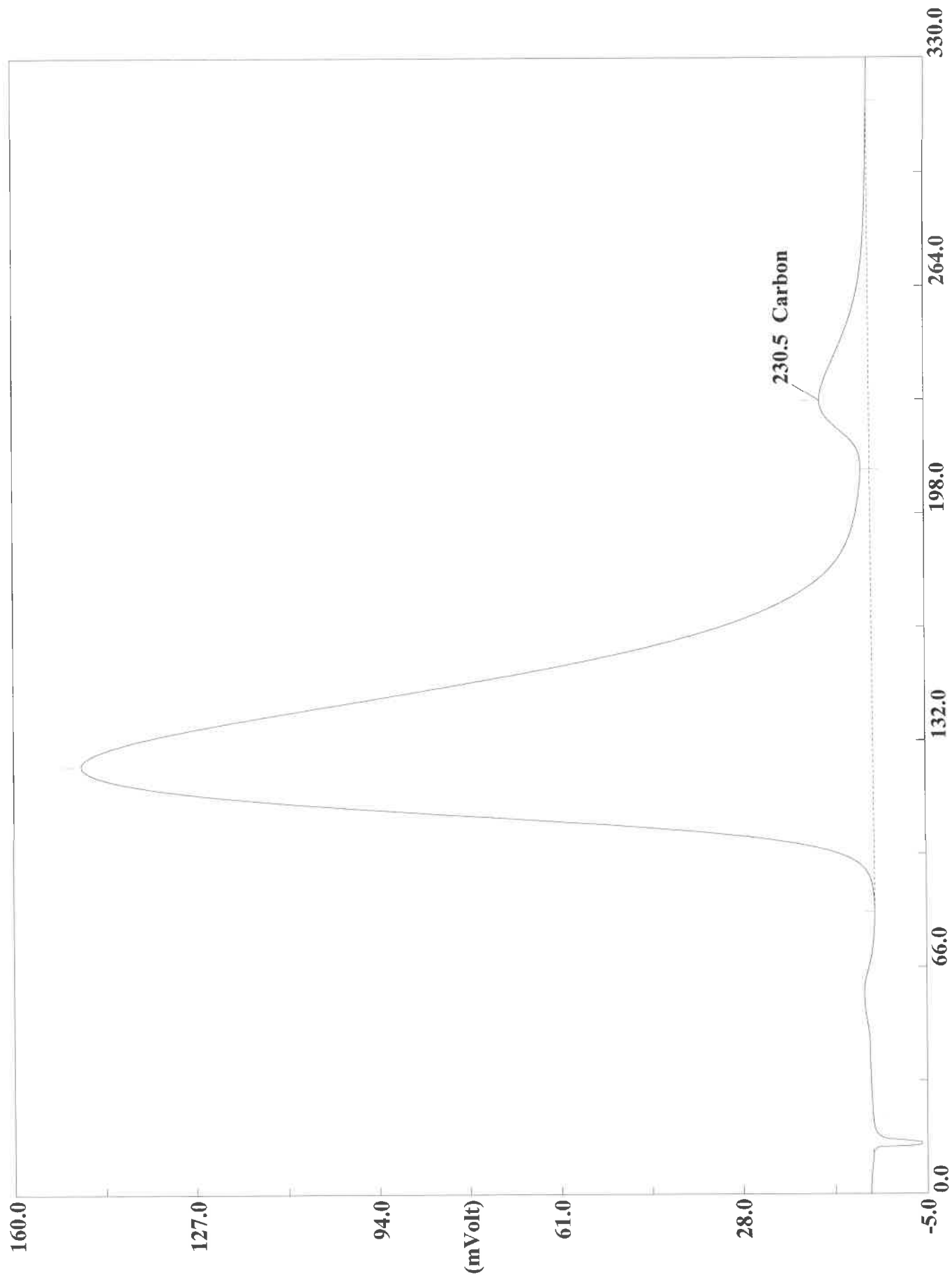
Page: 1 Sample: 180-111287-A-134 (A100420098)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420098
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 21:50 Printed : 10/5/2020 07:03
Sample ID : 180-111287-A-134 (# 109)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.9

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.9482	237	2204086	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420099.DAT

Sample name :180-111287-A-134 Analysed :10/04/2020 21:55

Eager 300 Report

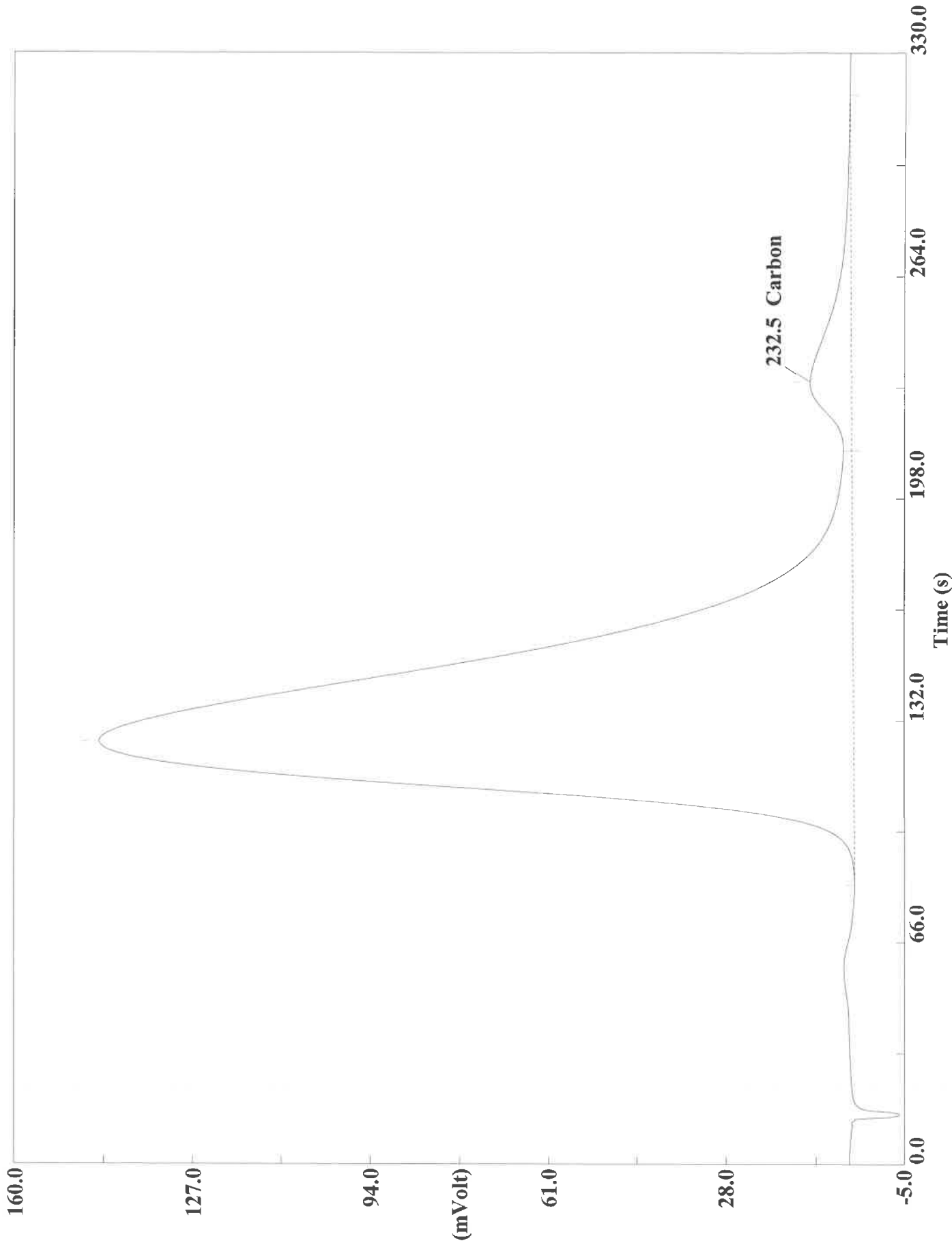
Page: 1 Sample: 180-111287-A-134 (A100420099)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420099
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 21:55 Printed : 10/5/2020 07:03
Sample ID : 180-111287-A-134 (# 110)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.8014	231	3004067	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420101.DAT
Sample name : 180-111287-A-135 Analysed : 10/04/2020 22:06

Eager 300 Report

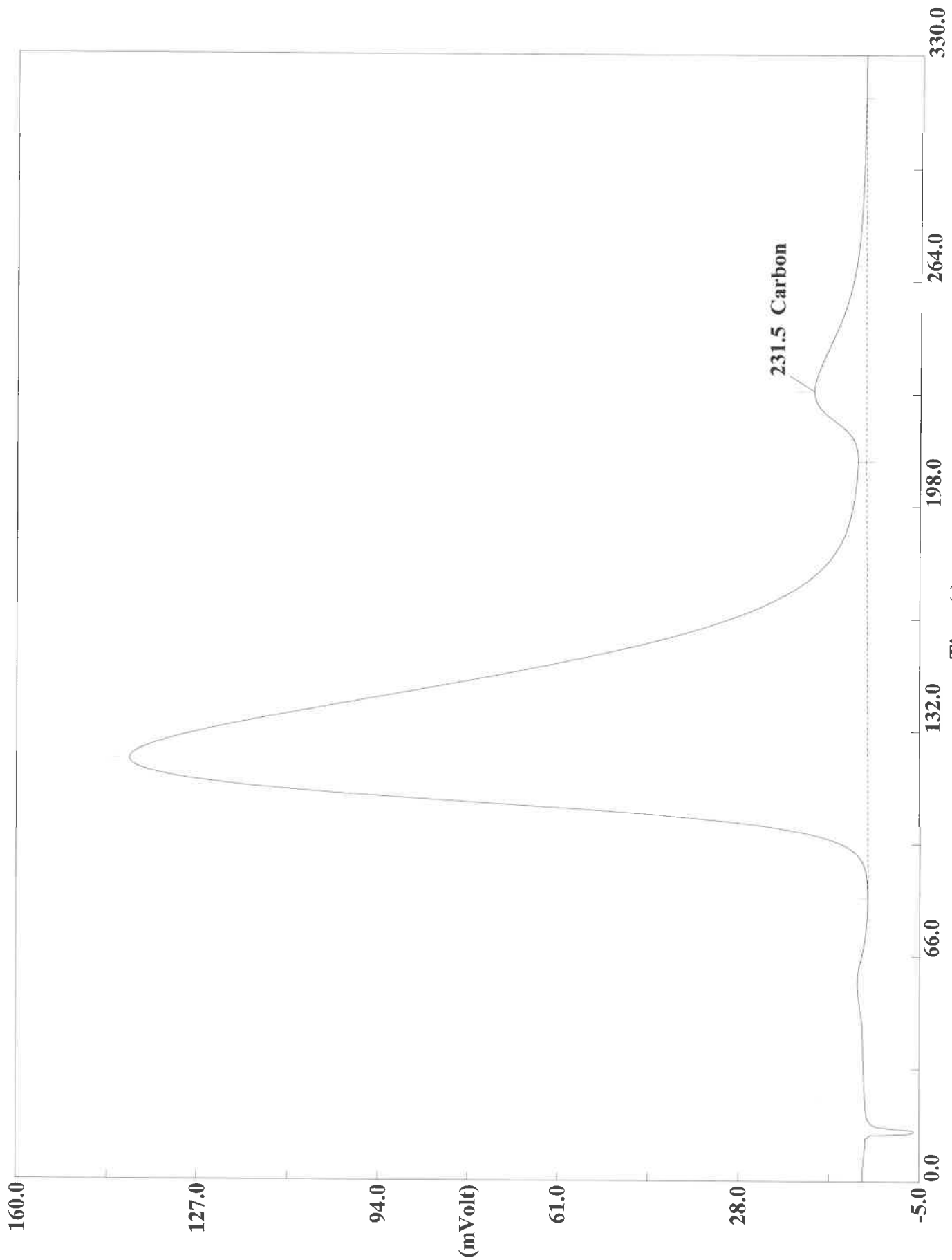
Page: 1 Sample: 180-111287-A-135 (A100420101)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420101
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 22:06 Printed : 10/5/2020 07:03
Sample ID : 180-111287-A-135 (# 112)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.0113	233	2680627	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420102.DAT
Sample name : 180-111287-A-135 Analysed : 10/04/2020 22:12

Eager 300 Report

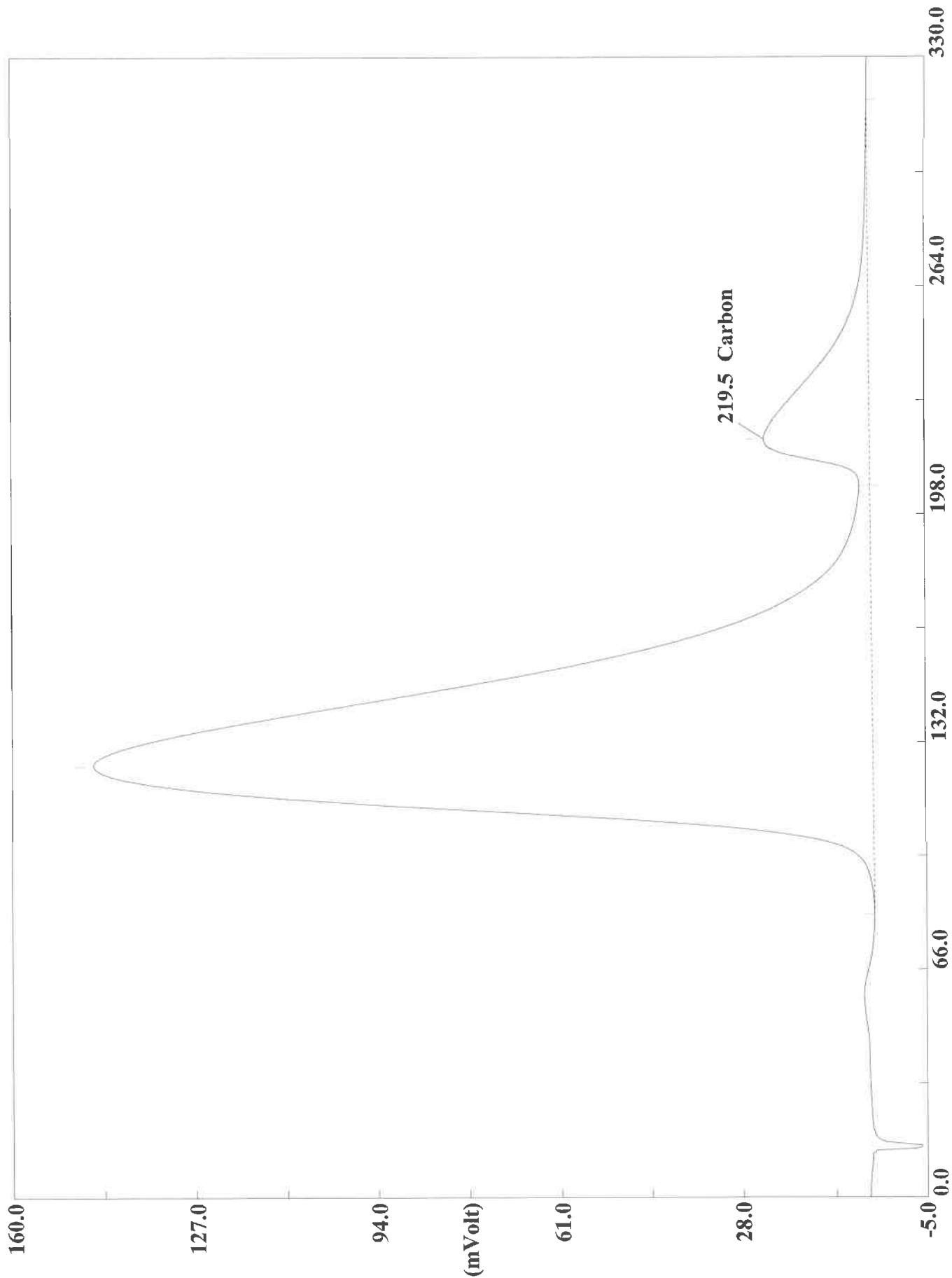
Page: 1 Sample: 180-111287-A-135 (A100420102)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420102
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 22:12 Printed : 10/5/2020 07:03
Sample ID : 180-111287-A-135 (# 113)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.8825	232	3257326	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420104.DAT
Sample name :CCV Analysed :10/04/2020 22:23

Eager 300 Report

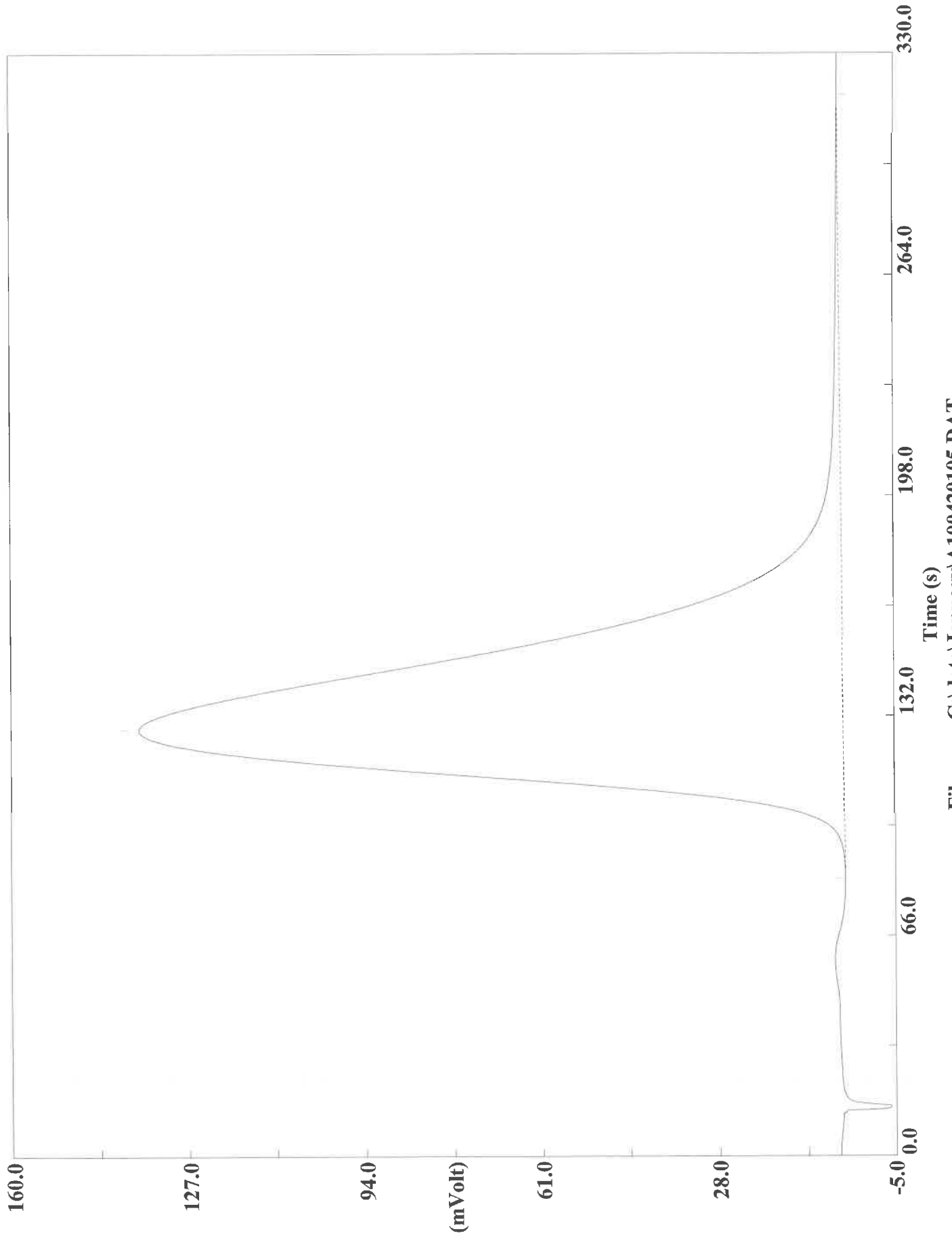
Page: 1 Sample: CCV (A100420104)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420104
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 22:23 Printed : 10/5/2020 07:03
Sample ID : CCV (# 115)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0815	220	5623123	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420105.DAT
Sample name :CCB Analysed :10/04/2020 22:29

Eager 300 Report

Page: 1 Sample: CCB (A100420105)

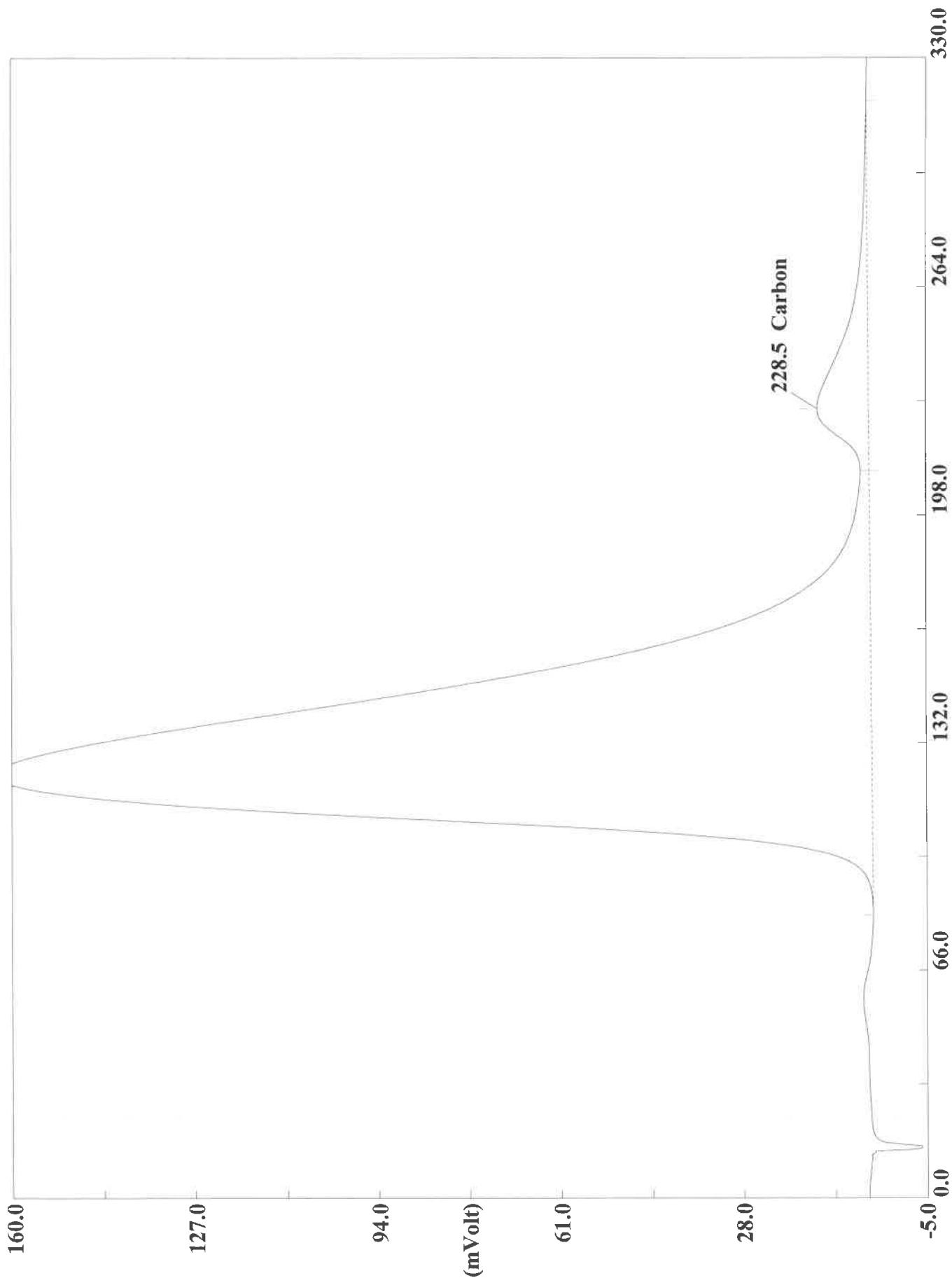
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420105
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 22:29 Printed : 10/5/2020 07:03
Sample ID : CCB (# 116)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420106.DAT
Sample name :180-111287-A-136 Analysed :10/04/2020 22:34

Eager 300 Report

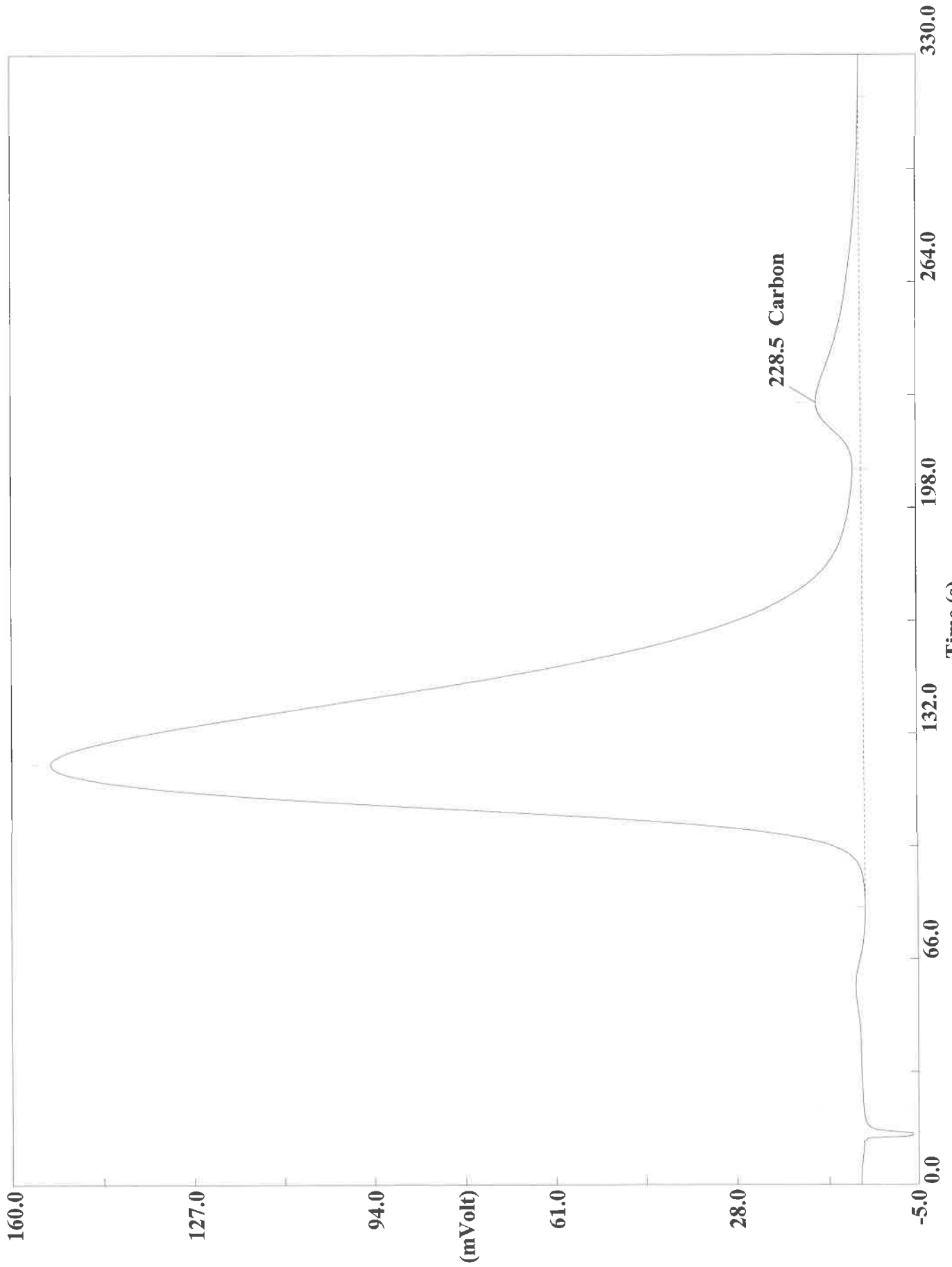
Page: 1 Sample: 180-111287-A-136 (A100420106)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420106
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 22:34 Printed : 10/5/2020 07:03
Sample ID : 180-111287-A-136 (# 117)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2202	229	3103596	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420107.DAT
Sample name :180-111287-A-136 Analysed :10/04/2020 22:40

Eager 300 Report

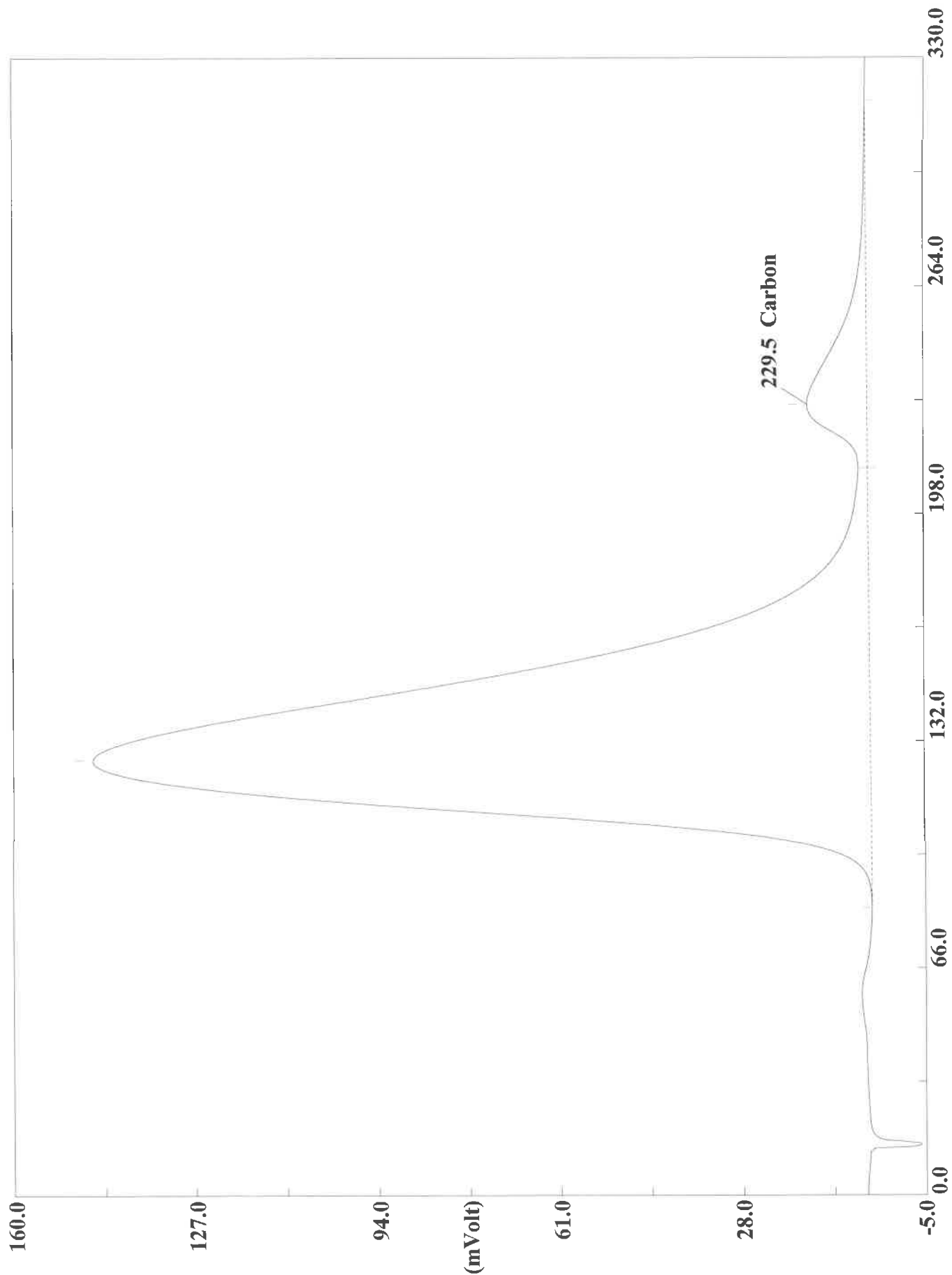
Page: 1 Sample: 180-111287-A-136 (A100420107)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420107
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 22:40 Printed : 10/5/2020 07:03
Sample ID : 180-111287-A-136 (# 118)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 16

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.7459	229	3105669	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420109.DAT

Sample name :180-111287-A-137 Analysed :10/04/2020 22:51

Eager 300 Report

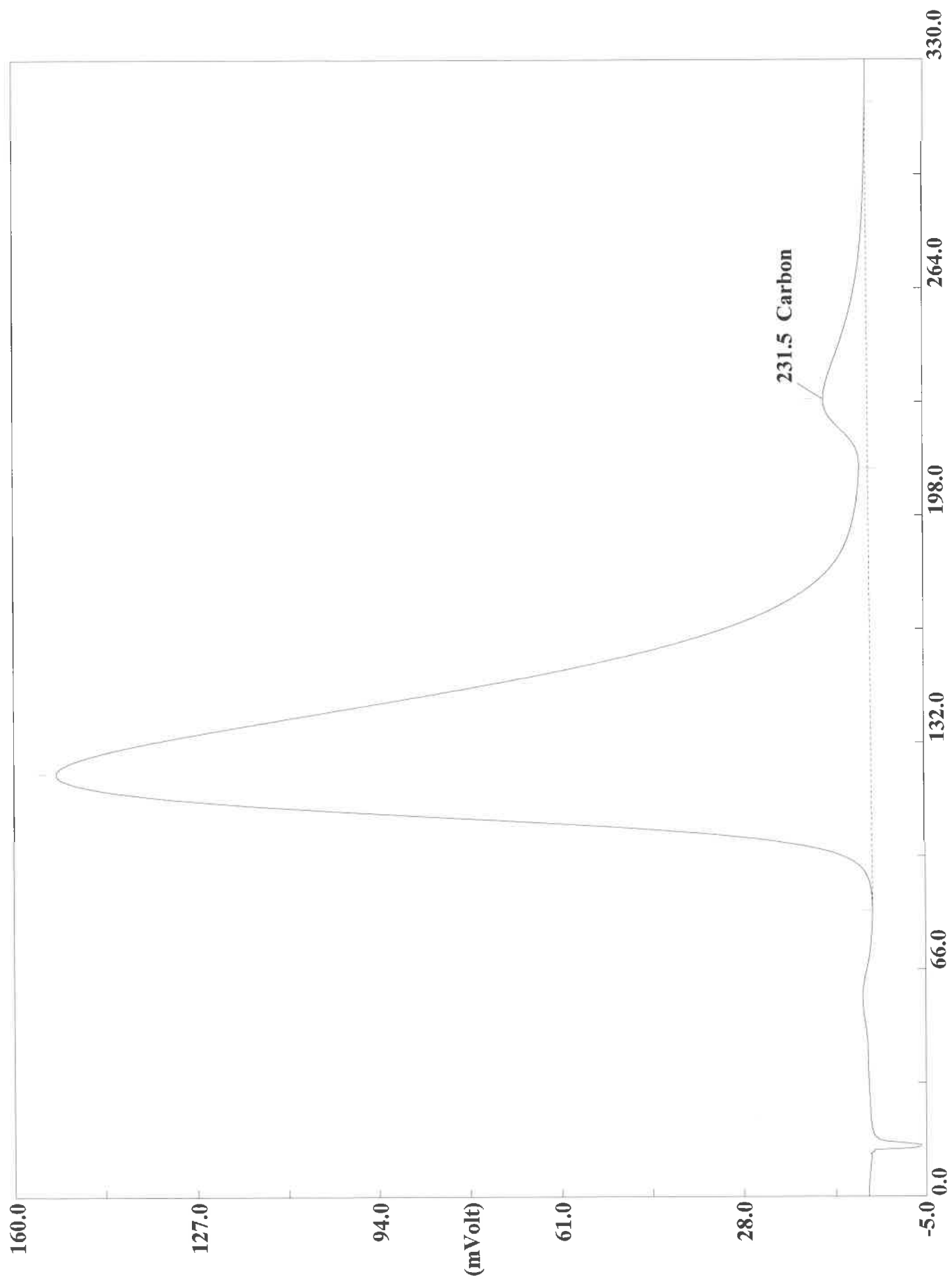
Page: 1 Sample: 180-111287-A-137 (A100420109)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420109
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 22:51 Printed : 10/5/2020 07:03
Sample ID : 180-111287-A-137 (# 120)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 15.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.3686	230	3466224	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420110.DAT
Sample name :180-111287-A-137 Analysed :10/04/2020 22:57

Eager 300 Report

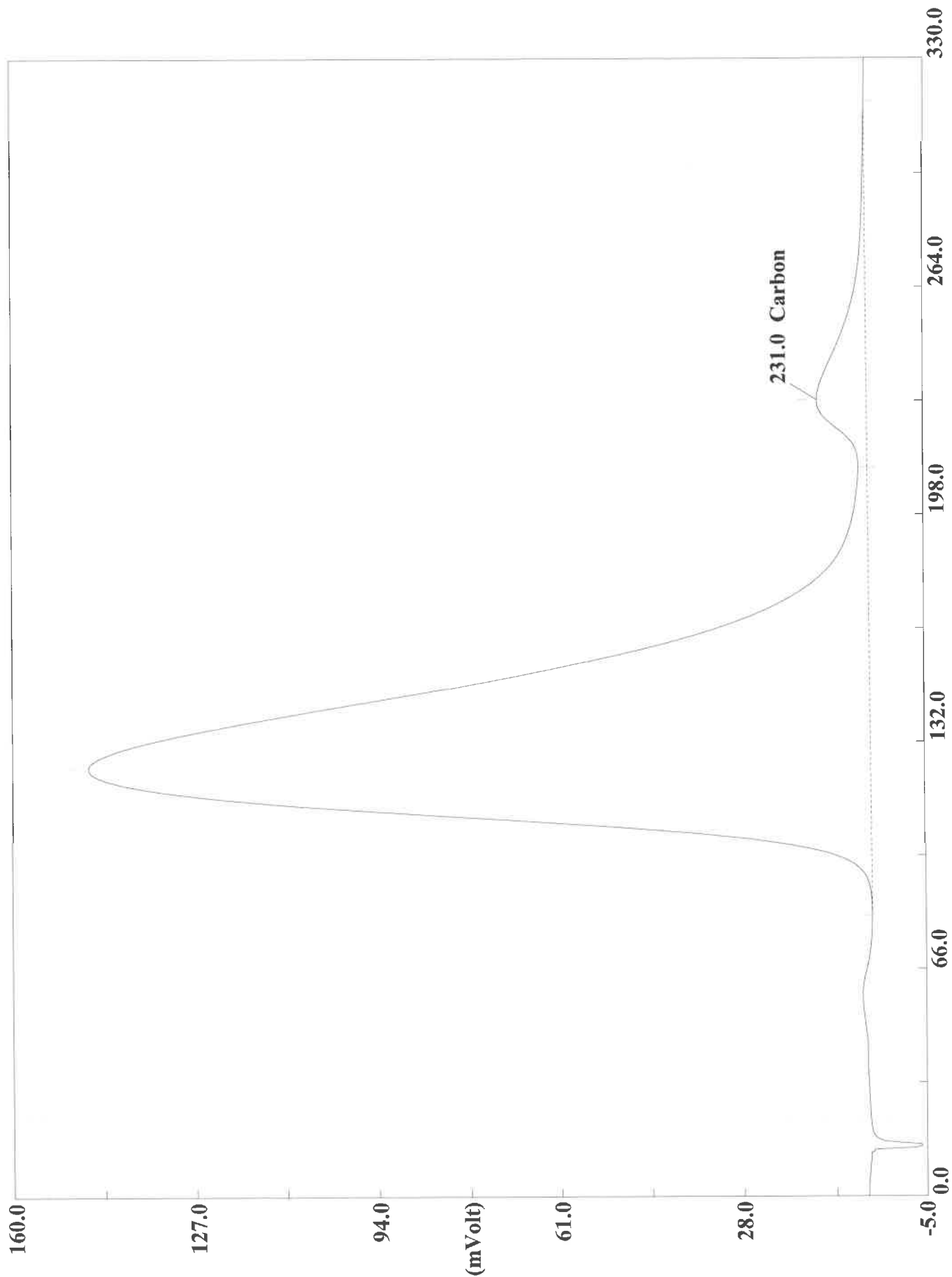
Page: 1 Sample: 180-111287-A-137 (A100420110)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420110
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 22:57 Printed : 10/5/2020 07:04
Sample ID : 180-111287-A-137 (# 121)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 15.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.5243	232	2883700	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420112.DAT

Sample name :180-111315-A-27 Analysed :10/04/2020 23:08

Eager 300 Report

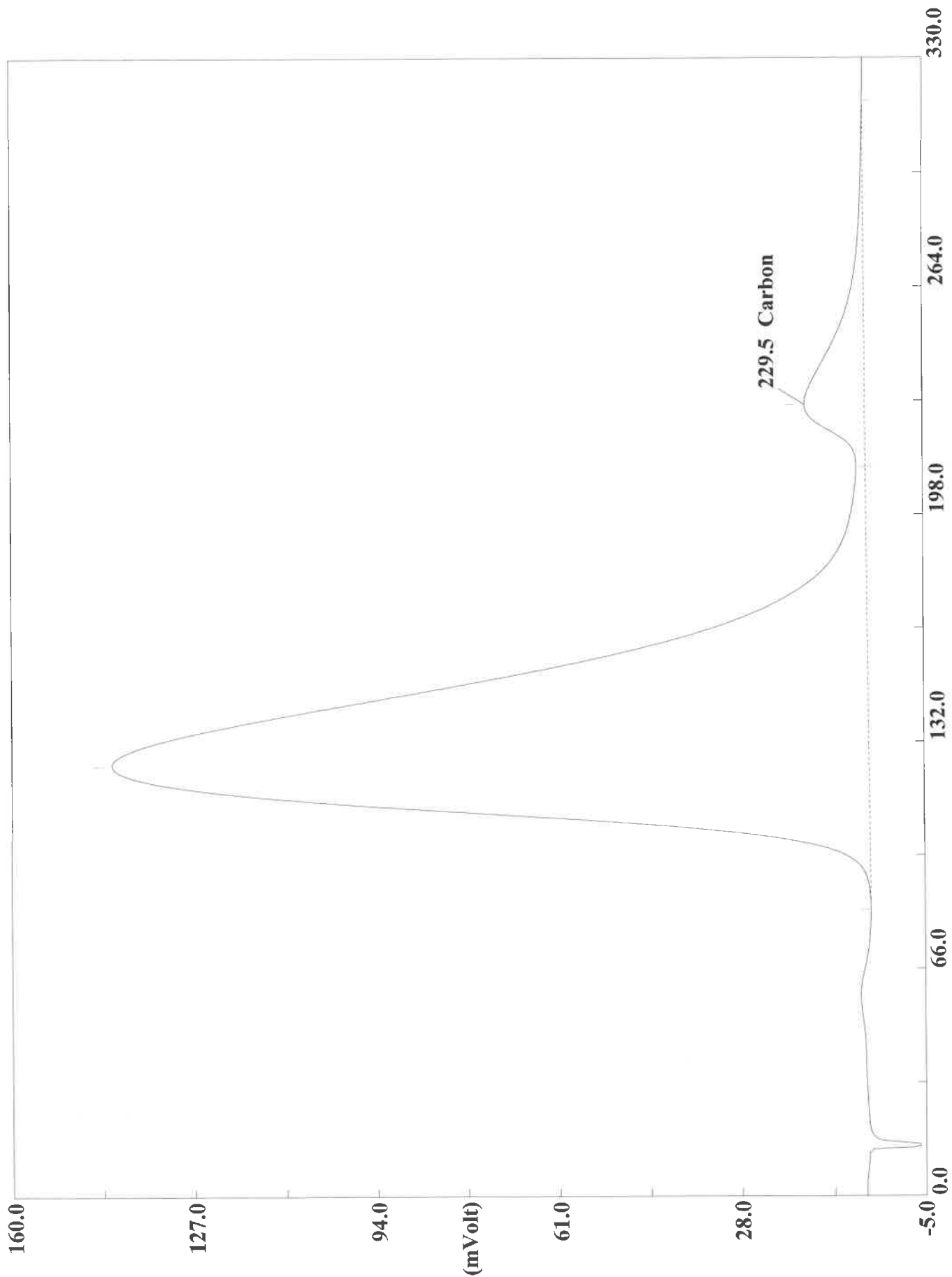
Page: 1 Sample: 180-111315-A-27 (A100420112)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420112
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 23:08 Printed : 10/5/2020 07:04
Sample ID : 180-111315-A-27 (# 123)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2913	231	3018073	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420113.DAT

Sample name :180-111315-A-27 Analysed :10/04/2020 23:13

Eager 300 Report

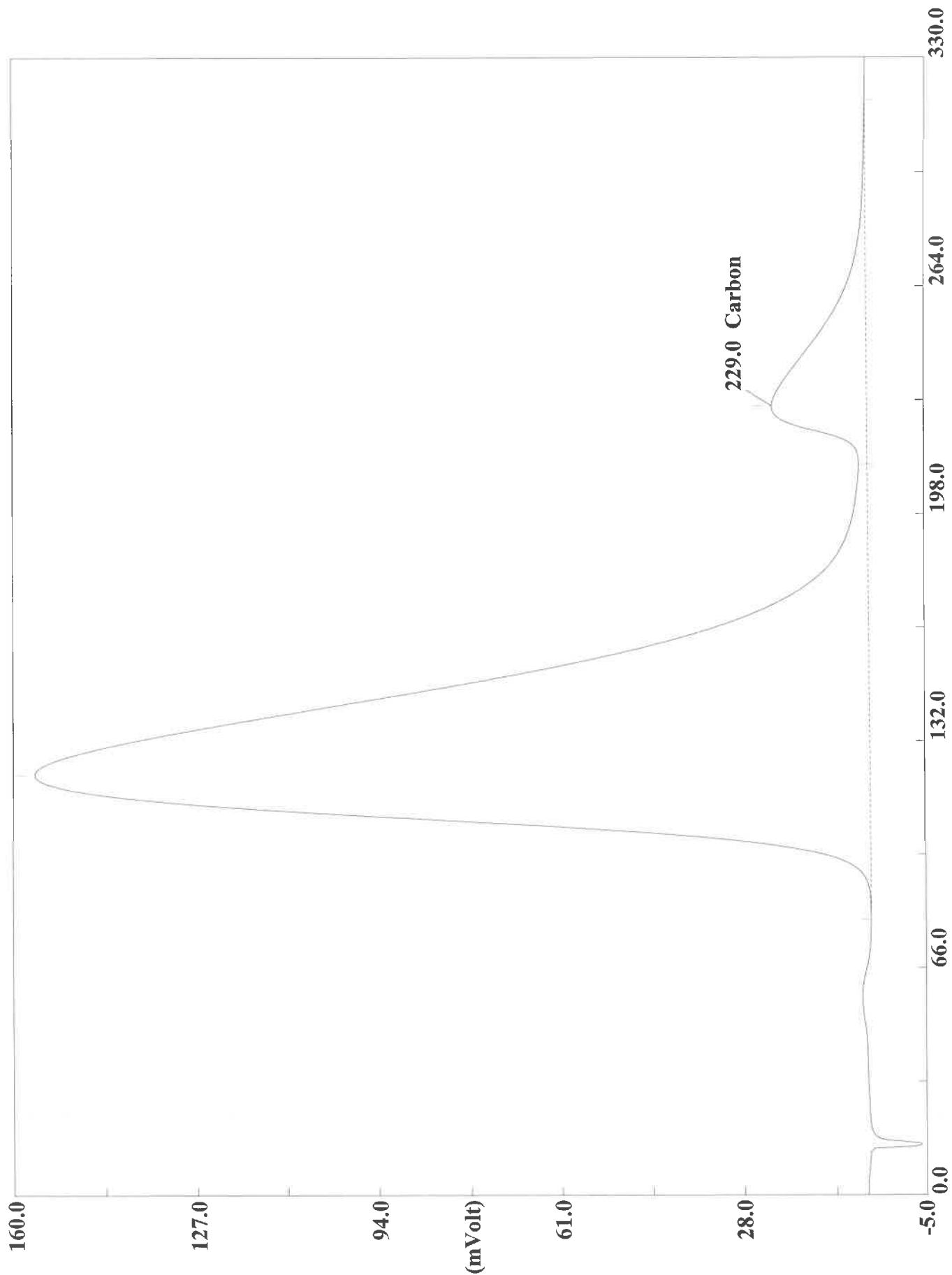
Page: 1 Sample: 180-111315-A-27 (A100420113)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420113
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 23:13 Printed : 10/5/2020 07:04
Sample ID : 180-111315-A-27 (# 124)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.1034	230	3492487	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Time (s)

Filename C:\data\January\A100420115.DAT

Sample name :180-111315-A-29 Analysed :10/04/2020 23:25

Eager 300 Report

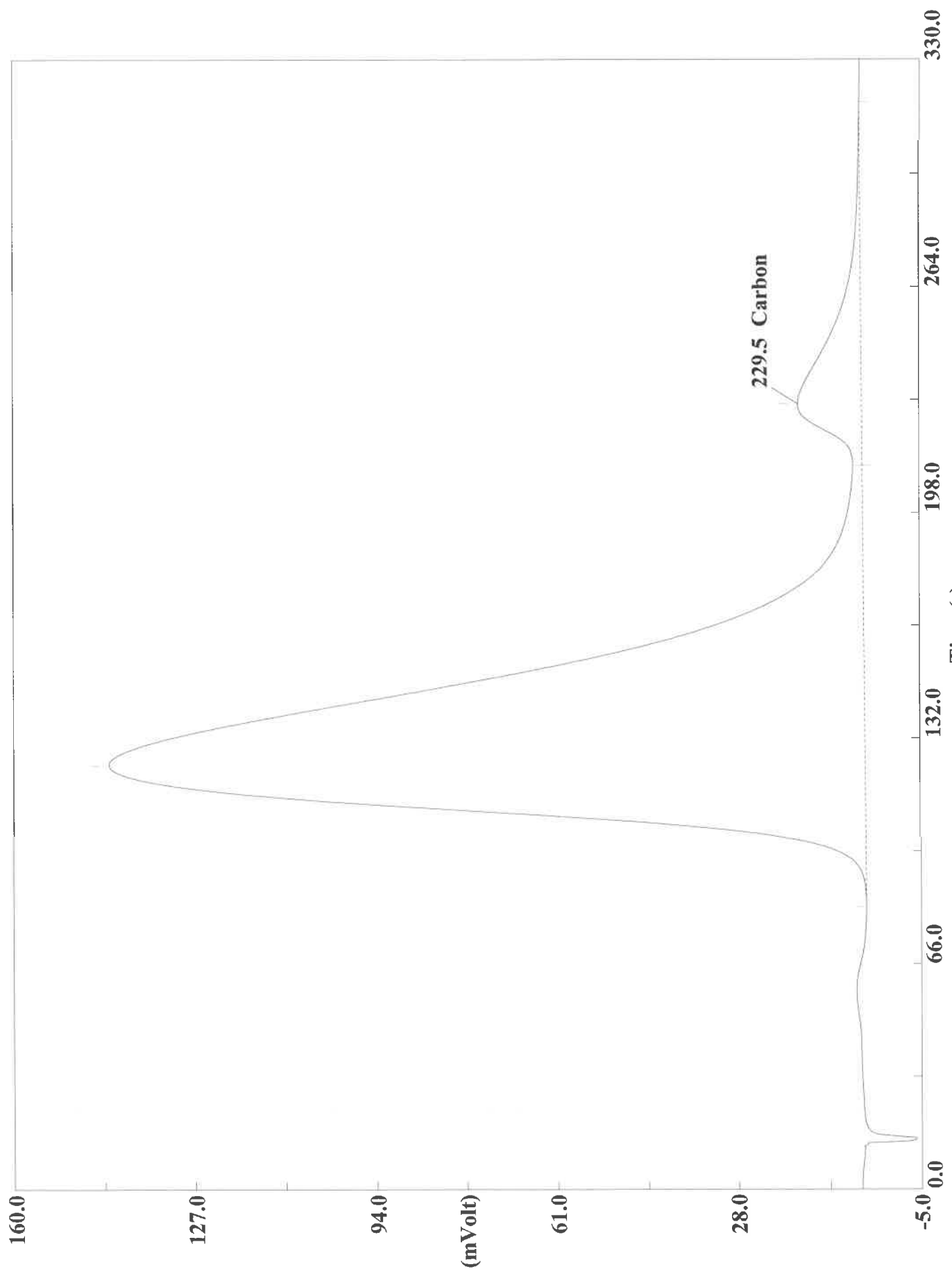
Page: 1 Sample: 180-111315-A-29 (A100420115)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420115
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 23:25 Printed : 10/5/2020 07:04
Sample ID : 180-111315-A-29 (# 126)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 25

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.2397	229	5510443	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420116.DAT
Sample name : 180-111315-A-29 Analysed : 10/04/2020 23:30

Eager 300 Report

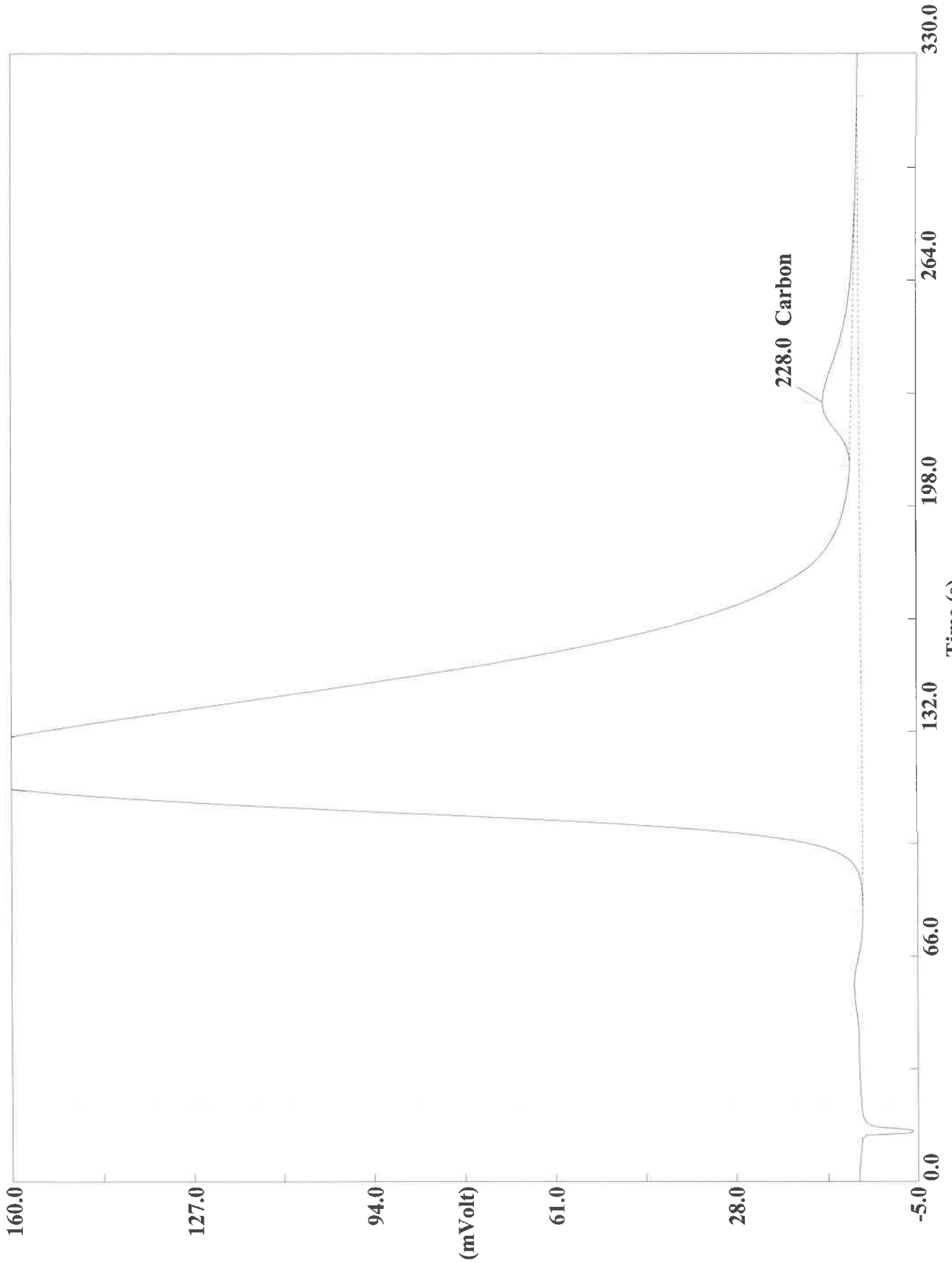
Page: 1 Sample: 180-111315-A-29 (A100420116)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420116
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 23:30 Printed : 10/5/2020 07:04
Sample ID : 180-111315-A-29 (# 127)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.8835	230	3747821	FU	1.000000	

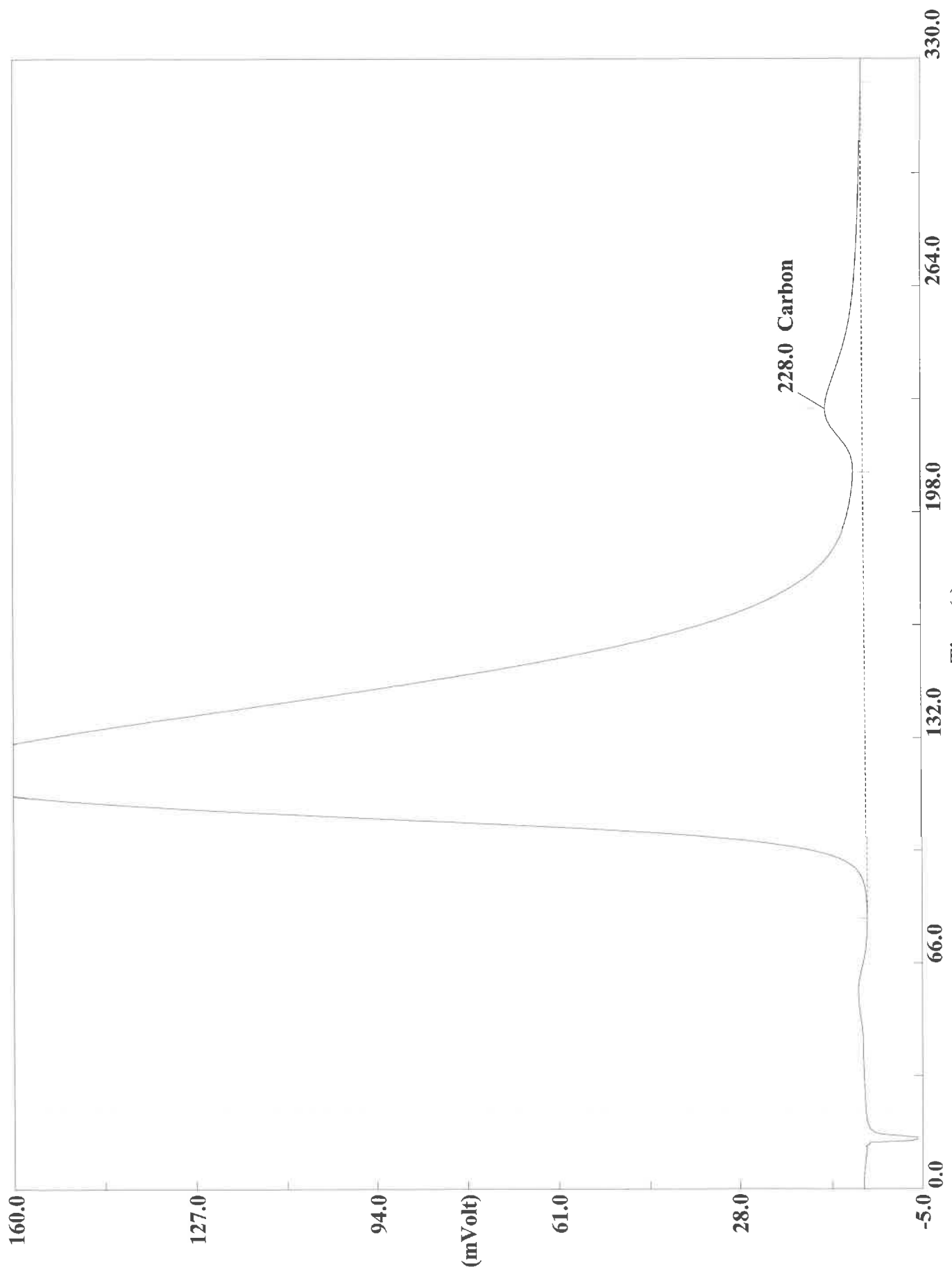
NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420118.DAT

Sample name : 180-111359-F-4 Analyzed : 10/04/2020 23:41

MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420118.DAT
Sample name :180-111359-F-4 Analysed :10/04/2020 23:41

Eager 300 Report

Page: 1 Sample: 180-111359-F-4 (A100420118)

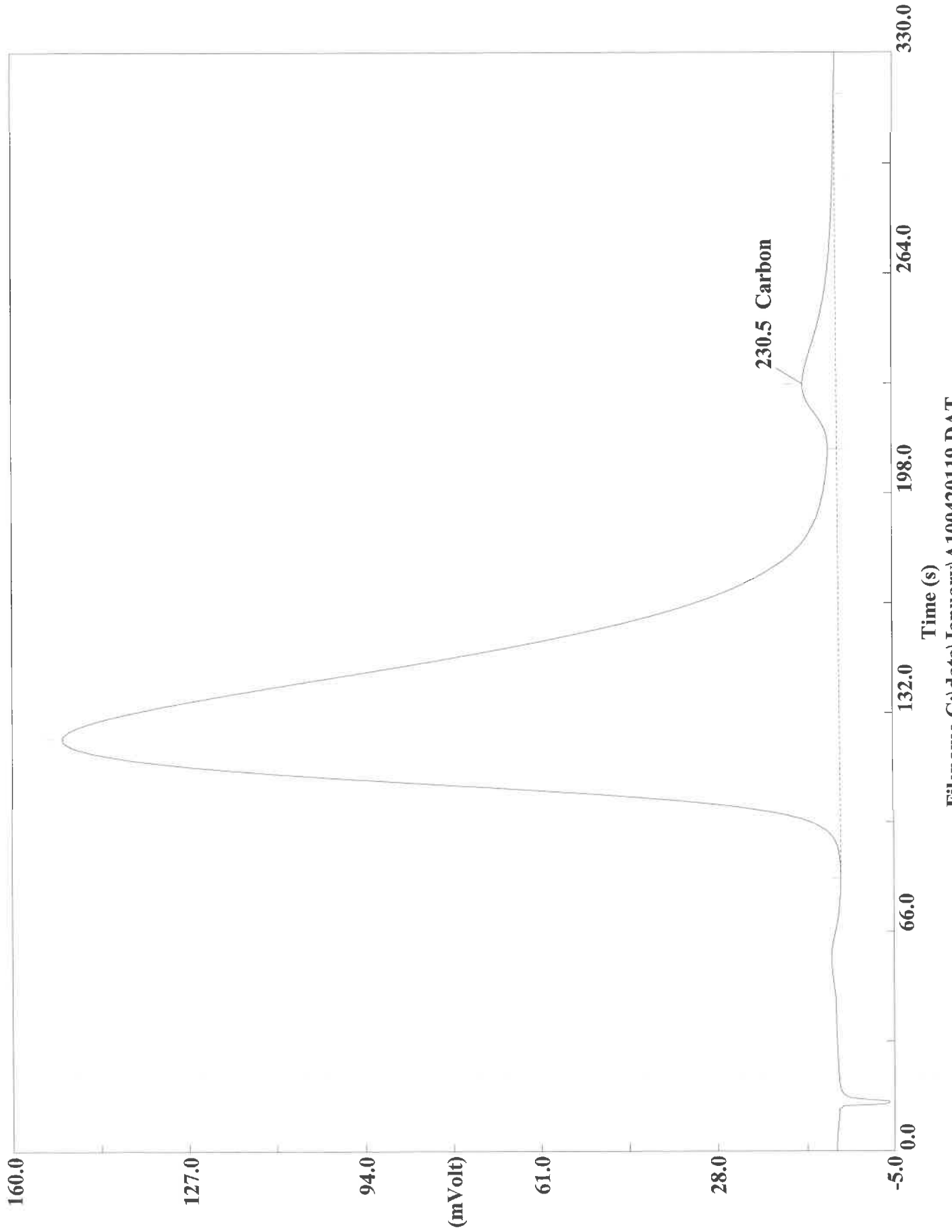
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420118
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 23:41 Printed : 10/5/2020 07:19
Sample ID : 180-111359-F-4 (# 129)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 14.3

Calib. method : using 'Least Squares to Linear fit'

Warning Chromatogram has been subjected to manual integration.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2246	228	2383948	mi	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420119.DAT

Sample name :180-111359-F-4 Analysed :10/04/2020 23:47

Eager 300 Report

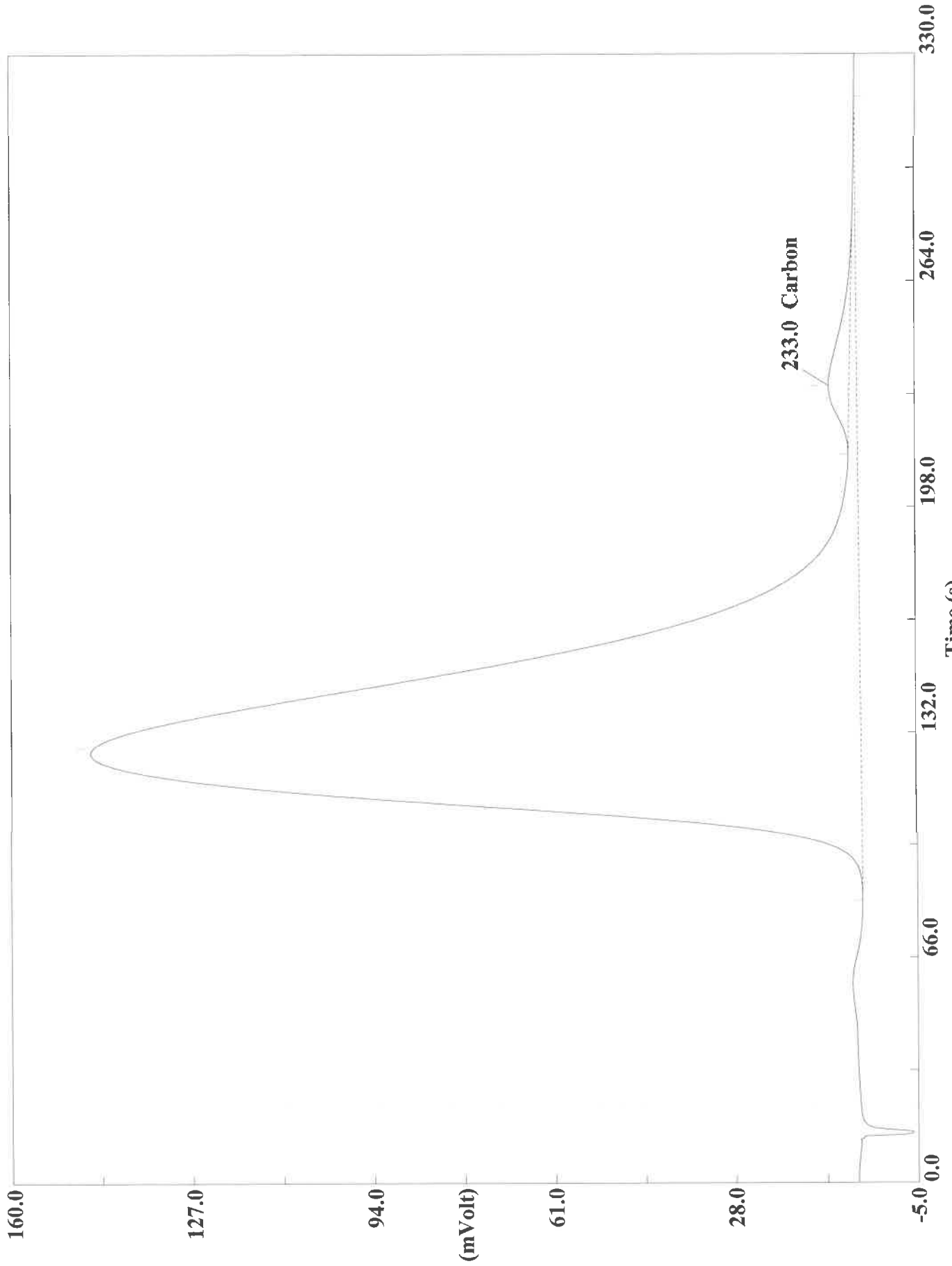
Page: 1 Sample: 180-111359-F-4 (A100420119)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420119
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 23:47 Printed : 10/5/2020 07:04
Sample ID : 180-111359-F-4 (# 130)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 12.2

Calib. method : using 'Least Squares to Linear fit'

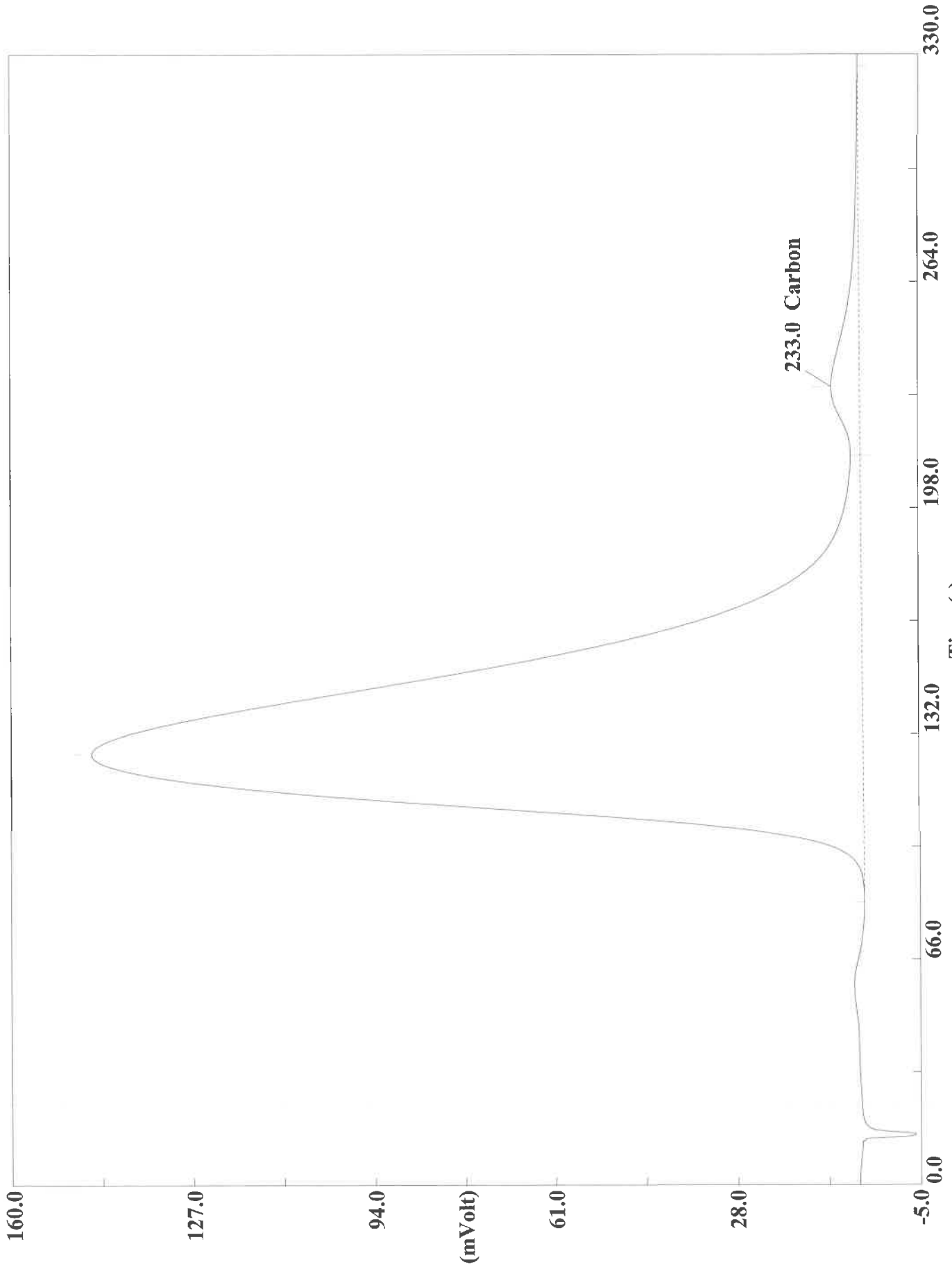
Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.6895	231	2326557	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420121.DAT
Sample name :180-111359-F-5 Analysed :10/04/2020 23:58

MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420121.DAT
Sample name :180-111359-F-5 Analysed :10/04/2020 23:58

Eager 300 Report

Page: 1 Sample: 180-111359-F-5 (A100420121)

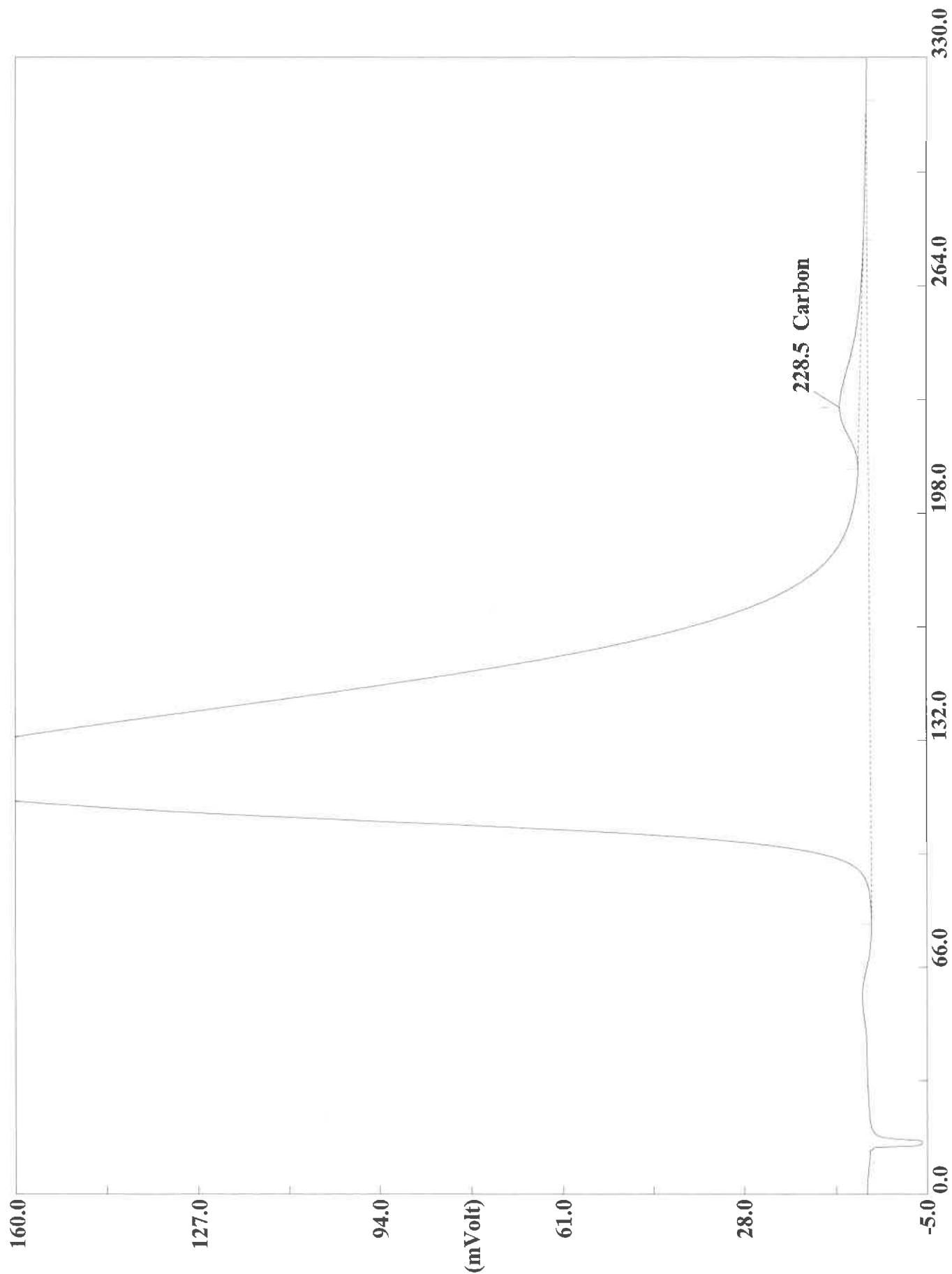
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420121
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/04/2020 23:58 Printed : 10/5/2020 07:20
Sample ID : 180-111359-F-5 (# 132)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 9.4

Calib. method : using 'Least Squares to Linear fit'

Warning Chromatogram has been subjected to manual integration.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.9890	233	1934165	mi	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20

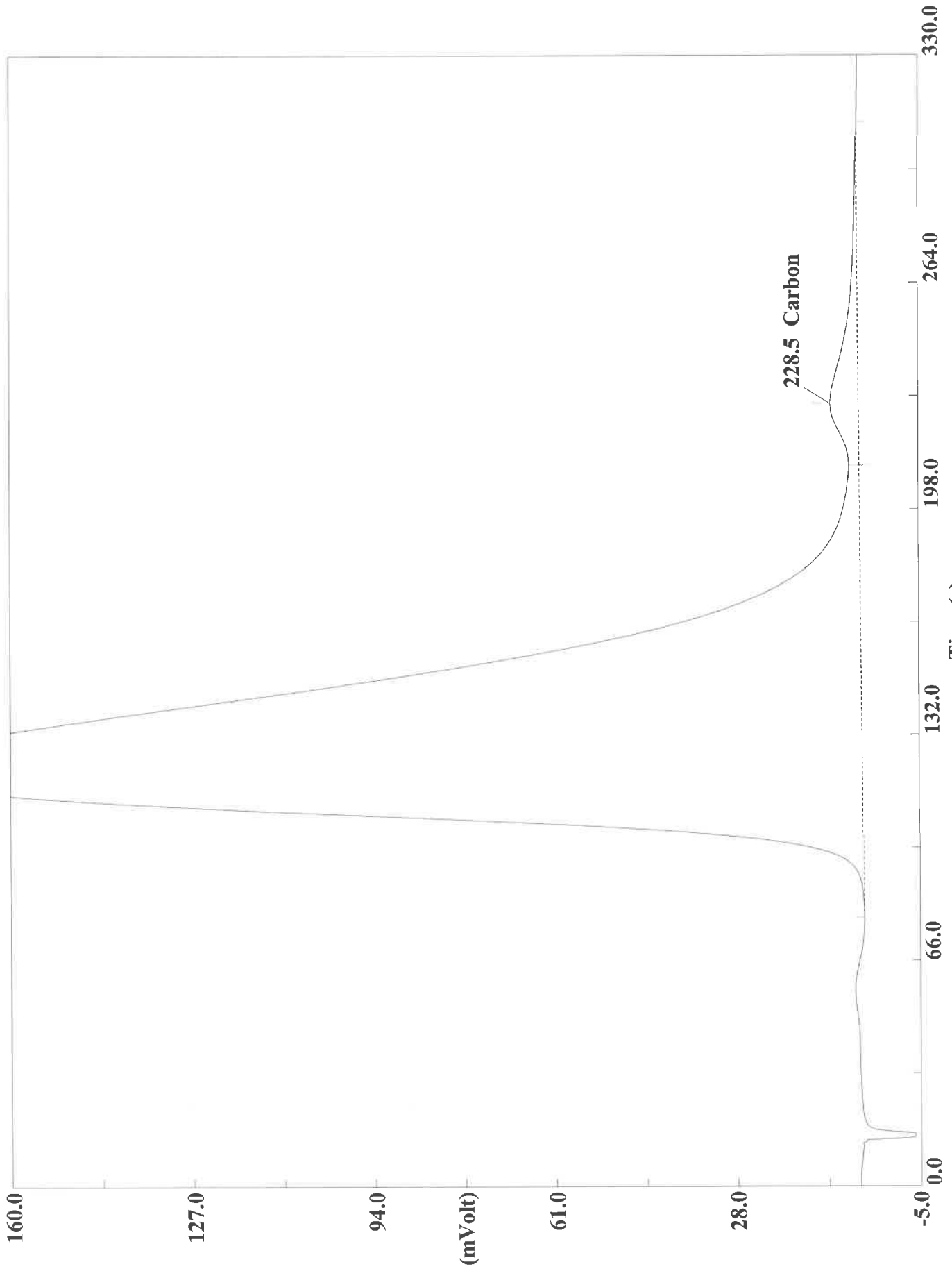


Time (s)

Filename C:\data\January\A100420122.DAT

Sample name : 180-111359-F-5 Analysed : 10/05/2020 00:04

MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A10042012.DAT
Sample name :180-111359-F-5 Analysed :10/05/2020 00:04

Eager 300 Report

Page: 1 Sample: 180-111359-F-5 (A100420122)

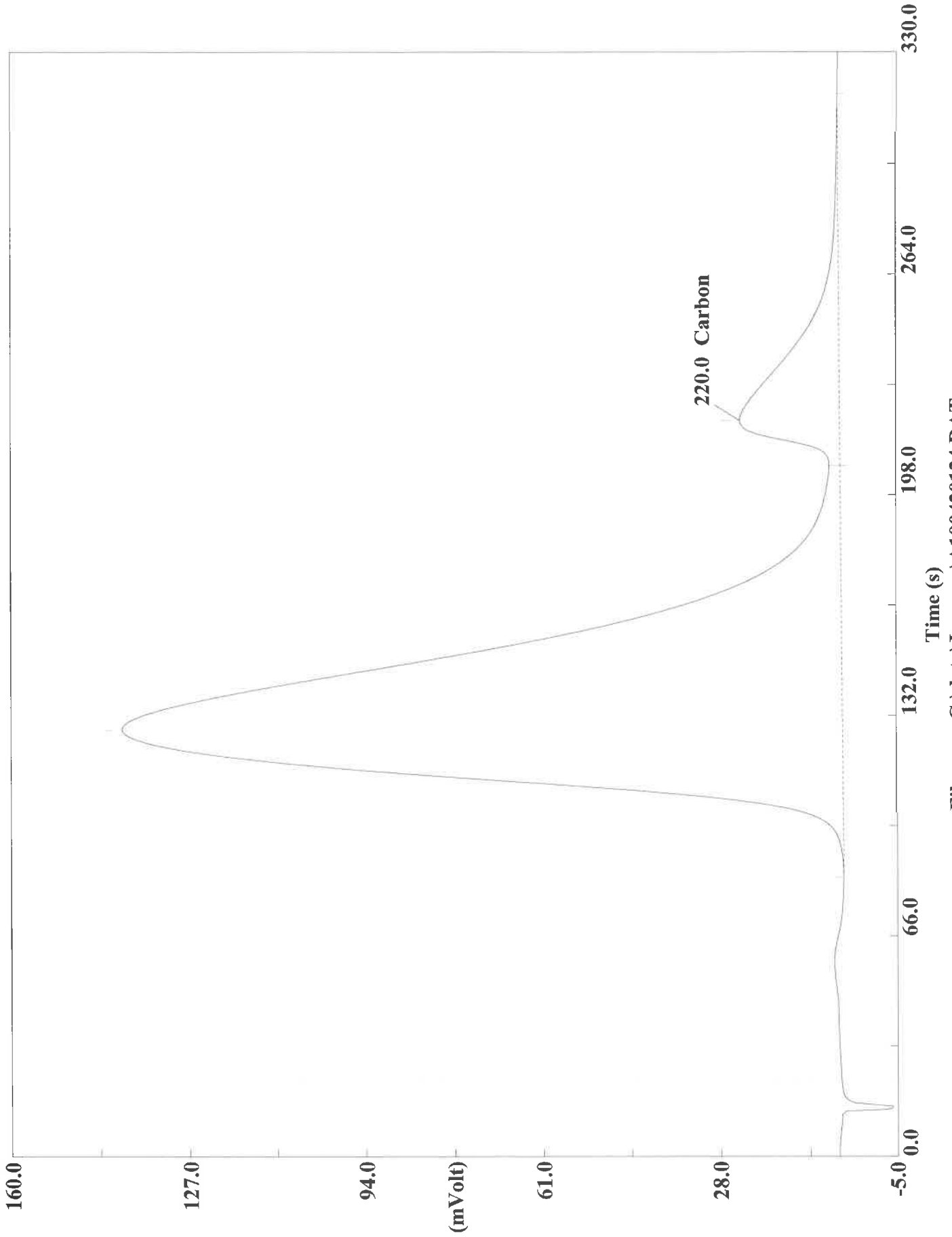
Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420122
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 00:04 Printed : 10/5/2020 07:20
Sample ID : 180-111359-F-5 (# 133)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 9.2

Calib. method : using 'Least Squares to Linear fit'

Warning Chromatogram has been subjected to manual integration.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.7800	229	1792104	mi	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420124.DAT
Sample name :CCV Analysed :10/05/2020 00:15

Eager 300 Report

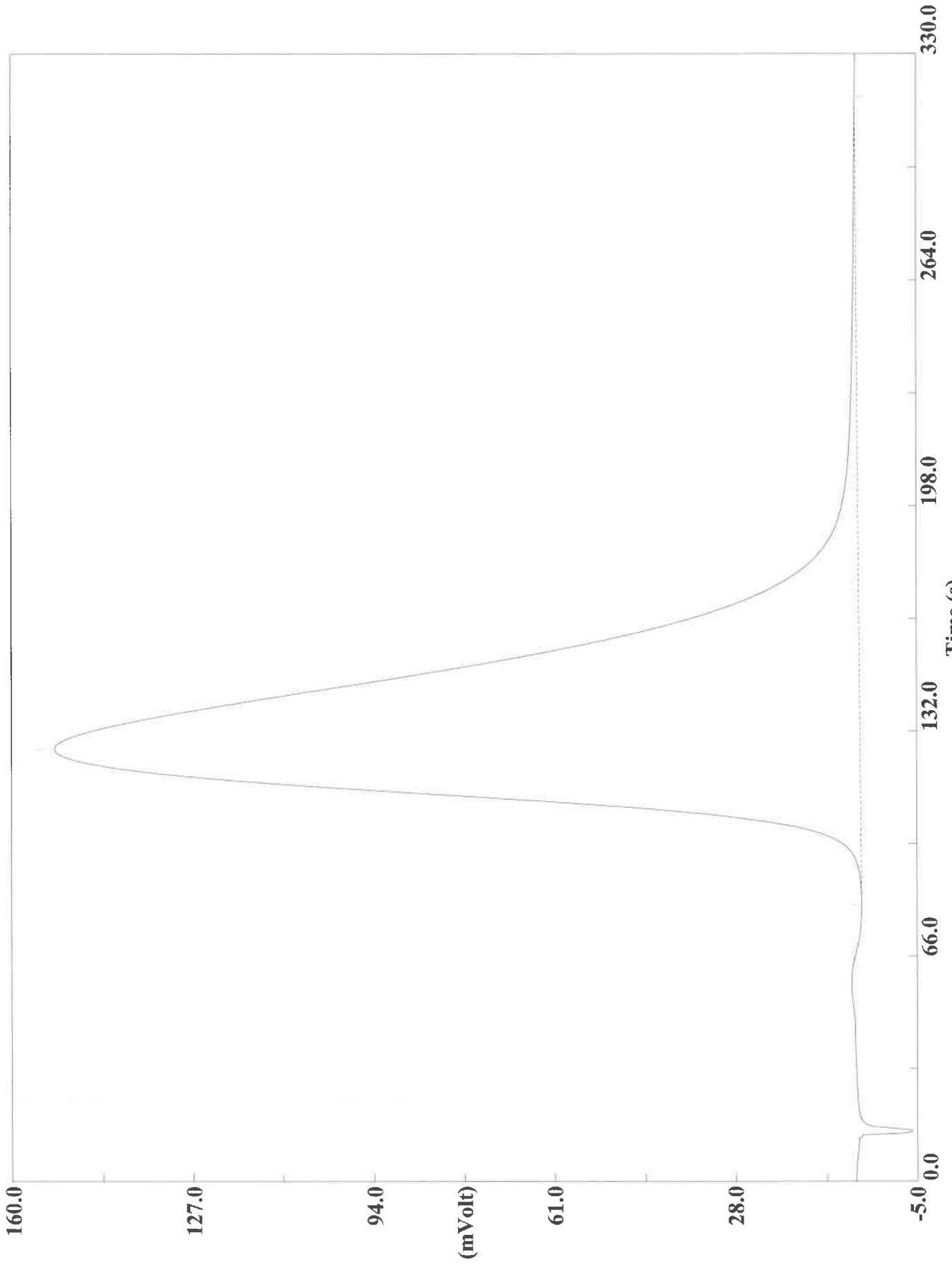
Page: 1 Sample: CCV (A100420124)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420124
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 00:15 Printed : 10/5/2020 07:04
Sample ID : CCV (# 135)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0727	220	5577345	FU	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/05/20



Filename C:\data\January\A100420125.DAT
Sample name :CCB Analysed :10/05/2020 00:20

Eager 300 Report

Page: 1 Sample: CCB (A100420125)

Method Name : Lloyd Kahn
Method File : C:\data\January\100420A.mth
Chromatogram : A100420125
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 00:20 Printed : 10/5/2020 07:05
Sample ID : CCB (# 136)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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Eager Xperience

Method name : Lloyd Kahn
 Method filename : C:\data\January\092320A.mth

Sample table

Chromatogram overwrite : Enabled

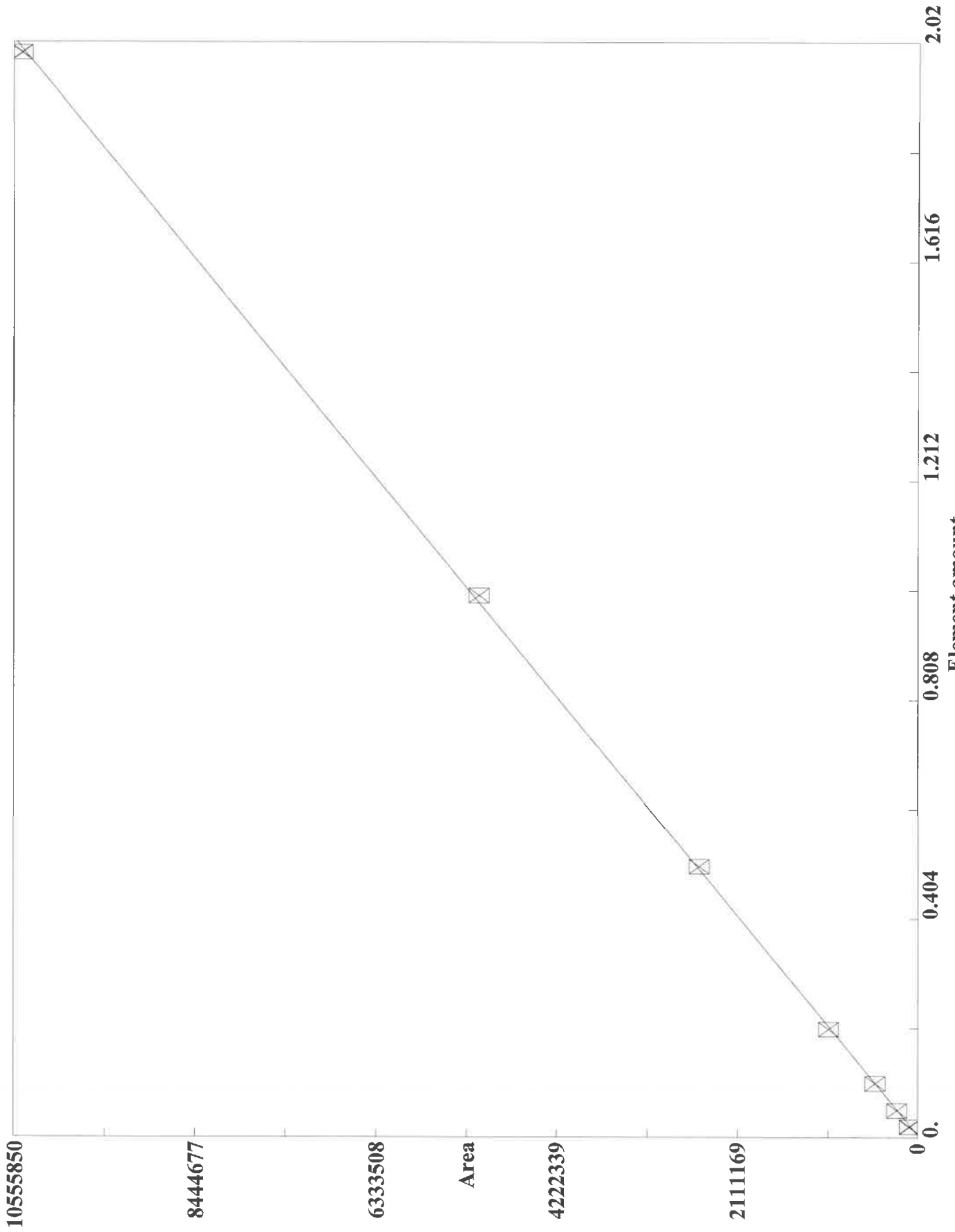
#	Sample name	Filename	Type	Weight	Hum. %
1	BYPASS	A092320006	ByP	-	0
2	BLANK	A092320007	Blk	-	0
3	BLANK	A092320008	Blk	-	0
4	1,000 KHP CT#3785365	A092320009	Std	200	0
5	2,500 KHP CT#3785364	A092320010	Std	50	0
6	5,000 KHP CT#3785364	A092320011	Std	100	0
7	10,000 KHP CT#3785364	A092320012	Std	200	0
8	25,000 KHP CT#3785363	A092320013	Std	50	0
9	50,000 KHP CT#3785363	A092320014	Std	100	0
10	100,000 KHP CT#3785363	A092320015	Std	200	0
11	ICV 37,810 KHP CT#3742673	A092320016	Unk	11.6	0
12	CCV	A092320017	Unk	100	0
13	CCB	A092320018	Unk	20	0
14	MB	A092320019	Unk	21.1	0
15	MB	A092320020	Unk	24.4	0
16	LCS	A092320021	Unk	12.7	0
17	LCS	A092320022	Unk	9.8	0
18	180-110583-A-9	A092320023	Unk	18.2	0
19	180-110583-A-9	A092320024	Unk	18	0
20	Rinse	A092320025	Unk	1	0
21	180-110583-B-14	A092320026	Unk	10.6	0
22	180-110583-B-14	A092320027	Unk	7.4	0
23	Rinse	A092320028	Unk	1	0
24	180-110583-B-14 MS	A092320029	Unk	8.3	0
25	180-110583-B-14 MS	A092320030	Unk	6.6	0
26	Rinse	A092320031	Unk	1	0
27	180-110583-B-14 MSD	A092320032	Unk	7.7	0
28	180-110583-B-14 MSD	A092320033	Unk	7.8	0
29	Rinse	A092320034	Unk	1	0
30	180-110583-A-19	A092320035	Unk	13.1	0
31	180-110583-A-19	A092320036	Unk	16.6	0
32	Rinse	A092320037	Unk	1	0
33	CCV	A092320038	Unk	100	0
34	CCB	A092320039	Unk	20	0
35	180-110583-A-20	A092320040	Unk	11.9	0
36	180-110583-A-20	A092320041	Unk	9.1	0
37	Rinse	A092320042	Unk	1	0

Llyod Kahn %Readback Error Calculation Spreadsheet

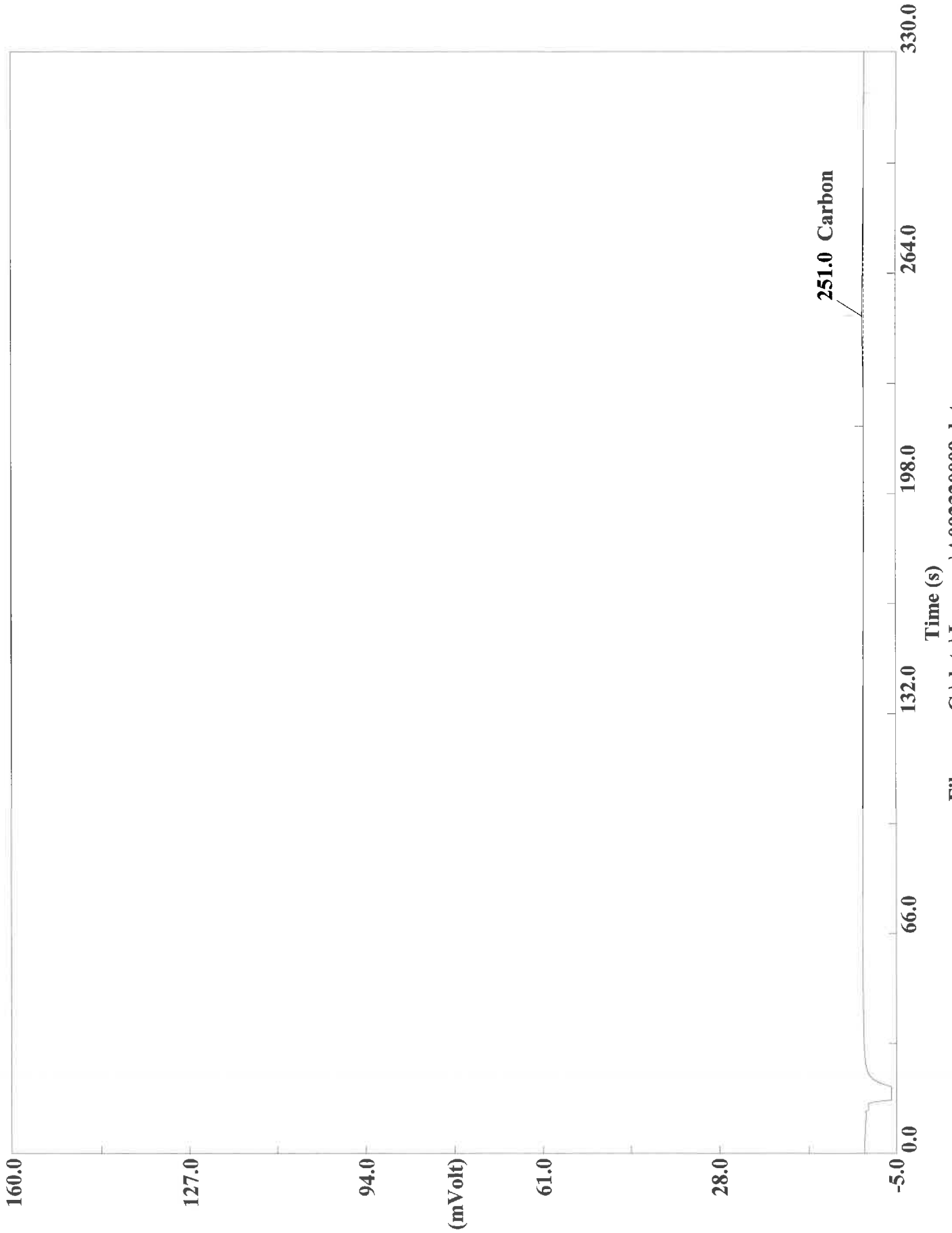
ICAL Std (ppm)	ICAL ID	Average Area	% Actual Carbon of Std.	%Readback Error	%Readback Criteria
1000	092320LK_ICAL	99423	0.0073	27.364	≤50%
2500	092320LK_ICAL	247009	0.0856	14.411	≤30%
5000	092320LK_ICAL	499611	0.0912	8.825	≤30%
10000	092320LK_ICAL	1048607	0.0982	1.838	≤30%
25000	092320LK_ICAL	2561375	0.9721	2.787	≤30%
50000	092320LK_ICAL	5128187	0.9777	2.231	≤30%
100000	092320LK_ICAL	10456420	0.9991	0.090	≤30%

Kb Value	Ke Value	Volume Cal Standard Injected	True Value Carbon Std in %
		200	0.01
		50	0.10
		100	0.10
		200	0.10
		50	1.00
		100	1.00
		200	1.00

Eager300 Calibration curve



NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320009.dat
Sample name :1,000 KHP CT#3785365 Analysed :09/23/2020 14:23

Eager 300 Report

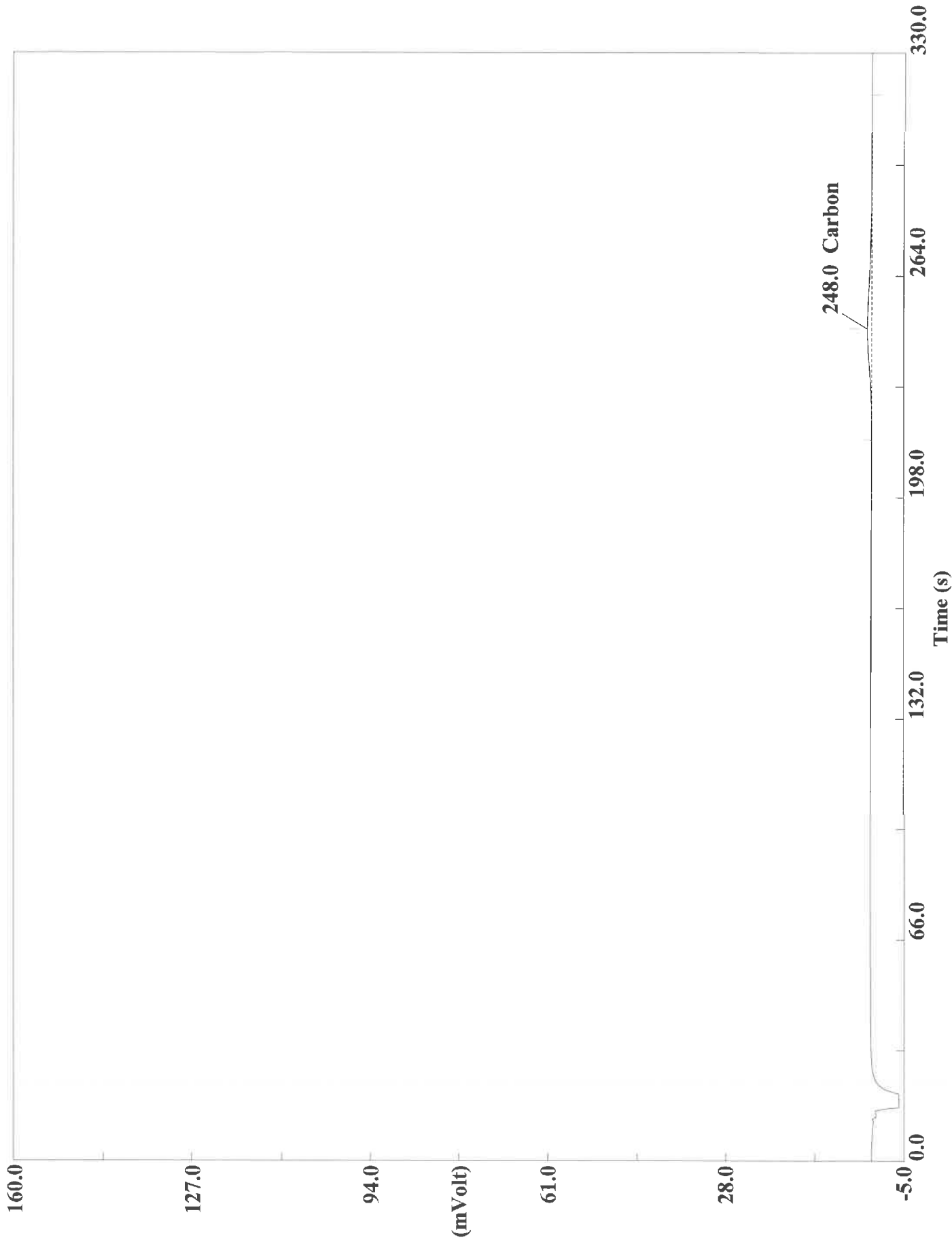
Page: 1 Sample: 1,000 KHP CT#3785365 (A092320009)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320009
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:23 Printed : 9/23/2020 14:29
Sample ID : 1,000 KHP CT#3785365 (# 4)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 200

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.0100	251	99423	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320010.dat
Sample name :2,500 KHP CT#3785364 Analysed :09/23/2020 14:29

Eager 300 Report

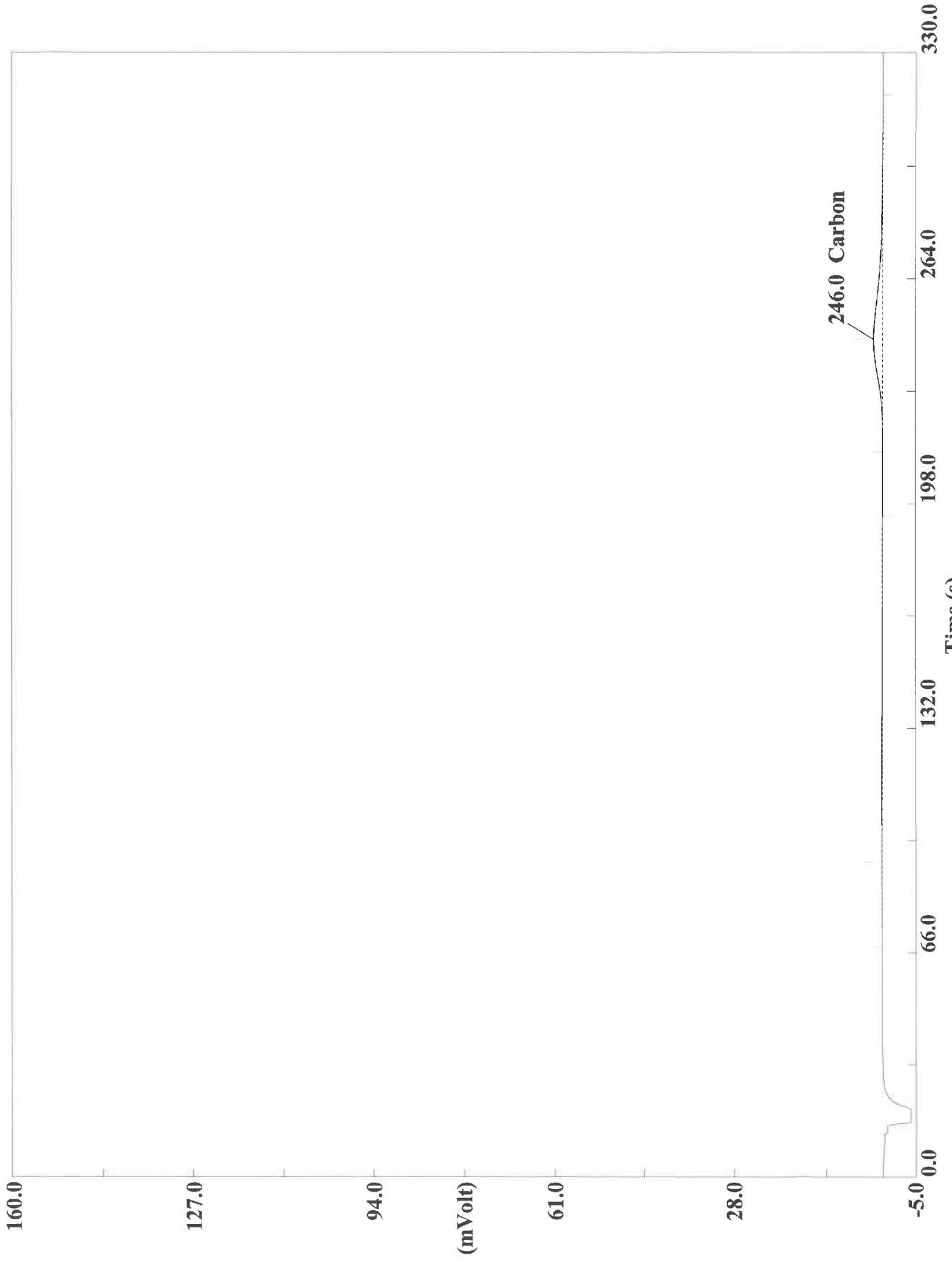
Page: 1 Sample: 2,500 KHP CT#3785364 (A092320010)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320010
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:29 Printed : 9/23/2020 14:34
Sample ID : 2,500 KHP CT#3785364 (# 5)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 50

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.1000	248	247009	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320011.dat
Sample name :5,000 KHP CT#3785364 Analysed :09/23/2020 14:34

Eager 300 Report

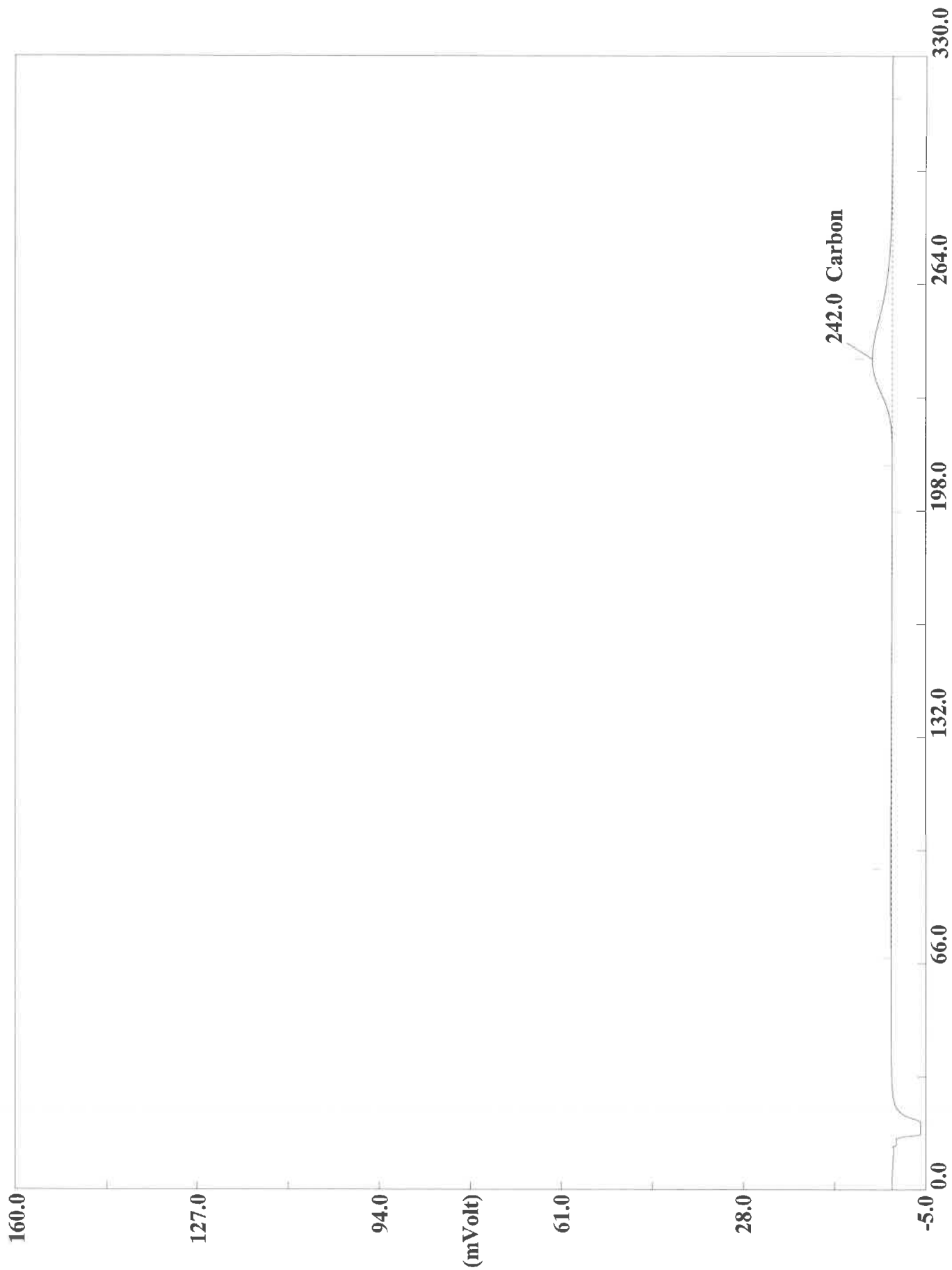
Page: 1 Sample: 5,000 KHP CT#3785364 (A092320011)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320011
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:34 Printed : 9/23/2020 14:40
Sample ID : 5,000 KHP CT#3785364 (# 6)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.1000	246	499611	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320012.dat
Sample name : 10,000 KHP CT#3785364 Analysed : 09/23/2020 14:40

Eager 300 Report

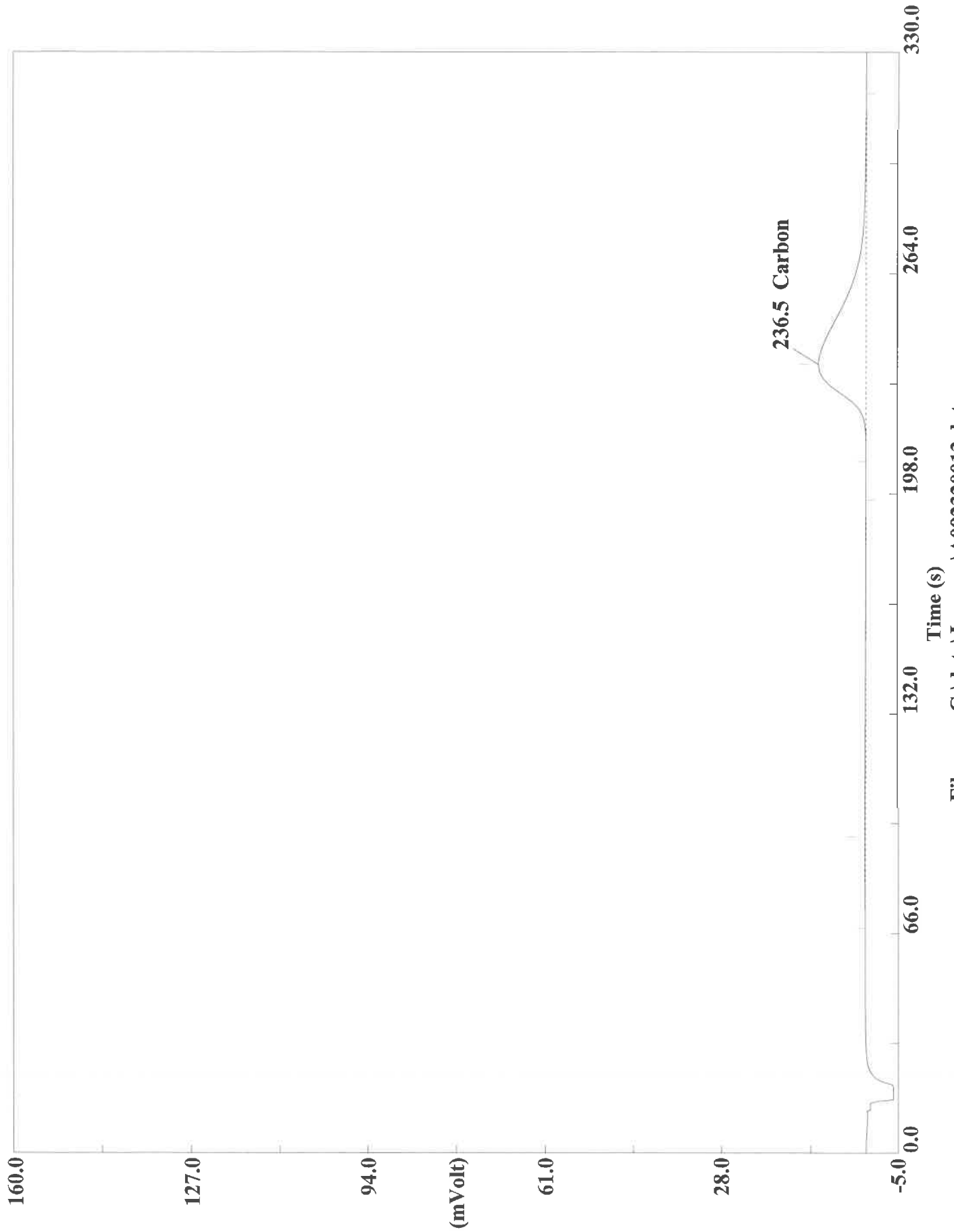
Page: 1 Sample: 10,000 KHP CT#3785364 (A092320012)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320012
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:40 Printed : 9/23/2020 14:46
Sample ID : 10,000 KHP CT#3785364 (# 7)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 200

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.1000	242	1048607	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320013.dat
Sample name :25,000 KHP CT#3785363 Analysed :09/23/2020 14:46

Eager 300 Report

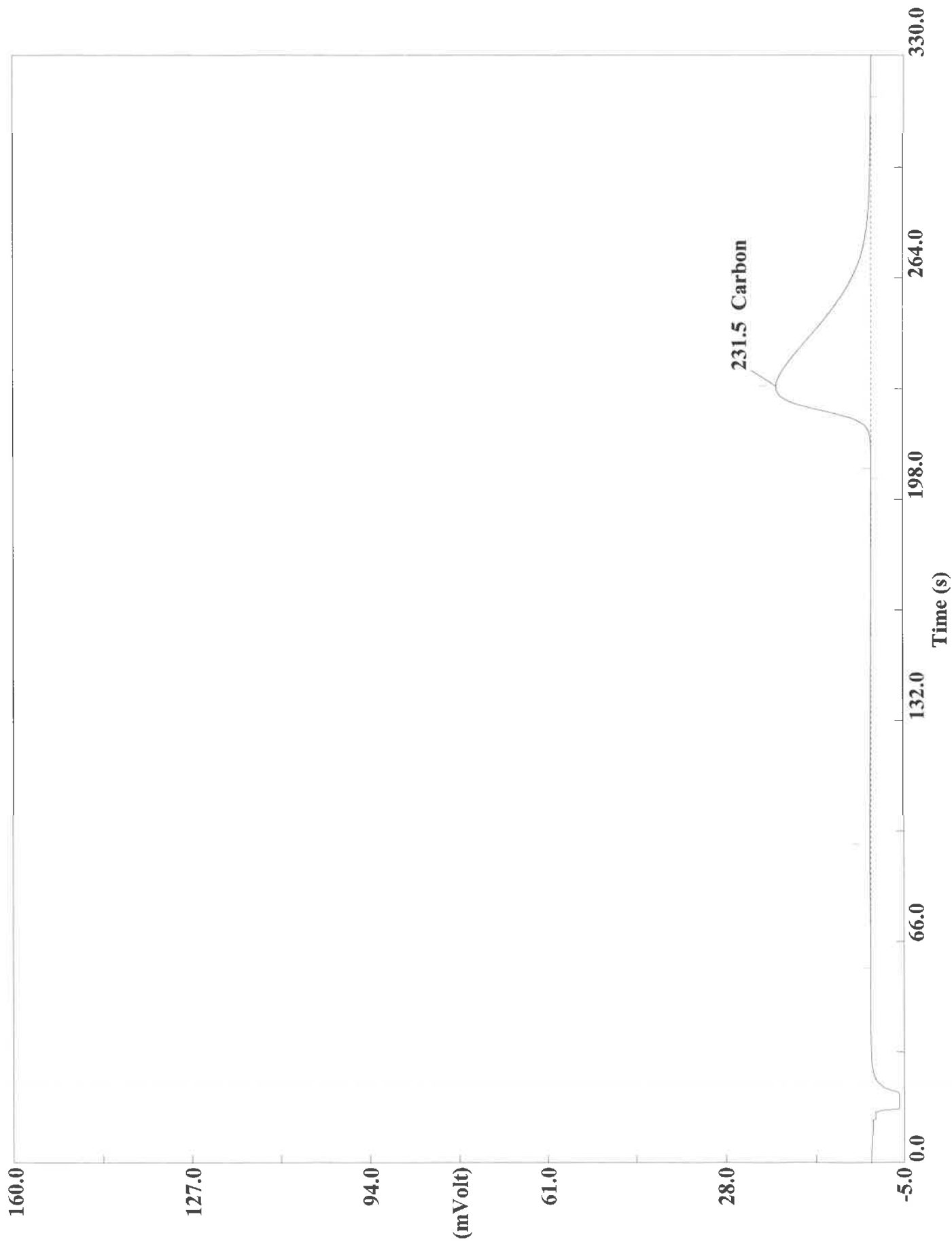
Page: 1 Sample: 25,000 KHP CT#3785363 (A092320013)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320013
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:46 Printed : 9/23/2020 14:51
Sample ID : 25,000 KHP CT#3785363 (# 8)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 50

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0000	237	2561375	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320014.dat
Sample name :50,000 KHP CT#3785363 Analysed :09/23/2020 14:51

Eager 300 Report

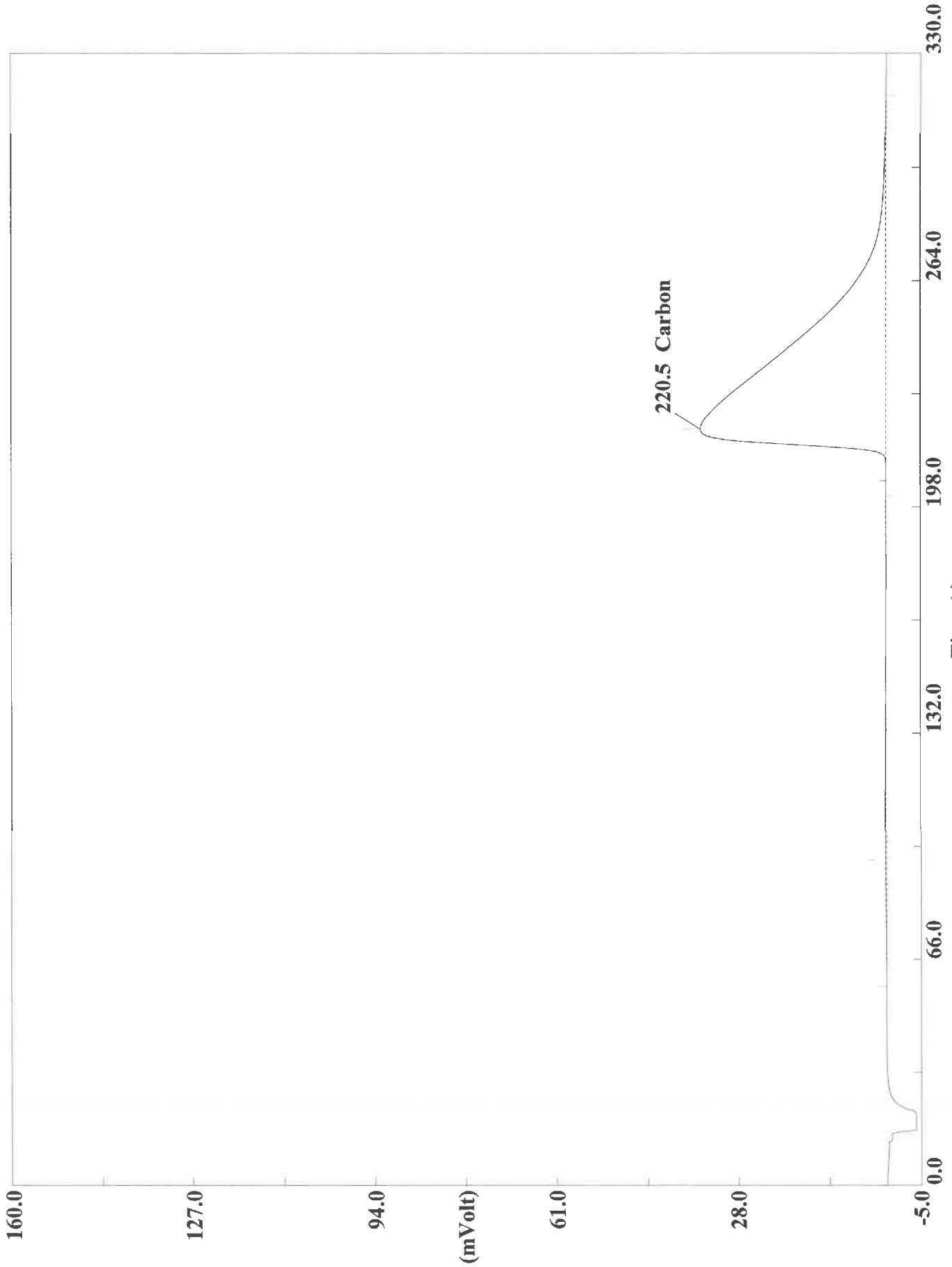
Page: 1 Sample: 50,000 KHP CT#3785363 (A092320014)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320014
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:51 Printed : 9/23/2020 14:57
Sample ID : 50,000 KHP CT#3785363 (# 9)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0000	232	5128187	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Time (s)

Filename C:\data\January\A092320015.dat

Sample name : 100,000 KHP CT#3785363 Analysed : 09/23/2020 14:57

Eager 300 Report

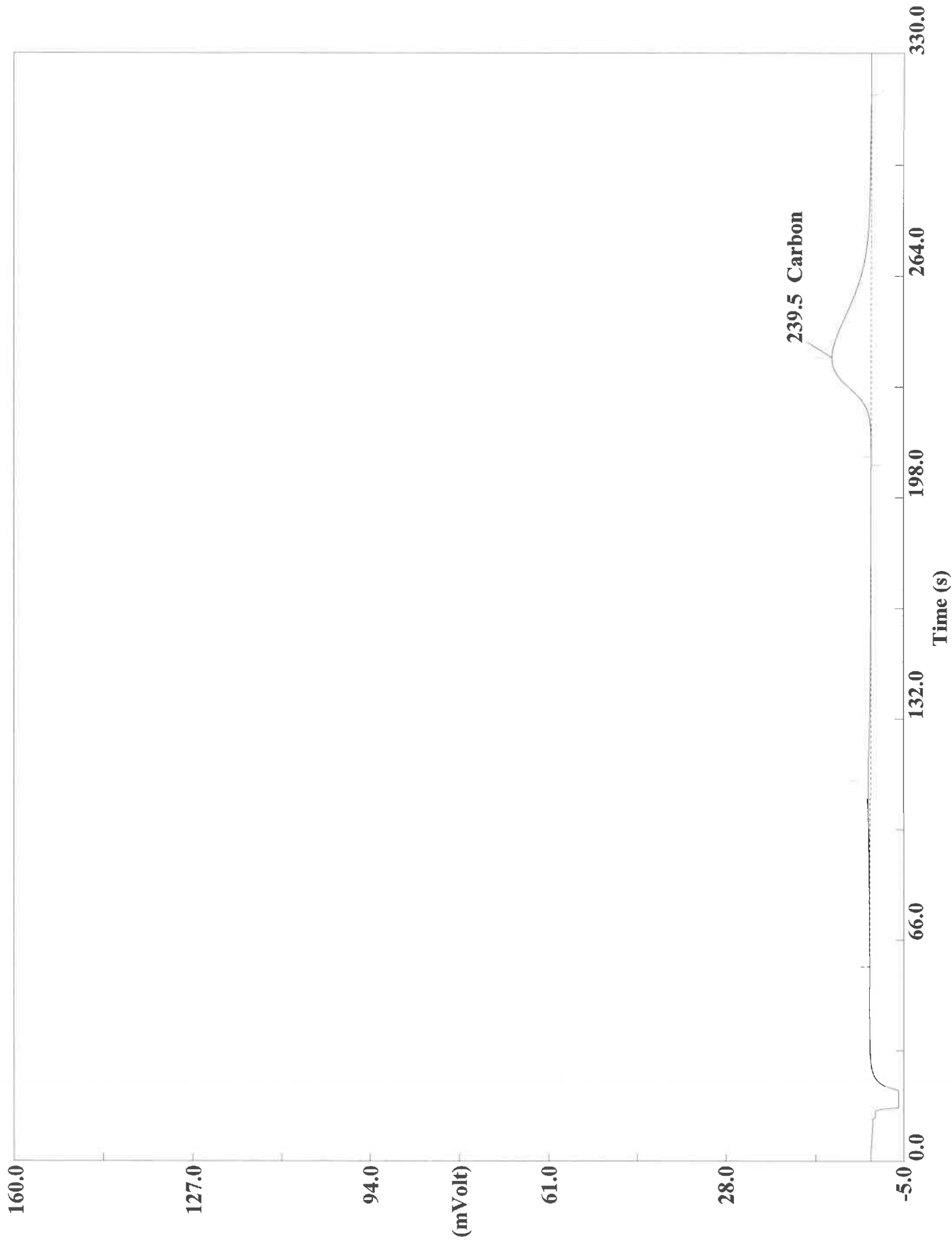
Page: 1 Sample: 100,000 KHP CT#3785363 (A092320015)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320015
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:57 Printed : 9/23/2020 15:03
Sample ID : 100,000 KHP CT#3785363 (# 10)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 200

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0000	221	10456420	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320016.dat
Sample name :ICV 37,810 KHP CT#3742673 Analysed :09/23/2020 15:03

Eager 300 Report

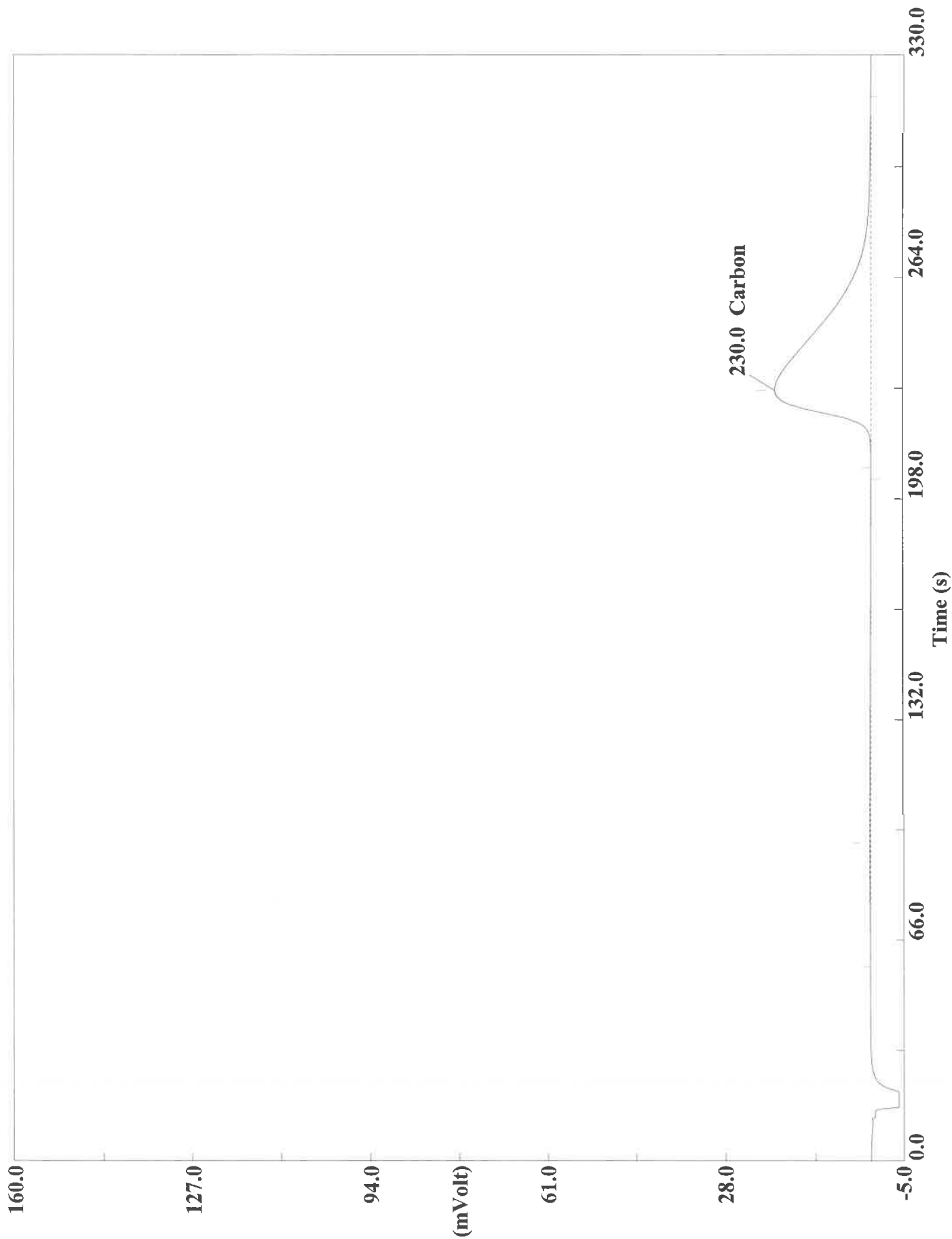
Page: 1 Sample: ICV 37,810 KHP CT#3742673 (A092320016)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320016
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 15:03 Printed : 9/23/2020 15:08
Sample ID : ICV 37,810 KHP CT#3742673 (# 11)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 11.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.4865	240	2087987	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320017.dat
Sample name :CCV Analysed :09/23/2020 15:08

Eager 300 Report

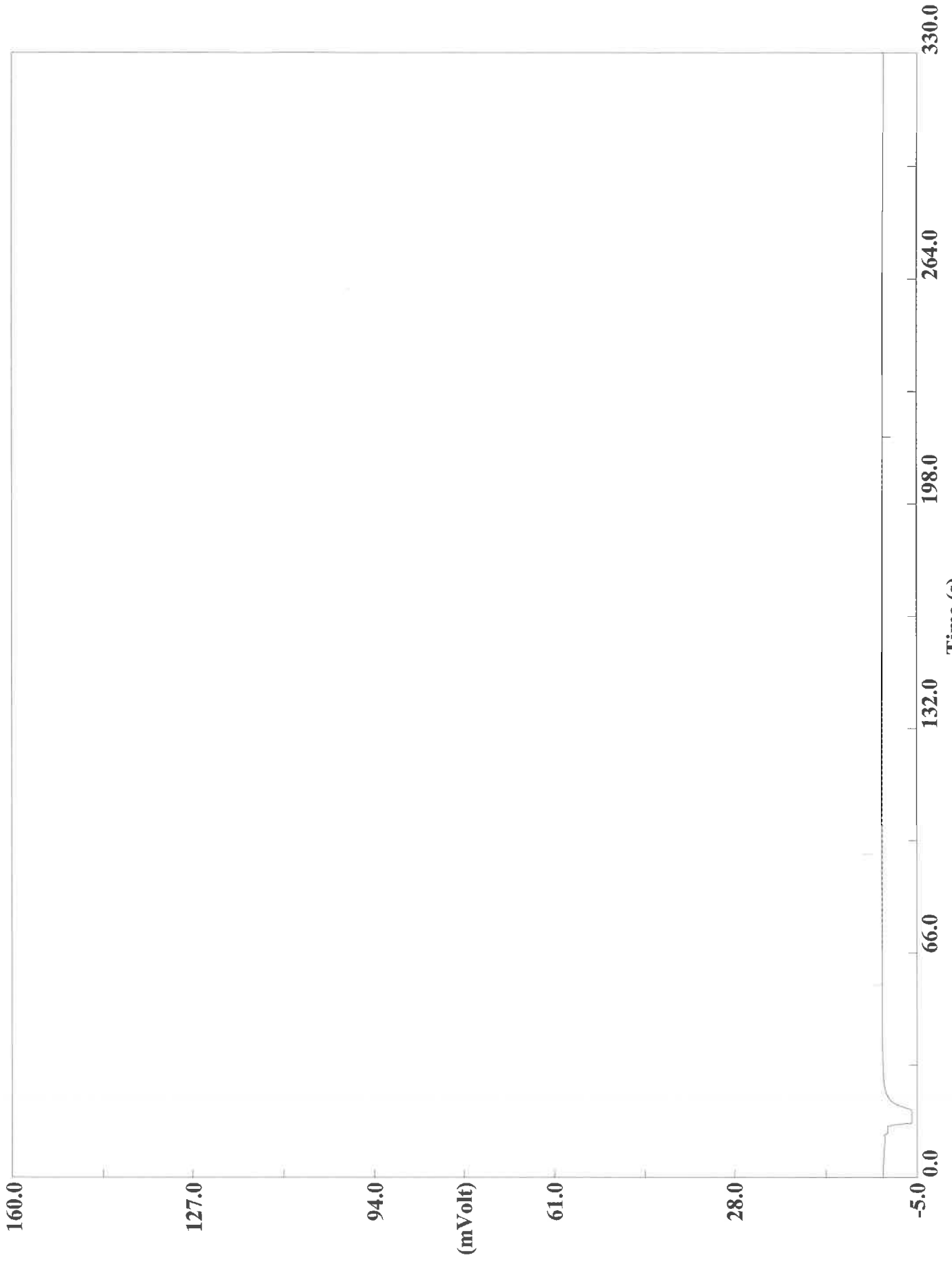
Page: 1 Sample: CCV (A092320017)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320017
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 15:08 Printed : 9/23/2020 15:14
Sample ID : CCV (# 12)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9923	230	5157272	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320018.dat
Sample name :CCB Analysed :09/23/2020 15:14

Eager 300 Report

Page: 1 Sample: CCB (A092320018)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320018
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 15:14 Printed : 9/23/2020 15:20
Sample ID : CCB (# 13)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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Eager Xperience

Method name : Lloyd Kahn
 Method filename : C:\data\January\100520A.mth

Sample table

Chromatogram overwrite : Enabled

Don Ferguson 10/5/20 BATCH 332397

#	Sample name	Filename	Type	Weight	Hum. %
1	BYPASS	A092320006	ByP	-	0
2	BLANK	A092320007	Blk	-	0
3	BLANK	A092320008	Blk	-	0
4	1,000 KHP CT#3785365	A092320009	Std	200	0
5	2,500 KHP CT#3785364	A092320010	Std	50	0
6	5,000 KHP CT#3785364	A092320011	Std	100	0
7	10,000 KHP CT#3785364	A092320012	Std	200	0
8	25,000 KHP CT#3785363	A092320013	Std	50	0
9	50,000 KHP CT#3785363	A092320014	Std	100	0
10	100,000 KHP CT#3785363	A092320015	Std	200	0
11	ICV 37,810 KHP CT#3742673	A092320016	Unk	11.6	0
12	Rinse	A100520001	Unk	1	0
13	CCV	A100520002	Unk	100	0
14	CCB	A100520003	Unk	20	0
15	MB	A100520004	Unk	20.4	0
16	MB	A100520005	Unk	23.3	0
17	LCS	A100520006	Unk	10	0
18	LCS	A100520007	Unk	10.4	0
19	180-111269-A-8	A100520008	Unk	24.4	0
20	180-111269-A-8	A100520009	Unk	21.4	0
21	Rinse	A100520010	Unk	1	0
22	180-111315-C-28	A100520011	Unk	20.9	0
23	180-111315-C-28	A100520012	Unk	21.7	0
24	Rinse	A100520013	Unk	1	0
25	180-111315-C-28 MS	A100520014	Unk	19.3	0
26	180-111315-C-28 MS	A100520015	Unk	23.9	0
27	Rinse	A100520016	Unk	1	0
28	180-111315-C-28 MSD	A100520017	Unk	18.5	0
29	180-111315-C-28 MSD	A100520018	Unk	21.6	0
30	Rinse	A100520019	Unk	1	0
31	180-111387-B-3	A100520020	Unk	14.2	0
32	180-111387-B-3	A100520020B	Unk	14.9	0
33	Rinse	A100520021	Unk	1	0
34	CCV	A100520022	Unk	100	0
35	CCB	A100520023	Unk	20	0
36	180-111387-B-4	A100520024	Unk	22	0
37	180-111387-B-4	A100520025	Unk	19.4	0

#	Sample name	Filename	Type	Weight	Hum. %
38	Rinse	A100520026	Unk	1	0
39	180-111413-C-1	A100520027	Unk	21.1	0
40	180-111413-C-1	A100520028	Unk	17.7	0
41	Rinse	A100520029	Unk	1	0
42	180-111413-C-2	A100520030	Unk	21.8	0
43	180-111413-C-2	A100520031	Unk	23.6	0
44	Rinse	A100520032	Unk	1	0
45	180-111424-D-1	A100520033	Unk	24.2	0
46	180-111424-D-1	A100520034	Unk	22.6	0
47	Rinse	A100520035	Unk	1	0
48	180-111424-D-2	A100520036	Unk	19.7	0
49	180-111424-D-2	A100520037	Unk	18.7	0
50	Rinse	A100520038	Unk	1	0
51	180-111431-E-2	A100520039	Unk	18.2	0
52	180-111431-E-2	A100520040	Unk	19.3	0
53	Rinse	A100520041	Unk	1	0
54	CCV	A100520042	Unk	100	0
55	CCB	A100520043	Unk	20	0
56	180-111467-B-18	A100520044	Unk	25.2	0
57	180-111467-B-18	A100520045	Unk	21.9	0
58	Rinse	A100520046	Unk	1	0
59	180-111467-B-19	A100520047	Unk	25.1	0
60	180-111467-B-19	A100520048	Unk	20.9	0
61	Rinse	A100520049	Unk	1	0
62	180-111496-D-1	A100520050	Unk	20.1	0
63	180-111496-D-1	A100520051	Unk	23.2	0
64	Rinse	A100520052	Unk	1	0
65	180-111496-P-2	A100520053	Unk	23.2	0
66	180-111496-P-2	A100520054	Unk	21.8	0
67	Rinse	A100520055	Unk	1	0
68	180-111497-D-1	A100520056	Unk	21.4	0
69	180-111497-D-1	A100520057	Unk	20.6	0
70	Rinse	A100520058	Unk	1	0
71	180-111497-D-2	A100520059	Unk	23.5	0
72	180-111497-D-2	A100520060	Unk	22.6	0
73	Rinse	A100520061	Unk	1	0
74	CCV	A100520062	Unk	100	0
75	CCB	A100520063	Unk	20	0
76	180-111506-C-2	A100520064	Unk	21.4	0
77	180-111506-C-2	A100520065	Unk	24.3	0
78	Rinse	A100520066	Unk	1	0
79	180-111515-B-4	A100520067	Unk	11.1	0
80	180-111515-B-4	A100520068	Unk	9.7	0
81	Rinse	A100520069	Unk	1	0
82	180-111515-B-5	A100520070	Unk	21.1	0
83	180-111515-B-5	A100520071	Unk	21.6	0

#	Sample name	Filename	Type	Weight	Hum.%
84	Rinse	A100520072	Unk	1	0
85	180-111515-B-6	A100520073	Unk	14.4	0
86	180-111515-B-6	A100520074	Unk	8.3	0
87	Rinse	A100520075	Unk	1	0
88	180-111515-B-7	A100520076	Unk	19.2	0
89	180-111515-B-7	A100520077	Unk	16.3	0
90	Rinse	A100520078	Unk	1	0
91	CCV	A100520080	Unk	100	0
92	CCB	A100520081	Unk	20	0
93	MB	A100520082	Unk	21.6	0
94	MB	A100520083	Unk	23.4	0
95	LCS	A100520084	Unk	10	0
96	LCS	A100520085	Unk	10	0
97	180-111359-F-3	A100520086	Unk	19.3	0
98	180-111359-F-3	A100520087	Unk	15.4	0
99	Rinse	A100520088	Unk	1	0
100	180-111359-D-3 MS	A100520089	Unk	20.4	0
101	180-111359-D-3 MS	A100520090	Unk	17.7	0
102	Rinse	A100520091	Unk	1	0
103	180-111359-D-3 MSD	A100520092	Unk	21.7	0
104	180-111359-D-3 MSD	A100520093	Unk	18.2	0
105	Rinse	A100520094	Unk	1	0
106	180-111518-B-1	A100520095	Unk	22.5	0
107	180-111518-B-1	A100520096	Unk	21.9	0
108	Rinse	A100520097	Unk	1	0
109	180-111518-B-2	A100520098	Unk	18.7	0
110	180-111518-B-2	A100520099	Unk	19.8	0
111	Rinse	A100520100	Unk	1	0
112	CCV	A100520101	Unk	100	0
113	CCB	A100520102	Unk	20	0
114	180-111518-B-3	A100520103	Unk	17.3	0
115	180-111518-B-3	A100520104	Unk	21.2	0
116	Rinse	A100520105	Unk	1	0
117	180-111518-B-4	A100520106	Unk	21.8	0
118	180-111518-B-4	A100520107	Unk	22.1	0
119	Rinse	A100520108	Unk	1	0
120	180-111519-B-1	A100520109	Unk	22.3	0
121	180-111519-B-1	A100520110	Unk	22.1	0
122	Rinse	A100520111	Unk	1	0
123	180-111519-B-2	A100520112	Unk	18.3	0
124	180-111519-B-2	A100520113	Unk	15.3	0
125	Rinse	A100520114	Unk	1	0
126	180-111519-B-3	A100520115	Unk	19.3	0
127	180-111519-B-3	A100520116	Unk	19.3	0
128	Rinse	A100520117	Unk	1	0
129	180-111519-B-4	A100520118	Unk	20	0

#	Sample name	Filename	Type	Weight	Hum. %
130	180-111519-B-4	A100520119	Unk	19.7	0
131	Rinse	A100520120	Unk	1	0
132	CCV	A100520121	Unk	100	0
133	CCB	A100520122	Unk	20	0
134	180-111706-A-1	A100520123	Unk	26.3	0
135	180-111706-A-1	A100520124	Unk	28	0
136	Rinse	A100520125	Unk	1	0
137	180-111287-A-96	A100520126	Unk	20.9	0
138	180-111287-A-96	A100520127	Unk	18.4	0
139	Rinse	A100520128	Unk	1	0
140	180-111287-A-99	A100520129	Unk	23.1	0
141	180-111287-A-99	A100520130	Unk	20.2	0
142	Rinse	A100520131	Unk	1	0
143	180-111287-A-101	A100520132	Unk	22.6	0
144	180-111287-A-101	A100520133	Unk	19.3	0
145	Rinse	A100520134	Unk	1	0
146	CCV	A100520135	Unk	100	0
147	CCB	A100520136	Unk	20	0

Analyst: *Don Ferguson*

Date: *10/5/20*

Job No.	Sample ID	Weight (mg)	Average Weights
	MB	20.4	
	MB	23.3	21.85
	LCS	10.0	
	LCS	10.4	10.2
180-111315-28	111315-28	20.9	
	-28	21.7	21.3
	111315-28MS	19.3 + 13.0	
	-28MS	23.9 + 9.3	21.6 + 11.15
	111315-28MSD	18.5 + 10.4	
	-28MSD	21.6 + 11.5	20.05 + 10.95
	MB	21.6	
	MB	23.4	22.5
	LCS	10.0	
	LCS	10.0	10.0
180-111354-3	111354-3	19.3	
	-3	15.4	17.35
	111354-3MS	20.4 + 9.9	
	-3MS	17.7 + 8.9	19.05 + 9.4
	111354-3MSD	21.7 + 10.1	
	-3MSD	18.2 + 12.4	19.95 + 11.25

Lloyd Kahn %RPD Replicate Calculation Spreadsheet

BATCH 332397

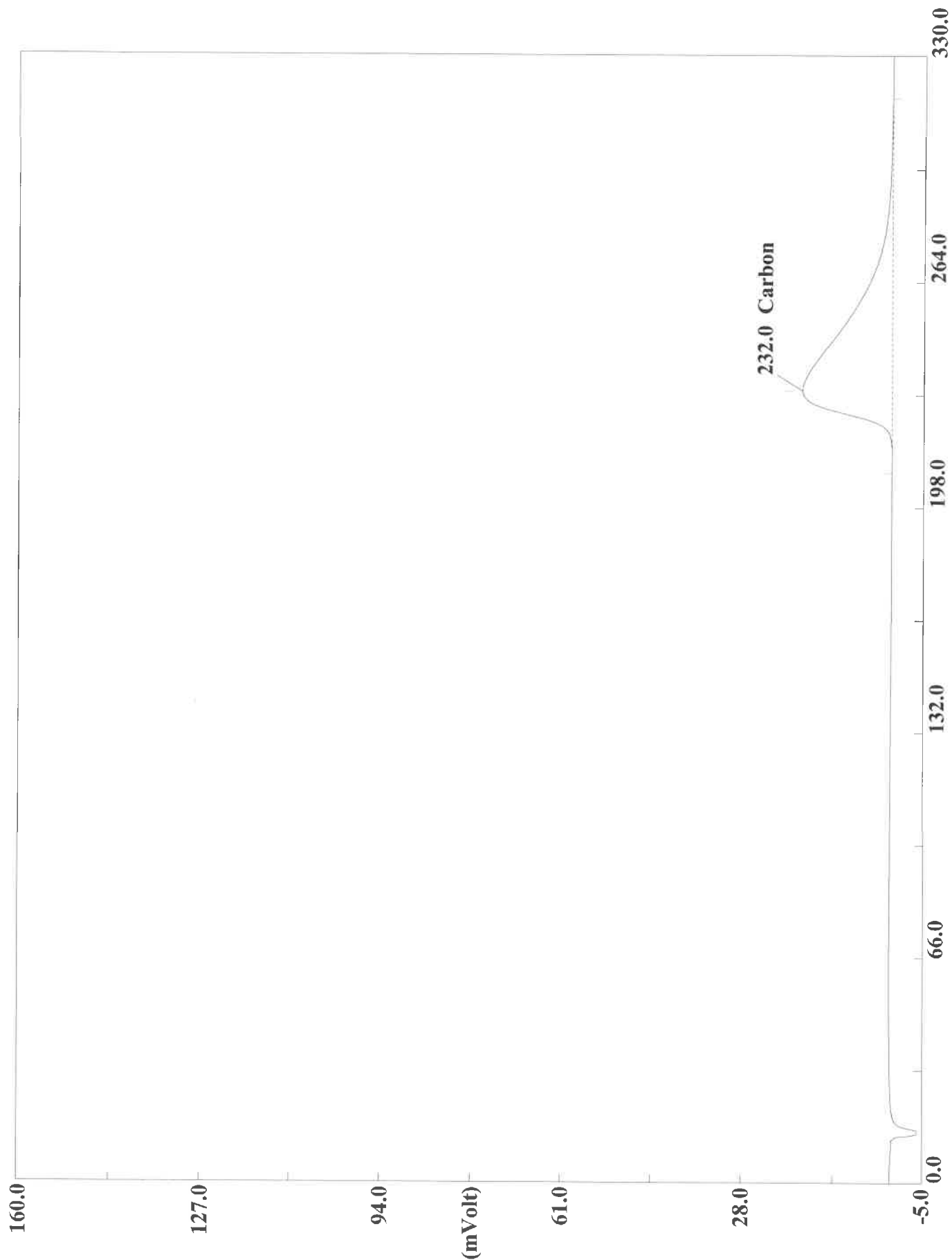
Units: mg/kg

Batch#	Sample#	Results	Average	RPD
	MB	0.07191422		
	MB	0.06859764	0.070	4.72
	LCS	2.69719648		
	LCS	3.21518373	2.956	17.52
	180-111269-A-8	4.08449221		
	180-111269-A-8	1.95977569	3.022	70.31
	180-111315-C-28	6.14249754		
	180-111315-C-28	4.72074413	5.432	26.18
	180-111315-C-28 MS	7.04892635		
	180-111315-C-28 MS	6.28835678	6.669	11.41
	180-111315-C-28 MSD	5.88387299		
	180-111315-C-28 MSD	7.10350418	6.494	18.78
	180-111387-B-3	3.54356337		
	180-111387-B-3	4.79966259	4.172	30.11
	180-111387-B-4	4.60294628		
	180-111387-B-4	4.12161684	4.362	11.03
	180-111413-C-1	1.4749254		
	180-111413-C-1	1.52081263	1.498	3.06
	180-111413-C-2	1.40284133		
	180-111413-C-2	1.62593067	1.514	14.73
	180-111424-D-1	0.73609561		
	180-111424-D-1	0.76449949	0.750	3.79
	180-111424-D-2	4.00511312		
	180-111424-D-2	3.72292304	3.864	7.30
	180-111431-E-2	4.86650515		
	180-111431-E-2	3.05674863	3.962	45.68
	180-111467-B-18	1.02046227		
	180-111467-B-18	1.86527908	1.443	58.55
	180-111467-B-19	3.08536053		
	180-111467-B-19	2.78930879	2.937	10.08
	180-111496-D-1	11.8513088		
	180-111496-D-1	5.55969524	8.706	72.27
	180-111496-P-2	0.64685959		
	180-111496-P-2	0.40955555	0.528	44.93
	180-111497-D-1	1.41290343		
	180-111497-D-1	1.45222735	1.433	2.75
	180-111497-D-2	1.30935705		
	180-111497-D-2	1.31327283	1.311	0.30
	180-111506-C-2	0.49846044		
	180-111506-C-2	0.46887699	0.484	6.12
	180-111515-B-4	3.22238302		
	180-111515-B-4	2.94171572	3.082	9.11
	180-111515-B-5	3.53365374		
	180-111515-B-5	3.22994375	3.382	8.98
	180-111515-B-6	3.2813201		
	180-111515-B-6	2.01049685	2.646	48.03
	180-111515-B-7	3.24636316		
	180-111515-B-7	3.14650273	3.196	3.12
	MB	0.08573309		
	MB	0.09498943	0.090	10.24

✓ NCM

✓ E

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520002.DAT
Sample name :CCV Analysed :10/05/2020 14:01

Eager 300 Report

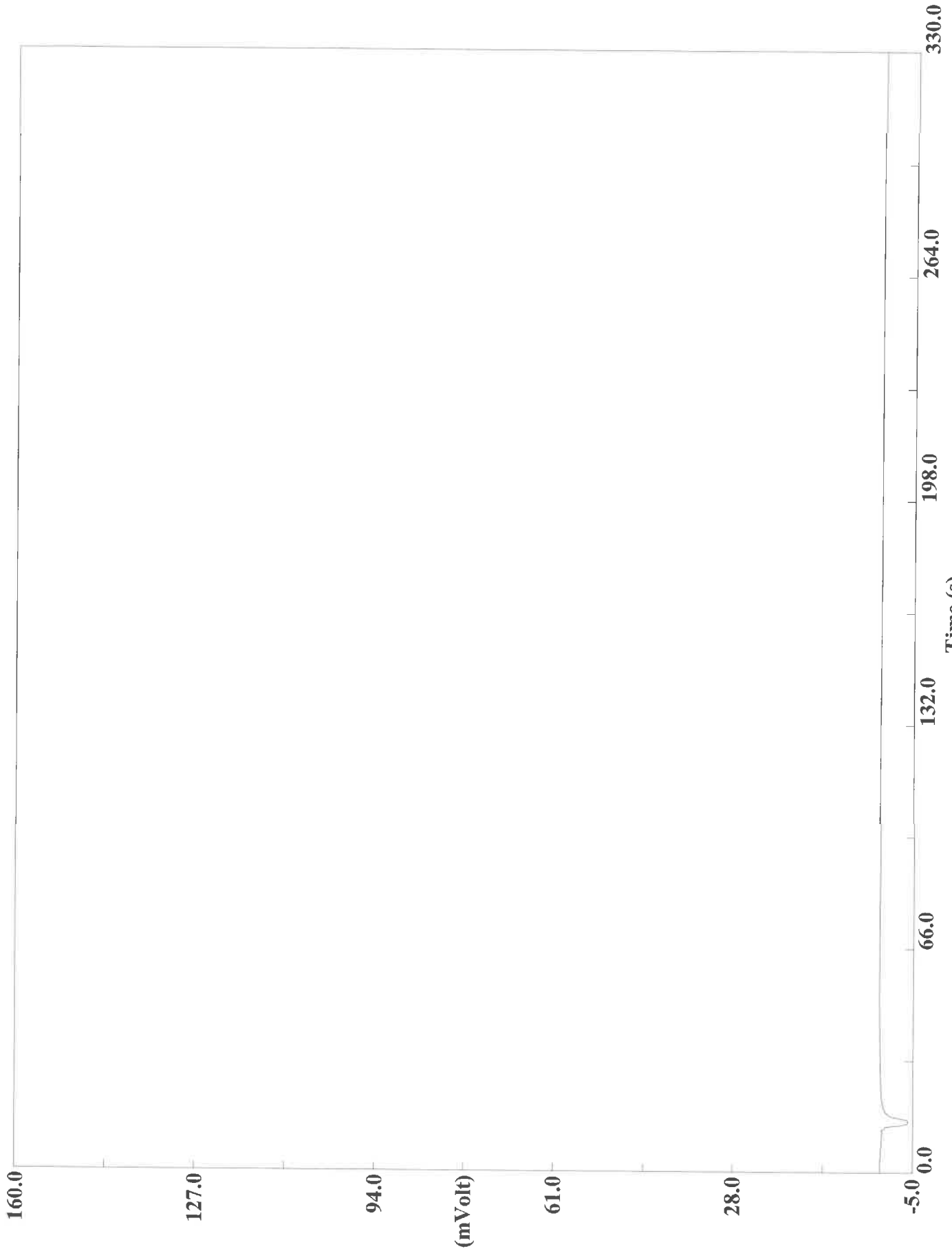
Page: 1 Sample: CCV (A100520002)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520002
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:01 Printed : 10/6/2020 07:05
Sample ID : CCV (# 13)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9545	232	4960058	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520003.DAT
Sample name :CCB Analysed :10/05/2020 14:07

Eager 300 Report

Page: 1 Sample: CCB (A100520003)

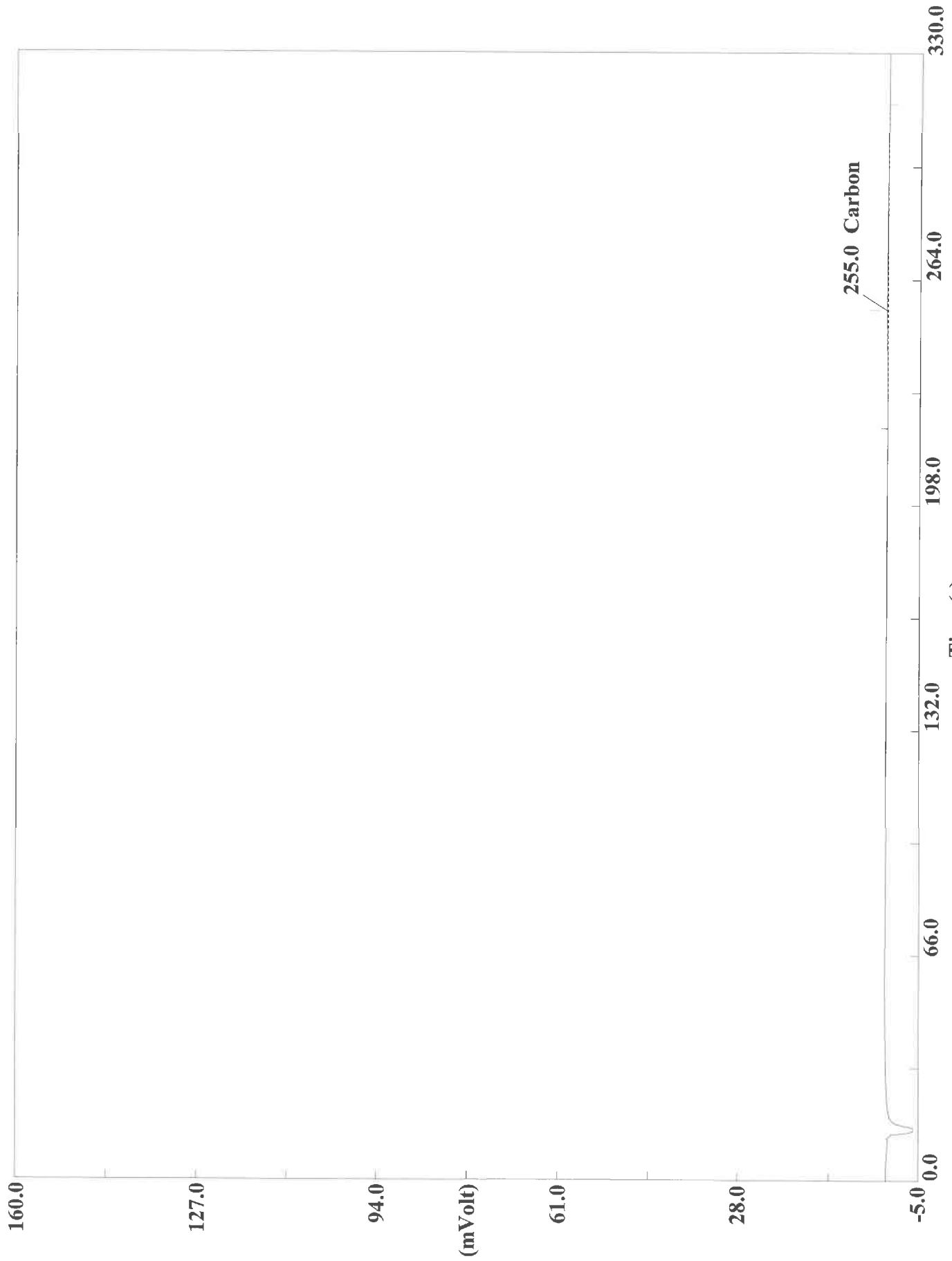
Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520003
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:07 Printed : 10/6/2020 07:05
Sample ID : CCB (# 14)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520004.DAT
Sample name :MB Analysed :10/05/2020 14:12

Eager 300 Report

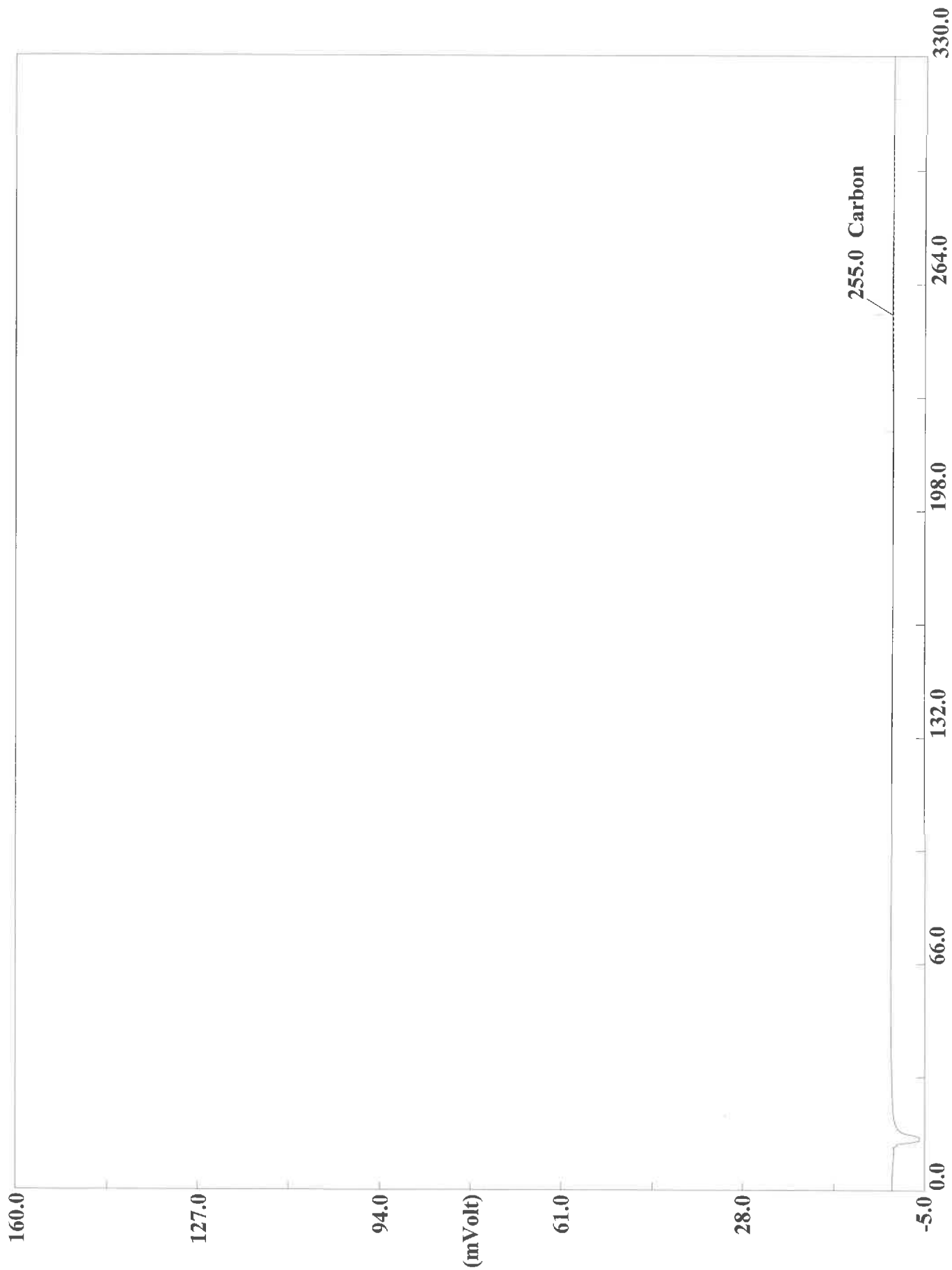
Page: 1 Sample: MB (A100520004)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520004
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:12 Printed : 10/6/2020 07:05
Sample ID : MB (# 15)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.0719	255	53021	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520005.DAT
Sample name :MB Analysed :10/05/2020 14:18

Eager 300 Report

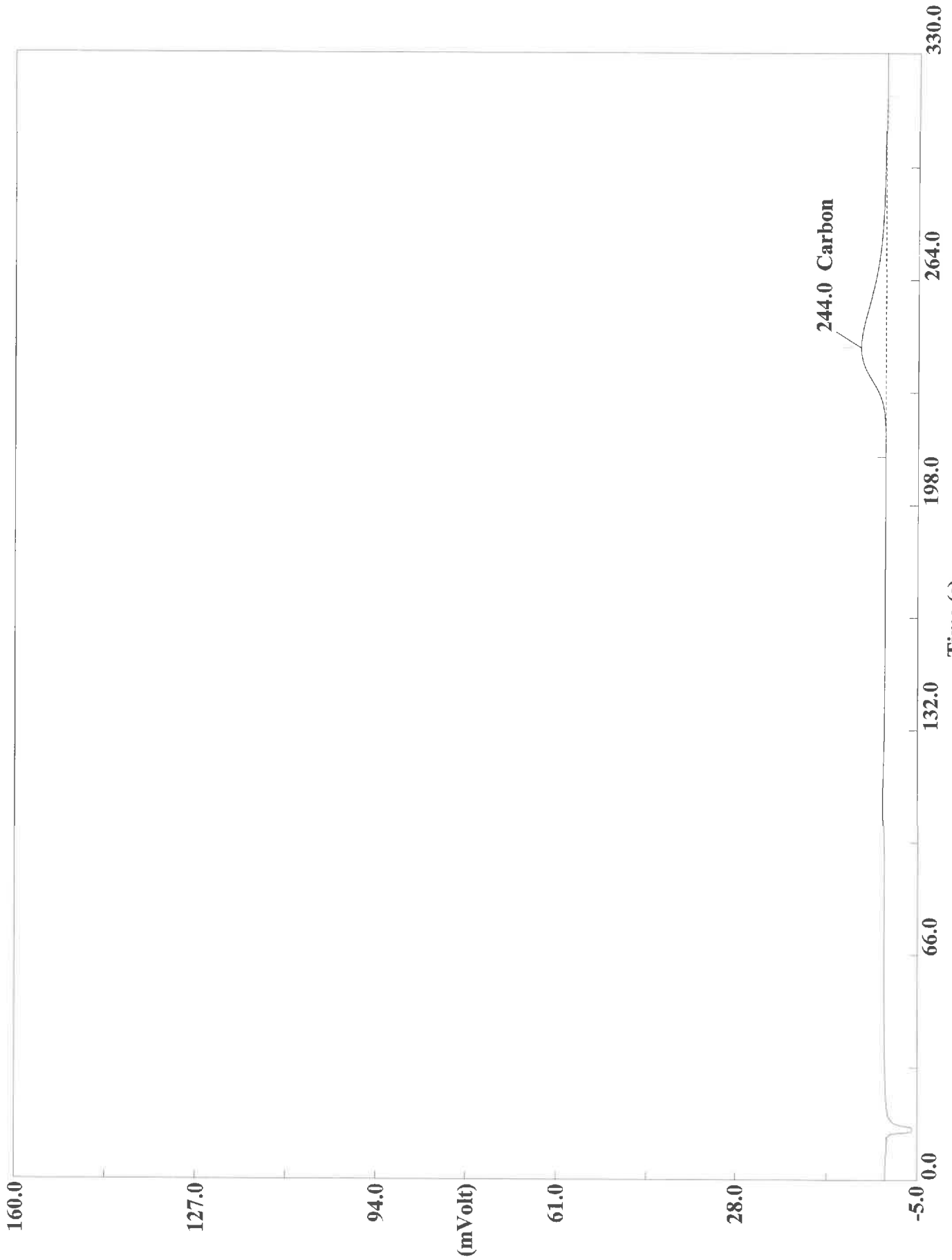
Page: 1 Sample: MB (A100520005)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520005
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:18 Printed : 10/6/2020 07:05
Sample ID : MB (# 16)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.0686	255	59875	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520006.DAT
Sample name : LCS Analysed : 10/05/2020 14:24

Eager 300 Report

Page: 1 Sample: LCS (A100520006)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520006
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:24 Printed : 10/6/2020 07:05
Sample ID : LCS (# 17)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 10

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.6972	244	1384659	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520007.DAT
Sample name :LCS Analysed :10/05/2020 14:30

Eager 300 Report

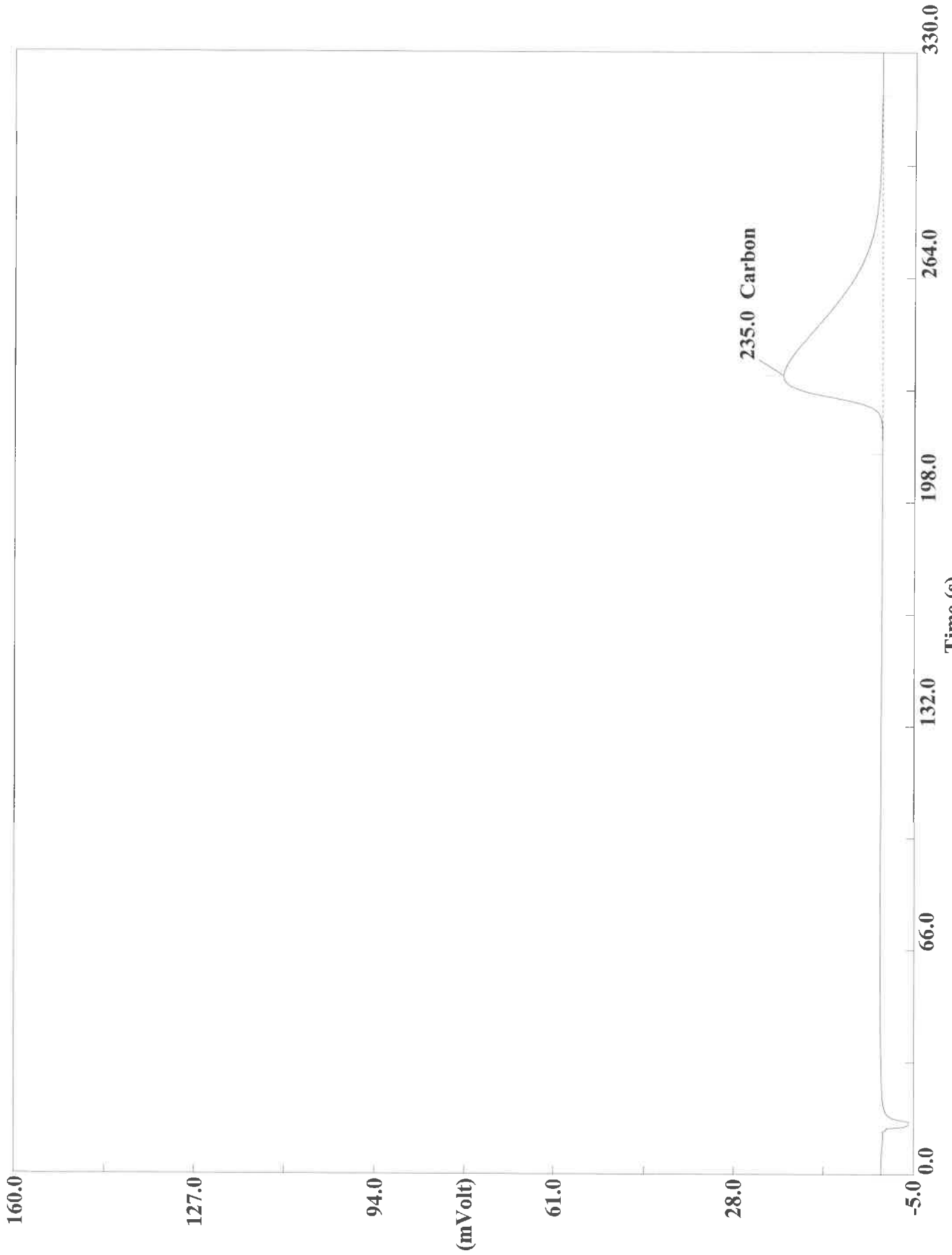
Page: 1 Sample: LCS (A100520007)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520007
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:30 Printed : 10/6/2020 07:05
Sample ID : LCS (# 18)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 10.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2152	243	1722252	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520008.DAT

Sample name :180-111269-A-8 Analyzed :10/05/2020 14:36

Eager 300 Report

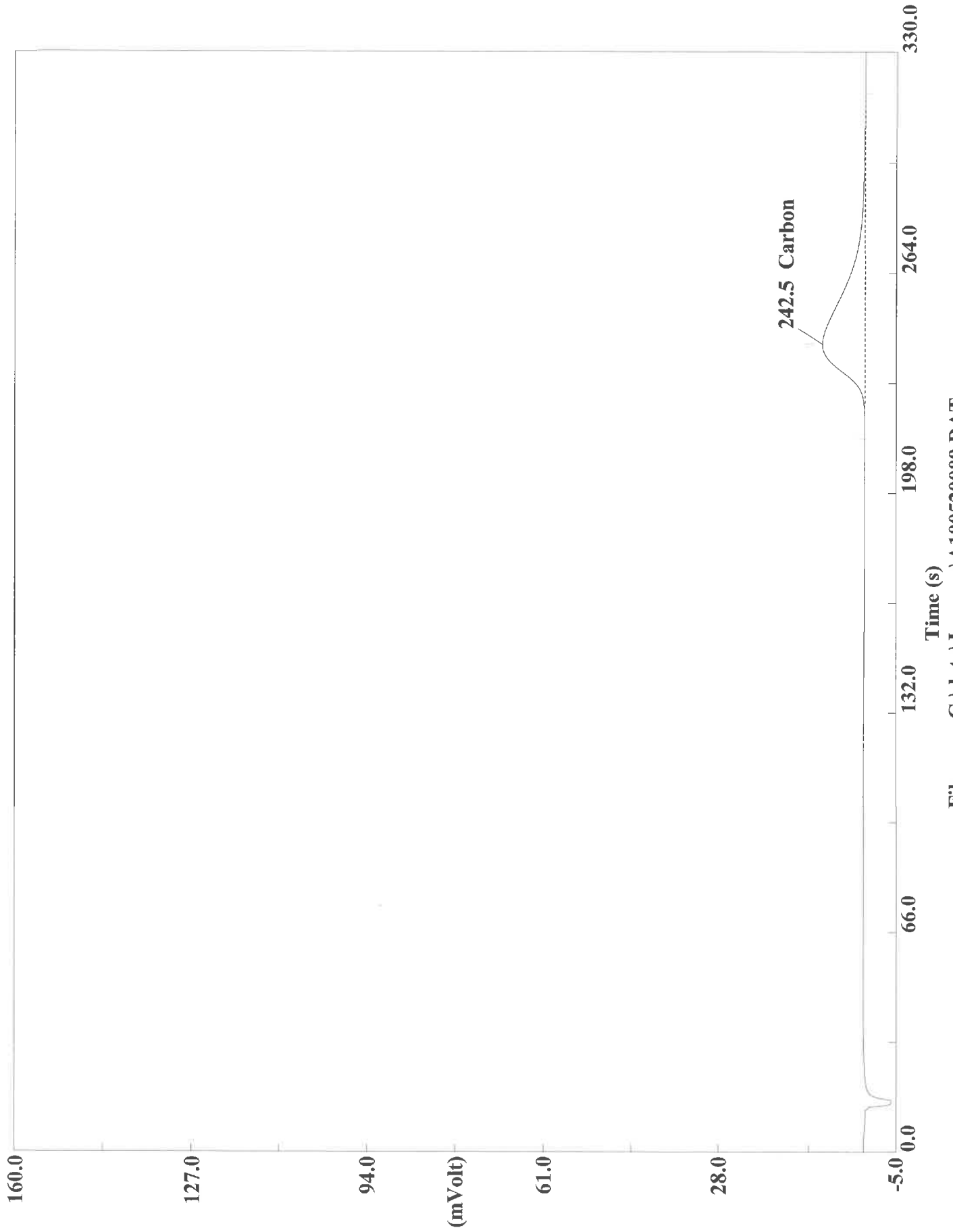
Page: 1 Sample: 180-111269-A-8 (A100520008)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520008
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:36 Printed : 10/6/2020 07:05
Sample ID : 180-111269-A-8 (# 19)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 24.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.0845	235	5179859	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520009.DAT

Sample name :180-111269-A-8 Analysed :10/05/2020 14:42

Eager 300 Report

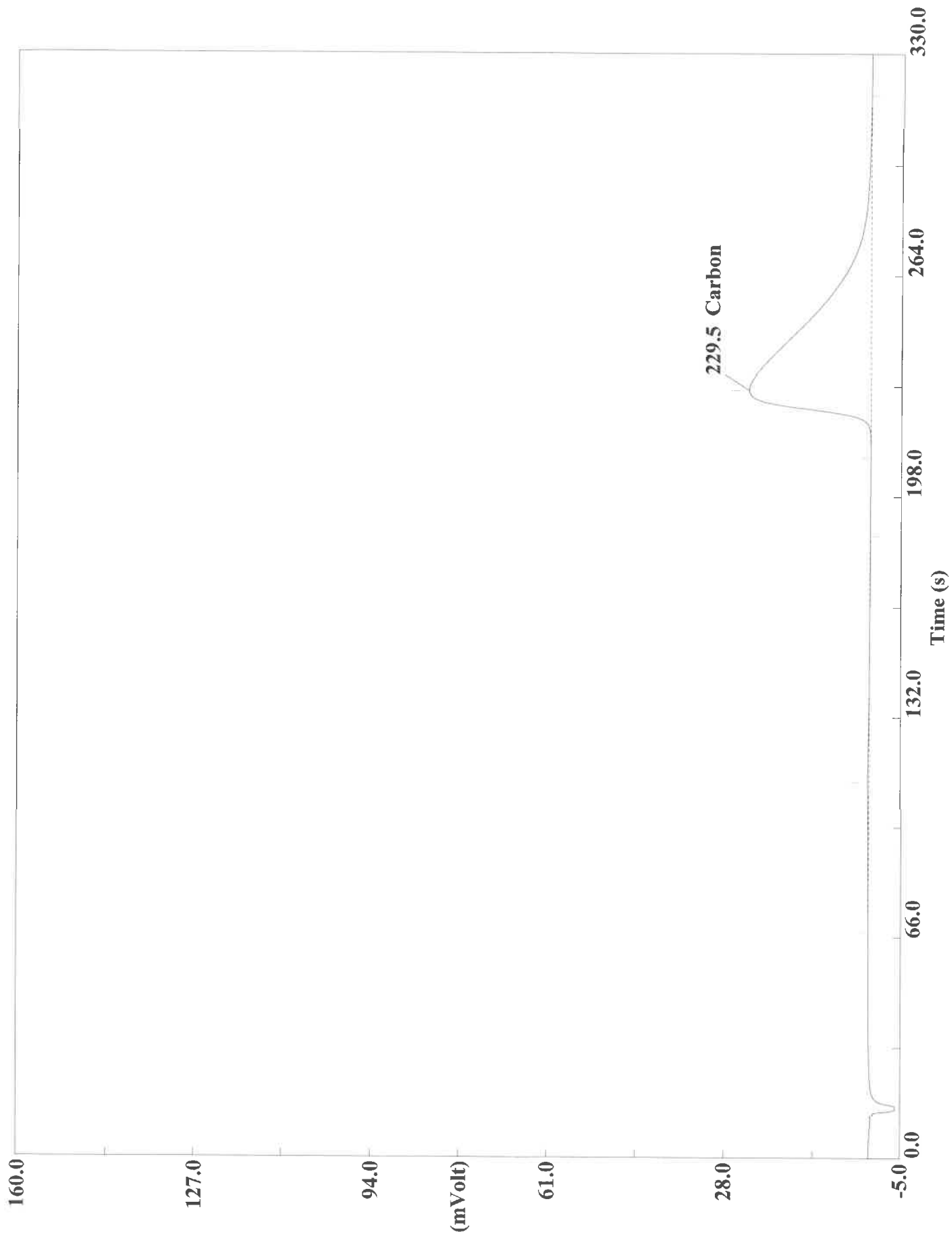
Page: 1 Sample: 180-111269-A-8 (A100520009)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520009
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:42 Printed : 10/6/2020 07:05
Sample ID : 180-111269-A-8 (# 20)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.9598	243	2166113	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520011.DAT

Sample name : 180-111315-C-28 Analysed : 10/05/2020 14:53

Eager 300 Report

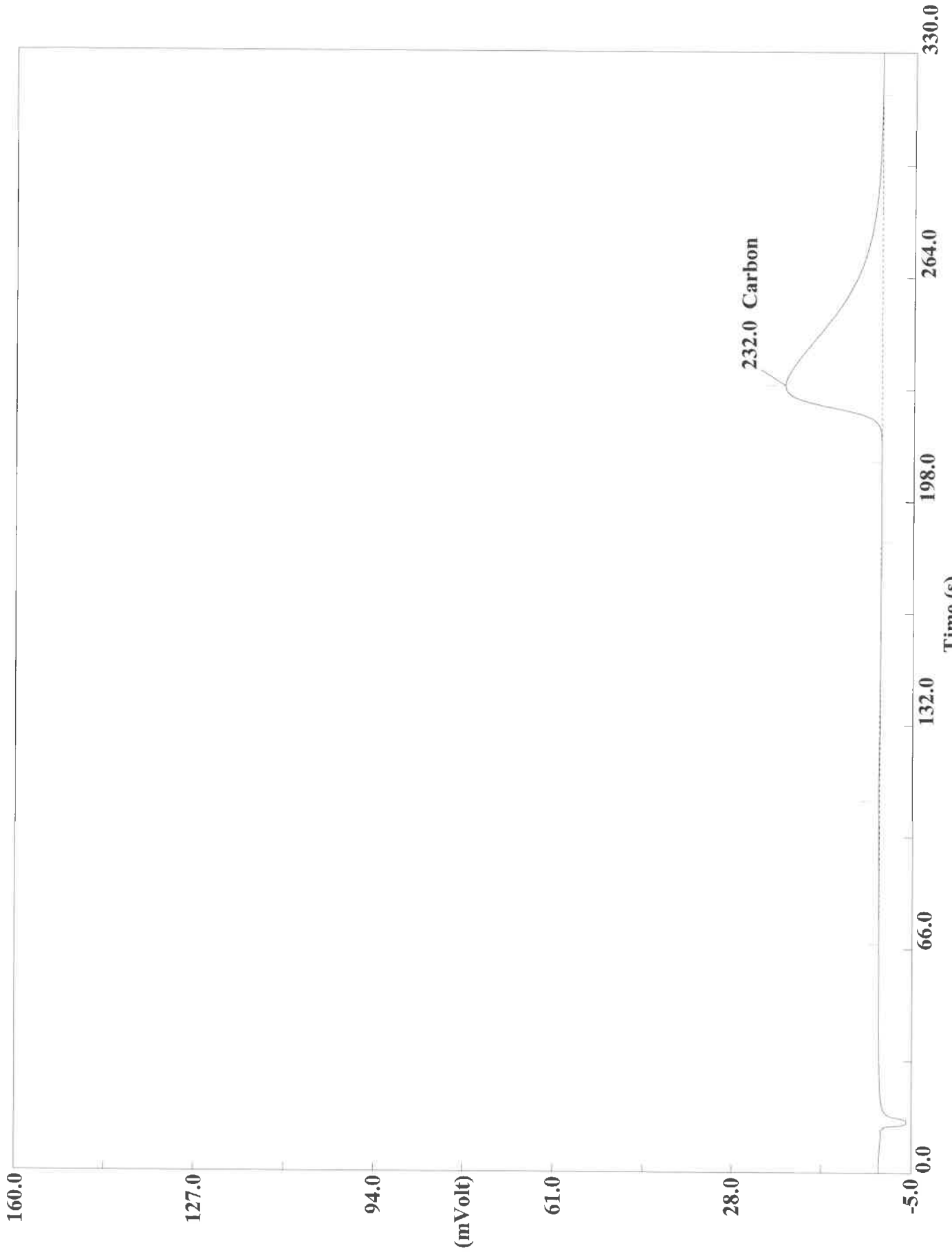
Page: 1 Sample: 180-111315-C-28 (A100520011)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520011
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:53 Printed : 10/6/2020 07:05
Sample ID : 180-111315-C-28 (# 22)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.9

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	6.1425	230	6679181	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520012.DAT

Sample name : 180-111315-C-28 Analysed : 10/05/2020 14:59

Eager 300 Report

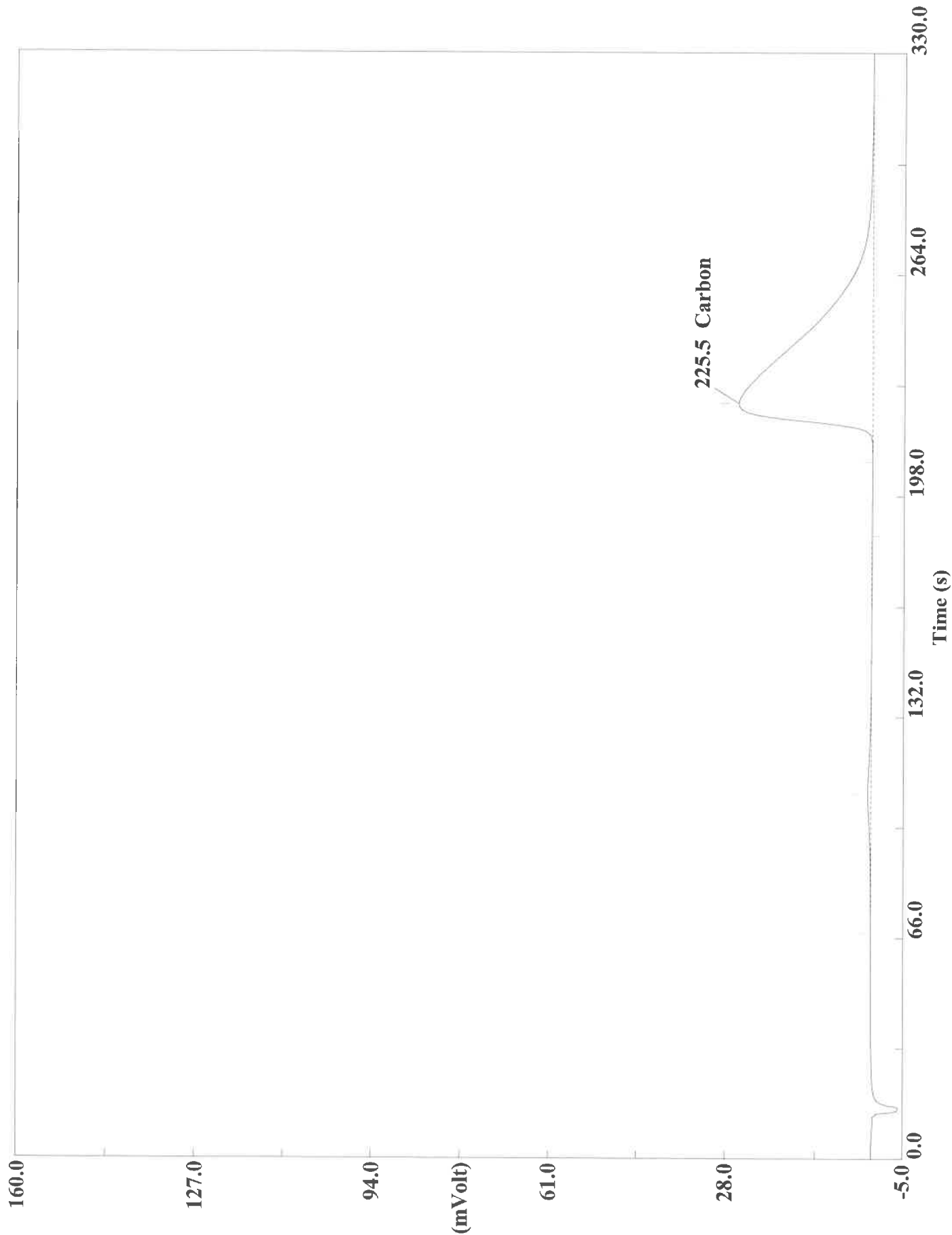
Page: 1 Sample: 180-111315-C-28 (A100520012)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520012
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 14:59 Printed : 10/6/2020 07:05
Sample ID : 180-111315-C-28 (# 23)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.7207	232	5324929	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520014.DAT

Sample name : 180-111315-C-28 MS Analysed : 10/05/2020 15:10

Eager 300 Report

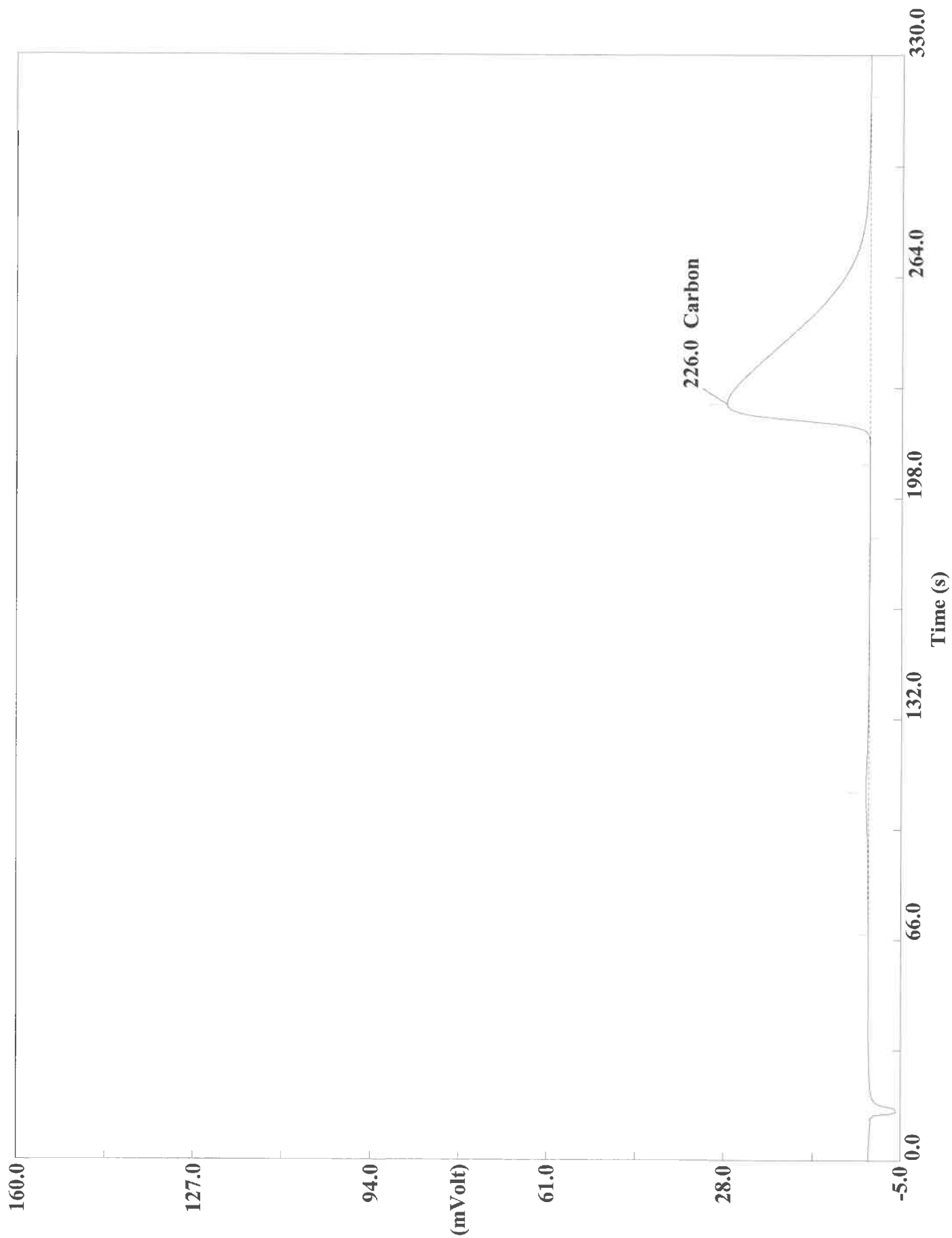
Page: 1 Sample: 180-111315-C-28 MS (A100520014)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520014
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 15:10 Printed : 10/6/2020 07:05
Sample ID : 180-111315-C-28 MS (# 25)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	7.0489	226	7079435	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520015.DAT

Sample name :180-111315-C-28 MS Analysed :10/05/2020 15:15

Eager 300 Report

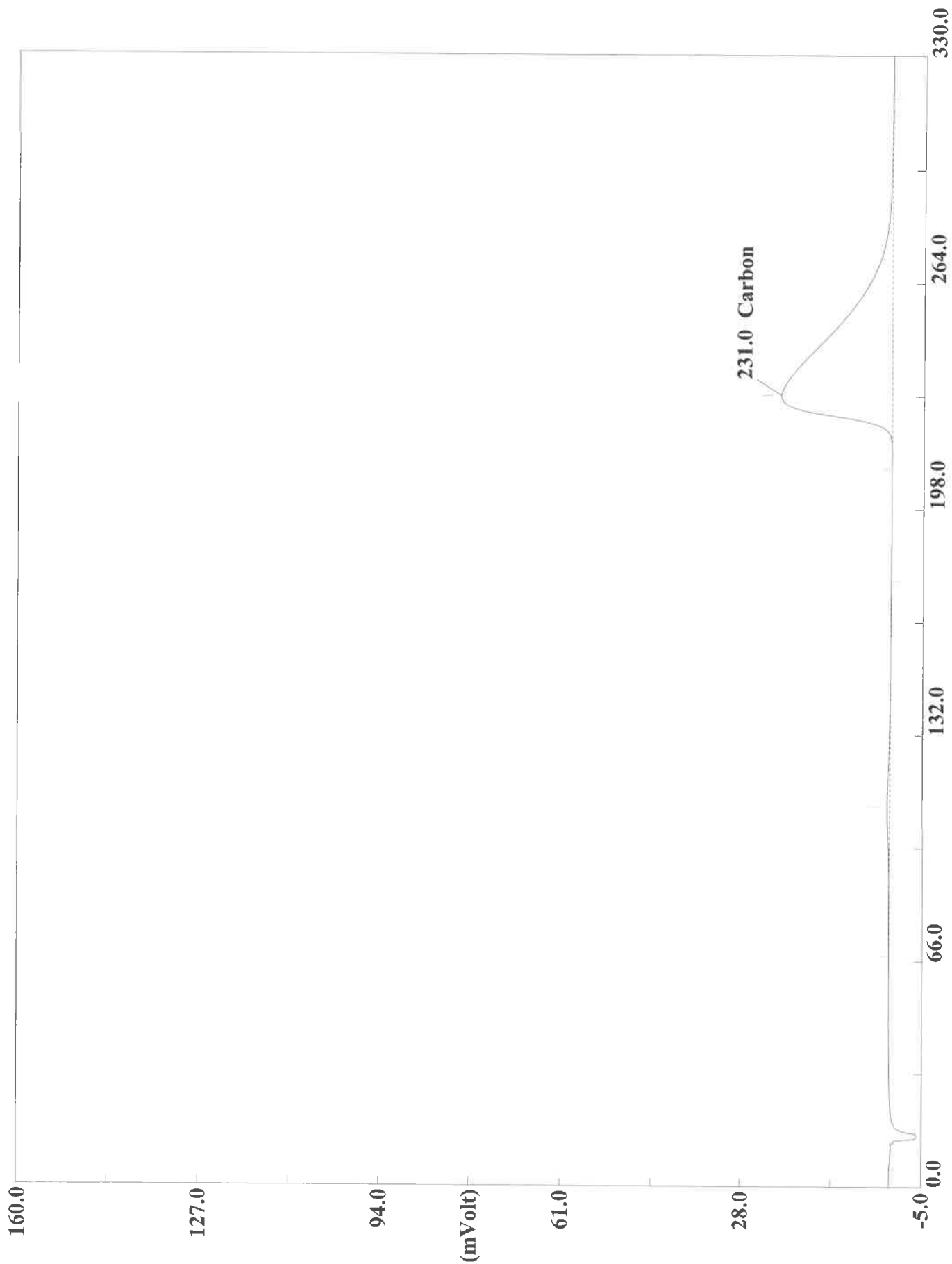
Page: 1 Sample: 180-111315-C-28 MS (A100520015)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520015
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 15:15 Printed : 10/6/2020 07:05
Sample ID : 180-111315-C-28 MS (# 26)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.9

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	6.2884	226	7823309	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520017.DAT
Sample name :180-111315-C-28 MSD Analysed :10/05/2020 15:27

Eager 300 Report

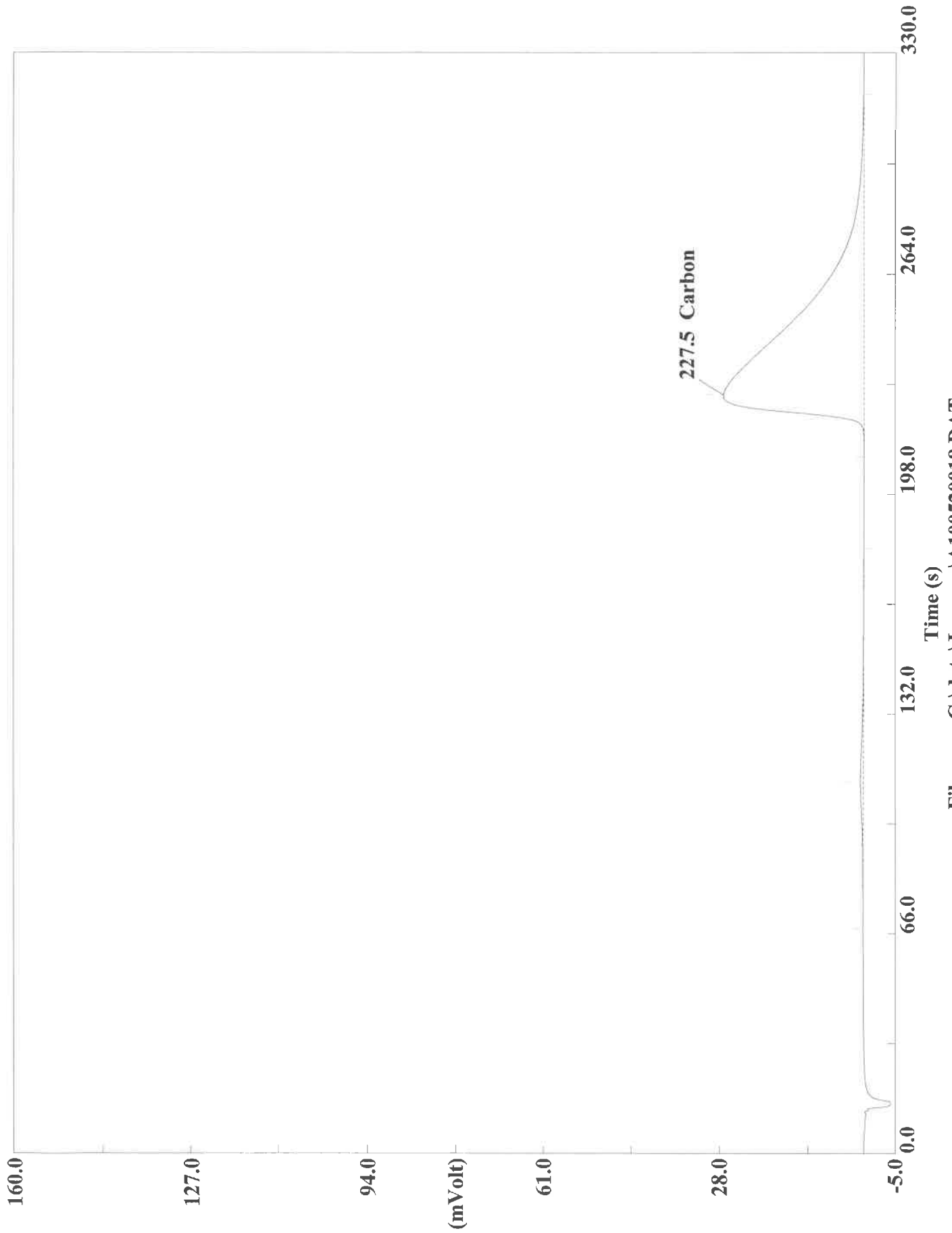
Page: 1 Sample: 180-111315-C-28 MSD (A100520017)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520017
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 15:27 Printed : 10/6/2020 07:06
Sample ID : 180-111315-C-28 MSD (# 28)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.5

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	5.8839	231	5659680	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520018.DAT

Sample name :180-111315-C-28 MSD Analysed :10/05/2020 15:32

Eager 300 Report

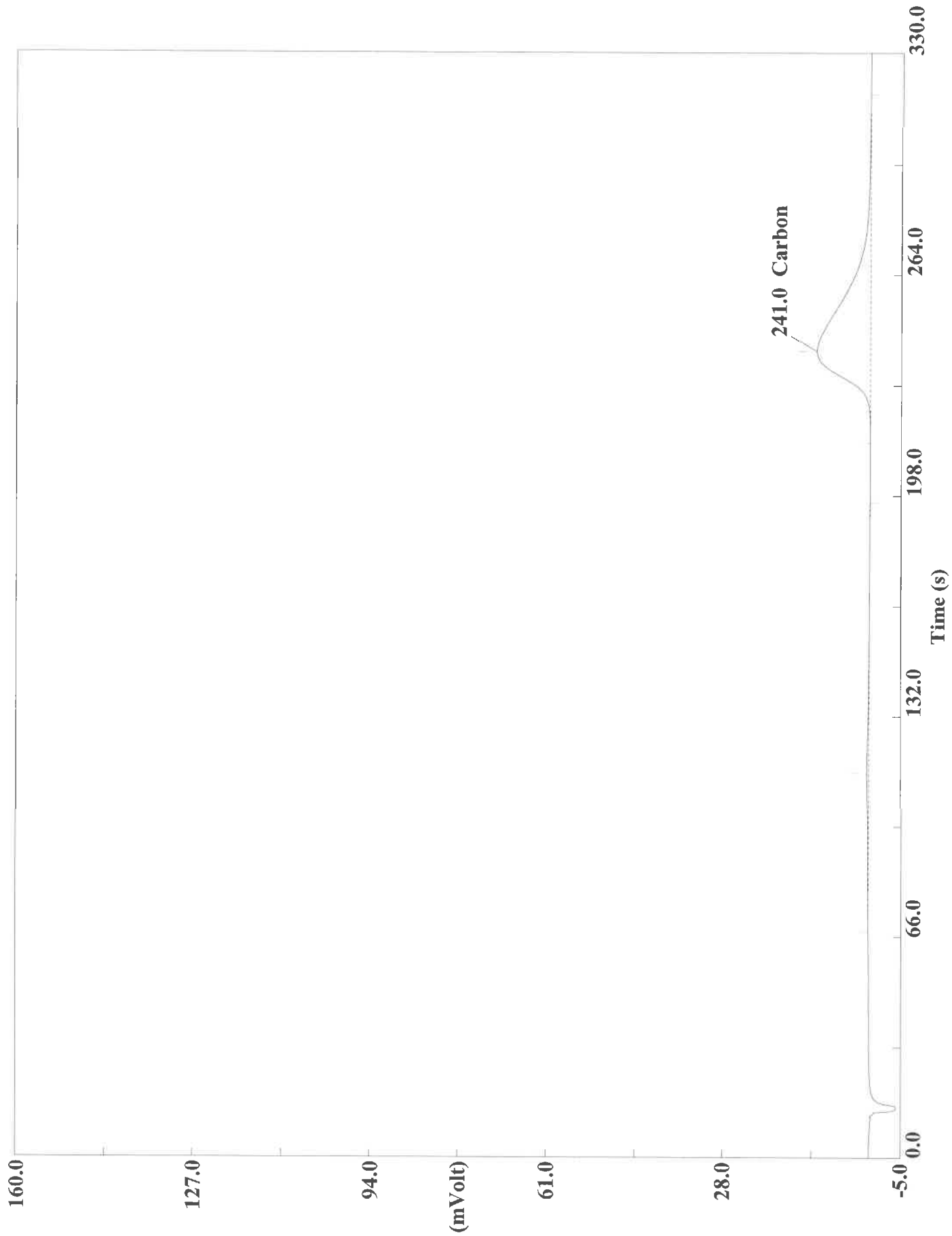
Page: 1 Sample: 180-111315-C-28 MSD (A100520018)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520018
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 15:32 Printed : 10/6/2020 07:06
Sample ID : 180-111315-C-28 MSD (# 29)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	7.1035	228	7987458	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520020.DAT

Sample name :180-111387-B-3 Analysed :10/05/2020 15:43

Eager 300 Report

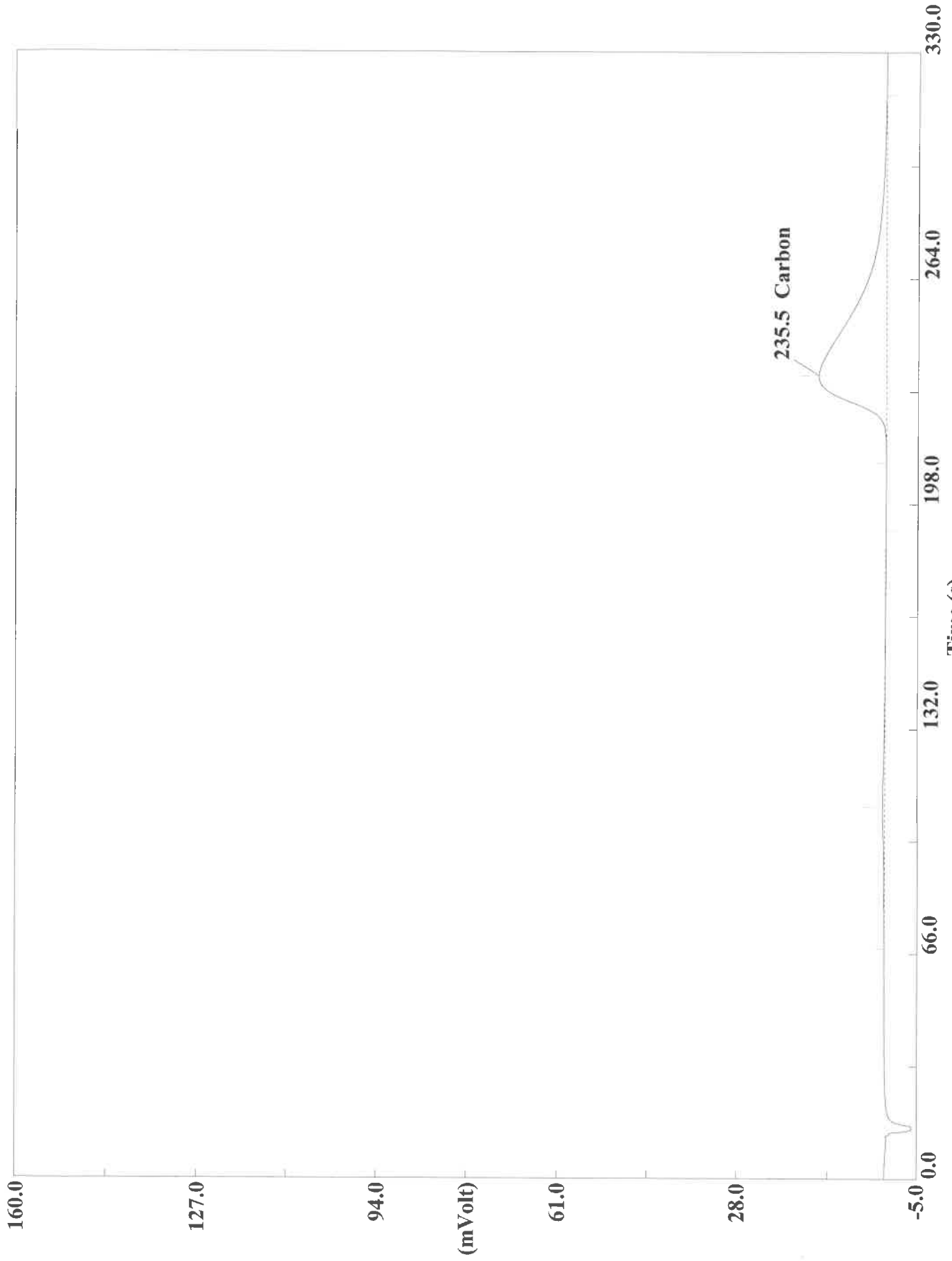
Page: 1 Sample: 180-111387-B-3 (A100520020)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520020
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 15:43 Printed : 10/6/2020 07:06
Sample ID : 180-111387-B-3 (# 31)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 14.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.5436	241	2603610	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520020B.DAT

Sample name : 180-111387-B-3 Analysed : 10/05/2020 15:49

Eager 300 Report

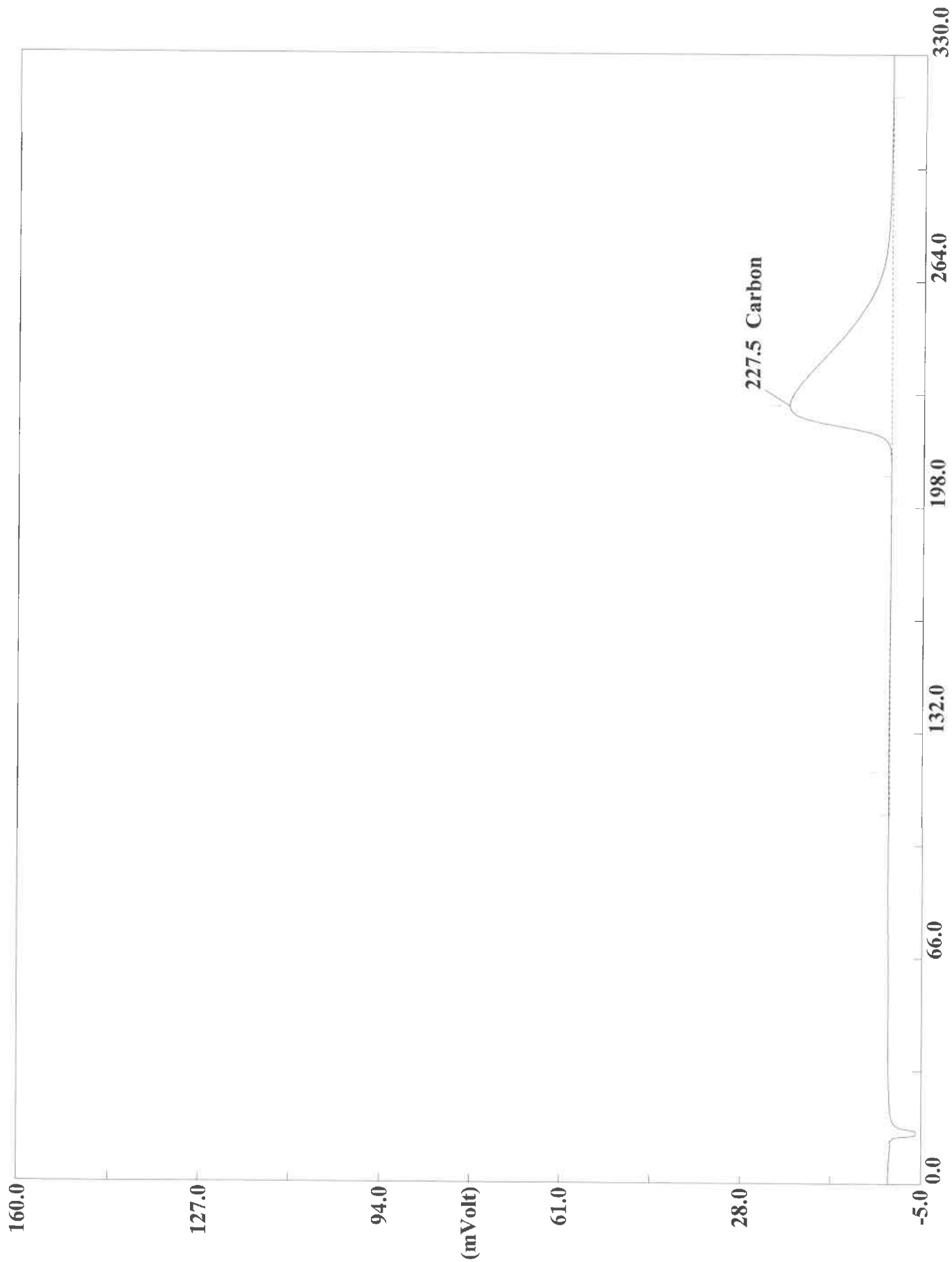
Page: 1 Sample: 180-111387-B-3 (A100520020B)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520020B
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 15:49 Printed : 10/6/2020 07:06
Sample ID : 180-111387-B-3 (# 32)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 14.9

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.7997	236	3710294	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520022.DAT
Sample name :CCV Analysed :10/05/2020 16:00

Eager 300 Report

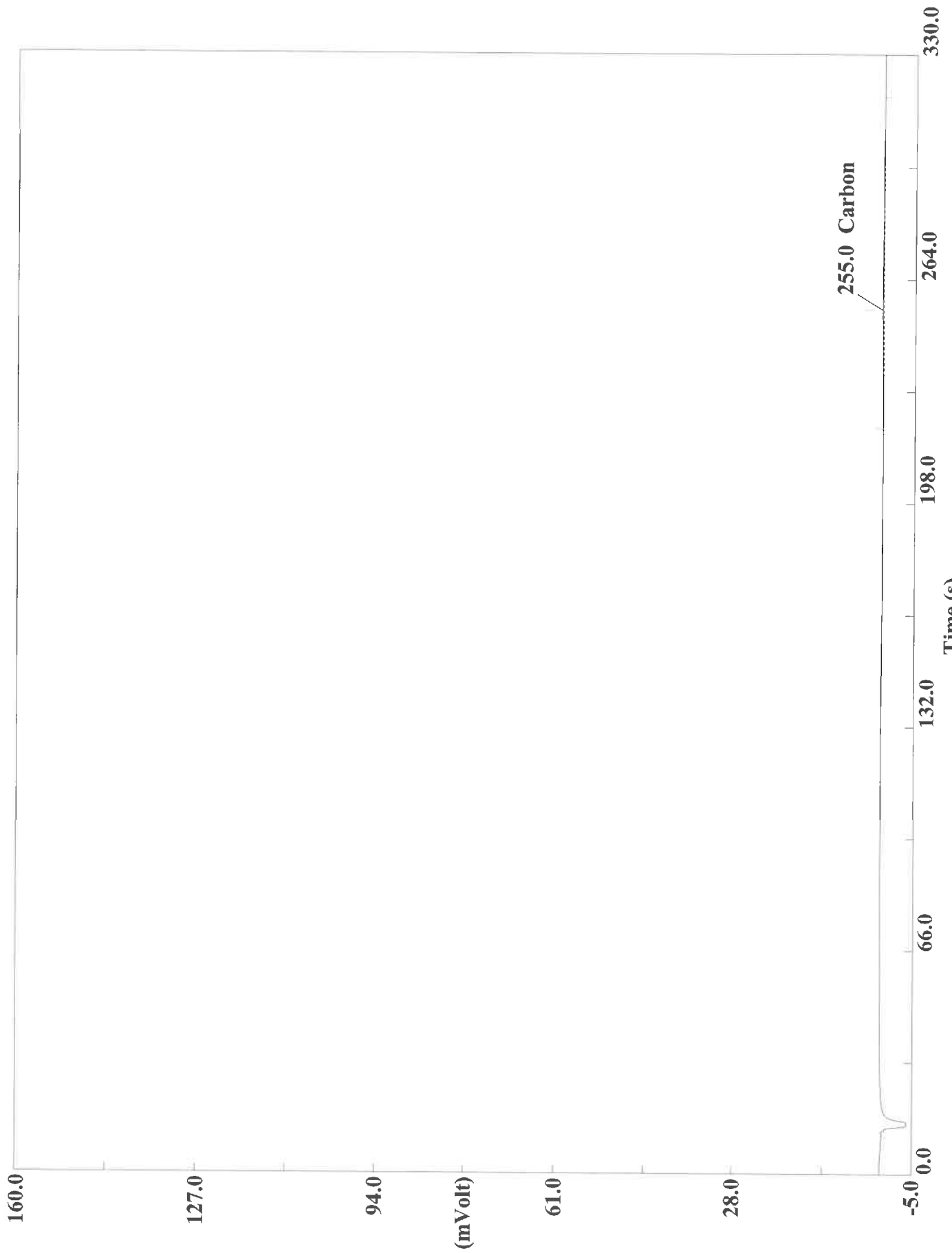
Page: 1 Sample: CCV (A100520022)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520022
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 16:00 Printed : 10/6/2020 07:06
Sample ID : CCV (# 34)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9828	228	5107699	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520023.DAT
Sample name :CCB Analysed :10/05/2020 16:06

Eager 300 Report

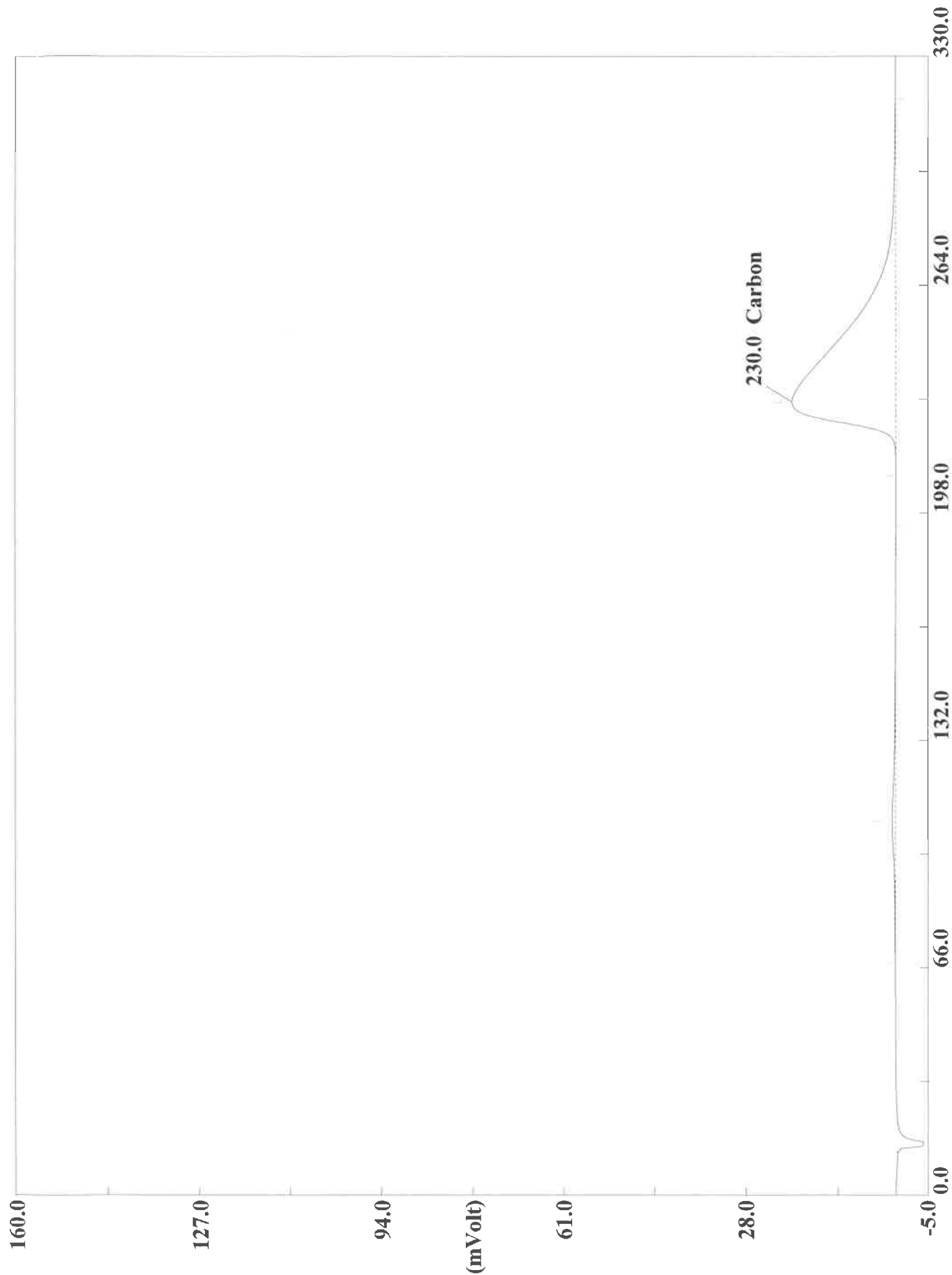
Page: 1 Sample: CCB (A100520023)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520023
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 16:06 Printed : 10/6/2020 07:06
Sample ID : CCB (# 35)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.0940	255	74613	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520024.DAT
Sample name :180-111387-B-4 Analyzed :10/05/2020 16:11

Eager 300 Report

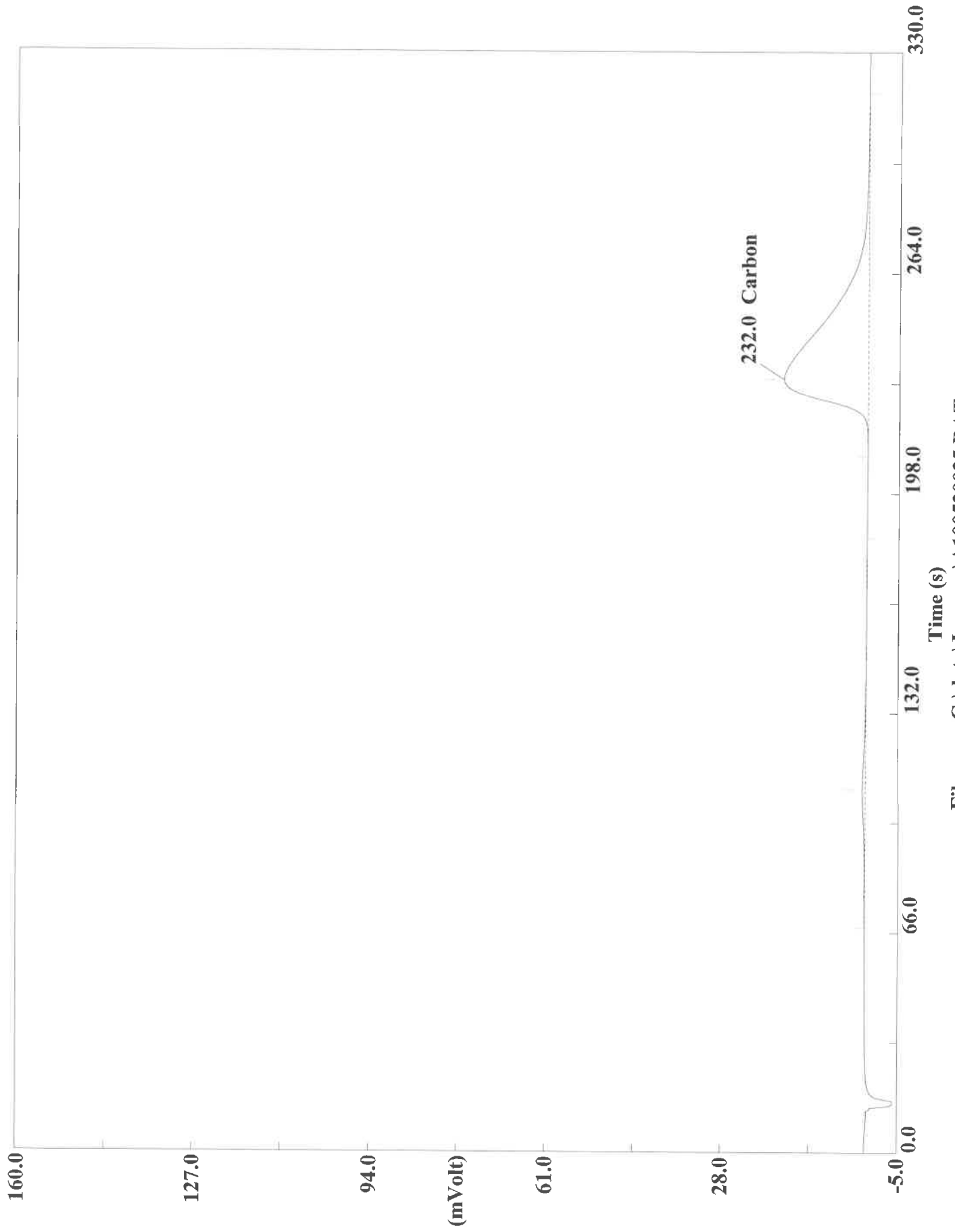
Page: 1 Sample: 180-111387-B-4 (A100520024)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520024
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 16:11 Printed : 10/6/2020 07:06
Sample ID : 180-111387-B-4 (# 36)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.6029	230	5263564	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520025.DAT

Sample name : 180-111387-B-4 Analysed : 10/05/2020 16:17

Eager 300 Report

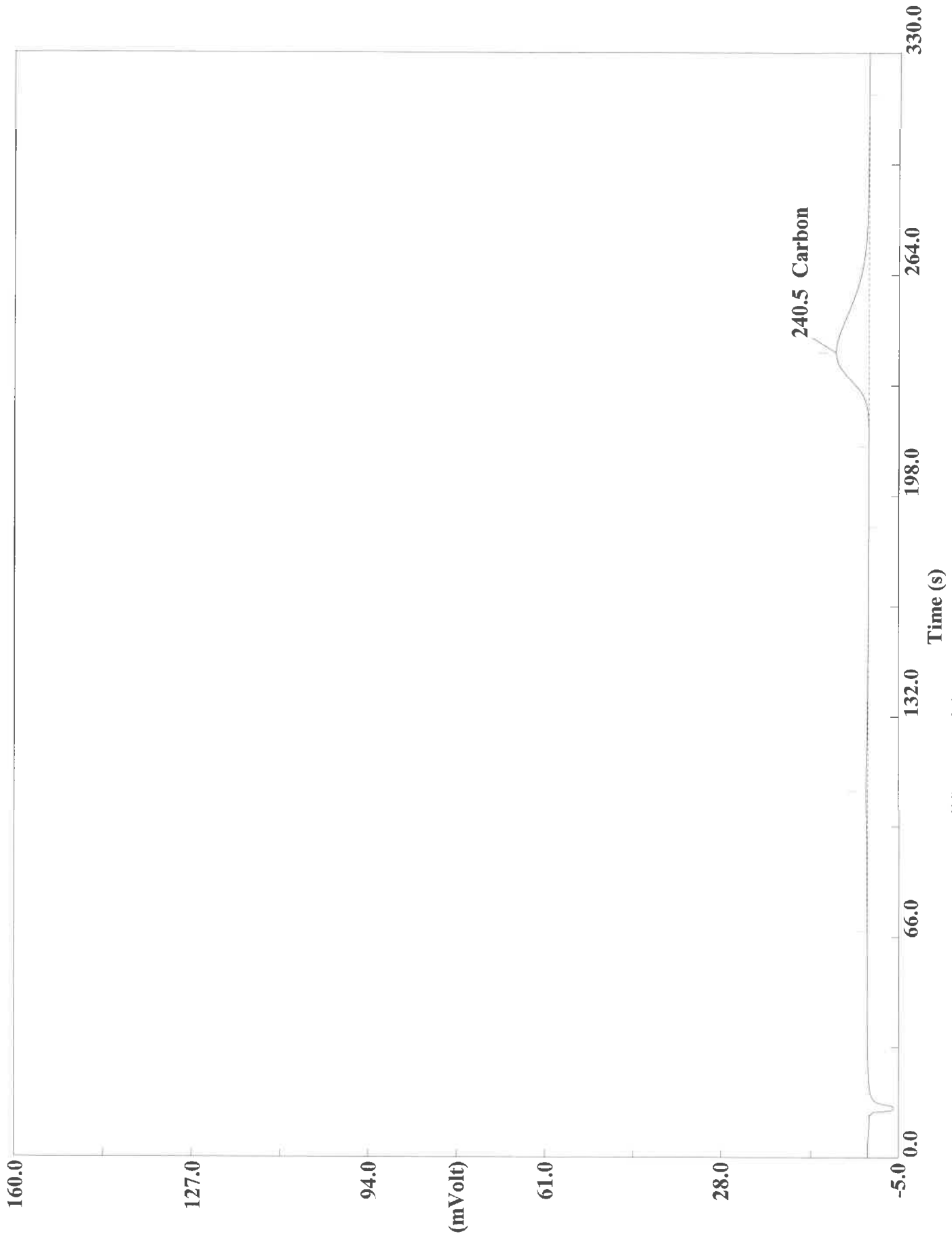
Page: 1 Sample: 180-111387-B-4 (A100520025)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520025
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 16:17 Printed : 10/6/2020 07:06
Sample ID : 180-111387-B-4 (# 37)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.1216	232	4151185	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520027.DAT

Sample name :180-111413-C-1 Analysed :10/05/2020 16:28

Eager 300 Report

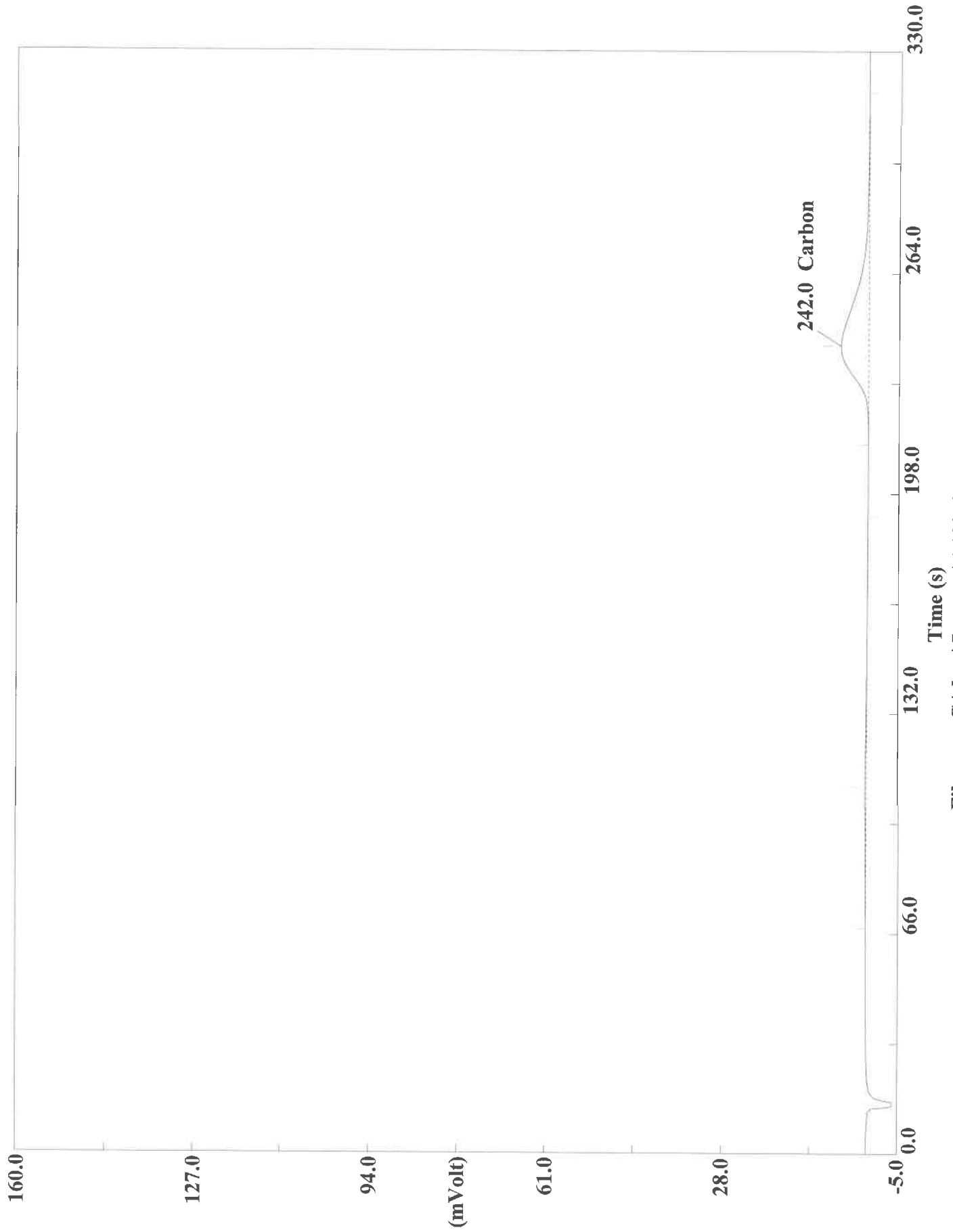
Page: 1 Sample: 180-111413-C-1 (A100520027)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520027
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 16:28 Printed : 10/6/2020 07:06
Sample ID : 180-111413-C-1 (# 39)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.4749	241	1601280	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520028.DAT

Sample name : 180-111413-C-1 Analyzed : 10/05/2020 16:34

Eager 300 Report

Page: 1 Sample: 180-111413-C-1 (A100520028)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520028
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 16:34 Printed : 10/6/2020 07:06
Sample ID : 180-111413-C-1 (# 40)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.5208	242	1381861	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520030.DAT

Sample name :180-111413-C-2 Analysed :10/05/2020 16:45

Eager 300 Report

Page: 1 Sample: 180-111413-C-2 (A100520030)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520030
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 16:45 Printed : 10/6/2020 07:07
Sample ID : 180-111413-C-2 (# 42)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.4028	240	1573139	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520031.DAT

Sample name :180-111413-C-2 Analysed :10/05/2020 16:50

Eager 300 Report

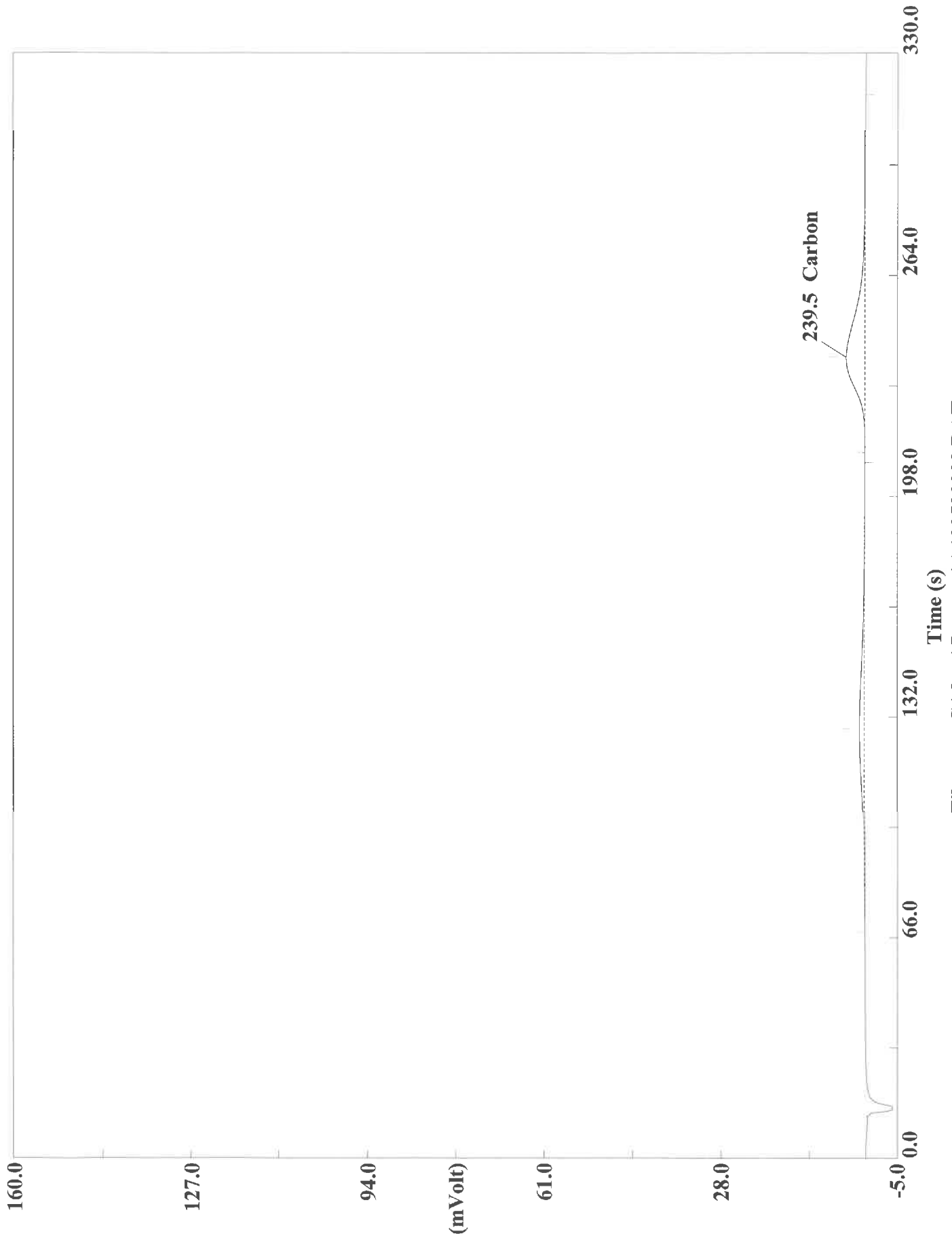
Page: 1 Sample: 180-111413-C-2 (A100520031)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520031
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 16:50 Printed : 10/6/2020 07:07
Sample ID : 180-111413-C-2 (# 43)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.6259	241	1979864	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520033.DAT
Sample name :180-111424-D-1 Analysed :10/05/2020 17:02

Eager 300 Report

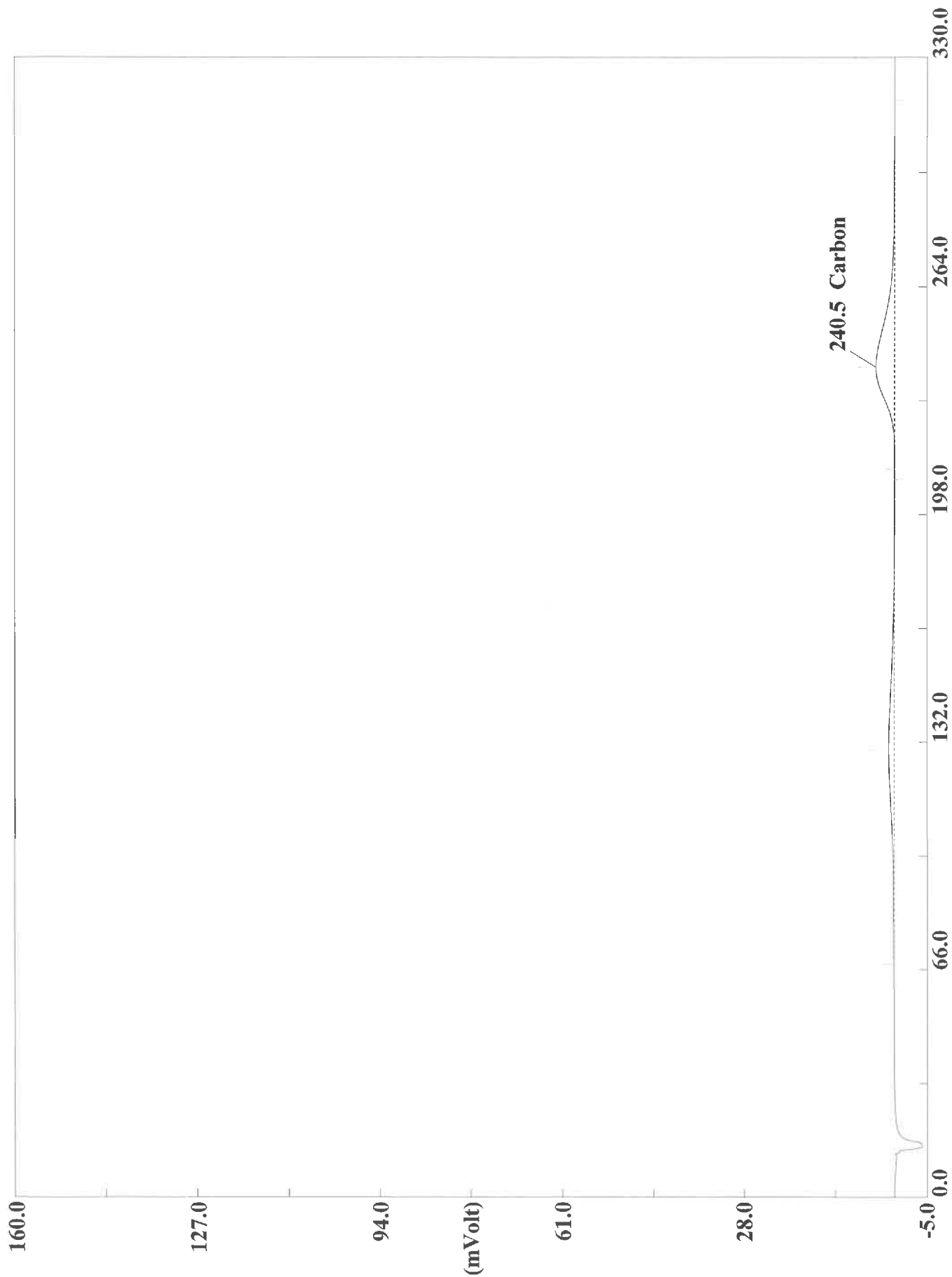
Page: 1 Sample: 180-111424-D-1 (A100520033)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520033
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 17:02 Printed : 10/6/2020 07:07
Sample ID : 180-111424-D-1 (# 45)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 24.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.7361	240	906487	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520034.DAT

Sample name :180-111424-D-1 Analysed :10/05/2020 17:08

Eager 300 Report

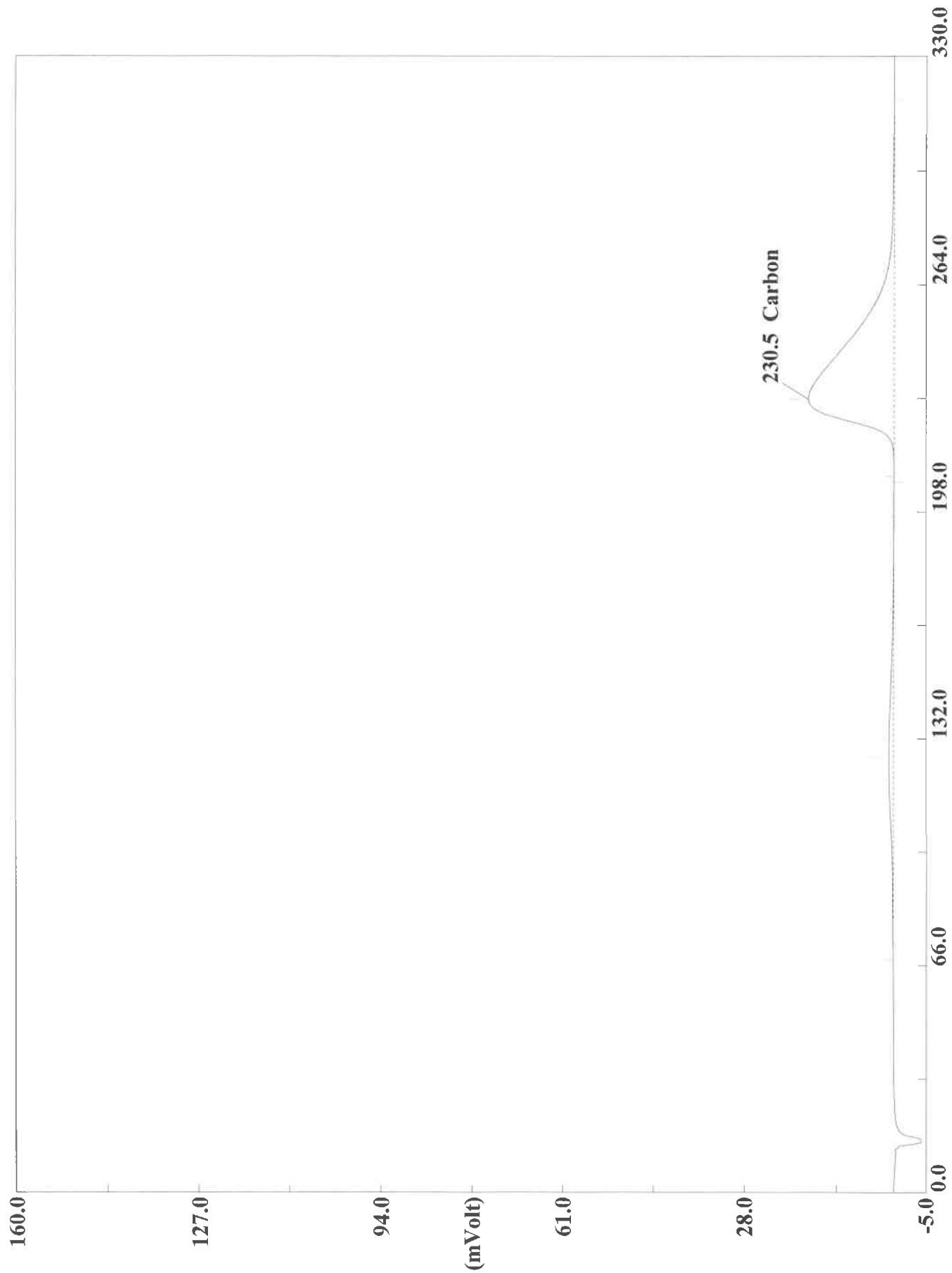
Page: 1 Sample: 180-111424-D-1 (A100520034)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520034
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 17:08 Printed : 10/6/2020 07:07
Sample ID : 180-111424-D-1 (# 46)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.7645	241	878511	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520036.DAT

Sample name :180-111424-D-2 Analysed :10/05/2020 17:19

Eager 300 Report

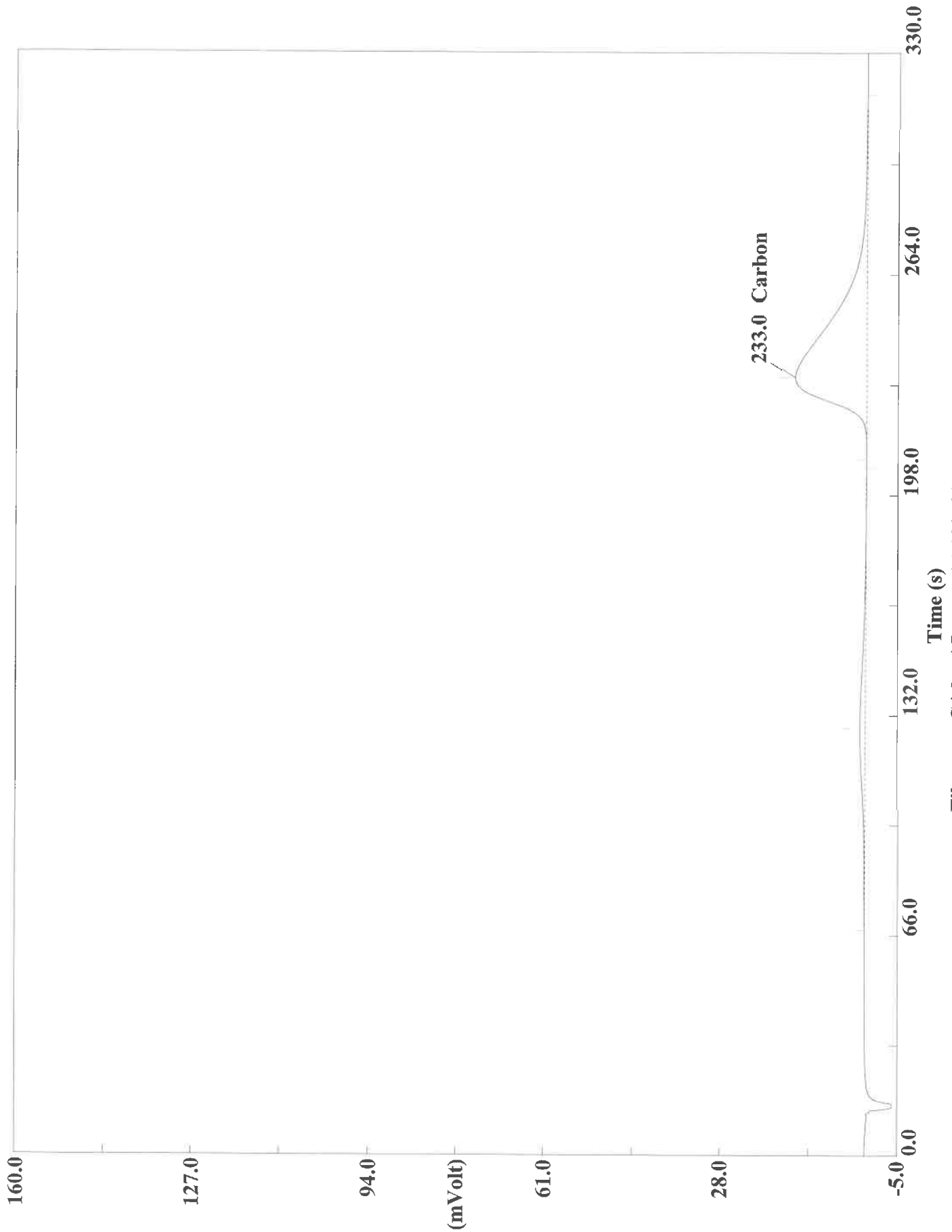
Page: 1 Sample: 180-111424-D-2 (A100520036)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520036
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 17:19 Printed : 10/6/2020 07:07
Sample ID : 180-111424-D-2 (# 48)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.0051	231	4095912	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520037.DAT
Sample name :180-111424-D-2 Analyzed :10/05/2020 17:25

Eager 300 Report

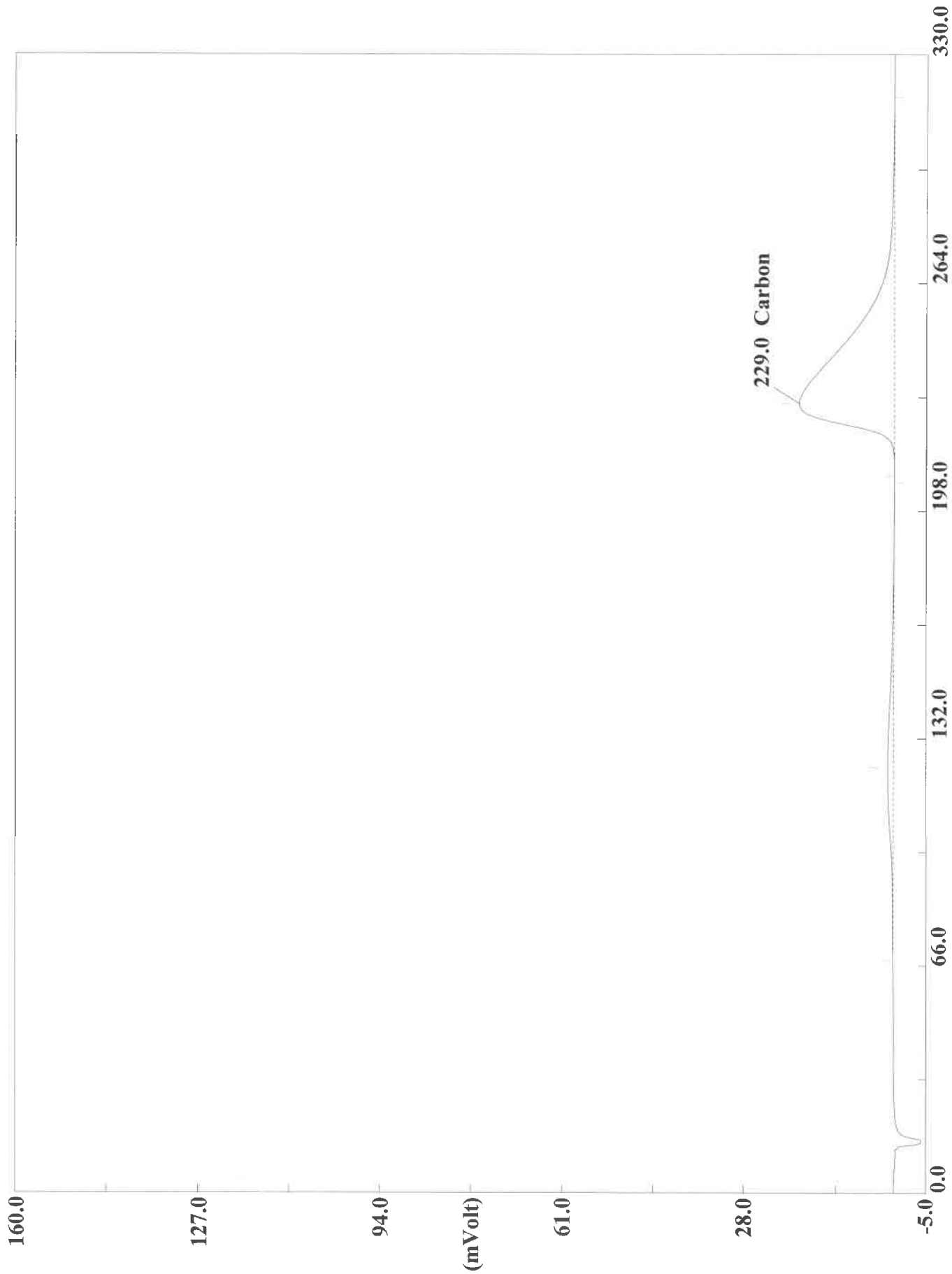
Page: 1 Sample: 180-111424-D-2 (A100520037)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520037
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 17:25 Printed : 10/6/2020 07:07
Sample ID : 180-111424-D-2 (# 49)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.7229	233	3611286	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520039.DAT

Sample name :180-111431-E-2 Analysed :10/05/2020 17:36

Eager 300 Report

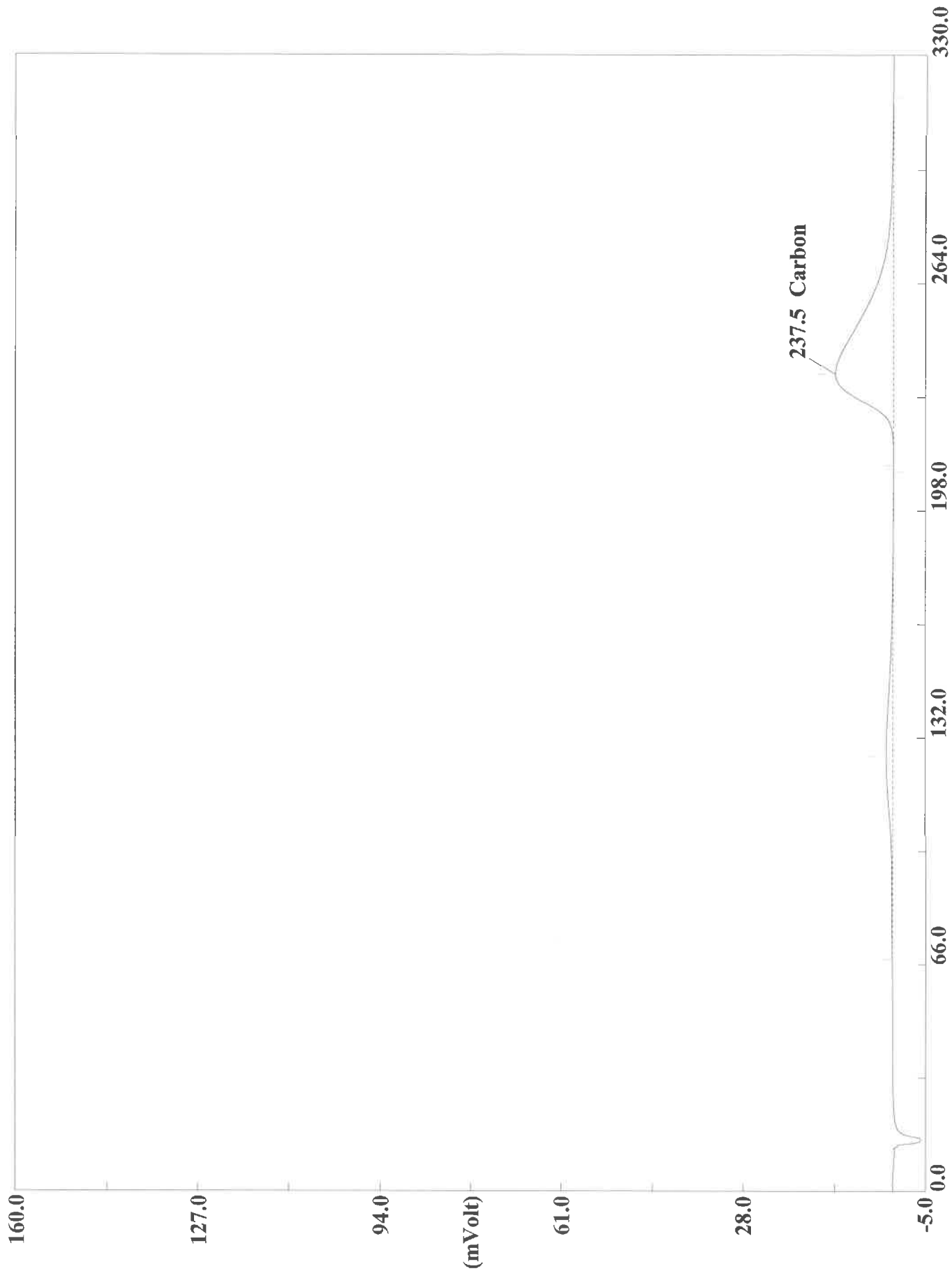
Page: 1 Sample: 180-111431-E-2 (A100520039)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520039
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 17:36 Printed : 10/6/2020 07:07
Sample ID : 180-111431-E-2 (# 51)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	4.8665	229	4600775	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520040.DAT
Sample name :180-111431-E-2 Analysed :10/05/2020 17:42

Eager 300 Report

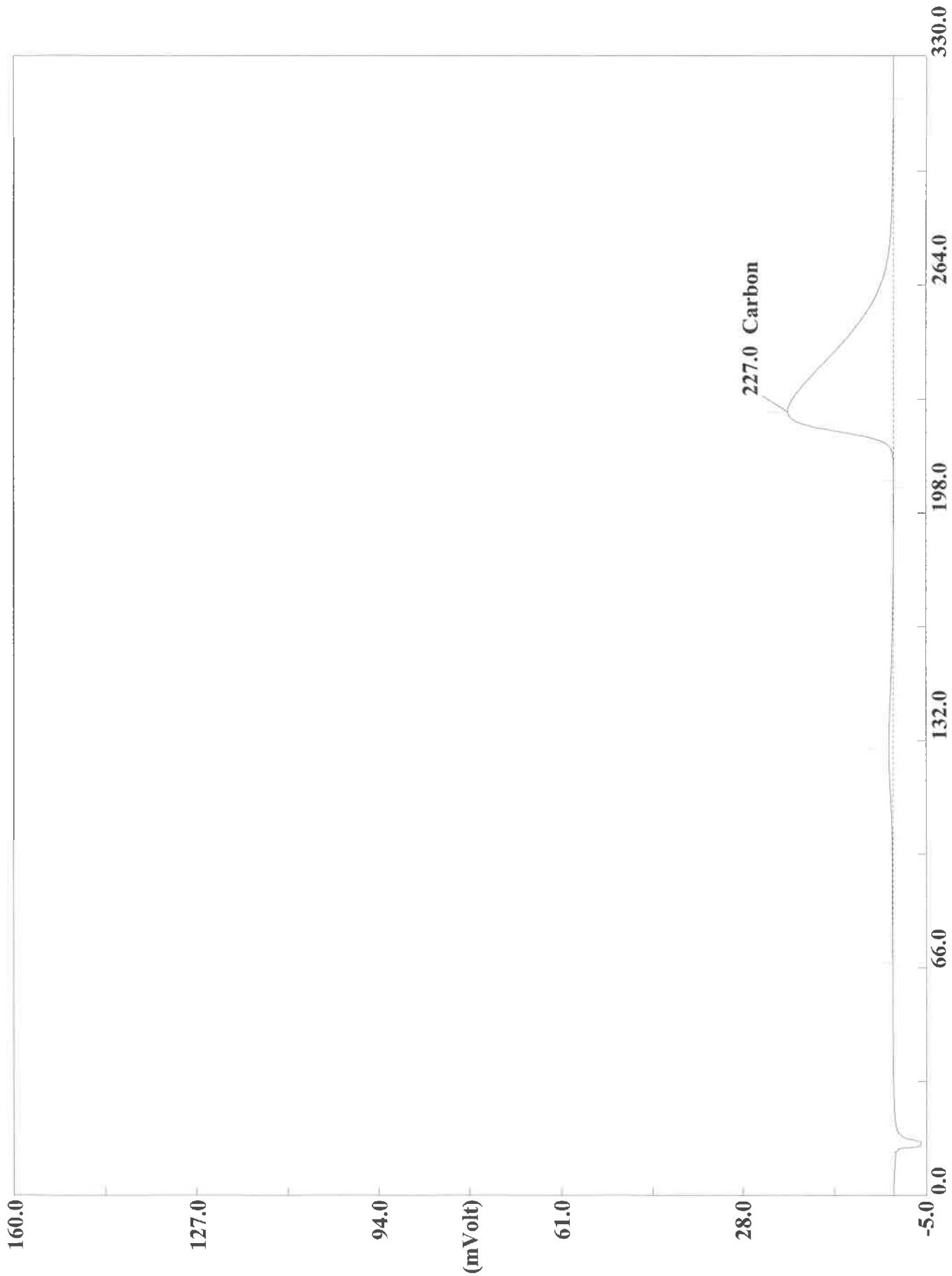
Page: 1 Sample: 180-111431-E-2 (A100520040)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520040
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 17:42 Printed : 10/6/2020 07:07
Sample ID : 180-111431-E-2 (# 52)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.0567	238	3056627	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520042.DAT
Sample name :CCV Analysed :10/05/2020 18:08

Eager 300 Report

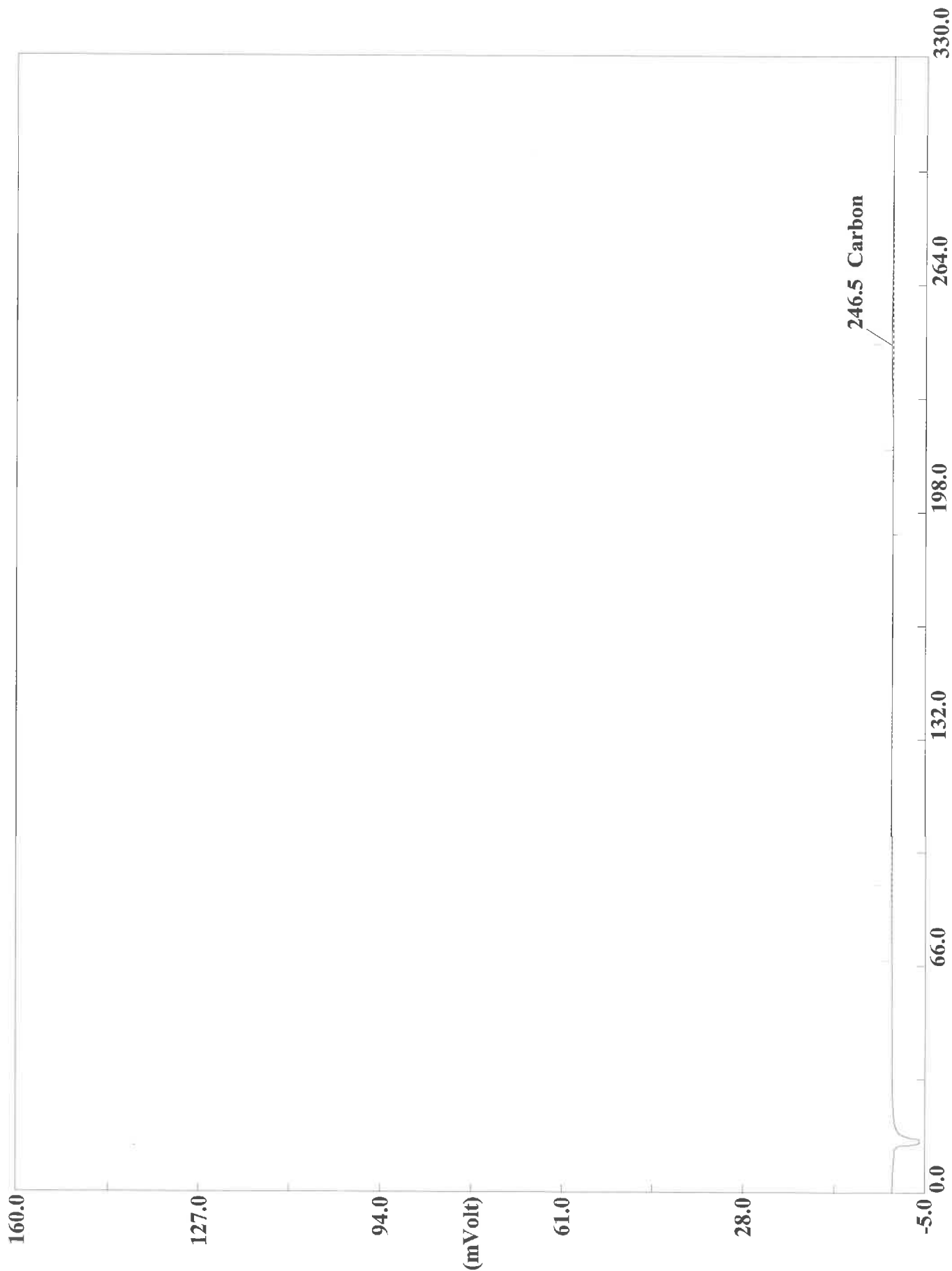
Page: 1 Sample: CCV (A100520042)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520042
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 18:08 Printed : 10/6/2020 07:07
Sample ID : CCV (# 54)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9955	227	5173909	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520043.DAT
Sample name :CCB Analysed :10/05/2020 18:14

Eager 300 Report

Page: 1 Sample: CCB (A100520043)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520043
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 18:14 Printed : 10/6/2020 07:07
Sample ID : CCB (# 55)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.1157	247	97216	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520044.DAT
Sample name : 180-111467-B-18 Analysed : 10/05/2020 18:19

Eager 300 Report

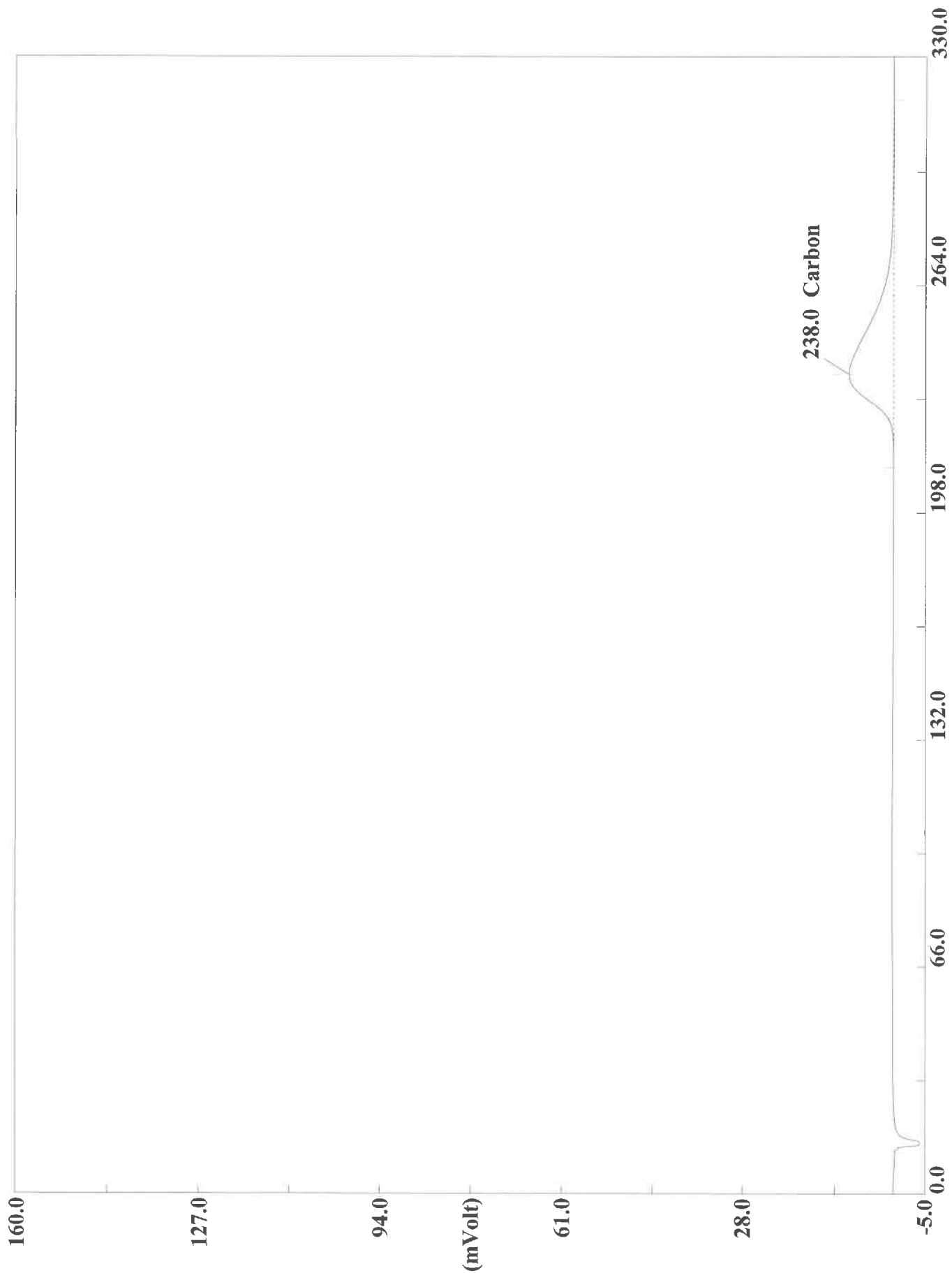
Page: 1 Sample: 180-111467-B-18 (A100520044)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520044
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 18:19 Printed : 10/6/2020 07:07
Sample ID : 180-111467-B-18 (# 56)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 25.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0205	240	1319065	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520045.DAT
Sample name : 180-111467-B-18 Analysed : 10/05/2020 18:25

Eager 300 Report

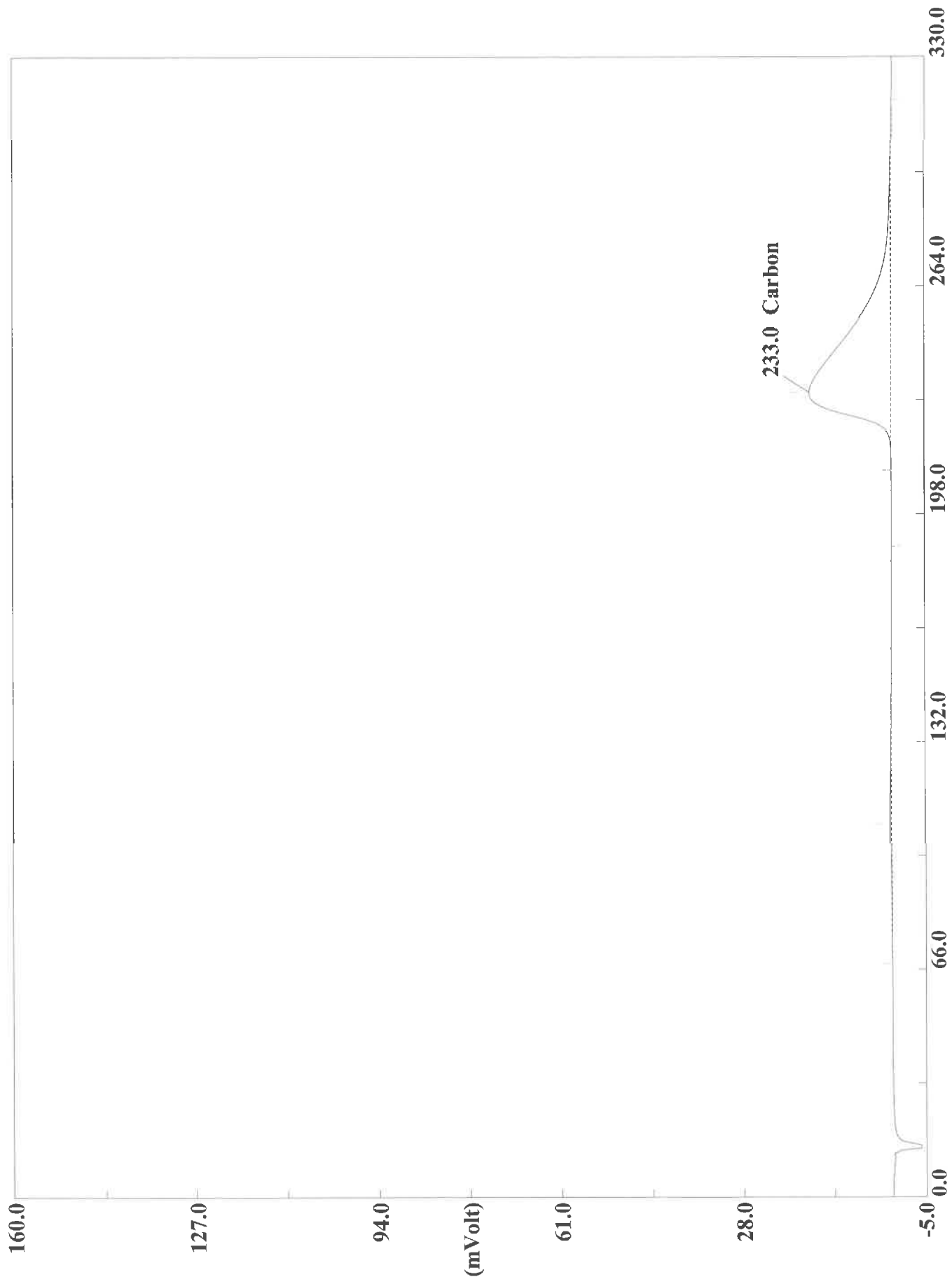
Page: 1 Sample: 180-111467-B-18 (A100520045)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520045
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 18:25 Printed : 10/6/2020 07:08
Sample ID : 180-111467-B-18 (# 57)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.9

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.8653	238	2109225	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520047.DAT
Sample name :180-111467-B-19 Analysed :10/05/2020 18:36

Eager 300 Report

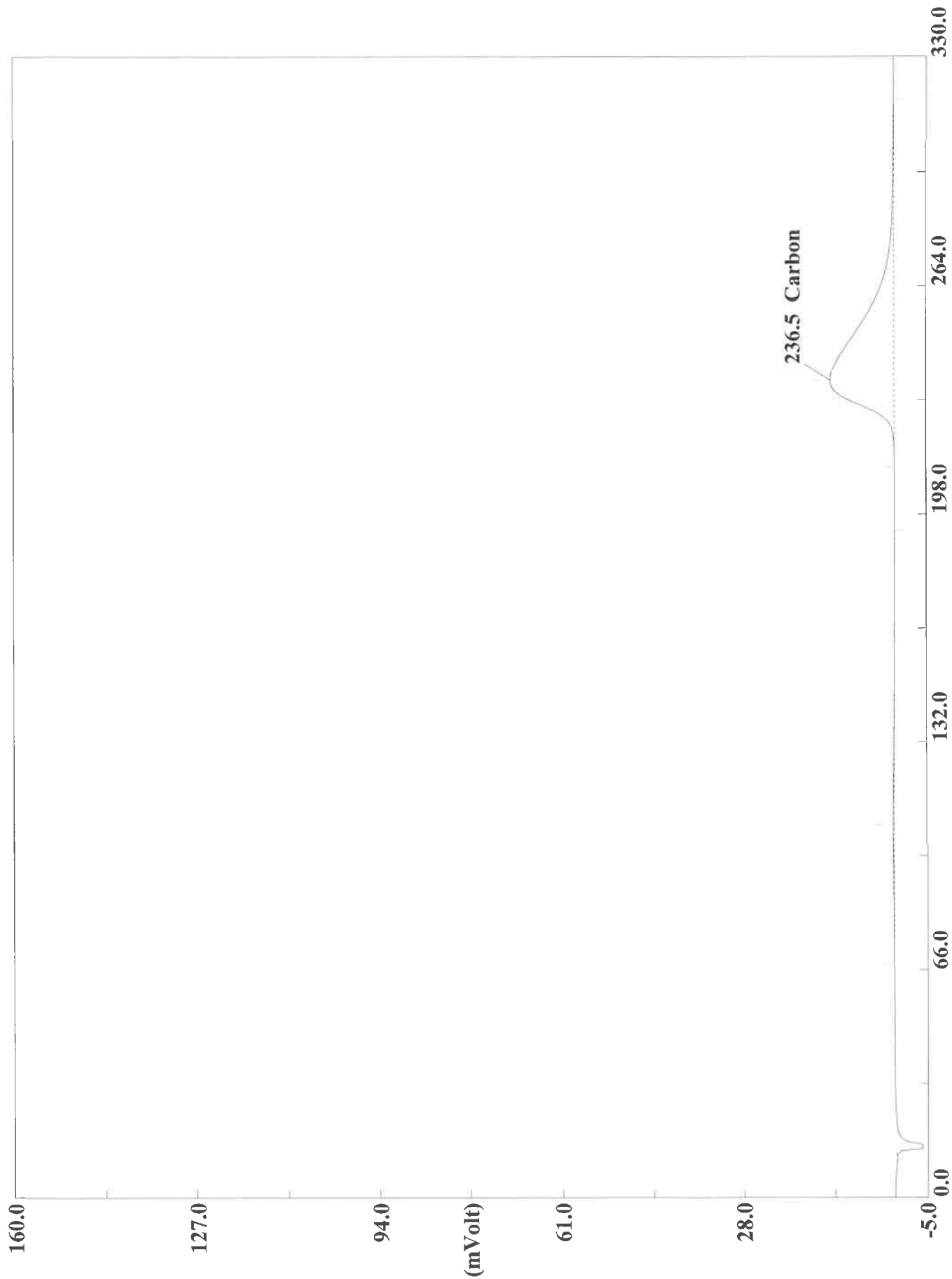
Page: 1 Sample: 180-111467-B-19 (A100520047)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520047
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 18:36 Printed : 10/6/2020 07:08
Sample ID : 180-111467-B-19 (# 59)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 25.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.0854	233	4019779	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520048.DAT
Sample name :180-111467-B-19 Analysed :10/05/2020 18:42

Eager 300 Report

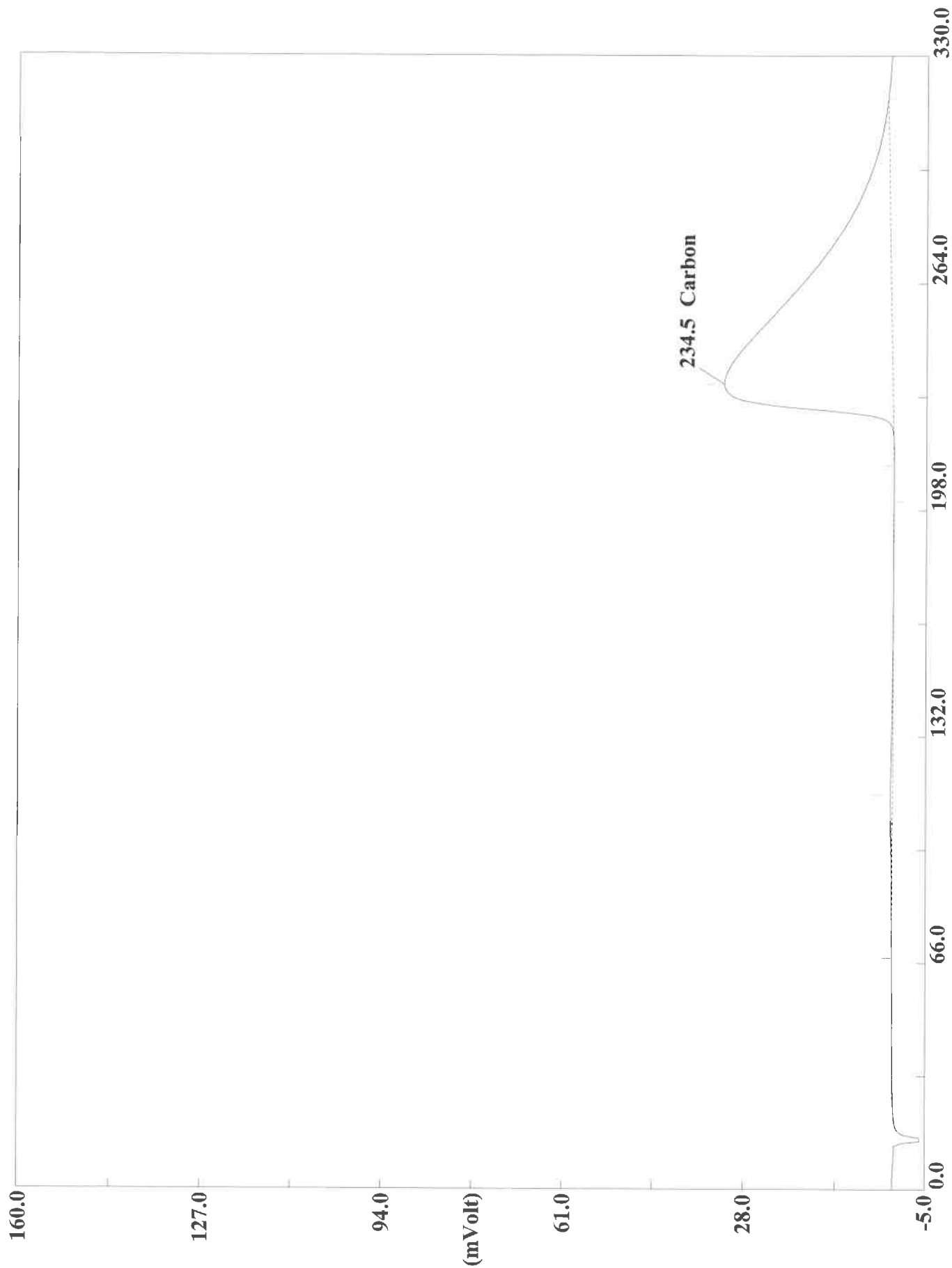
Page: 1 Sample: 180-111467-B-19 (A100520048)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520048
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 18:42 Printed : 10/6/2020 07:08
Sample ID : 180-111467-B-19 (# 60)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.9

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.7893	237	3020147	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520050.DAT
Sample name :180-111496-D-1 Analysed :10/05/2020 18:53

Eager 300 Report

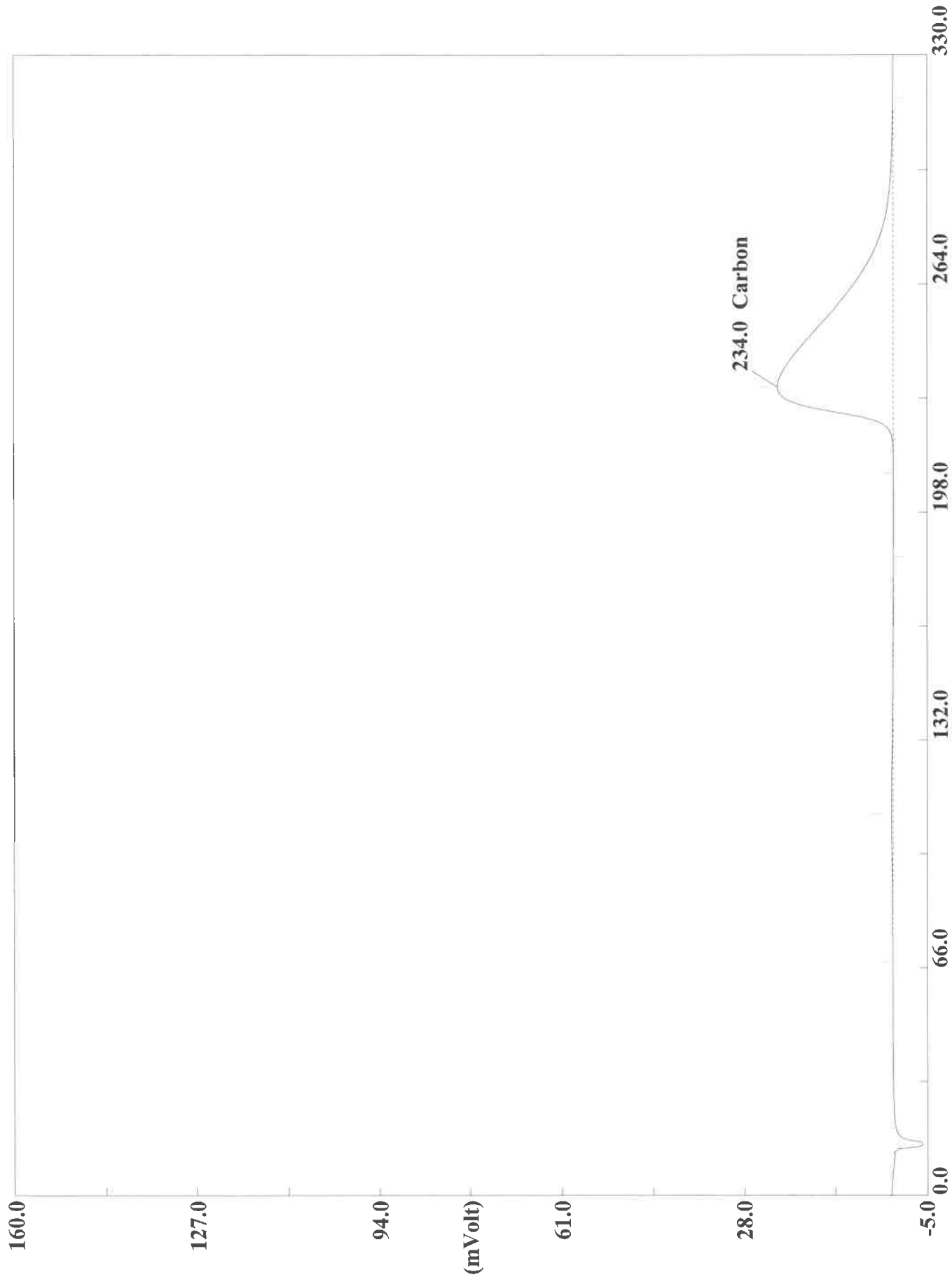
Page: 1 Sample: 180-111496-D-1 (A100520050)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520050
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 18:53 Printed : 10/6/2020 07:08
Sample ID : 180-111496-D-1 (# 62)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	11.8513	235	12413680	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520051.DAT
Sample name : 180-111496-D-1 Analysed : 10/05/2020 18:59

Eager 300 Report

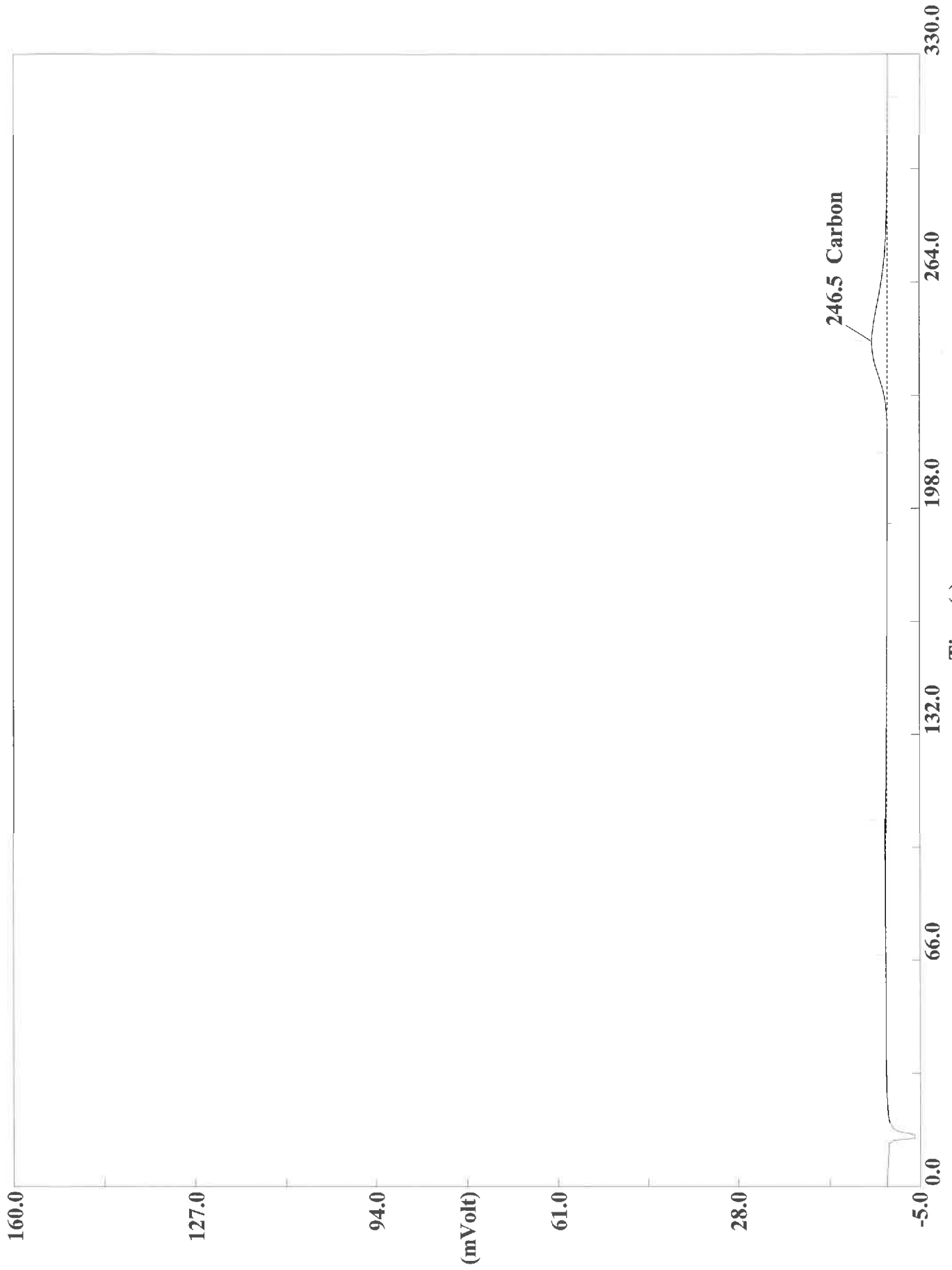
Page: 1 Sample: 180-111496-D-1 (A100520051)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520051
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 18:59 Printed : 10/6/2020 07:08
Sample ID : 180-111496-D-1 (# 63)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	5.5597	234	6710859	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520053.DAT
Sample name :180-111496-P-2 Analyzed :10/05/2020 19:10

Eager 300 Report

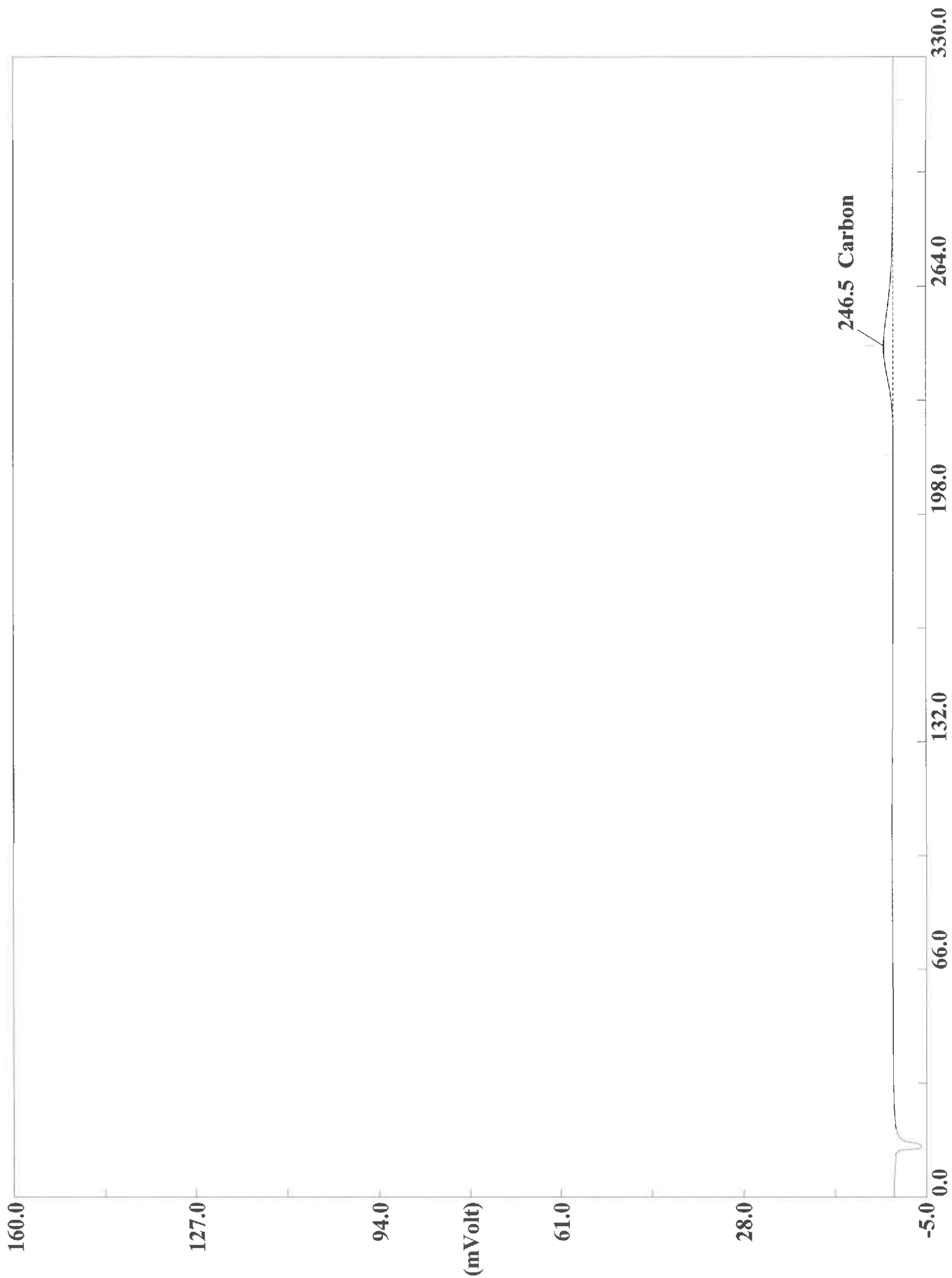
Page: 1 Sample: 180-111496-P-2 (A100520053)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520053
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 19:10 Printed : 10/6/2020 07:08
Sample ID : 180-111496-P-2 (# 65)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.6469	247	759963	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520054.DAT

Sample name :180-111496-P-2 Analysed :10/05/2020 19:15

Eager 300 Report

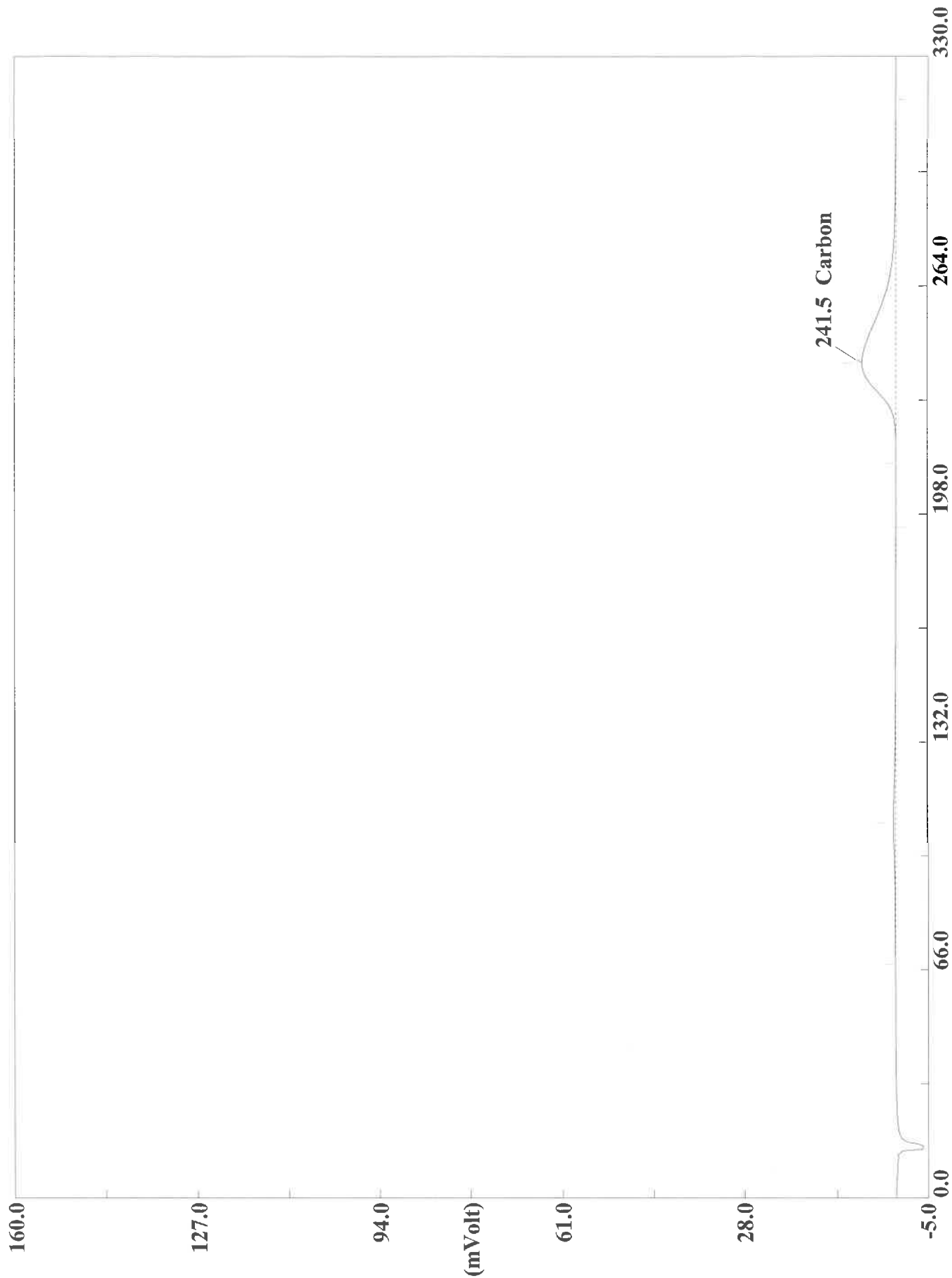
Page: 1 Sample: 180-111496-P-2 (A100520054)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520054
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 19:15 Printed : 10/6/2020 07:08
Sample ID : 180-111496-P-2 (# 66)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.4096	247	442581	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520056.DAT

Sample name :180-111497-D-1 Analysed :10/05/2020 19:26

Eager 300 Report

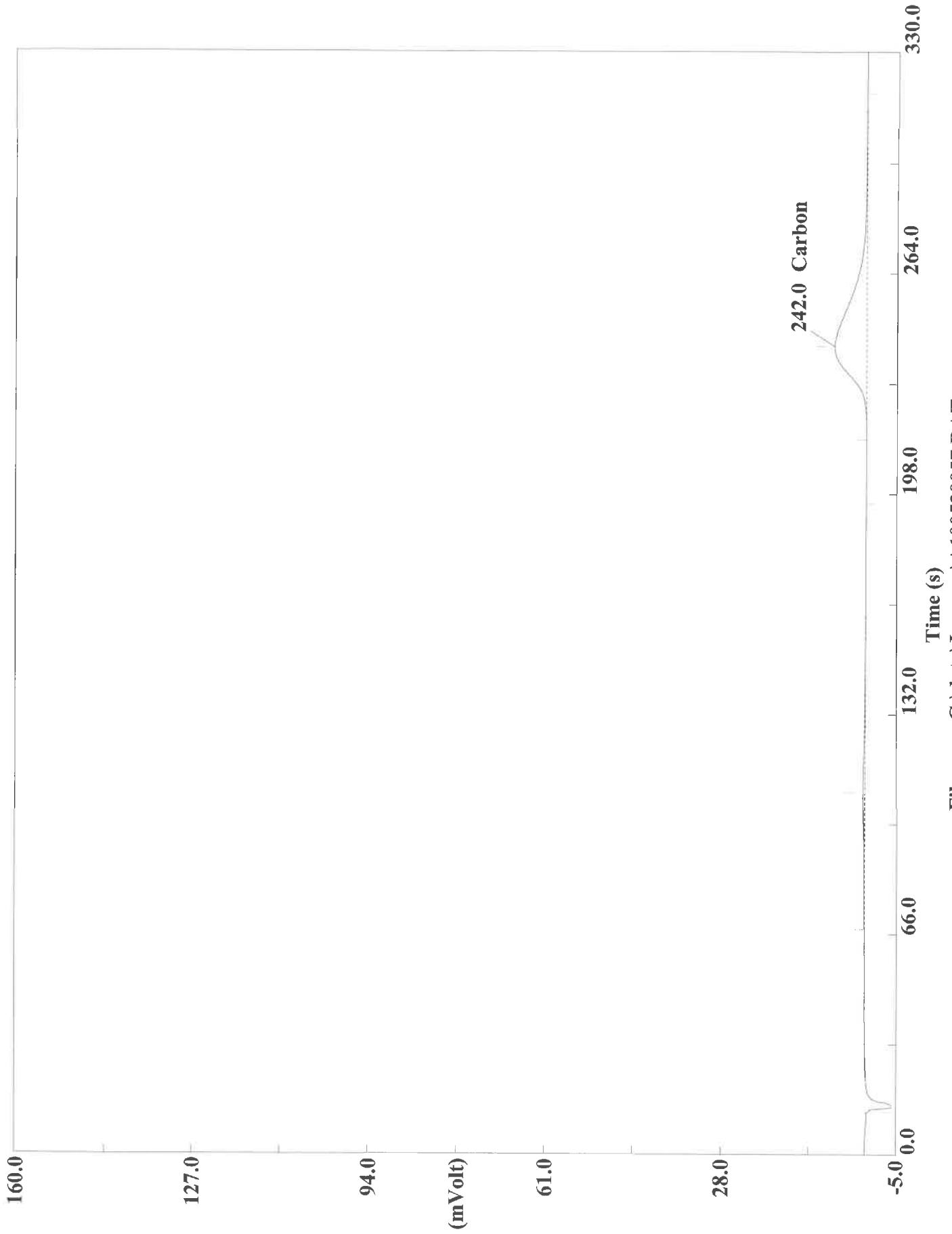
Page: 1 Sample: 180-111497-D-1 (A100520056)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520056
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 19:26 Printed : 10/6/2020 07:08
Sample ID : 180-111497-D-1 (# 68)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.4129	242	1555084	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520057.DAT

Sample name :180-111497-D-1 Analysed :10/05/2020 19:32

Eager 300 Report

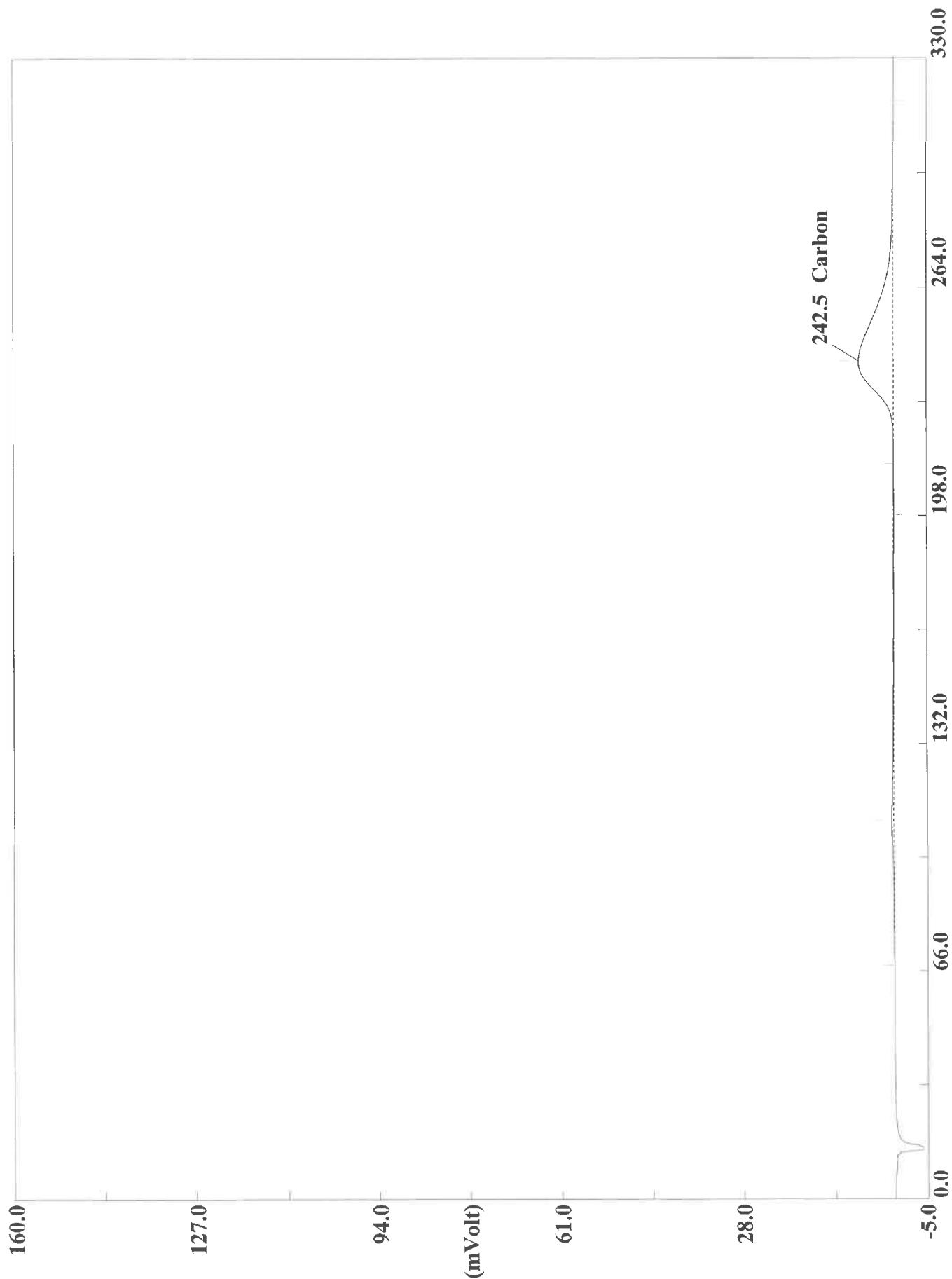
Page: 1 Sample: 180-111497-D-1 (A100520057)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520057
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 19:32 Printed : 10/6/2020 07:08
Sample ID : 180-111497-D-1 (# 69)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.4522	242	1538364	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520059.DAT

Sample name : 180-111497-D-2 Analysed : 10/05/2020 19:43

Eager 300 Report

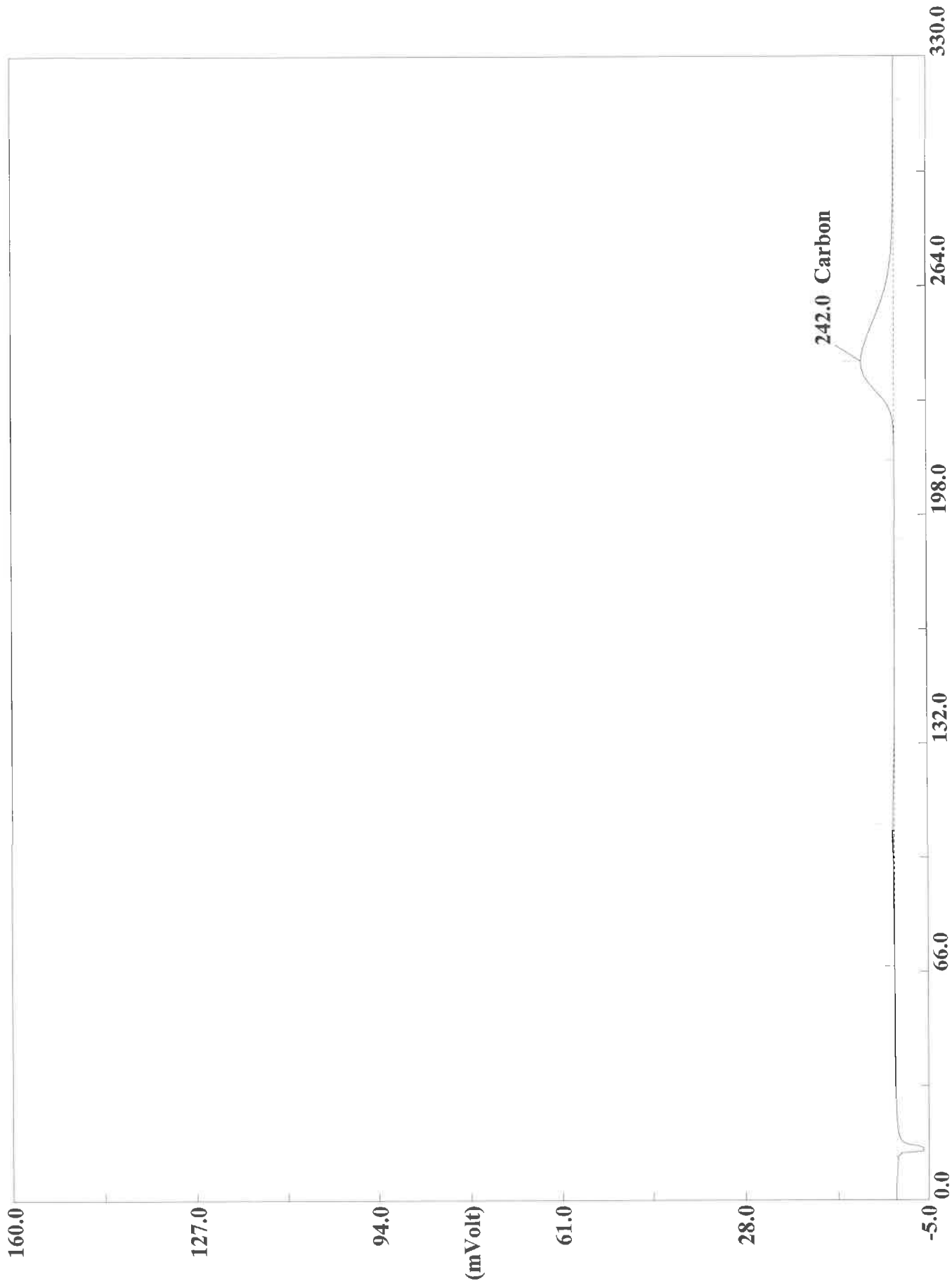
Page: 1 Sample: 180-111497-D-2 (A100520059)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520059
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 19:43 Printed : 10/6/2020 07:09
Sample ID : 180-111497-D-2 (# 71)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.5

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.3094	243	1582952	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520060.DAT

Sample name :180-111497-D-2 Analysed :10/05/2020 19:49

Eager 300 Report

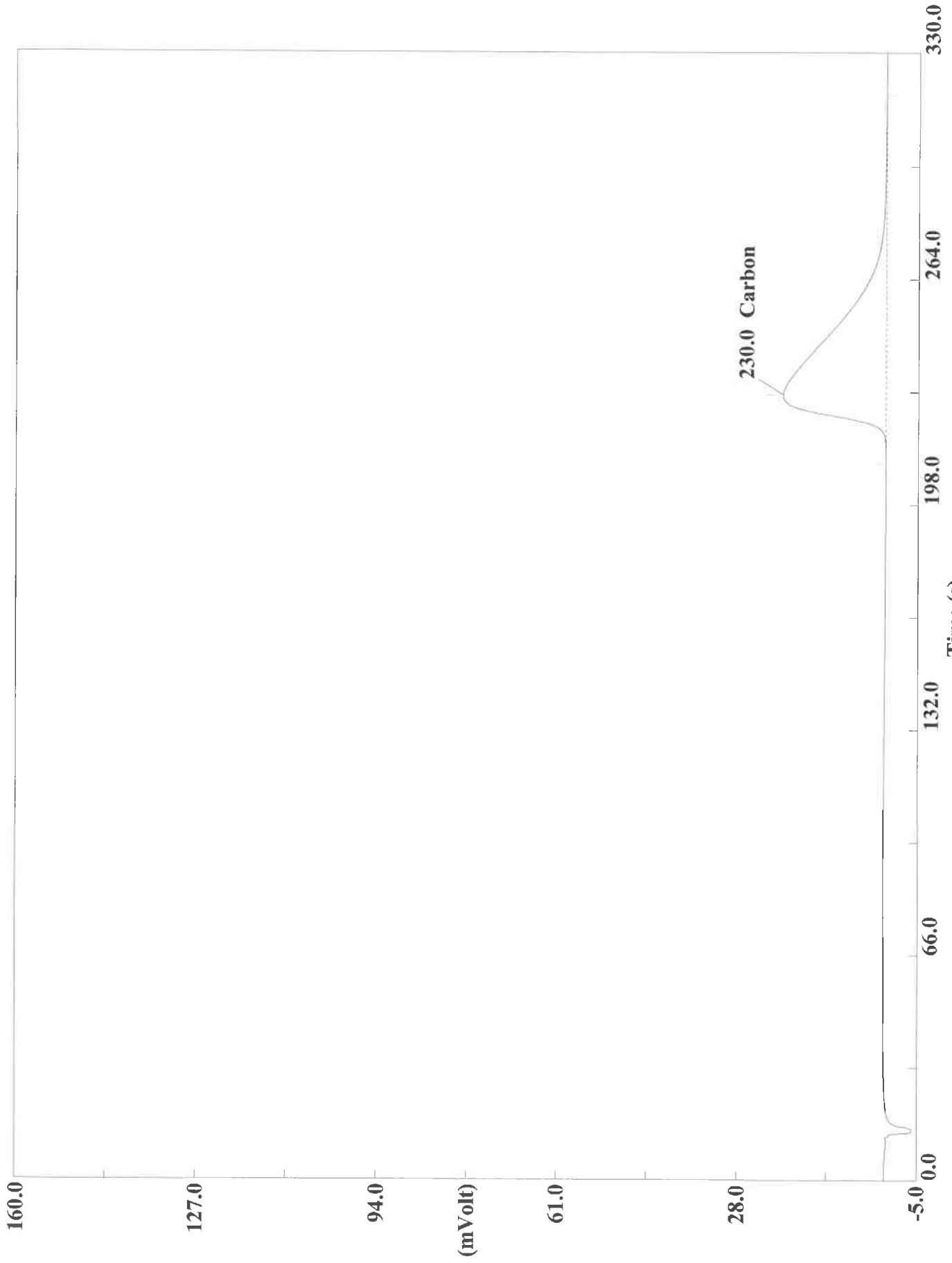
Page: 1 Sample: 180-111497-D-2 (A100520060)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520060
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 19:49 Printed : 10/6/2020 07:09
Sample ID : 180-111497-D-2 (# 72)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.3133	242	1526046	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520062.DAT
Sample name :CCV Analysed :10/05/2020 20:00

Eager 300 Report

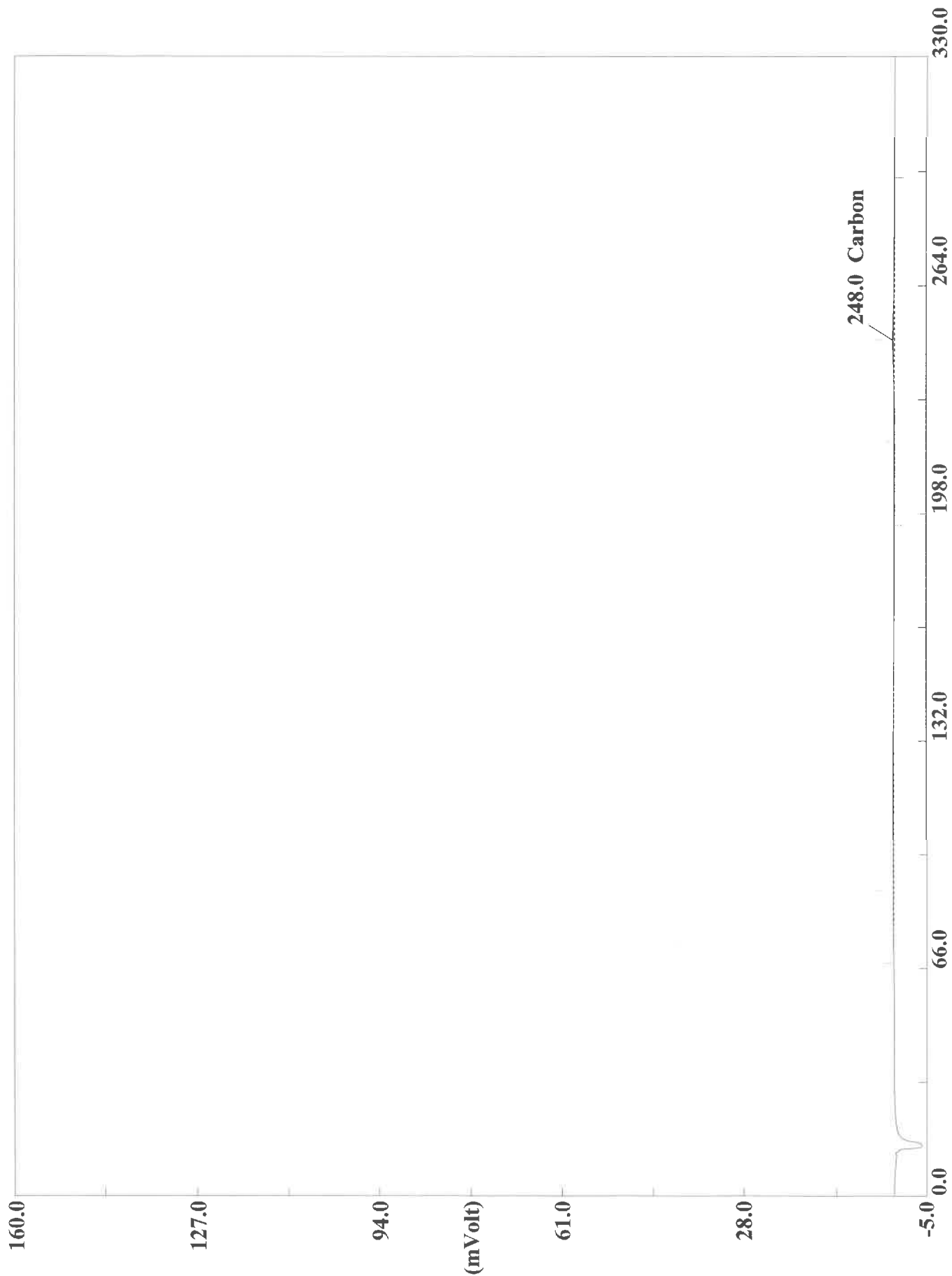
Page: 1 Sample: CCV (A100520062)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520062
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 20:00 Printed : 10/6/2020 07:09
Sample ID : CCV (# 74)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9857	230	5122955	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520063.DAT
Sample name :CCB Analysed :10/05/2020 20:06

Eager 300 Report

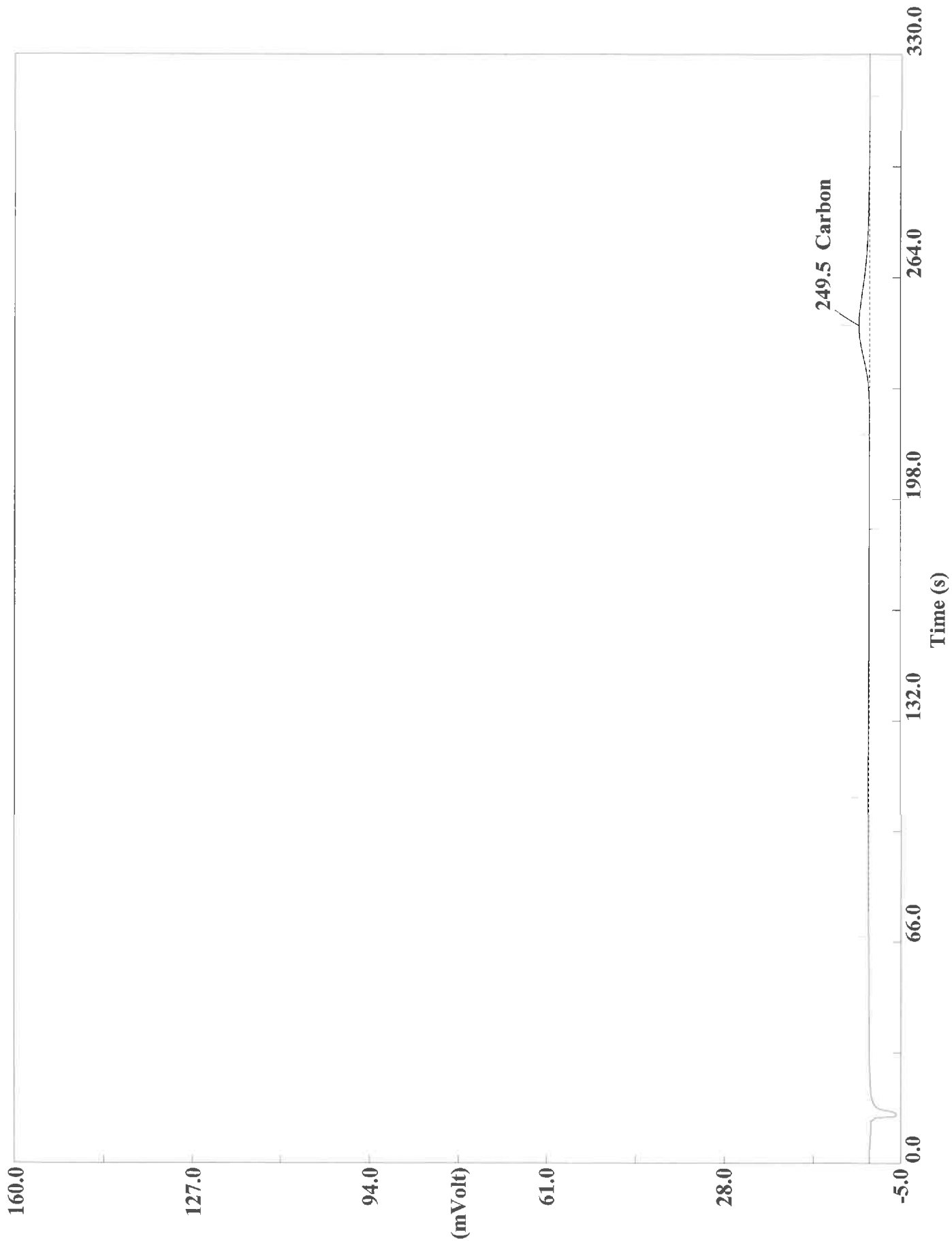
Page: 1 Sample: CCB (A100520063)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520063
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 20:06 Printed : 10/6/2020 07:09
Sample ID : CCB (# 75)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.0833	248	63372	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520064.DAT

Sample name :180-111506-C-2 Analysed :10/05/2020 20:11

Eager 300 Report

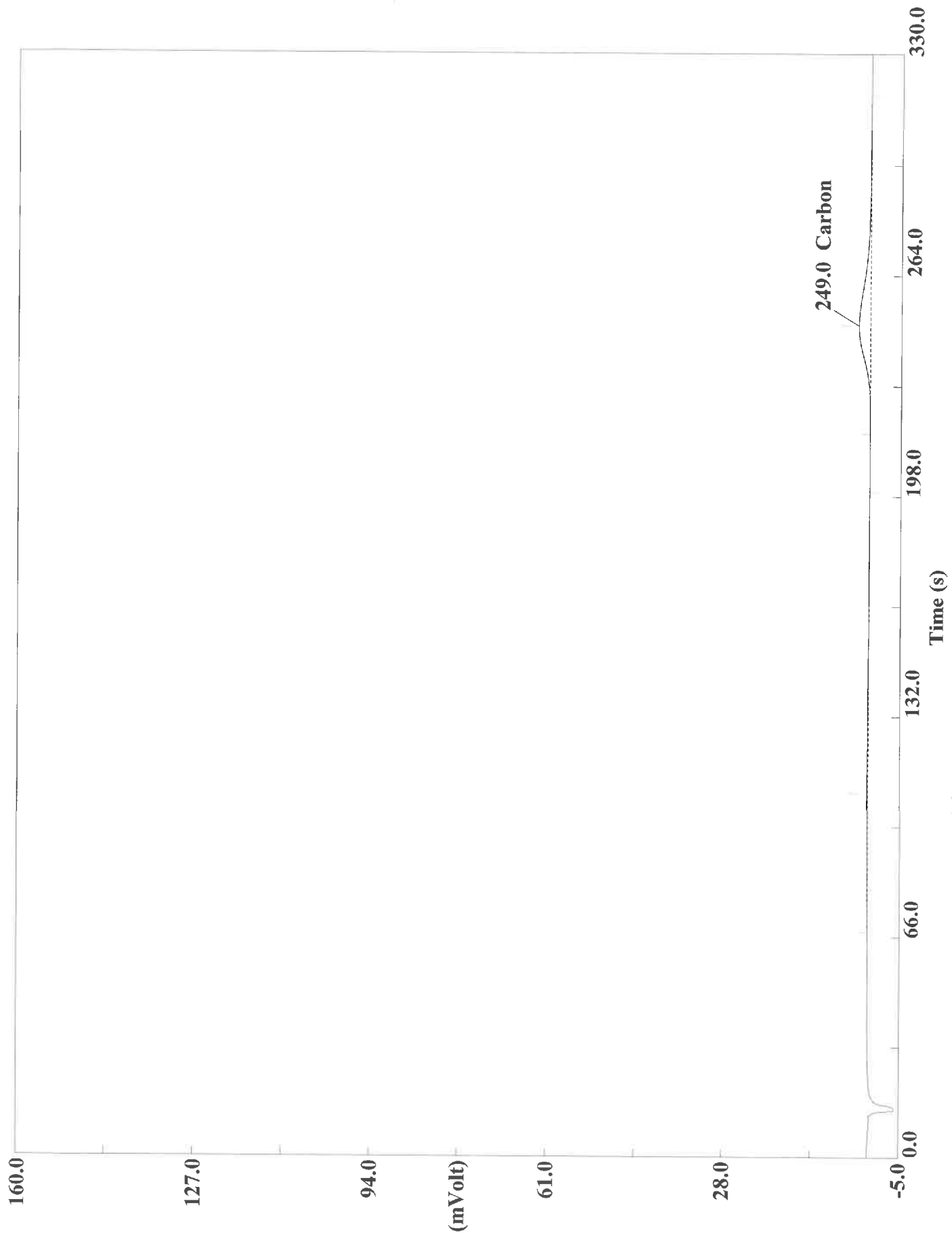
Page: 1 Sample: 180-111506-C-2 (A100520064)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520064
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 20:11 Printed : 10/6/2020 07:09
Sample ID : 180-111506-C-2 (# 76)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.4985	250	533363	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520065.DAT
Sample name :180-111506-C-2 Analysed :10/05/2020 20:17

Eager 300 Report

Page: 1 Sample: 180-111506-C-2 (A100520065)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520065
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 20:17 Printed : 10/6/2020 07:09
Sample ID : 180-111506-C-2 (# 77)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 24.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.4689	249	571302	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520067.DAT

Sample name :180-111515-B-4 Analysed :10/05/2020 20:28

Eager 300 Report

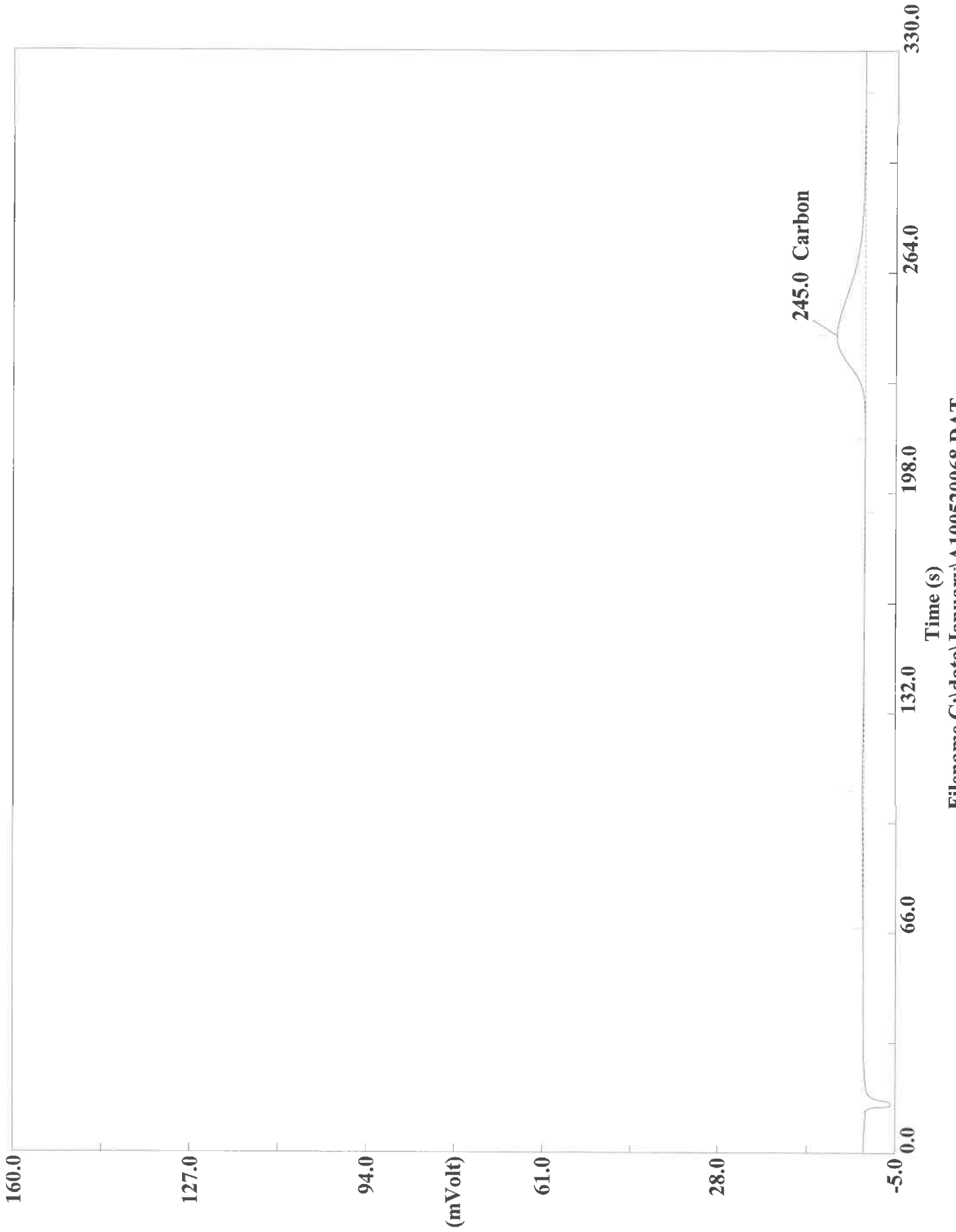
Page: 1 Sample: 180-111515-B-4 (A100520067)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520067
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 20:28 Printed : 10/6/2020 07:09
Sample ID : 180-111515-B-4 (# 79)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 11.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2224	243	1843932	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520068.DAT

Sample name :180-111515-B-4 Analysed :10/05/2020 20:33

Eager 300 Report

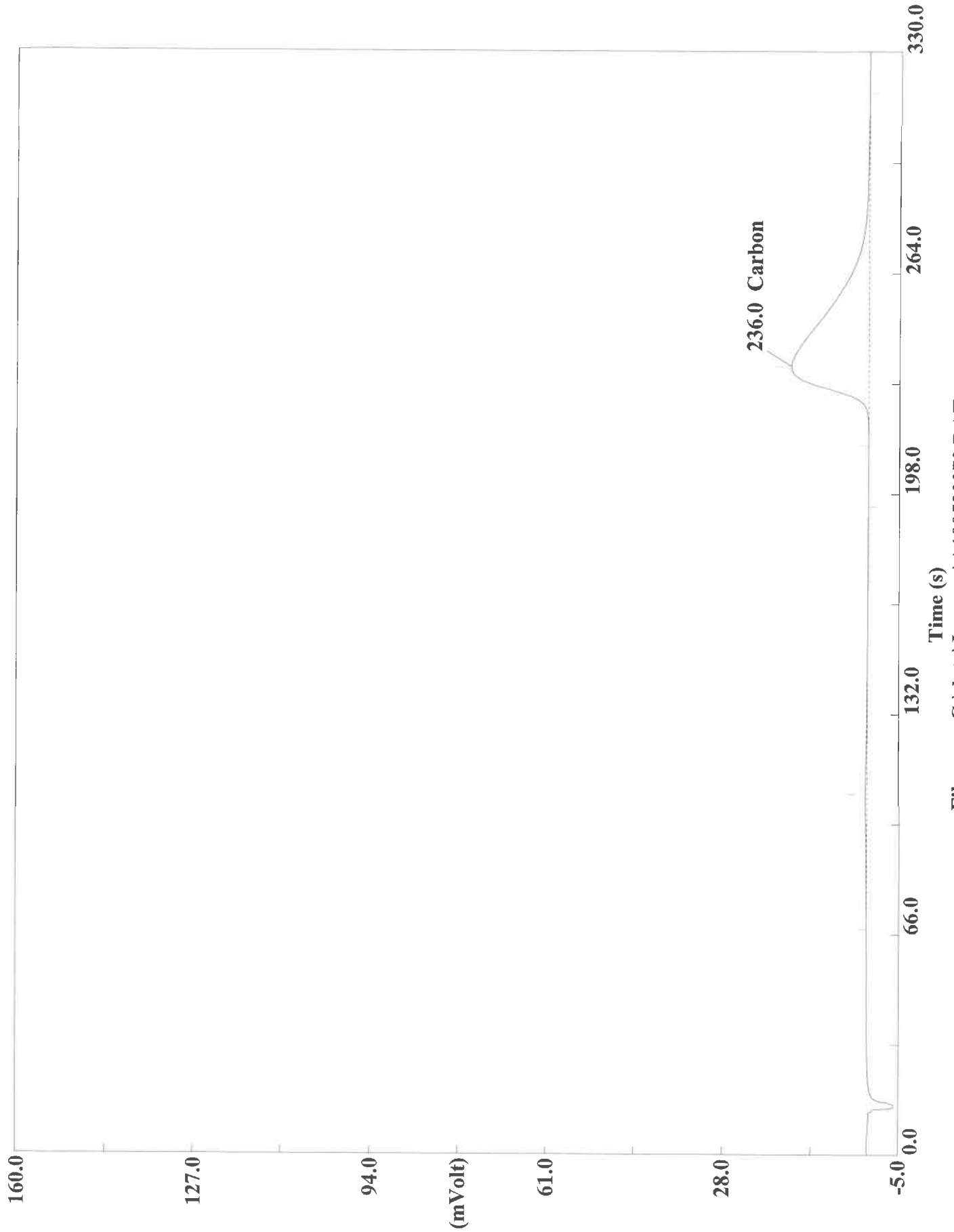
Page: 1 Sample: 180-111515-B-4 (A100520068)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520068
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 20:33 Printed : 10/6/2020 07:09
Sample ID : 180-111515-B-4 (# 80)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 9.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.9417	245	1466248	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520070.DAT

Sample name : 180-111515-B-5 Analyzed : 10/05/2020 20:45

Eager 300 Report

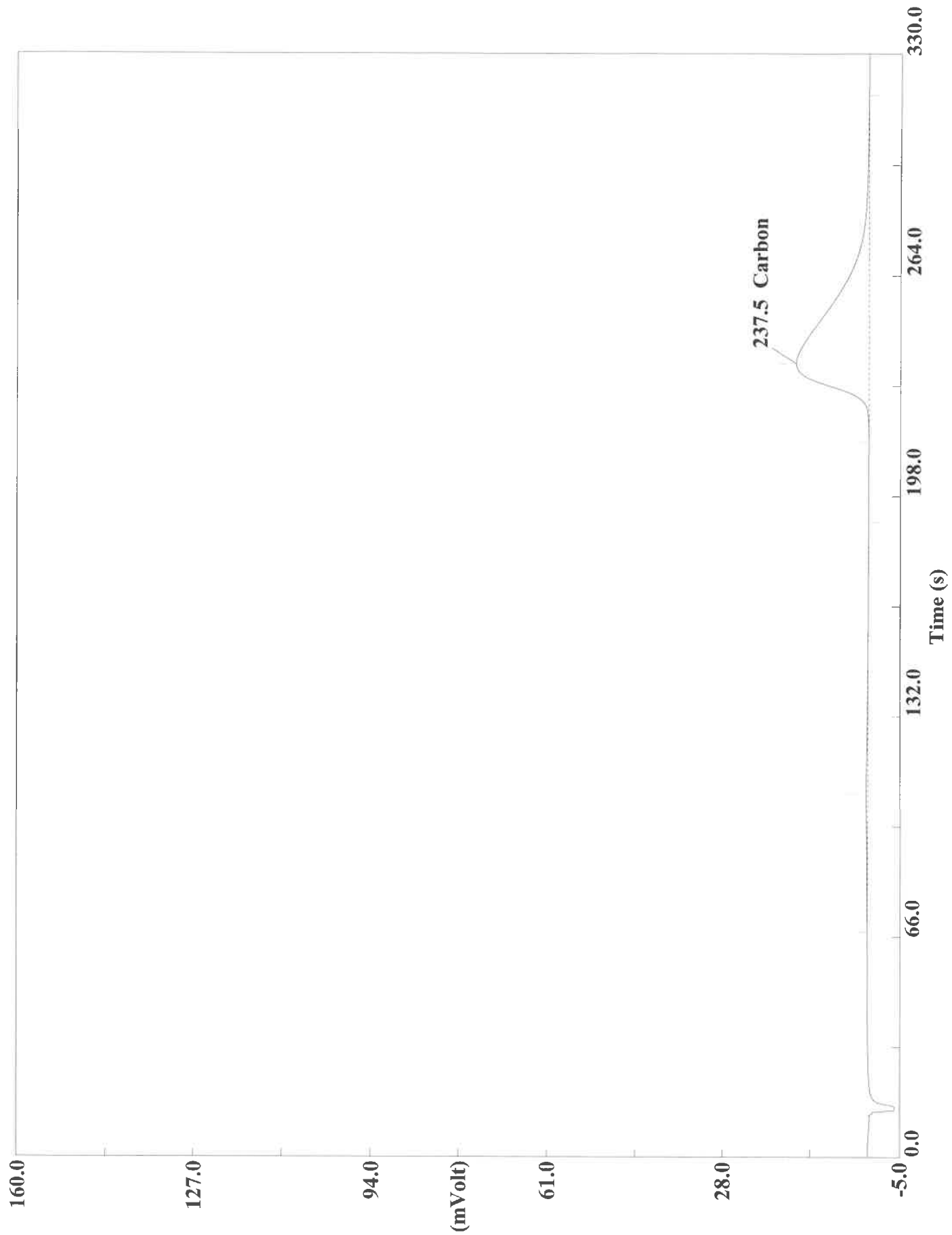
Page: 1 Sample: 180-111515-B-5 (A100520070)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520070
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 20:45 Printed : 10/6/2020 07:09
Sample ID : 180-111515-B-5 (# 82)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.5337	236	3869283	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520071.DAT
Sample name :180-111515-B-5 Analysed :10/05/2020 20:50

Eager 300 Report

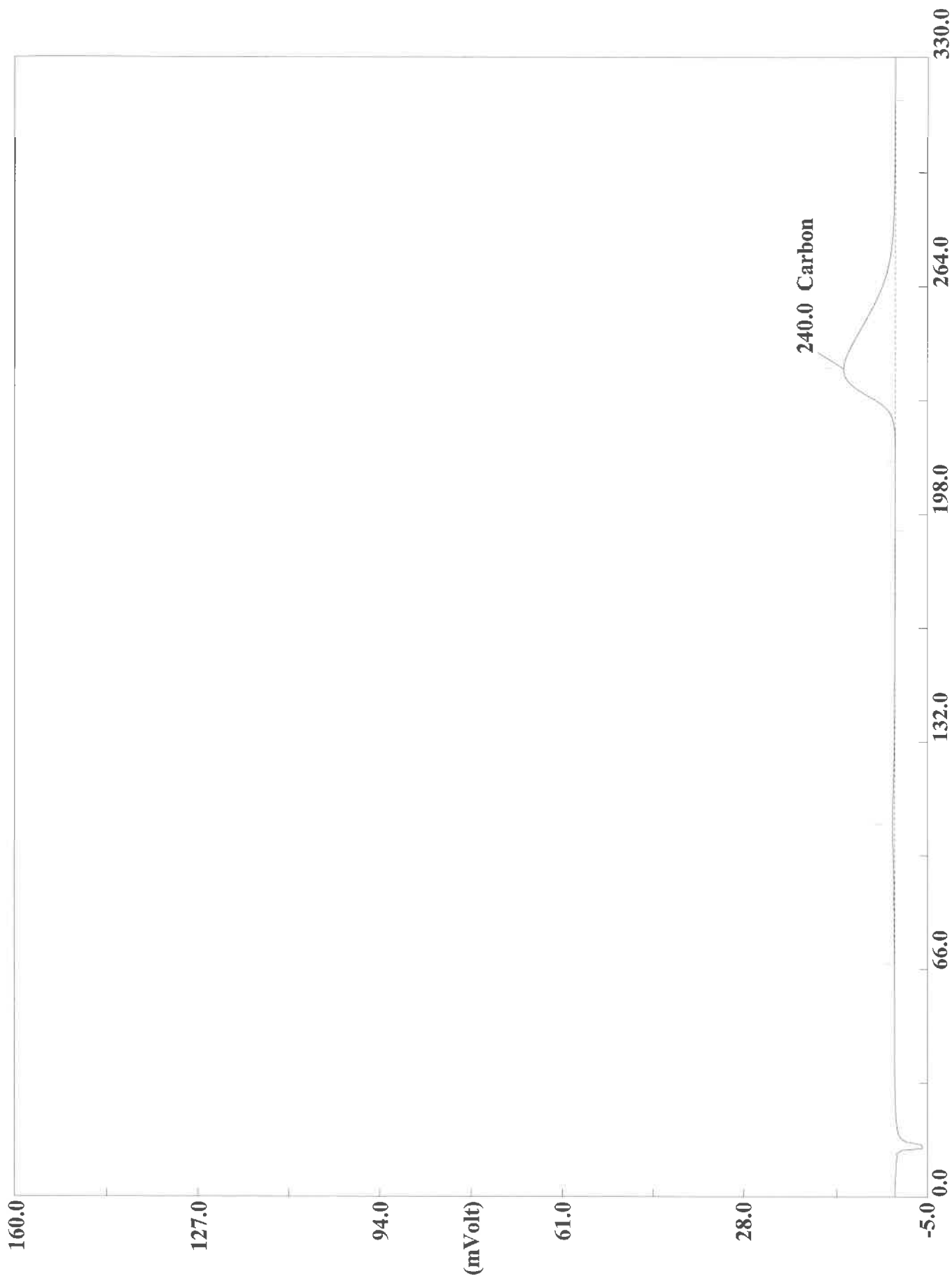
Page: 1 Sample: 180-111515-B-5 (A100520071)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520071
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 20:50 Printed : 10/6/2020 07:09
Sample ID : 180-111515-B-5 (# 83)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2299	238	3619020	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520073.DAT
Sample name :180-111515-B-6 Analysed :10/05/2020 21:01

Eager 300 Report

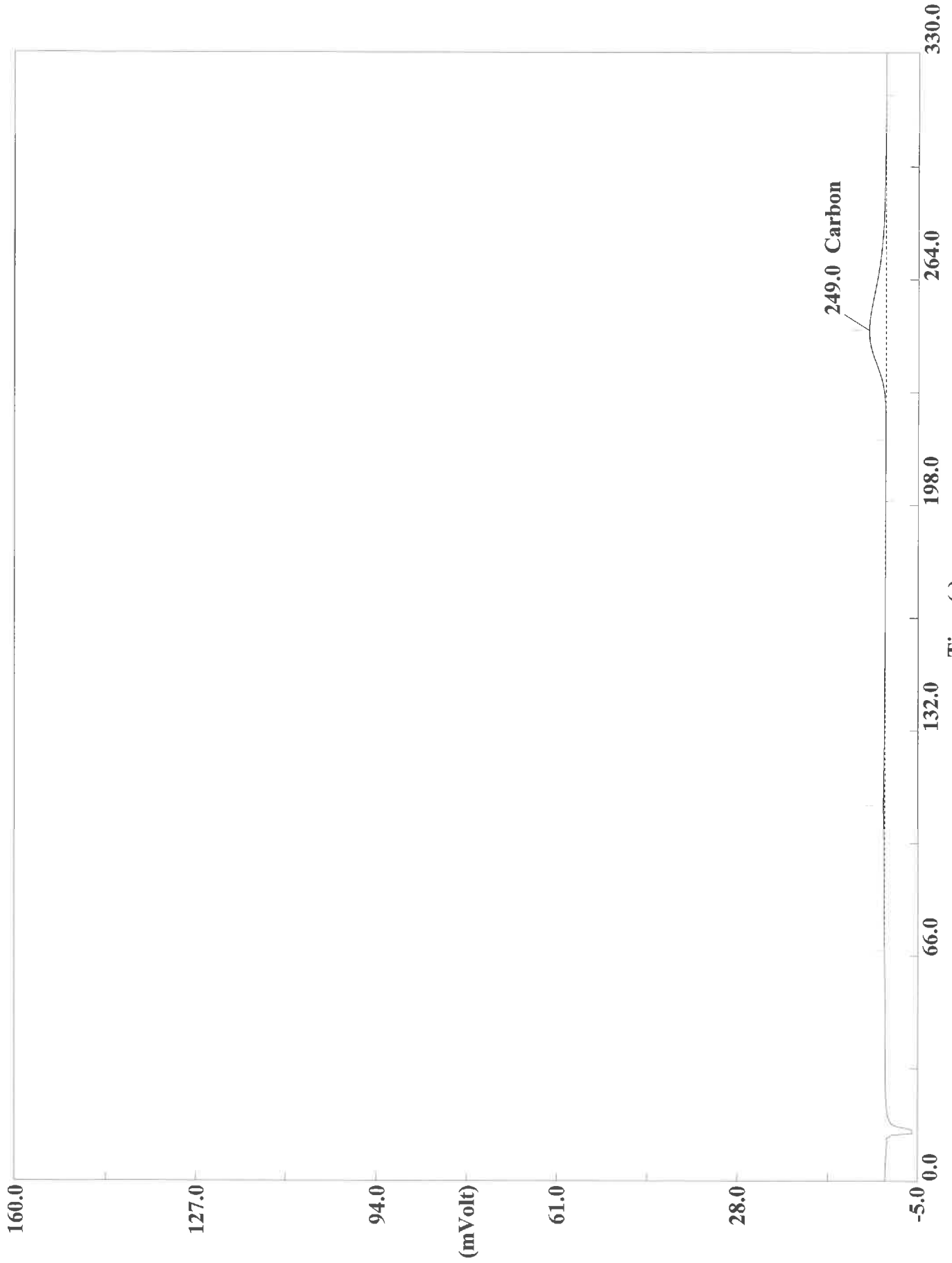
Page: 1 Sample: 180-111515-B-6 (A100520073)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520073
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 21:01 Printed : 10/6/2020 07:09
Sample ID : 180-111515-B-6 (# 85)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 14.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2813	240	2443448	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520074.DAT

Sample name :180-111515-B-6 Analysed :10/05/2020 21:07

Eager 300 Report

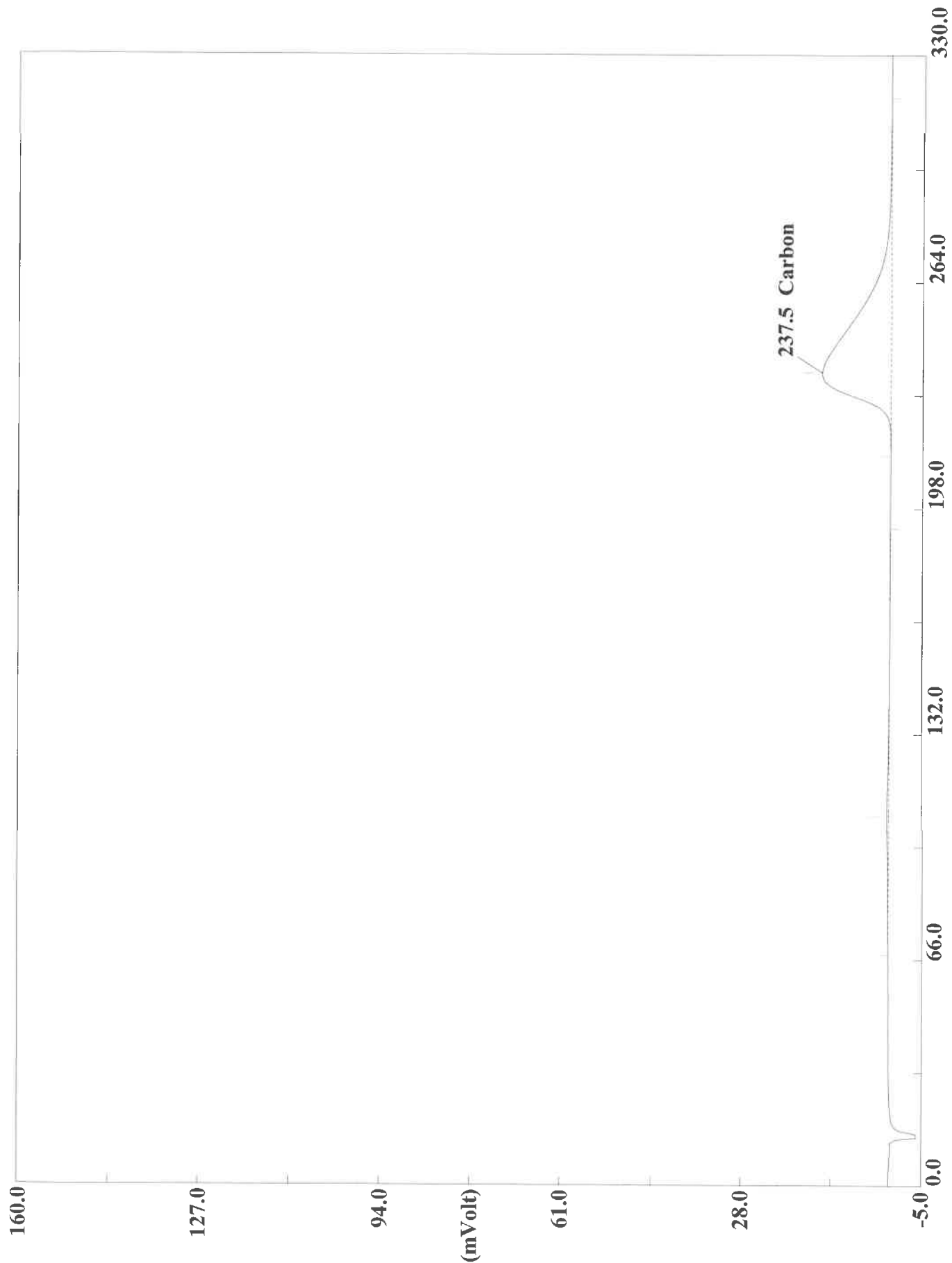
Page: 1 Sample: 180-111515-B-6 (A100520074)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520074
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 21:07 Printed : 10/6/2020 07:10
Sample ID : 180-111515-B-6 (# 86)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 8.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.0105	249	847677	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520076.DAT
Sample name :180-111515-B-7 Analysed :10/05/2020 21:18

Eager 300 Report

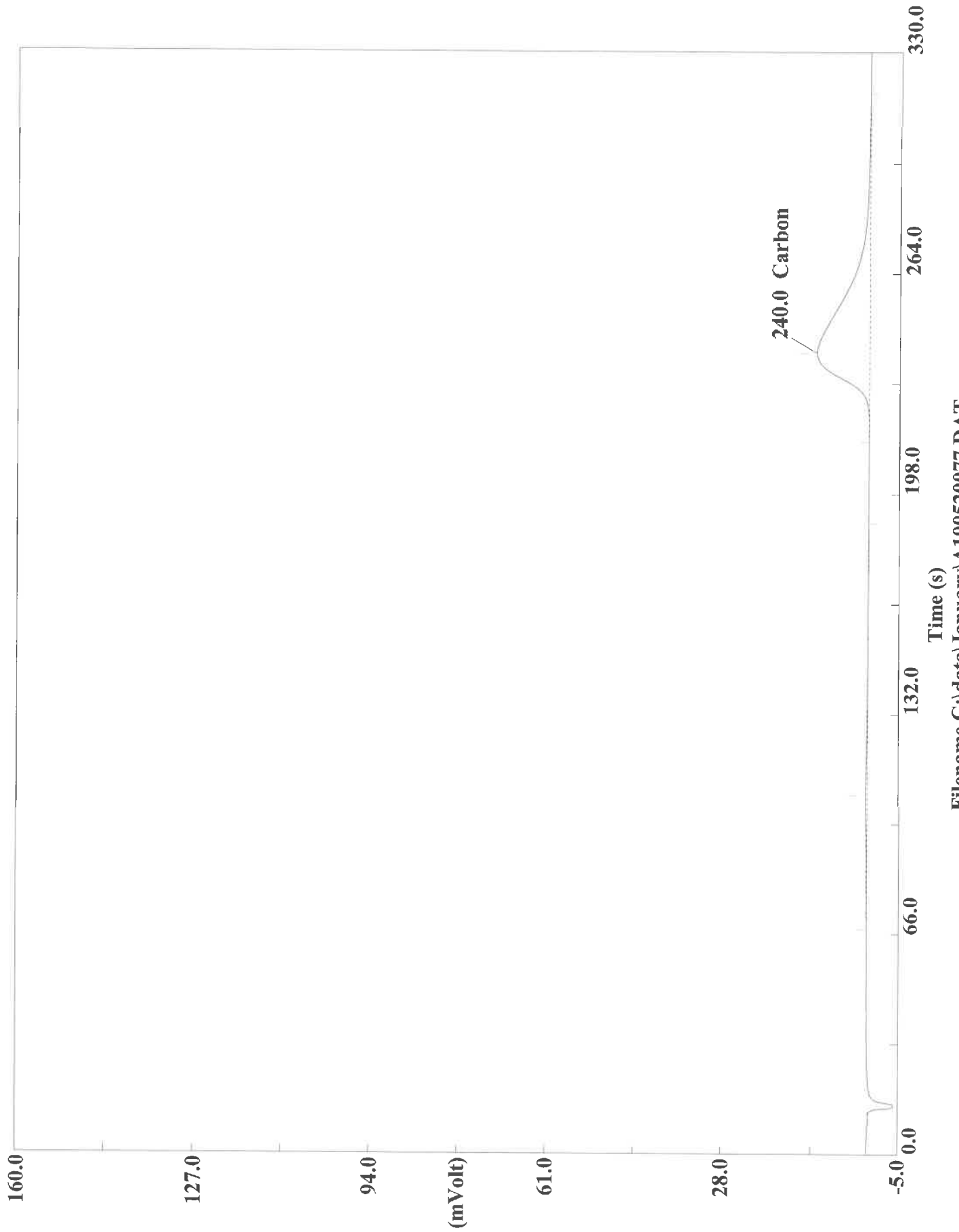
Page: 1 Sample: 180-111515-B-7 (A100520076)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520076
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 21:18 Printed : 10/6/2020 07:10
Sample ID : 180-111515-B-7 (# 88)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2464	238	3230747	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520077.DAT

Sample name :180-111515-B-7 Analysed :10/05/2020 21:24

Eager 300 Report

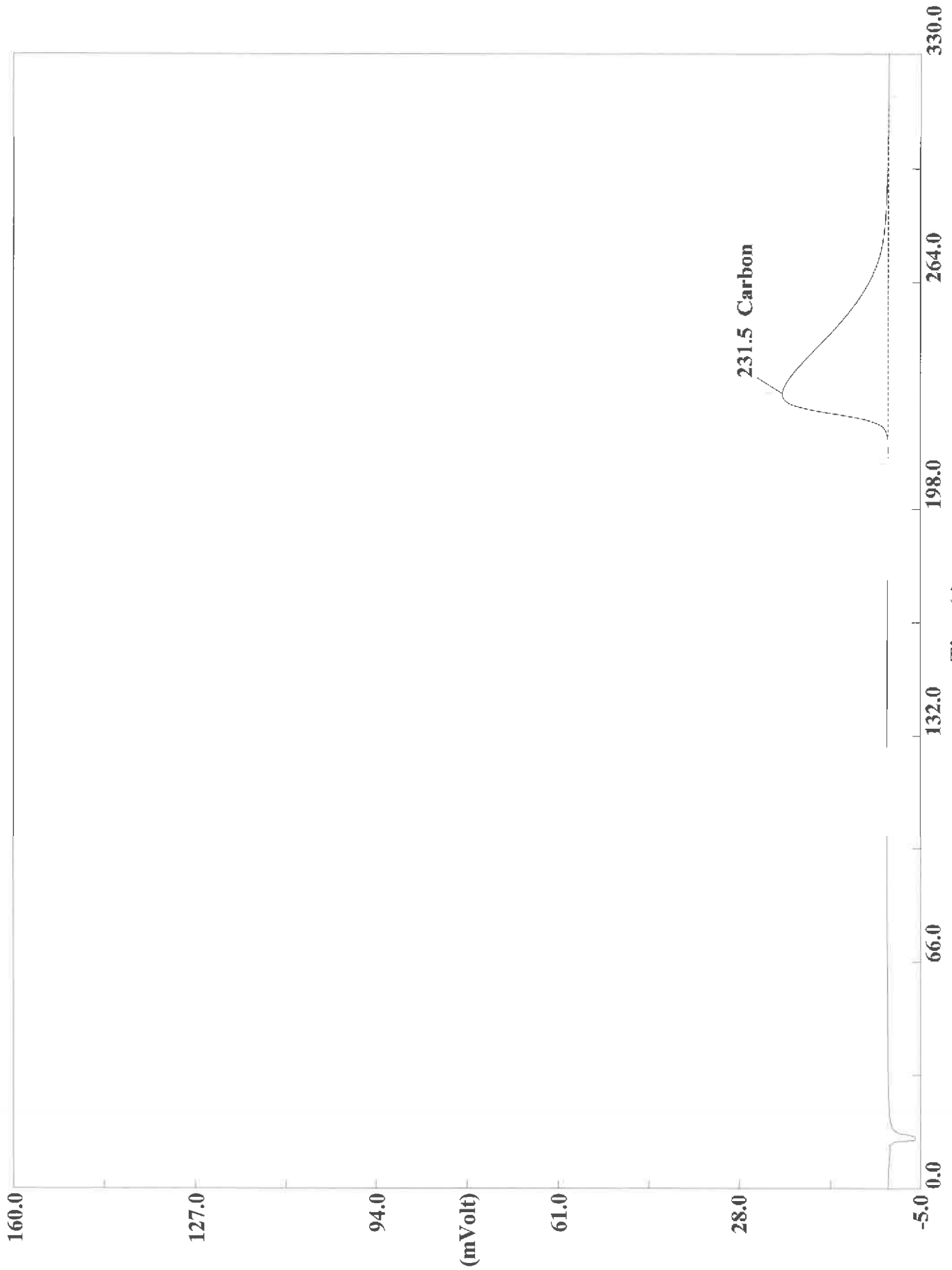
Page: 1 Sample: 180-111515-B-7 (A100520077)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520077
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 21:24 Printed : 10/6/2020 07:10
Sample ID : 180-111515-B-7 (# 89)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 16.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.1465	240	2654223	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520080.DAT
Sample name :CCV Analysed :10/05/2020 21:35

Eager 300 Report

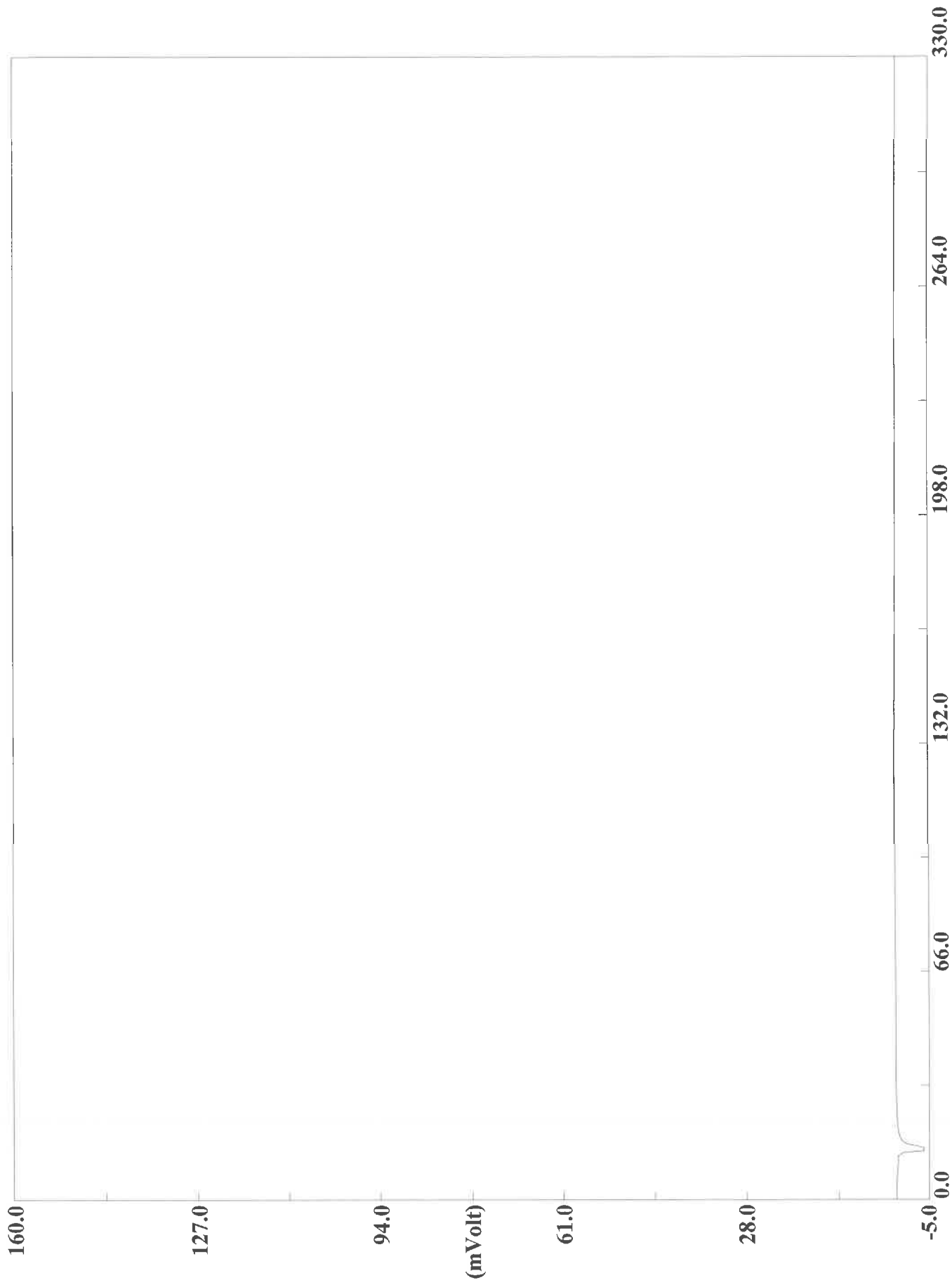
Page: 1 Sample: CCV (A100520080)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520080
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 21:35 Printed : 10/6/2020 07:10
Sample ID : CCV (# 91)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9885	232	5137248	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520081.DAT
Sample name :CCB Analysed :10/05/2020 21:40

Eager 300 Report

Page: 1 Sample: CCB (A100520081)

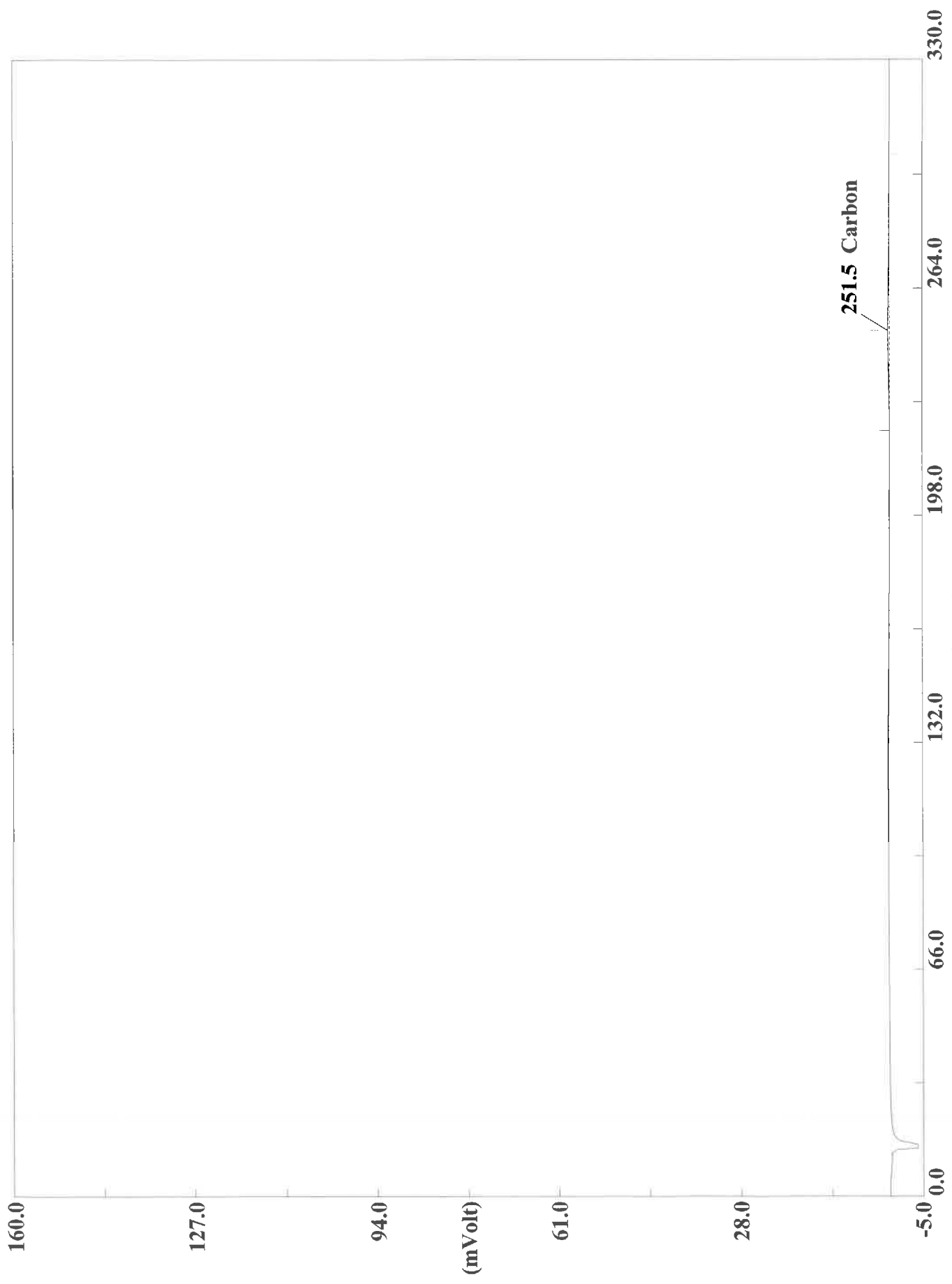
Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520081
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 21:40 Printed : 10/6/2020 07:10
Sample ID : CCB (# 92)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520082.DAT
Sample name :MB Analysed :10/05/2020 21:46

Eager 300 Report

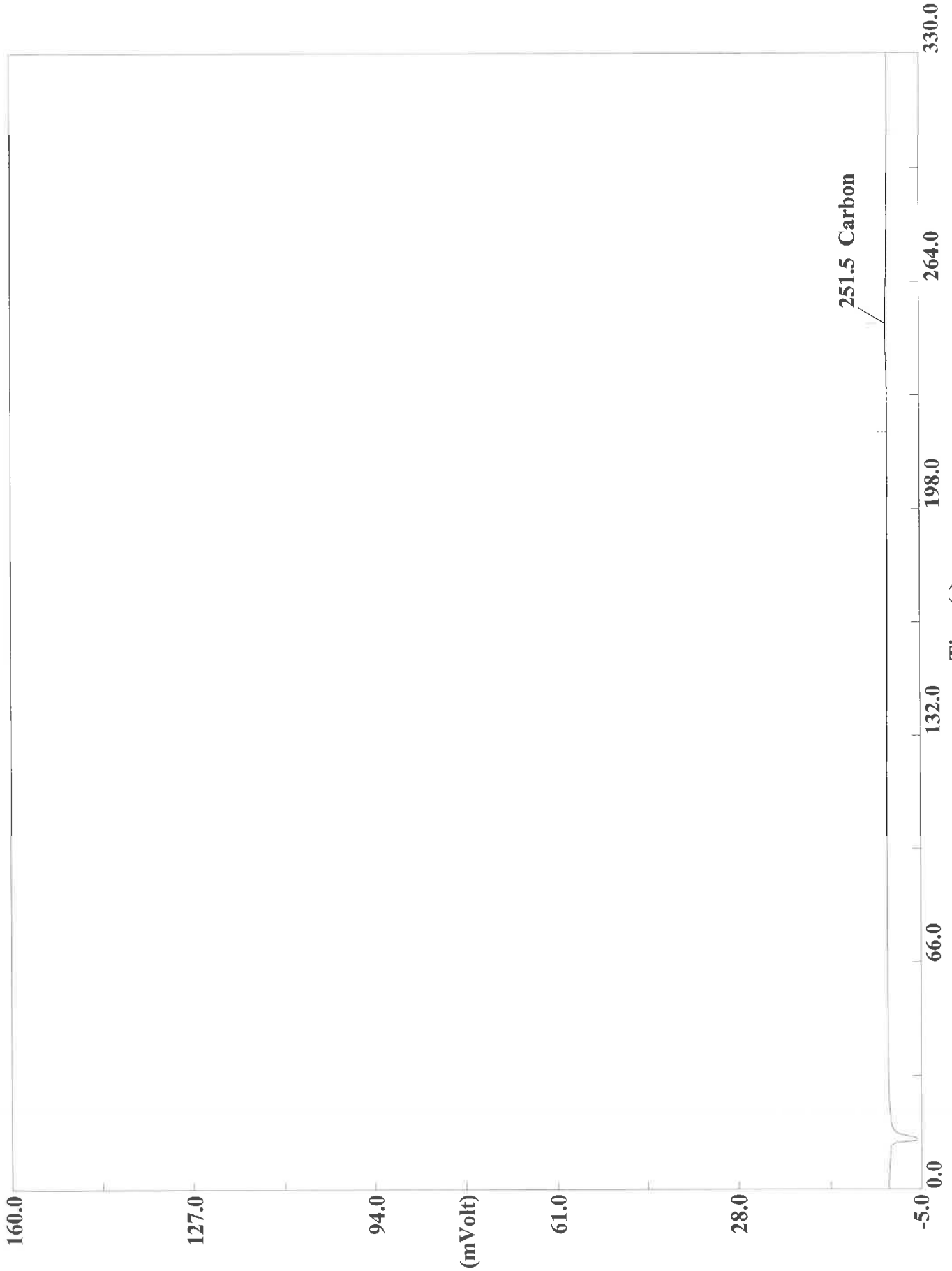
Page: 1 Sample: MB (A100520082)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520082
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 21:46 Printed : 10/6/2020 07:10
Sample ID : MB (# 93)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.0857	252	73111	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520083.DAT
Sample name :MB Analysed :10/05/2020 21:52

Eager 300 Report

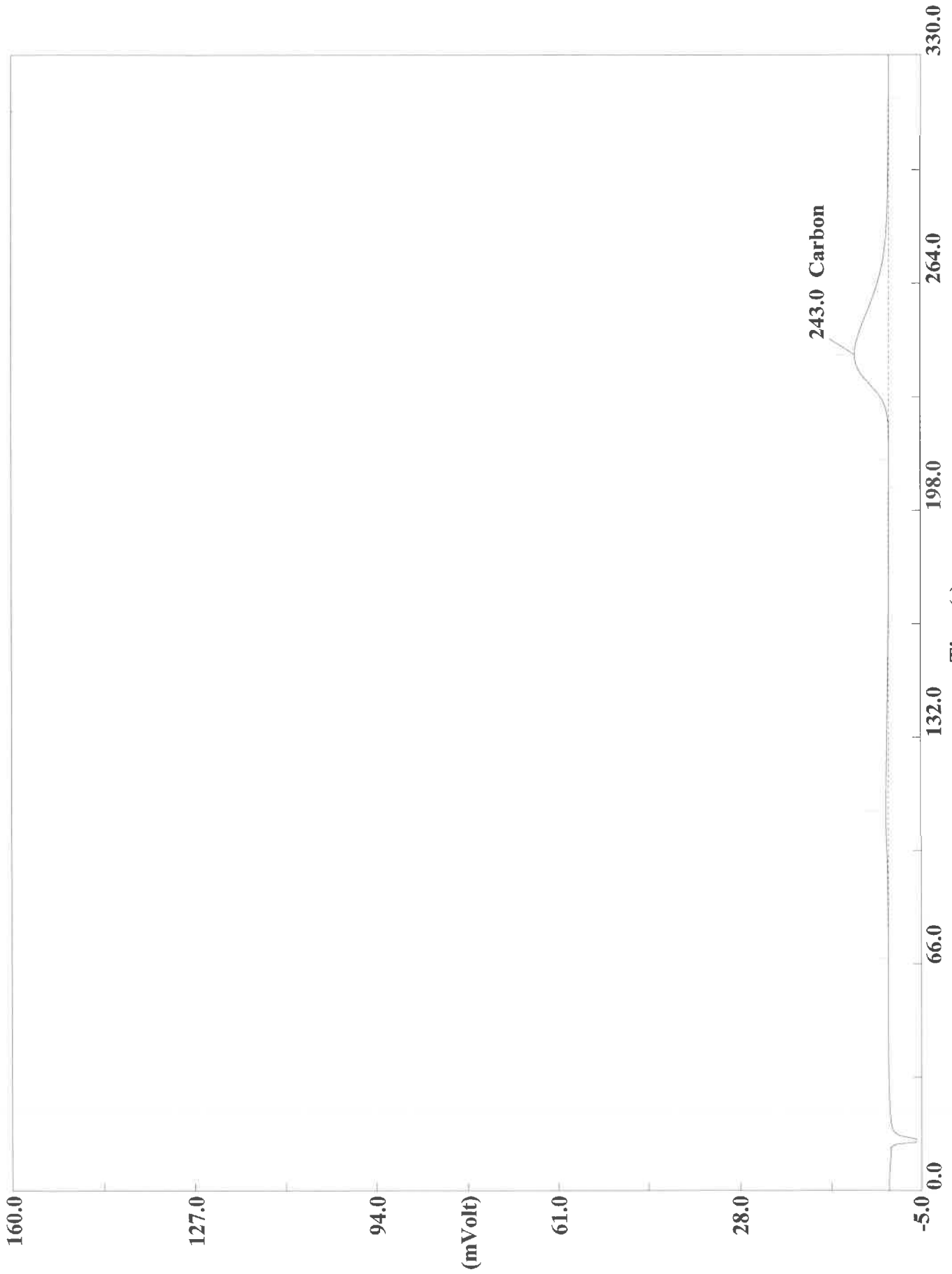
Page: 1 Sample: MB (A100520083)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520083
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 21:52 Printed : 10/6/2020 07:10
Sample ID : MB (# 94)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.0950	252	92477	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520084.DAT
Sample name :LCS Analysed :10/05/2020 21:57

Eager 300 Report

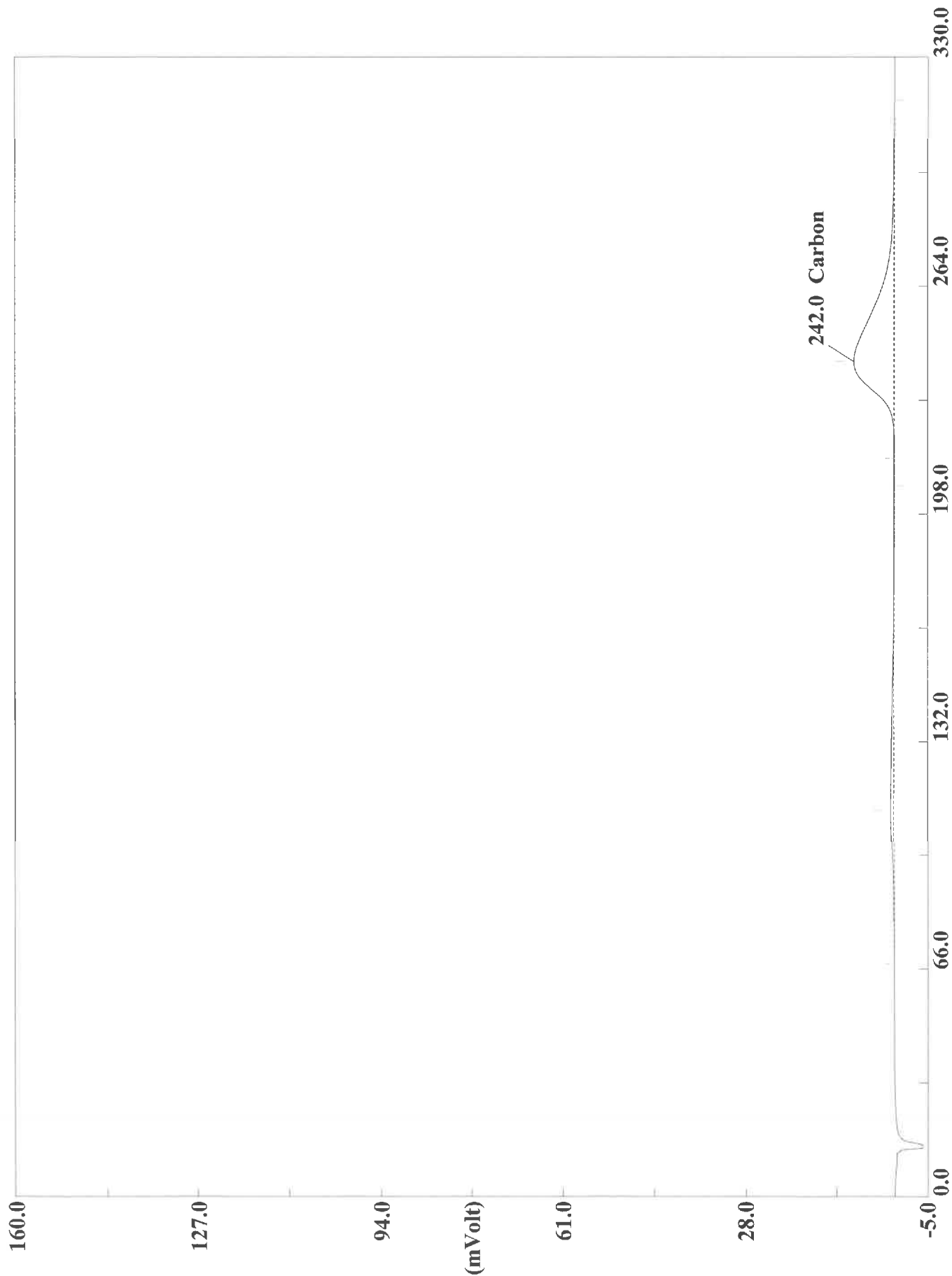
Page: 1 Sample: LCS (A100520084)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520084
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 21:57 Printed : 10/6/2020 07:10
Sample ID : LCS (# 95)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 10

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.2585	243	1677713	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520085.DAT
Sample name :LCS Analysed :10/05/2020 22:03

Eager 300 Report

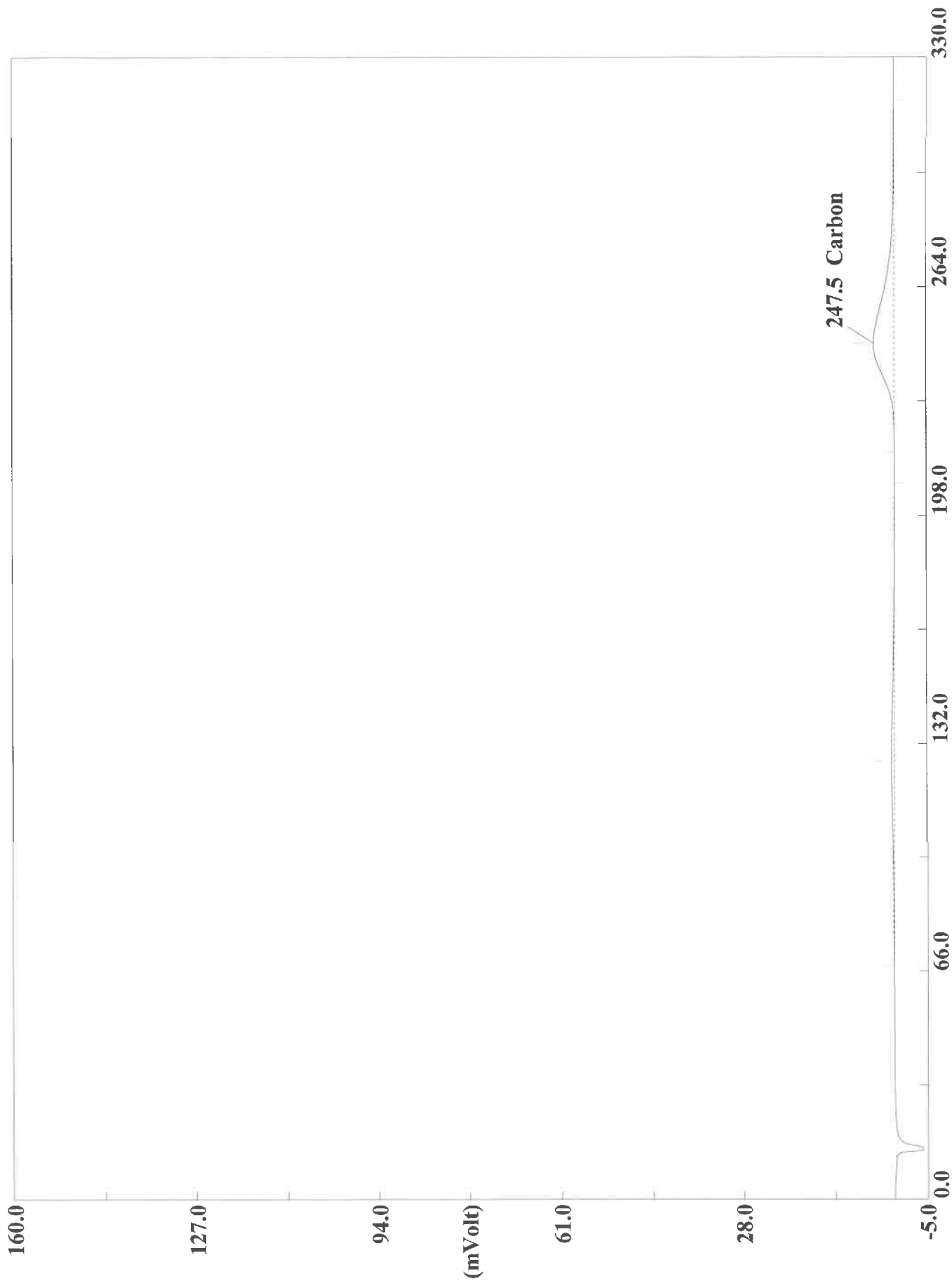
Page: 1 Sample: LCS (A100520085)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520085
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 22:03 Printed : 10/6/2020 07:10
Sample ID : LCS (# 96)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 10

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.7142	242	1915630	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520086.DAT
Sample name :180-111359-F-3 Analysed :10/05/2020 22:08

Eager 300 Report

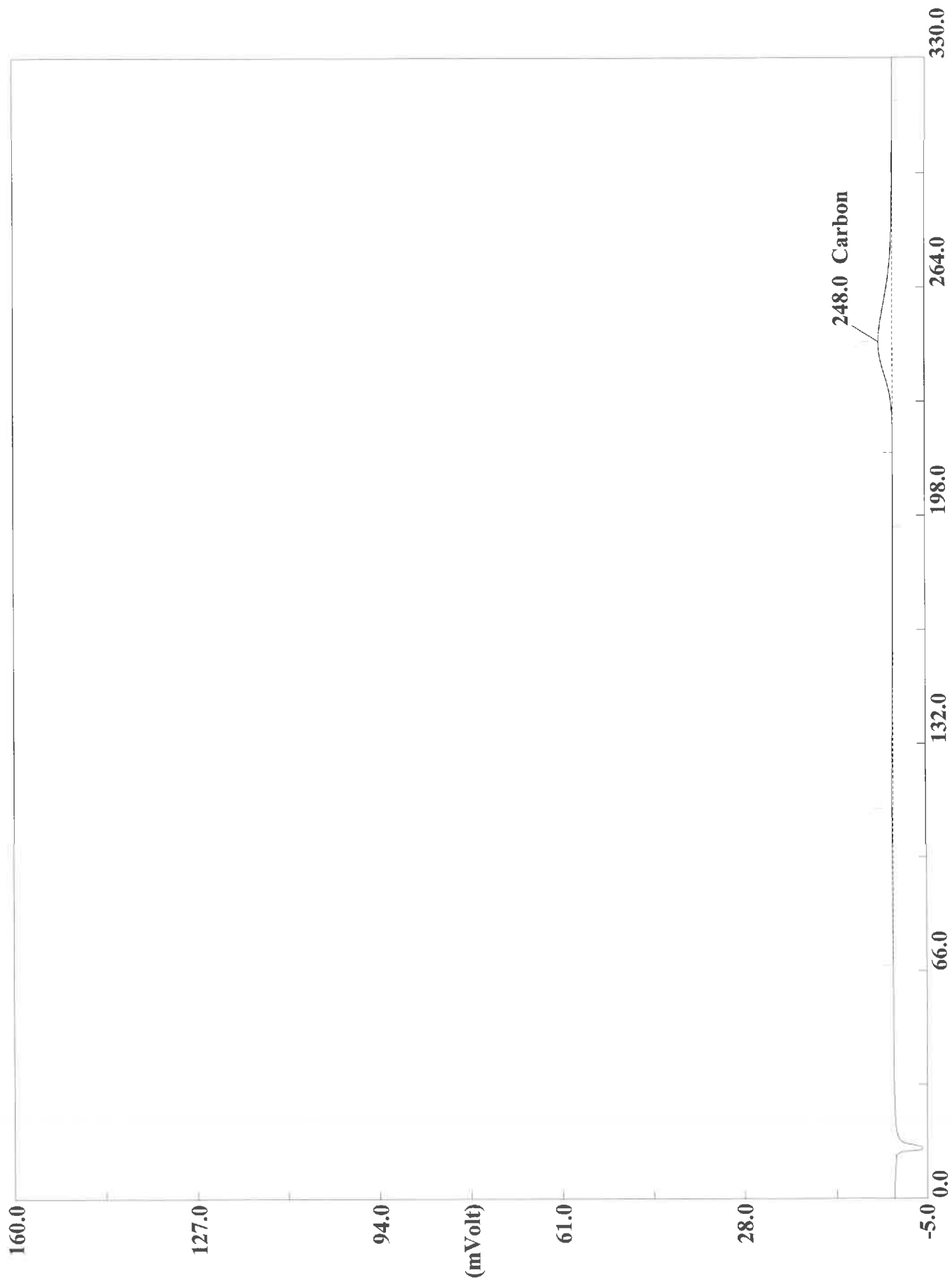
Page: 1 Sample: 180-111359-F-3 (A100520086)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520086
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 22:08 Printed : 10/6/2020 07:10
Sample ID : 180-111359-F-3 (# 97)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0273	248	1011566	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520087.DAT

Sample name : 180-111359-F-3 Analysed : 10/05/2020 22:14

Eager 300 Report

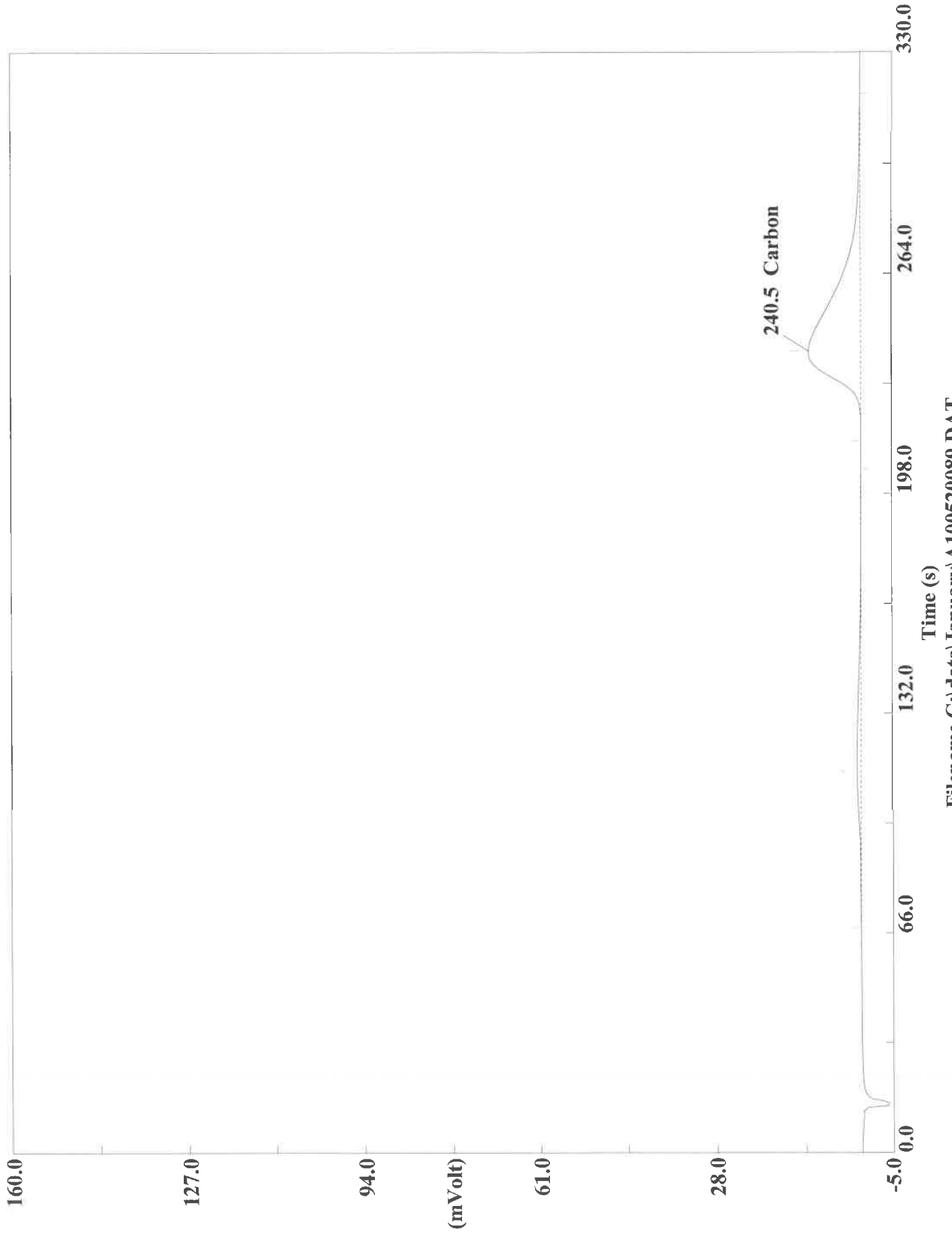
Page: 1 Sample: 180-111359-F-3 (A100520087)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520087
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 22:14 Printed : 10/6/2020 07:10
Sample ID : 180-111359-F-3 (# 98)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 15.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.8747	248	679735	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520089.DAT

Sample name :180-111359-D-3 MS Analysed :10/05/2020 22:25

Eager 300 Report

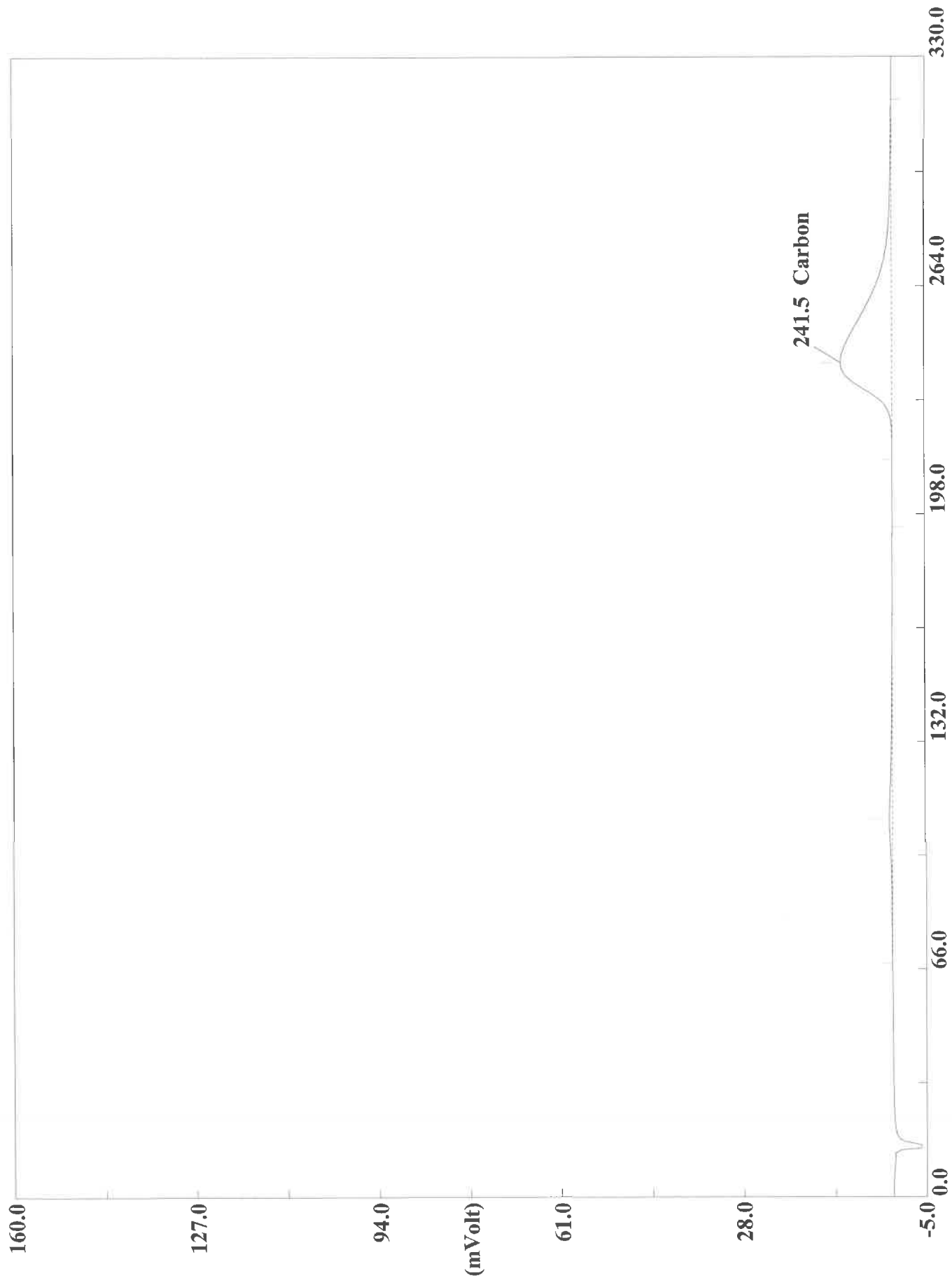
Page: 1 Sample: 180-111359-D-3 MS (A100520089)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520089
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 22:25 Printed : 10/6/2020 07:10
Sample ID : 180-111359-D-3 MS (# 100)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.6489	241	2797748	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520090.DAT

Sample name :180-111359-D-3 MS Analysed :10/05/2020 22:31

Eager 300 Report

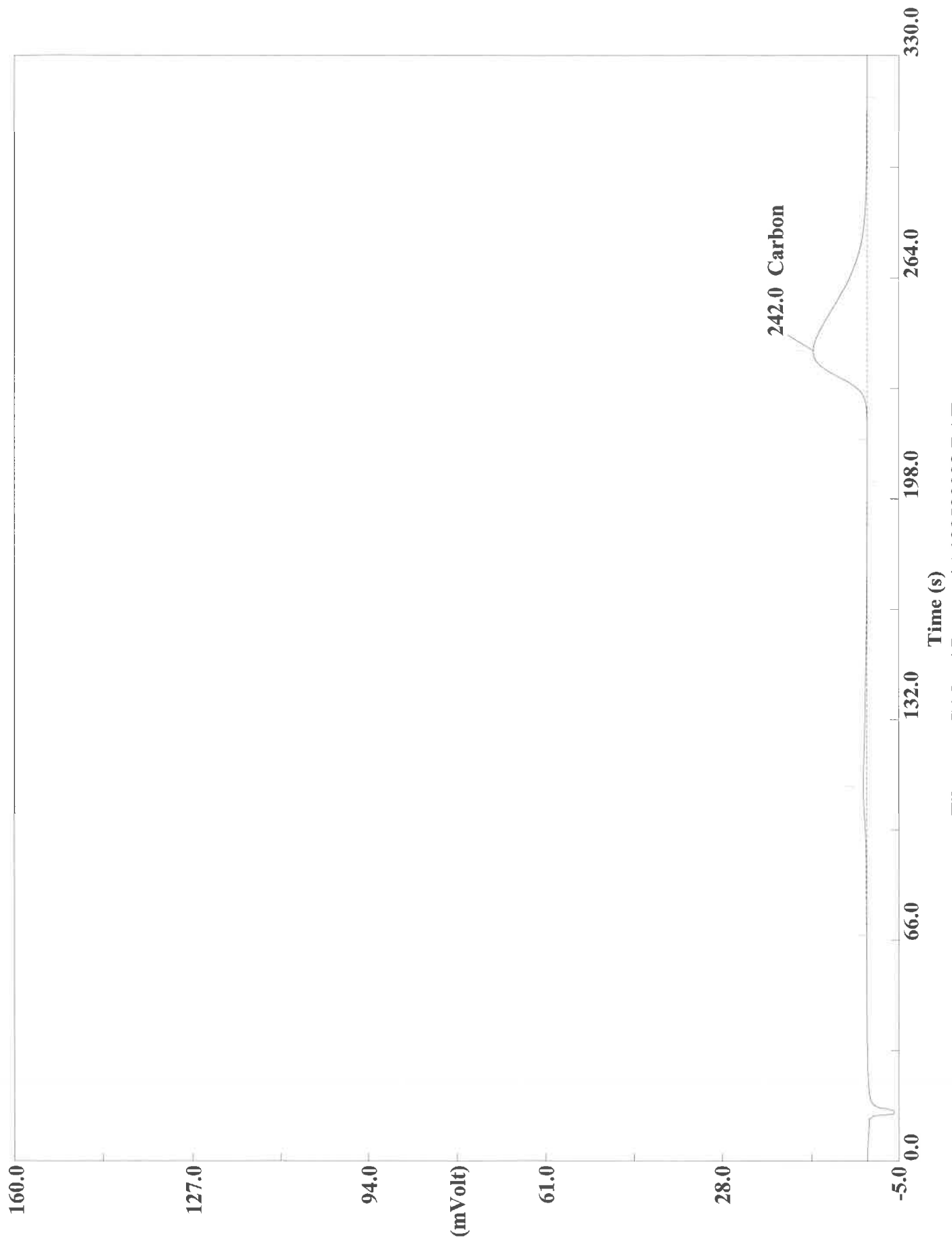
Page: 1 Sample: 180-111359-D-3 MS (A100520090)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520090
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 22:31 Printed : 10/6/2020 07:11
Sample ID : 180-111359-D-3 MS (# 101)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.7168	242	2487086	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520092.DAT
Sample name : 180-111359-D-3 MSD Analysed : 10/05/2020 22:42

Eager 300 Report

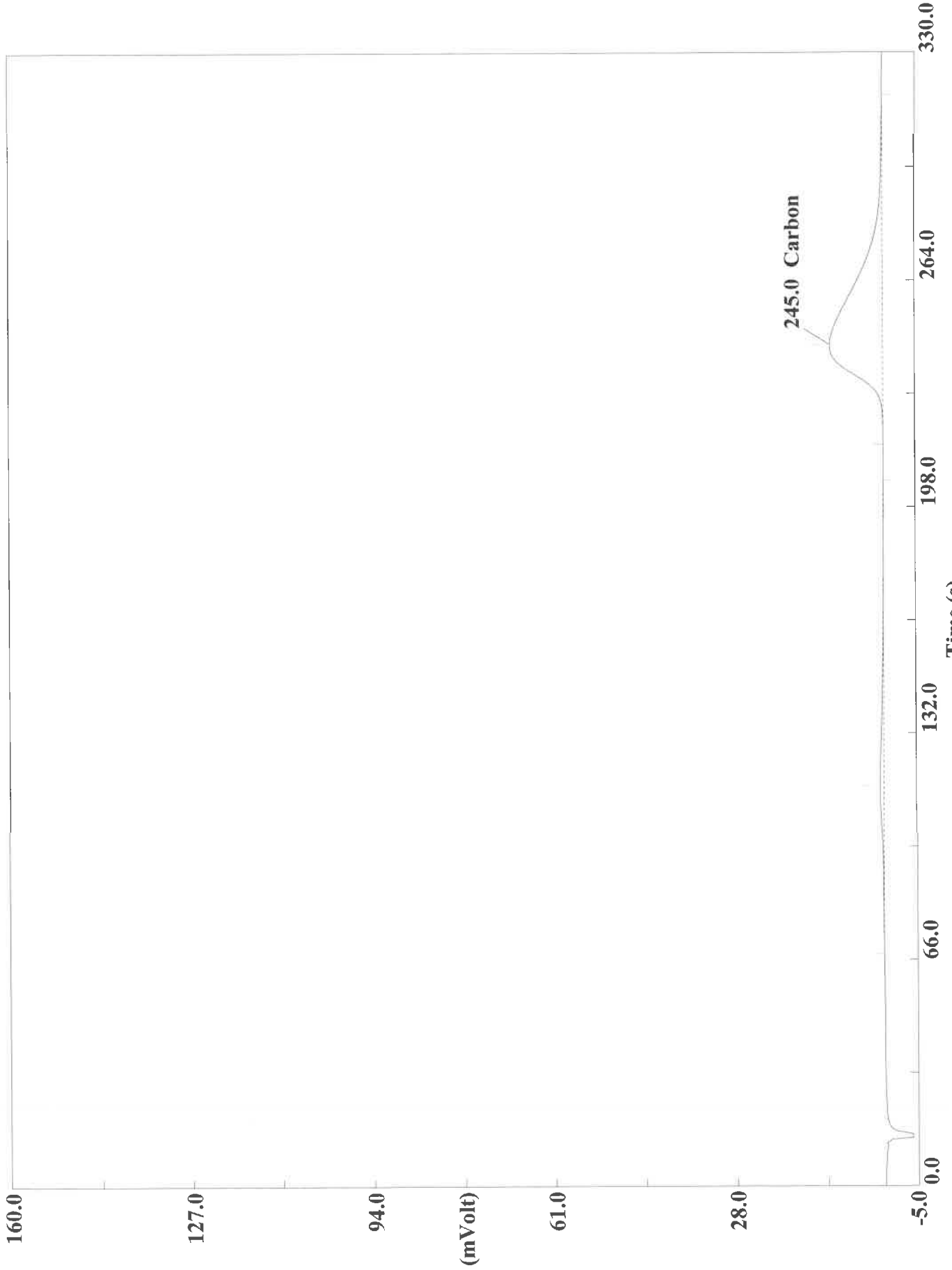
Page: 1 Sample: 180-111359-D-3 MSD (A100520092)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520092
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 22:42 Printed : 10/6/2020 07:11
Sample ID : 180-111359-D-3 MSD (# 103)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.4023	242	2698196	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520093.DAT

Sample name : 180-111359-D-3 MSD Analysed : 10/05/2020 22:47

Eager 300 Report

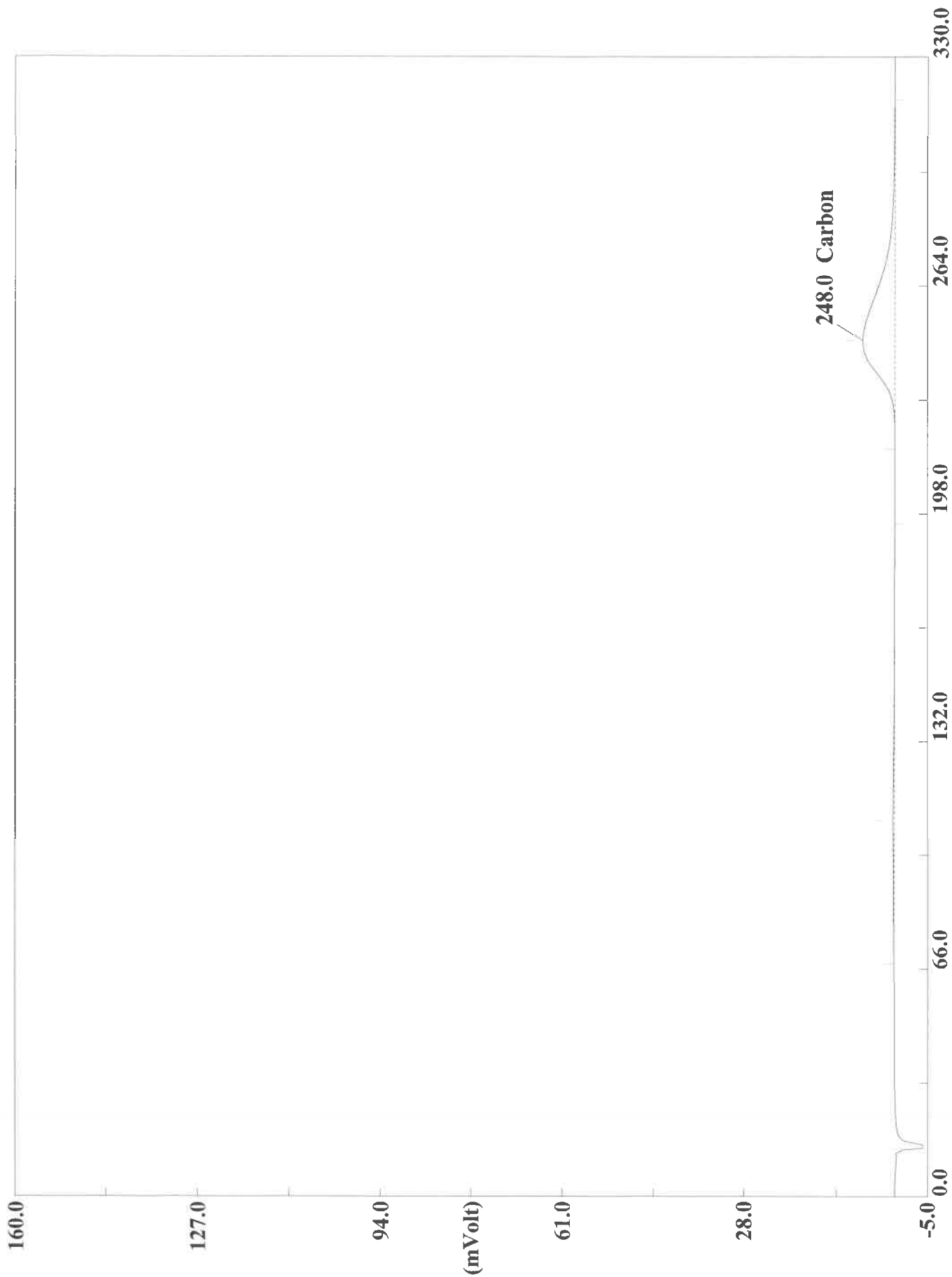
Page: 1 Sample: 180-111359-D-3 MSD (A100520093)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520093
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 22:47 Printed : 10/6/2020 07:11
Sample ID : 180-111359-D-3 MSD (# 104)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	2.9754	245	2803800	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520095.DAT

Sample name :180-111518-B-1 Analysed :10/05/2020 22:59

Eager 300 Report

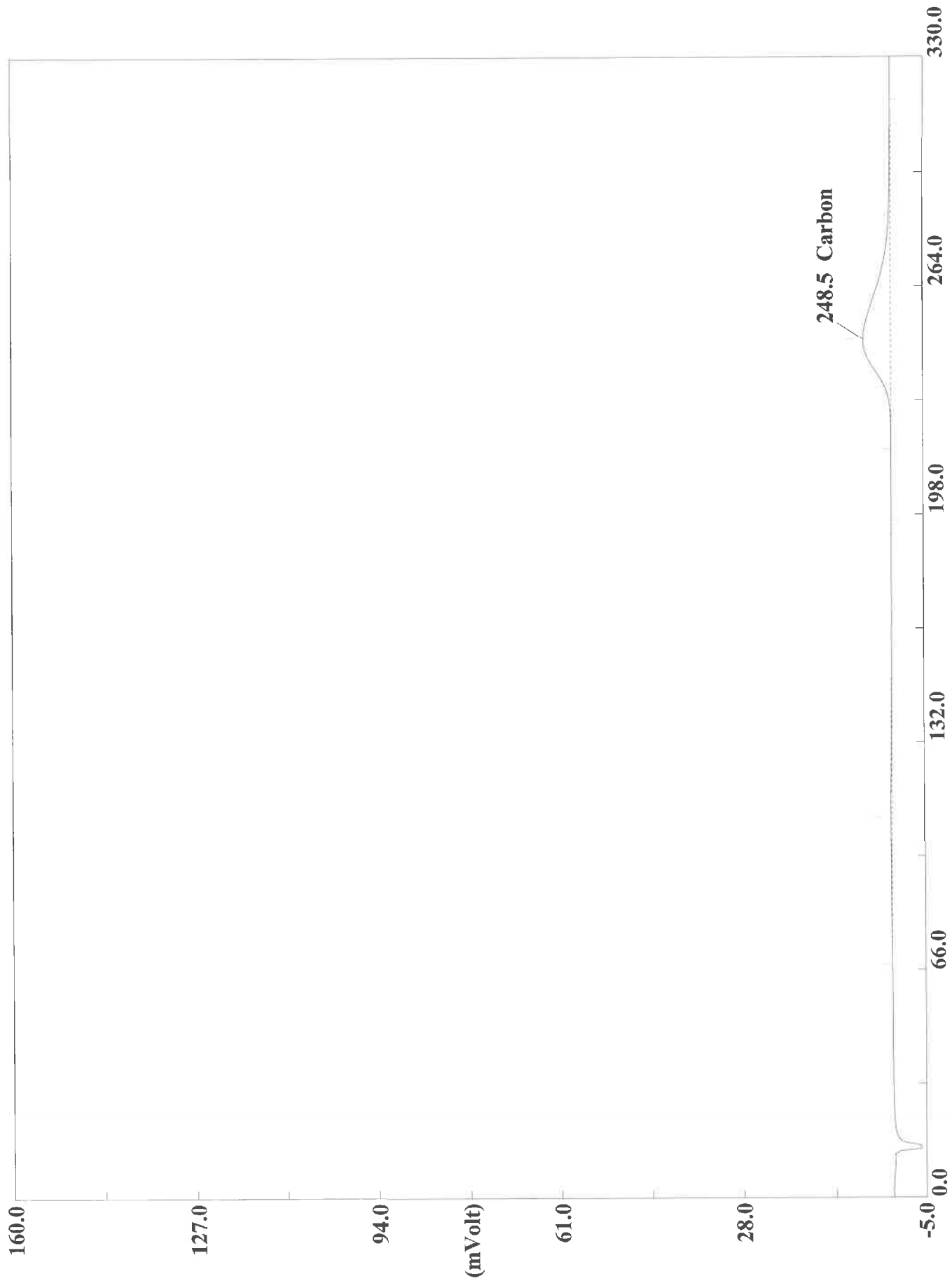
Page: 1 Sample: 180-111518-B-1 (A100520095)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520095
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 22:59 Printed : 10/6/2020 07:11
Sample ID : 180-111518-B-1 (# 106)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22.5

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.4345	248	1661552	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520096.DAT

Sample name :180-111518-B-1 Analysed :10/05/2020 23:04

Eager 300 Report

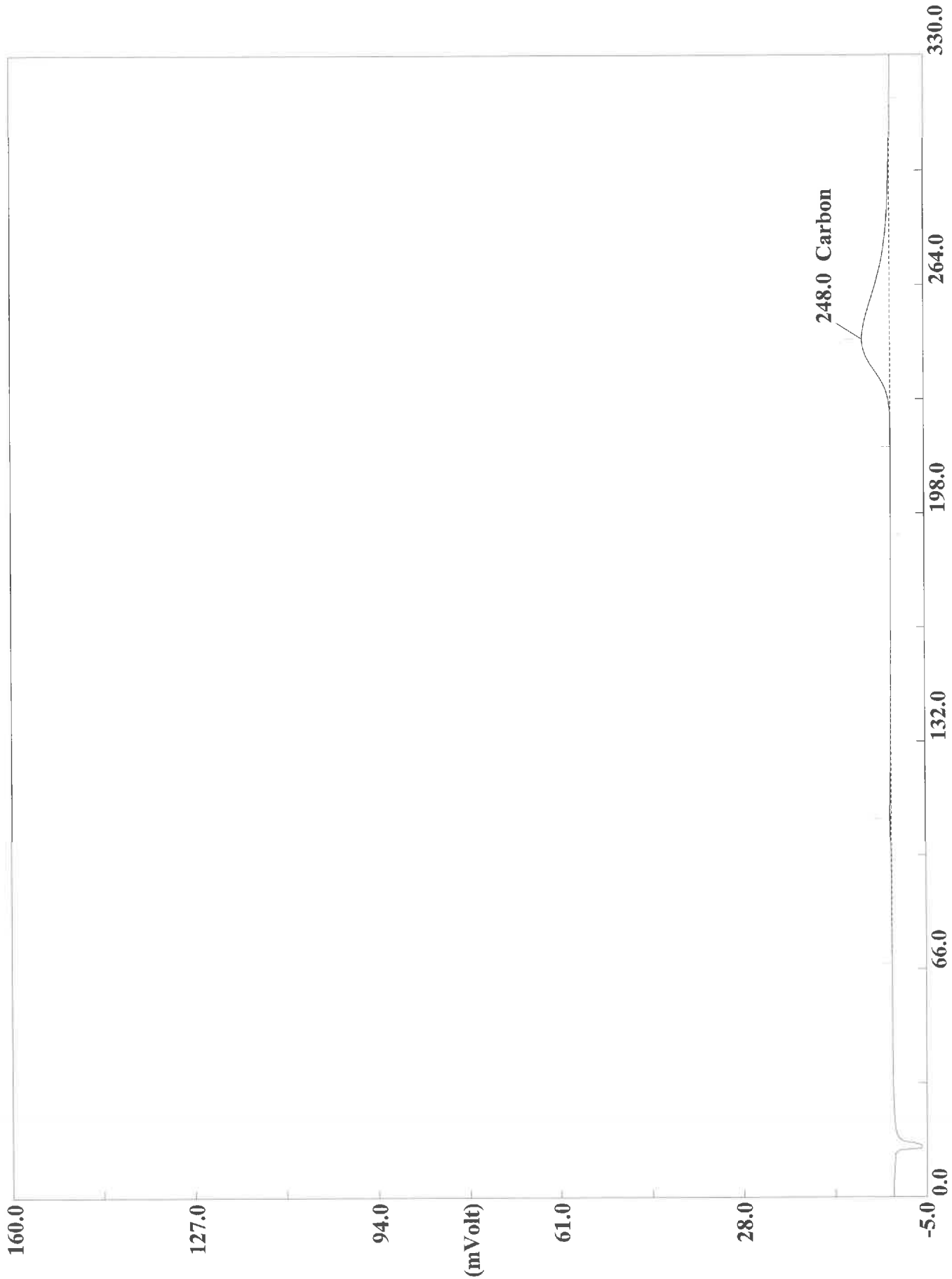
Page: 1 Sample: 180-111518-B-1 (A100520096)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520096
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 23:04 Printed : 10/6/2020 07:11
Sample ID : 180-111518-B-1 (# 107)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.9

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.2185	249	1369636	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520098.DAT

Sample name : 180-111518-B-2 Analysed : 10/05/2020 23:15

Eager 300 Report

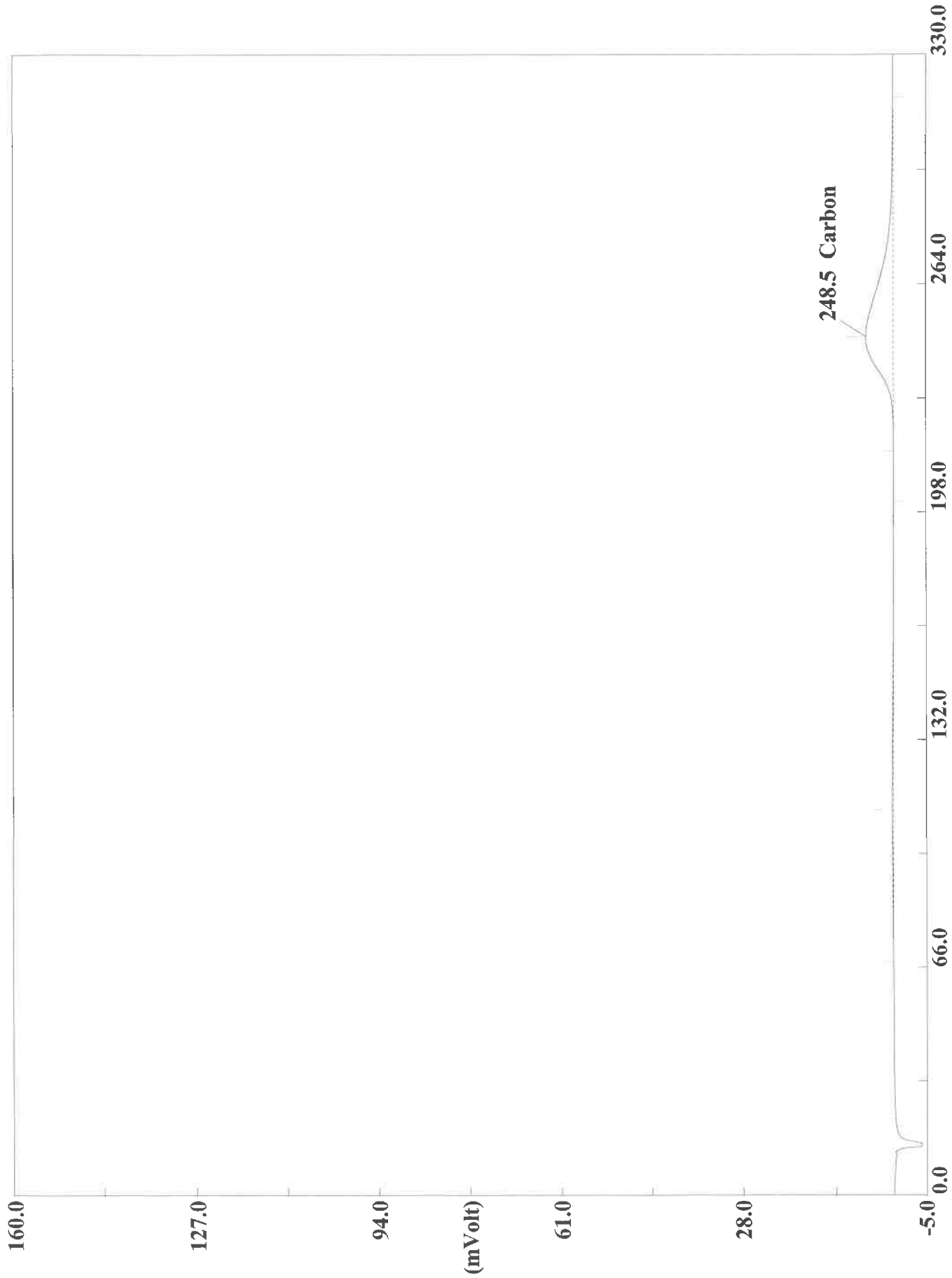
Page: 1 Sample: 180-111518-B-2 (A100520098)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520098
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 23:15 Printed : 10/6/2020 07:11
Sample ID : 180-111518-B-2 (# 109)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.5193	248	1459740	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520099.DAT
Sample name :180-111518-B-2 Analysed :10/05/2020 23:21

Eager 300 Report

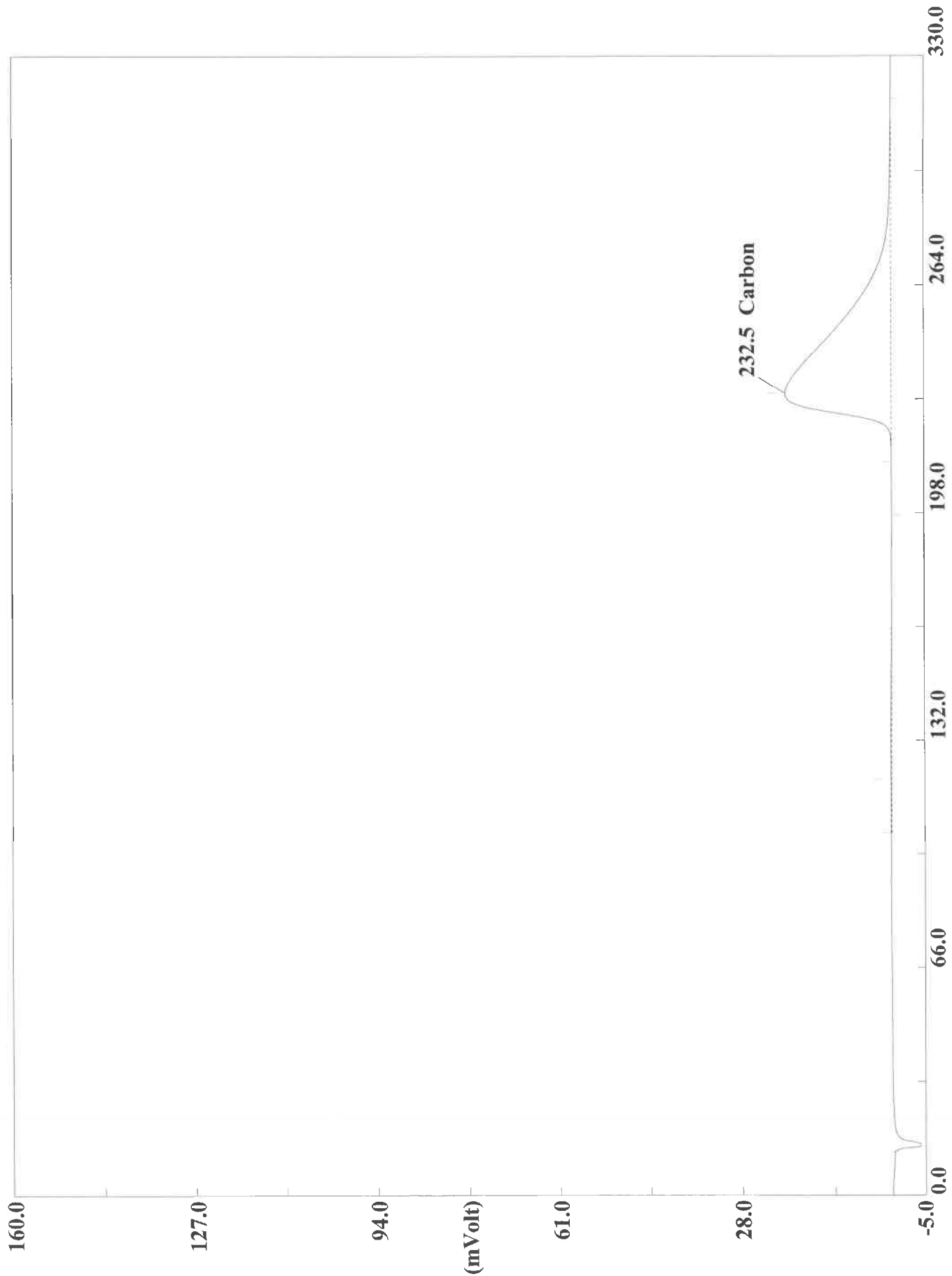
Page: 1 Sample: 180-111518-B-2 (A100520099)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520099
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 23:21 Printed : 10/6/2020 07:11
Sample ID : 180-111518-B-2 (# 110)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.4144	249	1438602	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520101.DAT
Sample name :CCV Analysed :10/05/2020 23:32

Eager 300 Report

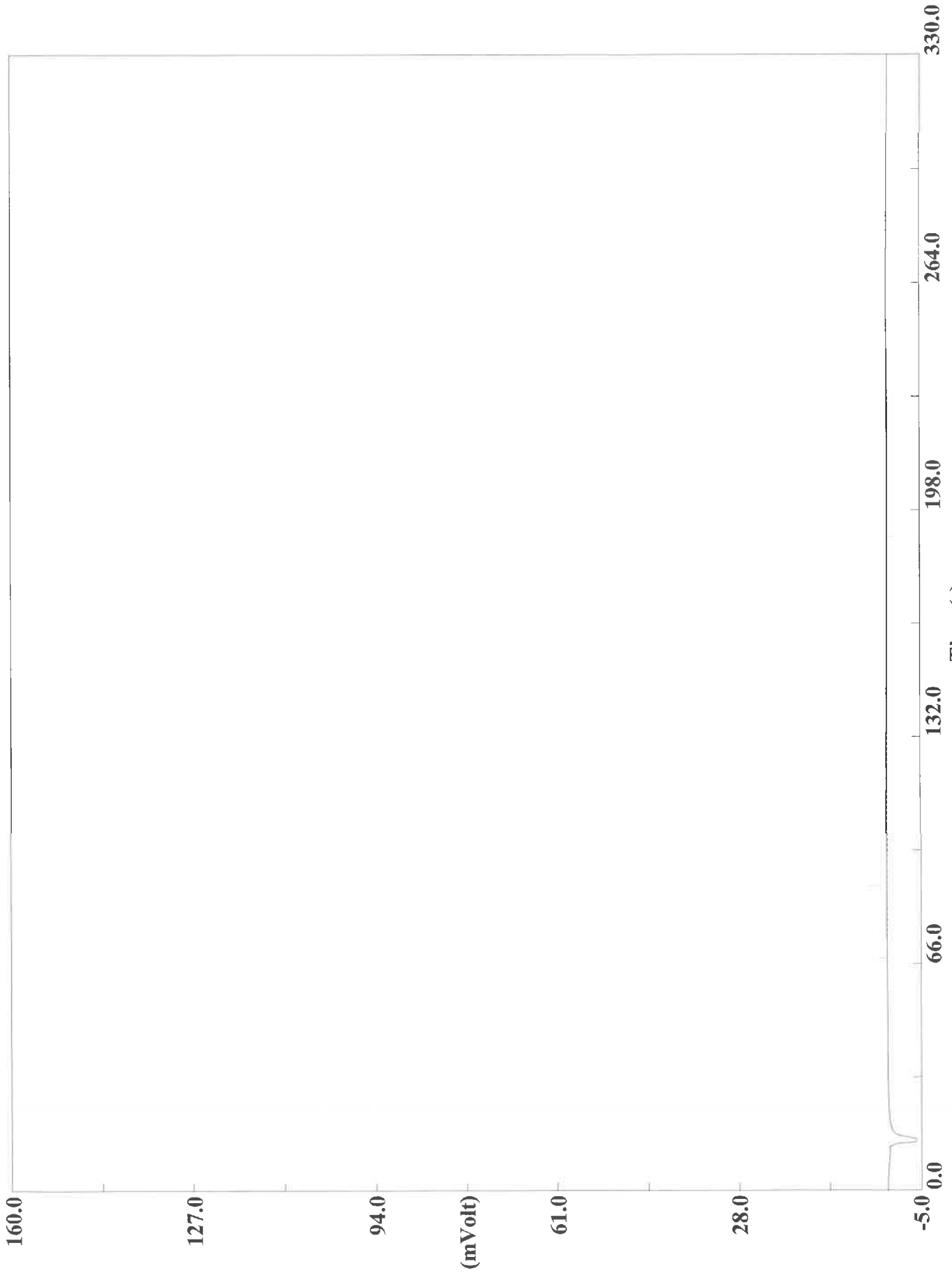
Page: 1 Sample: CCV (A100520101)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520101
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 23:32 Printed : 10/6/2020 07:11
Sample ID : CCV (# 112)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0097	233	5248316	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520102.DAT
Sample name :CCB Analysed :10/05/2020 23:38

Eager 300 Report

Page: 1 Sample: CCB (A100520102)

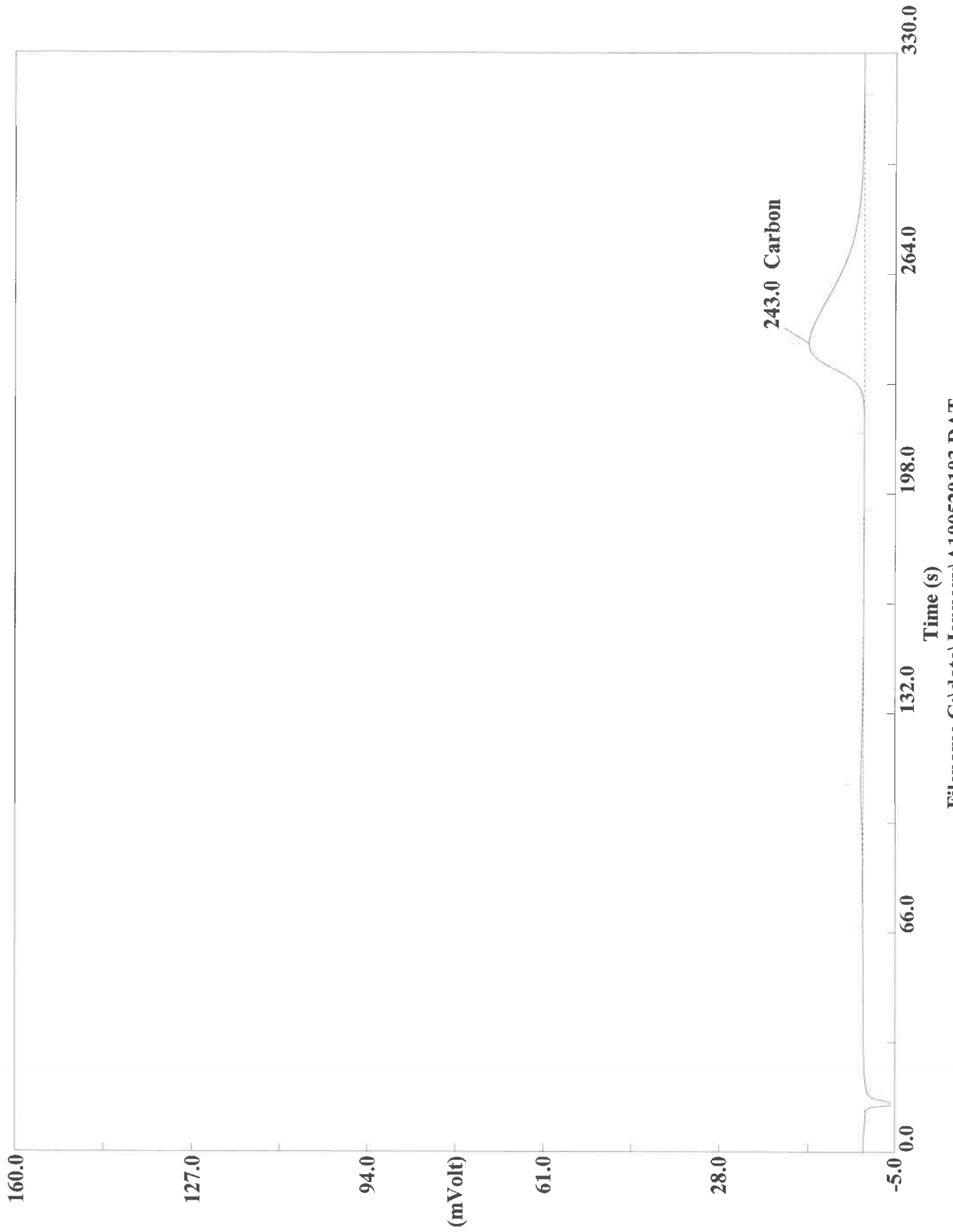
Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520102
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 23:38 Printed : 10/6/2020 07:11
Sample ID : CCB (# 113)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520103.DAT

Sample name :180-111518-B-3 Analysed :10/05/2020 23:43

Eager 300 Report

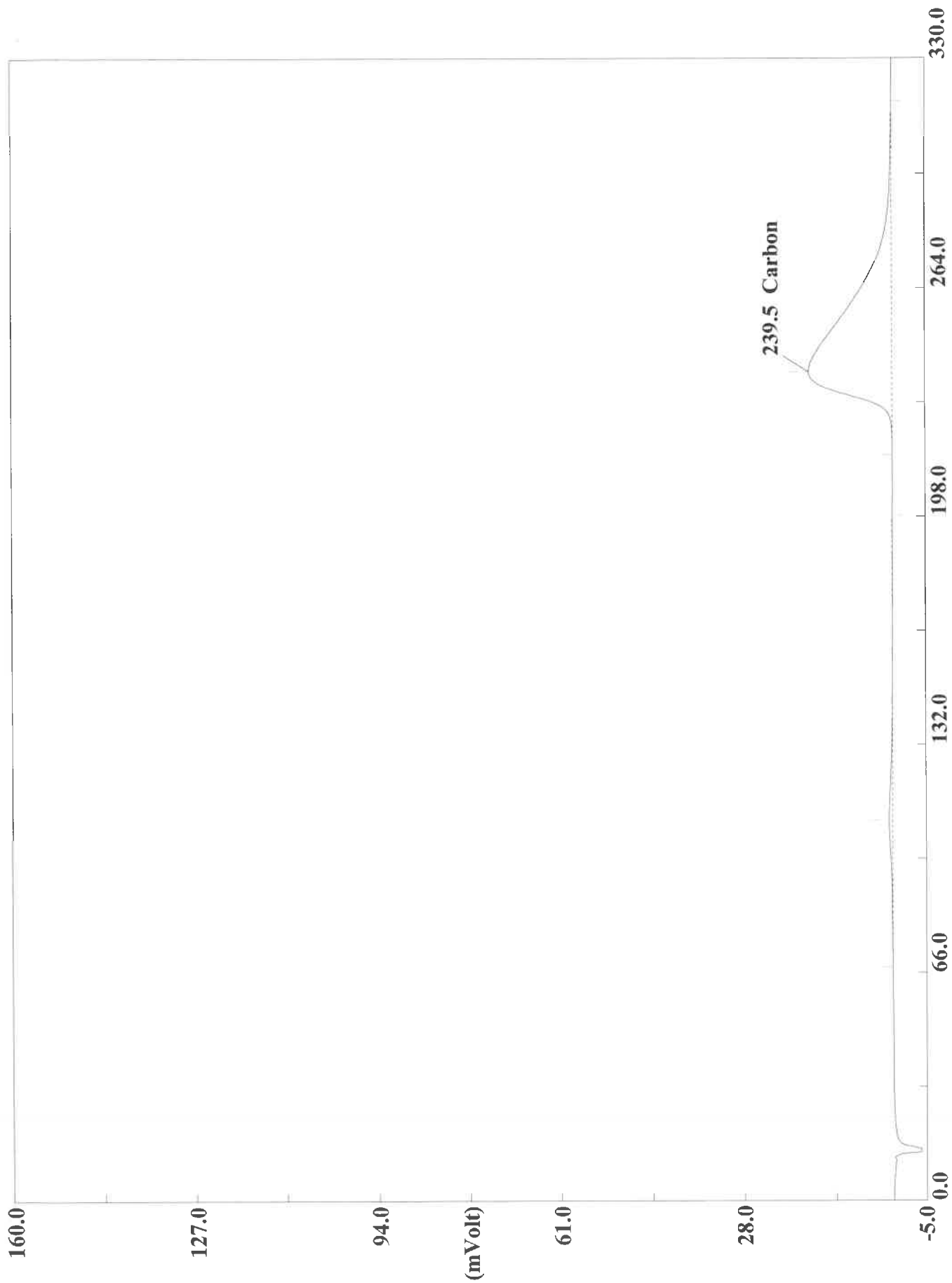
Page: 1 Sample: 180-111518-B-3 (A100520103)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520103
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 23:43 Printed : 10/6/2020 07:11
Sample ID : 180-111518-B-3 (# 114)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 17.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.4113	243	3057695	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520104.DAT
Sample name :180-111518-B-3 Analyzed :10/05/2020 23:49

Eager 300 Report

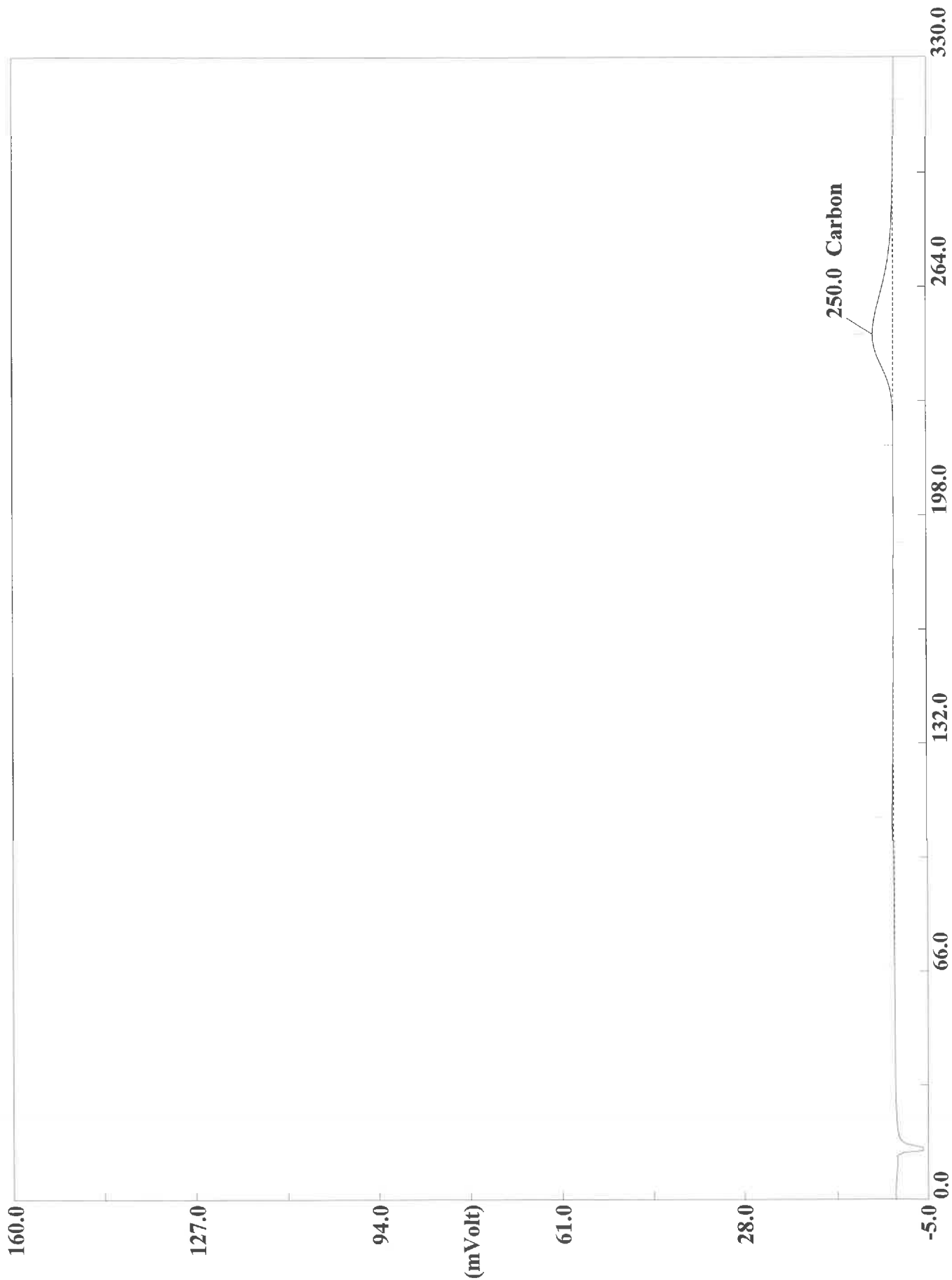
Page: 1 Sample: 180-111518-B-3 (A100520104)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520104
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/05/2020 23:49 Printed : 10/6/2020 07:12
Sample ID : 180-111518-B-3 (# 115)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.8861	240	4277801	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520106.DAT
Sample name :180-111518-B-4 Analysed :10/06/2020 00:00

Eager 300 Report

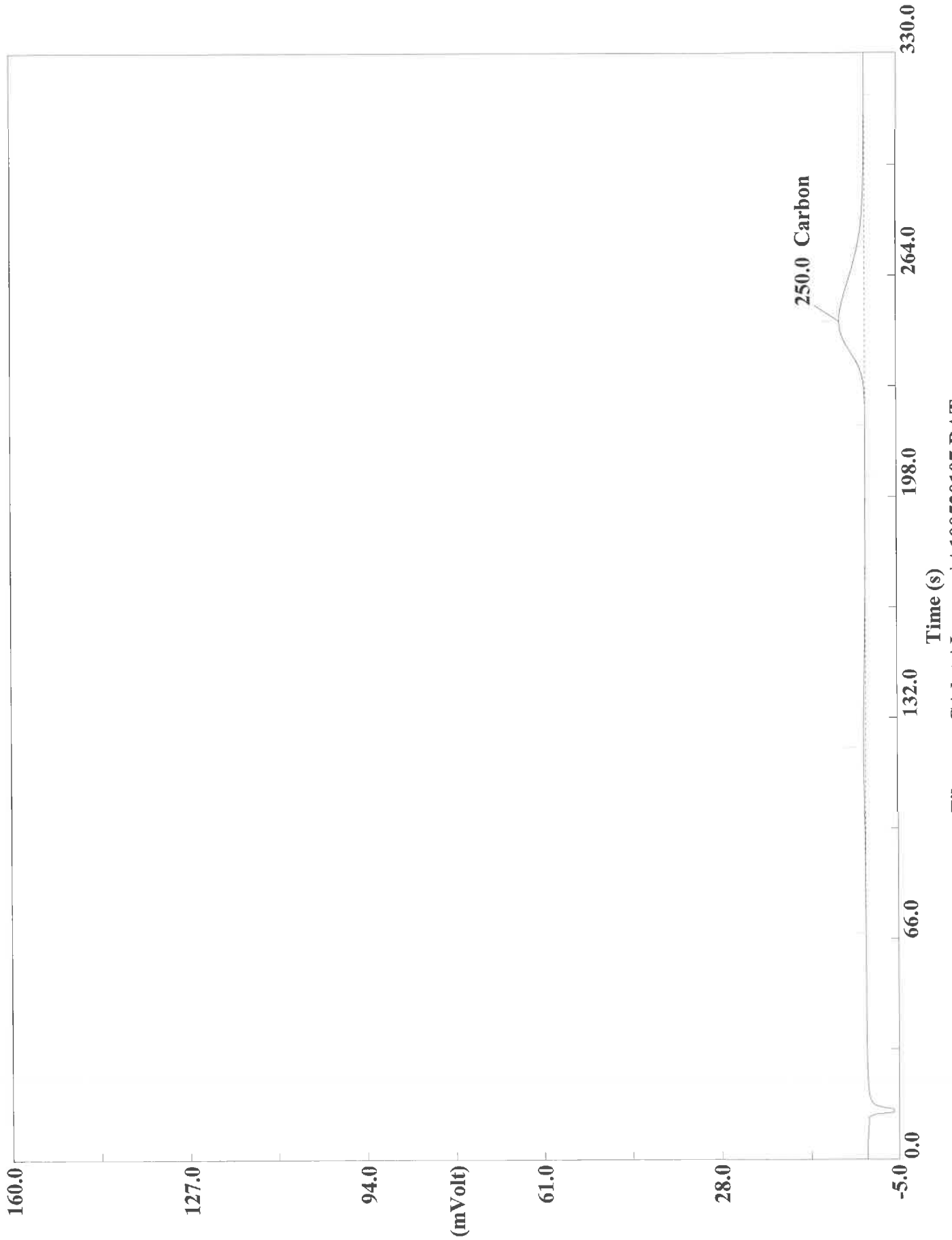
Page: 1 Sample: 180-111518-B-4 (A100520106)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520106
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 00:00 Printed : 10/6/2020 07:12
Sample ID : 180-111518-B-4 (# 117)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 21.8

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9045	250	1005960	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520107.DAT

Sample name :180-111518-B-4 Analysed :10/06/2020 00:06

Eager 300 Report

Page: 1 Sample: 180-111518-B-4 (A100520107)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520107
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 00:06 Printed : 10/6/2020 07:12
Sample ID : 180-111518-B-4 (# 118)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.1791	250	1336969	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520109.DAT
Sample name :180-111519-B-1 Analysed :10/06/2020 00:17

Eager 300 Report

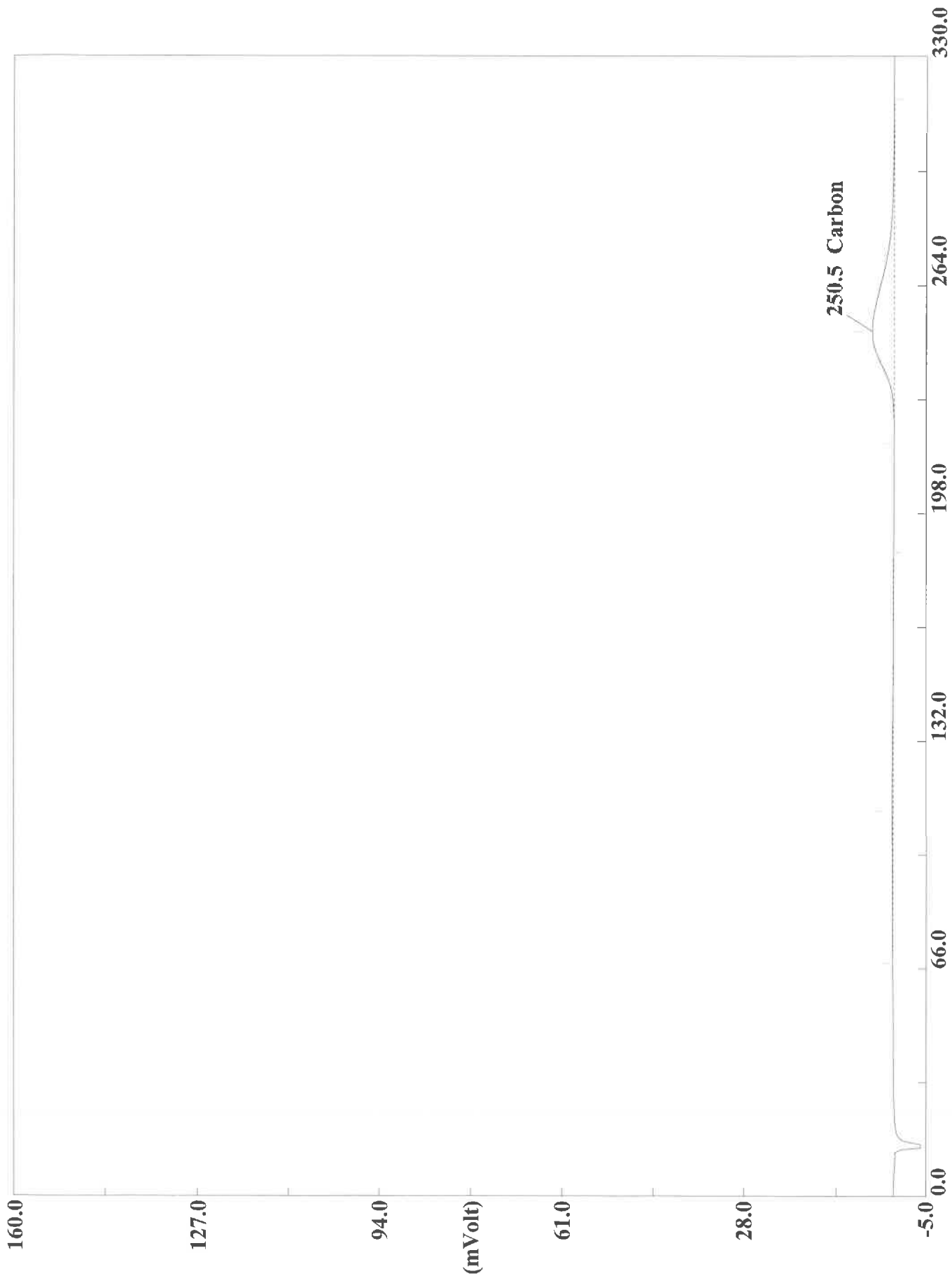
Page: 1 Sample: 180-111519-B-1 (A100520109)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520109
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 00:17 Printed : 10/6/2020 07:12
Sample ID : 180-111519-B-1 (# 120)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9744	252	1110954	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520110.DAT
Sample name :180-111519-B-1 Analysed :10/06/2020 00:22

Eager 300 Report

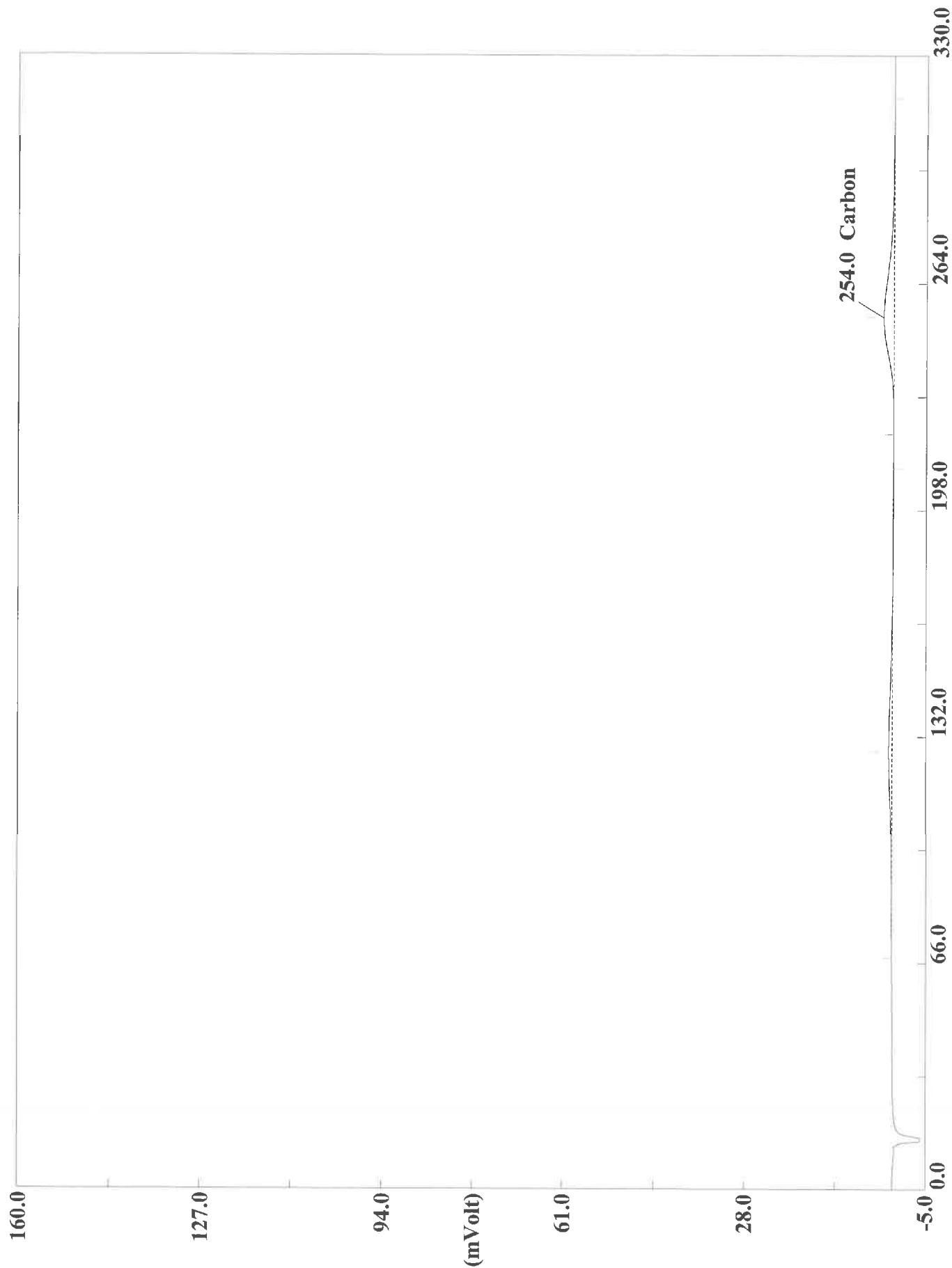
Page: 1 Sample: 180-111519-B-1 (A100520110)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520110
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 00:22 Printed : 10/6/2020 07:12
Sample ID : 180-111519-B-1 (# 121)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0283	251	1162939	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520112.DAT
Sample name :180-111519-B-2 Analysed :10/06/2020 00:34

Eager 300 Report

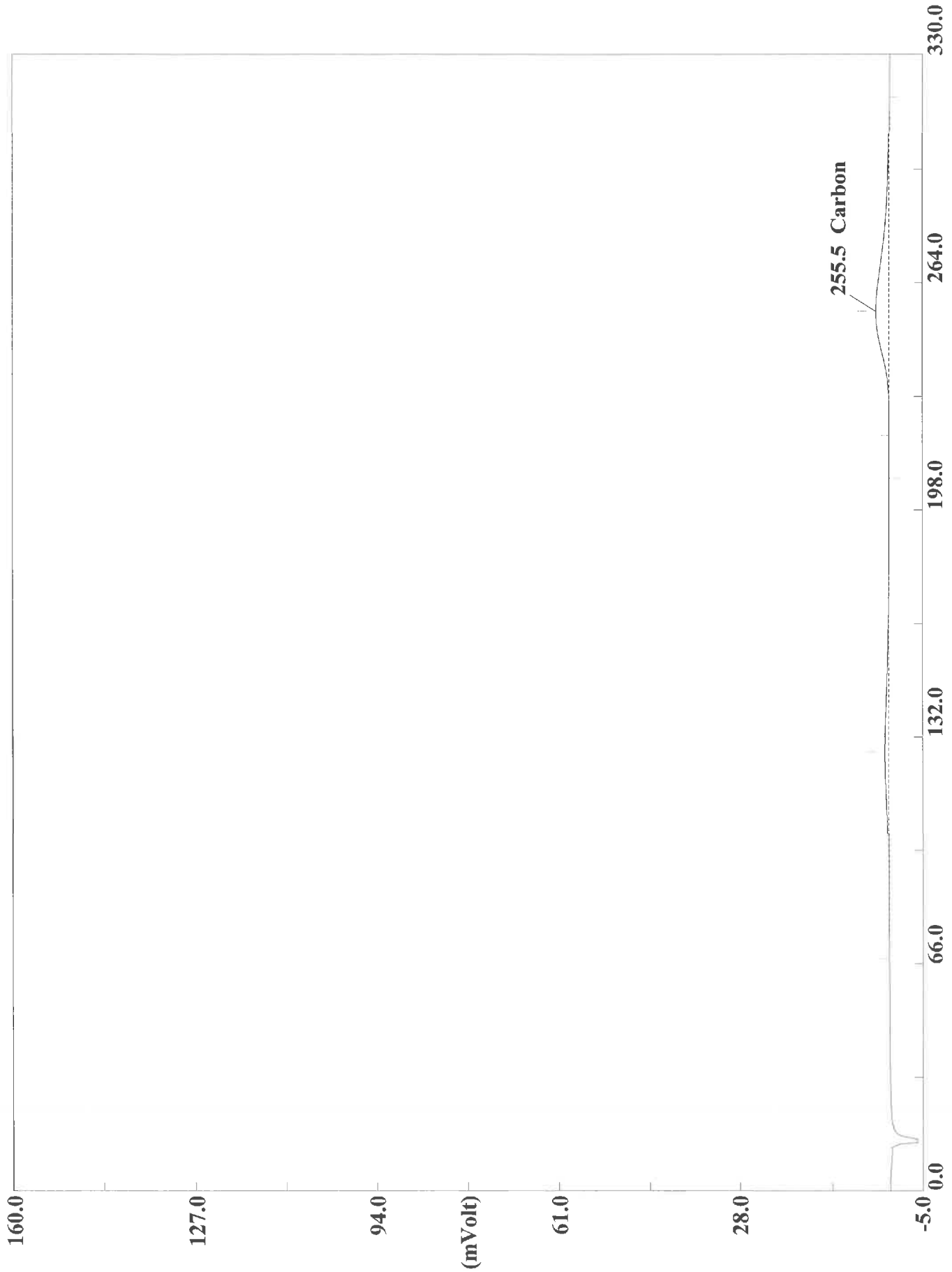
Page: 1 Sample: 180-111519-B-2 (A100520112)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520112
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 00:34 Printed : 10/6/2020 07:12
Sample ID : 180-111519-B-2 (# 123)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.5956	254	545512	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520113.DAT
Sample name :180-111519-B-2 Analysed :10/06/2020 00:39

Eager 300 Report

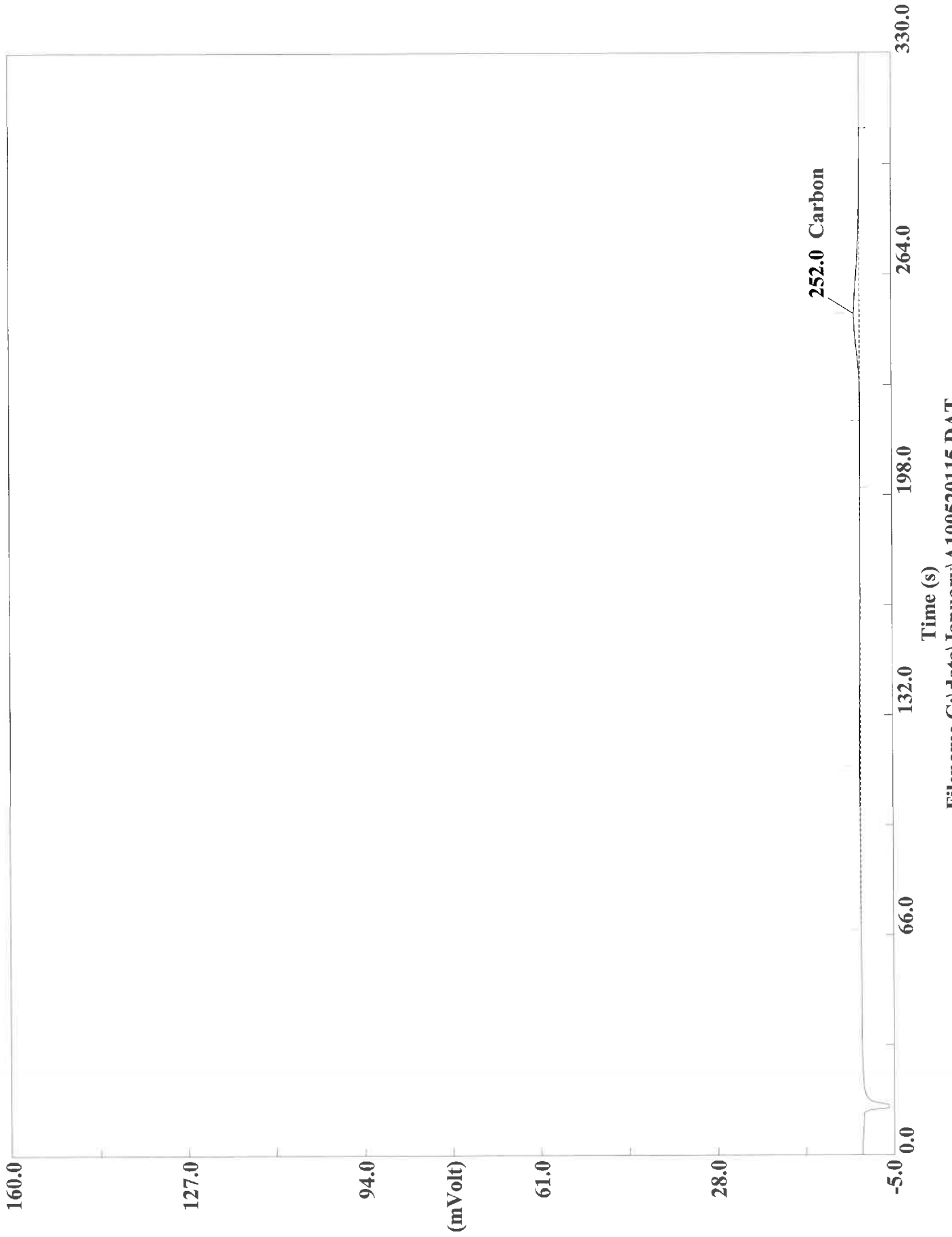
Page: 1 Sample: 180-111519-B-2 (A100520113)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520113
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 00:39 Printed : 10/6/2020 07:12
Sample ID : 180-111519-B-2 (# 124)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 15.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0122	256	784961	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520115.DAT

Sample name :180-111519-B-3 Analysed :10/06/2020 00:50

Eager 300 Report

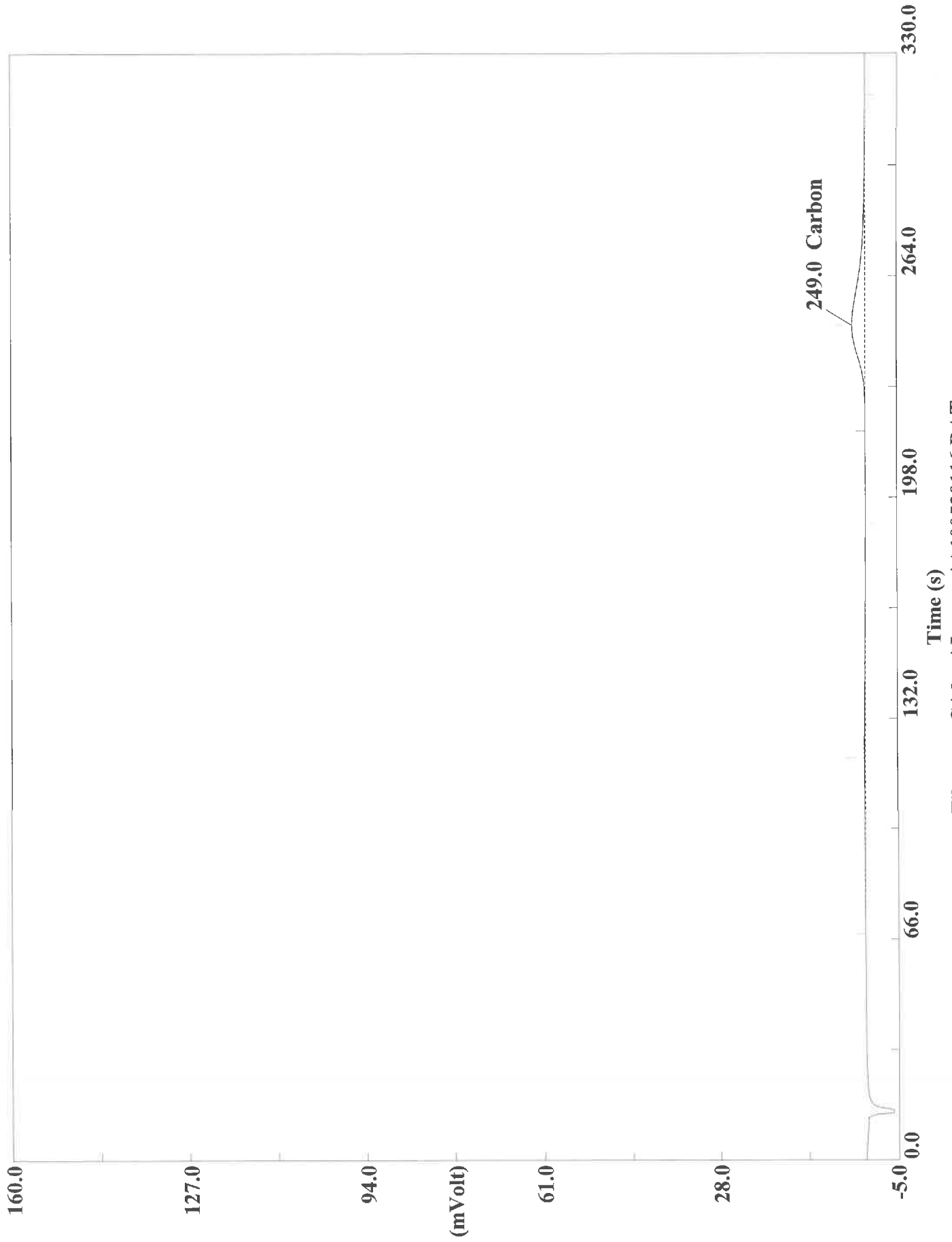
Page: 1 Sample: 180-111519-B-3 (A100520115)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520115
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 00:50 Printed : 10/6/2020 07:12
Sample ID : 180-111519-B-3 (# 126)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.3212	252	300055	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520116.DAT
Sample name :180-111519-B-3 Analysed :10/06/2020 00:56

Eager 300 Report

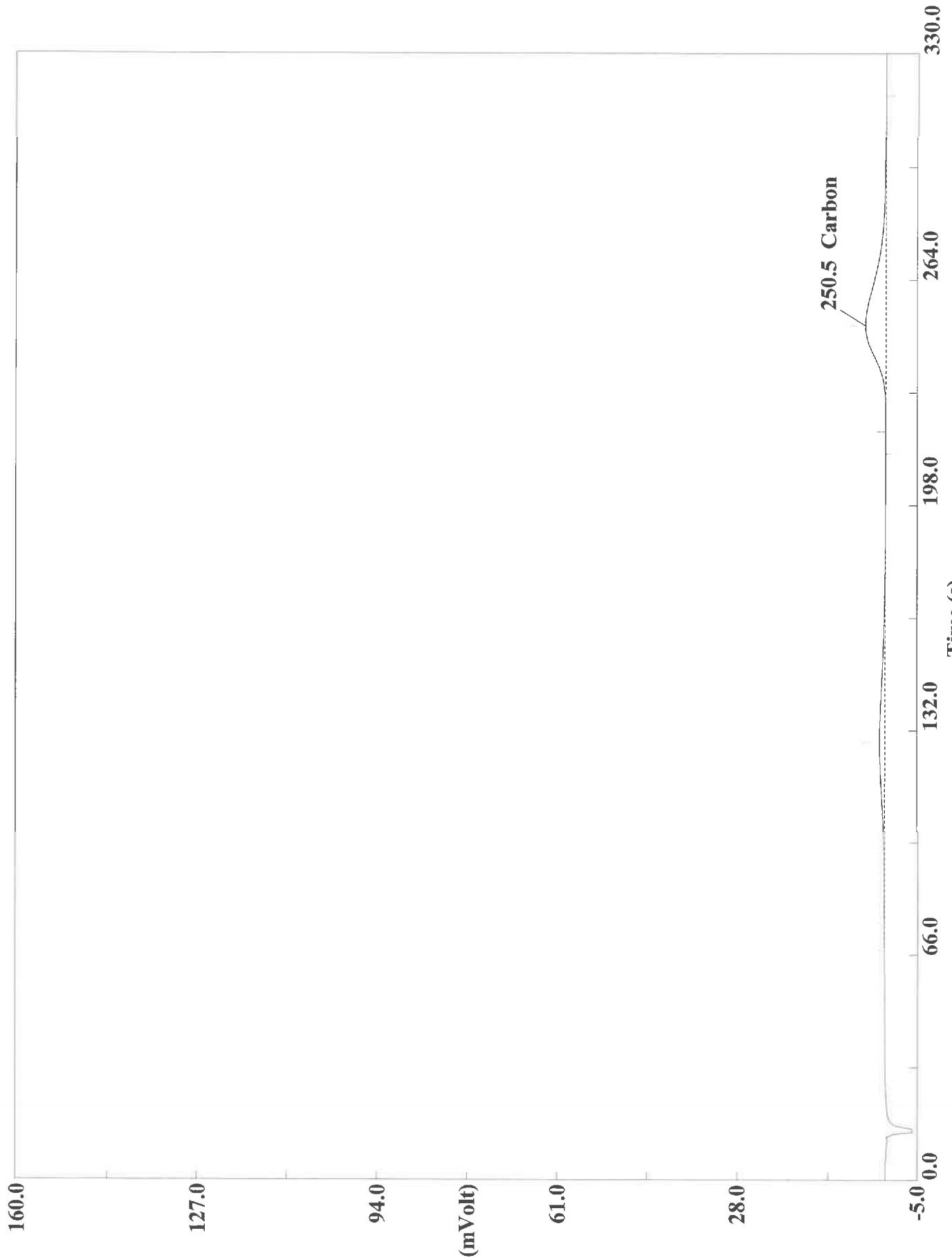
Page: 1 Sample: 180-111519-B-3 (A100520116)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520116
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 00:56 Printed : 10/6/2020 07:12
Sample ID : 180-111519-B-3 (# 127)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.6671	249	648602	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520118.DAT
Sample name :180-111519-B-4 Analysed :10/06/2020 01:07

Eager 300 Report

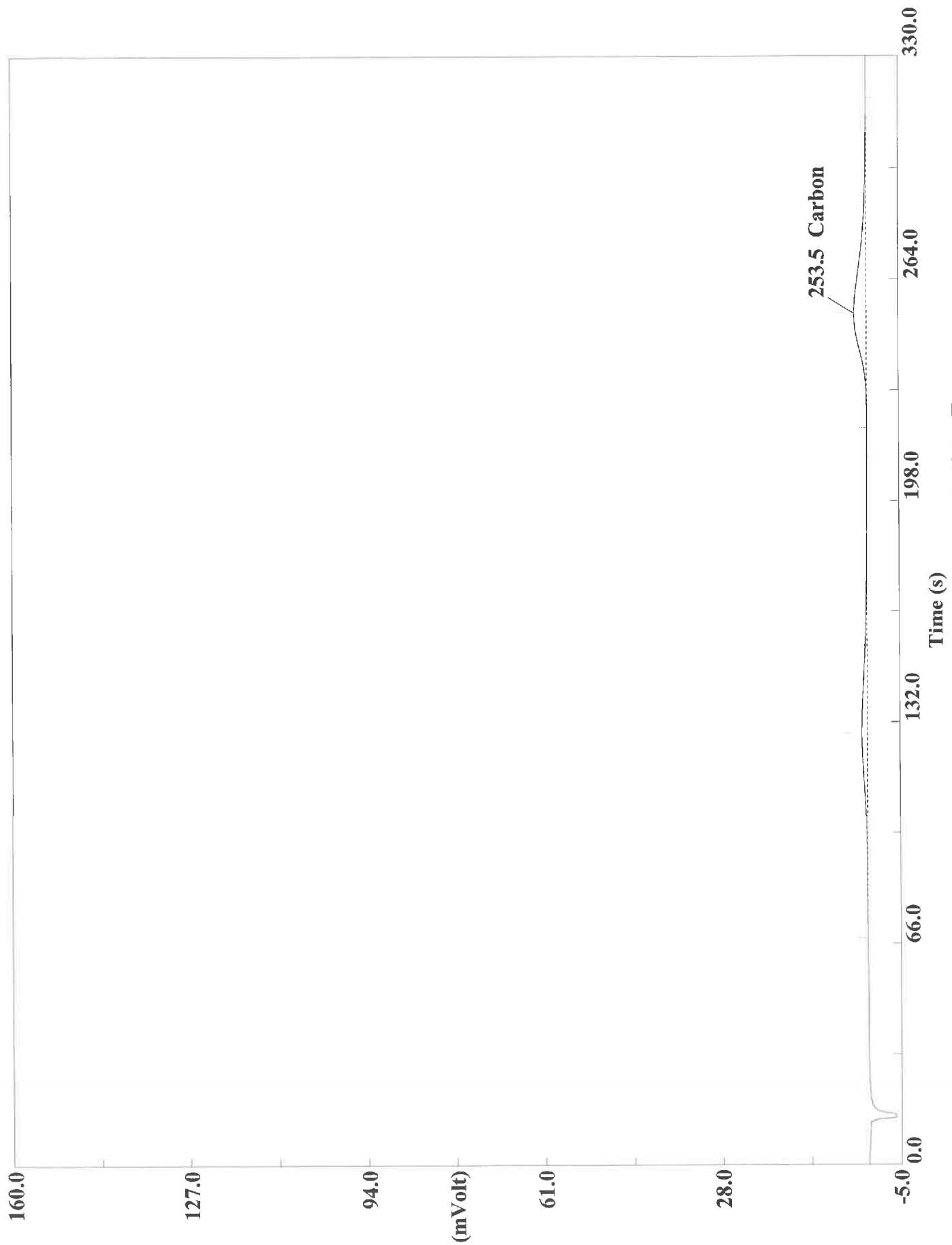
Page: 1 Sample: 180-111519-B-4 (A100520118)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520118
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 01:07 Printed : 10/6/2020 07:12
Sample ID : 180-111519-B-4 (# 129)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0009	251	1021600	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520119.DAT
Sample name :180-111519-B-4 Analysed :10/06/2020 01:13

Eager 300 Report

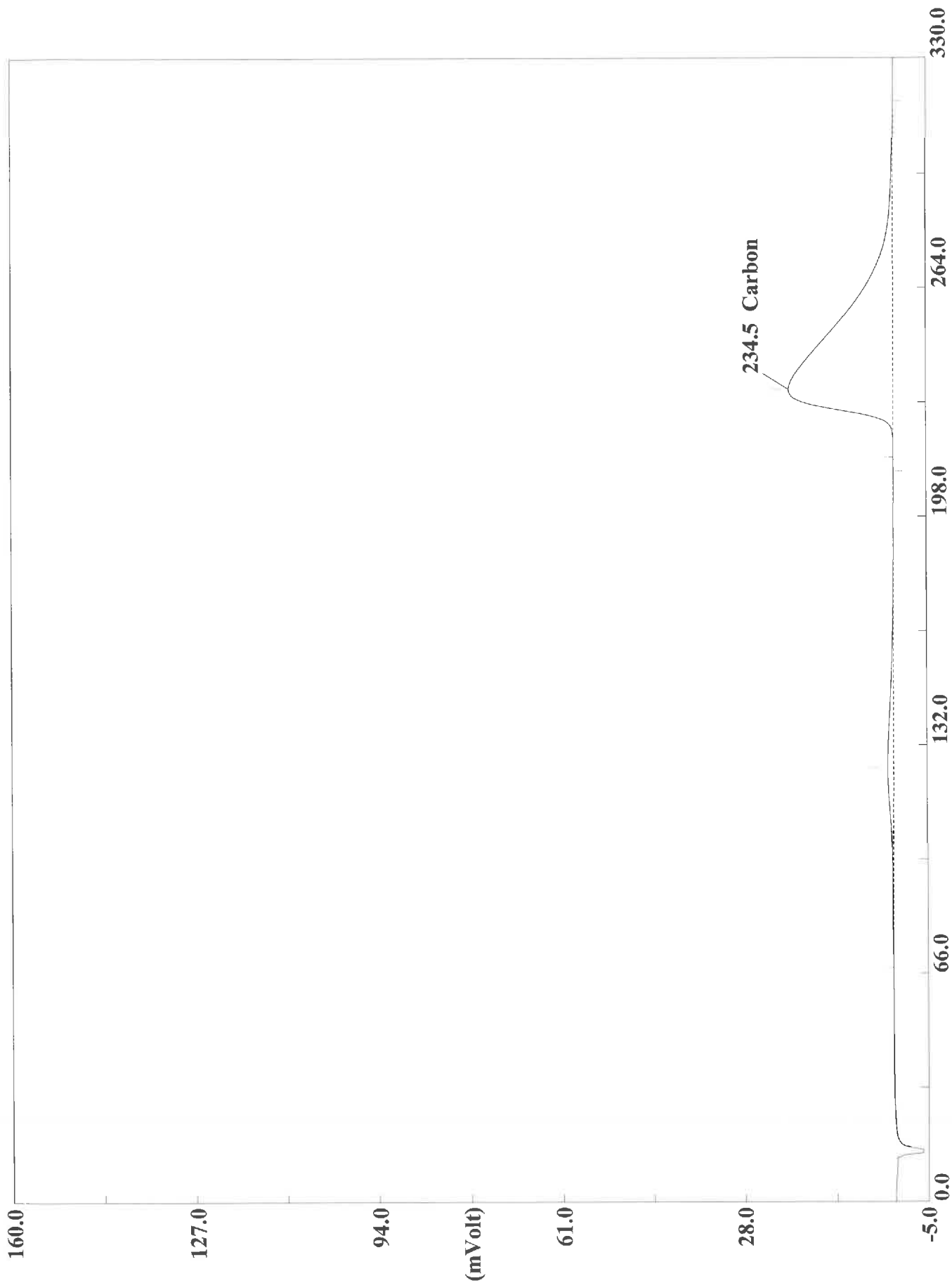
Page: 1 Sample: 180-111519-B-4 (A100520119)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520119
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 01:13 Printed : 10/6/2020 07:13
Sample ID : 180-111519-B-4 (# 130)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.7

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.6942	254	690492	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520121.DAT
Sample name :CCV Analysed :10/06/2020 01:24

Eager 300 Report

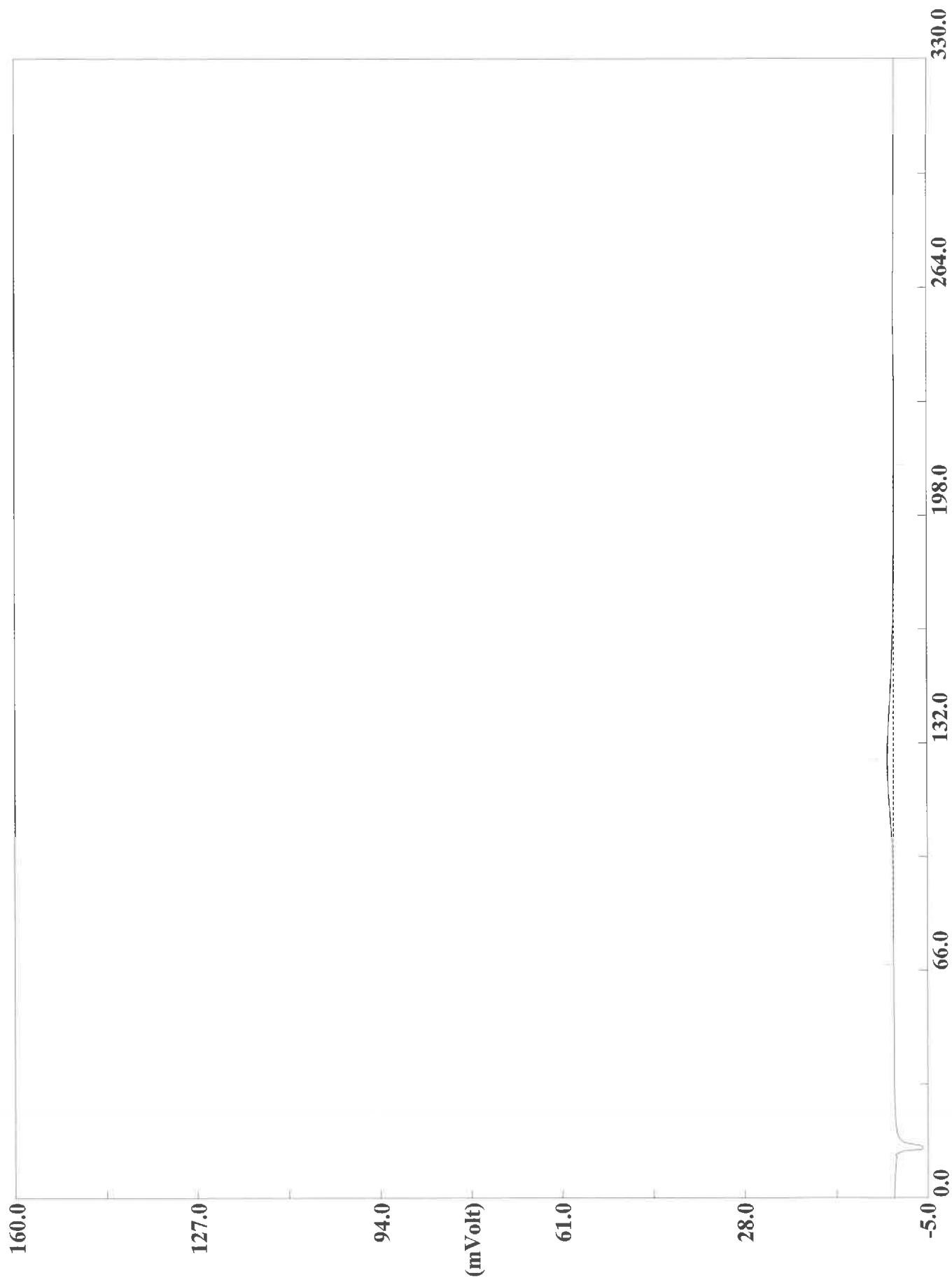
Page: 1 Sample: CCV (A100520121)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520121
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 01:24 Printed : 10/6/2020 07:13
Sample ID : CCV (# 132)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0171	235	5286629	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520122.DAT
Sample name :CCB Analysed :10/06/2020 01:29

Eager 300 Report

Page: 1 Sample: CCB (A100520122)

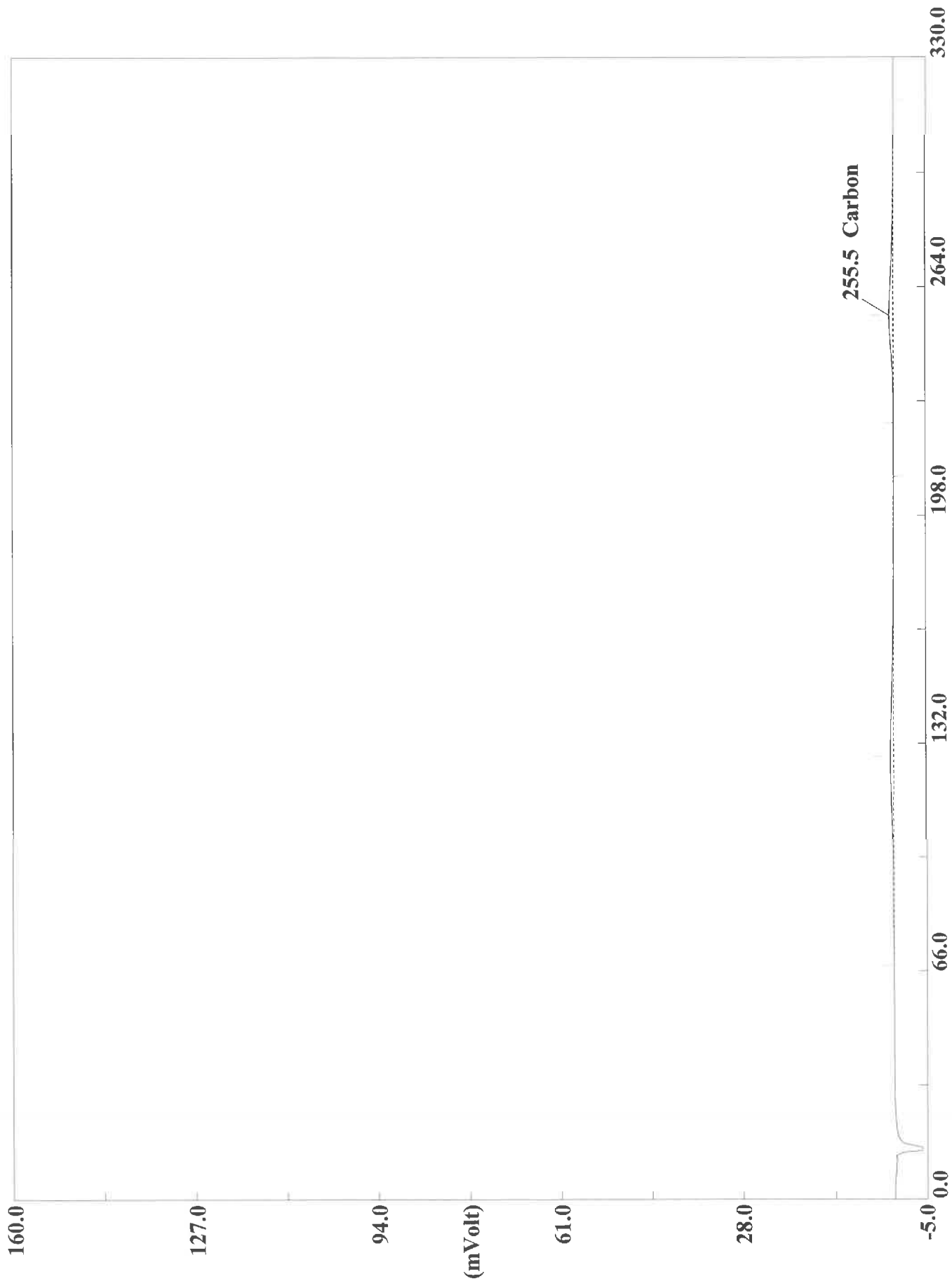
Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520122
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 01:29 Printed : 10/6/2020 07:13
Sample ID : CCB (# 133)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520123.DAT
Sample name :180-111706-A-1 Analysed :10/06/2020 01:35

Eager 300 Report

Page: 1 Sample: 180-111706-A-1 (A100520123)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520123
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 01:35 Printed : 10/6/2020 07:13
Sample ID : 180-111706-A-1 (# 134)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 26.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.1714	256	211718	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520124.DAT
Sample name :180-111706-A-1 Analysed :10/06/2020 01:40

Eager 300 Report

Page: 1 Sample: 180-111706-A-1 (A100520124)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520124
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 01:40 Printed : 10/6/2020 07:13
Sample ID : 180-111706-A-1 (# 135)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 28

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.2209	255	299338	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520126.DAT
Sample name :180-111287-A-96 Analysed :10/06/2020 01:52

Eager 300 Report

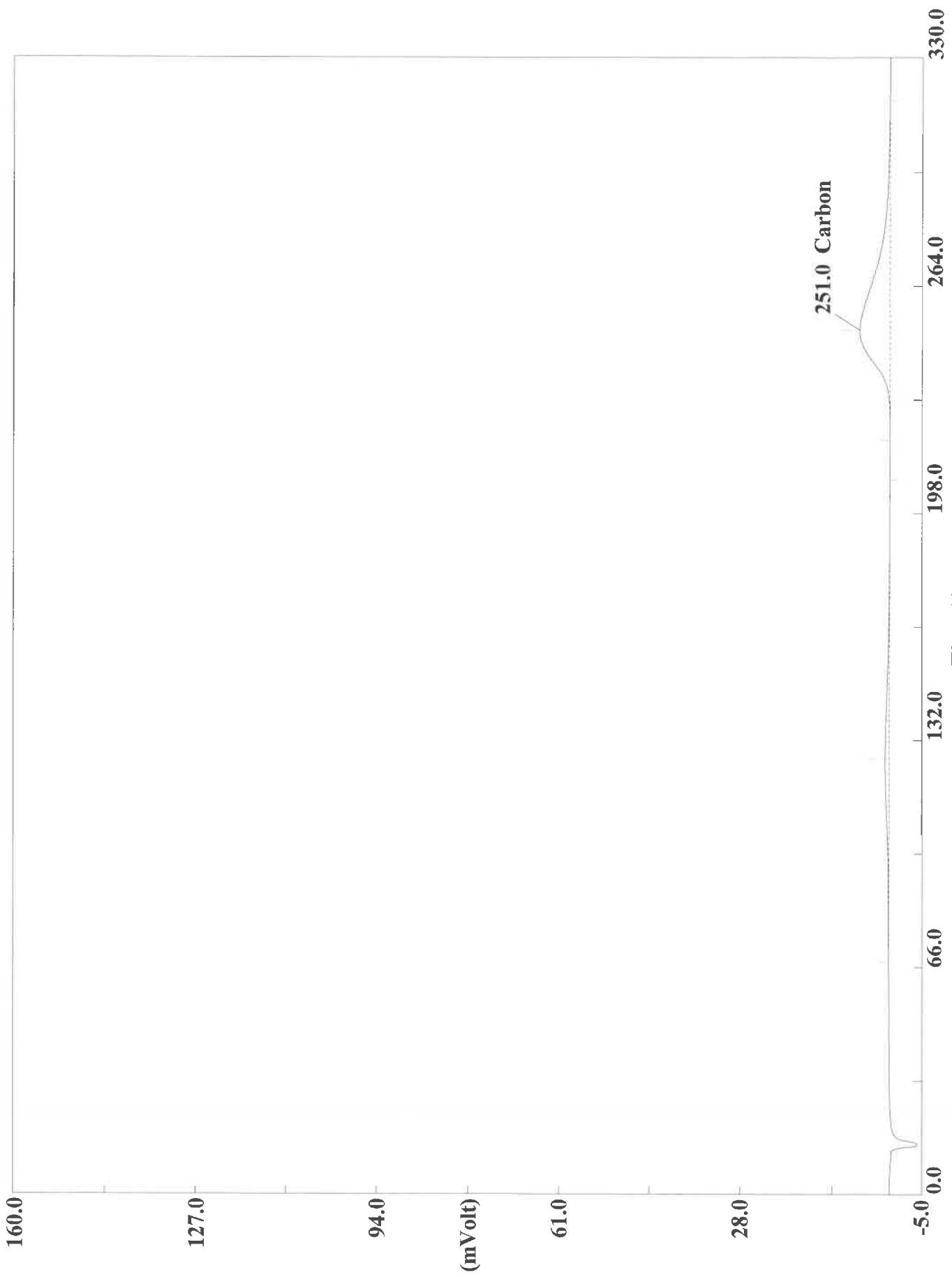
Page: 1 Sample: 180-111287-A-96 (A100520126)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520126
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 01:52 Printed : 10/6/2020 07:13
Sample ID : 180-111287-A-96 (# 137)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.9

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.5466	251	1664102	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520127.DAT
Sample name :180-111287-A-96 Analysed :10/06/2020 01:57

Eager 300 Report

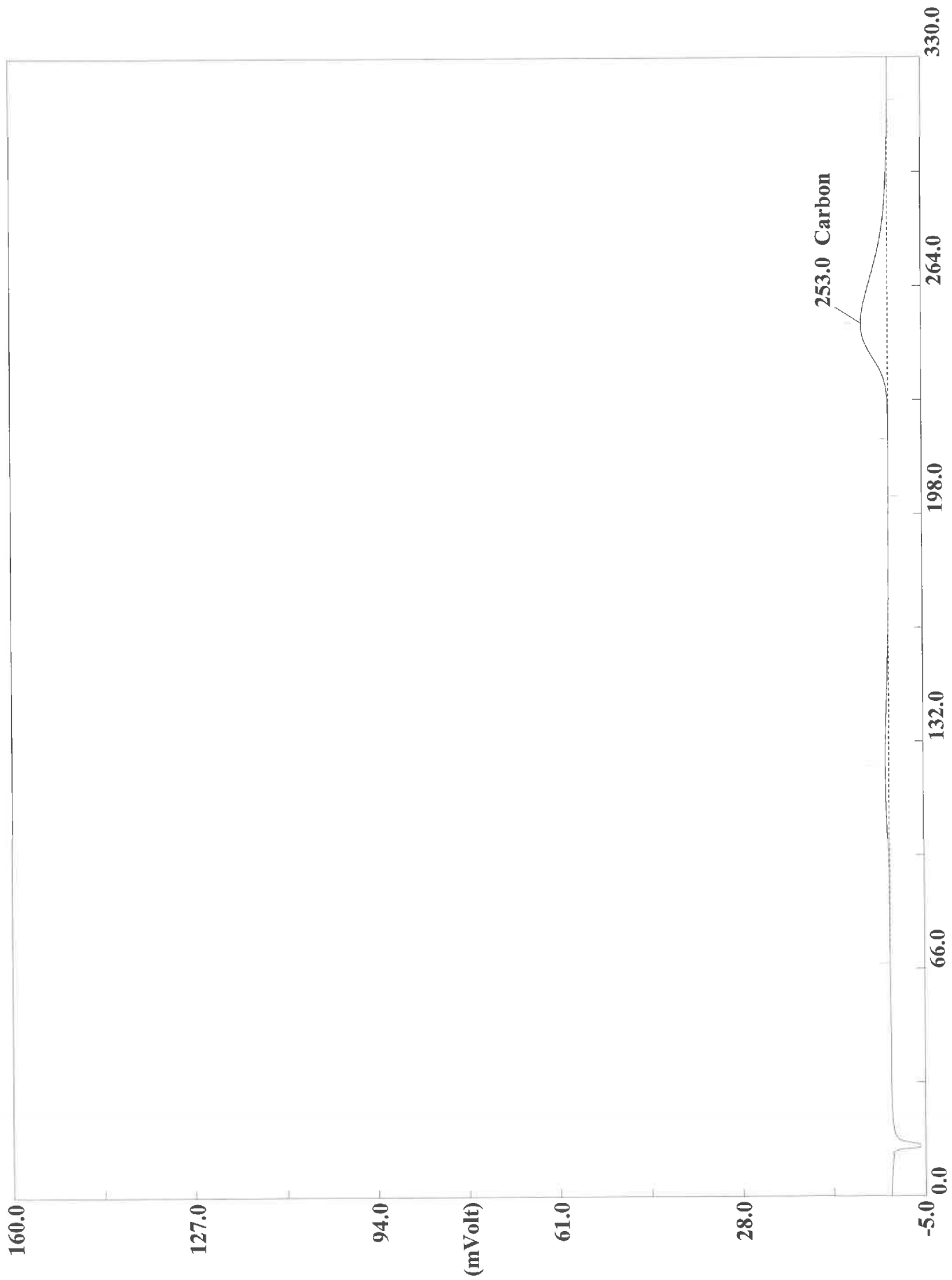
Page: 1 Sample: 180-111287-A-96 (A100520127)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520127
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 01:57 Printed : 10/6/2020 07:13
Sample ID : 180-111287-A-96 (# 138)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 18.4

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.7110	251	1620166	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520129.DAT
Sample name : 180-111287-A-99 Analysed : 10/06/2020 02:08

Eager 300 Report

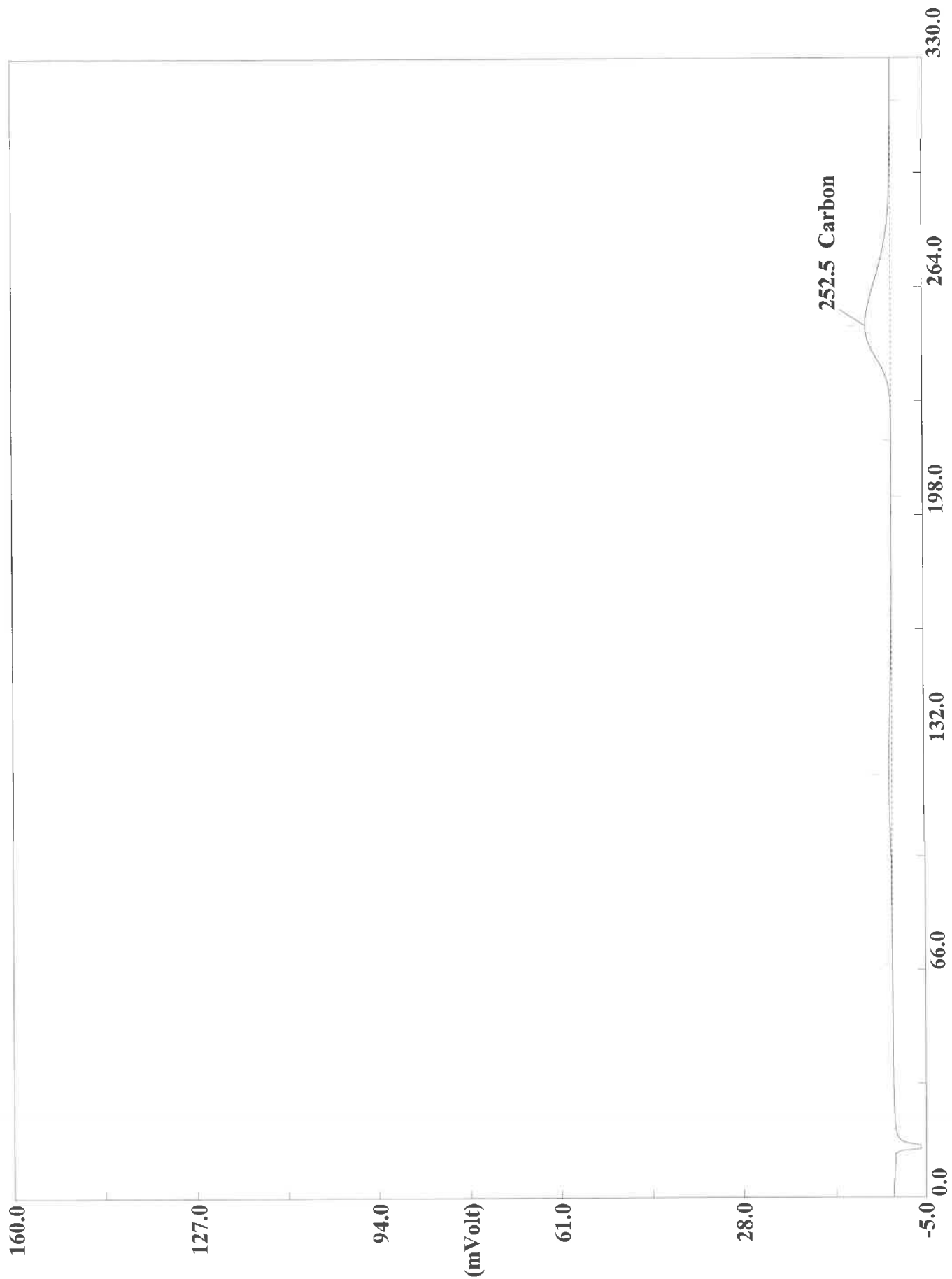
Page: 1 Sample: 180-111287-A-99 (A100520129)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520129
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 02:08 Printed : 10/6/2020 07:13
Sample ID : 180-111287-A-99 (# 140)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 23.1

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.2205	253	1448477	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520130.DAT
Sample name :180-111287-A-99 Analysed :10/06/2020 02:14

Eager 300 Report

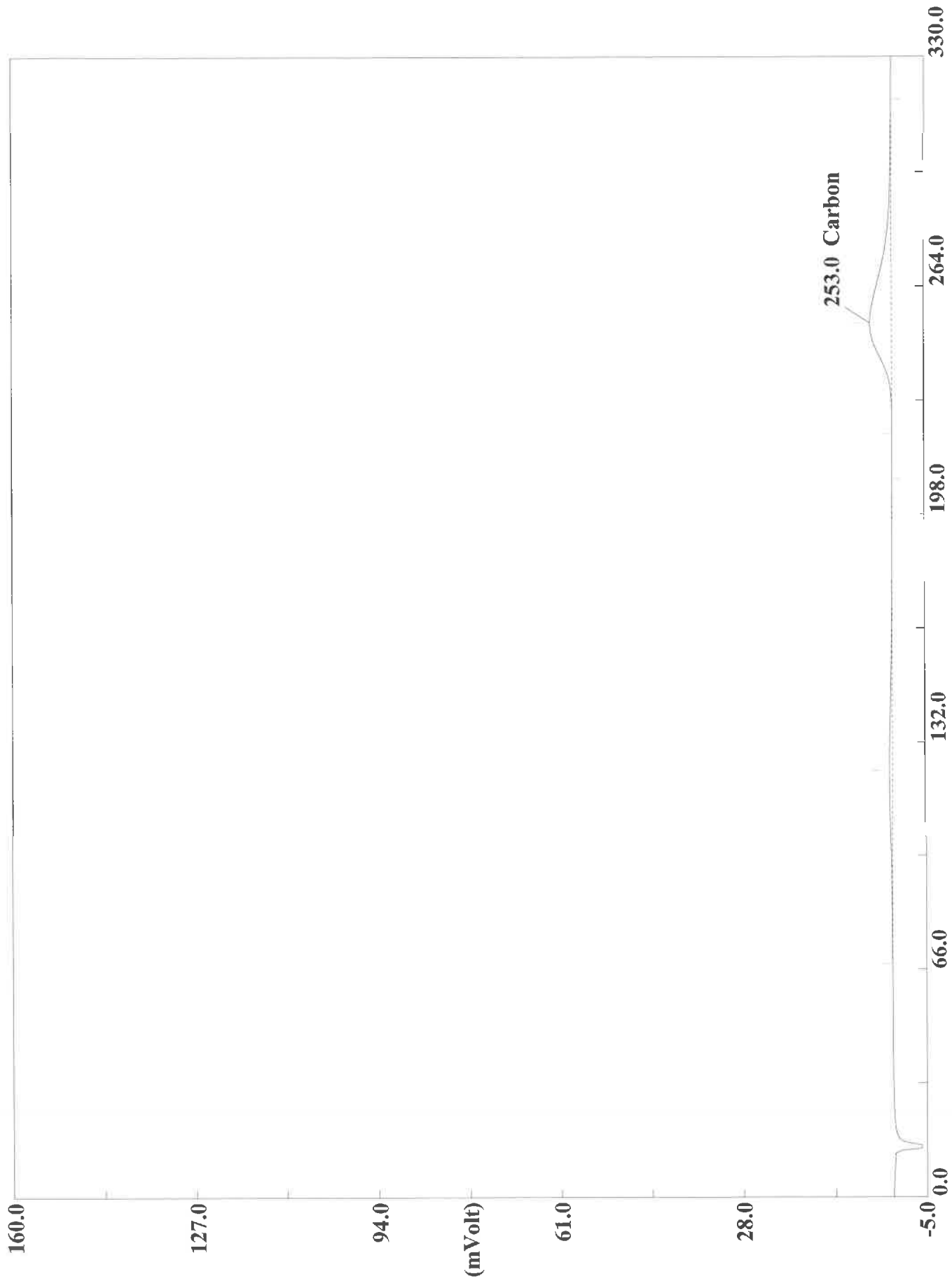
Page: 1 Sample: 180-111287-A-99 (A100520130)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520130
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 02:14 Printed : 10/6/2020 07:13
Sample ID : 180-111287-A-99 (# 141)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20.2

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.2732	253	1319192	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520132.DAT

Sample name : 180-111287-A-101 Analysed : 10/06/2020 02:25

Eager 300 Report

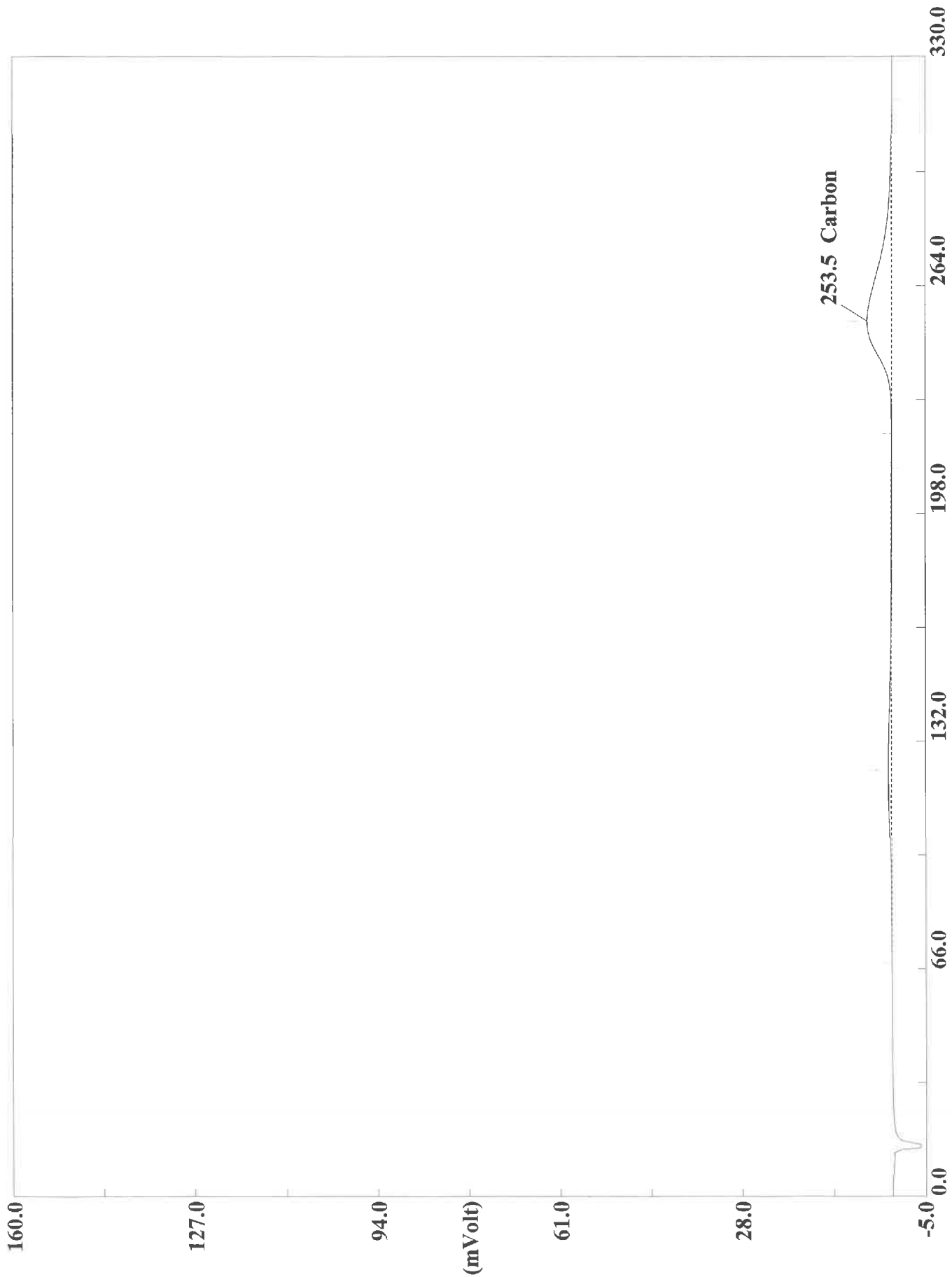
Page: 1 Sample: 180-111287-A-101 (A100520132)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520132
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 02:25 Printed : 10/6/2020 07:13
Sample ID : 180-111287-A-101 (# 143)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 22.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9796	253	1132333	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Time (s)

Filename C:\data\January\A100520133.DAT

Sample name :180-111287-A-101 Analysed :10/06/2020 02:31

Eager 300 Report

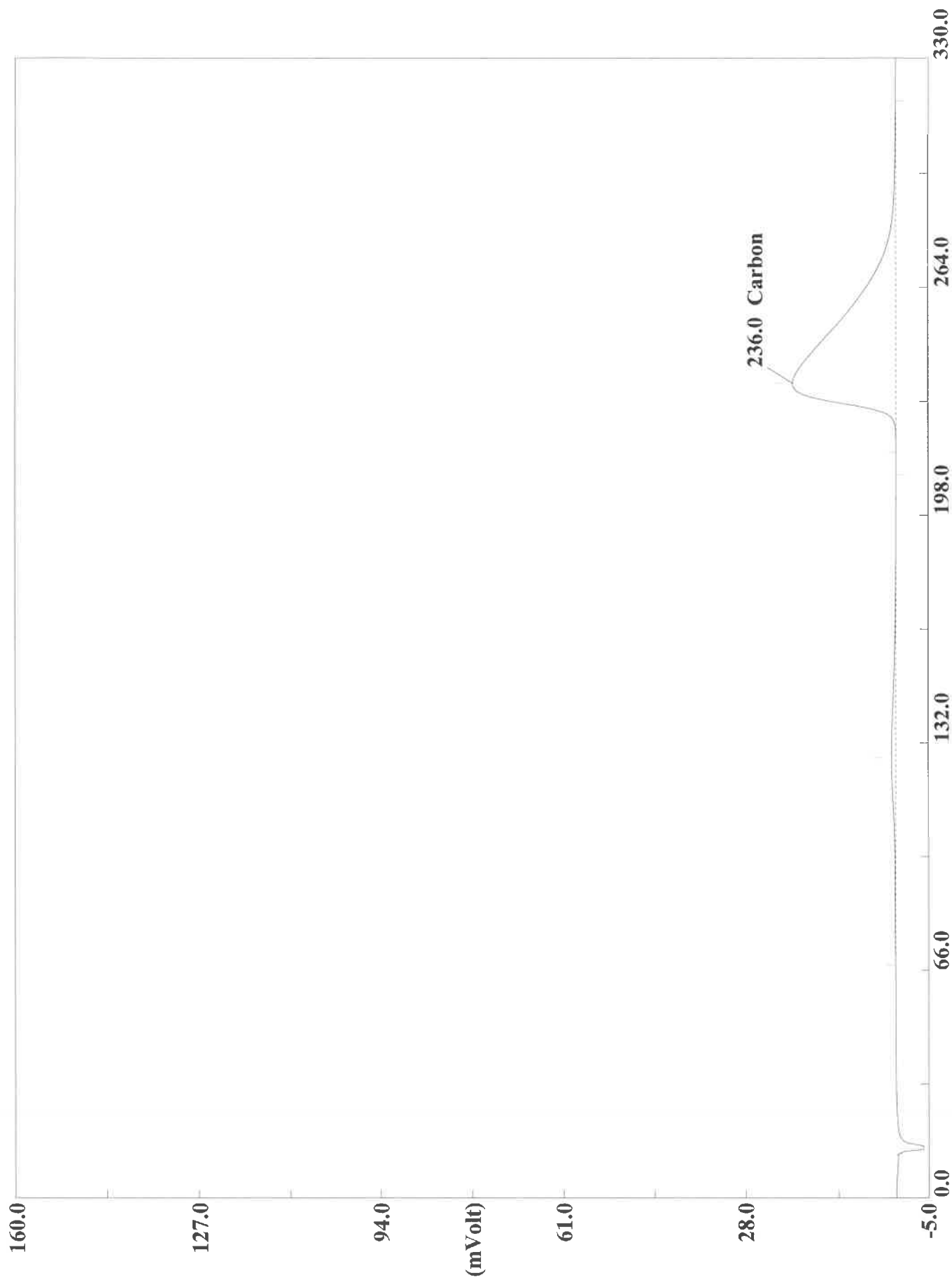
Page: 1 Sample: 180-111287-A-101 (A100520133)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520133
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 02:31 Printed : 10/6/2020 07:13
Sample ID : 180-111287-A-101 (# 144)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 19.3

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.3105	254	1296995	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520135.DAT
Sample name :CCV Analysed :10/06/2020 02:42

Eager 300 Report

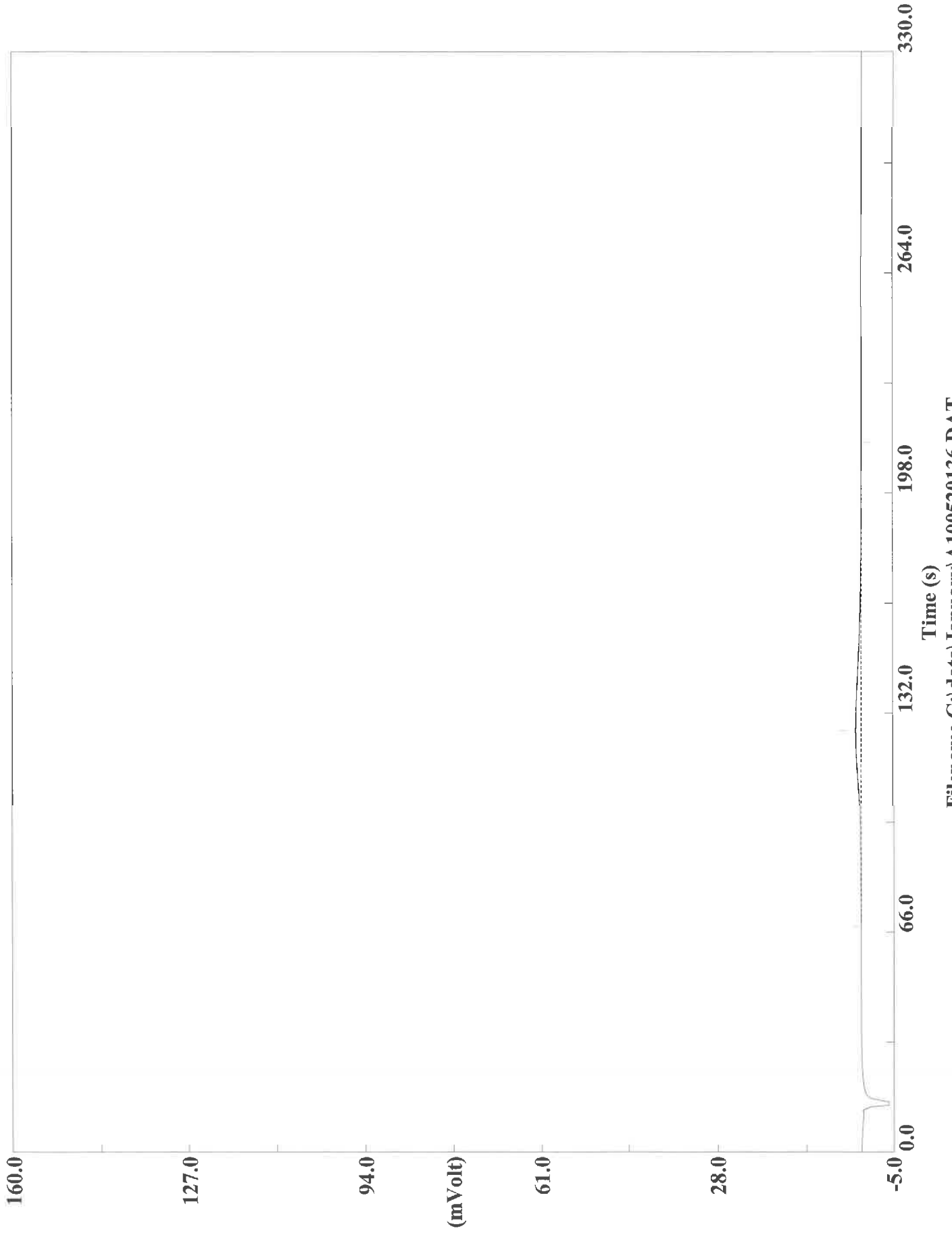
Page: 1 Sample: CCV (A100520135)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520135
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 02:42 Printed : 10/6/2020 07:14
Sample ID : CCV (# 146)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9829	236	5108042	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 10/06/20



Filename C:\data\January\A100520136.DAT
Sample name : CCB Analysed : 10/06/2020 02:47

Eager 300 Report

Page: 1 Sample: CCB (A100520136)

Method Name : Lloyd Kahn
Method File : C:\data\January\100520A.mth
Chromatogram : A100520136
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 10/06/2020 02:47 Printed : 10/6/2020 07:14
Sample ID : CCB (# 147)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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Eager Xperience

Method name : Lloyd Kahn
 Method filename : C:\data\January\092320A.mth

Sample table

Chromatogram overwrite : Enabled

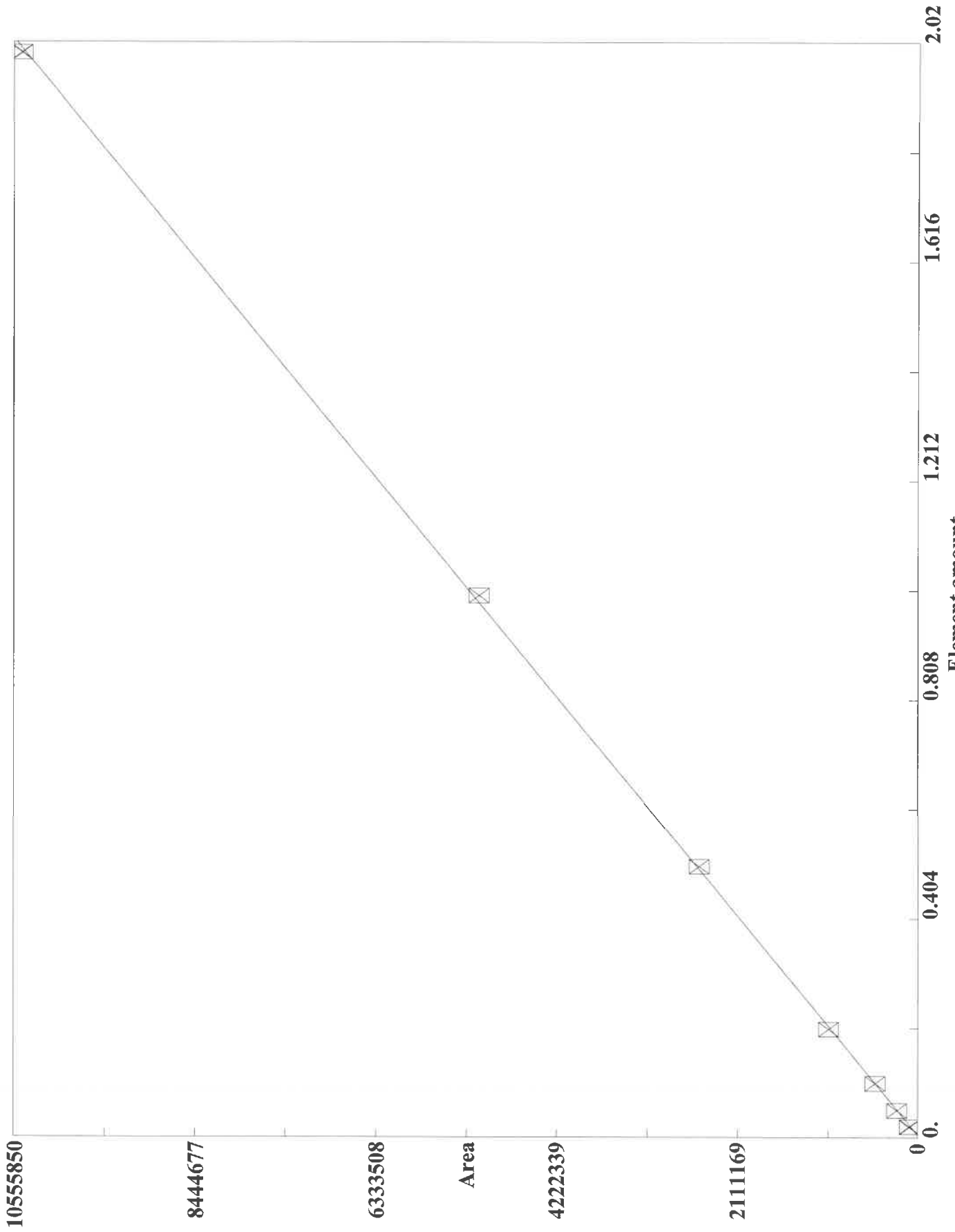
#	Sample name	Filename	Type	Weight	Hum. %
1	BYPASS	A092320006	ByP	-	0
2	BLANK	A092320007	Blk	-	0
3	BLANK	A092320008	Blk	-	0
4	1,000 KHP CT#3785365	A092320009	Std	200	0
5	2,500 KHP CT#3785364	A092320010	Std	50	0
6	5,000 KHP CT#3785364	A092320011	Std	100	0
7	10,000 KHP CT#3785364	A092320012	Std	200	0
8	25,000 KHP CT#3785363	A092320013	Std	50	0
9	50,000 KHP CT#3785363	A092320014	Std	100	0
10	100,000 KHP CT#3785363	A092320015	Std	200	0
11	ICV 37,810 KHP CT#3742673	A092320016	Unk	11.6	0
12	CCV	A092320017	Unk	100	0
13	CCB	A092320018	Unk	20	0
14	MB	A092320019	Unk	21.1	0
15	MB	A092320020	Unk	24.4	0
16	LCS	A092320021	Unk	12.7	0
17	LCS	A092320022	Unk	9.8	0
18	180-110583-A-9	A092320023	Unk	18.2	0
19	180-110583-A-9	A092320024	Unk	18	0
20	Rinse	A092320025	Unk	1	0
21	180-110583-B-14	A092320026	Unk	10.6	0
22	180-110583-B-14	A092320027	Unk	7.4	0
23	Rinse	A092320028	Unk	1	0
24	180-110583-B-14 MS	A092320029	Unk	8.3	0
25	180-110583-B-14 MS	A092320030	Unk	6.6	0
26	Rinse	A092320031	Unk	1	0
27	180-110583-B-14 MSD	A092320032	Unk	7.7	0
28	180-110583-B-14 MSD	A092320033	Unk	7.8	0
29	Rinse	A092320034	Unk	1	0
30	180-110583-A-19	A092320035	Unk	13.1	0
31	180-110583-A-19	A092320036	Unk	16.6	0
32	Rinse	A092320037	Unk	1	0
33	CCV	A092320038	Unk	100	0
34	CCB	A092320039	Unk	20	0
35	180-110583-A-20	A092320040	Unk	11.9	0
36	180-110583-A-20	A092320041	Unk	9.1	0
37	Rinse	A092320042	Unk	1	0

Llyod Kahn %Readback Error Calculation Spreadsheet

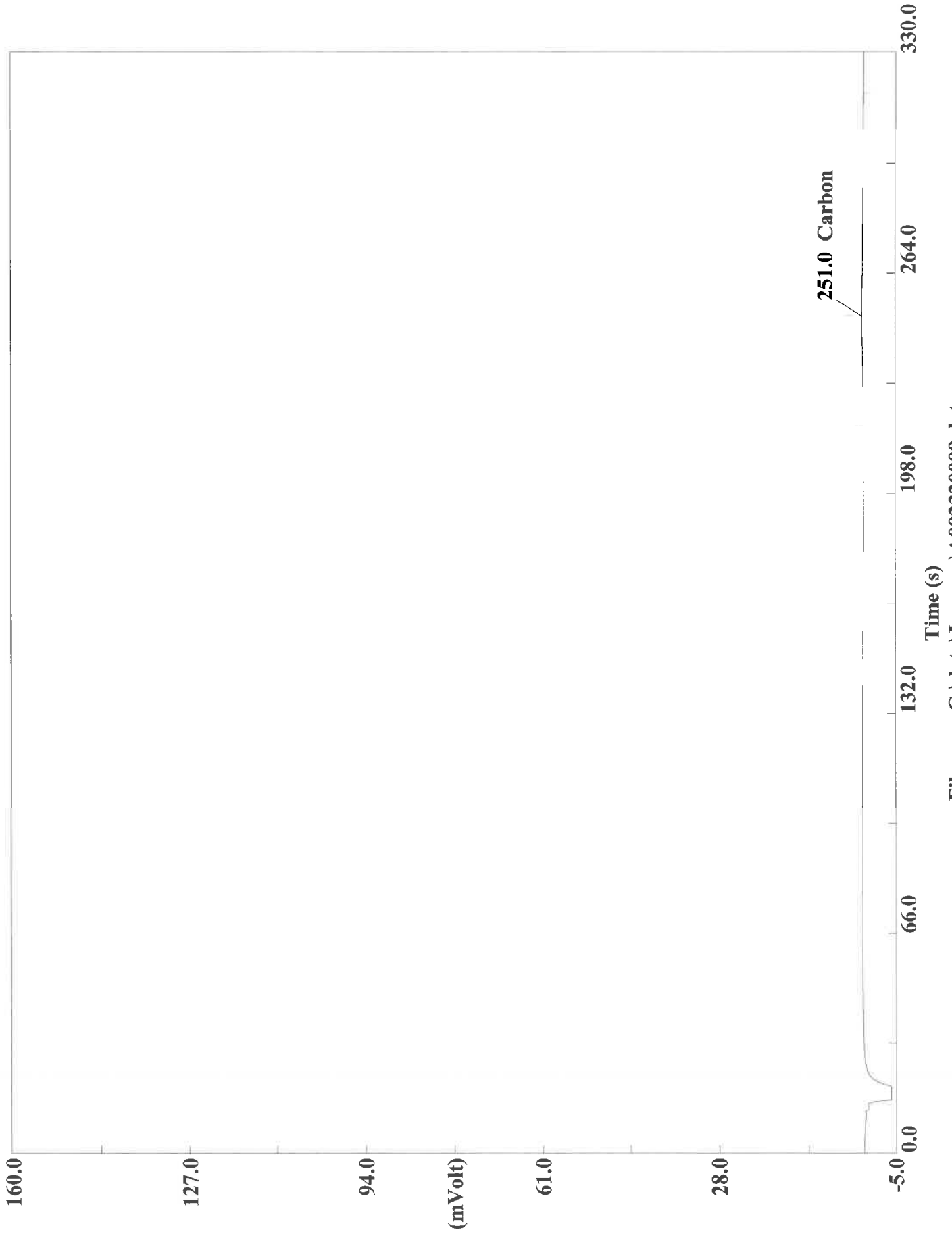
ICAL Std (ppm)	ICAL ID	Average Area	% Actual Carbon of Std.	%Readback Error	%Readback Criteria
1000	092320LK_ICAL	99423	0.0073	27.364	≤50%
2500	092320LK_ICAL	247009	0.0856	14.411	≤30%
5000	092320LK_ICAL	499611	0.0912	8.825	≤30%
10000	092320LK_ICAL	1048607	0.0982	1.838	≤30%
25000	092320LK_ICAL	2561375	0.9721	2.787	≤30%
50000	092320LK_ICAL	5128187	0.9777	2.231	≤30%
100000	092320LK_ICAL	10456420	0.9991	0.090	≤30%

Kb Value	Ke Value	Volume Cal Standard Injected	True Value Carbon Std in %
		200	0.01
		50	0.10
		100	0.10
		200	0.10
		50	1.00
		100	1.00
		200	1.00

Eager300 Calibration curve



NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320009.dat
Sample name :1,000 KHP CT#3785365 Analysed :09/23/2020 14:23

Eager 300 Report

Page: 1 Sample: 1,000 KHP CT#3785365 (A092320009)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320009
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:23 Printed : 9/23/2020 14:29
Sample ID : 1,000 KHP CT#3785365 (# 4)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 200

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.0100	251	99423	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320010.dat
Sample name :2,500 KHP CT#3785364 Analysed :09/23/2020 14:29

Eager 300 Report

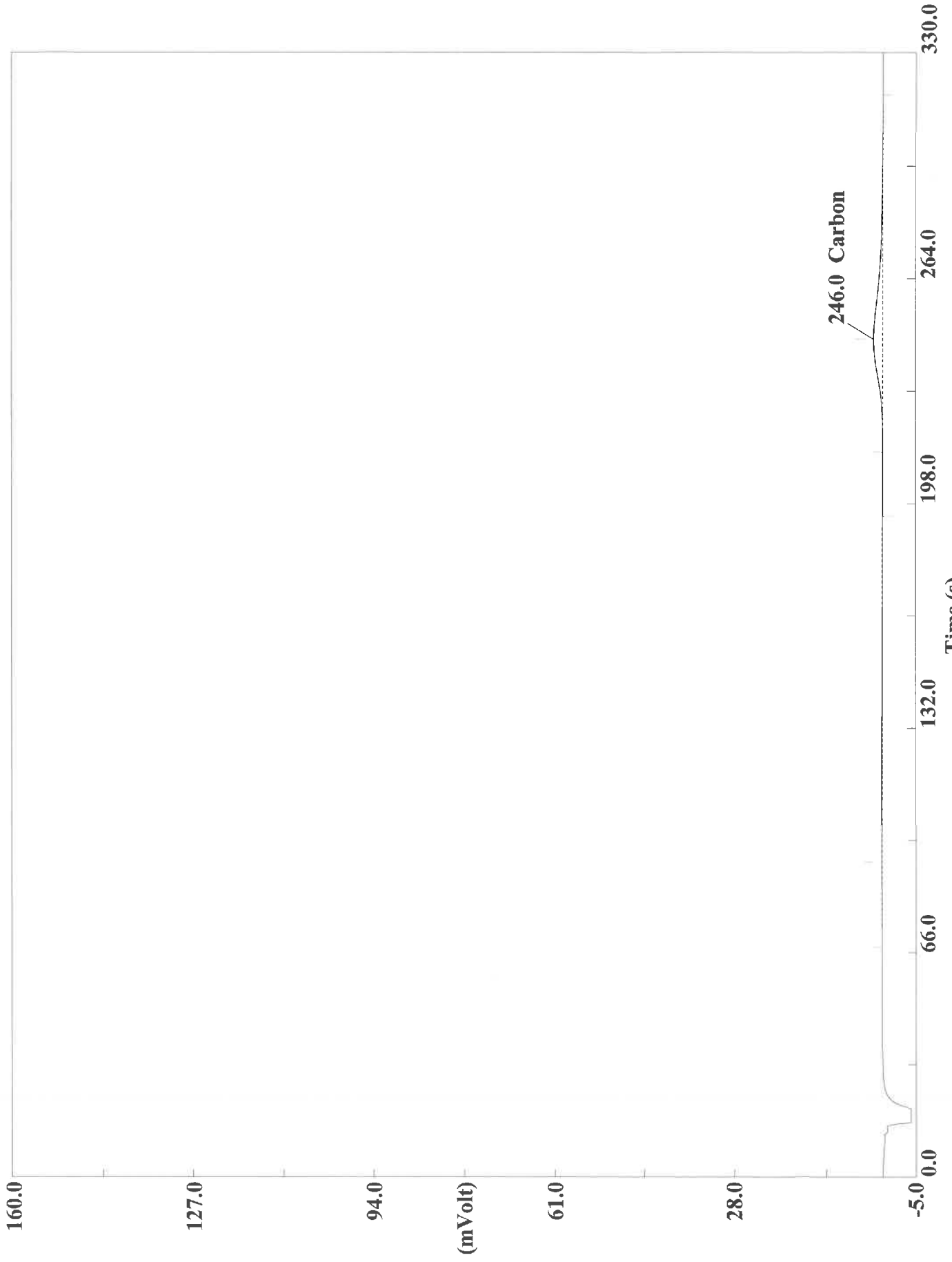
Page: 1 Sample: 2,500 KHP CT#3785364 (A092320010)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320010
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:29 Printed : 9/23/2020 14:34
Sample ID : 2,500 KHP CT#3785364 (# 5)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 50

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.1000	248	247009	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320011.dat
Sample name :5,000 KHP CT#3785364 Analysed :09/23/2020 14:34

Eager 300 Report

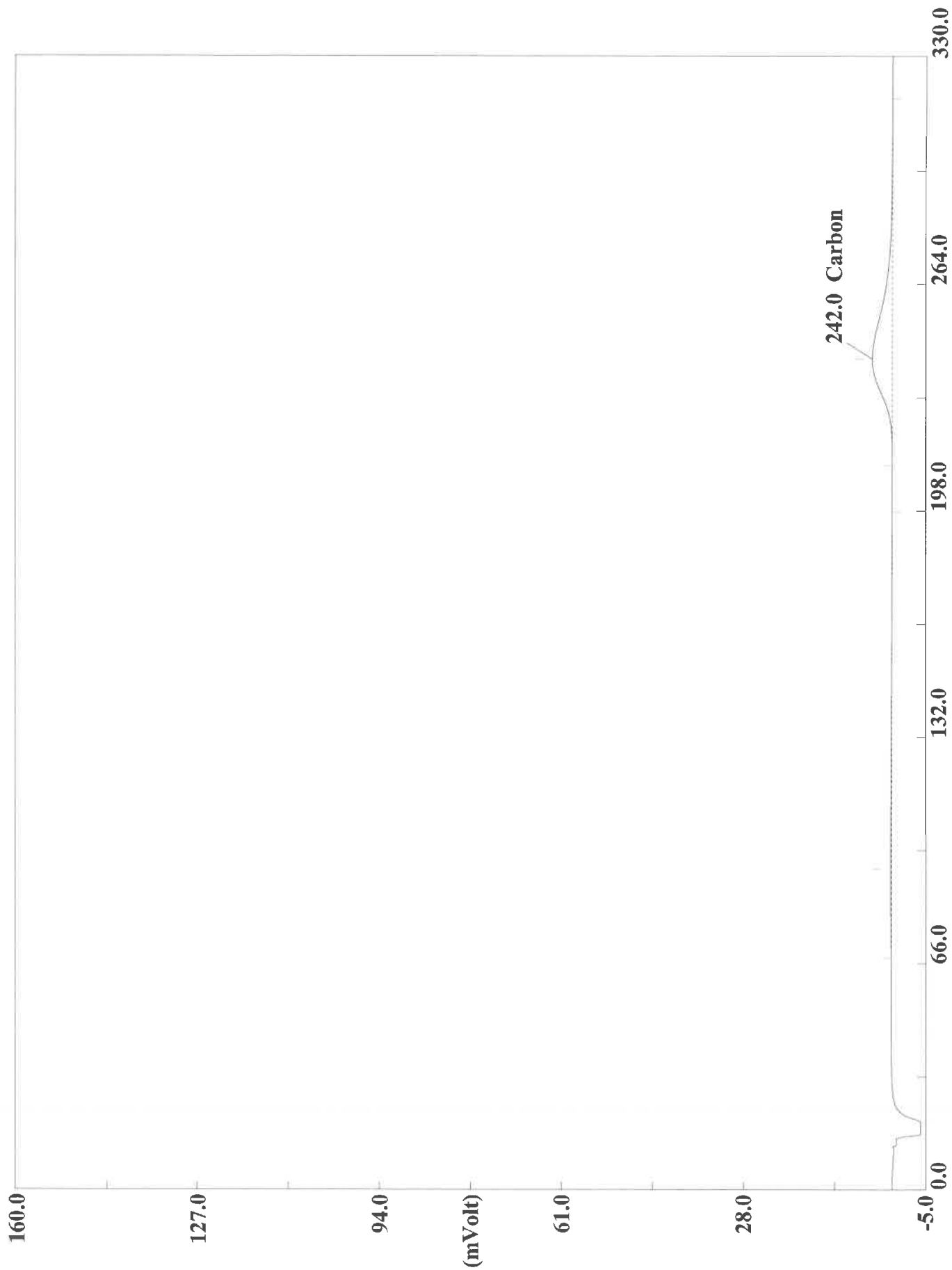
Page: 1 Sample: 5,000 KHP CT#3785364 (A092320011)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320011
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:34 Printed : 9/23/2020 14:40
Sample ID : 5,000 KHP CT#3785364 (# 6)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.1000	246	499611	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Time (s)

Filename C:\data\January\A092320012.dat

Sample name : 10,000 KHP CT#3785364 Analysed : 09/23/2020 14:40

Eager 300 Report

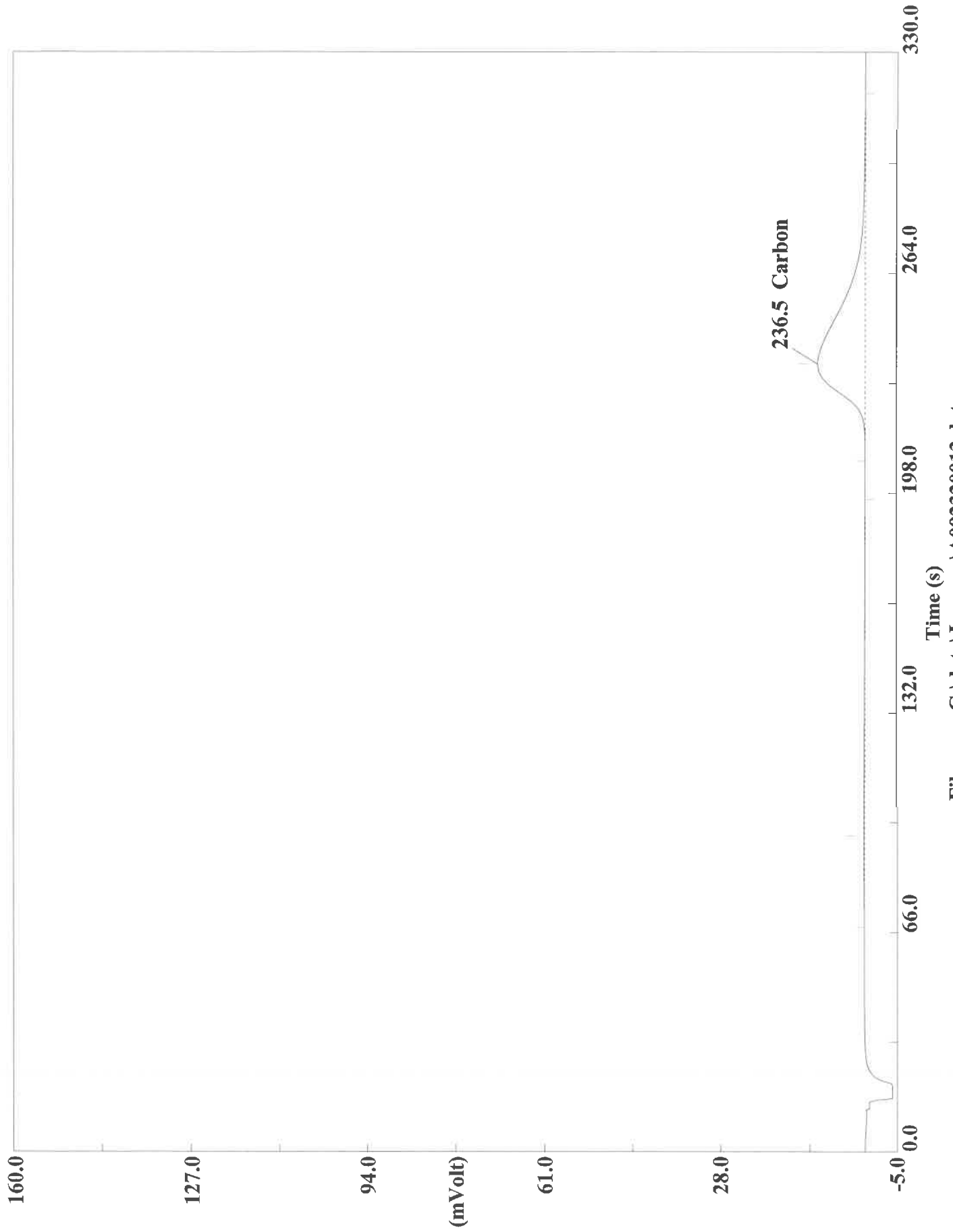
Page: 1 Sample: 10,000 KHP CT#3785364 (A092320012)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320012
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:40 Printed : 9/23/2020 14:46
Sample ID : 10,000 KHP CT#3785364 (# 7)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 200

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.1000	242	1048607	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320013.dat
Sample name :25,000 KHP CT#3785363 Analysed :09/23/2020 14:46

Eager 300 Report

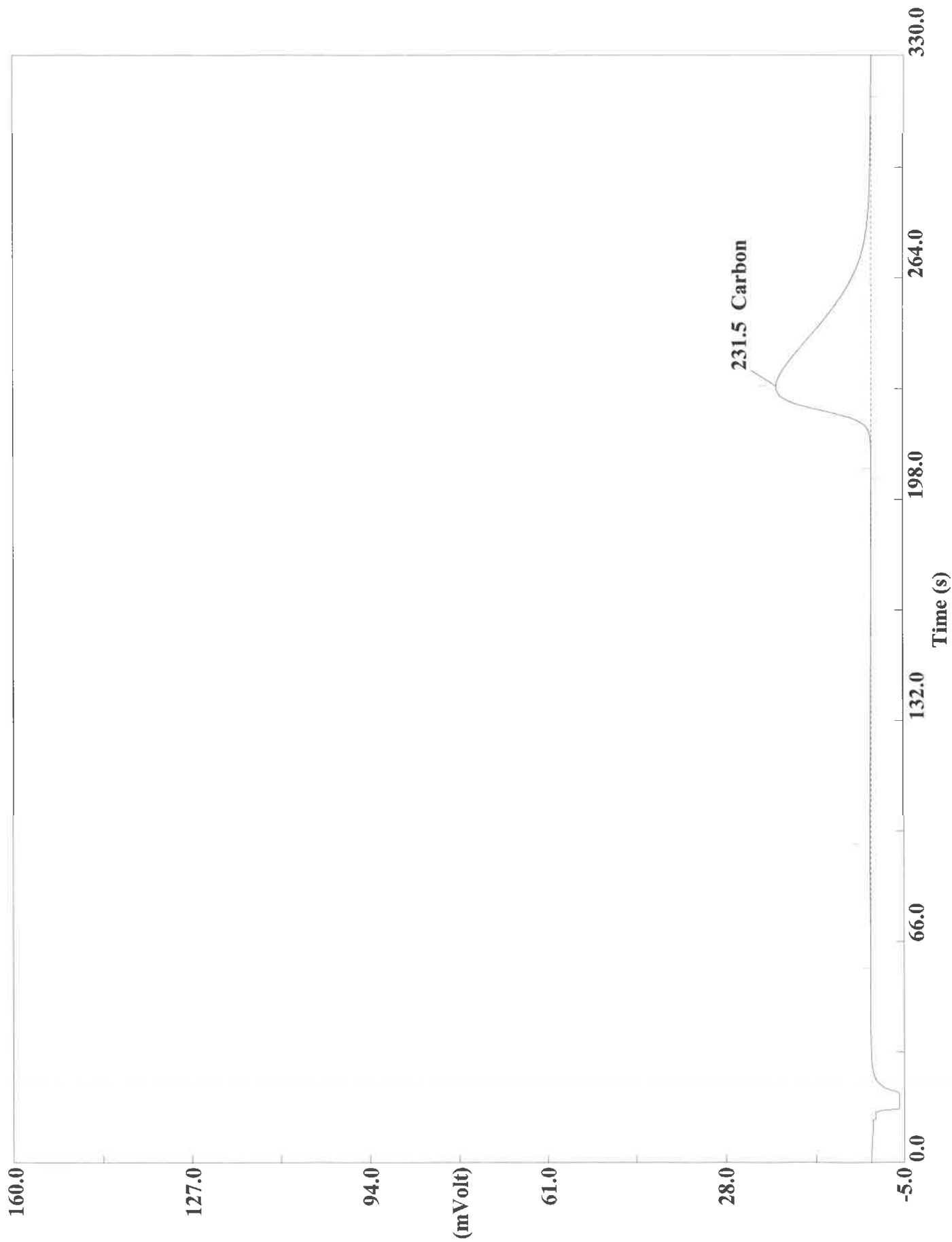
Page: 1 Sample: 25,000 KHP CT#3785363 (A092320013)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320013
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:46 Printed : 9/23/2020 14:51
Sample ID : 25,000 KHP CT#3785363 (# 8)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 50

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0000	237	2561375	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320014.dat
Sample name :50,000 KHP CT#3785363 Analysed :09/23/2020 14:51

Eager 300 Report

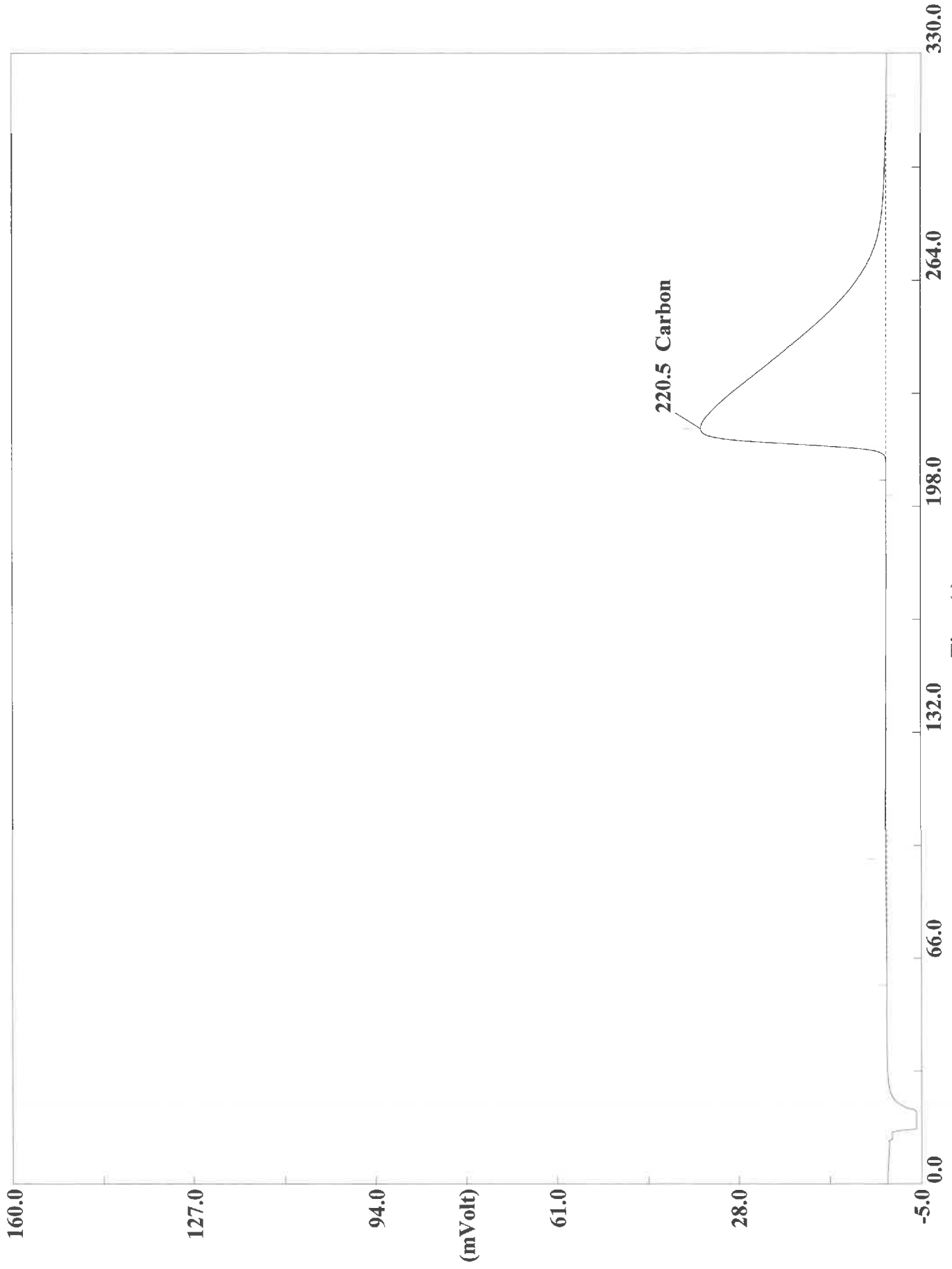
Page: 1 Sample: 50,000 KHP CT#3785363 (A092320014)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320014
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:51 Printed : 9/23/2020 14:57
Sample ID : 50,000 KHP CT#3785363 (# 9)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0000	232	5128187	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320015.dat
Sample name : 100,000 KHP CT#3785363 Analysed : 09/23/2020 14:57

Eager 300 Report

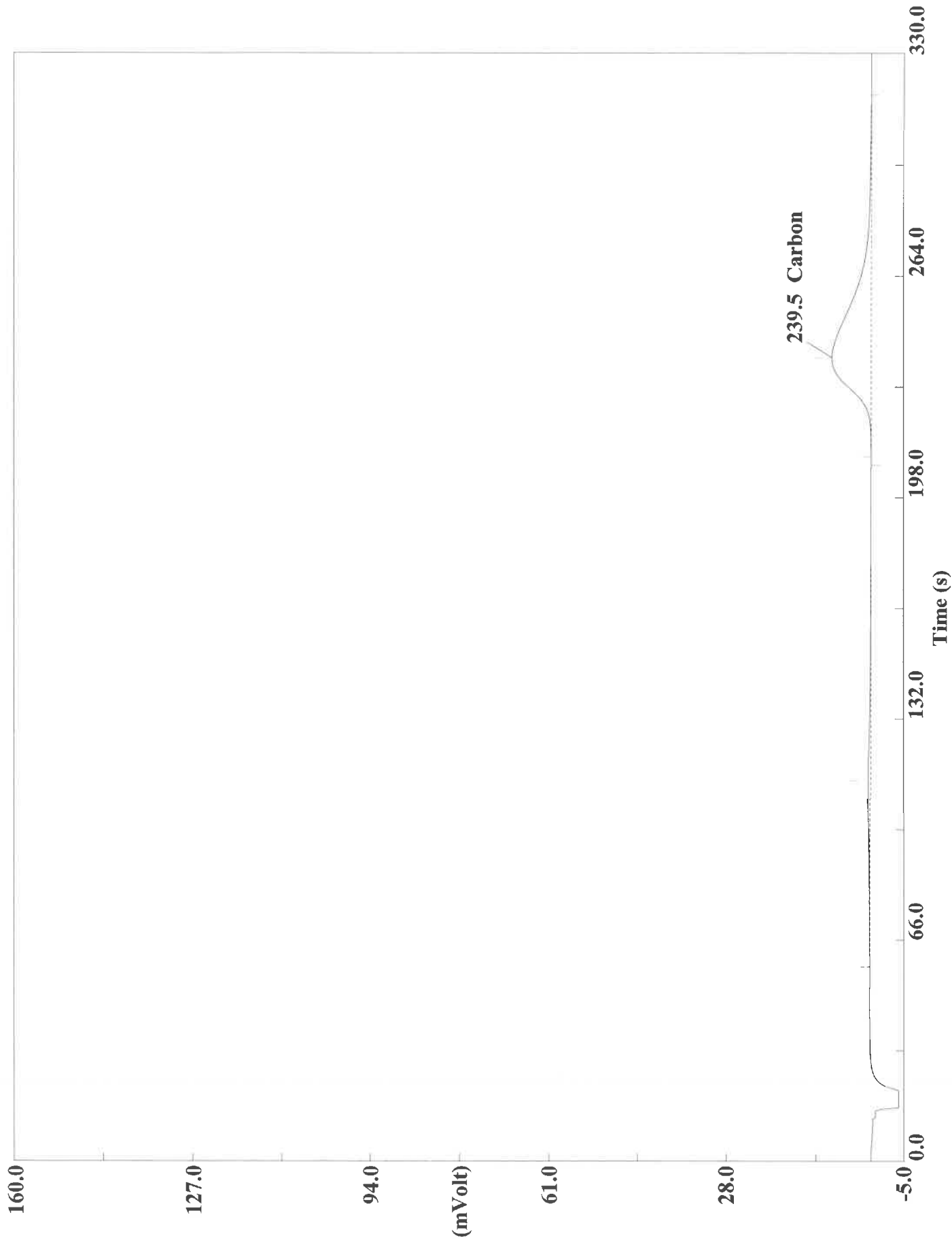
Page: 1 Sample: 100,000 KHP CT#3785363 (A092320015)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320015
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 14:57 Printed : 9/23/2020 15:03
Sample ID : 100,000 KHP CT#3785363 (# 10)
Instrument N. : Instrument #1
Analysis Type : Calibration (Area) Sample weight : 200

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	1.0000	221	10456420	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320016.dat
Sample name :ICV 37,810 KHP CT#3742673 Analysed :09/23/2020 15:03

Eager 300 Report

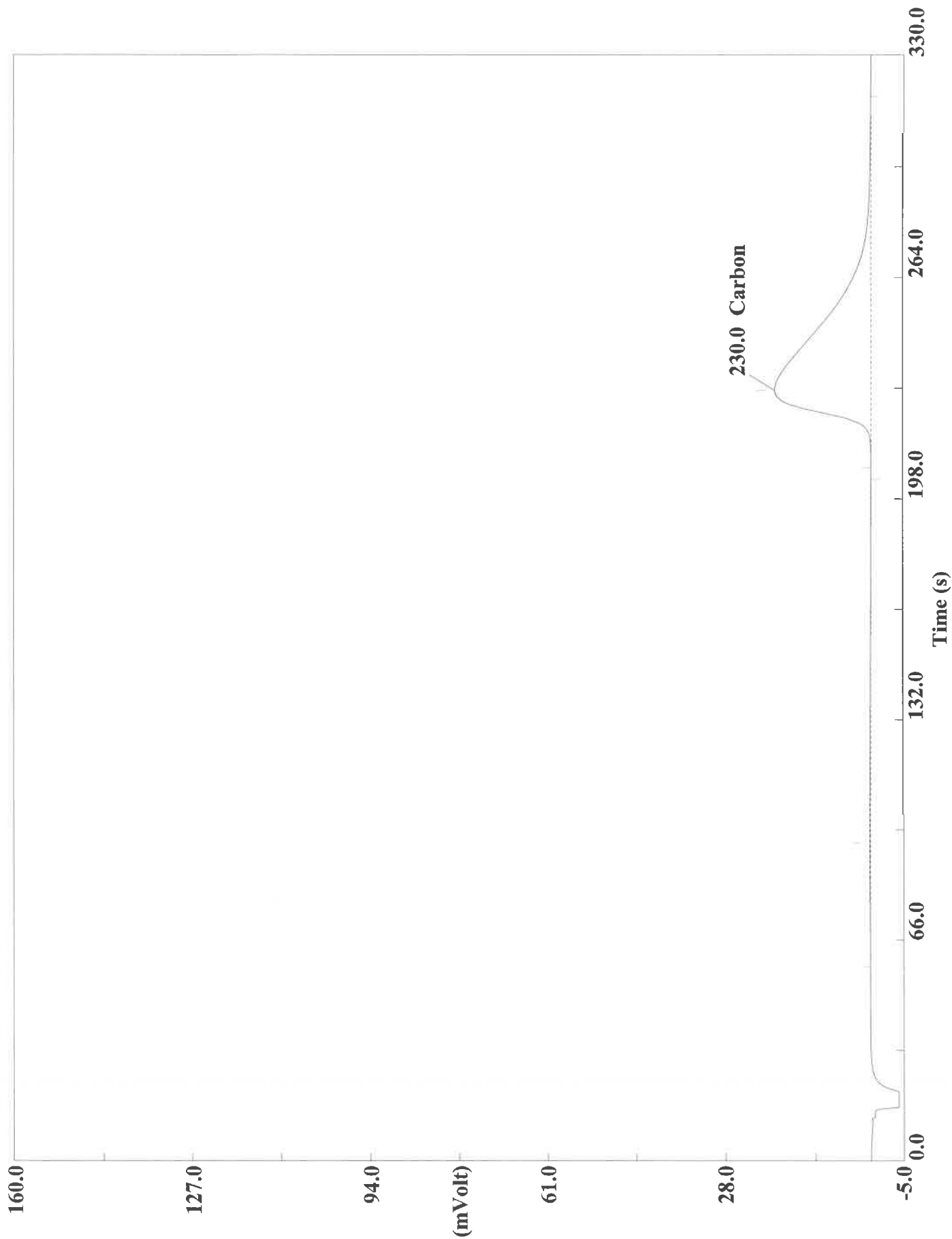
Page: 1 Sample: ICV 37,810 KHP CT#3742673 (A092320016)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320016
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 15:03 Printed : 9/23/2020 15:08
Sample ID : ICV 37,810 KHP CT#3742673 (# 11)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 11.6

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	3.4865	240	2087987	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320017.dat
Sample name :CCV Analysed :09/23/2020 15:08

Eager 300 Report

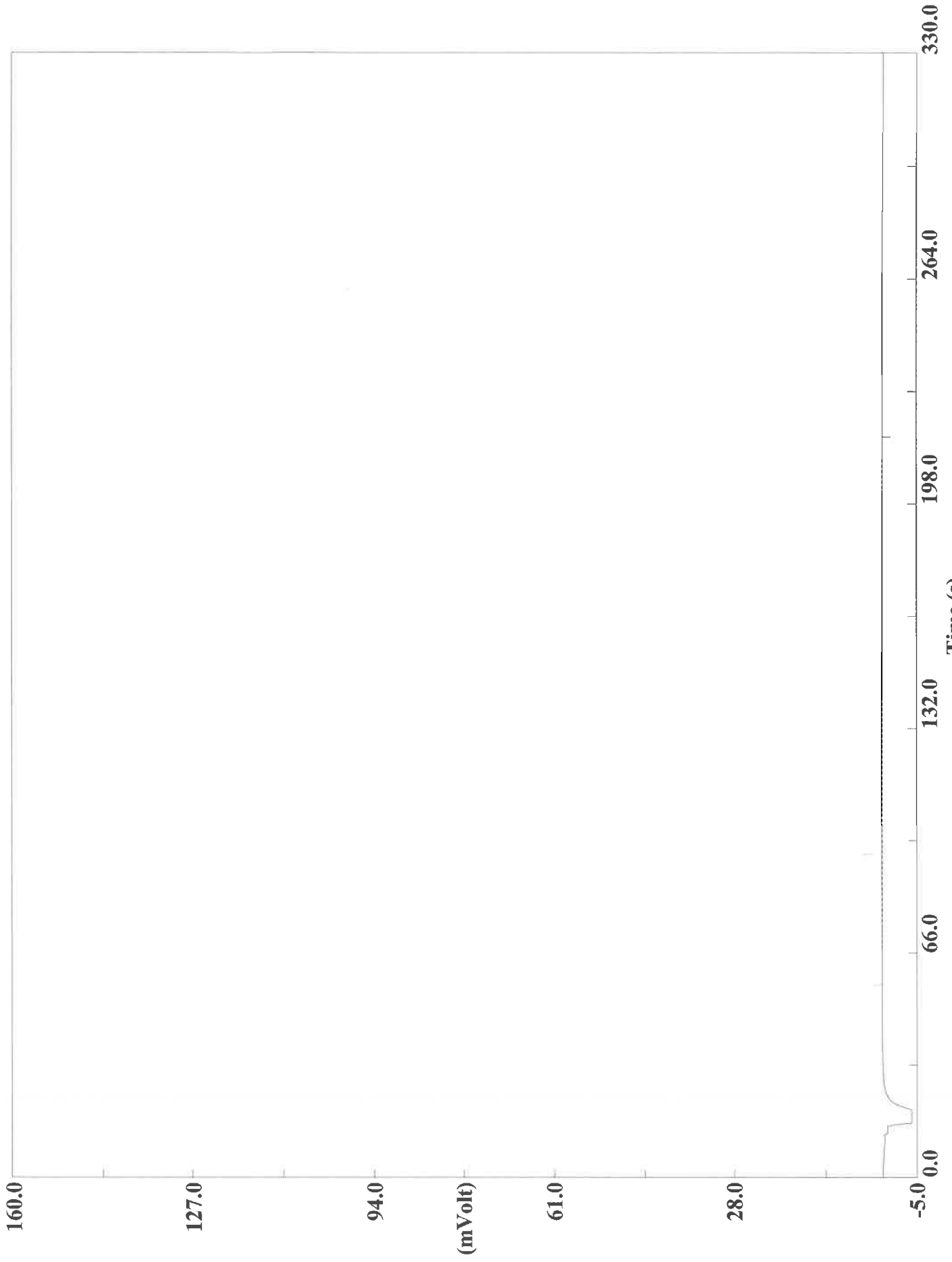
Page: 1 Sample: CCV (A092320017)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320017
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 15:08 Printed : 9/23/2020 15:14
Sample ID : CCV (# 12)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 100

Calib. method : using 'Least Squares to Linear fit'

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
Carbon	0.9923	230	5157272	RS	1.000000	

NO MANUAL INTEGRATIONS PERFORMED DLF 09/23/20



Filename C:\data\January\A092320018.dat
Sample name :CCB Analysed :09/23/2020 15:14

Eager 300 Report

Page: 1 Sample: CCB (A092320018)

Method Name : Lloyd Kahn
Method File : C:\data\January\092320A.mth
Chromatogram : A092320018
Operator ID : DON FERGUSON Company Name : Eurofins TA Pitt
Analysed : 09/23/2020 15:14 Printed : 9/23/2020 15:20
Sample ID : CCB (# 13)
Instrument N. : Instrument #1
Analysis Type : UnkNown (Area) Sample weight : 20

Calib. method : using 'Least Squares to Linear fit'

!!! Warning missing one or more peaks.

Element Name	%	Ret.Time	Area	BC	Area ratio	K factor
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Shipping and Receiving Documents




Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts.
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 1 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03.***	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	M/MS/SD	Methods for Analysis	RUSH
1	ES-02_091620_SED_00-01	09/16/20 10:18	SED	N	N	 180-111287 Chain of Custody	STANDARD - 14 days
2	ES-02_091620_SED_01-03	09/16/20 10:19	SED	N	N		5 Days
3	ES-02_091620_SED_03-05	09/16/20 10:20	SED	N	N		72 Hour
4	FRB-02_091520_SED_00-01	09/15/20 16:00	SED	N	N		48 Hour
5	FRB-02_091520_SED_01-03	09/15/20 16:05	SED	N	N		
6	FRB-02_091520_SED_03-05	09/15/20 16:10	SED	N	N		
7	VN-02-04_091620_SED_00-01	09/16/20 09:40	SED	N	N		
8	VN-02-04_091620_SED_01-03	09/16/20 09:41	SED	N	N		
9	VN-02-04_091620_SED_03-05	09/16/20 09:42	SED	N	N		
10	VN-MU3-GC-1_091620_SED_00-01	09/16/20 09:58	SED	N	N		
11	VN-MU3-GC-1_091620_SED_01-03	09/16/20 09:59	SED	N	N		
12	VN-MU3-GC-1_091620_SED_03-05	09/16/20 10:00	SED	N	N		

Sampler's Signature: *Carrie Gamber* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Carrie Gamber Wood EIS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *[Signature]* Date: 9/23/20 Time: 8:00

Relinquished By/Affiliation: *[Signature]* Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use

Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

Cooler Temperature at receipt: _____ °C

NUMBER OF COOLERS SENT: 3



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts.
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 2 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03.***	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Methods for Analysis					TOTAL BOTTLES
						STANDARD - 14 days	48 Hour	72 Hour	5 Days	HOLD All Analyses	
1	ADD-01_091620_SED_00-01	09/16/20 11:45	SED	N	N	X					1
2	ADD-01_091620_SED_01-03	09/16/20 11:50	SED	N	N	X					1
3	ADD-01_091620_SED_03-05	09/16/20 12:00	SED	N	N	X					1
4	ADD-02_091620_SED_00-01	09/16/20 14:05	SED	N	N	X					1
5	ADD-02_091620_SED_01-03	09/16/20 14:20	SED	N	N	X					1
6	ADD-02_091620_SED_03-05	09/16/20 14:30	SED	N	N	X					1
7	OR-T1-C3_091620_SED_00-01	09/16/20 10:56	SED	N	N	X					1
8	OR-T1-C3_091620_SED_01-03	09/16/20 10:57	SED	N	Y	X					1
9	OR-T1-C3_091620_SED_03-05	09/16/20 10:58	SED	N	Y	X					1
10	OR-T1-C5_091620_SED_00-01	09/16/20 10:43	SED	N	N	X					1
11	OR-T1-C5_091620_SED_01-03	09/16/20 10:44	SED	N	N	X					1
12	OR-T1-C5_091620_SED_03-05	09/16/20 10:45	SED	N	N	X					1

Extra volume for ms/msd
Extra volume for ms/msd

Sampler's Signature: *Calvin Seelye* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Caroline Godfrey Wood EIS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *DMY* Date: 9/23/20 Time: 8:00

Relinquished By/Affiliation: *DMY* Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use

Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

NUMBER OF COOLERS SENT: 3

Cooler Temperature at receipt: _____ °C



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts.
301 Alpha Drive R1DC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020

COC #:

PAGE: 3 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Methods for Analysis						RUSH	
						STANDARD - 14 days	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses		
1	BU-01-01_091720_SED_00-01	09/17/20 15:21	SED	N	N	X						1	
2	BU-01-01_091720_SED_00-01_DUP	09/17/20 15:54	SED	FD	N	X						1	
3	BU-01-01_091720_SED_01-03	09/17/20 15:23	SED	N	N	X						1	
4	BU-01-01_091720_SED_01-03_DUP	09/17/20 15:56	SED	FD	N	X						1	
5	BU-01-01_091720_SED_03-05	09/17/20 15:25	SED	N	N	X						1	
6	BU-01-01_091720_SED_03-05_DUP	09/17/20 15:58	SED	FD	N	X						1	
7	MMSW-C_091720_SED_00-01	09/17/20 10:30	SED	N	N	X						1	
8	MMSW-C_091720_SED_01-03	09/17/20 10:40	SED	N	N	X						1	
9	MMSW-C_091720_SED_03-05	09/17/20 10:50	SED	N	N	X						1	
10	OV-04_091620_SED_00-01	09/16/20 16:45	SED	N	N	X						1	
11	OV-04_091620_SED_01-03	09/16/20 17:00	SED	N	N	X						1	
12	OV-04_091620_SED_03-05	09/16/20 17:15	SED	N	N	X						1	

Sampler's Signature: *Caroline Godfrey* **Date:** 9/22/20 **Time:** 15:45

Relinquished By/Affiliation: *Caroline Godfrey Wood E&IS* **Date:** 9/22/20 **Time:** 17:00

Received By: *Fed Ex* **Date:** 9/22/20 **Time:** 17:00

Relinquished By/Affiliation: *[Signature]* **Date:** 9/23/20 **Time:** 8:00

Received By: *[Signature]* **Date:** 9/23/20 **Time:** 8:00

Relinquished By/Affiliation: *[Signature]* **Date:** **Time:**

Received By (LAB): **Date:** **Time:**

For Lab Use
Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____
Cooler Temperature at receipt: _____ °C

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

NUMBER OF COOLERS SENT: 3



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 4 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Methods for Analysis					RUSH		
						48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses			
1	OB-01_091720_SED_00-01	09/17/20 16:25	SED	N	N	X						1	
2	OB-01_091720_SED_01-03	09/17/20 16:27	SED	N	Y	X						1	
3	OB-01_091720_SED_03-05	09/17/20 16:29	SED	N	Y	X						1	
4	OR-T1-C1_091720_SED_00-01	09/17/20 17:00	SED	N	N	X						1	
5	OR-T1-C1_091720_SED_00-01_DUP	09/17/20 17:40	SED	FD	N	X						1	
6	OR-T1-C1_091720_SED_01-03	09/17/20 17:15	SED	N	N	X						1	
7	OR-T1-C1_091720_SED_01-03_DUP	09/17/20 17:45	SED	FD	N	X						1	
8	OR-T1-C1_091720_SED_03-05	09/17/20 17:30	SED	N	N	X						1	
9	PBR-28_091720_SED_00-01	09/17/20 17:45	SED	N	N	X						1	
10	W-17-N_091720_SED_00-01	09/17/20 16:56	SED	N	N	X						1	
11	W-17-N_091720_SED_01-03	09/17/20 16:58	SED	N	N	X						1	
12	W-17-N_091720_SED_03-05	09/17/20 17:00	SED	N	N	X						1	

Lab Phone# (412) 963-2428
Denise King
508-789-1738
Sediment Monitoring

TOC Lloyd-Kahn
X
X
X
X
X
X
X
X
X
X
X
X

Extra volume for MS/MSD
Extra volume for MS/MSD

Sampler's Signature: *Caroline Godfrey* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Caroline Godfrey Wood E&IS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *[Signature]* Date: 9/23/20 Time: 8:00

Relinquished By/Affiliation: *[Signature]* Date: 9/23/20 Time: 8:00

Received By (LAB): _____ Date: _____ Time: _____

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

NUMBER OF COOLERS SENT: 3

For Lab Use
Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____
Cooler Temperature at receipt: _____ °C



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts.
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 5 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03 ***	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Methods for Analysis						RUSH	
						STANDARD - 14 days	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses		
1	OR-T1-C1_091720_SED_03-05_DUP	09/17/20 17:50	SED	FD	N	X						1	
2	OV-01_091820_SED_00-01	09/18/20 10:15	SED	N	N	X						1	
3	OV-01_091820_SED_01-03	09/18/20 10:20	SED	N	N	X						1	
4	OV-01_091820_SED_03-05	09/18/20 10:25	SED	N	N	X						1	
5	PBR-28_091720_SED_00-01_DUP	09/17/20 18:25	SED	FD	N	X						1	
6	PBR-28_091720_SED_01-03	09/17/20 18:00	SED	N	N	X						1	
7	PBR-28_091720_SED_01-03_DUP	09/17/20 18:35	SED	FD	N	X						1	
8	PBR-28_091720_SED_03-05	09/17/20 18:15	SED	N	N	X						1	
9	PBR-28_091720_SED_03-05_DUP	09/17/20 18:45	SED	FD	N	X						1	
10	W-22-Mid_091820_SED_00-01	09/18/20 10:00	SED	N	N	X						1	
11	W-22-Mid_091820_SED_01-03	09/18/20 10:10	SED	N	N	X						1	
12	W-22-Mid_091820_SED_03-05	09/18/20 10:20	SED	N	N	X						1	

Sampler's Signature: *Calvin Godfrey* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Calvin Godfrey Wood E&IS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *Shirley Emery* Date: 9/23/20 Time: 8:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use
Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

NUMBER OF COOLERS SENT: 3

Cooler Temperature at receipt: _____ °C



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts.
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 6 OF 12

Project Name: Penobscot River 2020
Project Number: 3617207486.03.***
Project Manager: Rod Pendleton

Project Contact: Denise King
Phone Number: 508-789-1738
Project Phase: Sediment Monitoring

Bill To: Denise King, Wood E&IS
271 Mill Rd
Chelmsford, MA 01824

Disposal Instructions: LAB
Shipment Method: FED EX
Waybill Number: N/A

Sample Information		Date & Time Sampled		Matrix	Sample Type	Methods for Analysis				RUSH				
No.	Sample ID					STANDARD - 14 days	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses			
1	MM-T2-C1_091820_SED_00-01	09/18/20 12:35	SED	N	X					1				
2	MM-T2-C1_091820_SED_01-03	09/18/20 12:45	SED	N	X					1				
3	MM-T2-C1_091820_SED_03-05	09/18/20 12:55	SED	N	X					1				
4	MM-T5-C1_091820_SED_00-01	09/18/20 13:10	SED	N	X					1				
5	MM-T5-C1_091820_SED_01-03	09/18/20 13:20	SED	N	X					1				
6	MM-T5-C1_091820_SED_03-05	09/18/20 13:30	SED	N	X					1				
7	OB-05_091820_SED_00-01	09/18/20 15:40	SED	N	X					1				
8	OB-05_091820_SED_01-03	09/18/20 15:42	SED	N	X					1				
9	OB-05_091820_SED_03-05	09/18/20 15:44	SED	N	X					1				
10	W-17-Intertidal_091820_SED_00-01	09/18/20 16:06	SED	N	X					1				
11	W-17-Intertidal_091820_SED_01-03	09/18/20 16:08	SED	N	X					1				
12	W-17-Intertidal_091820_SED_03-05	09/18/20 16:10	SED	N	X					1				

MS/MSD
TOC Lloyd-Kahn

Extra volume per ms/msd

Sampler's Signature: *Carrie Gamber* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Caroline Galtrey Wood EIS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *Denise King* Date: 9/23/20 Time: 8:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use
Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Comments:
X-Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

Cooler Temperature at receipt: _____ °C

NUMBER OF COOLERS SENT: 3



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts.
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 7 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information				Methods for Analysis				RUSH			
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	STANDARD - 14 days	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses
1	FF-08-02_091820_SED_00-01	09/18/20 16:24	SED	N	N	X				1	
2	FF-08-02_091820_SED_00-01_DUP	09/18/20 17:06	SED	FD	N	X				1	
3	FF-08-02_091820_SED_01-03	09/18/20 16:26	SED	N	N	X				1	
4	FF-08-02_091820_SED_01-03_DUP	09/18/20 17:08	SED	FD	N	X				1	
5	FF-08-02_091820_SED_03-05	09/18/20 16:28	SED	N	N	X				1	
6	FF-08-02_091820_SED_03-05_DUP	09/18/20 17:10	SED	FD	N	X				1	
7	W-17-Low_091820_SED_00-01	09/18/20 17:33	SED	N	N	X				1	
8	W-17-Low_091820_SED_01-03	09/18/20 17:35	SED	N	N	X				1	
9	W-17-Low_091820_SED_03-05	09/18/20 17:37	SED	N	N	X				1	
10	W-61-Intertidal_091820_SED_00-01	09/18/20 18:20	SED	N	N	X				1	
11	W-61-Intertidal_091820_SED_01-03	09/18/20 18:22	SED	N	N	X				1	
12	W-61-Intertidal_091820_SED_03-05	09/18/20 18:24	SED	N	N	X				1	

Sampler's Signature: *Caroline Gabbrey Wood EIS* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Caroline Gabbrey Wood EIS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *amy imoin* Date: 9/23/20 Time: 8:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use

Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Comments:
X-Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

Cooler Temperature at receipt: _____ °C

NUMBER OF COOLERS SENT: 3



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts.
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF

DATE: 9/22/2020
COC #: _____
PAGE: 8 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Methods for Analysis					TOTAL BOTTLES
						STANDARD - 14 days	48 Hour	72 Hour	5 Days	HOLD All Analyses	
1	E-01-01_091920_SED_00-01	09/19/20 13:40	SED	N	N	X					1
2	E-01-01_091920_SED_00-01_DUP	09/19/20 14:45	SED	FD	N	X					1
3	E-01-01_091920_SED_01-03	09/19/20 13:43	SED	N	N	X					1
4	E-01-01_091920_SED_01-03_DUP	09/19/20 14:47	SED	FD	N	X					1
5	E-01-01_091920_SED_03-05	09/19/20 13:45	SED	N	N	X					1
6	E-01-01_091920_SED_03-05_DUP	09/19/20 14:49	SED	FD	N	X					1
7	E-01-03_091920_SED_00-01	09/19/20 15:15	SED	N	N	X					1
8	E-01-03_091920_SED_01-03	09/19/20 15:17	SED	N	N	X					1
9	E-01-03_091920_SED_03-05	09/19/20 15:19	SED	N	N	X					1
10	SVE-01_091820_SED_00-01	09/18/20 18:42	SED	N	N	X					1
11	SVE-01_091820_SED_01-03	09/18/20 18:44	SED	N	N	X					1
12	SVE-01_091820_SED_03-05	09/18/20 18:46	SED	N	N	X					1

Sampler's Signature: *Caroline Galtrey* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Caroline Galtrey Wood EIS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *Carrie Gamber* Date: 9/22/20 Time: 8:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use

Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

Cooler Temperature at receipt: _____ °C

NUMBER OF COOLERS SENT: 3



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Atten: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 9 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486 03 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Methods for Analysis				RUSH	TOTAL BOTTLES
						STANDARD - 14 days	48 Hour	72 Hour	5 Days		
1	CJ-04_092020_SED_00-01	09/20/20 12:35	SED	N	N	X					1
2	CJ-04_092020_SED_01-03	09/20/20 12:37	SED	N	N	X					1
3	E-01-04_091920_SED_00-01	09/19/20 15:50	SED	N	N	X					1
4	E-01-04_091920_SED_01-03	09/19/20 15:52	SED	N	N	X					1
5	E-01-04_091920_SED_03-05	09/19/20 15:54	SED	N	N	X					1
6	ES-FP_091920_SED_00-01	09/19/20 16:30	SED	N	N	X					1
7	ES-FP_091920_SED_01-03	09/19/20 16:32	SED	N	N	X					1
8	ES-FP_091920_SED_030-036	09/19/20 16:34	SED	N	N	X					1
9	L9-45_092020_SED_00-01	09/20/20 12:02	SED	N	N	X					1
10	L9-45_092020_SED_01-03	09/20/20 12:04	SED	N	N	X					1
11	L9-45_092020_SED_03-05	09/20/20 12:06	SED	N	N	X					1
12	OL-01_091920_SED_00-03	09/19/20 16:54	SED	N	N	X					1

Sampler's Signature: *Carrie Gamber* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Carrie Gamber Wood E&IS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *Emily Lomph* Date: 9/23/20 Time: 800

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use
Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

Cooler Temperature at receipt: _____ °C
NUMBER OF COOLERS SENT: 3



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts.
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 10 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Methods for Analysis					TOTAL BOTTLES
						STANDARD - 14 days	48 Hour	72 Hour	5 Days	HOLD All Analyses	
1	BO-04_092120_SED_00-02	09/21/20 11:00	SED	N	N	X					1
2	CJ-04_092020_SED_03-05	09/20/20 12:39	SED	N	N	X					1
3	MM-T2-C3_092120_SED_00-01	09/21/20 11:50	SED	N	N	X					1
4	W-61-High_092020_SED_00-01	09/20/20 18:15	SED	N	N	X					1
5	W-61-High_092020_SED_01-03	09/20/20 18:17	SED	N	N	X					1
6	W-61-High_092020_SED_03-05	09/20/20 18:19	SED	N	N	X					1
7	W-61-Low_092020_SED_00-01	09/20/20 16:55	SED	N	N	X					1
8	W-61-Low_092020_SED_01-03	09/20/20 16:57	SED	N	N	X					1
9	W-61-Low_092020_SED_03-05	09/20/20 16:59	SED	N	N	X					1
10	W-61-Mid_092020_SED_00-01	09/20/20 17:34	SED	N	N	X					1
11	W-61-Mid_092020_SED_01-03	09/20/20 17:36	SED	N	N	X					1
12	W-61-Mid_092020_SED_03-05	09/20/20 17:38	SED	N	N	X					1

Sampler's Signature: *Caroline Gamber* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Caroline Gamber Wood E&IS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *[Signature]* Date: 9/23/20 Time: 8:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use
Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

Cooler Temperature at receipt: _____ °C
NUMBER OF COOLERS SENT: 3



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 11 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Methods for Analysis				RUSH	TOTAL BOTTLES
						48 Hour	72 Hour	5 Days	HOLD All Analyses		
1	FRB-01_092120_SED_00-01	09/21/20 14:52	SED	N	N	X	X	X	X	X	1
2	FRB-01_092120_SED_01-03	09/21/20 14:54	SED	N	N	X	X	X	X	X	1
3	FRB-01_092120_SED_03-05	09/21/20 14:56	SED	N	N	X	X	X	X	X	1
4	MM-T2-C3_092120_SED_01-03	09/21/20 12:00	SED	N	Y	X	X	X	X	X	1
5	MM-T2-C3_092120_SED_03-05	09/21/20 12:10	SED	N	Y	X	X	X	X	X	1
6	MM-T5-C3_092120_SED_00-01	09/21/20 13:10	SED	N	N	X	X	X	X	X	1
7	MM-T5-C3_092120_SED_01-03	09/21/20 13:20	SED	N	N	X	X	X	X	X	1
8	MM-T5-C3_092120_SED_03-05	09/21/20 13:30	SED	N	N	X	X	X	X	X	1
9	W-17-High_092120_SED_00-01	09/21/20 14:35	SED	N	N	X	X	X	X	X	1
10	W-17-High_092120_SED_01-03	09/21/20 14:45	SED	N	N	X	X	X	X	X	1
11	W-17-High_092120_SED_03-05	09/21/20 14:55	SED	N	N	X	X	X	X	X	1
12	W-17-Mid_092120_SED_00-01	09/21/20 15:10	SED	N	N	X	X	X	X	X	1

Extra volume for ms/msd
Extra volume for ms/msd

TOC Lloyd-Kahn

Sampler's Signature: *Caroline Godfrey* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Caroline Godfrey Wood EIS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *Edmy* Date: 9/23/20 Time: 8:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use
Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

Cooler Temperature at receipt: _____ °C
NUMBER OF COOLERS SENT: 3



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins Pitts.
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Attn: Carrie Gamber
Lab Phone# (412) 963-2428

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 12 OF 12

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.03 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Sediment Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Methods for Analysis					TOTAL BOTTLES
						STANDARD - 14 days	48 Hour	72 Hour	5 Days	HOLD All Analyses	
1	MM-T1-C2_092120_SED_00-01	09/21/20 16:40	SED	N	N	X					1
2	MM-T1-C2_092120_SED_01-03	09/21/20 16:50	SED	N	N	X					1
3	MM-T1-C2_092120_SED_03-05	09/21/20 17:00	SED	N	N	X					1
4	W-17-Mid_092120_SED_01-03	09/21/20 15:20	SED	N	N	X					1
5	W-17-Mid_092120_SED_03-05	09/21/20 15:30	SED	N	N	X					1
6											
7											
8											
9											
10											
11											
12											

Sampler's Signature: *Caroline Gadbrey* Date: 9/22/20 Time: 15:45

Relinquished By/Affiliation: *Caroline Gadbrey Wood EIS* Date: 9/22/20 Time: 17:00

Received By: *Fed Ex* Date: 9/22/20 Time: 17:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By: *Denise King* Date: 9/23/20 Time: 8:00

Relinquished By/Affiliation: _____ Date: _____ Time: _____

Received By (LAB): _____ Date: _____ Time: _____

For Lab Use

Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Cooler Temperature at receipt: _____ °C

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
TOC Frozen until Shipment

NUMBER OF COOLERS SENT: 3

ORIGIN ID: LEWA (207) 947-6835
THOMAS GERHARD
WOOD E&S
511 CONGRESS STREET
STE 200
PORTLAND, ME 04101
UNITED STATES US

SHIP DATE: 22SEP20
ACT WGT: 50.00 LB
CAD: 101794853/NET14280
DRY ICE: 1.82 KG
BILL SENDER

TO **CARRIE GAMBER**
EUROFINS - PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: 3617204036 03 ****

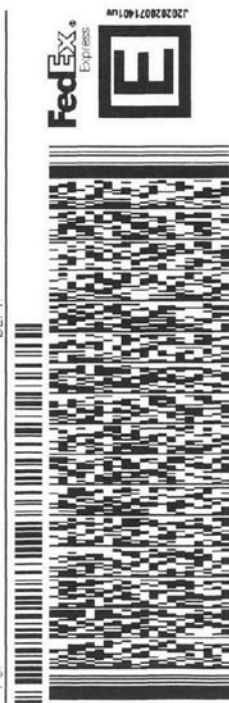
(412) 963-2428

INV

PC

DEPT

56BJ675+5/B7/56



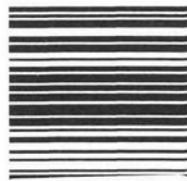
WED - 23 SEP 8:30A
FIRST OVERNIGHT
ICE
15238
PIT
PA-US

1 of 3
TRK# 7715 9504 9923
0201
MASTER

X1 AGCA

Uncorrected temp -25 °C
Thermometer ID 19

CF 0 Initials JB



PT-WI-SR-001 effective 11/8/18

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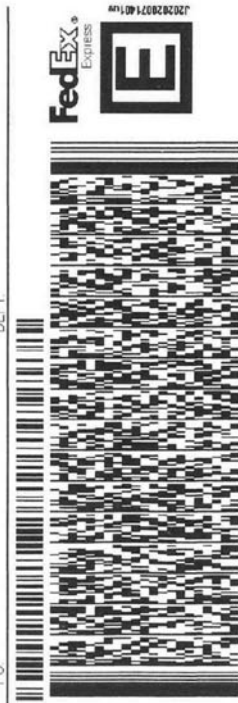


ORIGIN ID: LWA (207) 947-6935
THOMAS GERHARD
WOOD EMB
511 CONGRESS STREET
STE 200
PORTLAND, ME 04101
UNITED STATES US

SHIP DATE: 22SEP20
ACTWGT: 50.00 LB
CAD: 101794853/NET4280
DRY ICE: 1.82 KG
BILL SENDER

TO **CARRIE GAMBER**
EUROFINS - PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-2428 REF: 3617204066.00 ***
INW
PO DEPT

66806/1545/B/56



WED - 23 SEP 8:30A
FIRST OVERNIGHT
ICE
15238
PIT
PA-US

2 of 3
MPS# 7715 9505 0386
0263
Mstr# 7715 9504 9923

X1 AGCA

Thermometer ID
Uncorrected temp
-24
14
°C
CF 0 Initials B

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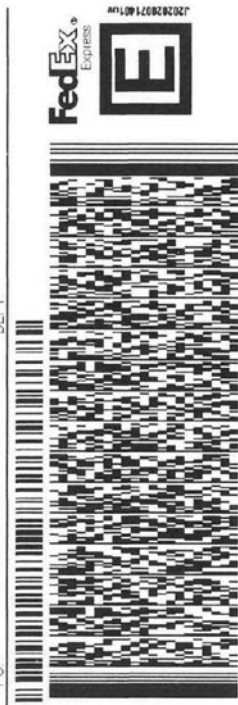
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ORIGIN ID: LEWA (207) 947-6935
THOMAS GERHARD
WOOD E&S
511 CONGRESS STREET
STE 200
PORTLAND, ME 04101
UNITED STATES US

SHIP DATE: 22SEP20
ACTWGT: 50.00 LB
CAD: 101794853MINET4280
DRY ICE: 1.82 KG
BILL SENDER

TO **CARRIE GAMBER**
EUROFINS - PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-2428 REF: 3617204066.03 ****
INVT
PO DEPT

968U61545B/56



WED - 23 SEP 8:30A
FIRST OVERNIGHT
ICE
15238
PA-US
PIT

MPS# 7715 9505 0055
0263
Mstr# 7715 9504 9923
0201

X1 AGCA



Uncorrected temp
Thermometer ID
CF Initials

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Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 180-111287-1

Login Number: 111287
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX D-2 WATER QUALITY LARS

ANALYTICAL REPORT

Job Number: 570-27031-1

Job Description: 0D00074

For:

Eurofins Frontier Global Sciences LLC
5755 8th Street E
Tacoma, WA 98424

Attention: Mr. Patrick Garcia-Strickland

Approved for release.
Ritu Sedha
Project Manager I
5/15/2020 2:18 PM

Designee for
Carla Hollowell, Project Manager I
7440 Lincoln Way, Garden Grove, CA, 92841
(714)895-5494
carlahollowell@eurofinsus.com
05/15/2020

cc: ICO AP
Amy Goodall

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins Calscience LLC

7440 Lincoln Way, Garden Grove, CA 92841

Tel (714) 895-5494 Fax (714) 894-7501 www.EurofinsUS.com

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Definitions/Glossary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0D00074

Job ID: 570-27031-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Eurofins Frontier Global Sciences LLC

Project: 0D00074

Report Number: 570-27031-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 04/30/2020 at 10:30 AM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.8 degrees Celsius.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2 degrees Celsius of the required temperature or method specified range. For samples with a specified temperature of 4 degrees Celsius, samples with a temperature ranging from just above freezing temperature of water to 6 degrees Celsius shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

SEDIMENT CONCENTRATION

Samples WQ1b-C_042720_SW_10 TOTAL (570-27031-1), WQ2-C_042720_SW_10 TOTAL (570-27031-2) and WQ3-L_042720_SW_10 TOTAL (570-27031-3) were analyzed for Sediment Concentration in accordance with ASTM D3977B. The samples were analyzed on 05/13/2020.

The following samples were analyzed outside of analytical holding time due to analyst scheduling oversight: WQ1b-C_042720_SW_10 TOTAL (570-27031-1), WQ1b-C_042720_SW_10 TOTAL (570-27031-1[DU]), WQ2-C_042720_SW_10 TOTAL (570-27031-2) and WQ3-L_042720_SW_10 TOTAL (570-27031-3).

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0D00074

Job ID: 570-27031-1

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL

Lab Sample ID: 570-27031-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Sediment Concentration (mg/L)	3.38	H	0.994	mg/L	1		D3977	Total/NA

Client Sample ID: WQ2-C_042720_SW_10 TOTAL

Lab Sample ID: 570-27031-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Sediment Concentration (mg/L)	10.1	H	0.940	mg/L	1		D3977	Total/NA

Client Sample ID: WQ3-L_042720_SW_10 TOTAL

Lab Sample ID: 570-27031-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Sediment Concentration (mg/L)	8.06	H	0.949	mg/L	1		D3977	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0D00074

Job ID: 570-27031-1

General Chemistry

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL

Date Collected: 04/27/20 14:25

Date Received: 04/30/20 10:30

Lab Sample ID: 570-27031-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	3.38	H	0.994	mg/L			05/13/20 13:13	1

Client Sample ID: WQ2-C_042720_SW_10 TOTAL

Date Collected: 04/27/20 15:45

Date Received: 04/30/20 10:30

Lab Sample ID: 570-27031-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	10.1	H	0.940	mg/L			05/13/20 13:13	1

Client Sample ID: WQ3-L_042720_SW_10 TOTAL

Date Collected: 04/27/20 17:00

Date Received: 04/30/20 10:30

Lab Sample ID: 570-27031-3

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	8.06	H	0.949	mg/L			05/13/20 13:13	1

Default Detection Limits

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0D00074

Job ID: 570-27031-1

General Chemistry

Analyte	RL	Units
Sediment Concentration (mg/L)	1.00	1.00 mg/L

QC Sample Results

Client: Eurofins Frontier Global Sciences LLC
 Project/Site: 0D00074

Job ID: 570-27031-1

Method: D3977 - Sediment Concentration in Water Samples

Lab Sample ID: MB 570-68837/1
Matrix: Water
Analysis Batch: 68837

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	ND		1.00	mg/L			05/13/20 13:13	1

Lab Sample ID: LCS 570-68837/2
Matrix: Water
Analysis Batch: 68837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sediment Concentration (mg/L)	100	103.0		mg/L		103	95 - 105

Lab Sample ID: LCSD 570-68837/3
Matrix: Water
Analysis Batch: 68837

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sediment Concentration (mg/L)	100	98.01		mg/L		98	95 - 105	5	20

Lab Sample ID: 570-27031-1 DU
Matrix: Water
Analysis Batch: 68837

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sediment Concentration (mg/L)	3.38	H	3.094	H	mg/L		9	10

QC Association Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0D00074

Job ID: 570-27031-1

General Chemistry

Analysis Batch: 68837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-27031-1	WQ1b-C_042720_SW_10 TOTAL	Total/NA	Water	D3977	
570-27031-2	WQ2-C_042720_SW_10 TOTAL	Total/NA	Water	D3977	
570-27031-3	WQ3-L_042720_SW_10 TOTAL	Total/NA	Water	D3977	
MB 570-68837/1	Method Blank	Total/NA	Water	D3977	
LCS 570-68837/2	Lab Control Sample	Total/NA	Water	D3977	
LCSD 570-68837/3	Lab Control Sample Dup	Total/NA	Water	D3977	
570-27031-1 DU	WQ1b-C_042720_SW_10 TOTAL	Total/NA	Water	D3977	

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0D00074

Job ID: 570-27031-1

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL

Lab Sample ID: 570-27031-1

Date Collected: 04/27/20 14:25

Matrix: Water

Date Received: 04/30/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D3977		1	1006.48 g	1000 g	68837	05/13/20 13:13	YR9U	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: WQ2-C_042720_SW_10 TOTAL

Lab Sample ID: 570-27031-2

Date Collected: 04/27/20 15:45

Matrix: Water

Date Received: 04/30/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D3977		1	1064.04 g	1000 g	68837	05/13/20 13:13	YR9U	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: WQ3-L_042720_SW_10 TOTAL

Lab Sample ID: 570-27031-3

Date Collected: 04/27/20 17:00

Matrix: Water

Date Received: 04/30/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D3977		1	1054.16 g	1000 g	68837	05/13/20 13:13	YR9U	ECL 1
Instrument ID: NOEQUIP										

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0D00074

Job ID: 570-27031-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

Method Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0D00074

Job ID: 570-27031-1

Method	Method Description	Protocol	Laboratory
D3977	Sediment Concentration in Water Samples	ASTM	ECL 1

Protocol References:

ASTM = ASTM International

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Sample Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0D00074

Job ID: 570-27031-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-27031-1	WQ1b-C_042720_SW_10 TOTAL	Water	04/27/20 14:25	04/30/20 10:30	
570-27031-2	WQ2-C_042720_SW_10 TOTAL	Water	04/27/20 15:45	04/30/20 10:30	
570-27031-3	WQ3-L_042720_SW_10 TOTAL	Water	04/27/20 17:00	04/30/20 10:30	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Calscience Job No.: 570-27031-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WC_TSS STD 00019	09/20/20	03/20/20	DI Water, Lot 112719	2 L	WC_TSS_STK_00002	0.2 g	Sediment Concentration (mg/L)	100 mg/L
.WC_TSS_STK_00002	11/04/21		FISHER, Lot 160676		(Purchased Reagent)		Sediment Concentration (mg/L)	1 g/g

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job Number: 570-27031-1

SDG No.: _____

Project: 0D00074

Client Sample ID	Lab Sample ID
<u>WQ1b-C_042720_SW_10 TOTAL</u>	<u>570-27031-1</u>
<u>WQ2-C_042720_SW_10 TOTAL</u>	<u>570-27031-2</u>
<u>WQ3-L_042720_SW_10 TOTAL</u>	<u>570-27031-3</u>

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL

Lab Sample ID: 570-27031-1

Lab Name: Eurofins Calscience

Job No.: 570-27031-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 14:25

Reporting Basis: WET

Date Received: 04/30/2020 10:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	3.38	0.994	mg/L		H	1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ2-C_042720_SW_10 TOTAL

Lab Sample ID: 570-27031-2

Lab Name: Eurofins Calscience

Job No.: 570-27031-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 15:45

Reporting Basis: WET

Date Received: 04/30/2020 10:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	10.1	0.940	mg/L		H	1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ3-L_042720_SW_10 TOTAL

Lab Sample ID: 570-27031-3

Lab Name: Eurofins Calscience

Job No.: 570-27031-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 17:00

Reporting Basis: WET

Date Received: 04/30/2020 10:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	8.06	0.949	mg/L		H	1	D3977

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience _____

Job No.: 570-27031-1 _____

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 68837 Date: 05/13/2020 13:13							
D3977	MB 570-68837/1	Sediment Concentration (mg/L)	ND		mg/L	1.00	1

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-27031-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 68837 Date: 05/13/2020 13:13								
D3977	WQ1b-C_042720_SW_1 0 TOTAL	570-27031-1	Sediment Concentration (mg/L)	3.38	mg/L			
D3977	WQ1b-C_042720_SW_1 0 TOTAL	570-27031-1 DU	Sediment Concentration (mg/L)	3.094	mg/L	9	10	H

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-27031-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 68837		Date: 05/13/2020 13:13									
						LCS Source: WC_TSS_STD_00019					
D3977	LCS 570-68837/2	Sediment Concentration (mg/L)	103.0		mg/L	100	103	95-105	5	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-27031-1
 SDG No.: _____
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 68837		Date: 05/13/2020 13:13									
						LCSD Source: WC_TSS_STD_00019					
D3977	LCSD 570-68837/3	Sediment Concentration (mg/L)	98.01		mg/L	100	98	95-105	5	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job Number: 570-27031-1

SDG Number: _____

Matrix: Water

Instrument ID: NOEQUIP

Method: D3977

RL Date: 03/12/2018 16:31

Analyte	Wavelength/ Mass	RL (mg/L)	
Sediment Concentration (mg/L)		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job Number: 570-27031-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: D3977 XMDL Date: 04/02/2017 14:13

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sediment Concentration (mg/L)		1	0.889

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-27031-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: D3977

Start Date: 05/13/2020 13:13 End Date: 05/13/2020 13:15

Lab Sample Id	D/F	T y p e	Time	Analytes																			
				S e d C o n c																			
MB 570-68837/1	1	T	13:13	X																			
LCS 570-68837/2	1	T	13:13	X																			
LCSD 570-68837/3	1	T	13:13	X																			
570-27031-1	1	T	13:13	X																			
570-27031-1 DU	1	T	13:13	X																			
570-27031-2	1	T	13:13	X																			
570-27031-3	1	T	13:13	X																			
ZZZZZZ			13:13																				
ZZZZZZ			13:13																				
ZZZZZZ			13:13																				
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ZZZZZZ			13:15																				

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-27031-1

SDG No.:

Batch Number: 68837 Batch Start Date: 05/13/20 13:13 Batch Analyst: Ie, Uyen

Batch Method: D3977 Batch End Date: 05/14/20 08:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	CrucibleID	SampTare	SampGross	InitialAmount	SedTare	SedGross
MB 570-68837/1		D3977		A0975889 0.3693	0 g	1000 g	1000 g	0.3693 g	0.3698 g
LCS 570-68837/2		D3977		A0975888 0.3700	0 g	100 g	100 g	0.3700 g	0.3803 g
LCSD 570-68837/3		D3977		A0975887 0.3687	0 g	100 g	100 g	0.3687 g	0.3785 g
570-27031-A-1	WQ1b-C_042720_SW_10 TOTAL	D3977	T	A0975886 0.3678	194.05 g	1197.53 g	1006.48 g	0.3678 g	0.3712 g
570-27031-B-1	WQ1b-C_042720_SW_10 TOTAL	D3977	T	A0975885 0.3689	194.38 g	1196.39 g	1002.01 g	0.3689 g	0.3720 g
570-27031-A-2	WQ2-C_042720_SW_10 TOTAL	D3977	T	A0975884 0.3674	134.16 g	1198.20 g	1064.04 g	0.3674 g	0.3781 g
570-27031-A-3	WQ3-L_042720_SW_10 TOTAL	D3977	T	A0975883 0.3690	140.11 g	1194.27 g	1054.16 g	0.3690 g	0.3775 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	SedNet	CalcMsg	FinalAmount	WC_TSS_STD
MB 570-68837/1		D3977		0.0005 g	OK	1000 g	000I9
LCS 570-68837/2		D3977		0.0103 g	OK	1000 g	100 mL
LCSD 570-68837/3		D3977		0.0098 g	OK	1000 g	100 mL
570-27031-A-1	WQ1b-C_042720_SW_10 TOTAL	D3977	T	0.0034 g	OK	1000 g	
570-27031-B-1	WQ1b-C_042720_SW_10 TOTAL	D3977	T	0.0031 g	OK	1000 g	
570-27031-A-2	WQ2-C_042720_SW_10 TOTAL	D3977	T	0.0107 g	OK	1000 g	
570-27031-A-3	WQ3-L_042720_SW_10 TOTAL	D3977	T	0.0085 g	OK	1000 g	

Batch Notes	
Nominal Amount Used	1000 g
Perform Calculation (0=No, 1=Yes)	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

General Chemistry – Gravimetric Methods
Technical Data Review
SOP T020 Current Revision

Instrument / Oven ID: NA Work Order # BATCH 68837

SM 2540 C (M713*) SM 2540 B / ASTM D2216 (M700*) SM 5520 B / EPA 1664A (M730*)
 SM 2540 D (M714*) SM 2540 E / EPA 160.4 (M735*) Other ASTM D3977B

(NOTE: Additional/alternate method(s) may apply for the indicated analysis)

Items for Review	Level I			Level II
	Yes	No	N/A	
1. Reagent Preparation				
a Were all reagents properly identified in logbook?	X			X
2. Results - Samples and Batch QC				
a Was the correct analysis performed?	X			X
b Were project- or QAPP-specific instructions followed, if applicable?	X			X
c Were all preparation and dilution factors verified?	X			X
d Was the method blank acceptable per method criteria?			X	X
e Was the LCS within lab- or project-specific criteria? LCSD? _____ RPD OK? _____			X	X
f Was the MS/MSD or sample duplicate reviewed?	X			X
3. Reporting				
a Were correct sample matrix and units reported?	X			X
b Was correct oven or instrument ID indicated?	X			X
c Were all support equipment IDs identified? (pipettes, hot plates, ovens, pH meters, etc.)	X			X
d Were at least two drying/weighing cycles recorded with start/ends times for each?	X			X
e Were correct initial and final weights / volumes reported?	X			X
f Were correct Prepared and Analyzed dates reported?	X			X
g Were correct Batch numbers reported?	X			X
h Were all applicable data flags/qualifiers reported?	X			X
i Were correct number of significant figures used in final results?	X			X
j Were correct reporting limits recorded?	X			X
k Were all discrepancies / corrective actions noted as comments and/or narratives?			X	X
4. Department of Defense (DoD) Projects				
a Were all DoD requirements met per QSM 4.2?			X	X

*Or current revision of SOP

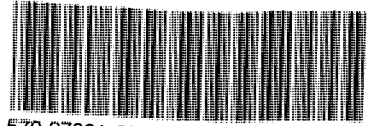
Comments: _____

Level I Reviewer #: YR9U Date: 05/13/2020 Level II Reviewer #: UAPD Date: 05/13/2020

Shipping and Receiving Documents

27031

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0D00074



570-27031 Chain of Custody

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310
Fax: (000) 000-0000
Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Eurofins Calscience, LLC
7440 Lincoln Way
Garden Grove, CA 92841
Phone :7148955494
Fax: x

Analysis	Due	Expires	Comments
Sample ID: WQ1b-C_042720_SW_10 TOTAL		Sampled: 27-Apr-20 14:25 MS/MSD - Also includes DUP bottles	
Misc. Subcontract 6 <i>Containers Supplied:</i>	28-May-20 19:00	25-May-20 14:25	ASTM 3977
Sample ID: WQ2-C_042720_SW_10 TOTAL		Sampled: 27-Apr-20 15:45	
Misc. Subcontract 6 <i>Containers Supplied:</i>	28-May-20 19:00	25-May-20 15:45	ASTM 3977
Sample ID: WQ3-L_042720_SW_10 TOTAL		Sampled: 27-Apr-20 17:00	
Misc. Subcontract 6 <i>Containers Supplied:</i>	28-May-20 19:00	25-May-20 17:00	ASTM 3977

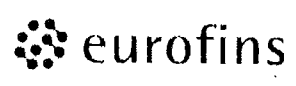
Released By: MS Date: 4/29/2020 Received By: [Signature] Date: 4/30/20 1030

Released By: * Custody Date: 4/30/20 Received By: [Signature] Date: 3-7/2-8 SLC



570-27031 Waybill

Do Not Lift Using This Tag



Environment Testing
TestAmerica

ORIGIN ID:TCMA (253) 922-2310
SAMPLE RECEIVING
TA- SEATTLE
5755 8TH ST E

SHIP DATE: 29APR20
ACTWGT: 27.35 LB
CAD: 989746/CAFE3313

FIFE, WA 98424
UNITED STATES US

BILL THIRD PARTY

TO

**EUROFINS CALSCIENCE, LLC.
7440 LINCOLN WAY**

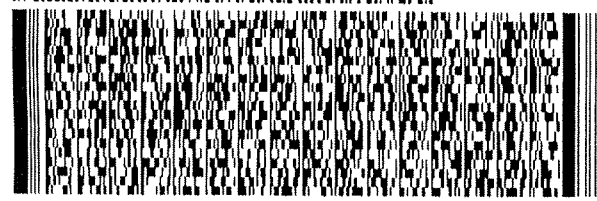
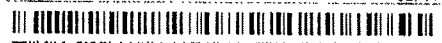
GARDEN GROVE CA 92841

(714) 896-6494

REF:

INV:

DEPT:



**FedEx
Express**



315121982001

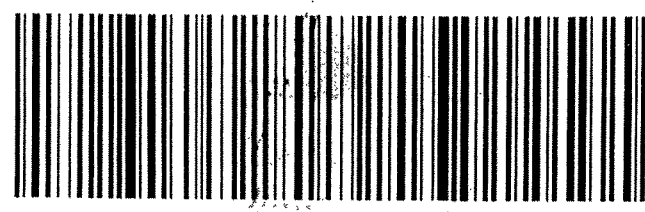
**THU - 30 APR 10:30A
PRIORITY OVERNIGHT**

TRK# 1794 2131 1343
0201

92 APVA

**92841
CA-US SNA**

Part 160471-04 F11 1202 1220 20



Login Sample Receipt Checklist

Client: Eurofins Frontier Global Sciences LLC

Job Number: 570-27031-1

Login Number: 27031
List Number: 1
Creator: Ramos, Maribel

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Frontier Global Sciences

5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310

28 May 2020

Denise King
Wood - MA
271 Mill Road
Chelmsford, MA 01824
RE: Penobscot

Enclosed are the analytical results for samples received by Eurofins Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Patrick Garcia-Strickland". The signature is written in a cursive style with a large initial "P".

Patrick Garcia-Strickland
Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WQ1b-C_042720_SW_10 TOTAL	0D00074-01	Water	27-Apr-20 14:25	29-Apr-20 10:30
WQ1b-C_042720_SW_10 DISSOLVED	0D00074-02	Water	27-Apr-20 14:25	29-Apr-20 10:30
WQ2-C_042720_SW_10 TOTAL	0D00074-03	Water	27-Apr-20 15:45	29-Apr-20 10:30
WQ2-C_042720_SW_10 DISSOLVED	0D00074-04	Water	27-Apr-20 15:45	29-Apr-20 10:30
WQ3-L_042720_SW_10 TOTAL	0D00074-05	Water	27-Apr-20 17:00	29-Apr-20 10:30
WQ3-L_042720_SW_10 DISSOLVED	0D00074-06	Water	27-Apr-20 17:00	29-Apr-20 10:30
WQ1b-C_042720_SW_10_DUP TOTAL	0D00074-07	Water	27-Apr-20 14:25	29-Apr-20 10:30
WQ1b-C_042720_SW_10_DUP DISSOLVED	0D00074-08	Water	27-Apr-20 14:25	29-Apr-20 10:30



Frontier Global Sciences

Sample Receipt Checklist

Client: Wood Date & Time Received: 4/29/20 10:30 Date Labeled: 4/29/20 Labeled By: MS

Matrix: Water Received By: MS Label Verified By: MS 4/29/2020

of Coolers Received: 2 Samples Arrived By: Shipping Service Courier Hand Other (Specify: _____)

Coolant: None/Ambient Loose Ice Gel Ice Dry Ice Coolant Required: Y / N Temp Blank Used: Y/N for Cooler(s): _____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y/N
Samples from Wisconsin have special requirements. Shipment received includes samples from Wisconsin: Y/N

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	Y	
Custody Seals are present and intact:	Y	
Custody seals signed:	Y	

TID:	°C	CF:	°C	Date/time:	By:
Cooler 1:	3.2	2	2.8	Cooler 4:	°C w/CF: °C
Cooler 2:	3.3	3	0.4	Cooler 5:	°C w/CF: °C
Cooler 3:				Cooler 6:	°C w/CF: °C


Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	Y	
Date and time of collection:	Y	
Sampled by:	N	
Preservation type:	N	
Requested analyses:	Y	
Required signatures:	Y	
Internal COC required:	N	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	Y	
Sample labels are present and legible:	Y	
Sample ID on container/bag matches COC:	Y	
Correct sample containers used:	Y	
Samples received within holding times:	Y	
Sample volume sufficient for requested analyses:	Y	
Correct preservative used for requested analyses:	Y	

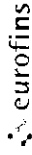
Anomalies/Non-conformances (attach additional pages if needed):

Cooler 1 - 181139780 4/29/2020 1052
Cooler 2 - 122405225 4/29/2020 1052

0D00074



Chain of Custody Record



Client Information		Sampler		Lab Pkt:		Carrier Tracking No(s):		COC No:						
Robert Brunette		BZAD WOLFE		Gamber, Carrie L				180-60149-12258.1						
Eurofins Frontier Global Sciences LLC		925-323-4082		E-Mail: carrie.gamber@testamericainc.com				Page: 1 of 1						
Address: 5755 8th Street E		Due Date Requested:		Analysis Requested		Total Number of containers		Job #:						
City: Tacoma		TAT Requested (days):		Analysis Requested										
State, Zip: WA, 98424		Purchase Order Requested		Analysis Requested										
Phone: 425-686-3560(Tel)		PO #:		Analysis Requested										
Email: RobertBrunette@Eurofins.US.com		WO #:		Analysis Requested										
Project Name: Wood Penobscot River Proposal		Project #:		Analysis Requested										
Site: PENOBSCOT		SSOW#:		Analysis Requested										
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=biota, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Mercury 1631E	DIS Mercury 1631E	TOTAL METHYL MERC 1630	TOC SW-846/90604	DOC SW-846/90604	TSS 2450D	SSC 03977B-SMD	Special Instructions/Note:
WQ16-C-042720-SW-10	4/27/20	1425	G	Ag	X	X	X	X	X	X	X	X	X	10 CONTAINERS
WQ16-C-042720-SW-10-DUP			G	Ag	X	X	X	X	X	X	X	X	X	
WQ16-C-042720-SW-10-MJ			G	Ag	X	X	X	X	X	X	X	X	X	
WQ16-C-042720-SW-10-MD			G	Ag	X	X	X	X	X	X	X	X	X	
WQ2-C-042720-SW-10	4/27/20	1545	G	Ag	X	X	X	X	X	X	X	X	X	
WQ3-L-042720-SW-10	4/27/20	1700	G	Ag	X	X	X	X	X	X	X	X	X	
				BRW										

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, V, Other (specify) **MAGTEL PAINTS EPOD**

Empty Kit Relinquished by: **[Signature]** Date: **4/28/2020, 1130**

Relinquished by: **[Signature]** Date: **4/28/2020, 1130**

Relinquished by: **[Signature]** Date: **4/28/2020, 1130**

Custody Seal Intact: **Yes** A No

Custody Seal No.:

Received by: **WOODERS** Company: **WOODERS** Date/Time: **4/28/2020, 1130**

Received by: **MS** Company: **MS** Date/Time: **4/28/2020, 1130**

Received by: **[Signature]** Company: **EFGLS** Date/Time: **4/28/2020, 1130**

Method of Shipment: **FED EX**

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Cooler Temperature(s) °C and Other Remarks: **1735 88521127**



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
----------------------------------------------------	--------------------------------------------------------------------------------	------------------------------

WQ1b-C_042720_SW_10 TOTAL
0D00074-01

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.418	0.025	0.054	ng/L	1.25	F005233	06-May-20	0E08011	08-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	5.19	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

WQ1b-C_042720_SW_10 DISSOLVED
0D00074-02

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.074	0.026	0.054	ng/L	1.25	F005233	06-May-20	0E08011	08-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	2.68	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

WQ2-C_042720_SW_10 TOTAL
0D00074-03

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.205	0.025	0.054	ng/L	1.25	F005233	06-May-20	0E08011	08-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	6.80	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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**WQ2-C_042720_SW_10 DISSOLVED
0D00074-04**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.055	0.025	0.054	ng/L	1.25	F005233	06-May-20	0E08011	08-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	3.53	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

WQ3-L_042720_SW_10 TOTAL
0D00074-05

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.058	0.026	0.055	ng/L	1.25	F005233	06-May-20	0E08011	08-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	4.90	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

**WQ3-L_042720_SW_10 DISSOLVED
0D00074-06**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.072	0.025	0.054	ng/L	1.25	F005233	06-May-20	0E08011	08-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	2.11	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

WQ1b-C_042720_SW_10_DUP TOTAL
0D00074-07

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F005238	13-May-20	0E15003	14-May-20	EPA 1630	QB-02, U
Sample Preparation: EPA 1631E											
Mercury	4.94	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

WQ1b-C_042720_SW_10_DUP DISSOLVED
0D00074-08

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.123	0.026	0.050	ng/L	1.25	F005238	13-May-20	0E15003	14-May-20	EPA 1630	QB-01
Sample Preparation: EPA 1631E											
Mercury	2.70	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0E05010 - F005228											
Cal Standard (0E05010-CAL1)					Prepared & Analyzed: 05-May-20						
Mercury	0.39	-		ng/L	0.50000		77.9				
Cal Standard (0E05010-CAL2)					Prepared & Analyzed: 05-May-20						
Mercury	0.97	-		ng/L	1.0000		97.4				
Cal Standard (0E05010-CAL3)					Prepared & Analyzed: 05-May-20						
Mercury	5.33	-		ng/L	5.0000		107				
Cal Standard (0E05010-CAL4)					Prepared & Analyzed: 05-May-20						
Mercury	21.51	-		ng/L	20.000		108				
Cal Standard (0E05010-CAL5)					Prepared & Analyzed: 05-May-20						
Mercury	44.20	-		ng/L	40.000		111				
Calibration Blank (0E05010-CCB1)					Prepared & Analyzed: 05-May-20						
Mercury	-0.27	-		ng/L							U
Calibration Blank (0E05010-CCB2)					Prepared & Analyzed: 05-May-20						
Mercury	-0.08	-		ng/L							U
Calibration Blank (0E05010-CCB3)					Prepared & Analyzed: 05-May-20						
Mercury	0.05	-		ng/L							
Calibration Check (0E05010-CCV1)					Prepared & Analyzed: 05-May-20						
Mercury	4.64	-		ng/L	5.0350		92.1				
Calibration Check (0E05010-CCV2)					Prepared & Analyzed: 05-May-20						
Mercury	5.34	-		ng/L	5.0350		106				



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0E05010 - F005228

Calibration Check (0E05010-CCV3)						Prepared & Analyzed: 05-May-20					
Mercury	4.67	-		ng/L	5.0350		92.8				
Instrument Blank (0E05010-IBL1)						Prepared & Analyzed: 05-May-20					
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (0E05010-IBL2)						Prepared & Analyzed: 05-May-20					
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (0E05010-IBL3)						Prepared & Analyzed: 05-May-20					
Mercury	0.12	0.08	0.50	ng/L							
Initial Cal Blank (0E05010-ICB1)						Prepared & Analyzed: 05-May-20					
Mercury	-0.07	-		ng/L							U
Initial Cal Check (0E05010-ICV1)						Prepared & Analyzed: 05-May-20					
Mercury	5.37	-		ng/L	5.0350		107				

Batch 0E08011 - F005235

Cal Standard (0E08011-CAL1)						Prepared & Analyzed: 08-May-20					
Methyl Mercury (as Mercury)	0.054	-		ng/L	0.050000		108				
Cal Standard (0E08011-CAL2)						Prepared & Analyzed: 08-May-20					
Methyl Mercury (as Mercury)	0.191	-		ng/L	0.200000		95.5				
Cal Standard (0E08011-CAL3)						Prepared & Analyzed: 08-May-20					
Methyl Mercury (as Mercury)	0.940	-		ng/L	1.0000		94.0				

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0E08011 - F005235											
Cal Standard (0E08011-CAL4)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	1.976	-		ng/L	2.0000		98.8				
Cal Standard (0E08011-CAL5)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	4.132	-		ng/L	4.0000		103				
Calibration Blank (0E08011-CCB1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.040	-		ng/L							
Calibration Blank (0E08011-CCB2)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.023	-		ng/L							
Calibration Blank (0E08011-CCB7)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.051	-		ng/L							QB-10
Calibration Check (0E08011-CCV1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.446	-		ng/L	0.50368		88.5	67-133			
Calibration Check (0E08011-CCV2)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.468	-		ng/L	0.50368		92.9	67-133			
Calibration Check (0E08011-CCV7)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.624	-		ng/L	0.50368		124	67-133			
Instrument Blank (0E08011-IBL1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	ND	0.021	0.044	ng/L							U
Initial Cal Blank (0E08011-ICB1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.041	-		ng/L							



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0E08011 - F005235											
Initial Cal Check (0E08011-ICV1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.543	-		ng/L	0.50368		108	69-131			
Batch 0E15003 - F005238											
Cal Standard (0E15003-CAL1)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	0.044	-		ng/L	0.050000		88.6				
Cal Standard (0E15003-CAL2)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	0.194	-		ng/L	0.20000		97.2				
Cal Standard (0E15003-CAL3)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	1.018	-		ng/L	1.0000		102				
Cal Standard (0E15003-CAL4)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	2.047	-		ng/L	2.0000		102				
Cal Standard (0E15003-CAL5)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	4.403	-		ng/L	4.0000		110				
Calibration Blank (0E15003-CCB1)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	-0.016	-		ng/L							U
Calibration Blank (0E15003-CCB2)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	-0.023	-		ng/L							U
Calibration Blank (0E15003-CCB3)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	-0.027	-		ng/L							U



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0E15003 - F005238											
Calibration Blank (0E15003-CCB4) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	-0.019	-		ng/L							U
Calibration Blank (0E15003-CCB5) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	-0.063	-		ng/L							QB-10, U
Calibration Blank (0E15003-CCB6) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	-0.075	-		ng/L							QB-10, U
Calibration Check (0E15003-CCV1) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	0.514	-		ng/L	0.50368		102	67-133			
Calibration Check (0E15003-CCV2) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	0.448	-		ng/L	0.50368		89.0	67-133			
Calibration Check (0E15003-CCV3) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	0.490	-		ng/L	0.50368		97.2	67-133			
Calibration Check (0E15003-CCV4) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	0.505	-		ng/L	0.50368		100	67-133			
Calibration Check (0E15003-CCV5) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	0.499	-		ng/L	0.50368		99.1	67-133			
Calibration Check (0E15003-CCV6) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	0.493	-		ng/L	0.50368		97.8	67-133			
Instrument Blank (0E15003-IBL1) Prepared & Analyzed: 14-May-20											
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0E15003 - F005238											
Initial Cal Blank (0E15003-ICB1)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	0.004	-		ng/L							
Initial Cal Check (0E15003-ICV1)					Prepared & Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	0.480	-		ng/L	0.50368		95.3	69-131			
Batch F005228 - EFGS SOP2796 EPA 1631 Oxidation											
Blank (F005228-BLK1)					Prepared & Analyzed: 05-May-20						
Mercury	ND	0.08	0.50	ng/L							U
Blank (F005228-BLK2)					Prepared & Analyzed: 05-May-20						
Mercury	ND	0.08	0.50	ng/L							U
Blank (F005228-BLK3)					Prepared & Analyzed: 05-May-20						
Mercury	ND	0.08	0.50	ng/L							U
LCS (F005228-BS1)					Prepared & Analyzed: 05-May-20						
Mercury	5.46	0.08	0.50	ng/L	5.0000		109	80-120			
LCS Dup (F005228-BSD1)					Prepared & Analyzed: 05-May-20						
Mercury	5.57	0.08	0.50	ng/L	5.0000		111	80-120	1.98	24	
Matrix Spike (F005228-MS1)					Source: 0D00074-01		Prepared & Analyzed: 05-May-20				
Mercury	10.29	0.08	0.50	ng/L	5.0000	5.19	102	71-125			
Matrix Spike (F005228-MS2)					Source: 0D00074-02		Prepared & Analyzed: 05-May-20				
Mercury	7.84	0.08	0.50	ng/L	5.0000	2.68	103	71-125			



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F005228 - EFGS SOP2796 EPA 1631 Oxidation

Matrix Spike Dup (F005228-MSD1) Source: 0D00074-01 Prepared & Analyzed: 05-May-20

Mercury	10.54	0.08	0.50	ng/L	5.0000	5.19	107	71-125	2.41	24	
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Matrix Spike Dup (F005228-MSD2) Source: 0D00074-02 Prepared & Analyzed: 05-May-20

Mercury	8.30	0.08	0.50	ng/L	5.0000	2.68	112	71-125	5.66	24	
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Batch F005233 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F005233-BLK1) Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.040	0.026	0.055	ng/L							J
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Blank (F005233-BLK2) Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.041	0.026	0.055	ng/L							J
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Blank (F005233-BLK3) Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.049	0.026	0.055	ng/L							J
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LCS (F005233-BS1) Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.795	0.026	0.055	ng/L	1.1111		71.6	65-135			
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LCS Dup (F005233-BSD1) Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.863	0.026	0.055	ng/L	1.1111		77.7	65-135	8.18	35	
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Matrix Spike (F005233-MS1) Source: 0D00074-01 Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	1.178	0.026	0.055	ng/L	1.1024	0.418	69.0	65-130			
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Matrix Spike (F005233-MS2) Source: 0D00074-02 Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.910	0.026	0.055	ng/L	1.1043	0.074	75.8	65-130			
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F005233 - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix Spike Dup (F005233-MSD1)		Source: 0D00074-01			Prepared: 06-May-20 Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	1.231	0.026	0.054	ng/L	1.1007	0.418	73.9	65-130	4.37	35	
Matrix Spike Dup (F005233-MSD2)		Source: 0D00074-02			Prepared: 06-May-20 Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	1.069	0.026	0.055	ng/L	1.1092	0.074	89.7	65-130	16.0	35	

Batch F005238 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F005238-BLK1)					Prepared: 13-May-20 Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F005238-BLK2)					Prepared: 13-May-20 Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F005238-BLK3)					Prepared: 13-May-20 Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							QB-10, U
LCS (F005238-BS1)					Prepared: 13-May-20 Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	1.012	0.026	0.050	ng/L	1.1111		91.1	65-135			
LCS Dup (F005238-BSD1)					Prepared: 13-May-20 Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	0.918	0.026	0.050	ng/L	1.1111		82.6	65-135	9.81	35	
Matrix Spike (F005238-MS1)		Source: 0D00074-07RE1			Prepared: 13-May-20 Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	1.129	0.025	0.049	ng/L	1.0924	ND	103	65-130			QB-01
Matrix Spike (F005238-MS2)		Source: 0D00062-05RE1			Prepared: 13-May-20 Analyzed: 14-May-20						
Methyl Mercury (as Mercury)	1.235	0.026	0.050	ng/L	1.1061	0.030	109	65-130			QB-01

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F005238 - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix Spike Dup (F005238-MSD1)		Source: 0D00074-07RE1		Prepared: 13-May-20 Analyzed: 14-May-20							
Methyl Mercury (as Mercury)	1.166	0.026	0.050	ng/L	1.1040	ND	106	65-130	3.24	35	QB-01
Matrix Spike Dup (F005238-MSD2)		Source: 0D00062-05RE1		Prepared: 13-May-20 Analyzed: 14-May-20							
Methyl Mercury (as Mercury)	1.218	0.026	0.049	ng/L	1.0984	0.030	108	65-130	1.44	35	QB-01

Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

Notes and Definitions

- Z-01 CCV below range. All other QC parameters passing. Only samples with no sample volume remaining have been reported.
- U Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
- QB-10 The method blank and/or initial/continuing calibration blank contains analyte at a concentration above the MRL. Only report sample results greater than 10 times the contamination value (QB-01), or samples less than the MRL (QB-02).
- QB-02 The method blank and/or initial/continuing calibration blank contains analyte at a concentration above the MRL. However, the sample concentrations are less than the MRL.
- QB-01 The method blank and/or initial/continuing calibration blank contains analyte at a concentration above the MRL. However, the blank concentration(s) are less than 10% of the sample result.
- J The result is an estimated concentration.
- E-01 Sample was preceded by a sample exceeding the calibration curve and was reanalyzed for confirmation.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the method detection limit if reported to the MDL or above the reporting limit if reported to the MRL.
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



ANALYSIS SEQUENCE

0E05010

QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: PGS

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/5/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E05010-IBL1	QC	1			
0E05010-IBL2	QC	2			
0E05010-IBL3	QC	3			
0E05010-CAL1	QC	4	2000505		
0E05010-CAL2	QC	5	2000506		
0E05010-CAL3	QC	6	2000507		
0E05010-CAL4	QC	7	2000508		
0E05010-CAL5	QC	8	2000509		
0E05010-ICV1	QC	9	2000510		
0E05010-ICB1	QC	10			
F005228-BS1	QC	11			
F005228-BSD1	QC	12			
F005228-BLK1	QC	13			
F005228-BLK2	QC	14			
F005228-BLK3	QC	15			
0D00074-01	Hg-CVAFS-W-1631	16			
0D00074-02	Hg-CVAFS-W-1631	17			
F005228-MS1	QC	18			
F005228-MSD1	QC	19			
F005228-MS2	QC	20			
0E05010-CCV1	QC	21	2000510		
0E05010-CCB1	QC	22			
F005228-MSD2	QC	23			
0D00074-03	Hg-CVAFS-W-1631	24			
0D00074-04	Hg-CVAFS-W-1631	25			
0D00074-05	Hg-CVAFS-W-1631	26			
0D00074-06	Hg-CVAFS-W-1631	27			
0D00074-07	Hg-CVAFS-W-1631	28			
0D00074-08	Hg-CVAFS-W-1631	29			
0E00002-01	Hg-CVAFS-W-1631	30			
0E00002-02	Hg-CVAFS-W-1631	31			
0E00002-03	Hg-CVAFS-W-1631	32			
0E05010-CCV2	QC	33	2000510		
0E05010-CCB2	QC	34			
0E00002-04	Hg-CVAFS-W-1631	35			
0E00002-05	Hg-CVAFS-W-1631	36			

ANALYSIS SEQUENCE

0E05010

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/5/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E00002-06	Hg-CVAFS-W-1631	37			
0E00002-07	Hg-CVAFS-W-1631	38			
0E00002-08	Hg-CVAFS-W-1631	39			
0E00002-09	Hg-CVAFS-W-1631	40			
0E00002-10	Hg-CVAFS-W-1631	41			
0E00002-11	Hg-CVAFS-W-1631	42			
0E00002-12	Hg-CVAFS-W-1631	43			
0E05010-CCV3	QC	44	2000510		
0E05010-CCB3	QC	45			

M. J. Smith 3/5/2020
 Samples Loaded By Date

M. J. Smith 5/5/2020
 Data Processed By Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0E05010
Reviewer:		Dataset ID(s):	THg26003-200505-1
Date:	5/5/2020	WO (s) #:	0D00074, 0E00002
Batch #(s):	F005228		0

Analyst Initials MFS Reviewer Initials PLS

- 5b. Has the B/C section data been uploaded? YES NO N/A
- QA/QC Data Checked**
6. RSD CF ($\leq 15\%$) PASS FAIL
 Comments: _____
7. The calibration curve included a minimum of 5 Standards YES NO
 Comments: _____
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) PASS FAIL
9. ICV and CCV % Recoveries EPA 1631E (77-123%) PASS FAIL
 Comments: _____
10. Do all calibration points pass acceptance criteria? YES NO
 Comments: _____
11. Are qualifiers consistent with the data review flowcharts? YES NO N/A
 Comments: _____
12. Explain any items on the failed data report from Element
 Comments: _____
13. Are the individual Preparation Blanks $< PQL$ or $< 2.2 \times MDL$ for WI (refer to appropriate prep method PQL list) PASS FAIL
- (a) If not $< PQL$ or $< 2.2 \times MDL$ for WI, note which PB(s) are above control limit: YES NO
- (b) Is the mean PB $< PQL$ or $< 2.2 \times MDL$ for WI (for appropriate qualification)? YES NO
- (c) Was a BrCl Blank analyzed for each preservation level? YES NO N/A
- (d) Are Preparation Blanks summarized on QC page? YES NO
14. Filtration Blank Prepared (if yes, use FB qualifier) YES NO
- (a) Filtration Blank prep date same as associated samples' prep date YES NO N/A
- (b) Filtration Blank absolute value $< PQL$ or $< 2.2 \times MDL$ for WI YES NO N/A
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? PASS FAIL
 Comments: _____
16. CCBs individually < 0.50 ng/L or $2.2 \times MDL$ for WI? PASS FAIL
 Comments: _____
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) YES NO N/A
18. Is the correct 'Source' designated for MD/MS/MSD? YES NO
19. For digested preps: was there a spike witness signature & date on the prep bench sheet? YES NO N/A

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: MFS	Sequence(s) #: 0E05010
Reviewer:	Dataset ID(s): THg26003-200505-1
Date: 5/5/2020	WO (s) #: 0D00074, 0E00002
Batch #(s): F005228	0

Analyst Initials MFS **Reviewer Initials** PGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| Comments: _____ | | | |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> |
| Comments: _____ | | | |
| 22. Are the samples run at the correct dilution level for the method? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| Comments: _____ | | | |
| 23. Dissolved < Total (if applicable) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____ | | | |
| 24. Effluent < Influent (visually confirm if needed) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____ | | | |
| 25. Are re-runs noted with reason? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____ | | | |
| 26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____ | | | |
| 27. Is the B trap <5% A Traps | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____ | | | |
| 28. Are spiked trap recoveries 75-125% of true value? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| Comments: _____ | | | |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 30. Have re-extracts been created for non-reportable samples? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 32. Does the data set need scanning? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 33. Does the dataset have an LOQ/LOQ or DOC? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 34. Water samples: has the preservation log been included in dataset for final volume verification? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> |
| 35. Water samples-is the final volume correct in the sequence? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/> |

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCS

- | | | | | | |
|-----------------------------------------------------|-------------------|----------------------------------|-----------------------------------------|-----------------------------|-------------------------------------|
| 36. Date of analyst IDOC/CDOC: _____ | <u>3/2/2020</u> | IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: _____ | <u>3/2/2020</u> | Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 38. Date of LOD: _____ | <u>12/29/2020</u> | LOD within last 3 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 39. Date of LOQ: _____ | <u>12/29/2020</u> | LOQ within last 3 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0E05010

Sample ID Analysis Result MRL Dup Result Source True Value Units % Rec. Rec. LCL Rec. UCL RPD RPD Limit Over Cal Failure Qualifier

Anal Jind
Analyst Reviewed By
5/5/2020
Date

[Signature]
Peer Reviewed By
5/5/2020
Date

PREPARATION BENCH SHEET

F005228

Eurofins Frontier Global Sciences, LLC

Prepared: 5/5/2020

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Matrix: Water

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005228-BLK1	Blank	50	50.5					
F005228-BLK2	Blank	50	50.5					
F005228-BLK3	Blank	50	50.5					
F005228-BS1	LCS	50	50.5	2000501	25			
F005228-BS1	LCS Dup	50	50.5	2000501	25			
F005228-MS1	Matrix Spike [0D00074-01]	50	50.5	2000501	25			
F005228-MS2	Matrix Spike [0D00074-02]	50	50.5	2000501	25			
F005228-MSD1	Matrix Spike Dup [0D00074-01]	50	50.5	2000501	25			
F005228-MSD2	Matrix Spike Dup [0D00074-02]	50	50.5	2000501	25			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2000501	THg 10ng/mL Calibration Standard	21-May-20 00:00	2000233	25% Hydroxylamine-HCl working solution	29-Apr-20 00:00
			2000625	0.2 N BRCL March 2020	21-Sep-20 00:00
			2000765	THg Washstation (0.5% BrCl)	29-Apr-20 00:00
			2000767	THg 2% BrCl	24-Jul-20 00:00
			2000768	3% SnCl2 THg reductant	09-Sep-20 00:00

PREPARATION BENCH SHEET

F005228

Eurofins Frontier Global Sciences, LLC

Prepared: 5/5/2020

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Matrix: Water

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00074-01	WQ1b-C_042720_SW_10 TOTAL	50	50.5	QC	-	010301	MS/MSD	
0D00074-02	WQ1b-C_042720_SW_10 DISSOLVED	50	50.5	QC	-	010301	MS/MSD	
0D00074-03	WQ2-C_042720_SW_10 TOTAL	50	50.5	-	-	010301		
0D00074-04	WQ2-C_042720_SW_10 DISSOLVED	50	50.5	-	-	010301		
0D00074-05	WQ3-L_042720_SW_10 TOTAL	50	50.5	-	-	010301		
0D00074-06	WQ3-L_042720_SW_10 DISSOLVED	50	50.5	-	-	010301		
0D00074-07	WQ1b-C_042720_SW_10_DUP TOTAL	50	50.5	-	-	010301		
0D00074-08	WQ1b-C_042720_SW_10_DUP DISSOLVED	50	50.5	-	-	010301		
0E00002-01	WQ-FPT_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0E00002-02	WQ-FPT_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0E00002-03	ES-15_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0E00002-04	ES-15_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0E00002-05	WQ-ECH_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0E00002-06	WQ-ECH_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0E00002-07	OV-02_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0E00002-08	OV-02_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0E00002-09	ADD-02_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0002-10	ADD-02_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0002-11	EB-01_042920_SW TOTAL	50	50.5	-	-	010206		

PREPARATION BENCH SHEET

F005228

Eurofins Frontier Global Sciences, LLC

Prepared: 5/5/2020

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Matrix: Water

01E00002-12	EB-01_042920_SW DISSOLVED	50	50.5	-	-	010206	
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Work Order

0D00074

0E00002

Client

Project



Analysis Datasheet for Total Mercury

Date of Analysis: May 05, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 0E05010

Analyst: **MPS**
 Units: ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	420.09 units	840.18	154.78 units	309.56	77.9 %Rec
SEQ-CAL2	1	1.00 ng/L	652.08 units	652.08	386.77 units	386.77	97.4 %Rec
SEQ-CAL3	1	5.00 ng/L	2382.42 units	476.48	2117.11 units	423.42	106.6 %Rec
SEQ-CAL4	1	20.00 ng/L	8807.48 units	440.37	8542.17 units	427.11	107.5 %Rec
SEQ-CAL5	1	40.00 ng/L	17821.36 units	445.53	17556.05 units	438.90	110.5 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 397.15 Corr. St Dev RF +/- 52.71 Corr. RSD CF 13.3% RSD Uncorr. Mean RF 570.93

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-BL	3	265.31 units	±40.27	0.46 ng/L	±0.07

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	-0.218 ng/L	±0.064
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	5/5/2020 11:51:51 AM	8377-1 RAW	11:51:51 AM	243.85			-21.5	-0.054	-0.054	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	5/5/2020 11:55:59 AM	8378-1 RAW	11:55:59 AM	240.31			-25.0	-0.063	-0.063	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	5/5/2020 12:00:08 PM	8379-1 RAW	12:00:08 PM	311.76			46.5	0.117	0.117	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	5/5/2020 12:04:16 PM	8380-1 RAW	12:04:16 PM	420.09			154.8	0.390	0.390	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	5/5/2020 12:08:25 PM	8381-1 RAW	12:08:25 PM	652.08				0.974	0.974	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	5/5/2020 12:12:34 PM	8382-1 RAW	12:12:34 PM	2382.42			2117.1	5.331	5.331	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	5/5/2020 12:16:43 PM	8383-1 RAW	12:16:43 PM	8807.48			8542.2	21.509	21.509	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	5/5/2020 12:20:51 PM	8384-1 RAW	12:20:51 PM	17821.36			17556.0	44.205	44.205	ng/L	
Hg2600-3	00	CAL	SEQ-ICV1	1	5/5/2020 12:25:01 PM	8385-1 RAW	12:25:01 PM	2386.61			2131.3	5.366	5.366	ng/L	
Hg2600-3	00	CAL	SEQ-ICV2	1	5/5/2020 12:29:10 PM	8386-1 RAW	12:29:10 PM	236.43			-28.9	-0.073	-0.073	ng/L	
Hg2600-3	00	SAM	F005228-BS1	1	5/5/2020 12:33:19 PM	8387-1 RAW	12:33:19 PM	2325.25			2105.9	5.405	5.405	ng/L	F005228
Hg2600-3	00	SAM	F005228-BSD1	1	5/5/2020 12:37:28 PM	8388-1 RAW	12:37:28 PM	2368.11			2059.9	5.512	5.512	ng/L	F005228
Hg2600-3	00	BLK	F005228-BLK1	1	5/5/2020 12:41:36 PM	8389-1 RAW	12:41:36 PM	166.28			-99.0	-0.249	-0.249	ng/L	F005228
Hg2600-3	00	BLK	F005228-BLK2	1	5/5/2020 12:45:45 PM	8390-1 RAW	12:45:45 PM	208.04			-57.3	-0.144	-0.144	ng/L	F005228
Hg2600-3	00	BLK	F005228-BLK3	1	5/5/2020 12:49:54 PM	8391-1 RAW	12:49:54 PM	162.14			-103.2	-0.260	-0.260	ng/L	F005228
Hg2600-3	00	SAM	0D000074-01	1	5/5/2020 12:54:04 PM	8392-1 RAW	12:54:04 PM	2218.31			1953.0	5.135	5.135	ng/L	F005228
Hg2600-3	00	SAM	0D000074-02	1	5/5/2020 12:58:13 PM	8393-1 RAW	12:58:13 PM	4235.52			968.2	2.656	2.656	ng/L	F005228
Hg2600-3	00	SAM	F005228-MS1	1	5/5/2020 13:02:21 PM	8394-1 RAW	1:02:21 PM	4225.47			3960.2	10.189	10.189	ng/L	F005228
Hg2600-3	00	SAM	F005228-MSD1	1	5/5/2020 13:06:30 PM	8395-1 RAW	1:06:30 PM	4324.13			4058.8	10.438	10.438	ng/L	F005228
Hg2600-3	00	SAM	F005228-MS2	1	5/5/2020 13:10:39 PM	8396-1 RAW	1:10:39 PM	3262.46			2997.1	7.764	7.764	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCV1	1	5/5/2020 13:14:48 PM	8397-1 RAW	1:14:48 PM	2107.95			1842.6	4.640	4.640	ng/L	
Hg2600-3	00	CAL	SEQ-CCB1	1	5/5/2020 13:18:57 PM	8398-1 RAW	1:18:57 PM	158.31			-107.0	-0.269	-0.269	ng/L	
Hg2600-3	00	SAM	F005228-MSD2	1	5/5/2020 13:23:06 PM	8399-1 RAW	1:23:06 PM	3442.08			3176.8	8.217	8.217	ng/L	F005228
Hg2600-3	00	SAM	0D000074-03	1	5/5/2020 13:27:15 PM	8400-1 RAW	1:27:15 PM	2654.62			2589.3	6.737	6.737	ng/L	F005228
Hg2600-3	00	SAM	0D000074-04	1	5/5/2020 13:31:25 PM	8401-1 RAW	1:31:25 PM	1566.63			1301.3	3.494	3.494	ng/L	F005228
Hg2600-3	00	SAM	0D000074-05	1	5/5/2020 13:35:34 PM	8402-1 RAW	1:35:34 PM	2105.47			1840.2	4.851	4.851	ng/L	F005228
Hg2600-3	00	SAM	0D000074-06	1	5/5/2020 13:39:43 PM	8403-1 RAW	1:39:43 PM	1007.88			742.6	2.088	2.088	ng/L	F005228
Hg2600-3	00	SAM	0D000074-07	1	5/5/2020 13:43:52 PM	8404-1 RAW	1:43:52 PM	2120.80			1855.5	4.890	4.890	ng/L	F005228
Hg2600-3	00	SAM	0D000074-08	1	5/5/2020 13:48:01 PM	8405-1 RAW	1:48:01 PM	1239.43			974.1	2.671	2.671	ng/L	F005228
Hg2600-3	00	SAM	0E000002-01	1	5/5/2020 13:52:10 PM	8406-1 RAW	1:52:10 PM	993.49			728.2	2.051	2.051	ng/L	F005228
Hg2600-3	00	SAM	0E000002-02	1	5/5/2020 13:56:19 PM	8407-1 RAW	1:56:19 PM	762.50			497.2	1.470	1.470	ng/L	F005228
Hg2600-3	00	SAM	0E000002-03	1	5/5/2020 14:00:28 PM	8408-1 RAW	2:00:28 PM	1238.53			973.2	2.668	2.668	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCV2	1	5/5/2020 14:04:37 PM	8409-1 RAW	2:04:37 PM	2387.59			2122.3	5.344	5.344	ng/L	
Hg2600-3	00	CAL	SEQ-CCB2	1	5/5/2020 14:08:46 PM	8410-1 RAW	2:08:46 PM	235.29			-30.0	-0.076	-0.076	ng/L	
Hg2600-3	00	SAM	0E000002-04	1	5/5/2020 14:12:55 PM	8411-1 RAW	2:12:55 PM	852.75			587.4	1.697	1.697	ng/L	F005228
Hg2600-3	00	SAM	0E000002-05	1	5/5/2020 14:17:04 PM	8412-1 RAW	2:17:04 PM	1512.35			1247.0	3.358	3.358	ng/L	F005228
Hg2600-3	00	SAM	0E000002-06	1	5/5/2020 14:21:13 PM	8413-1 RAW	2:21:13 PM	913.26			648.0	1.849	1.849	ng/L	F005228
Hg2600-3	00	SAM	0E000002-07	1	5/5/2020 14:25:22 PM	8414-1 RAW	2:25:22 PM	1328.20			1062.9	2.894	2.894	ng/L	F005228
Hg2600-3	00	SAM	0E000002-08	1	5/5/2020 14:29:32 PM	8415-1 RAW	2:29:32 PM	1154.61			889.3	2.457	2.457	ng/L	F005228
Hg2600-3	00	SAM	0E000002-09	1	5/5/2020 14:33:41 PM	8416-1 RAW	2:33:41 PM	1935.28			1670.0	4.423	4.423	ng/L	F005228
Hg2600-3	00	SAM	0E000002-10	1	5/5/2020 14:37:50 PM	8417-1 RAW	2:37:50 PM	1514.89			1249.1	3.363	3.363	ng/L	F005228
Hg2600-3	00	SAM	0E000002-11	1	5/5/2020 14:41:59 PM	8418-1 RAW	2:41:59 PM	235.71			-29.6	0.143	0.143	ng/L	F005228
Hg2600-3	00	SAM	0E000002-12	1	5/5/2020 14:46:08 PM	8419-1 RAW	2:46:08 PM	247.66			1855.5	4.672	4.672	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCV3	1	5/5/2020 14:50:17 PM	8420-1 RAW	2:50:17 PM	2120.82			20.2	0.051	0.051	ng/L	
Hg2600-3	00	CAL	SEQ-CCB3	1	5/5/2020 14:54:26 PM	8421-1 RAW	2:54:26 PM	285.48						ng/L	

192

40.26916616
15.17815832
52.70539808
13.27085814

RunEnd	Peak (Raw)	Control (eff)	Flags	RunCount	Comment
11:35:17	3505.85	Clean	OK	1	
11:39:26	243.53	Sample	OK	1	
11:43:34	199.73	Sample	OK	1	
11:47:43	193.21	Sample	OK	1	
11:51:51	243.85	Sample	OK	1	
11:55:59	240.31	Sample	OK	1	
12:00:08	311.76	Sample	OK	1	
12:04:16	420.09	Sample	OK	1	
12:08:25	652.08	Sample	OK	1	
12:12:34	2382.42	Sample	OK	1	
12:16:43	8807.48	Sample	OK	1	
12:20:51	17821.36	Sample	OK	1	
12:25:01	2396.61	Sample	OK	1	
12:29:10	236.43	Sample	OK	1	
12:33:19	2325.25	Sample	OK	1	F005228
12:37:28	2368.11	Sample	OK	1	F005228
12:41:36	166.28	Sample	OK	1	F005228
12:45:45	208.04	Sample	OK	1	F005228
12:49:54	162.14	Sample	OK	1	F005228
12:54:04	2218.31	Sample	OK	1	F005228
12:58:13	1233.52	Sample	OK	1	F005228
13:02:21	4225.47	Sample	OK	1	F005228
13:06:30	4324.13	Sample	OK	1	F005228
13:10:39	3262.46	Sample	OK	1	F005228
13:14:48	2107.95	Sample	OK	1	
13:18:57	158.31	Sample	OK	1	
13:23:06	3442.09	Sample	OK	1	F005228
13:27:15	2854.62	Sample	OK	1	F005228
13:31:25	1566.63	Sample	OK	1	F005228
13:35:34	2105.47	Sample	OK	1	F005228
13:39:43	1007.88	Sample	OK	1	F005228
13:43:52	2120.80	Sample	OK	1	F005228
13:48:01	1239.43	Sample	OK	1	F005228
13:52:10	993.49	Sample	OK	1	F005228
13:56:19	762.50	Sample	OK	1	F005228
14:00:28	1238.53	Sample	OK	1	F005228
14:04:37	2387.59	Sample	OK	1	
14:08:46	235.29	Sample	OK	1	
14:12:55	852.75	Sample	OK	1	F005228
14:17:04	1512.35	Sample	OK	1	F005228
14:21:13	913.26	Sample	OK	1	F005228
14:25:22	1328.20	Sample	OK	1	F005228
14:29:32	1154.61	Sample	OK	1	F005228
14:33:41	1935.28	Sample	OK	1	F005228
14:37:50	1514.39	Sample	OK	1	F005228
14:41:59	235.71	Sample	OK	1	F005228
14:46:08	247.66	Sample	OK	1	F005228
14:50:17	2120.82	Sample	OK	1	
14:54:26	285.49	Sample	OK	1	

TotalMercury EPA1631
 Operat MFS
 Worksh THg26003-200505-1
 Method ##### R:
 BlankS: 265.31
 CalibFa 397.15
 R²: 0.9999
 Calib Eqn: Conc = (Area-265.3
 Status: QC Warnings:5/QC E
 R²: 0.9998
 Run Date: 5/5/2020
 Run Time: 11:32:25
 Blank SD:
 Blank RSD%:
 CF SD:
 CF RSD%:

SampleID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawDate
Clean				0.00	8.83					
WS			1	265.31	0.00					8373-1.RAW
WS			1	265.31	0.00					8374-1.RAW
WS			1	265.31	0.00					8375-1.RAW
SEQ-IBL1	A1		1	0.00	0.61					8376-1.RAW
SEQ-IBL2	A2		1	0.00	0.61					8377-1.RAW
SEQ-IBL3	A3		1	0.00	0.79					8378-1.RAW
SEQ-CAL1	A4		1	265.31	0.39			77.94		8379-1.RAW
SEQ-CAL2	A5		1	265.31	0.97			97.39		8380-1.RAW
SEQ-CAL3	A6		1	265.31	5.33			106.61		8381-1.RAW
SEQ-CAL4	A7		1	265.31	21.51			107.54		8382-1.RAW
SEQ-CAL5	A8		1	265.31	44.20			110.51		8383-1.RAW
SEQ-ICV1	A9		1	265.31	5.37			107.33		8384-1.RAW
SEQ-ICB1	A10		1	265.31	0.00			0.00		8385-1.RAW
F005228-BS1	A11		1	265.31	5.19					8386-1.RAW
F005228-BSD1	A12		1	265.31	5.29					8387-1.RAW
F005228-BLK1	A13		1	265.31	0.00					8388-1.RAW
F005228-BLK2	A14		1	265.31	0.00					8389-1.RAW
F005228-BLK3	A15		1	265.31	0.00					8390-1.RAW
OD00074-01	A16		1	265.31	4.92					8391-1.RAW
OD00074-02	A17		1	265.31	2.44					8392-1.RAW
F005228-MS1	A18		1	265.31	9.97					8393-1.RAW
F005228-MSD1	A19		1	265.31	10.22			290.05		8394-1.RAW
F005228-MS2	A20		1	265.31	7.55					8395-1.RAW
SEQ-CCV1	A21		1	265.31	4.64			61.76		8396-1.RAW
SEQ-CCB1	B1		1	265.31	0.00			92.79		8397-1.RAW
F005228-MSD2	B2		1	265.31	8.00			0.00		8398-1.RAW
OD00074-03	B3		1	265.31	6.52					8399-1.RAW
OD00074-04	B4		1	265.31	3.28					8400-1.RAW
OD00074-05	B5		1	265.31	4.63					8401-1.RAW
OD00074-06	B6		1	265.31	1.87					8402-1.RAW
OD00074-07	B7		1	265.31	4.67					8403-1.RAW
OD00074-08	B8		1	265.31	2.45					8404-1.RAW
OE00002-01	B9		1	265.31	1.83					8405-1.RAW
OE00002-02	B10		1	265.31	1.25					8406-1.RAW
OE00002-03	B11		1	265.31	2.45					8407-1.RAW
SEQ-CCV2	B12		1	265.31	5.34			106.88		8408-1.RAW
SEQ-CCB2	B13		1	265.31	0.00			0.00		8409-1.RAW
OE00002-04	B14		1	265.31	1.48					8410-1.RAW
OE00002-05	B15		1	265.31	3.14					8411-1.RAW
OE00002-06	B16		1	265.31	1.63					8412-1.RAW
OE00002-07	B17		1	265.31	2.68					8413-1.RAW
OE00002-08	B18		1	265.31	2.24					8414-1.RAW
OE00002-09	B19		1	265.31	4.20					8415-1.RAW
OE00002-10	B20		1	265.31	3.15					8416-1.RAW
OE00002-11	B21		1	265.31	0.00					8417-1.RAW
OE00002-12	C1		1	265.31	0.00					8418-1.RAW
SEQ-CCV3	C2		1	265.31	4.67			93.44		8419-1.RAW
SEQ-CCB3	C3		1	265.31	0.05			0.00		8420-1.RAW
										8421-1.RAW

THg26003-200505-1

SEQ-IBL1	A1		
SEQ-IBL2	A2		
SEQ-IBL3	A3		
SEQ-CAL1	pot A4		
SEQ-CAL2	pot A5		
SEQ-CAL3	pot A6		
SEQ-CAL4	pot A7		
SEQ-CAL5	pot A8		
SEQ-ICV1	A9		
SEQ-ICB1	pot A10		
F005228-BS1	A11		
F005228-BSD1	A12		
F005228-BLK1	A13		
F005228-BLK2	A14		
F005228-BLK3	A15		
OD00074-01	A16	OE00002-02	B10
OD00074-02	A17	OE00002-03	B11
F005228-MS1	A18	SEQ-CCV2	B12
F005228-MSD1	A19	SEQ-CCB2	pot B13
F005228-MS2	A20	OE00002-04	B14
SEQ-CCV1	A21	OE00002-05	B15
SEQ-CCB1	pot B1	OE00002-06	B16
F005228-MSD2	B2	OE00002-07	B17
OD00074-03	B3	OE00002-08	B18
OD00074-04	B4	OE00002-09	B19
OD00074-05	B5	OE00002-10	B20
OD00074-06	B6	OE00002-11	B21
OD00074-07	B7	OE00002-12	C1
OD00074-08	B8	SEQ-CCV3	C2
OE00002-01	B9	SEQ-CCB3	pot C3

Verified by: ZKH 5/5/2020

ANALYSIS SEQUENCE

QUALITY ASSURANCE

0E08011

PEER - REVIEWED

INITIALS: *PFS*
Analyzed: 5/8/2020

Instrument: Hg2700-1

Calibration ID: UNASSIGNED



Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E08011-IBL1	QC	1			
0E08011-CAL1	QC	2	2000433		
0E08011-CAL2	QC	3	2000434		
0E08011-CAL3	QC	4	2000435		
0E08011-CAL4	QC	5	2000436		
0E08011-CAL5	QC	6	2000437		
0E08011-ICV1	QC	7	2000842		
0E08011-ICB1	QC	8			
F005234-BS1	QC	9			
F005234-BS2	QC	10			
F005234-BS3	QC	11			
F005234-BS4	QC	12			
0C00107-01	MHg-CVAFS-W-Dist	13			
F005233-BLK1	QC	14			
F005233-BLK2	QC	15			
F005233-BLK3	QC	16			
F005233-BS1	QC	17			
F005233-BSD1	QC	18			
0E08011-CCV1	QC	19	2000842		
0E08011-CCB1	QC	20			
0D00074-01	MHg-CVAFS-W-Dist	21			
F005233-MS1	QC	22			
F005233-MSD1	QC	23			
0D00074-02	MHg-CVAFS-W-Dist	24			
F005233-MS2	QC	25			
F005233-MSD2	QC	26			
0D00074-03	MHg-CVAFS-W-Dist	27			
0D00074-04	MHg-CVAFS-W-Dist	28			
0D00074-05	MHg-CVAFS-W-Dist	29			
0D00074-06	MHg-CVAFS-W-Dist	30			
0E08011-CCV2	QC	31	2000842		
0E08011-CCB2	QC	32			
0D00074-07	MHg-CVAFS-W-Dist	33			
0D00074-08	MHg-CVAFS-W-Dist	34			
0E00002-01	MHg-CVAFS-W-Dist	35			
0E00002-02	MHg-CVAFS-W-Dist	36			

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 5/8/2020

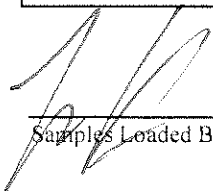
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E00002-03	MHg-CVAFS-W-Dist	37			
0E00002-04	MHg-CVAFS-W-Dist	38			
0E00002-05	MHg-CVAFS-W-Dist	39			
0E00002-06	MHg-CVAFS-W-Dist	40			
0E00002-07	MHg-CVAFS-W-Dist	41			
0E00002-08	MHg-CVAFS-W-Dist	42			
0E08011-CCV3	QC	43	2000842		
0E08011-CCB3	QC	44			
0E00002-09	MHg-CVAFS-W-Dist	45			
0E00002-10	MHg-CVAFS-W-Dist	46			
0E00002-11	MHg-CVAFS-W-Dist	47			
0E00002-12	MHg-CVAFS-W-Dist	48			
F005235-BS1	QC	49			
F005235-BSD1	QC	50			
F005235-BLK1	QC	51			
F005235-BLK2	QC	52			
F005235-BLK3	QC	53			
0D00062-01	MHg-CVAFS-W-Dist	54			
0E08011-CCV4	QC	55	2000842		
0E08011-CCB4	QC	56			
F005235-MS1	QC	57			
F005235-MSD1	QC	58			
0D00062-02	MHg-CVAFS-W-Dist	59			
F005235-MS2	QC	60			
F005235-MSD2	QC	61			
0D00062-05	MHg-CVAFS-W-Dist	62			
0D00062-06	MHg-CVAFS-W-Dist	63			
0E08011-CCV5	QC	64	2000842		
0E08011-CCB5	QC	65			
0D00075-01	MHg-CVAFS-W-Dist	66			
0D00075-02	MHg-CVAFS-W-Dist	67			
0D00075-03	MHg-CVAFS-W-Dist	68			
0D00075-04	MHg-CVAFS-W-Dist	69			
0D00075-05	MHg-CVAFS-W-Dist	70			
0D00075-06	MHg-CVAFS-W-Dist	71			
0E08011-CCV6	QC	72	2000842		

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 5/8/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E08011-CCB6	QC	73			
0D00075-01RE1	MHg-CVAFS-W-Dist	74			Sample Depleted. Added 12.43g Reagent Water for volume - MFS 5/7/2020
0D00075-02RE1	MHg-CVAFS-W-Dist	75			Added 5/8/2020 by ZKH
0D00075-03RE1	MHg-CVAFS-W-Dist	76			Sample Depleted. Added 7.17g Reagent Water for volume - MFS 5/7/2020
0D00075-04RE1	MHg-CVAFS-W-Dist	77			Added 5/8/2020 by ZKH
0D00075-05RE1	MHg-CVAFS-W-Dist	78			Sample Depleted. Added 3.59g Reagent Water for volume - MFS 5/7/2020
0D00075-06RE1	MHg-CVAFS-W-Dist	79			Sample Depleted. Added 3.45g Reagent Water for volume - MFS 5/7/2020
0E08011-CCV7	QC	80	2000842		
0E08011-CCB7	QC	81			



Samples Loaded By

5/8/2020

Date



Data Processed By

5/12/2020

Date

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: ZKH	Sequence #: 0E08011
Reviewer: 0	Dataset ID #: MHg27001-200508-2
Date:	WO #: 0
Batch #(s): F005234, F005233, F005235	

	Analyst Initials: <u>ZKH</u>	Reviewer Initials/Date: <u>PGS</u>
9. ICV % Recoveries 67-133% Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
10. CCV % Recoveries 67-133% Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
11. Are the absolute value of the ICB and CCBs < PQL? Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
13. LCS/LCSD or BS/BSD RPD (< 25%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
14. Water: Average of Preparation Blanks < 0.045 ng/L and standard deviation of 0.015 ng/L? Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix? Comments: _____	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) Comments: _____	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
17. Is the correct 'Source' designated for MD/MS/MSD? Comments: _____	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
18. For digested preps: was there a spike witness signature & date on the prep bench sheet? Comments: _____	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
19. MD RPD/MT RSD(< 35%) Comments: <u>NA</u>	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
20. Is there one set of MS/MSD per every 10 samples? Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
21. MS/MSD RPD(< 35%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
22. MS (AS) % Recoveries (65-130%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
23. MSD (ASD) % Recoveries (65-130%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630) Comments: _____	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
25. Are all samples within instrument calibration range (or at maximum aliquot size)? Comments: <u>000075-02RE1/03RE1/04RE1/06RE1 OVER CLIP</u>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>
26. For instrumental dilutions, is the dilution factor in excel correct? Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
27. Dissolved < Total metals (if applicable) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
28. Effluent < Influent metals (visually confirm if needed) Comments: _____	<input type="checkbox"/> PASS <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: ZKH	Sequence #: 0E08011
Reviewer: 0	Dataset ID #: MHg27001-200508-2
Date:	WO #: 0
Batch #(s): F005234, F005233, F005235	

Analyst Initials: ZKH **Reviewer Initials/Date:** PGS

29. Are re-runs noted with reason?

YES NO N/A

Comments: _____

30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):

YES NO N/A

Was a bubbler and trap test run before the analytical run continued?

Comments: _____

31. Do re-run results compare to initial analysis (< 35% RPD)?

YES NO N/A

Comments: _____

32. Are qualifiers consistent with the data review flowcharts?

YES NO N/A

Comments: _____

33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?

YES NO N/A

Comments: _____

34. Have re-extracts been created for non-reportable samples?

YES NO N/A

35. Narrations in MMO box in LIMS?

Comments: _____

36. Are there any HIGH QA projects within the data?

YES NO

If so, place dataset to the QA office.

37. Does the data set need scanning?

YES N/A

Files located at: \\Cuprum\gen admin\Quality Assurance\Training Master\DOCs

38. Date of analyst IDOC/CDOC: 10/3/2019 IDOC/CDOC within last 12 months?

YES NO

39. Date of analyst's SOP reading: 2/15/2019 Current SOP revision?

YES NO

40. Date of LOD: 10/29/2020 LOD within last 3 months (within 12 months for MDN)?

YES NO N/A

41. Date of LOQ: 10/29/2020 LOQ within last 3 months (within 12 months for MDN)?

YES NO N/A

42. If MDN samples, date of last MDL study: _____

43. MDL study within last 12 months?

YES NO N/A


Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Additional Comments:

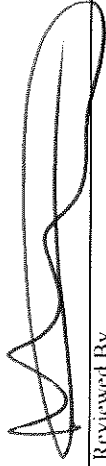
YES NO

Failing Data Report - 0E08011

Sample ID Analysis Result MRI Dup Source True Units % Rec. Rec. Rec. RPD RPD Over Cal Failure Qualifier

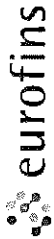


 Analyst Reviewed By _____ Date 5/12/2020



 Peer Reviewed By _____ Date 5/12/2020

0E08011-CCV3 - 0.320 ppt 03.6%. recovery - failed low
 0E08011-CCV5 - 0.38 ppt 03.07. recovery - failed low
 0E08011-CCB5 - failed high, switched w/a CCV
 0E08011-CCV6 - ND, switched w/a CCB
 0E08011-CCB7 - failed high - 0.051 ppt
 0D00075-02RE1 → over curve
 0D00075-03RE1 → over curve
 0D00075-04RE1 → over curve
 0D00075-05RE1 → E-01
 0D00075-06RE1 → over curve



Frontier Global Sciences

MHg27001-200508-2

Analysis Datasheet for Methyl Mercury in Soil/Tissue

Date of Analysis: May 08, 2020
 Instrument #: Hg2700-1
 LIMS Sequence #: 0E08011

Analyst:
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	21.23 units	424.50	10.84 units	216.74	108.4 %Rec
SEQ-CAL2	1	0.20 ng/L	48.59 units	242.95	38.20 units	191.01	95.5 %Rec
SEQ-CAL3	1	1.00 ng/L	198.29 units	198.29	187.91 units	187.91	94.0 %Rec
SEQ-CAL4	1	2.00 ng/L	405.39 units	202.70	395.00 units	197.50	98.8 %Rec
SEQ-CAL5	1	4.00 ng/L	836.55 units	209.14	826.17 units	206.54	103.3 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 199.94 Corr. St Dev RF +/- 11.79 Corr. RSD CF 5.9% RSD Uncorr. Mean RF 255.52

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-TBL	1	10.39 units		0.04 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	0	0.000 ng/L	
BLK	2	3	0.049 ng/L	±0.005
BLK	3	3	0.021 ng/L	±0.009
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	00	CAL	SEQ-18L1	1	5/8/20 13:32	46784-1.RAW	13:32:59	10.39			0.0	0.000	0.000	ng/L	
Hg2700-1	00	CAL	SEQ-CAL1	1	5/8/20 13:43	46785-1.RAW	13:43:14	21.23			10.8	0.054	0.054	ng/L	
Hg2700-1	00	CAL	SEQ-CAL2	1	5/8/20 13:53	46786-1.RAW	13:53:30	48.59			38.2	0.191	0.191	ng/L	
Hg2700-1	00	CAL	SEQ-CAL3	1	5/8/20 14:03	46787-1.RAW	14:03:45	198.29			187.9	0.940	0.940	ng/L	
Hg2700-1	00	CAL	SEQ-CAL4	1	5/8/20 14:14	46788-1.RAW	14:14:01	405.39			395.0	1.976	1.976	ng/L	
Hg2700-1	00	CAL	SEQ-CAL5	1	5/8/20 14:24	46789-1.RAW	14:24:16	836.55			826.2	4.132	4.132	ng/L	
Hg2700-1	00	CAL	SEQ-ICV1	1	5/8/20 14:34	46790-1.RAW	14:34:32	118.98			108.6	0.543	0.543	ng/L	108.6226448
Hg2700-1	00	CAL	SEQ-ICB1	1	5/8/20 14:44	46791-1.RAW	14:44:48	18.60			8.2	0.041	0.041	ng/L	
Hg2700-1	00	SAM	F005234-B51	1.25	5/8/20 14:55	46792-1.RAW	14:55:04	150.32			139.9	0.875	0.875	ng/L	F005234
Hg2700-1	00	SAM	F005234-B52	1.25	5/8/20 15:05	46793-1.RAW	15:05:20	179.79			169.4	1.059	1.059	ng/L	F005234
Hg2700-1	00	SAM	F005234-B53	1.25	5/8/20 15:15	46794-1.RAW	15:15:36	170.89			160.5	1.003	1.003	ng/L	F005234
Hg2700-1	00	SAM	F005234-B54	1.25	5/8/20 15:25	46795-1.RAW	15:25:52	148.39			138.0	0.863	0.863	ng/L	F005234
Hg2700-1	00	SAM	DC00107-01	1.25	5/8/20 15:36	46796-1.RAW	15:36:09	10.81			0.4	0.003	0.003	ng/L	F005234
Hg2700-1	00	SAM	F005233-B51	1.25	5/8/20 15:46	46797-1.RAW	15:46:25	161.23			150.8	0.894	0.894	ng/L	F005233
Hg2700-1	00	SAM	F005233-B5D1	1.25	5/8/20 15:56	46798-1.RAW	15:56:41	173.43			163.0	0.971	0.971	ng/L	F005233
Hg2700-1	00	BLK	F005233-BLK1	1.25	5/8/20 16:06	46799-1.RAW	16:06:57	17.62			7.2	0.045	0.045	ng/L	F005233
Hg2700-1	00	BLK	F005233-BLK2	1.25	5/8/20 16:17	46800-1.RAW	16:17:12	17.69			7.3	0.037	0.037	ng/L	F005233
Hg2700-1	00	BLK	F005233-BLK3	1.25	5/8/20 16:27	46801-1.RAW	16:27:28	19.16			8.8	0.044	0.044	ng/L	F005233
Hg2700-1	00	CAL	SEQ-CCV1	1	5/8/20 16:37	46802-1.RAW	16:37:44	99.53			89.1	0.446	0.446	ng/L	89.16654765
Hg2700-1	00	CAL	SEQ-CCB1	1	5/8/20 16:47	46803-1.RAW	16:47:59	18.48			8.1	0.040	0.040	ng/L	
Hg2700-1	00	SAM	DD00074-01	1.25	5/8/20 16:58	46804-1.RAW	16:58:16	94.69			84.3	0.383	0.383	ng/L	F005233
Hg2700-1	00	SAM	F005233-M51	1.25	5/8/20 17:08	46805-1.RAW	17:08:32	231.85			221.5	1.336	1.336	ng/L	F005233
Hg2700-1	00	SAM	F005233-M5D1	1.25	5/8/20 17:18	46806-1.RAW	17:18:48	241.74			231.3	1.398	1.398	ng/L	F005233
Hg2700-1	00	SAM	DD00074-02	1.25	5/8/20 17:29	46807-1.RAW	17:29:04	31.58			21.2	0.067	0.067	ng/L	F005233
Hg2700-1	00	SAM	F005233-M52	1.25	5/8/20 17:39	46808-1.RAW	17:39:21	182.98			172.6	0.824	0.824	ng/L	F005233
Hg2700-1	00	SAM	F005233-M5D2	1.25	5/8/20 17:49	46809-1.RAW	17:49:37	210.77			200.4	0.963	0.963	ng/L	F005233
Hg2700-1	00	SAM	DD00074-03	1.25	5/8/20 17:59	46810-1.RAW	17:59:53	55.46			45.1	0.187	0.187	ng/L	F005233
Hg2700-1	00	SAM	DD00074-04	1.25	5/8/20 18:10	46811-1.RAW	18:10:09	28.27			17.9	0.051	0.051	ng/L	F005233
Hg2700-1	00	SAM	DD00074-05	1.25	5/8/20 18:20	46812-1.RAW	18:20:25	28.54			18.1	0.052	0.052	ng/L	F005233
Hg2700-1	00	SAM	DD00074-06	1.25	5/8/20 18:30	46813-1.RAW	18:30:41	31.34			21.0	0.086	0.082	ng/L	F005233
Hg2700-1	00	CAL	SEQ-CCV2	1	5/8/20 18:40	46814-1.RAW	18:40:58	103.93			93.5	0.468	0.468	ng/L	93.57324503
Hg2700-1	00	CAL	SEQ-CCB2	1	5/8/20 18:51	46815-1.RAW	18:51:14	14.99			4.6	0.023	0.023	ng/L	
Hg2700-1	00	SAM	DD00074-07	1.25	5/8/20 19:01	46816-1.RAW	19:01:30	23.24			12.9	0.025	0.032	ng/L	F005233
Hg2700-1	00	SAM	DF00002-01	1.25	5/8/20 19:11	46817-1.RAW	19:11:47	34.42			24.0	0.081	0.102	ng/L	F005233
Hg2700-1	00	SAM	DF00002-02	1.25	5/8/20 19:22	46818-1.RAW	19:22:03	50.82			40.4	0.163	0.204	ng/L	F005233
Hg2700-1	00	SAM	DF00002-03	1.25	5/8/20 19:32	46819-1.RAW	19:32:20	40.76			30.4	0.141	0.141	ng/L	F005233
Hg2700-1	00	SAM	DF00002-04	1.25	5/8/20 19:42	46820-1.RAW	19:42:36	46.85			36.5	0.144	0.179	ng/L	F005233
Hg2700-1	00	SAM	DF00002-05	1.25	5/8/20 19:52	46821-1.RAW	19:52:53	35.28			24.9	0.086	0.107	ng/L	F005233
Hg2700-1	00	SAM	DF00002-06	1.25	5/8/20 20:03	46822-1.RAW	20:03:09	30.72			20.3	0.053	0.079	ng/L	F005233
Hg2700-1	00	SAM	DF00002-07	1.25	5/8/20 20:13	46823-1.RAW	20:13:25	29.82			19.4	0.058	0.073	ng/L	F005233
Hg2700-1	00	SAM	DF00002-08	1.25	5/8/20 20:23	46824-1.RAW	20:23:42	17.48			7.1	-0.003	-0.004	ng/L	F005233
Hg2700-1	00	SAM	DF00002-09	1.25	5/8/20 20:33	46825-1.RAW	20:33:58	43.07			32.7	0.156	0.156	ng/L	F005233
Hg2700-1	00	CAL	SEQ-CCV3	1	5/8/20 20:44	46826-1.RAW	20:44:14	74.43			64.0	0.320	0.320	ng/L	F005233
Hg2700-1	00	CAL	SEQ-CCB3	1	5/8/20 20:54	46827-1.RAW	20:54:31	12.98			2.6	0.013	0.013	ng/L	F005233
Hg2700-1	00	SAM	DF00002-09	1.25	5/8/20 21:04	46828-1.RAW	21:04:47	52.64			42.3	0.172	0.216	ng/L	F005233
Hg2700-1	00	SAM	DF00002-10	1.25	5/8/20 21:15	46829-1.RAW	21:15:04	35.66			25.3	0.088	0.109	ng/L	F005233

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	00	SAM	0E00002-11	1.25	5/8/20 21:25	46830-1.RAW	21:25:20	12.03	2		1.6	-0.031	-0.038	ng/L	F0052333
Hg2700-1	00	SAM	0E00002-12	1.25	5/8/20 21:35	46831-1.RAW	21:35:37	34.26	2		23.9	0.081	0.081	ng/L	F0052333
Hg2700-1	00	SAM	F005235-BS1	1.25	5/8/20 21:45	46832-1.RAW	21:45:53	203.00	3		192.6	0.947	1.183	ng/L	F0052335
Hg2700-1	00	BLK	F005235-BSK1	1.25	5/8/20 21:56	46833-1.RAW	21:56:10	190.96	3		180.6	0.886	1.108	ng/L	F0052335
Hg2700-1	00	BLK	F005235-BLK1	1.25	5/8/20 22:06	46834-1.RAW	22:06:26	15.25	3		4.9	0.030	0.030	ng/L	F0052335
Hg2700-1	00	BLK	F005235-BLK2	1.25	5/8/20 22:16	46835-1.RAW	22:16:43	12.46	3		2.1	0.010	0.013	ng/L	F0052335
Hg2700-1	00	BLK	F005235-BLK3	1.25	5/8/20 22:26	46836-1.RAW	22:26:59	13.45	3		3.1	0.015	0.019	ng/L	F0052335
Hg2700-1	00	SAM	0D00062-01	1.25	5/8/20 22:37	46837-1.RAW	22:37:16	9.88	3		-0.5	-0.019	-0.024	ng/L	F0052335
Hg2700-1	00	CAL	SEQ-CCV4	1	5/8/20 22:47	46838-1.RAW	22:47:33	85.14	3		74.8	0.374	0.374	ng/L	74.77602508
Hg2700-1	00	CAL	SEQ-CCB4	1	5/8/20 22:57	46839-1.RAW	22:57:49	11.44	3		1.1	0.005	0.005	ng/L	F0052335
Hg2700-1	00	SAM	F005235-MS1	1.25	5/8/20 23:08	46840-1.RAW	23:08:06	219.03	3		208.6	1.027	1.284	ng/L	F0052335
Hg2700-1	00	SAM	F005235-MSDI	1.25	5/8/20 23:18	46841-1.RAW	23:18:22	172.57	3		162.2	0.794	0.993	ng/L	F0052335
Hg2700-1	00	SAM	0D00062-02	1.25	5/8/20 23:28	46842-1.RAW	23:28:39	9.56	3		-0.8	-0.021	-0.026	ng/L	F0052335
Hg2700-1	00	SAM	F005235-MS2	1.25	5/8/20 23:38	46843-1.RAW	23:38:55	197.61	3		187.2	0.920	1.150	ng/L	F0052335
Hg2700-1	00	SAM	F005235-MSD2	1.25	5/8/20 23:49	46844-1.RAW	23:49:11	217.65	3		207.3	1.020	1.275	ng/L	F0052335
Hg2700-1	00	SAM	0D00062-05	1.25	5/8/20 23:59	46845-1.RAW	23:59:28	5.33	3		-5.1	-0.042	-0.052	ng/L	F0052335
Hg2700-1	00	SAM	0D00062-06	1.25	5/8/20 0:09	46846-1.RAW	0:09:44	0.00	3		-10.4	-0.069	-0.086	ng/L	F0052335
Hg2700-1	00	CAL	SEQ-CCV5	1	5/8/20 0:20	46847-1.RAW	0:20:00	73.87	3		63.5	0.318	0.318	ng/L	63.50159474
Hg2700-1	00	CAL	SEQ-CCB5	1	5/8/20 0:30	46848-1.RAW	0:30:16	75.78	3		65.4	0.327	0.327	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-01	50	5/8/20 0:40	46849-1.RAW	0:40:32	6.99	3		-1.1	-0.007	-0.371	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-02	50	5/8/20 0:50	46850-1.RAW	0:50:48	44.78	3		34.4	0.172	8.980	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-03	50	5/8/20 1:01	46851-1.RAW	1:01:05	27.67	3		17.3	0.086	4.300	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-04	50	5/8/20 1:11	46852-1.RAW	1:11:21	74.02	3		63.6	0.318	15.893	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-05	50	5/8/20 1:21	46853-1.RAW	1:21:38	16.80	3		6.4	0.032	1.583	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-06	50	5/8/20 1:31	46854-1.RAW	1:31:54	120.93	3		110.5	0.552	27.622	ng/L	F0052335
Hg2700-1	00	CAL	SEQ-CCV6	1	5/8/20 1:47	46855-1.RAW	1:47:11	7.69	3		2.7	-0.013	-0.013	ng/L	2.69976424
Hg2700-1	00	CAL	SEQ-CCB6	1	5/8/20 1:52	46856-1.RAW	1:52:27	8.42	3		-2.0	-0.010	-0.010	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-01RE1	1.25	5/8/20 2:02	46857-1.RAW	2:02:43	64.04	3		53.7	0.252	0.315	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-02RE1	1.25	5/8/20 2:13	46858-1.RAW	2:13:00	2044.29	3		2033.9	10.156	12.695	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-03RE1	1.25	5/8/20 2:23	46859-1.RAW	2:23:16	1041.34	3		1031.0	5.140	6.425	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-04RE1	1.25	5/8/20 2:33	46860-1.RAW	2:33:33	2835.10	3		2824.7	14.111	17.639	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-05RE1	1.25	5/8/20 2:43	46861-1.RAW	2:43:49	150.03	3		139.6	0.682	0.852	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-06RE1	1.25	5/8/20 2:54	46862-1.RAW	2:54:06	1816.62	3		1806.2	9.017	11.271	ng/L	F0052335
Hg2700-1	00	CAL	SEQ-CCV7	1	5/8/20 3:04	46863-1.RAW	3:04:22	135.11	3		124.7	0.624	0.624	ng/L	124.7620691
Hg2700-1	00	CAL	SEQ-CCB7	1	5/8/20 3:14	46864-1.RAW	3:14:39	20.60	3		10.2	0.051	0.051	ng/L	F0052335

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: ZKH 5/7/20
Upload/Date: ZKH 5/7/20

Samples to lab: 5/16/2020
Reviewer/Date: _____

Batch #: FO05234

- EFGS Preparation Method**
- SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS
 - SOP2837 Tissue Nitric Digestion ICPMS CVAFS
 - SOP2840 Modified Aqua Regia
 - SOP2820 RP
 - SOP2821 HF Bomb Digestion ICPMS CVAFS
 - SOP2825 Nitric Bomb Digestion ICPMS CVAFS
 - SOP2993 Oven Digestion (As, Se Speciation)
 - SOP5145 Microwave Digestion (Nutraceuticals)
 - SOP5145 Microwave Digestion (3051)
 - NA Other:

Initials	SOP Date	DOC Date
<u>ZKH</u>		<u>5/16/2020</u>
Comments: _____		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: Methyl Mercury Distillation

- | | | Reviewer Initials | Tertiary Review |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------|
| 1. Is any SOP/DOC expiring within one week of Submission Date?
Data cannot be reported without a current IDOC/CDOC. | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| If YES, notify supervisor and technician immediately. | | | |
| 2. Check prep method | <input checked="" type="checkbox"/> YES | | <input type="checkbox"/> |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30 | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 4. Check for transcription errors from benchsheet | <input checked="" type="checkbox"/> YES | | <input type="checkbox"/> |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) Check and compare mass | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (e) For re-digests, have e-mails been attached and verified? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> YES | | <input type="checkbox"/> |
| 5. Samples per Batch? Check QC Requirements | <input type="checkbox"/> ≤ 20 <input checked="" type="checkbox"/> ≤ 10 | | <input type="checkbox"/> |
| (a) PBs per batch? | <input type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) Are pre and post homogenization blanks in batch? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (c) BS, BS/BSD or CRM in batch? | <input checked="" type="checkbox"/> BS <input type="checkbox"/> BS/BSD <input type="checkbox"/> CRM | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) MS/MSD in batch? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (e) MD in batch? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (f) Is there at least one duplicate QC source in batch? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (g) Are there any client specific requests, QC requests, etc? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| Document: | | | |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (i) Correct 'source' designated for MD/MS/MSD? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 6. Special prep requirements? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (c) Spikes added: | <input checked="" type="checkbox"/> YES | | <input type="checkbox"/> |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: 2000428

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>1.0ng/mL MHg</u>	<u>2000428</u>	<u>50</u>			

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/6/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005234-BS1	LCS	45	40	2000428	50			
F005234-BS2	LCS	45	40	2000428	50			
F005234-BS3	LCS	45	40	2000428	50			
F005234-BS4	LCS	45	40	2000428	50			

Standard ID(s):
2000428

Description:
MHe New Primary 1.0 ng/mL CAL

Expiration:
24-May-20 00:00

Reagent ID(s):
2000983
2000984

Description:
1% APDC Solution
0.4% HCl Distillation Dilute (Made Daily)

Expiration:
13-May-20 00:00
07-May-20 00:00

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/6/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0C00107-01	Zahra Dist. DOC	45.0929	40	-	-		This sample does not exist - ZKH 3/21/	

Work Order
0C00107

Client
[REDACTED]

Project
[REDACTED]

Methyl Mercury Distillations (EPA 1630)

Name: ZKH Date: 5/6/2020 Batch #: F005234 Sample Matrix: Water
 WO#: 0C00107

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (±3)	Time first sample distillation completed: <u>1416</u>
1	F005234-BS1	<u>2</u>	<u>45.4563</u>	<u>2</u>	Spike ID: <u>2000428</u> Spike Amount: <u>50</u> µL Spike Witness: <u>MPS 5/14/2020</u> Balance #: <u>25</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>MU17683</u> Cal. Date: <u>4/30/2020</u> Pipette #: <u>U21647</u> Cal. Date: <u>4/30/2020</u> Pipette #: <u>PU30538</u> Cal. Date: <u>4/30/2020</u> APDC ID: <u>2000983</u> HCl ID: <u>2000984</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>NA</u> Unit 2: <u>123°C</u> Unit 3: <u>NA</u> Unit 4: <u>NA</u> Unit 5: <u>NA</u> Unit 6: <u>NA</u> Comments:
2	F005234-BS2	<u>2</u>	<u>45.4788</u>	<u>2</u>	
3	F005234-BS3	<u>2</u>	<u>45.5926</u>	<u>3</u>	
4	F005234-BS4	<u>2</u>	<u>45.5785</u>	<u>3</u>	
5	F005234 <u>0C00107-01</u>	<u>2</u>	<u>45.0929</u>	<u>3</u>	
<u>ZKH 5/6/2020</u>					

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/6/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005234-BS1	LCS	45	40	2000428	50			
F005234-BS2	LCS	45	40	2000428	50			
F005234-BS3	LCS	45	40	2000428	50			
F005234-BS4	LCS	45	40	2000428	50			

Standard ID(s): 2000428 Description: MHg New Primary 1.0 ng/mL CAL Expiration: 24-May-20 00:00

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0C00107-01	Zahra Dist. DOC	45	40	-	-		This sample does not exist - ZKH 3/21/	

Work Order
0C00107

Client



Project



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: ZKH 5/6/2020
Upload/Date: ZKH 5/7/2020

Samples to lab: 5/6/2020
Reviewer/Date: _____

Batch #: FO05233

- EFGS Preparation Method**
- SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS
 - SOP2837 Tissue Nitric Digestion ICPMS CVAFS
 - SOP2840 Modified Aqua Regia
 - SOP2820 RP
 - SOP2821 HF Bomb Digestion ICPMS CVAFS
 - SOP2825 Nitric Bomb Digestion ICPMS CVAFS
 - SOP2993 Oven Digestion (As, Se Speciation)
 - SOP5145 Microwave Digestion (Nutraceuticals)
 - SOP5145 Microwave Digestion (3051)
 - NA Other: _____

Initials	SOP Date	DOC Date
<u>ZKH</u>	_____	<u>5/6/2020</u>
_____	_____	_____
_____	_____	_____

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analyses: Methy Mercury Distillation

- | | Reviewer Initials | Tertiary Review |
|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 1. Is any SOP/DOC expiring within one week of Submission Date?
Data cannot be reported without a current IDOC/CDOC. | <input checked="" type="checkbox"/> YES
<input type="checkbox"/> NO | <input type="checkbox"/> |
| If YES, notify supervisor and technician immediately. | | |
| 2. Check prep method | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30 <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 4. Check for transcription errors from benchsheet | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) Check and compare mass | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (e) For re-digests, have e-mails been attached and verified? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> |
| 5. Samples per Batch? Check QC Requirements | <input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10 | <input type="checkbox"/> |
| (a) PBs per batch? | <input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs | <input type="checkbox"/> |
| (b) Are pre and post homogenization blanks in batch? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (c) BS, BS/BSD or CRM in batch? | <input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM | <input type="checkbox"/> |
| (d) MS/MSD in batch? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (e) MD in batch? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (f) Is there at least one duplicate QC source in batch? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (g) Are there any client specific requests, QC requests, etc? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| Document: <u>0000074-01 / 0000074-02 QCD</u> | | |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (i) Correct 'source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 6. Special prep requirements? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) For all spiking was there a witness? (Initials must be in logbook) | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (c) Spikes added: | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: 2000478

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>10mg/ml Mthg</u>	<u>2000478</u>	<u>50</u>			

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/6/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005233-BLK1	Blank	45	40					
F005233-BLK2	Blank	45	40					
F005233-BLK3	Blank	45	40					
F005233-BS1	LCS	45	40	2000428	50			
F005233-BSD1	LCS Dup	45	40	2000428	50			
F005233-MS1	Matrix Spike [0D00074-01]	45.3567	40	2000428	50			
F005233-MS2	Matrix Spike [0D00074-02]	45.2785	40	2000428	50			
F005233-MSD1	Matrix Spike Dup [0D00074-01]	45.4245	40	2000428	50			
F005233-MSD2	Matrix Spike Dup [0D00074-02]	45.0768	40	2000428	50			

Standard ID(s):	Description:	Reagent ID(s):	Description:	Expiration:
2000428	MHg New Primary 1.0 ng/mL CAL	2000983	1% APDC Solution	13-May-20 00:00
		2000984	0.4% HCl Distillation Dilute (Made Daily)	07-May-20 00:00

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/6/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00074-01	WQ1b-C_042720_SW_10 TOTAL	45.8303	40	QC	-		MS/MSD	
0D00074-02	WQ1b-C_042720_SW_10 DISSOLVED	45.5742	40	QC	-	flms Test	MS/MSD	
0D00074-03	WQ2-C_042720_SW_10 TOTAL	45.6076	40	-	-			
0D00074-04	WQ2-C_042720_SW_10 DISSOLVED	45.849	40	-	-	flms Test		
0D00074-05	WQ3-L_042720_SW_10 TOTAL	45.0305	40	-	-			
0D00074-06	WQ3-L_042720_SW_10 DISSOLVED	45.9123	40	-	-	flms Test		
0D00074-07	WQ1b-C_042720_SW_10 DUP TOTAL	45.7057	40	-	-			
0D00074-08	WQ1b-C_042720_SW_10 DUP DISSOLVED	45.7123	40	-	-			
0E00002-01	WQ-FPT_042920_SW_10 TOTAL	45.2003	40	-	-			
0E00002-02	WQ-FPT_042920_SW_10 DISSOLVED	45.0073	40	-	-			
0E00002-03	ES-15_042920_SW_10 TOTAL	45.5717	40	-	-			
0E00002-04	ES-15_042920_SW_10 DISSOLVED	45.7102	40	-	-			
0E00002-05	WQ-ECH_042920_SW_10 TOTAL	45.7094	40	-	-			
0E00002-06	WQ_ECH_042920_SW_10 DISSOLVED	45.0343	40	-	-			
0E00002-07	OV-02_042920_SW_10 TOTAL	45.3405	40	-	-			
0E00002-08	OV-02_042920_SW_10 DISSOLVED	45.9539	40	-	-			
000002-09	ADD-02_042920_SW_10 TOTAL	45.2179	40	-	-			
000002-10	ADD-02_042920_SW_10 DISSOLVED	45.6509	40	-	-			
000002-11	EB-01_042920_SW TOTAL	45.1209	40	-	-	010106		

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/6/2020

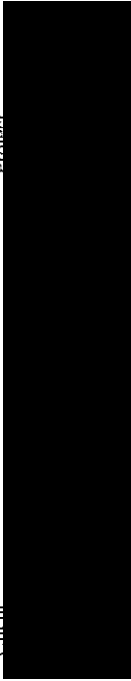
0E00002-12	EB-01_042920_SW DISSOLVED	45.6572	40	-	-	010106	
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Work Order

0D000074

0E000002

Client



Prepared

Methyl Mercury Distillations (EPA 1630)

Name: ZH Date: 5/6/2020 Batch #: FO05233 Sample Matrix: Water
 WO#: 0D00074, 0E00002

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (±3)	Time first sample distillation completed: <u>1416</u>
1	FO05233-BLK1	<2	45.1715	3	Spike ID: <u>2000428</u> Spike Amount: <u>50</u> µL Spike Witness: <u>MFS 5/6/2020</u> Balance #: <u>75</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>MU17683</u> Cal. Date: <u>4/30/2020</u> Pipette #: <u>PJ30538</u> Cal. Date: <u>4/30/2020</u> Pipette #: <u>LI121647</u> Cal. Date: <u>4/30/2020</u> APDC ID: <u>2000983</u> HCl ID: <u>2000984</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>NA</u> Unit 2: <u>NA</u> Unit 3: <u>123 °C</u> Unit 4: <u>112 °C</u> Unit 5: <u>120 °C</u> Unit 6: <u>NA</u> Comments:
2	FO05233-BLK2	<2	45.7485	4	
3	FO05233-BLK3	<2	45.6258	3	
4	FO05233-BS1	<2	45.0152	3	
5	FO05233-BSD1	<2	45.6982	3	
6	0D00074-01 (src MS1)	<2	45.8303	4	
7	FO05233-MS1 (src MS1)	<2	45.3567	4	
8	FO05233-MSD1	<2	45.4245	4	
9	0D00074-02 (src MS2)	<2	45.5742	4	
10	FO05233-US2	<2	45.2785	3	
11	FO05233-MSD2	<2	45.0768	3	
12	0D00074-03	<2	45.6076	4	
13	0D00074-04	<2	45.8490	3	
14	0D00074-05	<2	45.0305	2	
15	0D00074-06	<2	45.9123	3	
16	0D00074-07	<2	45.7057	2	
17	0D00074-08	<2	45.7123	2	
18	0E00002-01	<2	45.2003	2	
19	0E00002-02	<2	45.0073	3	
20	0E00002-03	<2	45.5717	3	
21	0E00002-04	<2	45.7102	4	
22	0E00002-05	<2	45.7094	4	
23	0E00002-06	<2	45.0343	2	
24	0E00002-07	<2	45.3405	3	
25	0E00002-08	<2	45.9539	3	
26	0E00002-09	<2	45.2179	2	
27	0E00002-10	<2	45.6509	2	
28	0E00002-11	<2	45.1209	2	
29	0E00002-12	<2	45.6572	3	

ZH 5/6/2020

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005233-BLK1 ✓	Blank	45	40					
F005233-BLK2 ✓	Blank	45	40					
F005233-BLK3 ✓	Blank	45	40					
F005233-BS1 ✓	LCS	45	40	2000428	50			
F005233-BSD1 ✓	LCS Dup	45	40	2000428	50			
F005233-MS1 ✓	Matrix Spike [0D00074-01]	45	40	2000428	50			
F005233-MS2 ✓	Matrix Spike [0D00074-02]	45	40	2000428	50			
F005233-MSD1 ✓	Matrix Spike Dup [0D00074-01]	45	40	2000428	50			
F005233-MSD2 ✓	Matrix Spike Dup [0D00074-02]	45	40	2000428	50			

Standard ID(s): 2000428 Description: MHg New Primary 1.0 ng/mL CAL Expiration: 24-May-20 00:00

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/6/2020

Matrix: Water

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
01D00074-01	WQ1b-C_042720_SW_10 TOTAL	45	40	QC	-		MS/MSD	
01D00074-02	WQ1b-C_042720_SW_10 DISSOLVED	45	40	QC	-	flms Test/	MS/MSD	
01D00074-03	WQ2-C_042720_SW_10 TOTAL	45	40	-	-			
01D00074-04	WQ2-C_042720_SW_10 DISSOLVED	45	40	-	-	flms Test/		
01D00074-05	WQ3-L_042720_SW_10 TOTAL	45	40	-	-			
01D00074-06	WQ3-L_042720_SW_10 DISSOLVED	45	40	-	-	flms Test/		
01D00074-07	WQ1b-C_042720_SW_10_DUP TOTAL	45	40	-	-			
01D00074-08	WQ1b-C_042720_SW_10_DUP DISSOLVED	45	40	-	-			
01E00002-01	WQ-FPT_042920_SW_10 TOTAL	45	40	-	-			
01E00002-02	WQ-FPT_042920_SW_10 DISSOLVED	45	40	-	-			
01E00002-03	ES-15_042920_SW_10 TOTAL	45	40	-	-			
01E00002-04	ES-15_042920_SW_10 DISSOLVED	45	40	-	-			
01E00002-05	WQ-ECH_042920_SW_10 TOTAL	45	40	-	-			
01E00002-06	WQ_ECH_042920_SW_10 DISSOLVED	45	40	-	-			
01E00002-07	OV-02_042920_SW_10 TOTAL	45	40	-	-			
01E00002-08	OV-02_042920_SW_10 DISSOLVED	45	40	-	-			
000002-09	ADD-02_042920_SW_10 TOTAL	45	40	-	-			
000002-10	ADD-02_042920_SW_10 DISSOLVED	45	40	-	-			
000002-11	EIB-01_042920_SW TOTAL	45	40	-	-	010106		

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

0E00002-12	EB-01_042920_SW DISSOLVED	45	40	-	-	010106	
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Work Order
0D00074
0E00002

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS 5/17/2020
Upload/Date: MFS 5/17/2020

Samples to lab: 5/17/2020 Batch #: EGC5235
Reviewer/Date: ZKH 5/18/2020

EFGS Preparation Method

SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS

SOP2837 Tissue Nitric Digestion ICPMS CVAFS

SOP2840 Modified Aqua Regia

SOP2820 RP

SOP2821 HF Bomb Digestion ICPMS CVAFS

SOP2825 Nitric Bomb Digestion ICPMS CVAFS

SOP2993 Oven Digestion (As, Se Speciation)

SOP5145 Microwave Digestion (Nutraceuticals)

SOP5145 Microwave Digestion (3051)

NA Other: SOP2797 Distillation

Initials	SOP Date	DOC Date
<u>MFS</u>	<u>10/23/19</u>	<u>9J00236</u>

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: MHg

	Reviewer Initials	Tertiary Review
1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>
If YES, notify supervisor and technician immediately.		
2. Check prep method	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(a) For Ceuticals: Is correct Hg code being used in LIMS? <input type="checkbox"/> ICPMS <input type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> 20 <input type="checkbox"/> < 10	<input type="checkbox"/>
(a) PBs per batch? <input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
(c) BS, BS/BSD or CRM in batch? <input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(d) MS/MSD in batch?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
(e) MD in batch?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
Document: <u>N/A</u>		
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
6. Special prep requirements?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(c) Spikes added: <input checked="" type="checkbox"/> YES		<input type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : N/A

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL

MFS 5/17/2020

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Prepared: 5/7/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005235-BLK1	Blank	45	40					
F005235-BLK2	Blank	45	40					
F005235-BLK3	Blank	45	40					
F005235-BS1	LCS	45	40	2000428	50			
F005235-BSD1	LCS Dup	45	40	2000428	50			
F005235-MS1	Matrix Spike [0D00062-01]	45.73	40	2000428	50			
F005235-MS2	Matrix Spike [0D00062-02]	45.42	40	2000428	50			
F005235-MSD1	Matrix Spike Dup [0D00062-01]	45.59	40	2000428	50			
F005235-MSD2	Matrix Spike Dup [0D00062-02]	45.44	40	2000428	50			

<u>Standard ID(s):</u> 2000428	<u>Description:</u> MHg New Primary 1.0 ng/mL CAL	<u>Expiration:</u> 24-May-20 00:00	<u>Reagent ID(s):</u> 2000983 2000991	<u>Description:</u> 1% APDC Solution .4% HCl Distillation Dilute (Made Daily)	<u>Expiration:</u> 13-May-20 00:00 08-May-20 00:00
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PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Prepared: 5/7/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00062-01	GSLCEOP	45.34	40	-	-	S&R		
0D00062-02	GSLCEOP (Blank)	45.55	40	-	-	S&R		
0D00062-05	By Product C Plant	45.27	40	-	-	S&R		
0D00062-06	By Product C Plant (Blank)	45.13	40	-	-	S&R		
0D00075-01	P2-PW-Alb1-A-Do	34.87	40	-	-	140603	Porewater	Sample Depleted. Added 12.43g Reagent Water for volume - MFS 5/7/2020
0D00075-02	P2-PW-Alb1-B-Do	45.08	40	-	-	140603	Porewater	
0D00075-03	P2-PW-Alb1-C-Do	38.83	40	-	-	140603	Porewater	Sample Depleted. Added 7.17g Reagent Water for volume - MFS 5/7/2020
0D00075-04	P2-PW-Alb1-D-Do	45.01	40	-	-	140603	Porewater	
0D00075-05	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater	Sample Depleted. Added 3.59g Reagent Water for volume - MFS 5/7/2020
0D00075-06	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater	Sample Depleted. Added 3.45g Reagent Water for volume - MFS 5/7/2020

Work Order: 0D00062, 0D00075
 Client: [Redacted]
 Project: [Redacted]

Methyl Mercury Distillations (EPA 1630)

Name: MFS Date: 5/7/2020 Batch #: F005235 Sample Matrix: Water
 WO#: 0D00062, 0D00075

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (23)	Time first sample distillation completed: <u>1328</u>
1	F005235-BLK1	2.2	45.66	3	2000478 MFS Spike ID: <u>1964214</u> 5/7/2020 Spike Amount: <u>50</u> µL Spike Witness: <u>ZKH</u> Balance #: <u>2</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>NU01049</u> Cal. Date: <u>5/7/2020</u> Pipette #: <u>LU21657</u> Cal. Date: <u>5/7/2020</u> Pipette #: <u>NU004643</u> Cal. Date: <u>5/7/2020</u> APDC ID: <u>2000983</u> HCl ID: <u>2000991</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>123°C</u> Unit 2: <u>123°C</u> Unit 3: <u>123°C</u> Unit 4: <u>112.4°C</u> Unit 5: <u>121°C</u> Unit 6: <u>124.2°C</u> Comments: * Sample depleted. Added 12.43g H ₂ O for volume ** Sample depleted. Added 7.17g H ₂ O for volume *** Sample Depleted Added 3.59g H ₂ O for volume **** Sample depleted. Added 3.45g H ₂ O for volume
2	F005235-BLK2	2.2	45.90	4	
3	F005235-BLK3	2.2	45.83	4	
4	F005235-BLK1	2.2	45.29	3	
5	F005235- BLK1 MFS BSD1 5/7/2020	2.2	45.84	3	
6	0D00062-01A (SOURCE MFS) (MSI/MSD)	2.2	45.34	3	
7	F005235-MS1	2.2	45.73	3	
8	F005235-MSD1	2.2	45.59	3	
9	F005235 0D00062-02A (SOURCE MFS) (MSI/MSD)	2.2	45.55	3	
10	F005235-MS2	2.2	45.42	3	
11	F005235-MSD2	2.2	45.44	3	
12	0D00062-05A	2.2	45.21	3	
13	0D00062-06A	2.2	45.13	3	
14	0D00075-01A	2.2	34.87	2	
15	0D00075-02A	2.2	45.08	2	
16	0D00075-03A	2.2	38.83	2	
17	0D00075-04A	2.2	45.01	2	
18	0D00075-05A	2.2	41.43	2	
19	0D00075-06A	2.2	41.58	3	
20	0D00075-07A				

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005235-BLK1	Blank	45	40					
F005235-BLK2	Blank	45	40					
F005235-BLK3	Blank	45	40					
F005235-BL1	LCS	45	40	2000428	50			
F005235-BL2	LCS Dup	45	40	2000428	50			
F005235-M81	Matrix Spike [0D00062-05]	45	40	2000428	50			
F005235-M82	Matrix Spike [0D00062-02]	45	40	2000428	50			
F005235-M8D1	Matrix Spike Dup [0D00062-05]	45	40	2000428	50			
F005235-M8D2	Matrix Spike Dup [0D00062-02]	45	40	2000428	50			

Standard ID(s): 2000428
 Description: MHg New Primary 1.0 ng/mL CAL
 Expiration: 24-May-20 00:00

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs	Location	Sample Comments	Analysis Comments
0D00062-01	GSLCEOP	45	40	-	-	S&R		
0D00062-02	GSLCEOP (Blank)	45	40	-	-	S&R		
0D00062-03	By Product C Plant	45	40	-	-	S&R		
0D00062-04	By Product C Plant (Blank)	45	40	-	-	S&R		
0D00075-01	P2-PW-Albl-A-Do	45	40	-	-	140603	Porewater	
0D00075-02	P2-PW-Albl-B-Do	45	40	-	-	140603	Porewater	
0D00075-03	P2-PW-Albl-C-Do	45	40	-	-	140603	Porewater	
0D00075-04	P2-PW-Albl-D-Do	45	40	-	-	140603	Porewater	
0D00075-05	P2-PW-Un-A-Do	45	40	-	-	140603	Porewater	
0D00075-06	P2-PW-Un-B-Do	45	40	-	-	140603	Porewater	
0D00075-07	P2-PW-Un-C-Do	45	40	-	-	140603	Porewater	
0D00075-08	P2-PW-Un-D-Do	45	40	-	-	140603	Porewater	
0D00075-09	P2-OW-Albl-A-Do	45	40	-	-	140603	Overlying Water	
0D00075-10	P2-OW-Albl-B-Do	45	40	-	-	140603	Overlying Water	
0D00075-11	P2-OW-Albl-C-Do	45	40	-	-	140603	Overlying Water	
0D00075-12	P2-OW-Albl-D-Do	45	40	-	-	140603	Overlying Water	
000075-13	P2-OW-Un-A-Do	45	40	-	-	140603	Overlying Water	
000075-14	P2-OW-Un-B-Do	45	40	-	-	140603	Overlying Water	
000075-15	P2-OW-Un-C-Do	45	40	-	-	140603	Overlying Water	

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/6/2020

0D00075-16	P2-OW-Un-D-Do	45	40	-	140603	Overlying Water
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Work Order
0D00062
0D00075

Client
[Redacted]

Project

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Matrix: Water **Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water** **Prepared: 5/6/2020**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005234-BS1	LCS	45	40	2000428	50			
F005234-BS2	LCS	45	40	2000428	50			
F005234-BS3	LCS	45	40	2000428	50			
F005234-BS4	LCS	45	40	2000428	50			

Standard ID(s):	Description:	Reagent ID(s):	Description:	Expiration:
2000428	MHg New Primary 1.0 ng/mL CAL	2000639	Acetate Buffer	24-Sep-20 00:00
		2000810	Ethylating Agent (for Methyl Mercury Analysis)	14-Jul-20 00:00
		2000937	2.5% Ascorbic Acid	08-May-20 00:00
		2000983	1% APDC Solution	13-May-20 00:00
		2000984	0.4% HCl Distillation Dilute (Made Daily)	07-May-20 00:00

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Prepared: 5/6/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0C00107-01	Zahra Dist. DOC	45.0929	40	-	-		This sample does not exist - ZKH 3/21/	

Work Order

0C00107

Client



Project

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/7/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005235-BLK1	Blank	45	40					
F005235-BLK2	Blank	45	40					
F005235-BLK3	Blank	45	40					
F005235-BS1	LCS	45	40	2000428	50			
F005235-BSD1	LCS Dup	45	40	2000428	50			
F005235-MS1	Matrix Spike [0D00062-01]	45.73	40	2000428	50			
F005235-MS2	Matrix Spike [0D00062-02]	45.42	40	2000428	50			
F005235-MSD1	Matrix Spike Dup [0D00062-01]	45.59	40	2000428	50			
F005235-MSD2	Matrix Spike Dup [0D00062-02]	45.44	40	2000428	50			

Standard ID(s)	Description	Expiration	Reagent ID(s)	Description	Expiration
2000428	MHg New Primary 1.0 ng/mL CAL	24-May-20 00:00	2000639	Acetate Buffer	24-Sep-20 00:00
			2000810	Ethylating Agent (For Methyl Mercury Analysis)	14-Jul-20 00:00
			2000937	2.5% Ascorbic Acid	08-May-20 00:00
			2000983	1% APDC Solution	13-May-20 00:00
			2000991	4% HCl Distillation Dilute (Made Daily)	08-May-20 00:00

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/7/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00062-01	GSLCEOP	45.34	40	-	-	010106		
0D00062-02	GSLCEOP (Blank)	45.55	40	-	-	010106		
0D00062-05	By Product C Plant	45.27	40	-	-	010106		
0D00062-06	By Product C Plant (Blank)	45.13	40	-	-	010106		
0D00075-01	P2-PW-Alb1-A-Do	34.87	40	-	-	140603	Porewater	Sample Depleted. Added 12.43g Reagent Water for volume - MFS 5/7/2020
0D00075-01RE1	P2-PW-Alb1-A-Do	34.87	40	-	-	140603	Porewater Sample Depleted. Added 12	IX ran is same seq. - ZKH 5/8/2020
0D00075-02	P2-PW-Alb1-B-Do	45.08	40	-	-	140603	Porewater	
0D00075-02RE1	P2-PW-Alb1-B-Do	45.08	40	-	-	140603	Porewater Added 5/8/2020 by ZKH	IX ran is same seq. - ZKH 5/8/2020
0D00075-03	P2-PW-Alb1-C-Do	38.83	40	-	-	140603	Porewater	Sample Depleted. Added 7.17g Reagent Water for volume - MFS 5/7/2020
0D00075-03RE1	P2-PW-Alb1-C-Do	38.83	40	-	-	140603	Porewater Sample Depleted. Added 7.1	IX ran is same seq. - ZKH 5/8/2020
0D00075-04	P2-PW-Alb1-D-Do	45.01	40	-	-	140603	Porewater	
0D00075-04RE1	P2-PW-Alb1-D-Do	45.01	40	-	-	140603	Porewater Added 5/8/2020 by ZKH	IX ran is same seq. - ZKH 5/8/2020
0D00075-05	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater	Sample Depleted. Added 3.59g Reagent Water for volume - MFS 5/7/2020
0D00075-05RE1	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater Sample Depleted. Added 3.5	IX ran is same seq. - ZKH 5/8/2020
0D00075-06	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater	Sample Depleted. Added 3.45g Reagent Water for volume - MFS 5/7/2020
0D00075-06RE1	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater Sample Depleted. Added 3.4	IX ran is same seq. - ZKH 5/8/2020

Work Order
00062
00075

Client
Project

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/7/2020

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Prepared: 5/7/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005235-BLK1	Blank	45	40					
F005235-BLK2	Blank	45	40					
F005235-BLK3	Blank	45	40					
F005235-BS1	LCS	45	40	2000428	50			
F005235-BSD1	LCS Dup	45	40	2000428	50			
F005235-MS1	Matrix Spike [0D000062-01]	45.73	40	2000428	50			
F005235-MS2	Matrix Spike [0D000062-02]	45.42	40	2000428	50			
F005235-MSD1	Matrix Spike Dup [0D000062-01]	45.59	40	2000428	50			
F005235-MSD2	Matrix Spike Dup [0D000062-02]	45.44	40	2000428	50			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2000428	MHg New Primary 1.0 ng/mL CAL	24-May-20 00:00	2000639	Acetate Buffer	24-Sep-20 00:00
			2000810	Ethylating Agent (for Methyl Mercury Analysis)	14-Jul-20 00:00
			2000937	2.5% Ascorbic Acid	08-May-20 00:00
			2000983	1% APDC Solution	13-May-20 00:00
			2000991	.4% HCl Distillation Dilute (Made Daily)	08-May-20 00:00

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/7/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00062-01	GSLCEOP	45.34	40	-	-	010106		
0D00062-02	GSLCEOP (Blank)	45.55	40	-	-	010106		
0D00062-05	By Product C Plant	45.27	40	-	-	010106		
0D00062-06	By Product C Plant (Blank)	45.13	40	-	-	010106		
0D00075-01	P2-PW-Albl-A-Do	34.87	40	-	-	140603	Porewater	Sample Depleted. Added 12.43g Reagent Water for volume - MFS 5/7/2020
0D00075-01RE1	P2-PW-Albl-A-Do	34.87	40	-	-	140603	Porewater Sample Depleted. Added 12	IX ran is same seq. - ZKH 5/8/2020
0D00075-02	P2-PW-Albl-B-Do	45.08	40	-	-	140603	Porewater	
0D00075-02RE1	P2-PW-Albl-B-Do	45.08	40	-	-	140603	Porewater Added 5/8/2020 by ZKH	IX ran is same seq. - ZKH 5/8/2020
0D00075-03	P2-PW-Albl-C-Do	38.83	40	-	-	140603	Porewater	Sample Depleted. Added 7.17g Reagent Water for volume - MFS 5/7/2020
0D00075-03RE1	P2-PW-Albl-C-Do	38.83	40	-	-	140603	Porewater Sample Depleted. Added 7.1	IX ran is same seq. - ZKH 5/8/2020
0D00075-04	P2-PW-Albl-D-Do	45.01	40	-	-	140603	Porewater	
0D00075-04RE1	P2-PW-Albl-D-Do	45.01	40	-	-	140603	Porewater Added 5/8/2020 by ZKH	IX ran is same seq. - ZKH 5/8/2020
0D00075-05	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater	Sample Depleted. Added 3.59g Reagent Water for volume - MFS 5/7/2020
0D00075-05RE1	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater Sample Depleted. Added 3.5	IX ran is same seq. - ZKH 5/8/2020
0D00075-06	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater	Sample Depleted. Added 3.45g Reagent Water for volume - MFS 5/7/2020
0D00075-06RE1	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater Sample Depleted. Added 3.4	IX ran is same seq. - ZKH 5/8/2020

Work Order

00062

00075

Client

Product

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/7/2020

2018

Sample/ID	Location	Rinse	Dilute	Blank	ConcHg0(ppb)	ConcMeHg(ppb)	ConcHg2(ppb)	ConcPrHg(%)	Rec%	QA	RawData	RunEnd	PeakHg0 (Raw)
Clean					0	0.010736423	0				46782-1.RAW	13:12:28	0
WS	A1		1	10.388	0.14241	0	0.04				46783-1.RAW	13:22:43	38.8617477
SEQ-IBL1	A2		1	0	0.233128	0.051956771	0.11				46784-1.RAW	13:32:59	46.6116898
SEQ-CAL1	A3		1	10.388	0.1967804	0.054201075	0.09	108.40			46785-1.RAW	13:43:14	49.7325922
SEQ-CAL2	A4		1	10.388	0.2078737	0.191070057	0.08	95.54			46786-1.RAW	13:53:30	51.9505787
SEQ-CAL3	A5		1	10.388	0.2265995	0.93980832	0.17	93.98			46787-1.RAW	14:03:45	55.6946181
SEQ-CAL4	A6		1	10.388	0.2352489	1.975608112	0.09	98.78			46788-1.RAW	14:14:01	57.4239914
SEQ-CAL5	A7		1	10.388	0.2600037	4.132063323	0.09	103.30			46789-1.RAW	14:24:16	62.3734704
SEQ-ICV1	A8		1	10.388	0.2019315	0.543113224	0.10	108.76			46790-1.RAW	14:34:32	50.7625
SEQ-ICB1	A9		1	10.388	0.1899676	0.041091549	0.07	0.00			46791-1.RAW	14:44:48	48.3704282
F005234-BS1	A10		1.25	10.388	0.4310993	0.874829107	0.3927858				46792-1.RAW	14:55:04	79.3435475
F005234-BS2	A11		1.25	10.388	0.4286492	1.059061438	1.6439489				46793-1.RAW	15:05:20	78.9516499
F005234-BS3	A12		1.25	10.388	0.3493953	1.003430864	0.7260389				46794-1.RAW	15:15:36	66.2748111
F005234-BS4	A13		1.25	10.388	0.9473652	0.862782506	0.7745919				46795-1.RAW	15:25:52	161.921445
OC00107-01	A14		1.25	10.388	0.9789743	0.002620502	1.8510987				46796-1.RAW	15:36:09	166.977386
F005233-BS1	A15		1.25	10.388	0.4283402	0.943017322	0.1846017				46797-1.RAW	15:46:25	78.9022196
F005233-BSD1	A16		1.25	10.388	0.4090334	1.019345264	0.2099607				46798-1.RAW	15:56:41	75.8140625
F005233-BLK1	A17		1.25	10.388	0.4379982	0.0451871	0.7467				46799-1.RAW	16:06:57	80.4470486
F005233-BLK2	A18		1.25	10.388	0.3612491	0.045679326	0.5262867				46800-1.RAW	16:17:12	68.1708507
F005233-BLK3	A19		1.25	10.388	0.3247566	0.054852529	0.4209449				46801-1.RAW	16:27:28	62.3337963
SEQ-CCV1	A20		1	10.388	0.2199404	0.445832738	0.0526613	89.28			46802-1.RAW	16:37:44	54.3631944
SEQ-CCB1	A21		1	10.388	0.2099505	0.040481123	0.0655142	0.00			46803-1.RAW	16:47:59	52.3658111
OD00074-01	B1		1.25	10.388	0.6686787	0.527072484	52.62495	138.46			46804-1.RAW	16:58:16	117.344907
F005233-MS1	B2		1.25	10.388	1.1555192	1.384570209	3.9538264				46805-1.RAW	17:08:32	195.37609
F005233-MSD1	B3		1.25	10.388	0.7955456	1.446358221	1.9246522				46806-1.RAW	17:18:48	137.637551
OD00074-02	B4		1.25	10.388	0.4611193	0.132474441	0.6182455				46807-1.RAW	17:29:04	84.1453125
F005233-MS2	B5		1.25	10.388	0.6371737	1.079039552	0.8177727	53.95			46808-1.RAW	17:39:21	112.305618
F005233-MSD2	B6		1.25	10.388	0.4383668	1.252737532	0.5146531				46809-1.RAW	17:49:37	80.5061921
OD00074-03	B7		1.25	10.388	0.4126939	0.28181083	0.2949242				46810-1.RAW	17:59:53	76.399566
OD00074-04	B8		1.25	10.388	0.3397289	0.111770199	0.4626484				46811-1.RAW	18:10:09	64.7286458
OD00074-05	B9		1.25	10.388	0.3453016	0.11346088	0.2233526				46812-1.RAW	18:20:25	65.6200231
OD00074-06	B10		1.25	10.388	0.3465817	0.130998306	0.1832817				46813-1.RAW	18:30:41	65.8247685
SEQ-CCV2	B11		1	10.388	0.2886076	0.467866225	0.0926851	93.69			46814-1.RAW	18:40:58	68.0925347
SEQ-CCB2	B12		1	10.388	0.2229919	0.022996737	0.0952174	0.00			46815-1.RAW	18:51:14	54.973218
OD00074-07	B13		1.25	10.388	0.7400321	0.080378088	0.2046907				46816-1.RAW	19:01:30	128.758044
OD00074-08	B14		1.25	10.388	0.4404241	0.150250653	0.3490122				46817-1.RAW	19:11:47	80.8350694
OE00002-01	B15		1.25	10.388	0.3816913	0.252770224	0.7410176				46818-1.RAW	19:22:03	71.440625
OE00002-02	B16		1.25	10.388	0.3789461	0.189870951	1.0103168				46819-1.RAW	19:32:20	71.0015291

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286

PeakMeHg (Ri PeakHg2 (Raw) PeakPthHg (Raw Control (ef))	Flags	RunCount	Comment
2.14664352	0 cleandry	1	
7.67679398	0 psample10	1	
10.3882523	0 psample10	1	
21.2252315	0 psample10	1	
48.5908565	0 psample10	1	
198.293808	0 psample10	1	
405.391927	0 psample10	1	
836.554225	0 psample10	1	
118.978472	0 psample10	1	
18.6041088	0 psample10	1	
150.319126	0 psample10	1	
179.7875	0 psample10	1	F005234
170.889265	0 psample10	1	F005234
148.392245	0 psample10	1	F005234
10.8074074	0 psample10	1	F005234
161.225984	0 psample10	1	F005233
173.434809	0 psample10	1	F005233
17.6160301	0 psample10	1	F005233
17.6947627	0 psample10	1	F005233
19.162037	0 psample10	1	F005233
99.5281829	0 psample10	1	
18.4820602	0 psample10	1	
94.6946759	0 psample10	1	F005233
231.853356	0 psample10	1	F005233
241.736487	0 psample10	1	F005233
31.5778356	0 psample10	1	F005233
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210.766425	0 psample10	1	F005233
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28.2661458	0 psample10	1	F005233
28.5365741	0 psample10	1	F005233
31.3417245	0 psample10	1	F005233
103.933565	0 psample10	1	F005233
14.9862269	0 psample10	1	
23.2449074	0 psample10	1	F005233
34.4211806	0 psample10	1	F005233
50.8194155	0 psample10	1	F005233
40.7585359	0 psample10	1	F005233

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0E00002-03	B17	1.25	10.388	0.4347364	0.227959939	8.8918488	46820-1.RAW	19:42:36	79.9253183
0E00002-04	B18	1.25	10.388	0.4475473	0.155633662	5.4583137	46821-1.RAW	19:52:53	81.9744502
0E00002-05	B19	1.25	10.388	0.3514454	0.127134667	0.6565798	46822-1.RAW	20:03:09	66.6043267
0E00002-06	B20	1.25	10.388	0.3791939	0.121468913	0.2756595	46823-1.RAW	20:13:25	71.0411712
0E00002-07	B21	1.25	10.388	0.6954367	0.044355689	1.7278125	46824-1.RAW	20:23:42	121.624913
0E00002-08	C1	1.25	10.388	0.4214478	0.204312653	0.4384584	46825-1.RAW	20:33:58	77.7997685
SEQ-CCV3	C2	1	10.388	0.2649153	0.320324787	0.1037601	46826-1.RAW	20:44:14	63.3554935
SEQ-CCB3	C3	1	10.388	0.2357598	0.012944258	0.0771922	46827-1.RAW	20:54:31	57.5261415
0E00002-09	C4	1.25	10.388	0.4465683	0.264176081	0.6703685	46828-1.RAW	21:04:47	81.817853
0E00002-10	C5	1.25	10.388	0.3872358	0.158010492	0.3549318	46829-1.RAW	21:15:04	72.3274884
0E00002-11	C6	1.25	10.388	1.637365	0.010281209	0.1940316	46830-1.RAW	21:25:20	272.288455
0E00002-12	C7	1.25	10.388	0.9498995	0.149265477	0.1702255	46831-1.RAW	21:35:37	162.326799
F005235-851	C8	1.25	10.388	0.766418	1.204169497	0.114297	46832-1.RAW	21:45:53	133.014323
F005235-85D1	C9	1.25	10.388	0.5867821	1.128887693	0.273182	46833-1.RAW	21:56:10	104.24537
F005235-BLK1	C10	1.25	10.388	0.5056477	0.030416342	0.2498272	46834-1.RAW	22:06:26	91.2677373
F005235-BLK2	C11	1.25	10.388	0.4575027	0.012967557	0.1586588	46835-1.RAW	22:16:43	83.5668403
F005235-BLK3	C12	1.25	10.388	0.8299897	0.019150863	0.800384	46836-1.RAW	22:26:59	143.146962
0D00062-01	C13	10.388	0.4148858	0	0	0.1033445	46837-1.RAW	22:37:16	93.3406378
SEQ-CCV4	C14	1	10.388	0.338885	0.373880125	0.0486285	46838-1.RAW	22:47:33	78.1450231
SEQ-CCB4	C15	1	10.388	0.3081478	0.005267631	0.0222511	46839-1.RAW	22:57:49	71.9994213
F005235-M51	C16	1.25	10.388	0.4168582	1.304403773	0.7510318	46840-1.RAW	23:08:06	77.0656539
F005235-MSD1	C17	1.25	10.388	2.5432393	1.013942356	0.0990664	46841-1.RAW	23:18:22	417.185069
0D00062-02	C18	1.25	10.388	1.2486793	0	0.1410566	46842-1.RAW	23:28:39	210.117297
F005235-MS2	C19	1.25	10.388	0.7222496	1.17050299	0.0882544	46843-1.RAW	23:38:55	125.913696
F005235-MSD2	C20	1.25	10.388	0.5153227	1.295787919	0	46844-1.RAW	23:49:11	92.8152778
0D00062-05	C21	1.25	10.388	1.7564137	0	1.6005092	46845-1.RAW	23:59:28	291.330556
0D00062-06	A1	1.25					46846-1.RAW	0:09:44	454.891869
SEQ-CCV5	A2	1	10.388	1.191244	0.317507974	0.0256824	46847-1.RAW	0:20:00	248.565933
SEQ-CCB5	A3	1	10.388	0.6633297	0.327049016	0.009873	46848-1.RAW	0:30:16	143.014583
0D00075-01	A4	50	10.388	29.24775	0	1.9106108	46849-1.RAW	0:40:32	127.344329
0D00075-02	A5	50	10.388	29.59038	8.600462288	0	46850-1.RAW	0:50:48	128.714439
0D00075-03	A6	5	10.388	3.1461495	0.432058951	0	46851-1.RAW	1:01:05	136.196665
0D00075-04	A7	5	10.388	3.0261232	1.591344534	0.9043874	46852-1.RAW	1:11:21	131.397049
0D00075-05	A8	50	10.388	33.870325	1.604269399	0	46853-1.RAW	1:21:38	145.829109
0D00075-06	A9	50	10.388	33.393374	27.64284367	0	46854-1.RAW	1:31:54	143.921875
SEQ-CCV6	A10	1	10.388	0.607785	0	0	46855-1.RAW	1:42:11	131.90897
SEQ-CCB6	A11	1	10.388	0.5200739	0	0	46856-1.RAW	1:52:27	114.371991
0D00075-01RE1	A12	1.25	10.388	0.7836774	0.335454231	4.8491909	46857-1.RAW	2:02:43	135.739207
0D00075-02RE1	A13	1.25	10.388	0.8141115	12.71570074	1.2062799	46858-1.RAW	2:13:00	140.607205
0D00075-03RE1	A14	1.25	10.388	0.7312846	6.445401302	0.3920608	46859-1.RAW	2:23:16	127.358854
0D00075-04RE1	A15	1.25	10.388	1.1049076	17.6597237	16.37226	46860-1.RAW	2:33:33	187.1207
0D00075-05RE1	A16	1.25	10.388	1.1687567	0.872997143	0.6014183	46861-1.RAW	2:43:49	197.333507

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46.8509549	1432.65938	0	psample10	CT	1	F005233
35.2822049	883.457755	0	psample10	OK	1	F005233
30.7237269	115.409664	0	psample10	CT	1	F005233
29.8174769	54.4806134	0	psample10	OK	1	F005233
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74.4340856	31.1340856	0	psample10	CT	1	
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52.6438079	117.615191	0	psample10	OK	1	F005233
35.6623843	67.1603877	0	psample10	CT	1	F005233
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34.2635995	37.6162037	0	psample10	CT	1	F005233
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219.030556	130.517477	0	psample10	CT	1	F005235
172.570602	26.2341435	0	psample10	CT	1	F005235
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197.612826	24.5047454	0	psample10	CT	1	F005235
217.652431	8.32025463	0	psample10	CT	1	F005235
5.32896412	266.393287	0	psample10	CT	1	F005235
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75.7785301	12.3622685	0	psample10	CT	1	
8.98721065	18.0284144	0	psample10	CT	1	F005235
44.7798322	6.35052083	0	psample10	CT	1	F005235
27.6654514	5.69675926	0	psample10	CT	1	F005235
74.0230324	46.5529514	0	psample10	OK	1	F005235
16.8034144	5.87291667	0	psample10	CT	1	F005235
120.92662	9.05648148	0	psample10	CT	1	F005235
7.68929398	7.22997685	0	psample10	CT	1	F005235
8.42108656	7.48292917	0	psample10	OK	1	
64.0449074	786.027199	0	psample10	CT	1	F005235
2044.29305	203.335419	0	psample10	CT	1	F005235
1041.34462	73.0992477	0	psample10	CT	1	F005235
2835.10059	2629.16785	0	psample10	CT	1	F005235
150.0261	106.586458	0	psample10	CT	1	F005235

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0D00075-06RE1	A17	1.25	10.388	1.6164949	11.2922952	1.4981105	46862-1.RAW	2:54:06	268.950231
SEQ-CCV7	A18	1	10.388	0.7207727	0.623810345	0.0352003	46863-1.RAW	3:04:22	154.499769
SEQ-CCB7	A19	1	10.388	0.774014	0.051075142	0.0113162	46864-1.RAW	3:14:39	165.14485

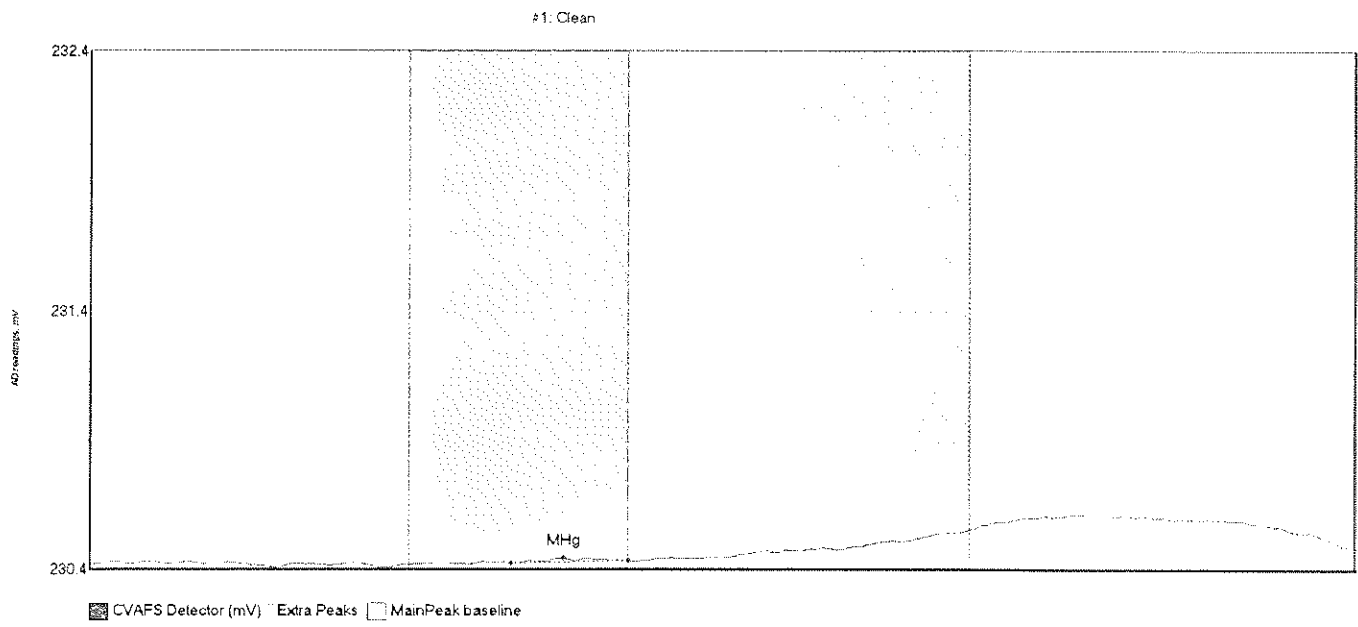
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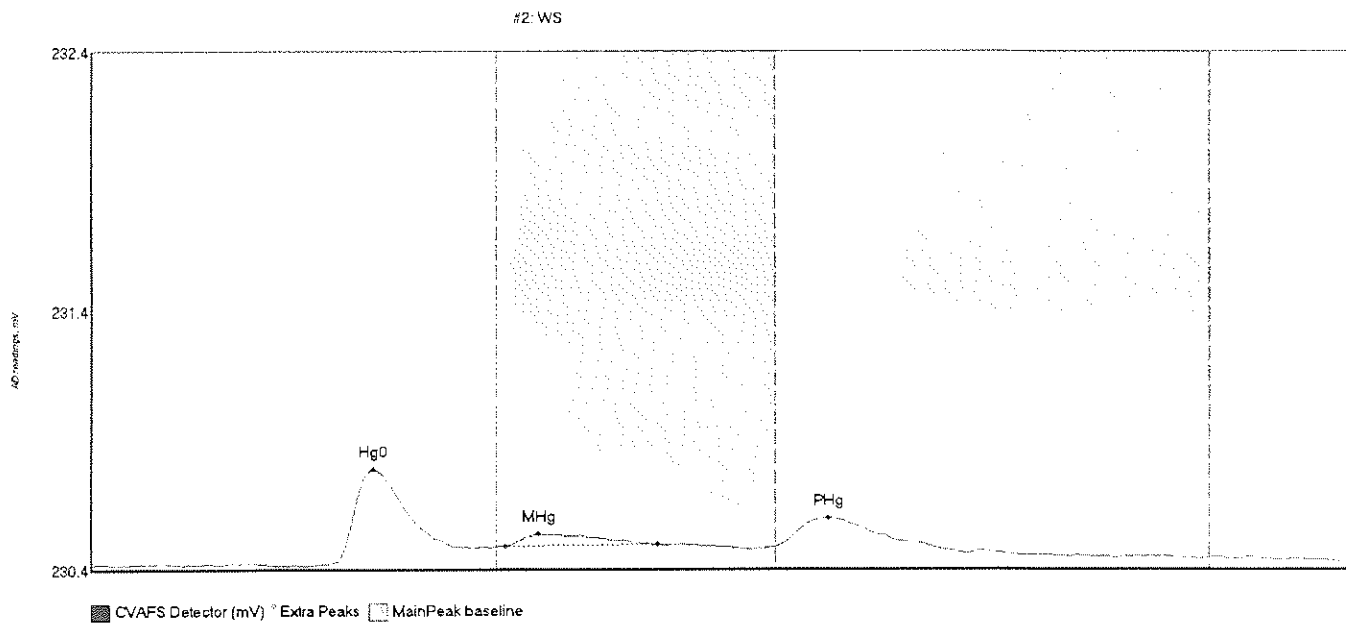
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WS	A1				
SEQ-IBL1	A2	0E00002-03	B17		
SEQ-CAL1	A3	0E00002-04	B18		
SEQ-CAL2	A4	0E00002-05	B19		
SEQ-CAL3	A5	0E00002-06	B20		
SEQ-CAL4	A6	0E00002-07	B21		
SEQ-CAL5	A7	0E00002-08	C1		
SEQ-ICV1	A8	SEQ-CCV3	C2		
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F005234-BS1	A10	0E00002-09	C4		
F005234-BS2	A11	0E00002-10	C5		
F005234-BS3	A12	0E00002-11	C6		
F005234-BS4	A13	0E00002-12	C7		
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F005233-BS1	A15	F005235-BSD1	C9		
F005233-BSD1	A16	F005235-BLK1	C10		
F005233-BLK1	A17	F005235-BLK2	C11		
F005233-BLK2	A18	F005235-BLK3	C12		
F005233-BLK3	A19	0D00062-01	C13		
SEQ-CCV1	A20	SEQ-CCV4	C14		
SEQ-CCB1	A21	SEQ-CCB4	C15		
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F005233-MS1	B2	F005235-MSD1	C17		
F005233-MSD1	B3	0D00062-02	C18		
OD00074-02	B4	F005235-MS2	C19		
F005233-MS2	B5	F005235-MSD2	C20		
F005233-MSD2	B6	0D00062-05	C21		
OD00074-03	B7	0D00062-06	A1		
OD00074-04	B8	SEQ-CCV5	A2	SEQ-CCB6	A11
OD00074-05	B9	SEQ-CCB5	A3	OD00075-01RE	A12
OD00074-06	B10	0D00075-01	A4	OD00075-02RE	A13
SEQ-CCV2	B11	0D00075-02	A5	OD00075-03RE	A14
SEQ-CCB2	B12	0D00075-03	A6	OD00075-04RE	A15
OD00074-07	B13	0D00075-04	A7	OD00075-05RE	A16
OD00074-08	B14	0D00075-05	A8	OD00075-06RE	A17
0E00002-01	B15	0D00075-06	A9	SEQ-CCV7	A18
0E00002-02	B16	SEQ-CCV6	A10	SEQ-CCB7	A19

tube says
CCB. VAL 5-11-2020
black ink.
quality, see PLS. VAL
5-11-2020

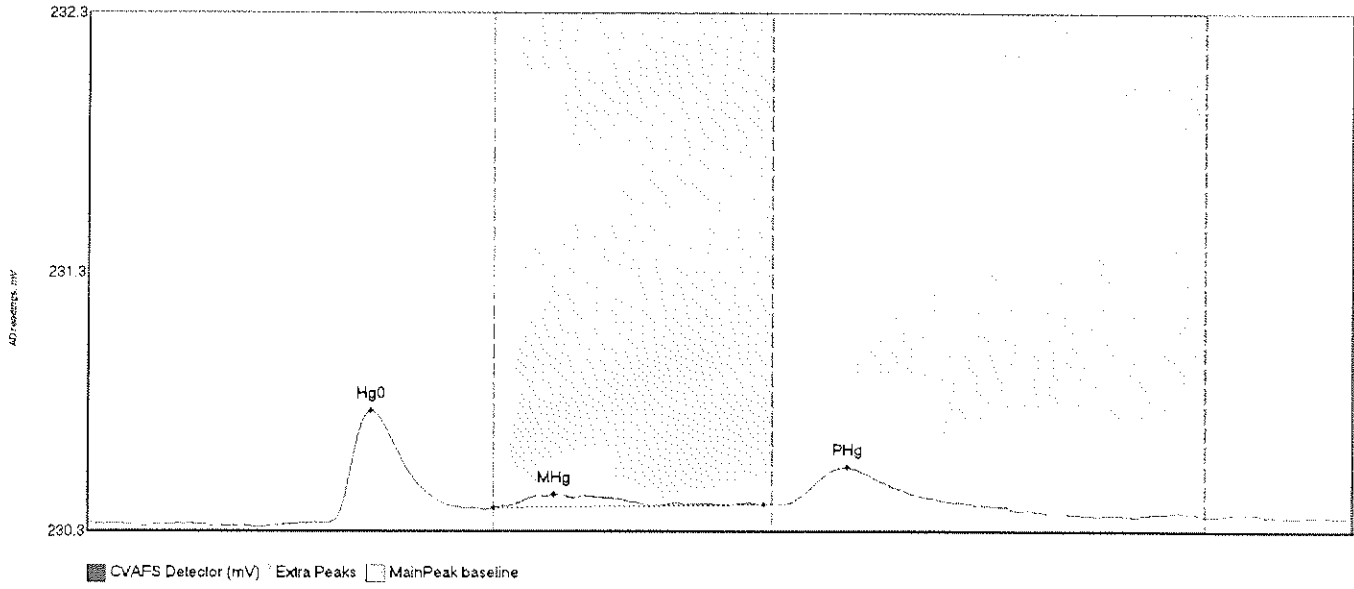


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
Clean	2.147	105.5	135.0	230.42	230.42	116.7	0.019	CT	230.4136	0.00	0.06	

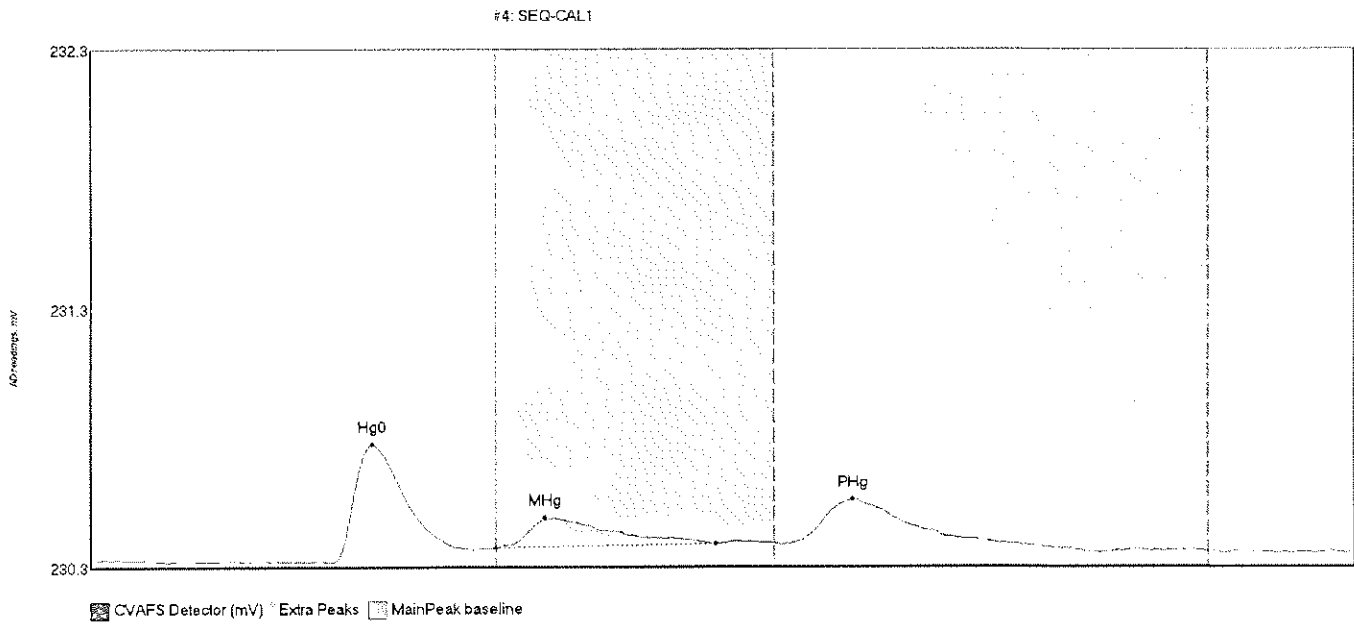


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WS Hg0	38.862	47.2	75.3	230.38	230.44	55.9	0.364	OK	230.3776	0.00	0.01	
WS MHg	7.698	81.8	111.5	230.45	230.45	88.2	0.047	OK	230.3776	0.00	0.01	
WS PHg	19.291	135.0	168.8	230.45	230.43	145.4	0.110	OK	230.3776	0.00	0.01	

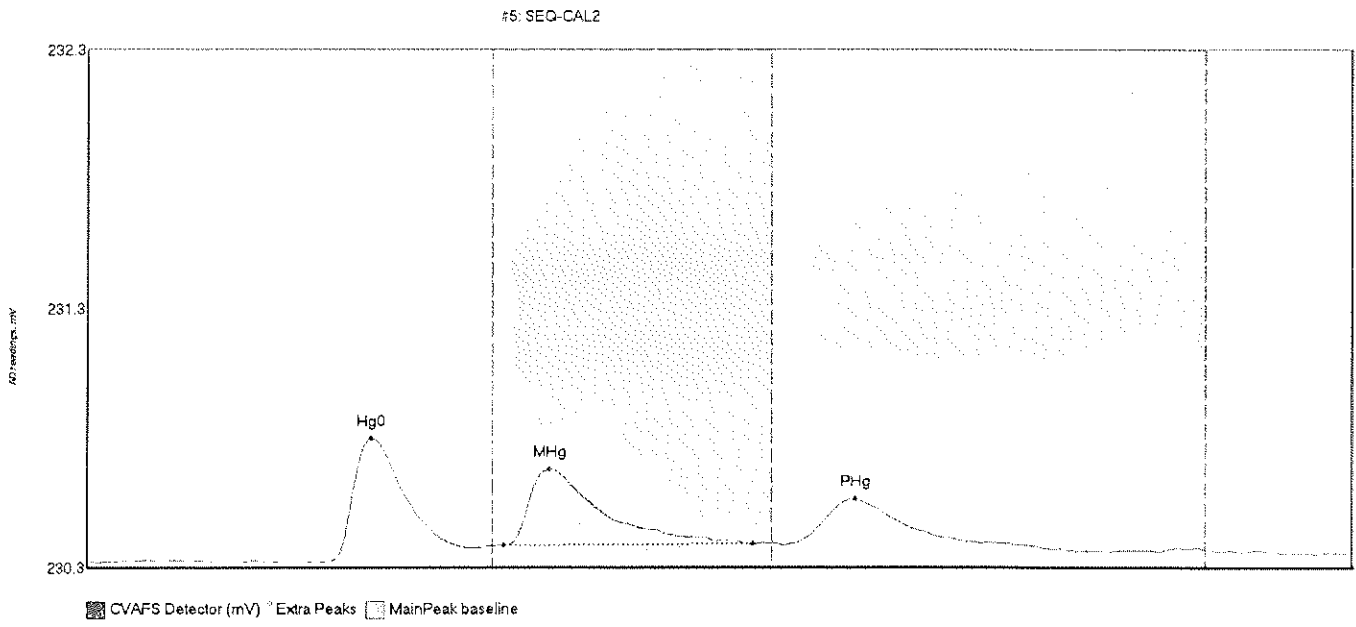
#3: SEQ-IBL1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Height	Comment
SEQ-IBL1 Hg0	46.612	47.9	70.3	230.36	230.41	55.9	0.420	OK	230.3596	0.00	0.02	
SEQ-IBL1 MHg	10.386	80.0	133.3	230.42	230.43	92.1	0.051	OK	230.3599	0.00	0.02	
SEQ-IBL1 PHg	22.574	137.6	173.3	230.43	230.43	149.5	0.142	OK	230.3599	0.00	0.02	

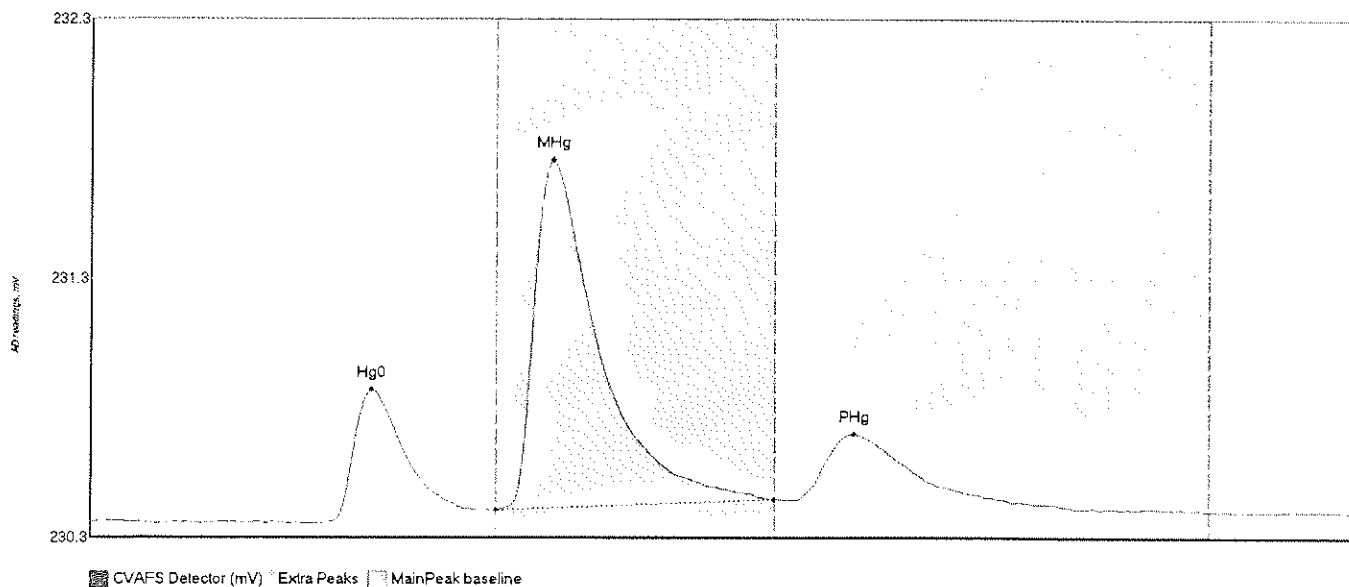


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlStift	Comment
SEQ-CAL1 Hg0	49.733	47.8	75.9	230.33	230.38	55.8	0.457	OK	230.3413	0.00	0.03	
SEQ-CAL1 MHg	21.225	80.0	123.4	230.39	230.41	89.5	0.115	OK	230.3413	0.00	0.03	
SEQ-CAL1 PHg	29.156	138.3	178.9	230.41	230.41	150.4	0.169	OK	230.3413	0.00	0.03	

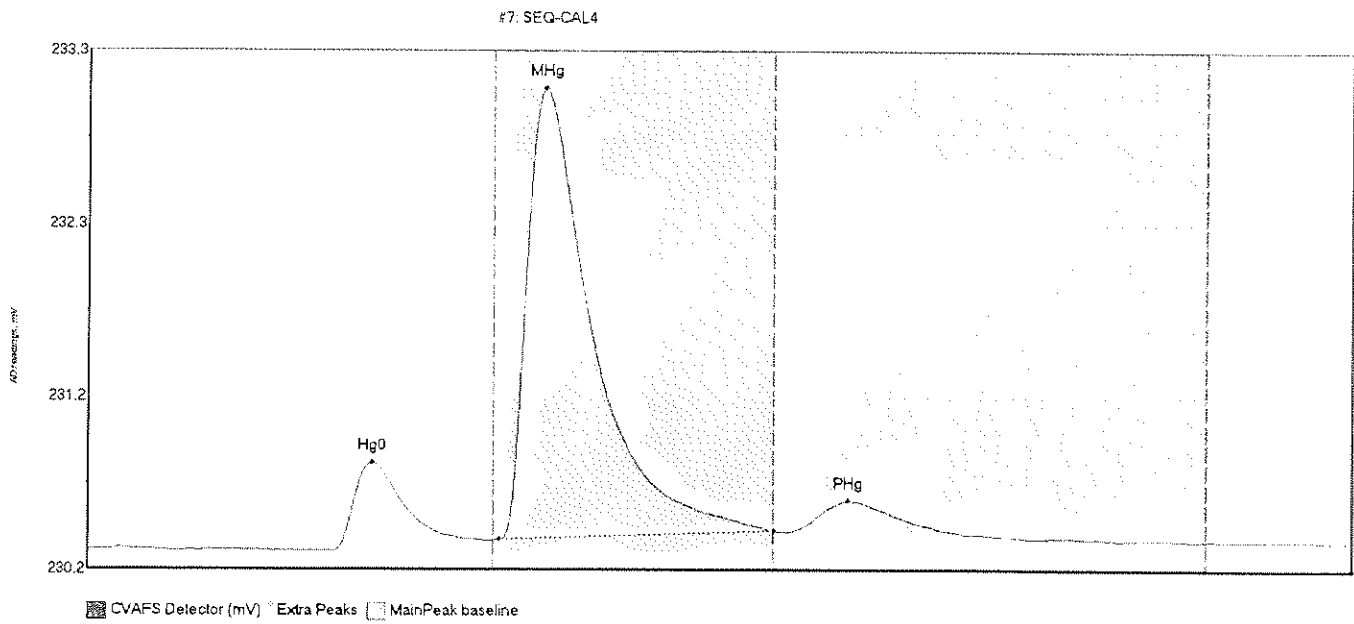


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RIDev	RIShift	Comment
SEQ-CAL2 Hg0	51.951	47.8	75.5	230.32	230.38	56.0	0.476	OK	230.3226	0.00	0.03	
SEQ-CAL2 MHg	48.591	82.3	131.2	230.39	230.39	91.5	0.295	OK	230.3226	0.00	0.03	
SEQ-CAL2 PHg	26.407	139.4	174.6	230.39	230.40	151.3	0.171	OK	230.3226	0.00	0.03	

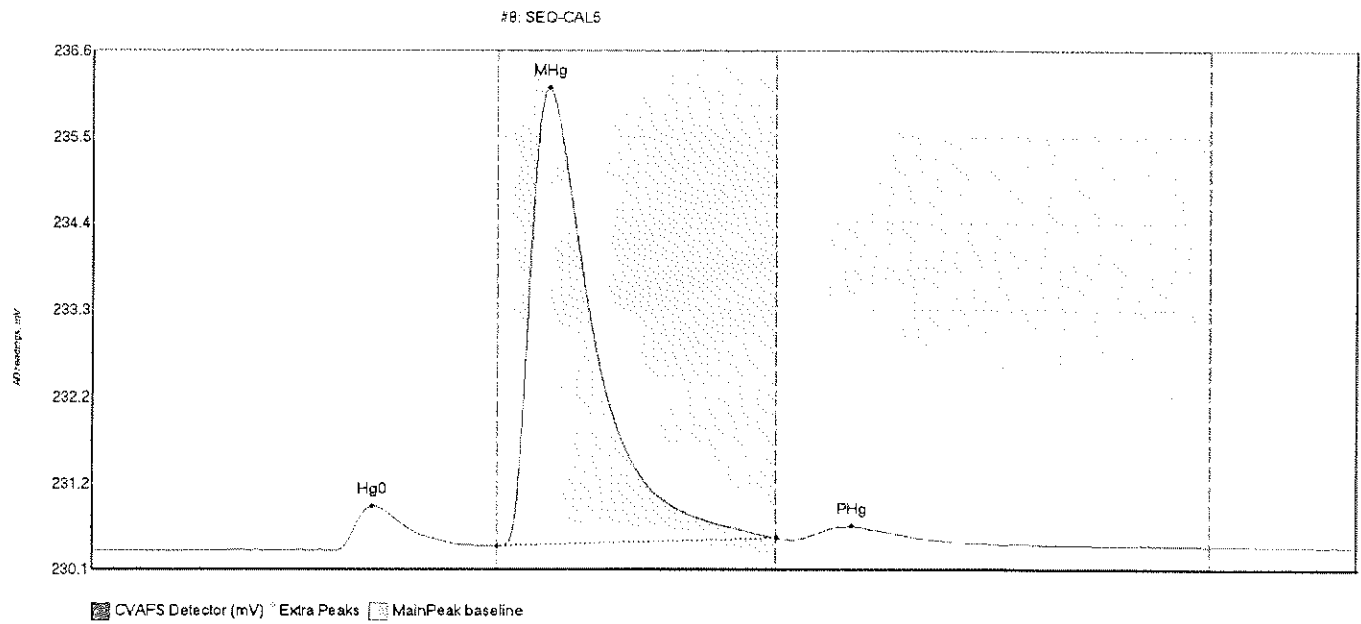
#6: SEQ-CAL3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Skew	Shift	Comment
SEQ-CAL3 Hg0	55.655	45.8	77.3	230.32	230.36	55.6	0.512	OK	230.3214	0.00	0.03	
SEQ-CAL3 MHg	198.294	80.0	134.7	230.36	230.41	91.1	1.349	OK	230.3214	0.00	0.03	
SEQ-CAL3 PHg	43.797	139.2	178.7	230.40	230.41	150.6	0.254	OK	230.3214	0.00	0.03	

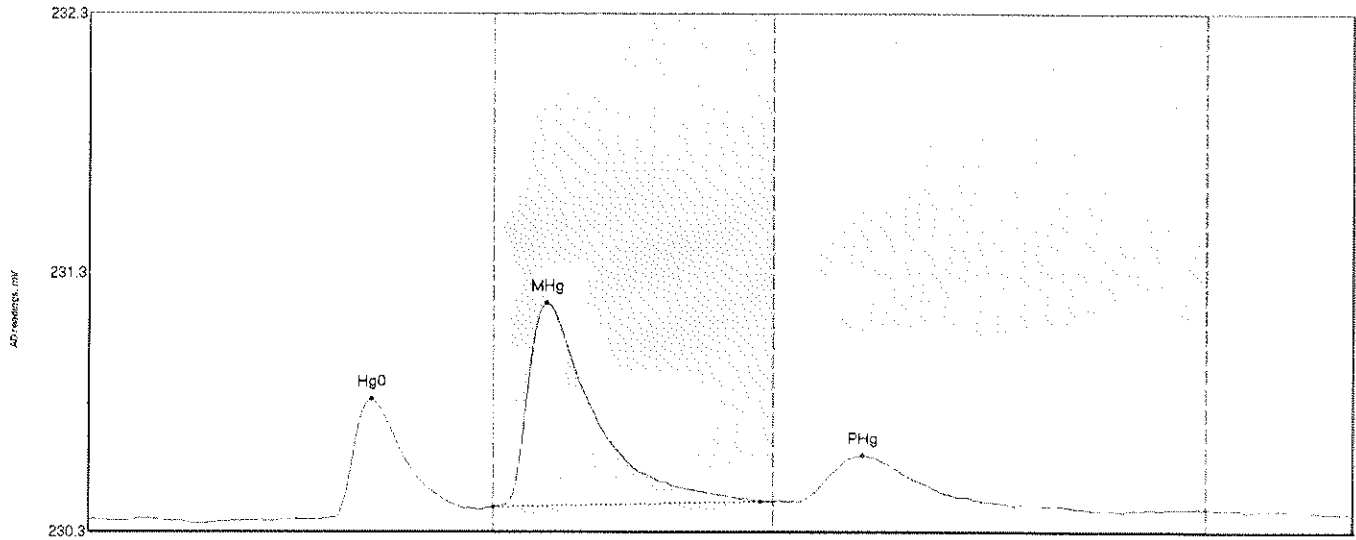


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	R1Dev	B1Shift	Comment
SEQ-CAL4 Hg0	57.424	47.7	78.6	230.30	230.36	55.6	0.524	OK	230.3123	0.00	0.04	
SEQ-CAL4 MHg	465.392	81.2	135.0	230.37	230.42	90.3	2.714	CT	230.3123	0.00	0.04	
SEQ-CAL4 PHg	28.923	137.6	168.8	230.41	230.42	149.6	0.195	OK	230.3123	0.00	0.04	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CAL5 Hg0	62.373	47.7	80.0	230.31	230.36	55.6	0.560	CT	230.3119	0.00	0.04	
SEQ-CAL5 MHg	836.554	80.0	135.0	230.36	230.47	90.1	5.733	CT	230.3119	0.00	0.04	
SEQ-CAL5 PHg	20.959	138.6	172.5	230.45	230.40	149.9	0.169	OK	230.3119	0.00	0.04	

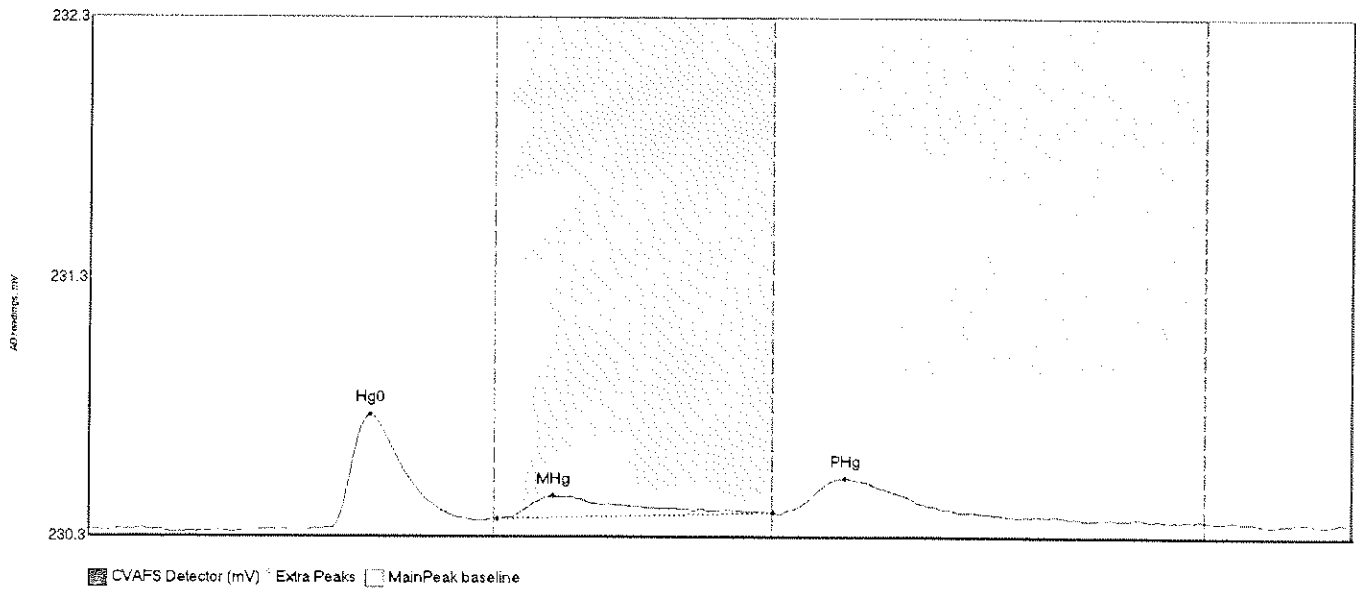
#9: SEQ-ICV1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

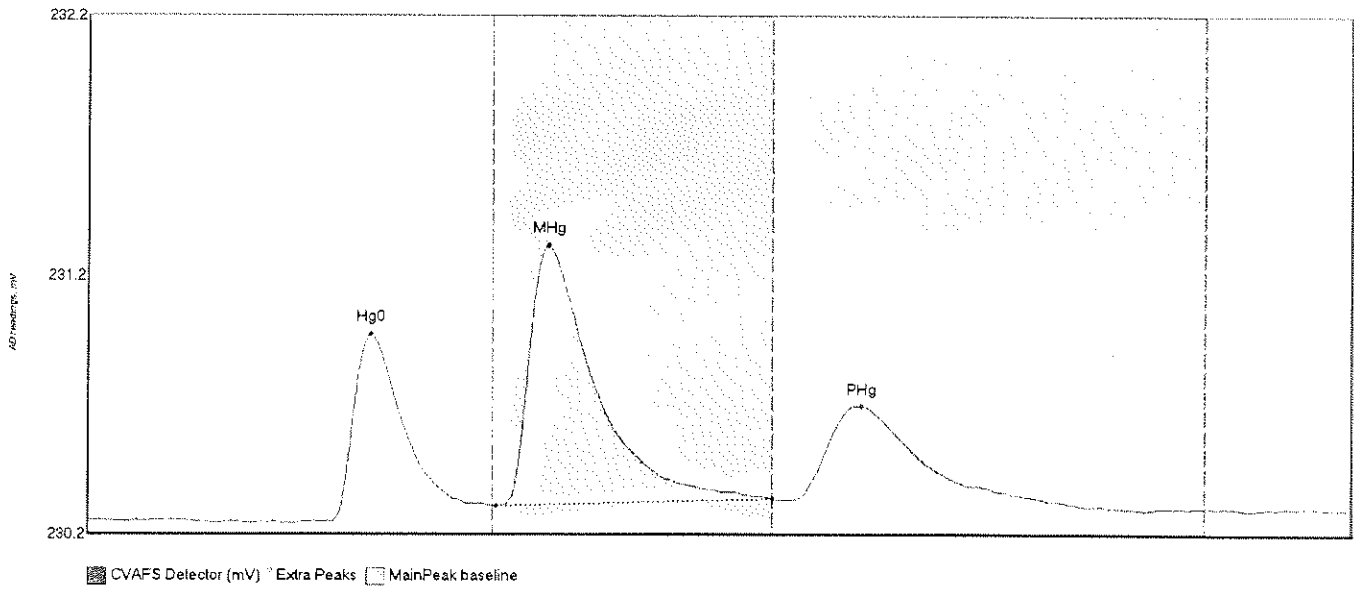
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	50.763	45.3	77.1	230.31	230.35	55.8	0.463	OK	230.3118	0.00	0.02	
SEQ-ICV1 MHg	118.978	80.0	132.5	230.36	230.38	90.7	0.786	OK	230.3118	0.00	0.02	
SEQ-ICV1 PHg	30.560	139.8	175.2	230.38	230.39	152.5	0.180	OK	230.3118	0.00	0.02	

#10: SEG-ICB1



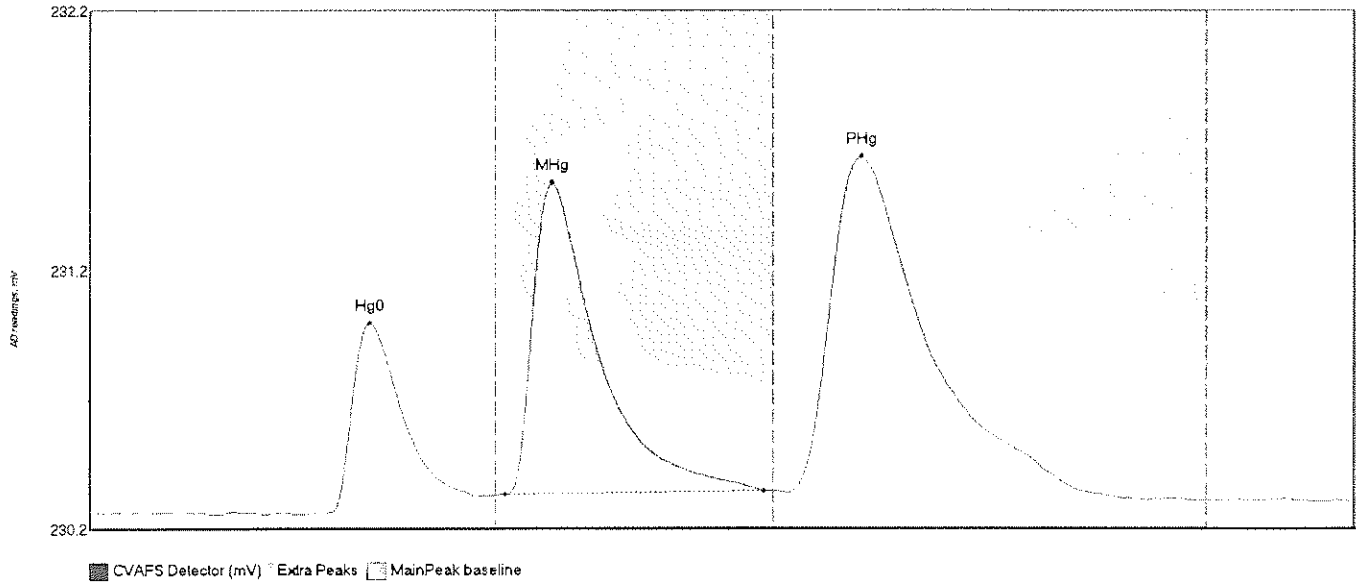
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEG-ICB1 Hg0	48.370	48.1	76.8	230.30	230.32	55.9	0.436	OK	230.2918	0.00	0.02	
SEG-ICB1 MHg	18.604	88.7	135.0	230.33	230.36	91.6	0.090	CF	230.2918	0.00	0.02	
SEG-ICB1 PHg	24.180	136.5	172.0	230.35	230.36	149.3	0.139	OK	230.2918	0.00	0.02	

#11: F005234-BS1



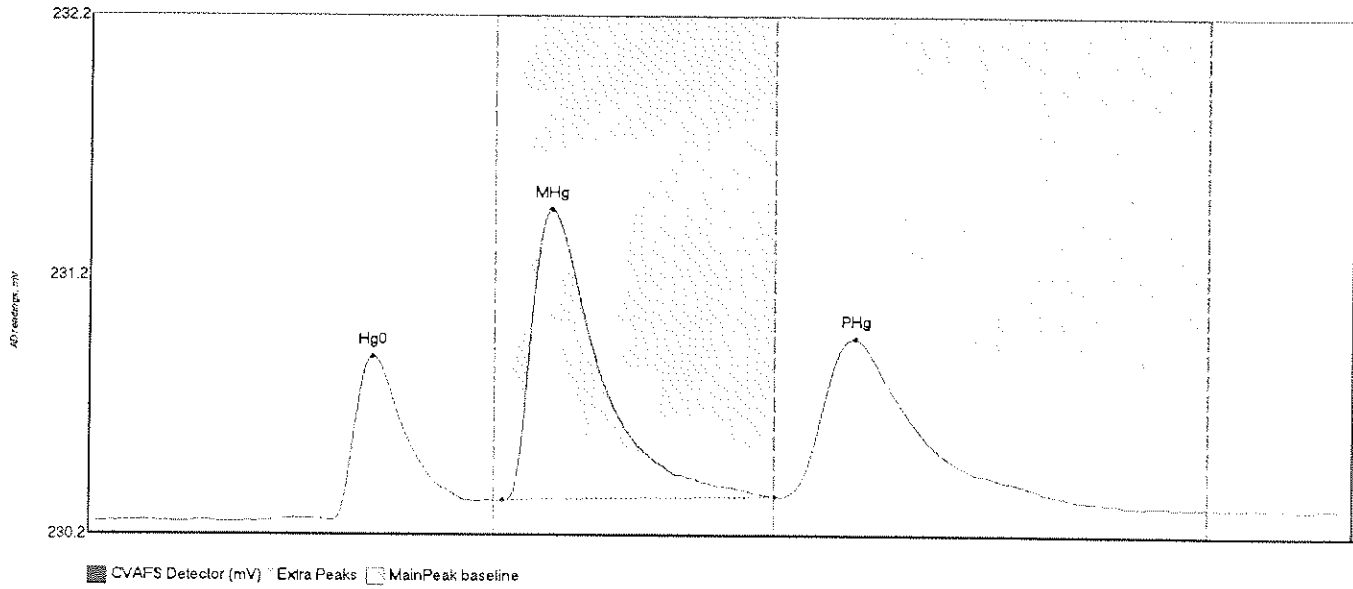
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005234-BS1 Hg0	79.344	48.2	80.0	230.29	230.35	55.8	0.721	CT	230.2966	0.00	0.04	F005234
F005234-BS1 MHg	150.319	80.8	135.0	230.35	230.38	91.1	1.005	CT	230.2966	0.00	0.04	F005234
F005234-BS1 PHg	93.215	138.3	189.5	230.37	230.37	152.4	0.366	OK	230.2966	0.00	0.04	F005234

#12: F005234-BS2



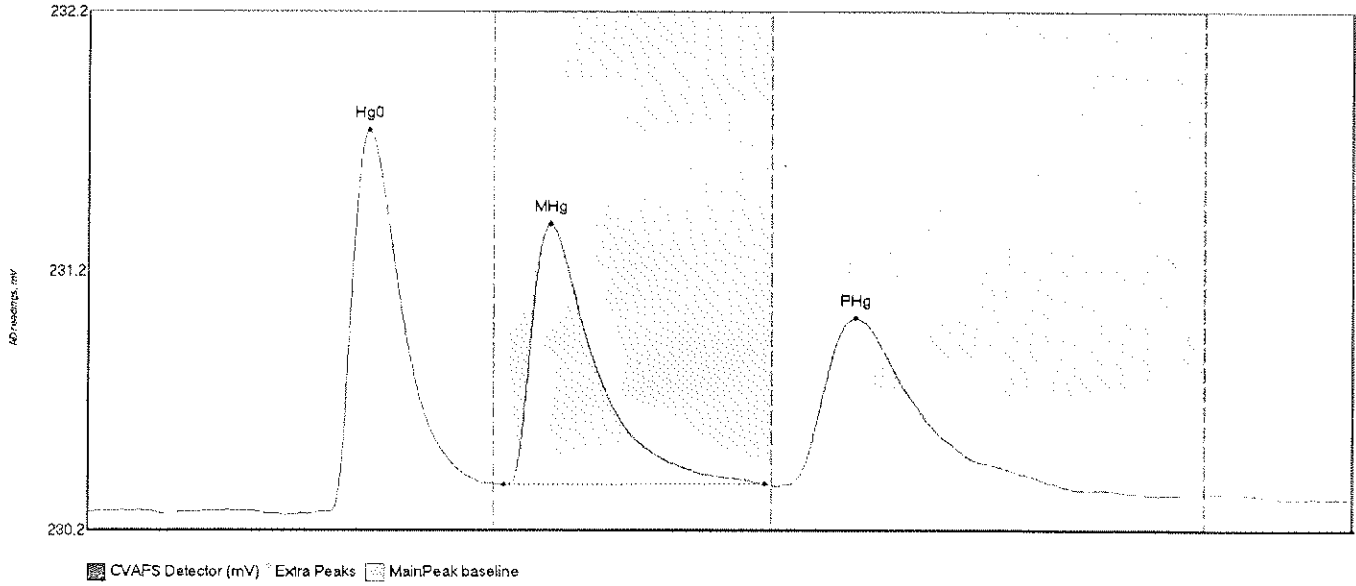
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005234-BS2 Hg0	78.952	45.8	76.5	230.29	230.36	55.5	0.736	OK	230.2933	0.00	0.05	F005234
F005234-BS2 MHg	179.787	82.0	133.1	230.36	230.38	91.2	1.209	OK	230.2933	0.00	0.05	F005234
F005234-BS2 PHg	273.342	137.7	195.2	230.37	230.38	152.3	1.295	OK	230.2933	0.00	0.05	F005234

#13: F005234-BS3



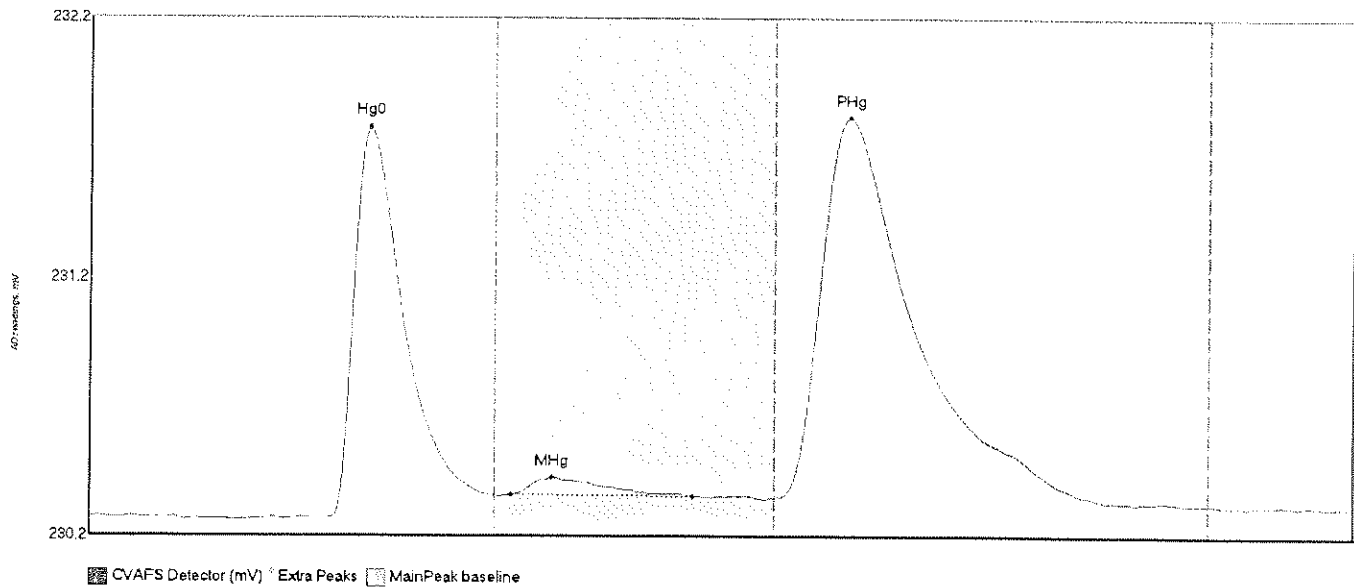
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	WShift	Comment
F005234-BS3 Hg0	66.275	35.1	76.8	230.29	230.37	56.0	0.633	OK	230.2854	0.00	0.06	F005234
F005234-BS3 MHg	170.885	81.6	135.0	230.37	230.39	91.1	1.124	CT	230.2854	0.00	0.06	F005234
F005234-BS3 PHg	122.788	135.9	191.8	230.35	230.38	151.0	0.613	OK	230.2854	0.00	0.06	F005234

#14: F005234-BS4



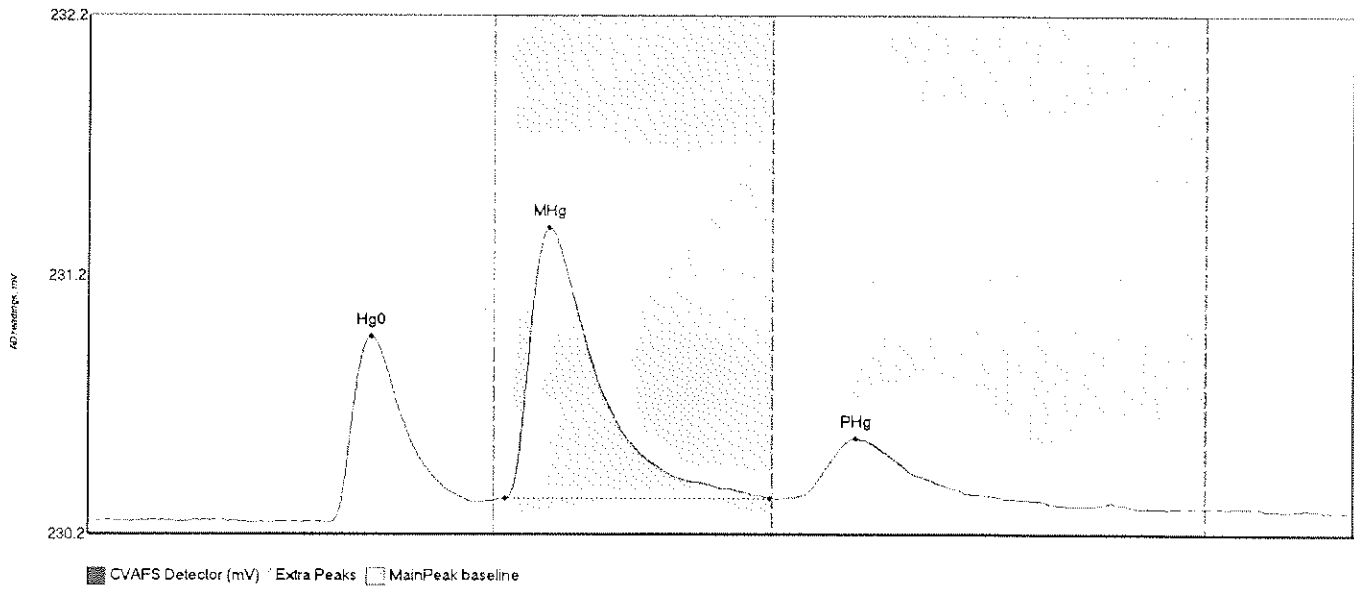
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RISDev	Shift	Comment
F005234-BS4 Hg0	161.921	47.6	79.1	230.30	230.43	55.6	1.472	OK	230.3016	0.00	0.05	F005234
F005234-BS4 MHg	148.392	82.1	133.6	230.40	230.41	91.3	1.005	OK	230.3016	0.00	0.05	F005234
F005234-BS4 PHg	134.286	138.3	194.7	230.41	230.38	151.4	0.642	OK	230.3016	0.00	0.05	F005234

#15: 0C00107-01



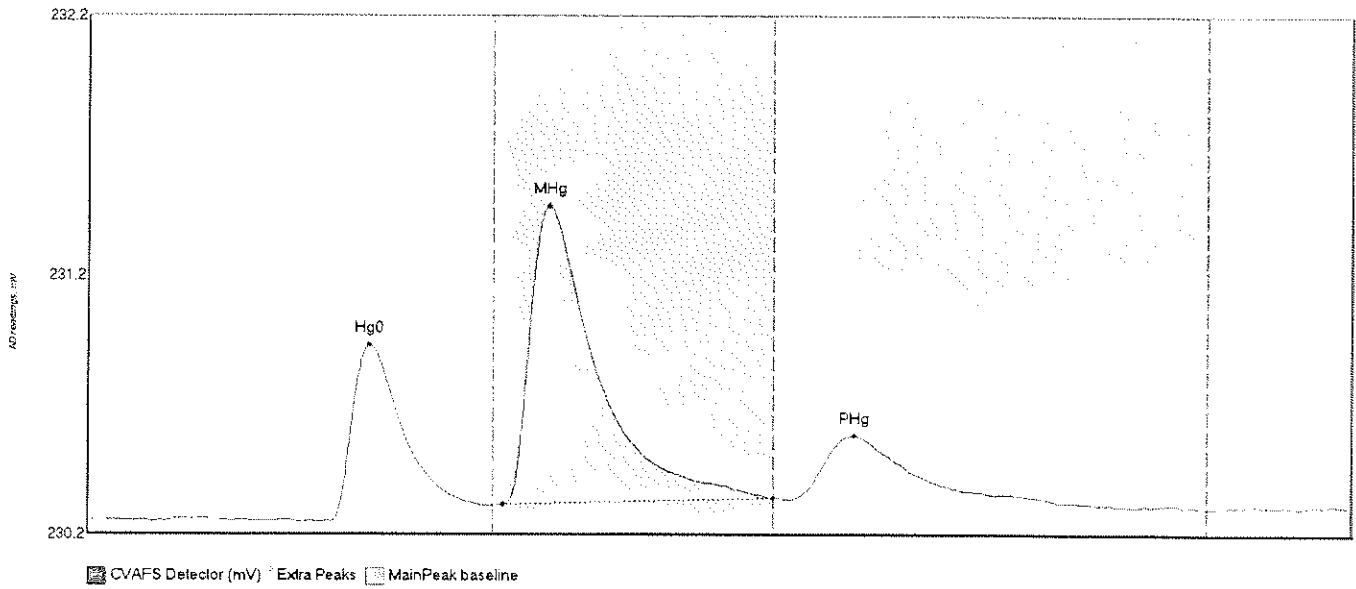
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0C00107-01 Hg0	166.977	45.9	80.0	230.30	230.39	55.4	1.508	CT	230.3047	0.00	0.04	F005234
0C00107-01 MHg	10.807	83.2	118.7	230.39	230.38	91.1	0.065	OK	230.3047	0.00	0.04	F005234
0C00107-01 PHg	306.476	135.0	196.0	230.38	230.38	145.9	1.471	OK	230.3047	0.00	0.04	F005234

#16: F005233-BS1



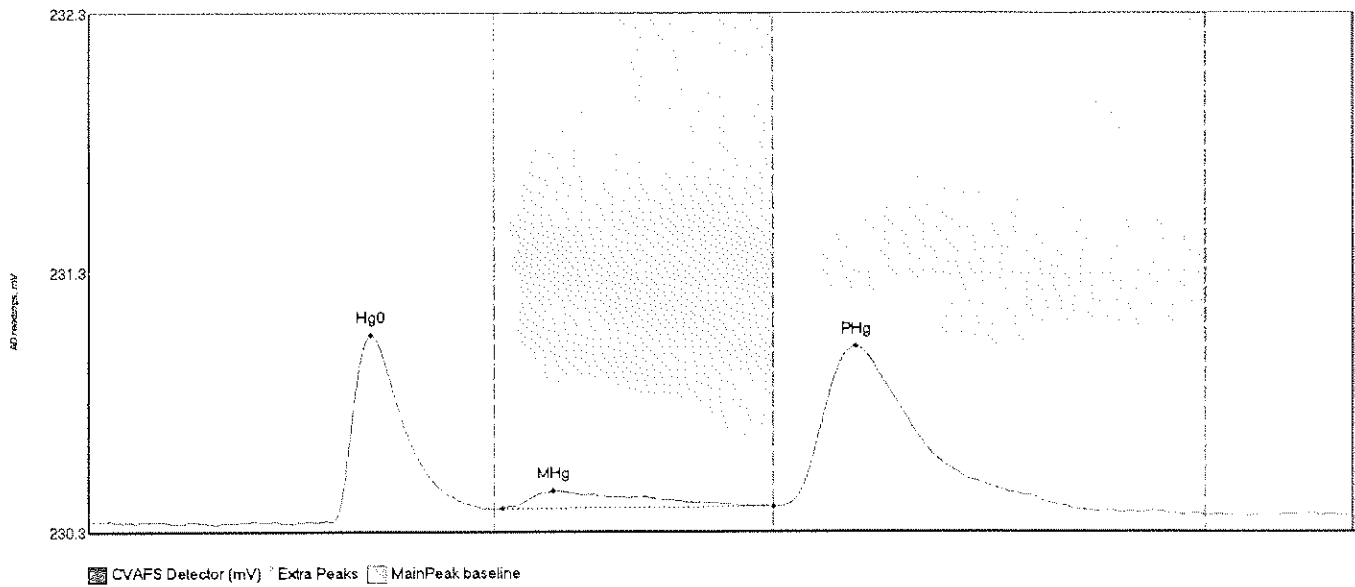
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005233-BS1 Hg0	78.902	47.4	76.5	230.29	230.37	55.9	0.719	OK	230.2992	0.00	0.03	F005233
F005233-BS1 MHg	161.226	62.2	134.5	230.38	230.38	91.0	1.048	OK	230.2992	0.00	0.03	F005233
F005233-BS1 PHg	39.916	130.0	160.0	230.39	230.38	151.4	0.228	OK	230.2992	0.00	0.03	F005233

#17: F005233-BSD1



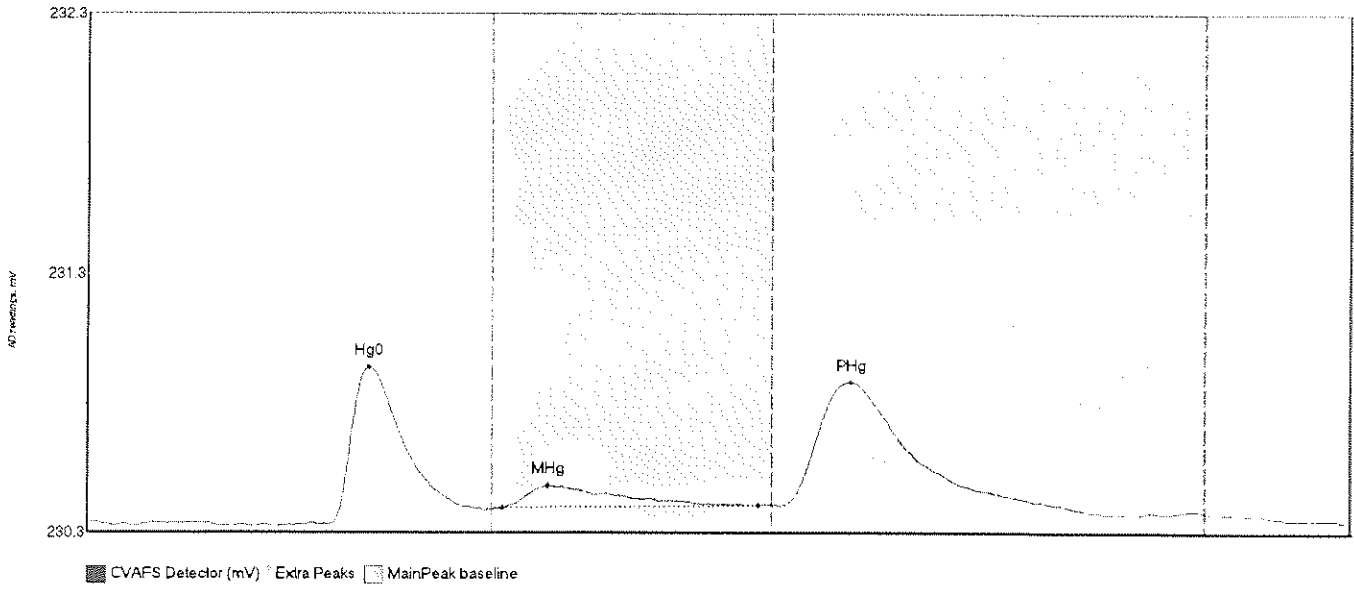
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	SlDev	BIShift	Comment
F005233-BSD1 Hg	75.814	48.0	77.7	230.29	230.35	55.6	0.660	OK	230.3009	0.00	0.05	F005233
F005233-BSD1 MH	173.447	82.0	134.9	230.36	230.38	90.9	1.146	OK	230.3009	0.00	0.05	F005233
F005233-BSD1 PH	44.227	137.7	186.6	230.30	230.38	151.0	0.250	OK	230.3009	0.00	0.05	F005233

#18: F005233-BLK1



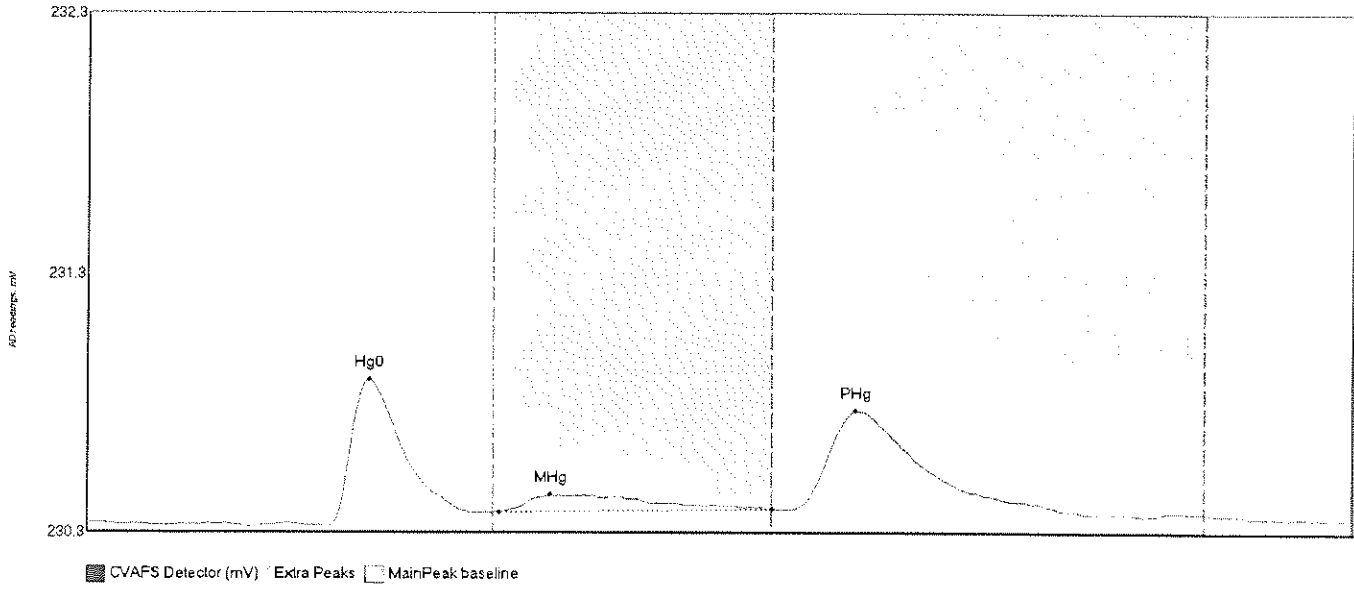
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	HiShift	Comment
F005233-BLK1 Hg	80.447	48.0	79.4	230.30	230.34	55.7	0.718	OK	230.2934	0.00	0.00	F005233
F005233-BLK1 MH	16.988	81.6	135.0	230.35	230.35	91.8	0.066	CT	230.2934	0.00	0.00	F005233
F005233-BLK1 PH	129.825	136.6	194.7	230.35	230.34	151.1	0.616	OK	230.2934	0.00	0.00	F005233

#19: F005233-BLK2



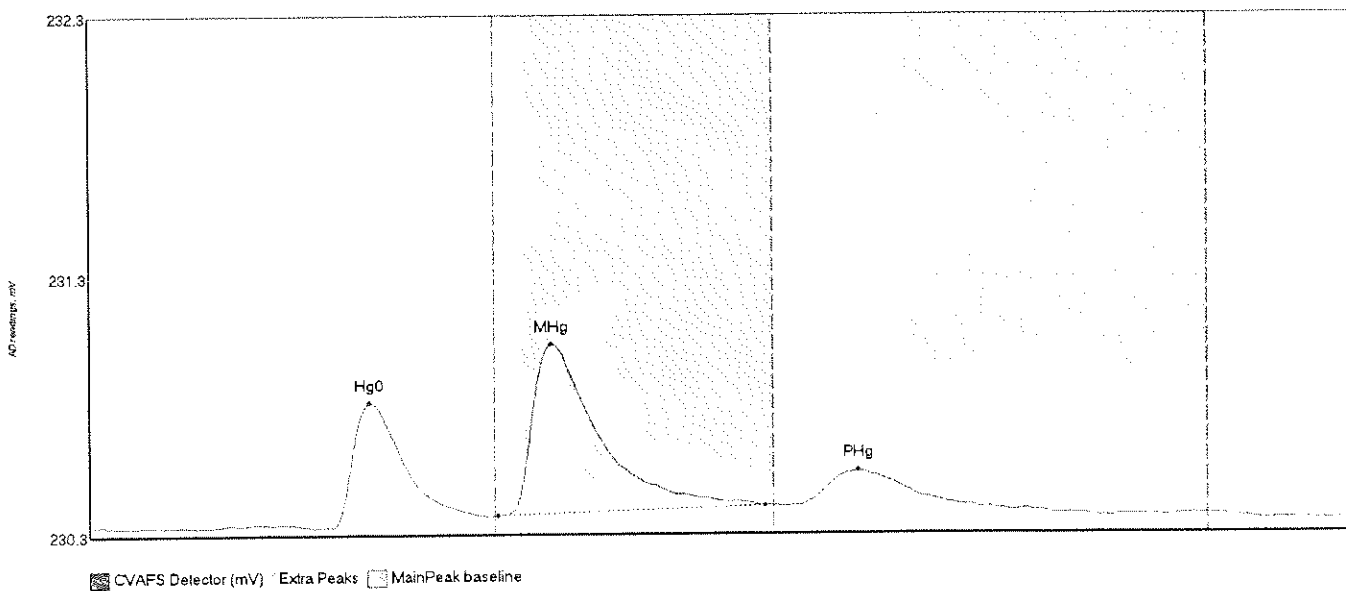
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005233-BLK2 Hg	68.171	47.7	78.5	230.29	230.34	55.8	0.604	OK	230.2927	0.00	0.00	F005233
F005233-BLK2 MHg	17.695	82.1	132.3	230.35	230.36	90.9	0.085	OK	230.2927	0.00	0.00	F005233
F005233-BLK2 PHg	94.569	136.6	189.5	230.36	230.36	150.7	0.480	OK	230.2927	0.00	0.00	F005233

#20: F005233-BLK3



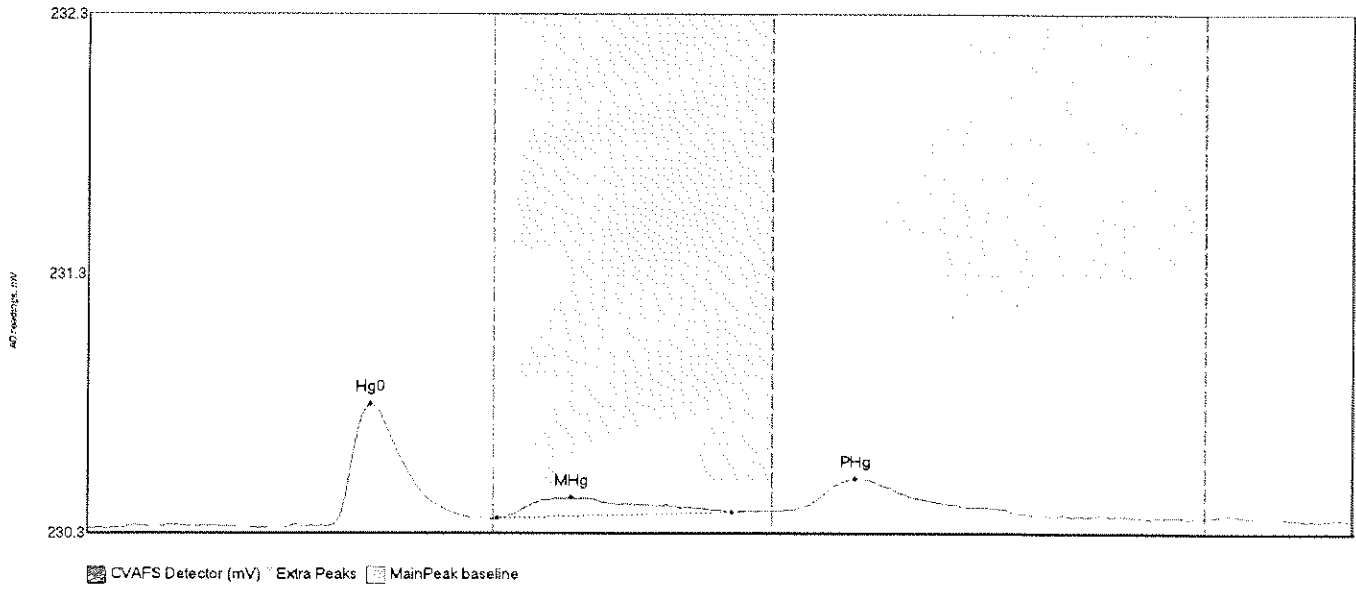
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005233-BLK3 Hg	62.359	47.5	76.3	230.28	230.33	55.7	0.565	OK	230.2894	0.00	0.01	F005233
F005233-BLK3 MH	19.162	81.3	135.0	230.33	230.34	91.5	0.069	CT	230.2894	0.00	0.01	F005233
F005233-BLK3 PH	77.727	138.8	192.8	230.34	230.33	151.3	0.381	OK	230.2894	0.00	0.01	F005233

#21: SEQ-CCV1



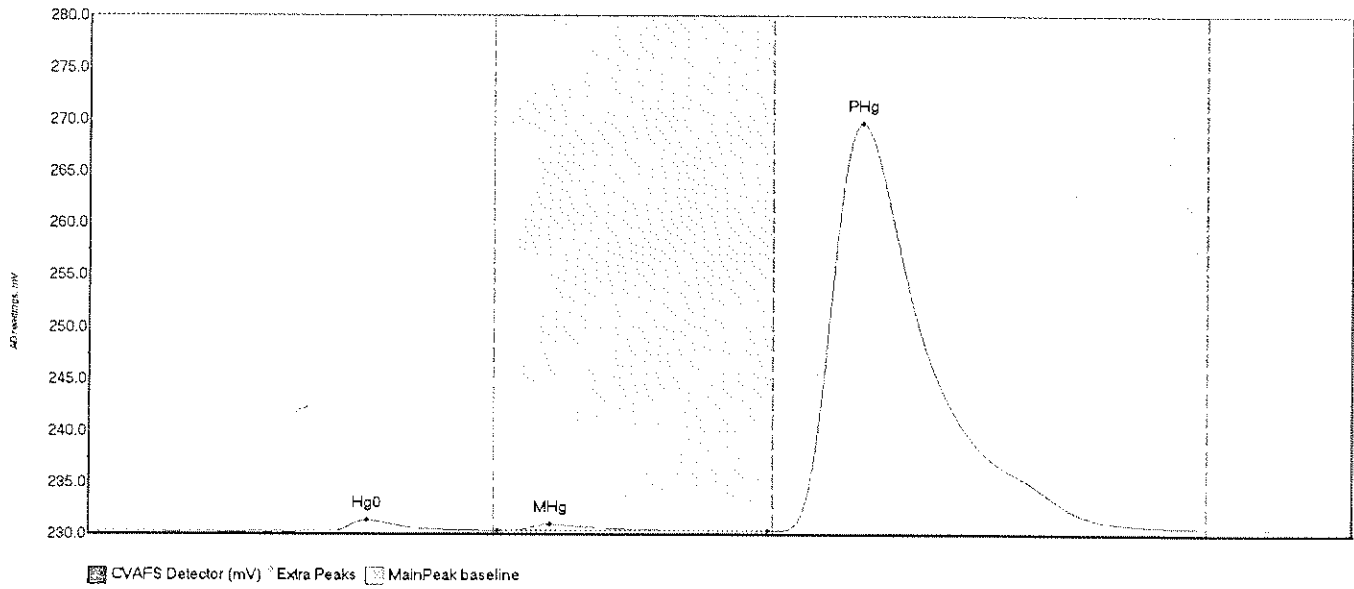
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCV1 Hg0	54.363	48.2	76.9	230.28	230.32	55.6	0.492	OK	230.2895	0.00	0.02	
SEQ-CCV1 MHg	99.253	86.6	133.3	230.32	230.36	91.2	0.663	OK	230.2895	0.00	0.02	
SEQ-CCV1 PHg	20.917	140.2	172.9	230.36	230.36	151.7	0.131	OK	230.2895	0.00	0.02	

#22: SEQ-CCB1



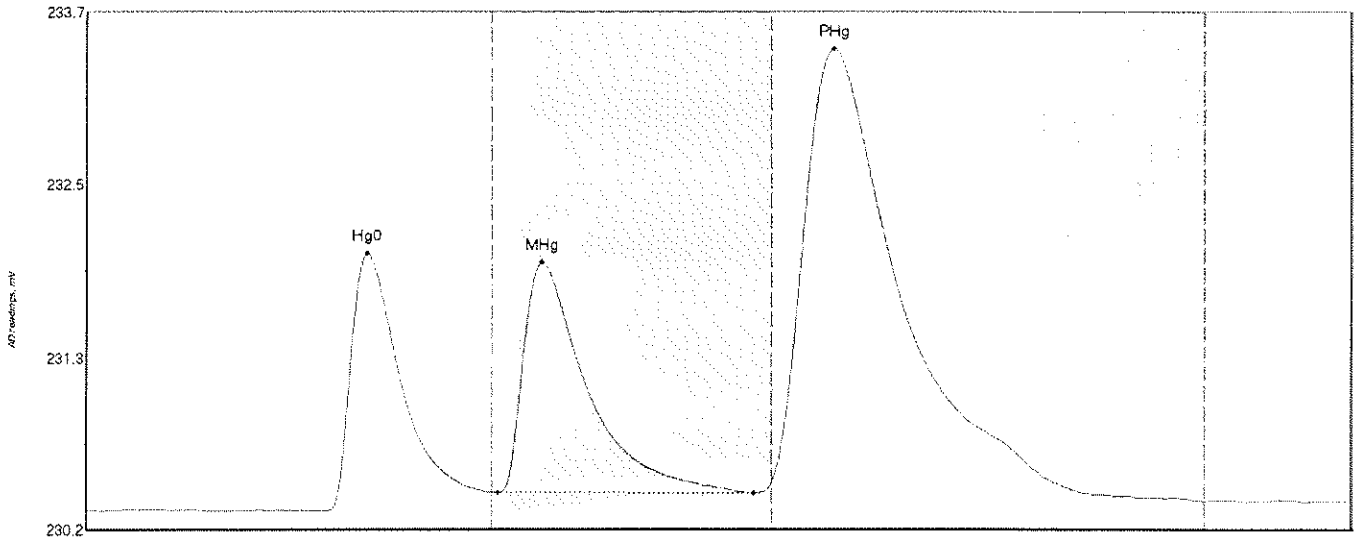
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CCB1 Hg0	52.366	38.0	80.0	230.27	230.31	55.7	0.473	CF	230.2725	0.00	0.03	
SEQ-CCB1 MHg	18.482	80.8	127.1	230.31	230.33	95.5	0.081	OK	230.2725	0.00	0.03	
SEQ-CCB1 PHg	23.487	139.3	183.3	230.34	230.33	151.2	0.118	OK	230.2725	0.00	0.03	

#29: 000074-01



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
000074-01 Hg0	117.381	47.8	78.9	230.28	230.35	55.2	1.072	OK	230.2785	0.00	0.34	F005233
000074-01 MHg	94.695	80.8	134.0	230.36	230.37	91.2	0.611	OK	230.2785	0.00	0.34	F005233
000074-01 PHg	8427.867	135.0	219.7	230.37	230.66	152.6	39.347	CT	230.2785	0.00	0.34	F005233

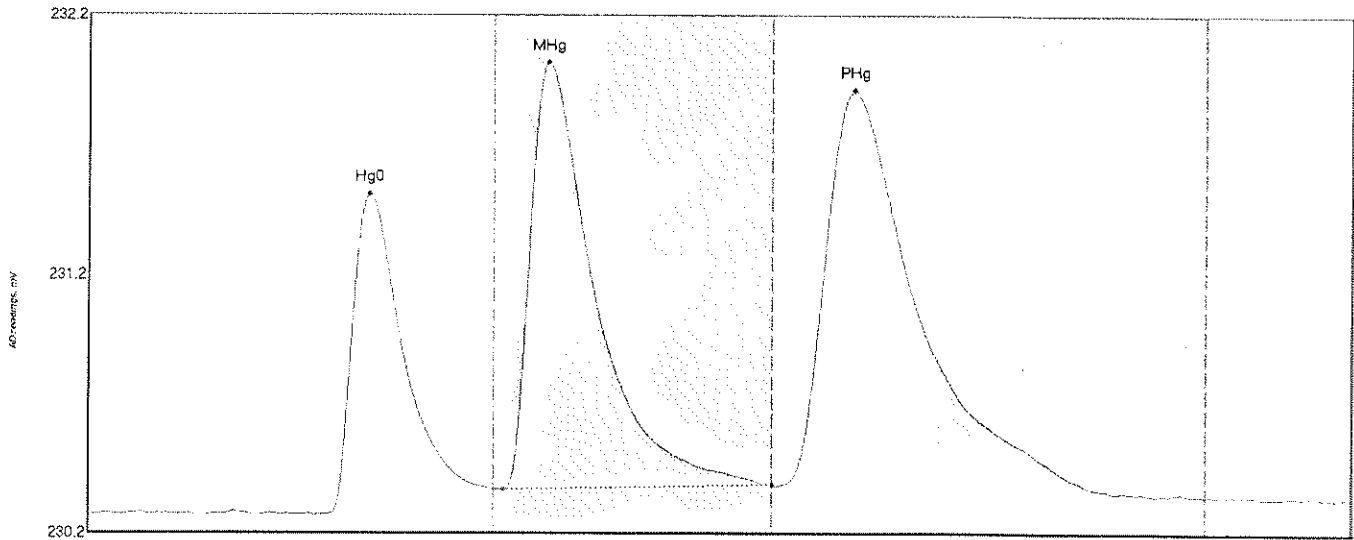
#24: F005233-MS1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

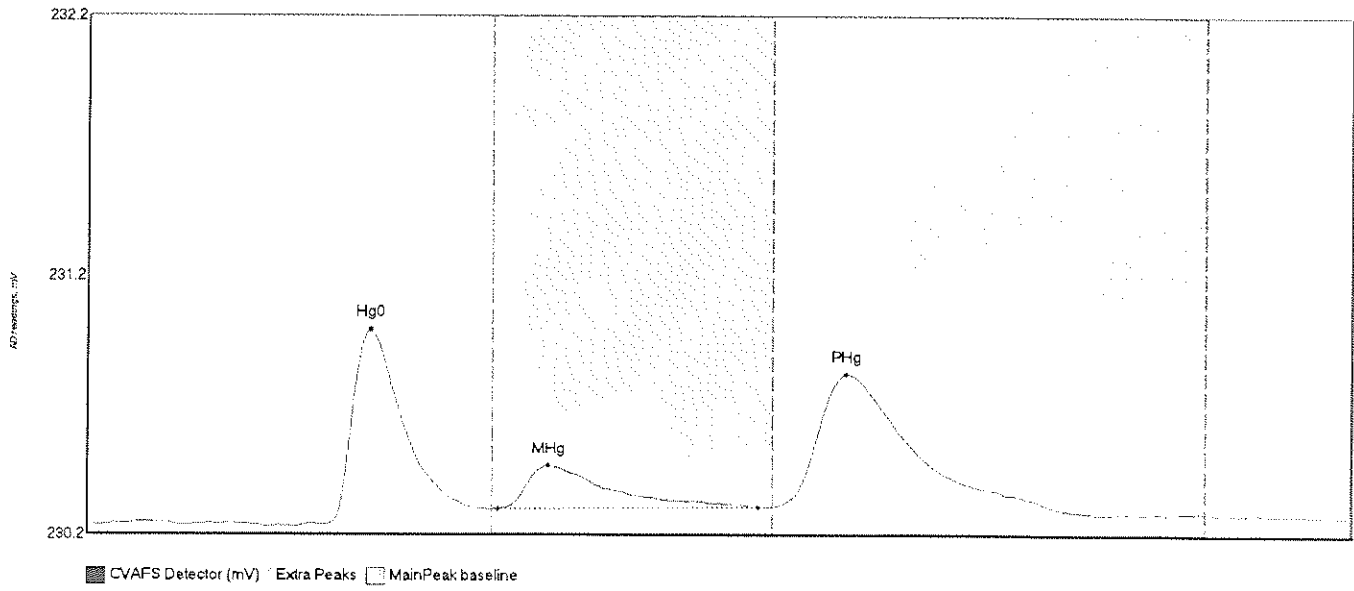
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005233-MS1	HgD	46.9	79.6	230.28	230.41	55.3	1.777	OK	230.2894	0.00	0.06	F005233
F005233-MS1	MHg	81.2	131.3	230.41	230.41	89.9	1.585	OK	230.2894	0.00	0.06	F005233
F005233-MS1	PHg	135.0	196.6	230.49	230.41	147.1	2.984	OK	230.2894	0.00	0.06	F005233

#25: F005233-MSD1



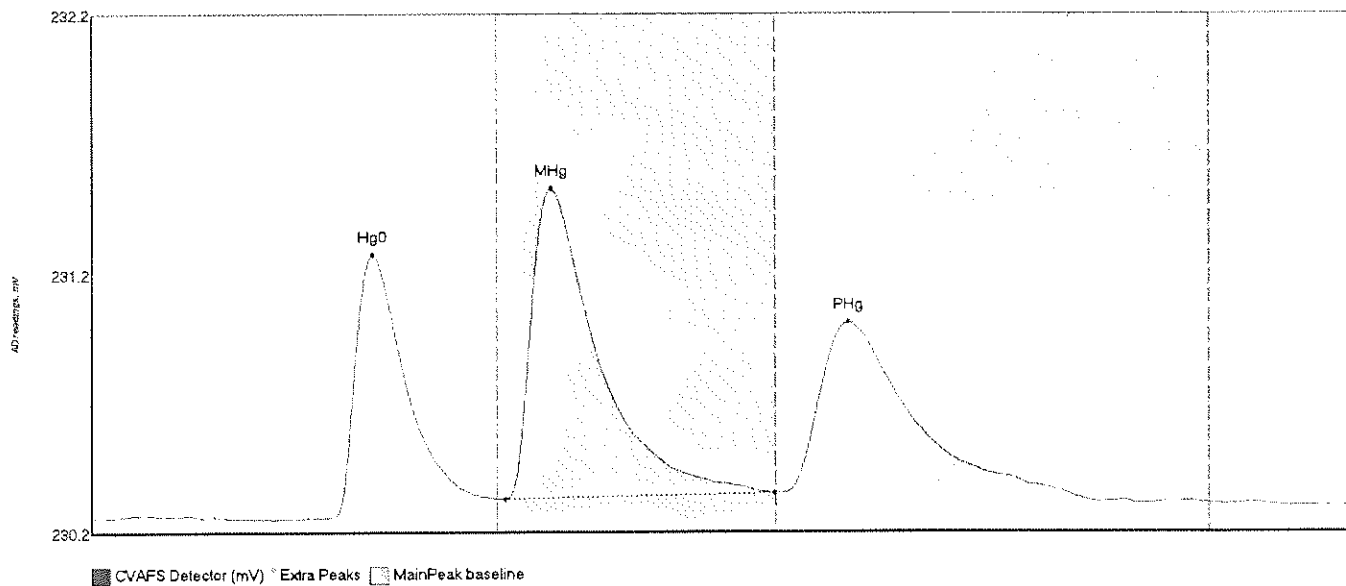
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BinDev	BinShift	Comment
F005233-MSD1 Hg	137.660	47.9	80.0	230.26	230.36	55.6	1.235	CT	230.2618	0.00	0.07	F005233
F005233-MSD1 MH	241.736	82.0	135.0	230.36	230.38	90.7	1.646	CT	230.2618	0.00	0.07	F005233
F005233-MSD1 PH	313.241	136.1	198.8	230.37	230.36	151.2	1.524	OK	230.2618	0.00	0.07	F005233

#26: 000074-02



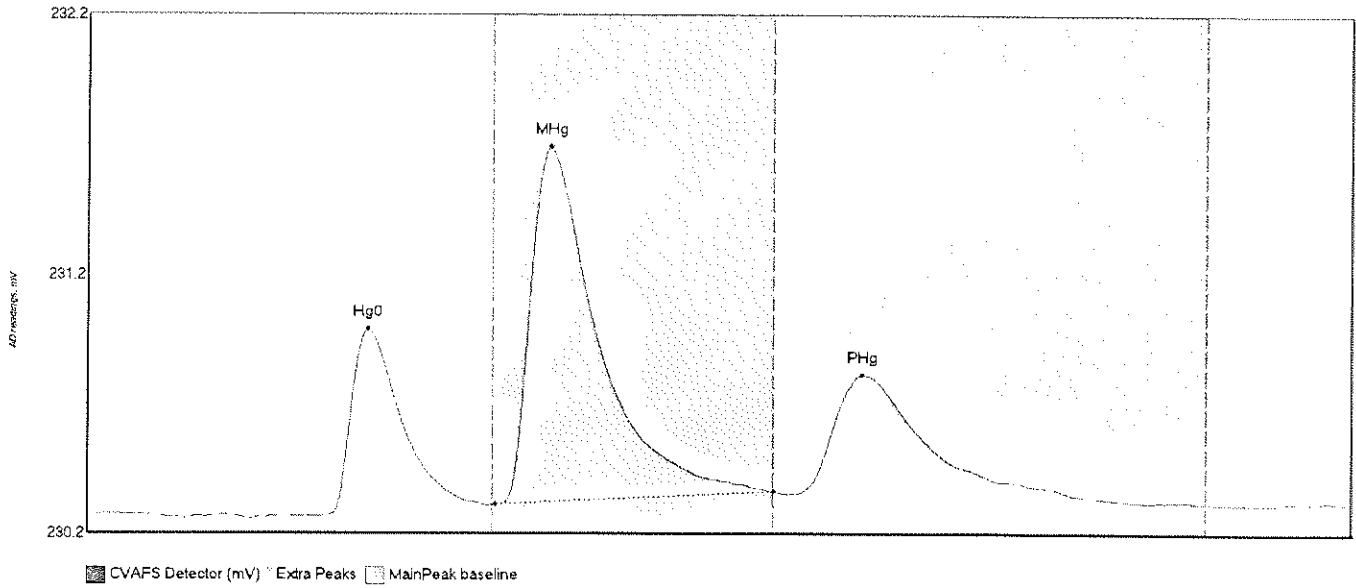
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	Shift	Comment
000074-02 Hg0	84.145	47.1	79.8	230.26	230.32	55.7	0.750	OK	230.2560	0.00	0.04	F005233
000074-02 MHg	31.578	81.1	132.2	230.32	230.32	91.1	0.167	OK	230.2560	0.00	0.04	F005233
000074-02 PHg	104.278	135.0	192.7	230.33	230.31	149.4	0.515	OK	230.2560	0.00	0.04	F005233

#27: F005233-MS2



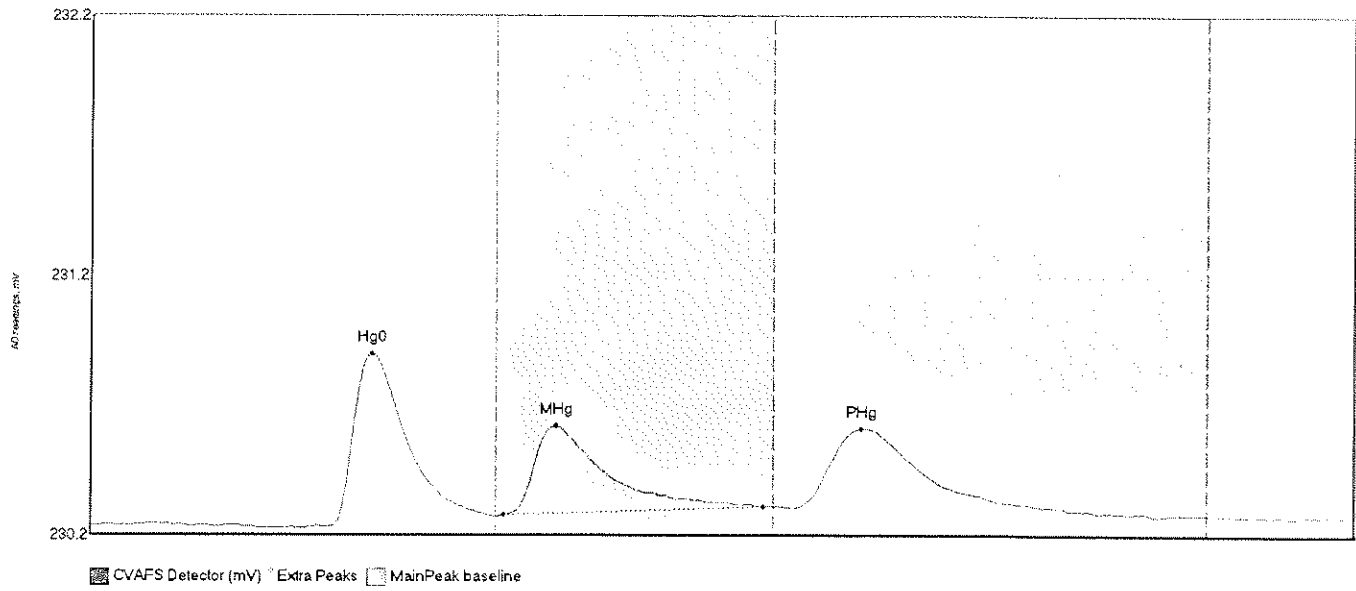
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RIDev	RIShift	Comment
F005233-MS2 Hg0	112.306	46.5	79.8	230.26	230.33	55.7	1.016	OK	230.2613	0.00	0.04	F005233
F005233-MS2 MHg	192.983	81.7	134.7	230.33	230.36	90.7	1.201	OK	230.2613	0.00	0.04	F005233
F005233-MS2 PHg	141.193	136.1	197.8	230.36	230.32	149.3	0.660	OK	230.2613	0.00	0.04	F005233

#28: F005233-MSD2



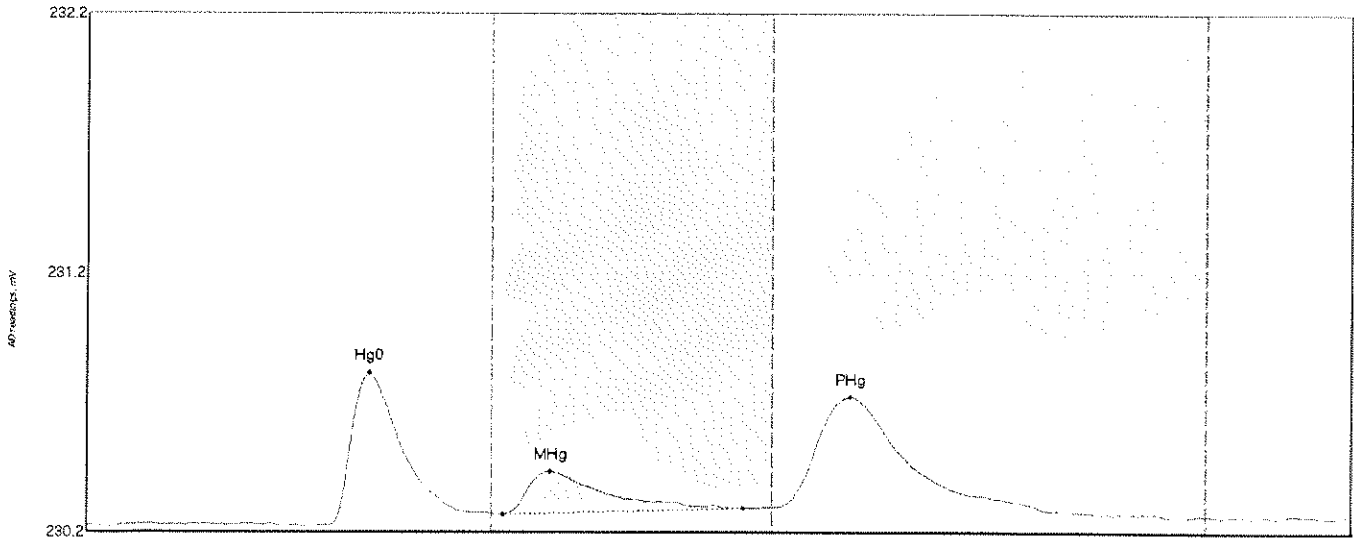
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	ElDev	BinShift	Comment
F005233-MSD2 Hg	80.525	47.4	79.0	230.26	230.30	55.2	0.715	OK	230.2638	0.00	0.05	F005233
F005233-MSD2 MH	210.804	80.7	135.0	230.31	230.36	91.4	1.399	CT	230.2638	0.00	0.05	F005233
F005233-MSD2 PH	92.711	139.4	194.1	230.35	230.34	152.6	0.438	OK	230.2638	0.00	0.05	F005233

#29: 0D00074-03



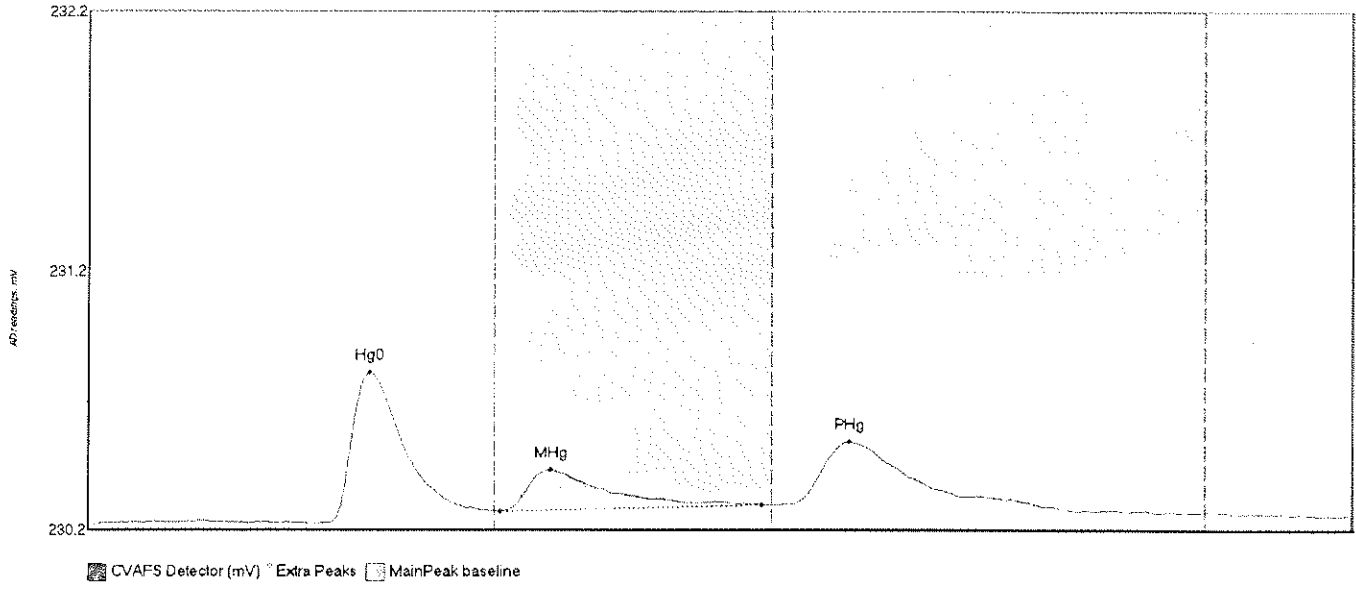
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlSblt	Comment
0D00074-03 Hg0	76.400	48.1	79.9	230.26	230.30	55.0	0.662	OK	230.2658	0.00	0.03	F005233
0D00074-03 MHg	55.465	81.5	133.0	230.31	230.34	91.8	0.343	OK	230.2658	0.00	0.03	F005233
0D00074-03 PHg	57.562	138.9	185.6	230.33	230.34	152.2	0.307	OK	230.2658	0.00	0.03	F005233

#30: 000074-04



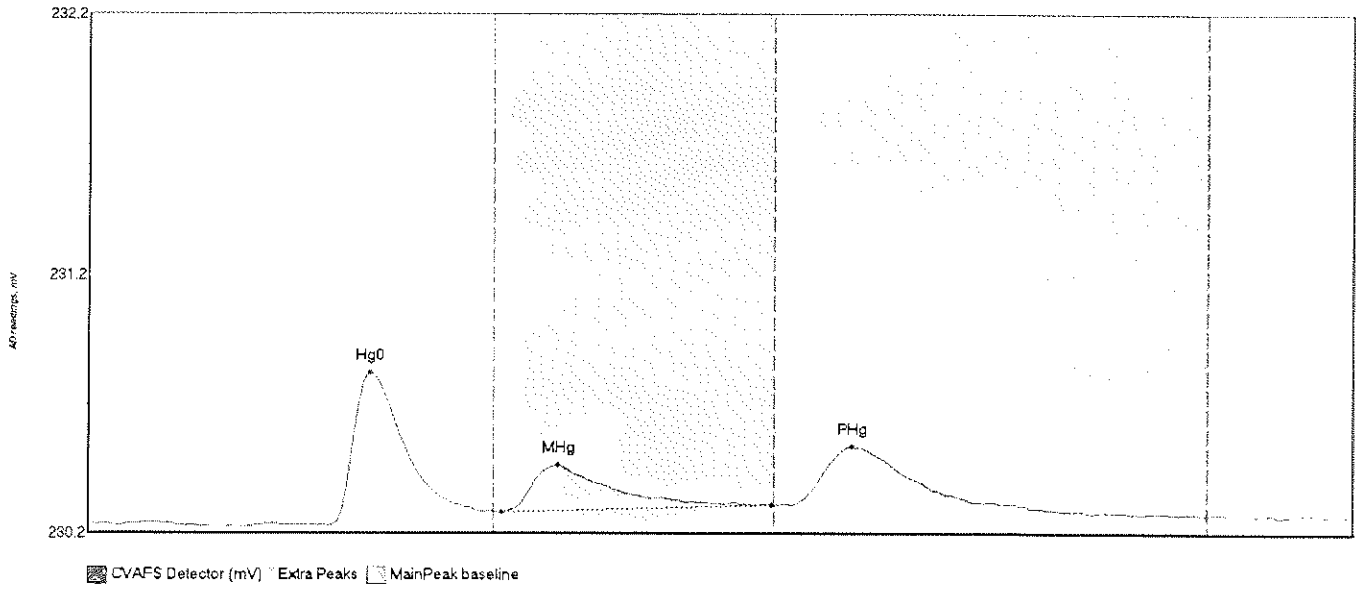
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
000074-04 Hg0	64.729	48.1	60.0	230.27	230.31	55.7	0.565	CT	230.2600	0.00	0.03	F005233
000074-04 MHg	28.266	82.2	129.2	230.31	230.33	91.6	0.167	OK	230.2600	0.00	0.03	F005233
000074-04 PHg	84.390	136.1	189.1	230.34	230.33	150.4	0.424	OK	230.2600	0.00	0.03	F005233

#31: 000074-05



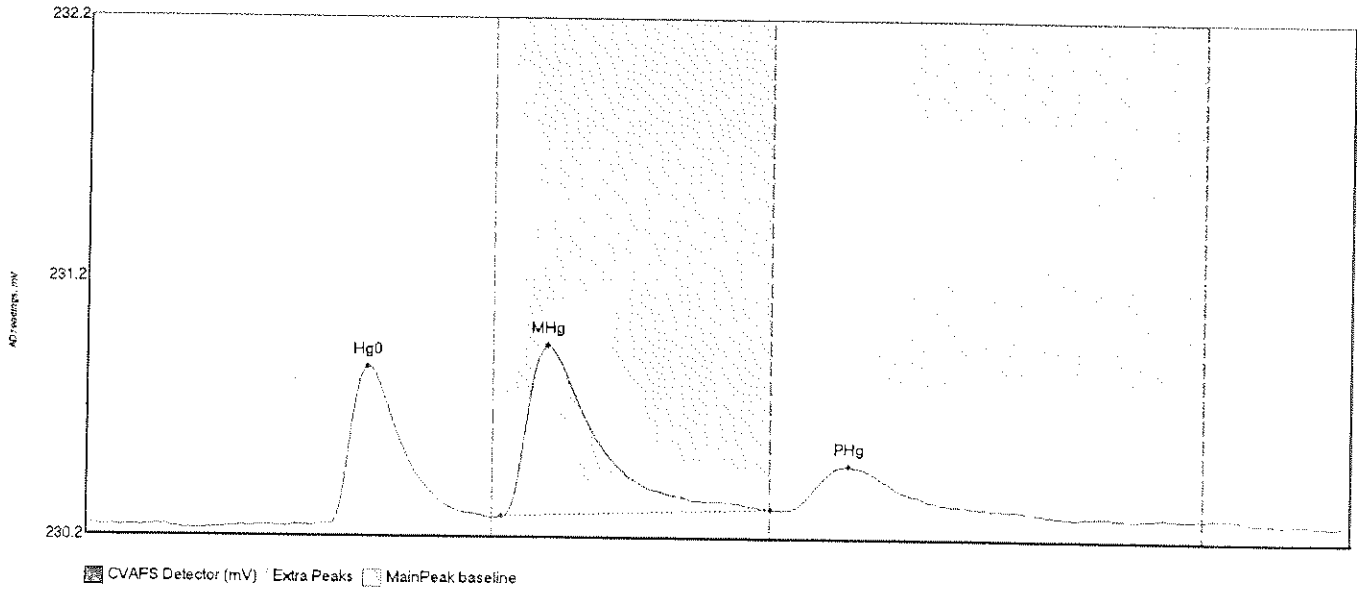
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
000074-05 Hg0	65.620	47.3	60.0	230.26	230.30	55.7	0.582	CT	230.2557	0.00	0.03	F005233
000074-05 MHg	28.537	81.1	133.0	230.30	230.33	91.1	0.161	OK	230.2557	0.00	0.03	F005233
000074-05 PHg	46.114	139.3	187.9	230.33	230.32	150.0	0.241	OK	230.2557	0.00	0.03	F005232

#32: 0000074-06

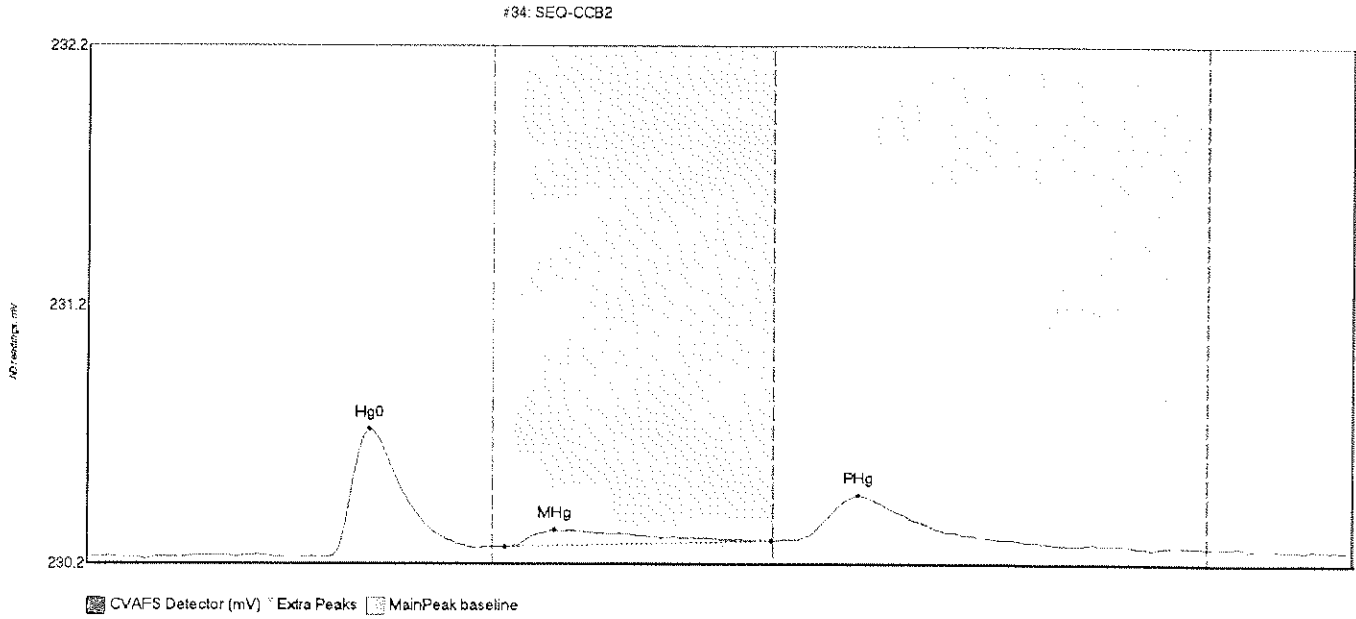


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0000074-06 Hg0	65.825	47.5	77.9	230.25	230.31	55.6	0.589	OK	230.2623	0.00	0.03	F005233
0000074-06 MHg	31.342	81.6	134.5	230.30	230.33	92.7	0.181	OK	230.2623	0.00	0.03	F005233
0000074-06 PHg	39.705	138.4	179.9	230.33	230.33	150.3	0.223	OK	230.2623	0.00	0.03	F005233

#33: SEQ-CCV2

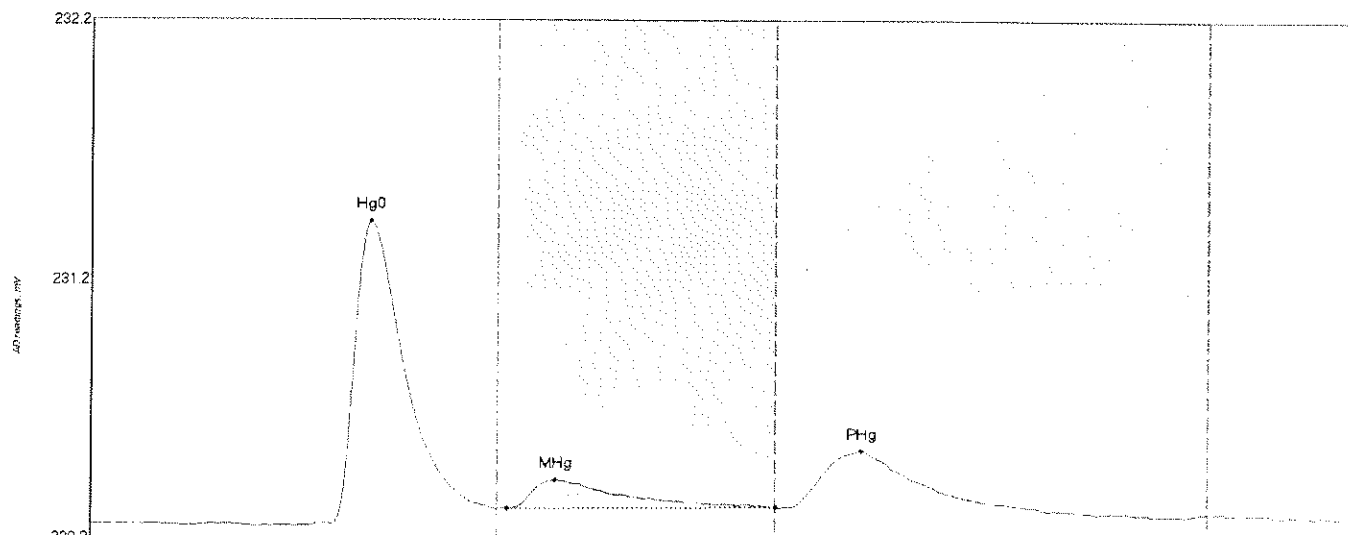


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCV2 Hg0	68.893	48.2	79.5	230.26	230.29	55.6	0.606	OK	230.2580	3.00	0.02	
SEQ-CCV2 MHg	103.934	82.0	135.0	230.29	230.32	90.7	0.662	CT	230.2580	3.00	0.02	
SEQ-CCV2 PHg	28.920	138.6	178.4	230.32	230.33	150.3	0.172	OK	230.2580	0.00	0.02	



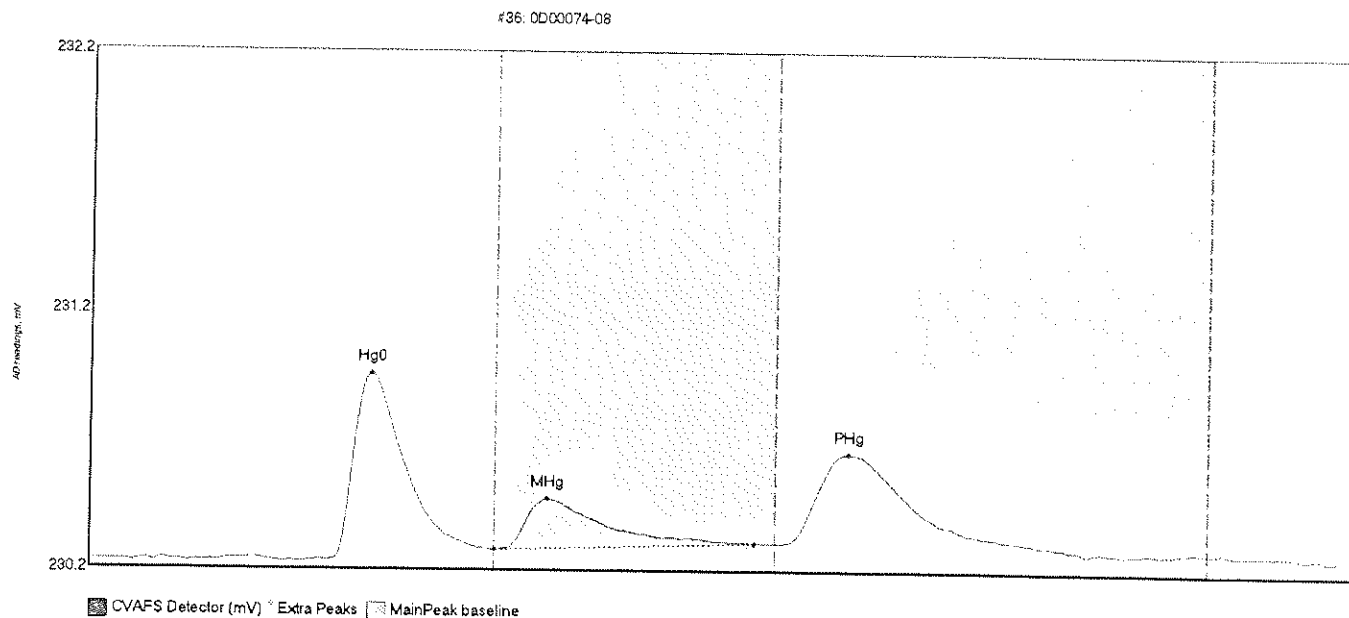
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Height	Comment
SEQ-CCB2 Hg0	54.973	47.5	77.4	230.25	230.28	55.5	0.495	OK	230.2553	0.00	0.02	
SEQ-CCB2 MRg	14.986	82.5	134.6	230.29	230.31	92.2	0.065	OK	230.2553	0.00	0.02	
SEQ-CCB2 PHg	29.426	139.3	179.9	230.32	230.32	151.8	0.172	OK	230.2553	0.00	0.02	

#35: 0000074-07



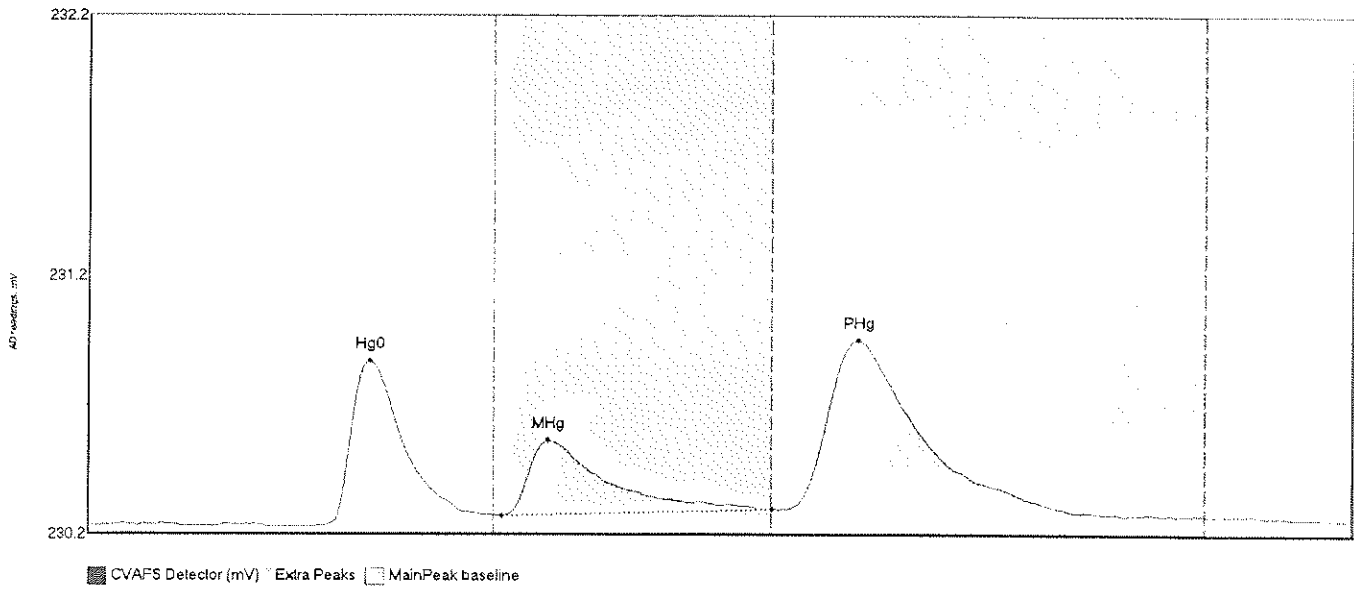
CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0000074-07 Hg0	128.758	47.6	79.5	230.25	230.31	55.3	1.166	OK	230.2510	0.00	0.03	F005233
0000074-07 MHg	23.245	81.9	135.0	230.31	230.32	91.6	0.112	CT	230.2510	0.00	0.03	F005233
0000074-07 PHg	43.129	137.9	184.6	230.32	230.32	151.8	0.220	OK	230.2510	0.00	0.03	F005233



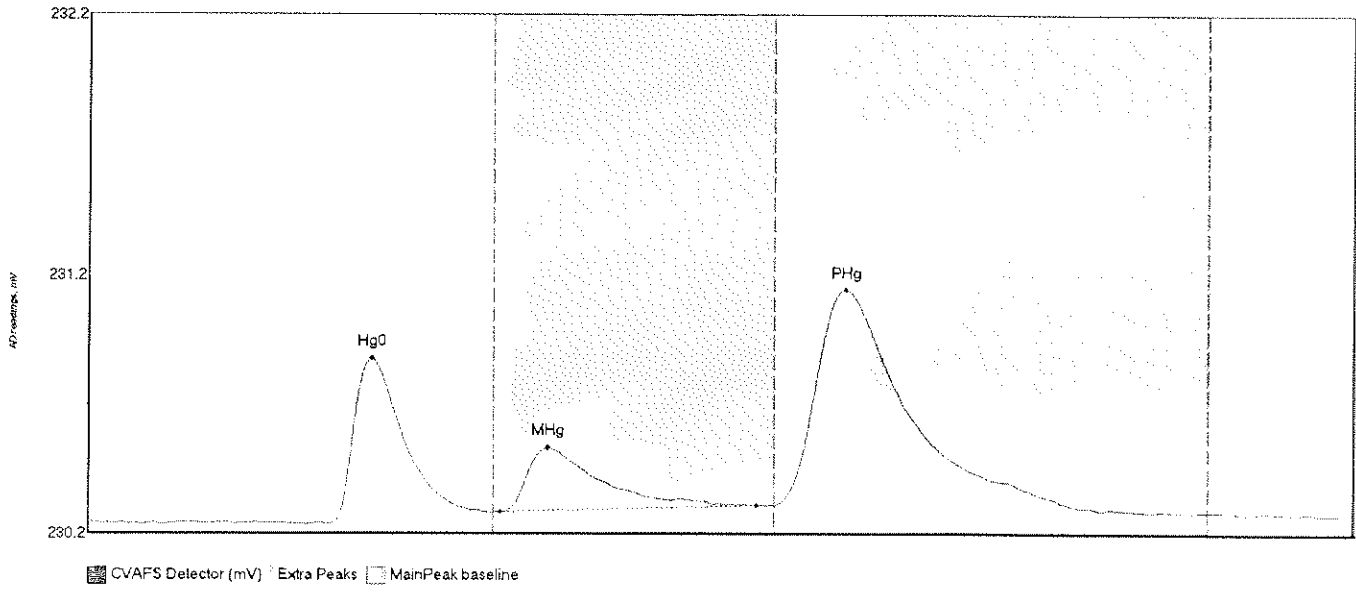
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
0D00074-08 Hg0	80.991	47.0	79.5	230.25	230.29	55.5	0.718	OK	230.2464	0.00	0.03	FO05233
0D00074-08 MHg	34.421	80.0	130.9	230.29	230.32	90.3	0.197	OK	230.2464	0.00	0.03	FO05233
0D00074-08 PHg	66.212	136.2	184.1	230.32	230.32	148.4	0.346	OK	230.2464	0.00	0.03	FO05233

#37: 0E00002-01



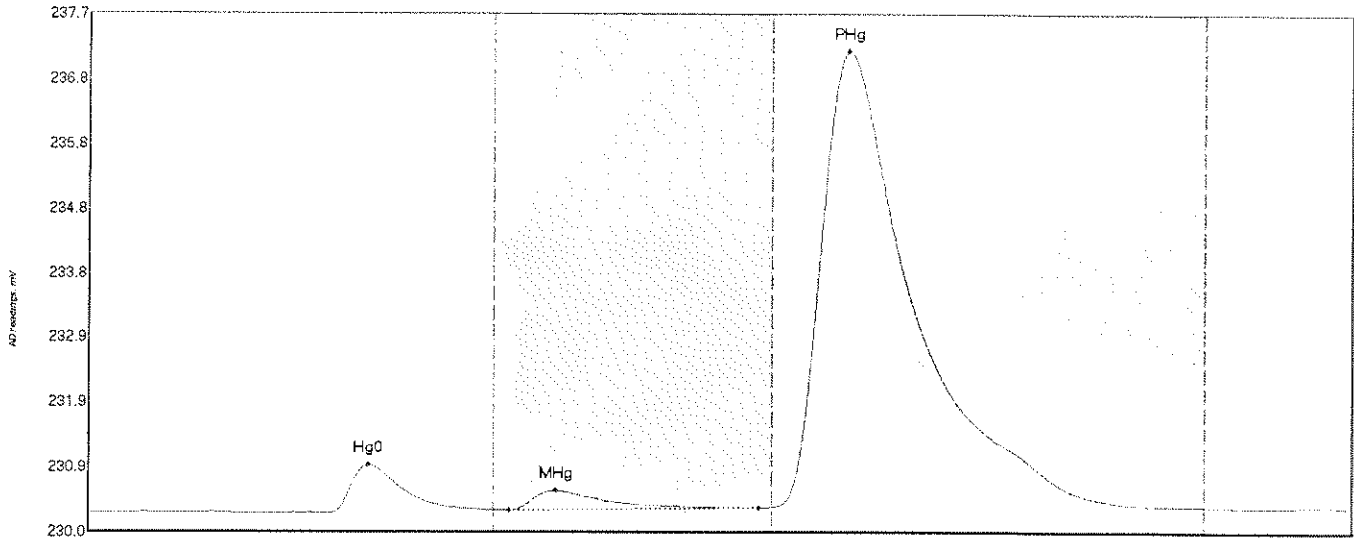
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00002-01 Hg0	71.136	46.3	79.5	230.25	230.29	55.8	0.636	OK	230.2466	0.00	0.02	F005233
0E00002-01 MHg	50.815	81.6	135.0	230.28	230.31	60.6	0.293	CT	230.2466	0.00	0.02	F005233
0E00002-01 PHg	128.516	137.9	191.2	230.31	230.31	152.0	0.656	OK	230.2466	0.00	0.02	F005233

#38: 0E00002-02



Nano	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00002-02 Hg0	71.002	47.1	79.3	230.24	230.29	55.9	0.638	OK	230.2526	0.00	0.02	F005213
0E00002-02 MHg	40.480	81.5	131.5	230.29	230.32	90.6	0.246	OK	230.2526	0.00	0.02	F005213
0E00002-02 PHg	171.991	135.0	194.7	230.32	230.31	149.1	0.833	OK	230.2526	0.00	0.02	F005213

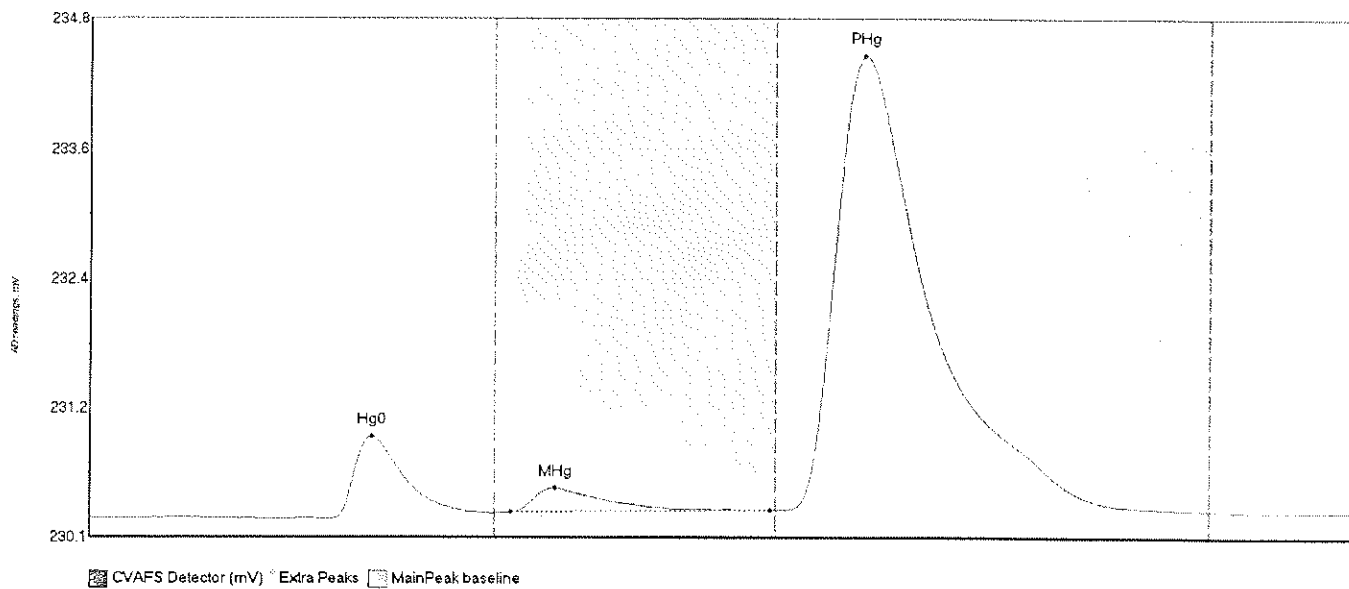
#39: 0E00002-03



☑ CVAFS Detector (mV) ◦ Extra Peaks ▨ MainPeak baseline

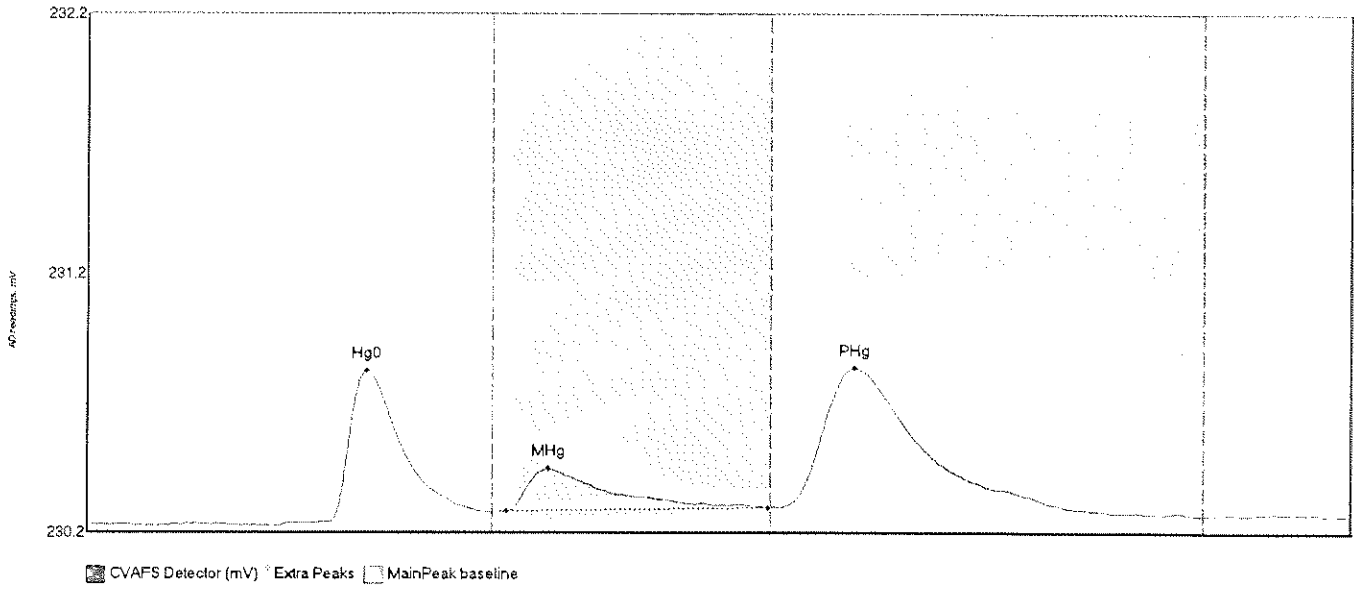
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00002-03 Hg0	79.525	47.8	80.0	230.24	230.29	55.6	0.720	CT	230.2522	0.00	0.07	F005233
0E00002-03 MHg	46.851	83.1	132.5	230.28	230.32	92.2	0.293	OK	230.2522	0.00	0.07	F005233
0E00002-03 PHg	1432.659	135.0	219.7	230.33	230.34	150.1	6.856	CT	230.2522	0.00	0.07	F005233

#40: 0E00002-04



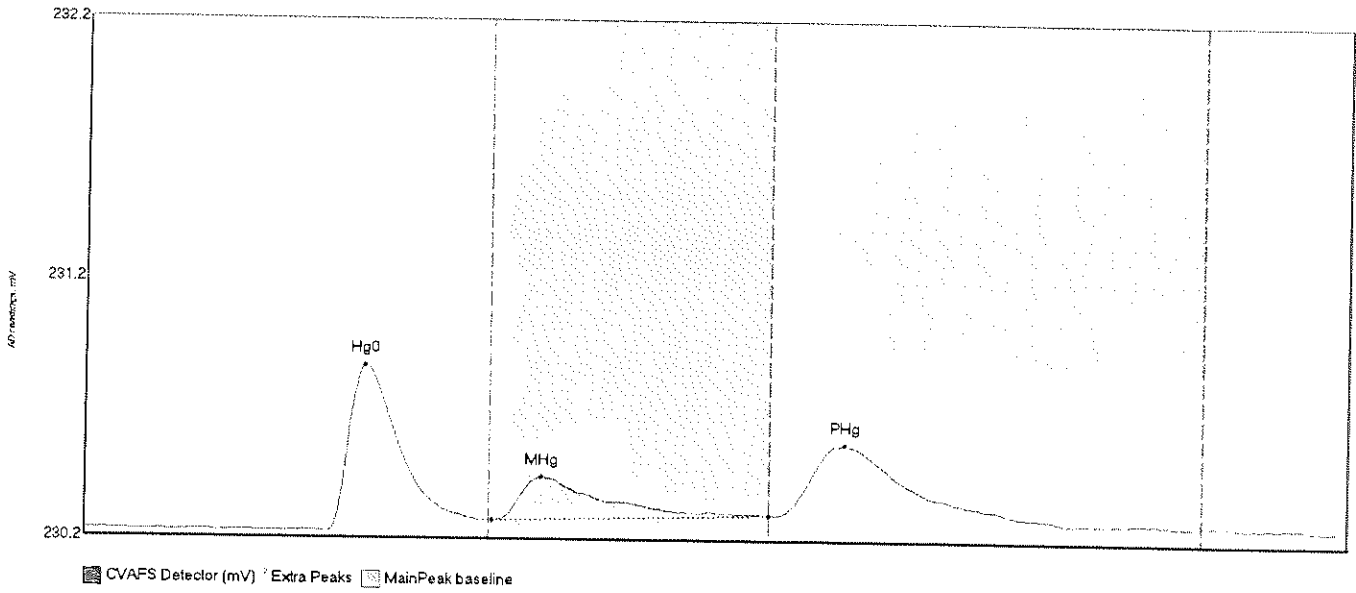
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00002-04 Hg0	61.974	47.6	79.4	230.24	230.29	55.5	0.745	OK	230.2462	0.00	0.06	P005233
0E00002-04 MHg	35.292	83.2	134.0	230.30	230.32	91.9	0.220	OK	230.2462	0.00	0.06	F005233
0E00002-04 PHg	883.458	136.4	214.0	230.32	230.32	152.7	4.115	OK	230.2462	0.00	0.06	P005233

#41: 0E00002-05



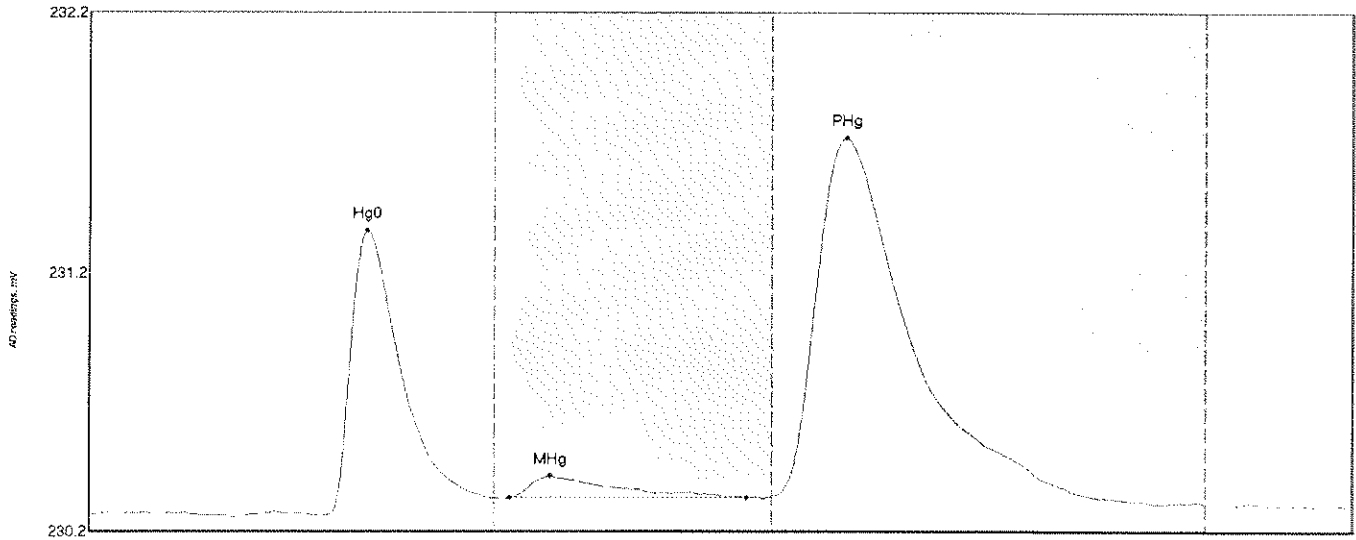
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00002-05 Hg0	66.604	38.2	80.0	230.24	230.29	55.4	0.567	CT	230.2414	0.00	0.03	F005233
0E00002-05 MHg	30.724	82.7	134.4	230.29	230.31	90.9	0.168	OK	230.2414	0.00	0.03	F005233
0E00002-05 PHg	115.406	136.7	194.7	230.31	230.30	151.4	0.539	OK	230.2414	0.00	0.03	F005233

#42: 0E00002-06



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0E00002-06 Hg0	71.041	47.5	73.6	230.24	230.29	55.3	8.637	OK	230.2482	0.00	0.03	F005233
0E00002-06 MHg	29.817	80.7	134.9	230.29	230.31	90.3	0.165	OK	230.2482	0.00	0.03	F005233
0E00002-06 PHg	54.401	136.7	184.2	230.32	230.31	149.8	0.271	OK	230.2482	0.00	0.03	F005233

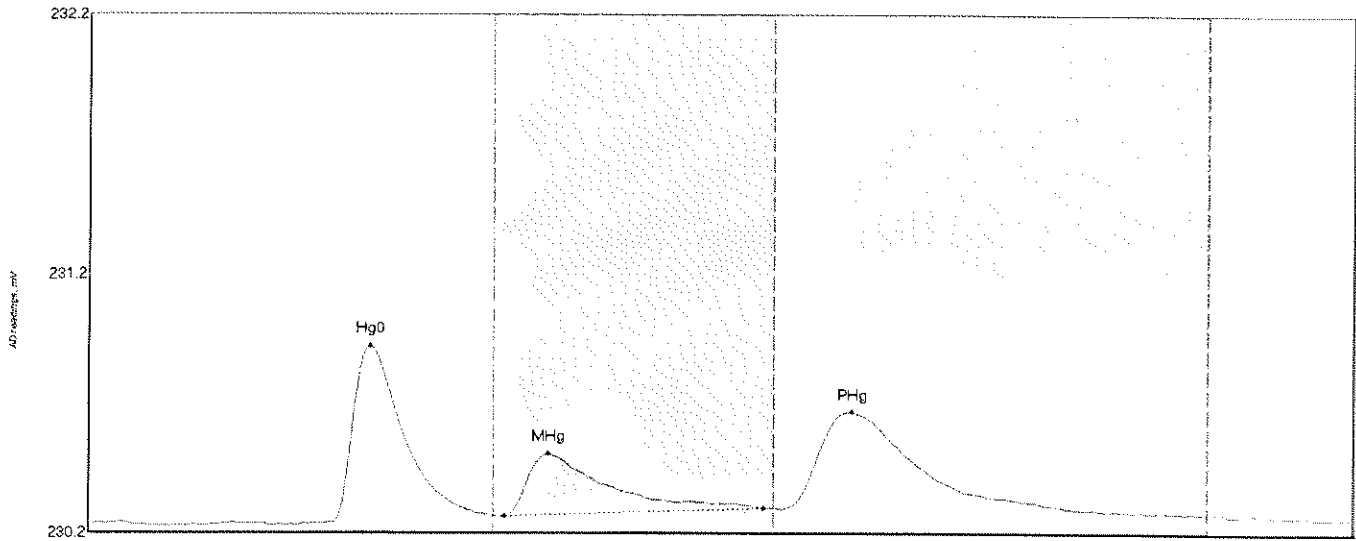
#43: 0E00002-07



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BShift	Comment
0E00002-07 Hg0	121.625	46.2	79.6	230.24	230.31	55.3	1.102	OK	230.2502	0.30	0.03	F005233
0E00002-07 MHg	16.298	63.1	129.9	230.31	230.32	91.0	0.085	OK	230.2502	0.30	0.03	F005233
0E00002-07 PHg	286.756	135.0	196.8	230.32	230.32	149.5	1.381	OK	230.2502	0.30	0.03	F005233

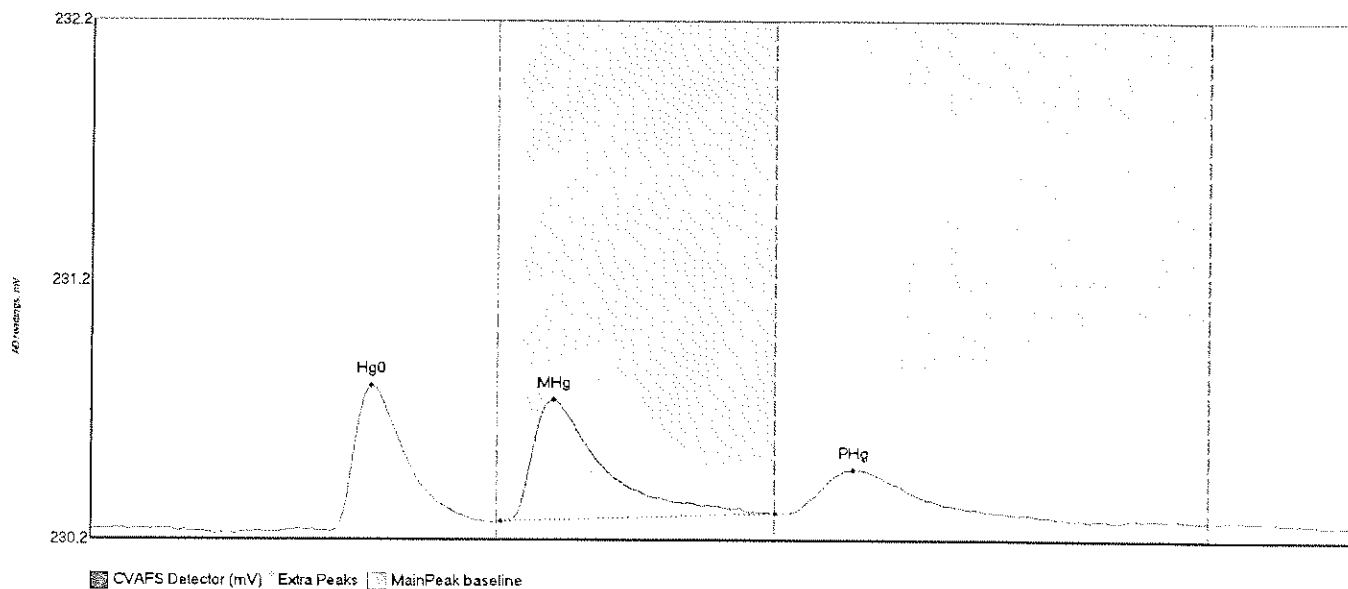
#44: 0E00002-08



CVAFS Detector (mV) Extra Peaks MainPeak baseline

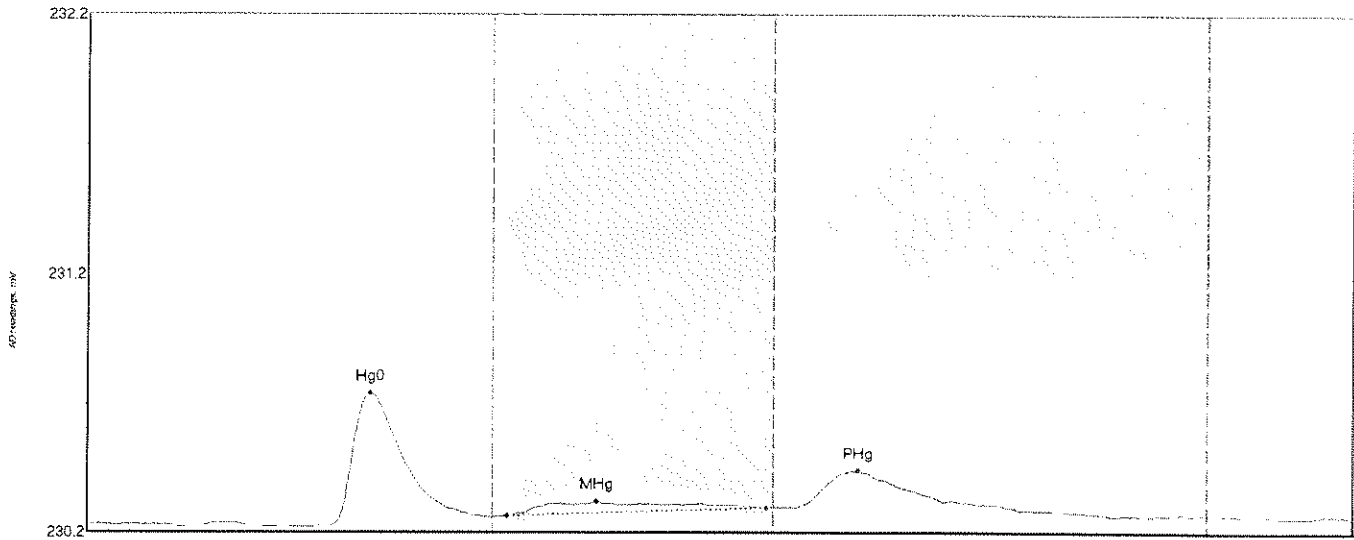
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00002-08 Hg0	77.800	47.8	80.0	230.25	230.28	55.5	0.683	CT	230.2515	0.00	0.02	F005233
0E00002-08 MHg	43.053	82.2	133.0	230.28	230.31	90.8	0.242	OK	230.2515	0.00	0.02	F005233
0E00002-08 PHg	60.521	136.6	193.1	230.31	230.31	150.3	0.370	OK	230.2515	0.00	0.02	F005233

#45: SEQ-CCV3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
SEQ-CCV3 Hg0	63.355	47.4	79.0	230.28	230.28	58.6	0.561	OK	230.2567	0.00	0.02	
SEQ-CCV3 MHg	74.434	80.8	135.0	230.29	230.32	91.1	6.469	CF	230.2567	0.00	0.02	
SEQ-CCV3 PHg	31.134	136.5	179.2	230.32	230.32	150.3	0.169	OK	230.2567	0.00	0.02	

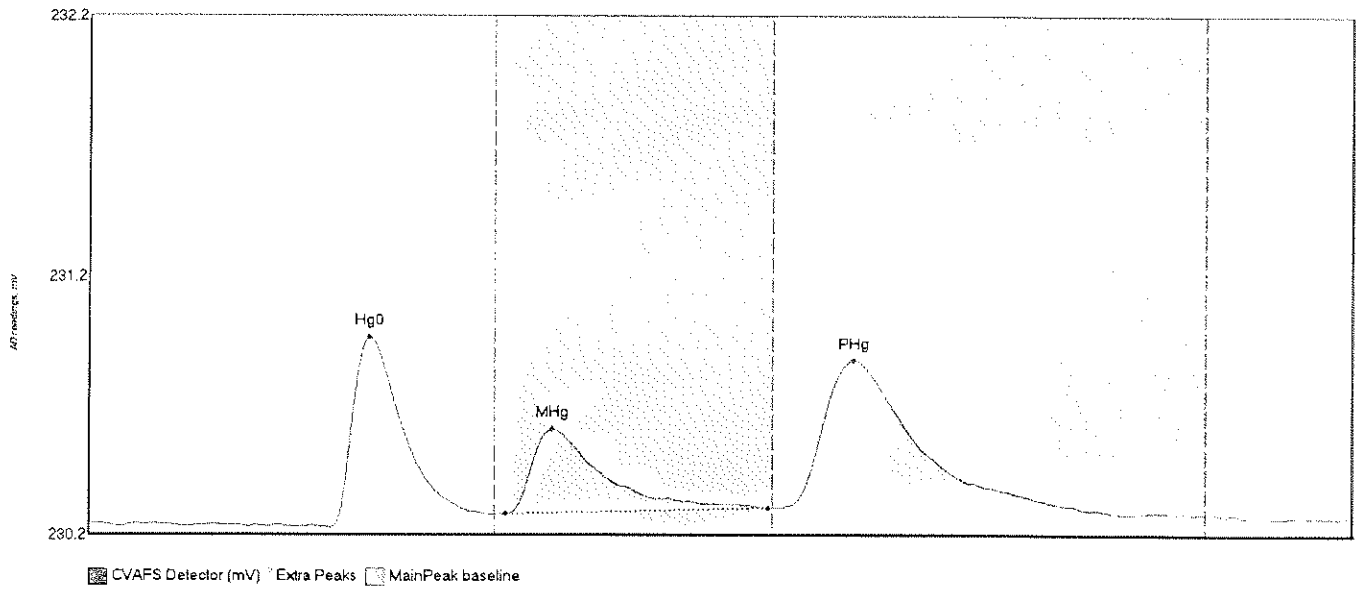
#46: SEQ-CCB3



CVAFS Detector (mV) * Extra Peaks MainPeak baseline

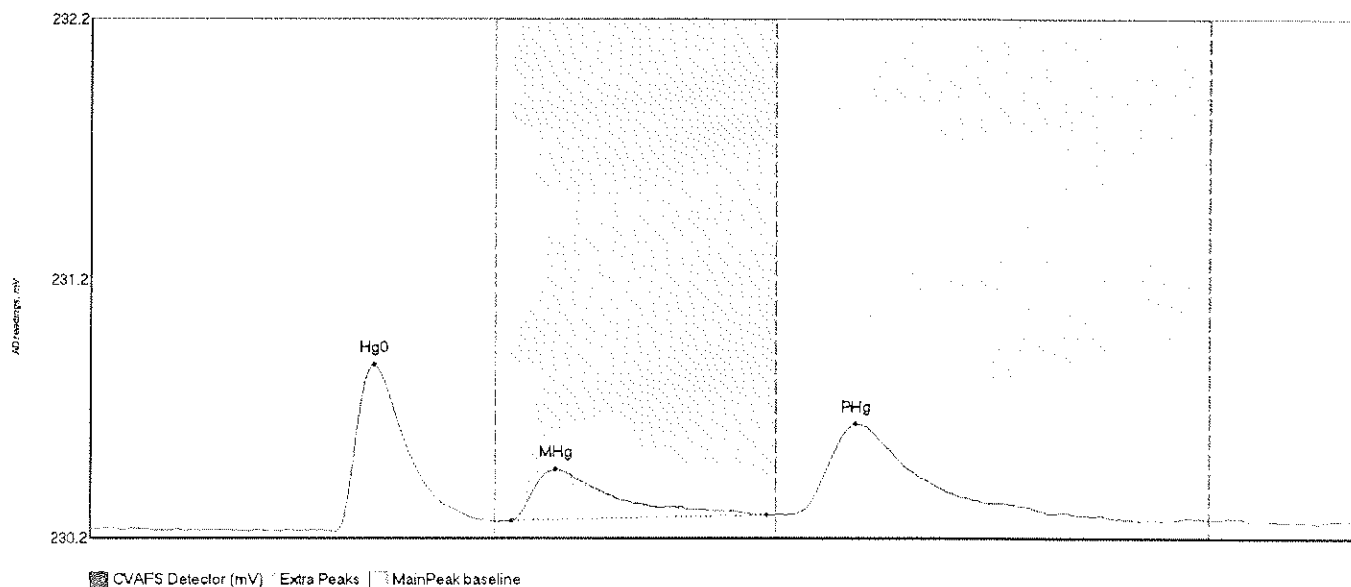
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	R1Dev	R1Shift	Comment
SEQ-CCB3 Hg0	57.526	47.1	80.0	230.25	230.28	55.7	0.518	CT	230.2561	0.00	0.03	
SEQ-CCB3 MHg	12.976	82.9	133.6	230.29	230.32	100.4	0.057	OK	230.2561	0.00	0.03	
SEQ-CCB3 PHg	25.622	139.3	181.3	230.32	230.32	151.7	0.142	OK	230.2561	0.00	0.03	

#47: DE00002-09



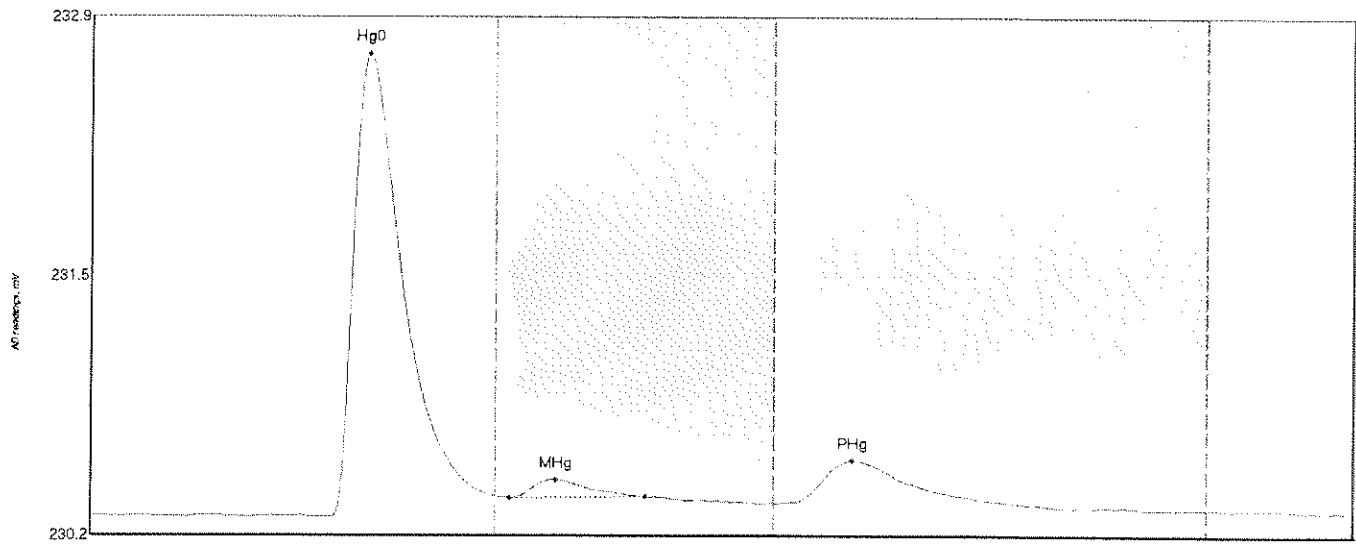
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
DE00002-09 Hg0	81.918	48.0	79.6	230.24	230.29	55.6	0.733	OK	230.2608	0.00	0.02	F005233
DE00002-09 MHg	52.644	52.2	134.1	230.29	230.32	91.3	0.326	OK	230.2608	0.00	0.02	F005233
DE00002-09 PHg	117.615	136.7	195.7	230.32	230.31	150.9	0.573	OK	230.2608	0.00	0.02	F005233

#48 GE00002-10



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
GE00002-10 Hg0	72.327	48.2	80.0	230.24	230.28	55.8	0.644	CT	230.2548	0.00	0.03	F005233
GE00002-10 MHg	35.662	83.3	133.1	230.28	230.31	91.9	0.199	OK	230.2548	0.00	0.03	F005233
GE00002-10 PHg	67.160	138.7	188.9	230.31	230.31	150.7	0.348	OK	230.2548	0.00	0.03	F005233

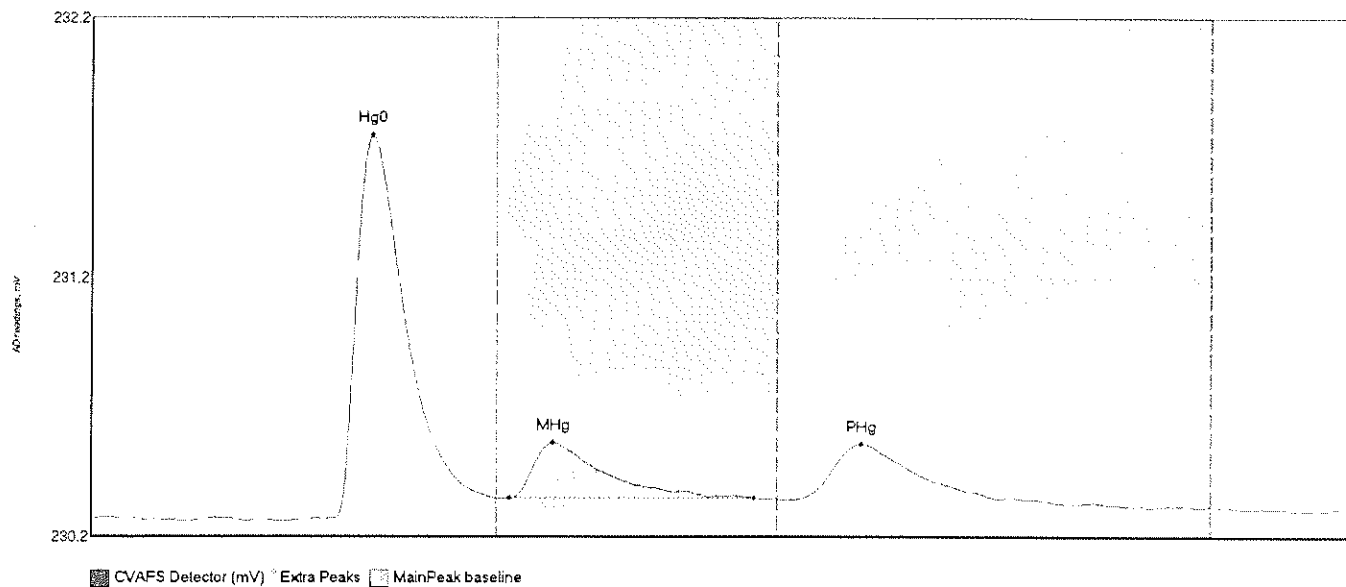
#49: 0E0002-11



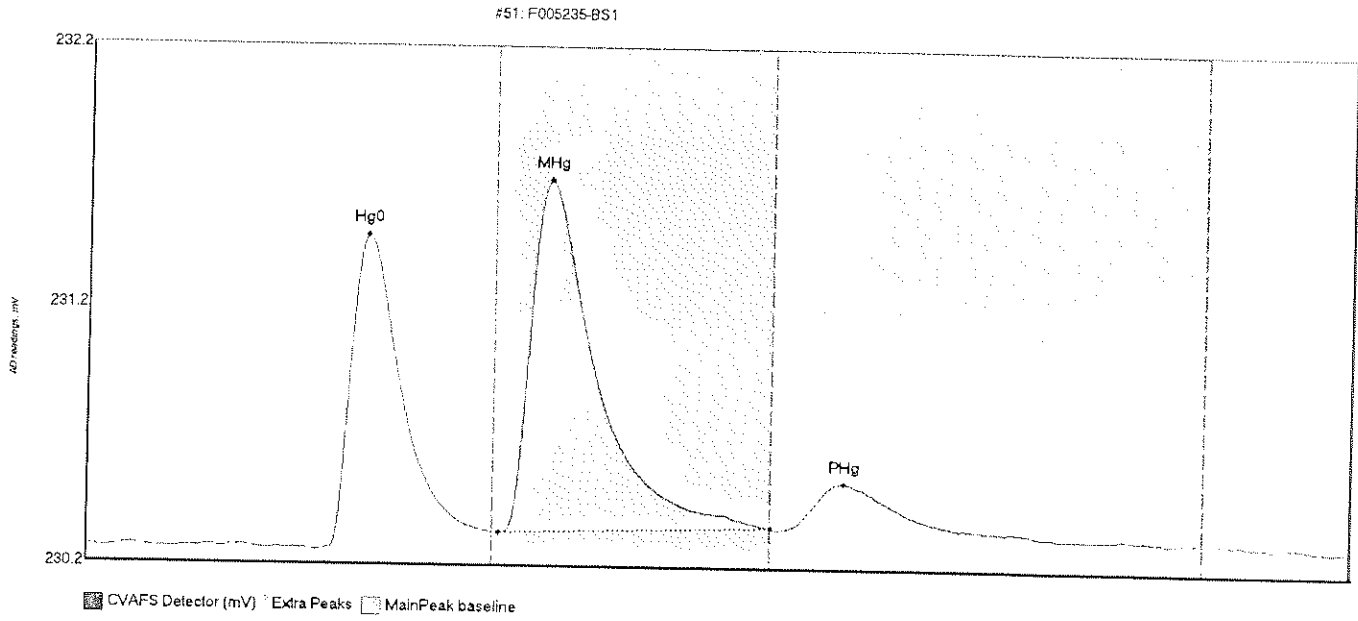
CVAFS Detector (mV)
 Extra Peaks
 MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BiShift	Comment
0E0002-11 Hg0	272.288	47.8	80.0	230.26	230.37	55.4	2.485	CT	230.2606	0.00	0.02	F005233
0E0002-11 MHg	12.033	82.8	109.5	230.36	230.36	91.8	0.097	OK	230.2606	0.00	0.02	F005233
0E0002-11 PHg	41.424	138.1	181.7	230.33	230.33	150.3	0.228	OK	230.2606	0.00	0.02	F005233

#50 OE00002-12

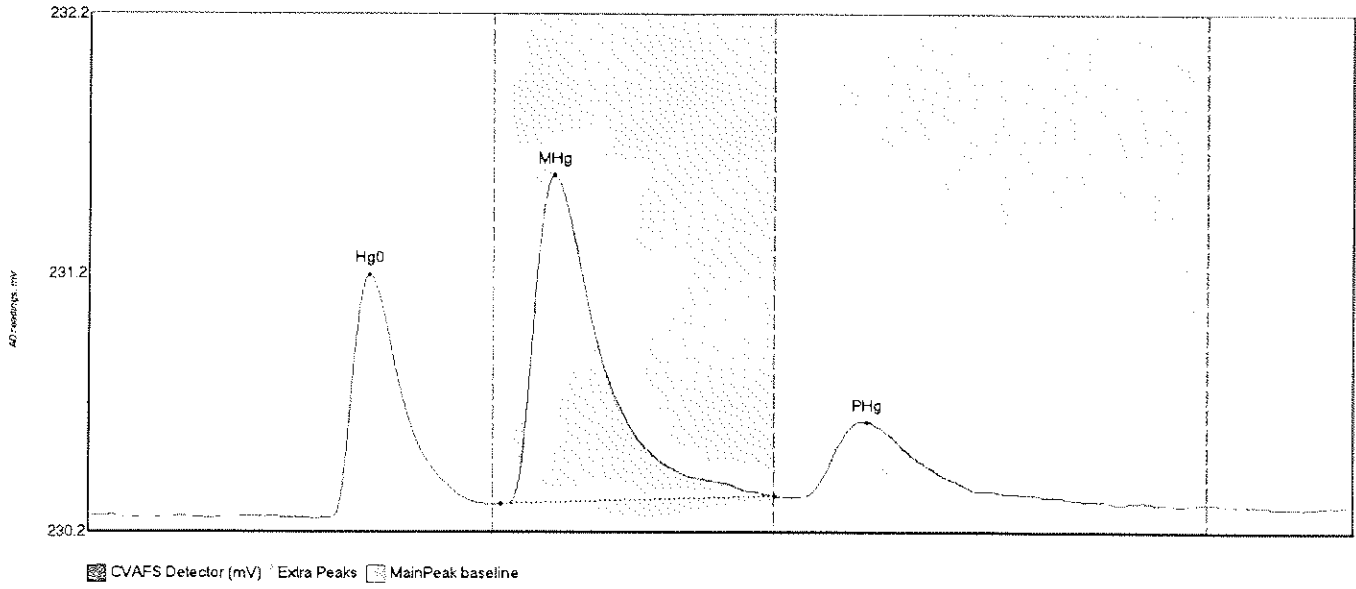


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BiShift	Comment
OE00002-12 Hg0	162.327	47.8	80.0	230.25	230.33	55.4	1.474	CT	230.2527	0.00	0.03	F005233
OE00002-12 MHg	34.264	82.6	130.4	230.33	230.33	91.1	0.215	OK	230.2527	0.00	0.03	F005233
OE00002-12 PHg	37.616	138.0	178.3	230.32	230.33	151.5	0.215	OK	230.2527	0.00	0.03	F005233



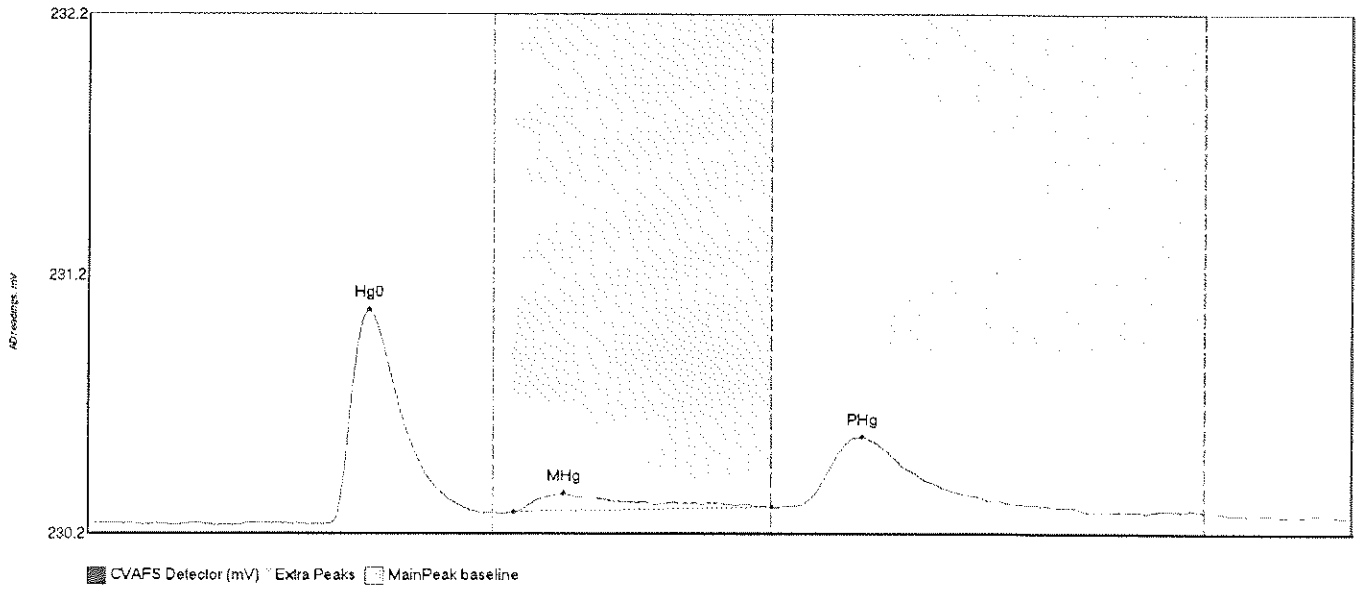
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005235-BS1 Hg0	133.014	48.2	80.0	230.25	230.32	55.3	1.203	CF	230.2569	0.00	0.03	F005235
F005235-BS1 MHg	262.791	81.3	135.0	230.32	230.35	91.0	1.356	CT	230.2569	0.00	0.03	F005235
F005235-BS1 PHg	28.670	137.3	171.6	230.34	230.35	149.4	0.183	OK	230.2569	0.00	0.03	F005235

#52: F005235-BSD1



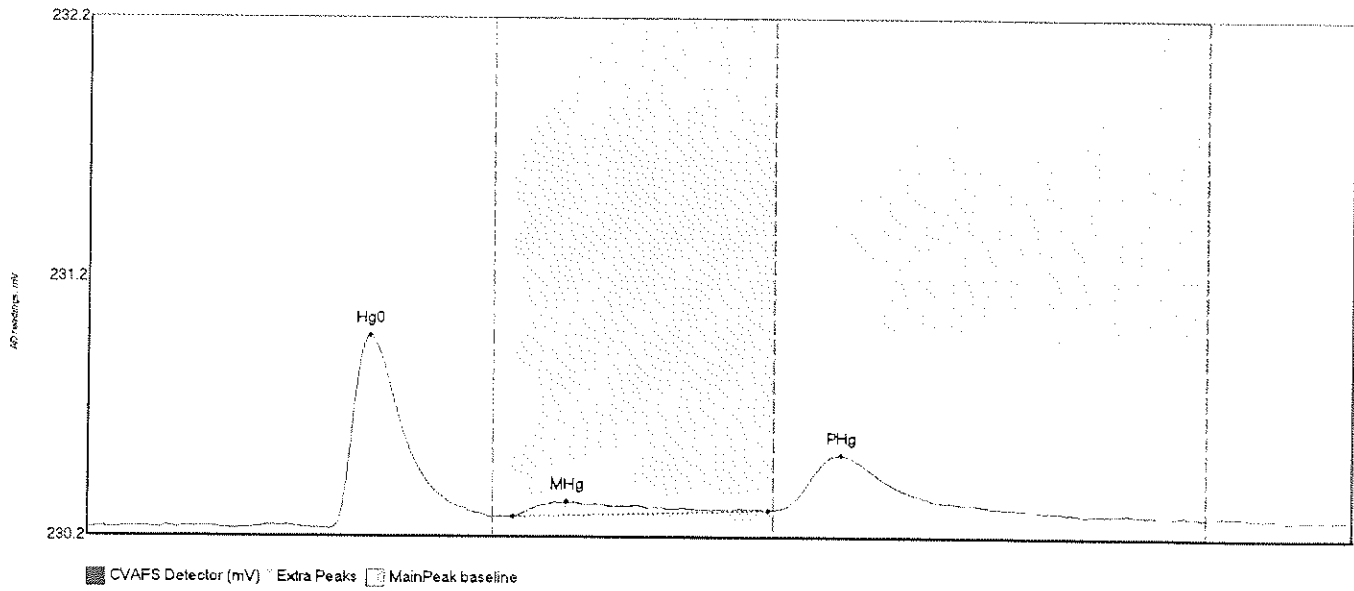
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
F005235-BSD1 Hg	104.249	47.1	80.0	230.25	230.30	55.4	0.937	CT	230.2598	0.00	0.04	F005235
F005235-BSD1 MH	190.985	81.7	135.0	230.30	230.34	92.0	1.269	CT	230.2598	0.00	0.04	F005235
F005235-BSD1 PH	54.084	139.9	188.5	230.33	230.33	153.3	0.292	OK	230.2598	0.00	0.04	F005235

#53: F005235-BLK1



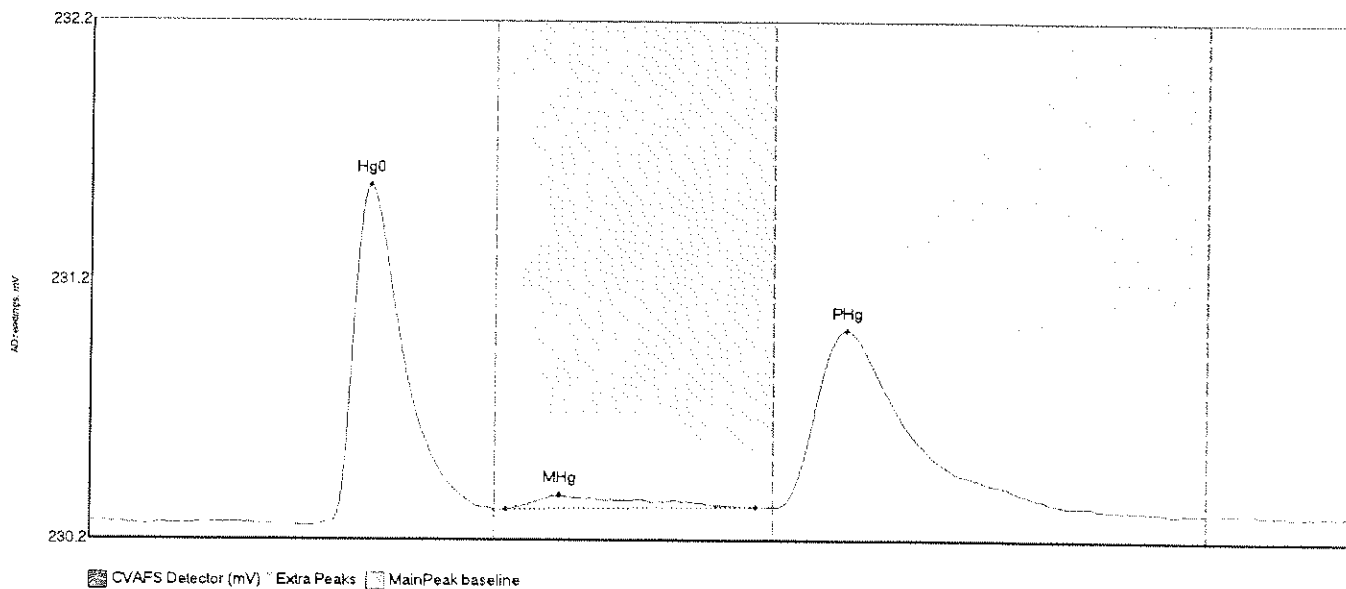
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
F005235-BLK1 Hg	51.268	47.8	78.0	230.25	230.29	55.7	0.824	OK	230.2564	0.00	0.02	F005235
F005235-BLK1 MH	15.253	84.0	135.0	230.30	230.32	93.9	0.072	CT	230.2569	0.00	0.02	F005235
F005235-BLK1 PH	50.349	136.6	187.7	230.32	230.32	152.8	0.270	OK	230.2564	0.00	0.02	F005235

#54: F005235-BLK2



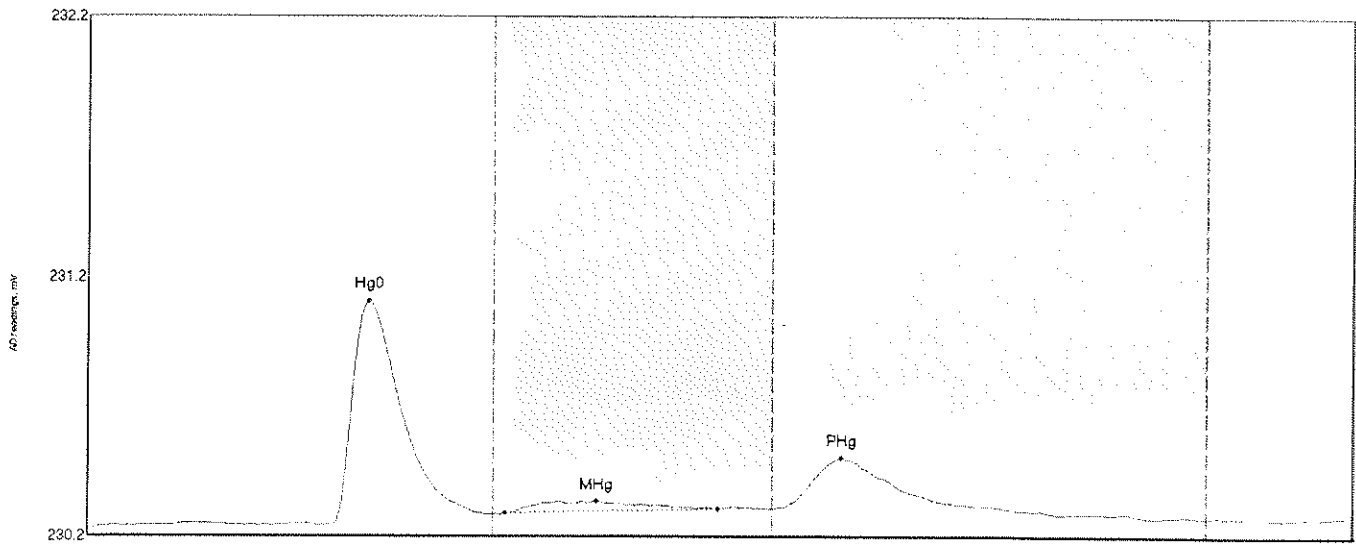
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	B1Shift	Comment
F005235-BLK2 Hg	83.567	47.6	79.9	230.24	230.29	55.5	0.744	OK	230.2459	0.00	0.04	F005235
F005235-BLK2 MH	12.462	84.1	133.9	230.29	230.31	94.6	0.059	OK	230.2459	0.00	0.04	F005235
F005235-BLK2 PH	35.765	136.4	180.6	230.32	230.32	140.3	0.207	OK	230.2459	0.00	0.04	F005235

#55: F005235-BLK3

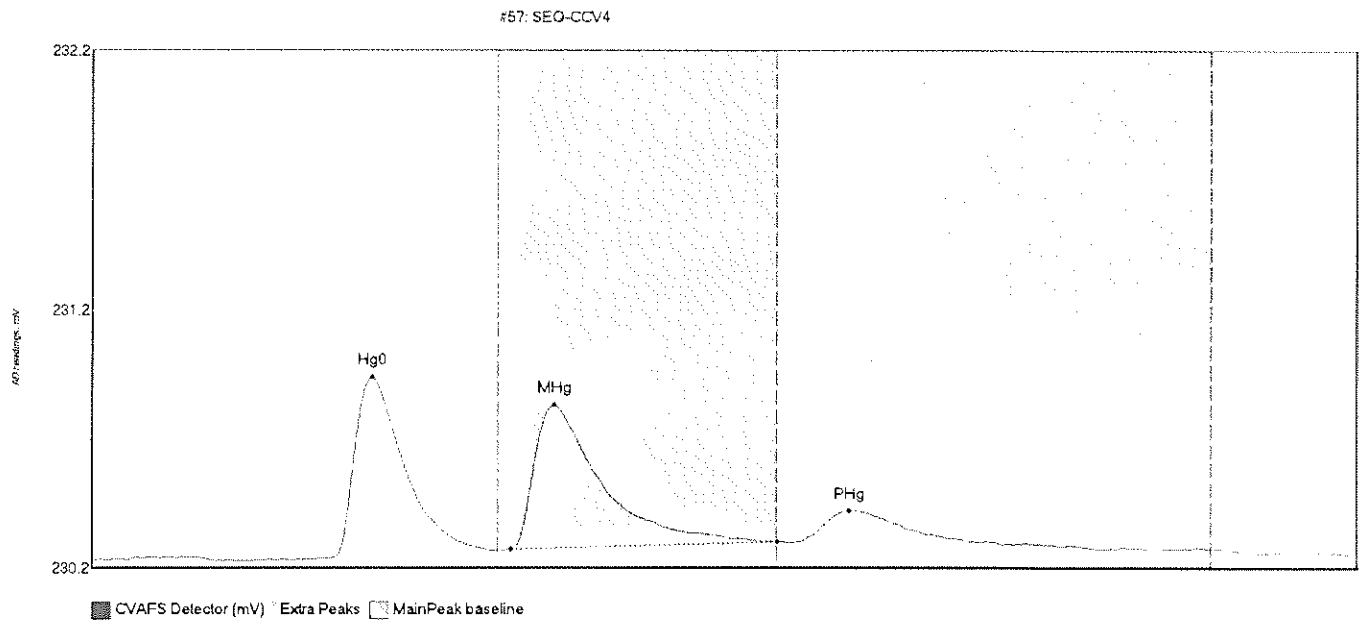


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005235-BLK3 Hg	143.147	46.0	80.0	230.25	230.30	55.5	1.298	CF	230.2545	0.00	0.03	F005235
F005235-BLK3 MH	13.451	62.2	131.6	230.30	230.31	92.7	0.055	OK	230.2545	0.00	0.03	F005235
F005235-BLK3 PH	138.411	136.0	192.7	230.31	230.31	149.4	0.651	OK	230.2545	0.00	0.03	F005235

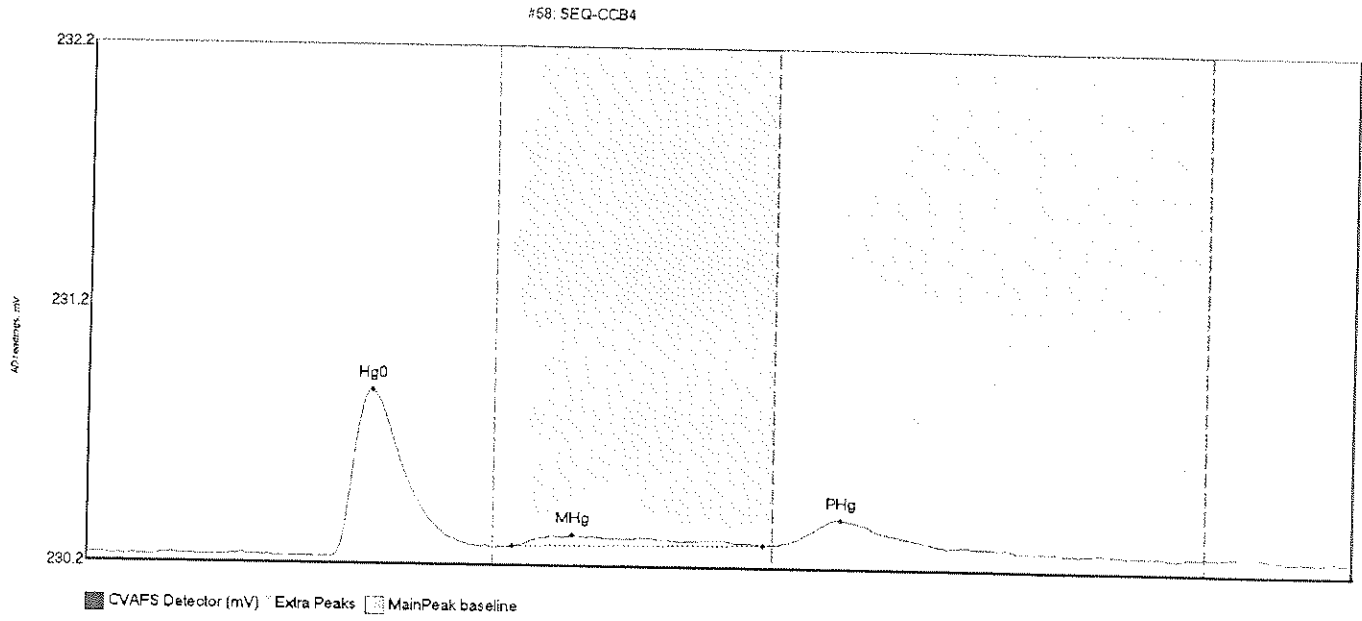
#56: 0D0062-01



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0D0062-01 Hg0	93.341	36.4	78.8	230.24	230.29	55.4	0.865	OK	230.2399	0.00	0.04	F005235
0D0062-01 MHg	9.679	82.4	124.3	230.29	230.31	100.4	0.048	OK	230.2399	0.00	0.04	F005235
0D0062-01 PHg	31.051	136.9	178.0	230.32	230.32	140.4	0.192	OK	230.2399	0.00	0.04	F005235

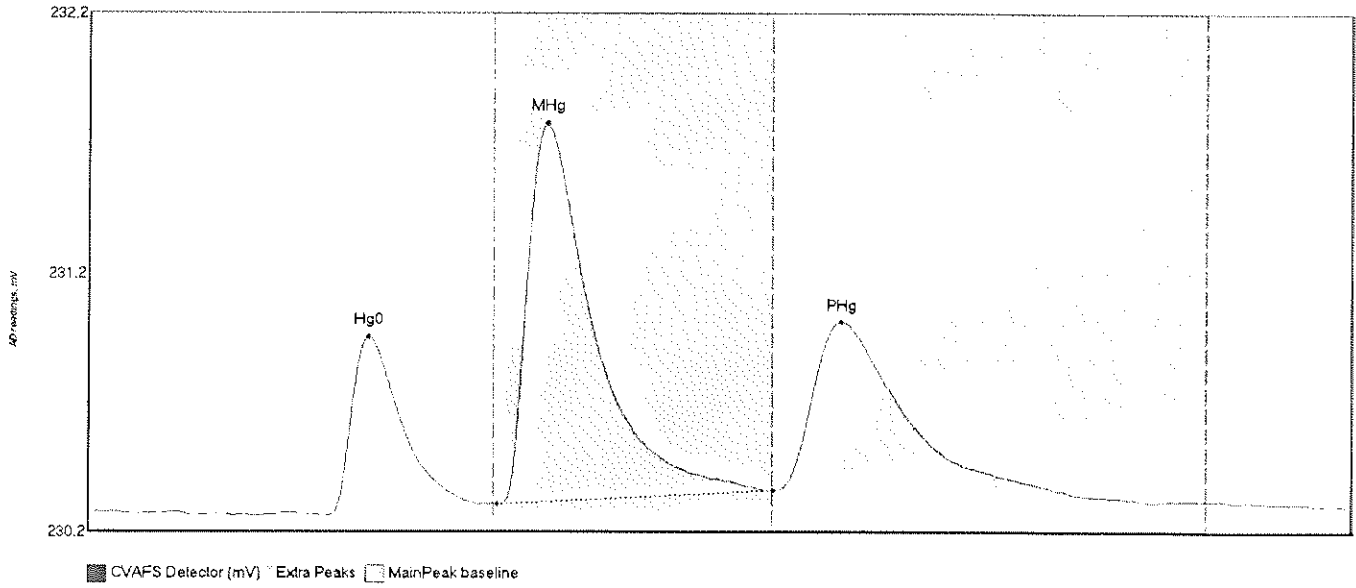


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RiDev	BiShift	Comment
SEQ-CCV4 Hg0	78.145	46.1	79.0	230.24	230.27	55.5	0.702	OK	230.2401	0.00	0.02	
SEQ-CCV4 MHg	85.142	82.6	135.0	230.28	230.31	91.2	0.559	CT	230.2401	0.00	0.02	
SEQ-CCV4 PHg	20.109	137.0	172.7	230.31	230.31	149.2	0.124	OK	230.2401	0.00	0.02	



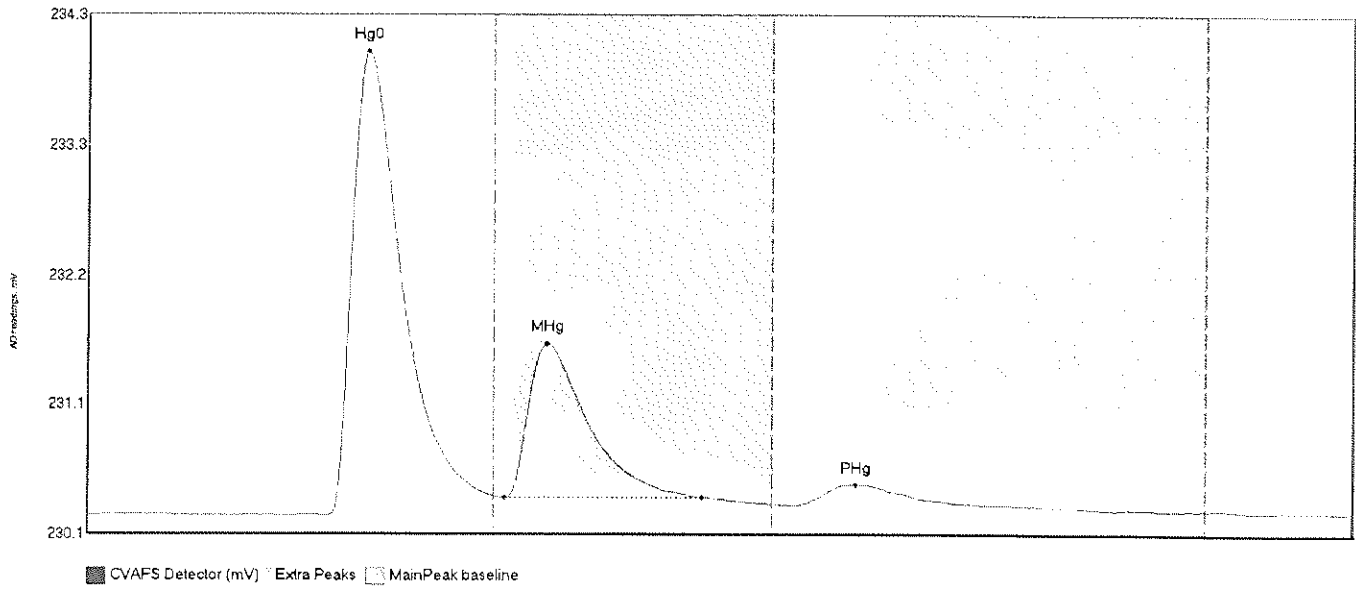
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BiShift	Comment
SEQ-CCB4 Hg0	71.999	47.7	80.0	230.24	230.28	55.8	0.647	CF	230.2456	0.00	0.02	
SEQ-CCB4 MHg	11.441	83.8	133.2	230.28	230.30	95.8	0.044	OK	230.2456	0.00	0.02	
SEQ-CCB4 PHg	14.837	135.9	167.7	230.30	230.30	148.3	0.097	OK	230.2456	0.00	0.02	

#59: F005235-MS1



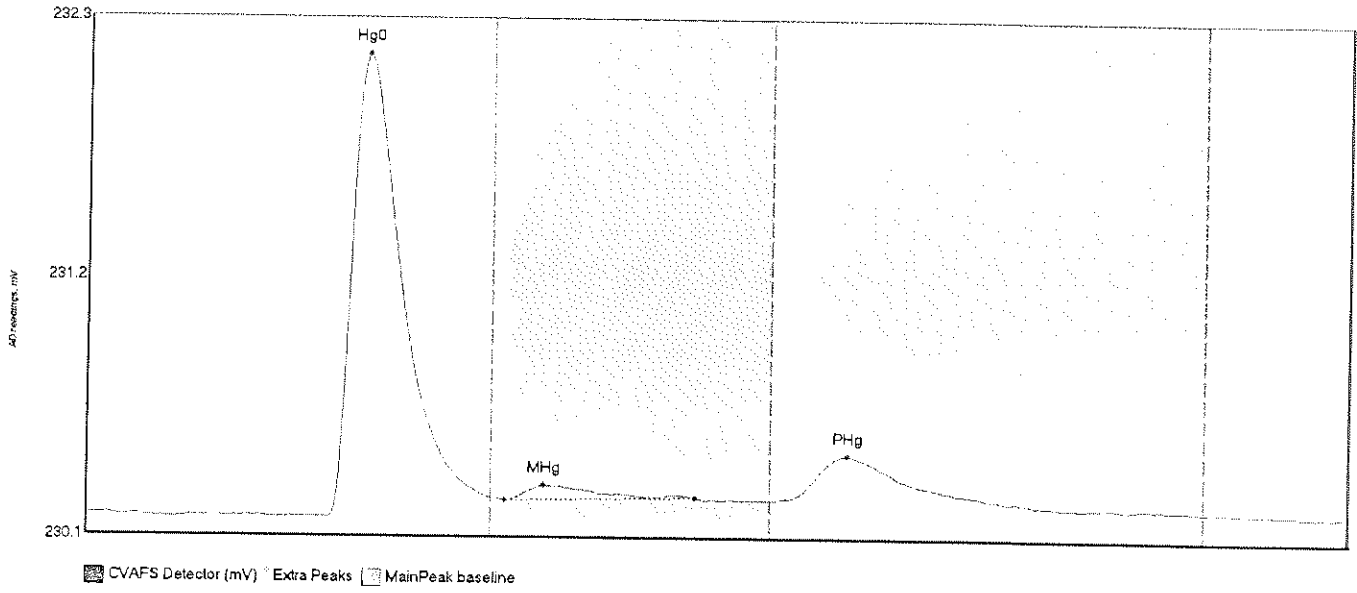
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Offset	Shift	Comment
F005235-MS1 Hg0	77.866	46.6	60.0	230.23	230.27	55.5	0.669	CT	230.2472	0.00	0.02	F005235
F005235-MS1 MHg	219.031	80.8	135.0	230.27	230.33	90.4	1.468	CT	230.2472	0.00	0.02	F005235
F005235-MS1 PHg	130.517	135.4	190.7	230.32	230.32	148.6	0.652	OK	230.2472	0.00	0.02	F005235

#60: F005235-MSD1



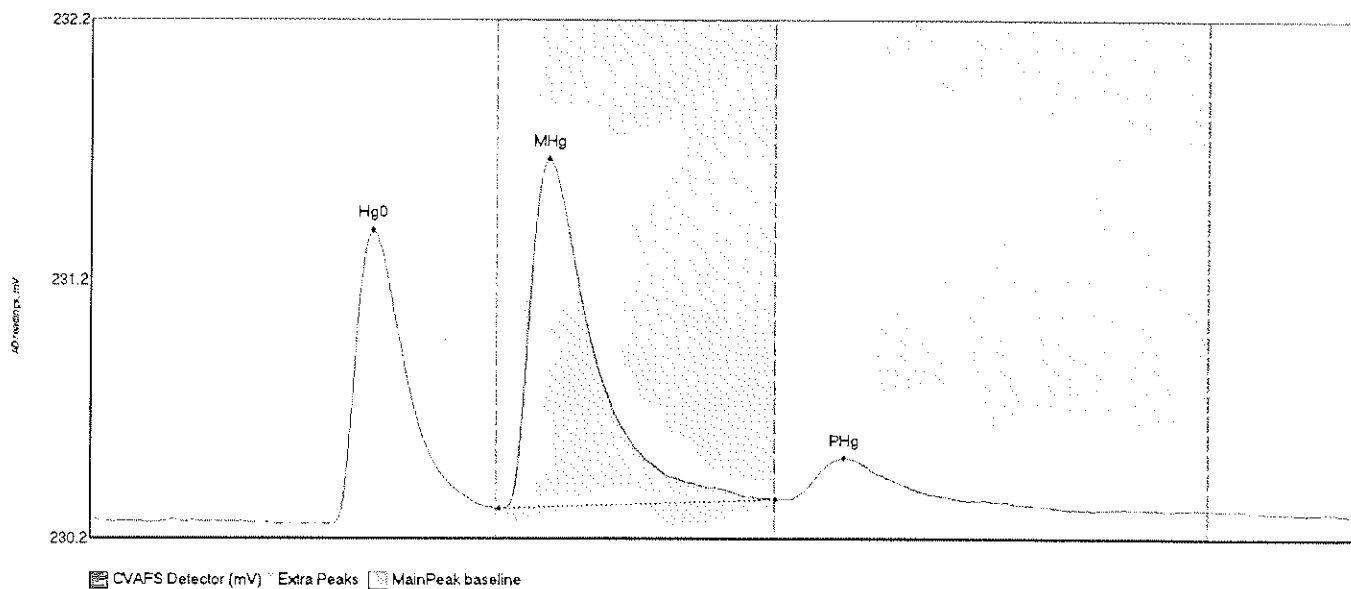
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BiShift	Comment
F005235-MSD1 Hg	417.185	47.6	60.6	230.23	230.35	55.3	3.784	OT	230.2298	0.00	0.03	F005235
F005235-MSD1 MH	172.571	62.3	121.2	230.37	230.38	90.7	1.268	OK	230.2298	0.00	0.03	F005235
F005235-MSD1 PH	26.224	139.5	171.4	230.32	230.33	151.3	0.171	OK	230.2298	0.00	0.03	F005235

#61: 0000062-02



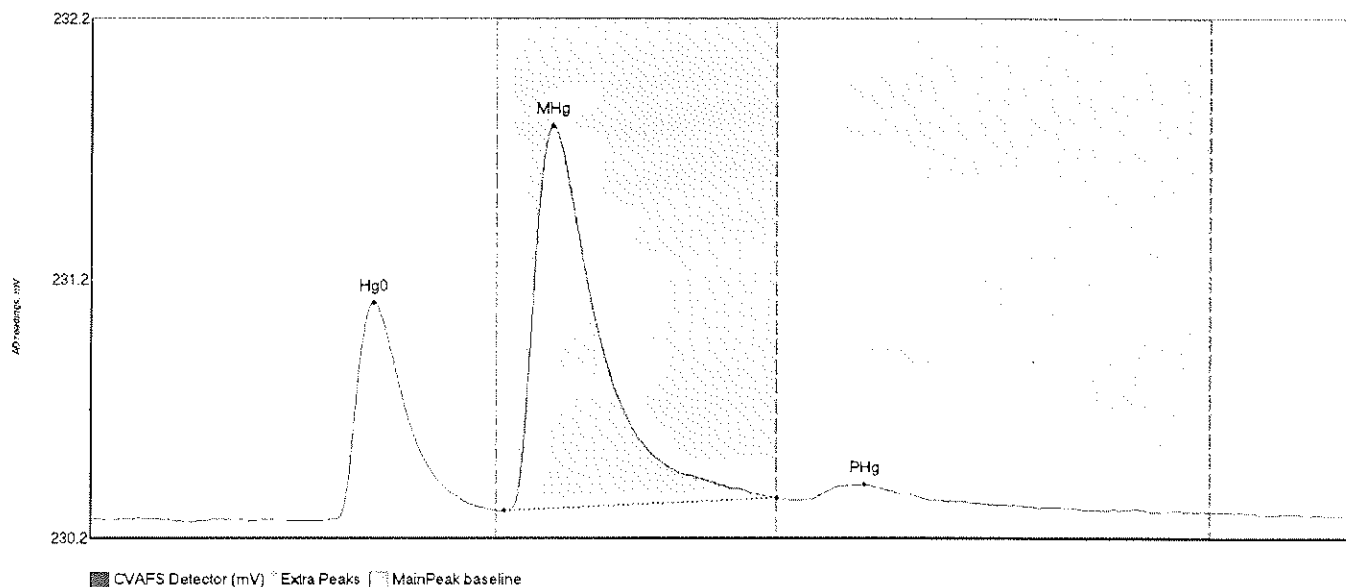
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0000062-02 Hg0	210.117	47.8	80.0	230.22	230.31	55.6	1.893	CT	230.2357	0.00	0.02	F005235
0000062-02 MHg	9.564	82.7	120.1	230.30	230.31	90.3	0.063	OK	230.2357	0.00	0.02	F005235
0000062-02 PHg	32.951	135.9	170.5	230.30	230.30	150.2	0.184	OK	230.2357	0.00	0.02	F005235

#62: F005235-MS2



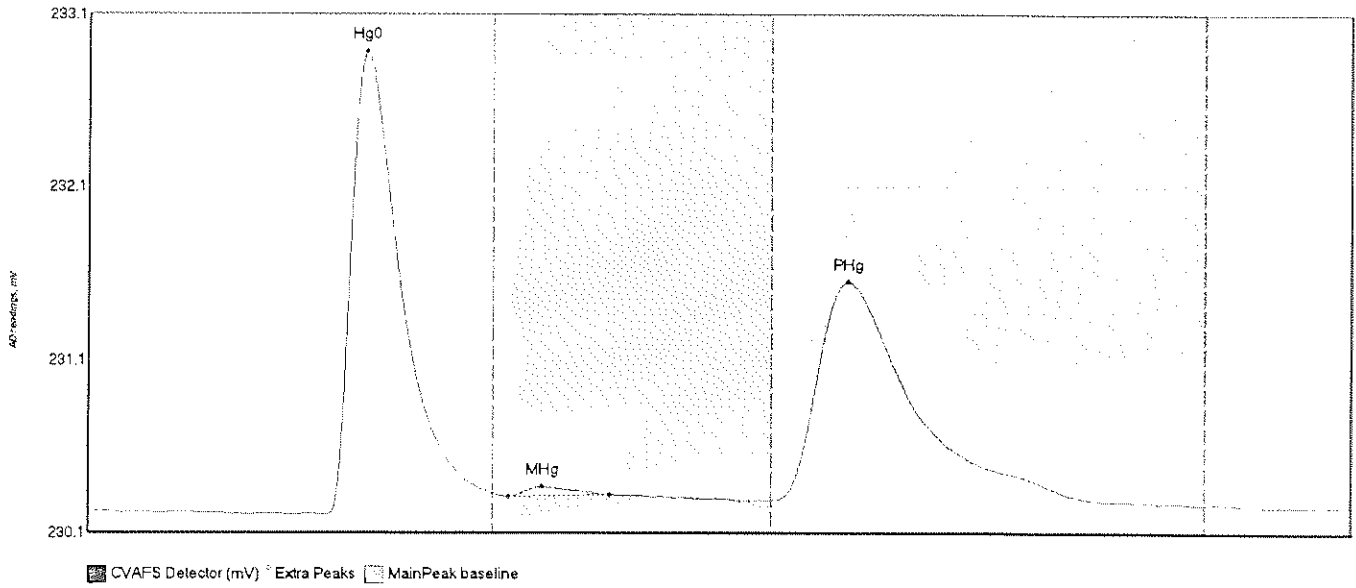
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	HiDev	BiShift	Comment
F005235-MS2 Hg0	125.914	48.7	60.0	230.21	230.27	55.7	1.122	CF	230.2280	0.00	0.02	F005235
F005235-MS2 MHg	197.631	80.6	135.0	230.27	230.30	90.5	1.350	CF	230.2280	0.00	0.02	F005235
F005235-MS2 PHg	24.505	137.8	170.9	230.30	230.30	148.5	0.161	OK	230.2280	0.00	0.02	F005235

#63: F005235-MSD2



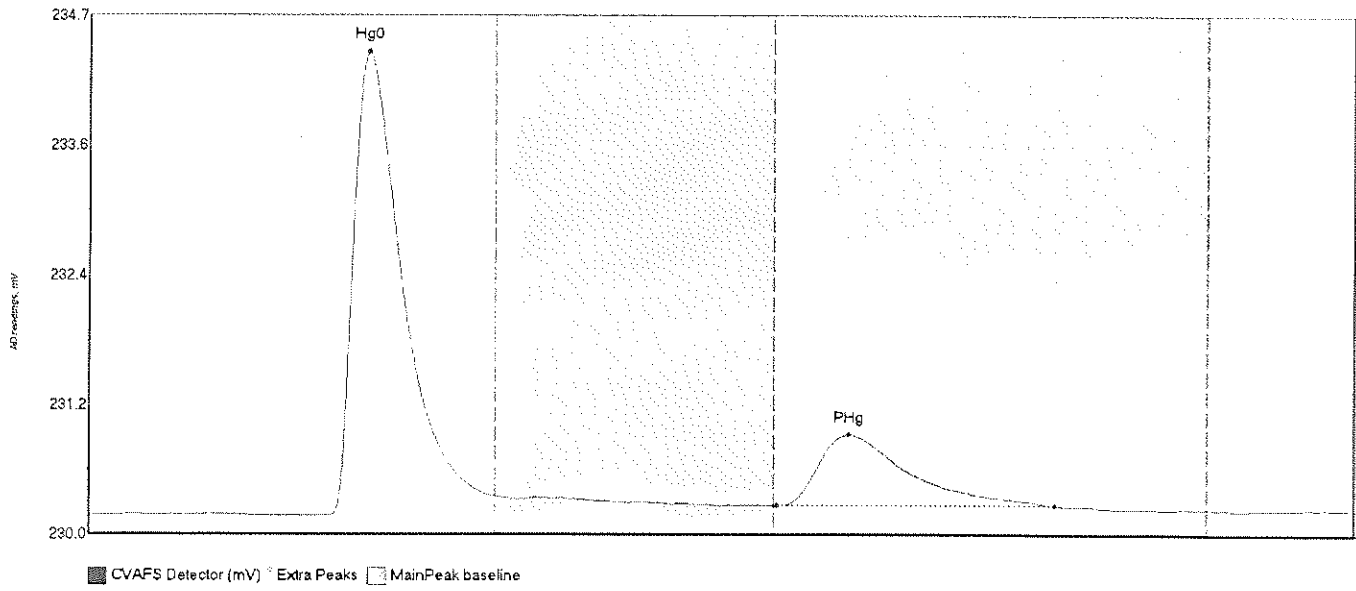
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005235-MSD2 Hg	92.815	48.3	80.0	230.23	230.26	55.7	0.635	CT	230.2263	0.00	0.01	F005235
F005235-MSD2 MH	217.652	81.7	135.0	230.26	230.31	91.2	1.482	CT	230.2263	0.00	0.01	F005235
F005235-MSD2 PH	8.320	141.5	165.8	230.30	230.30	152.4	0.057	OK	230.2263	0.00	0.01	F005235

#64: 0000062-05



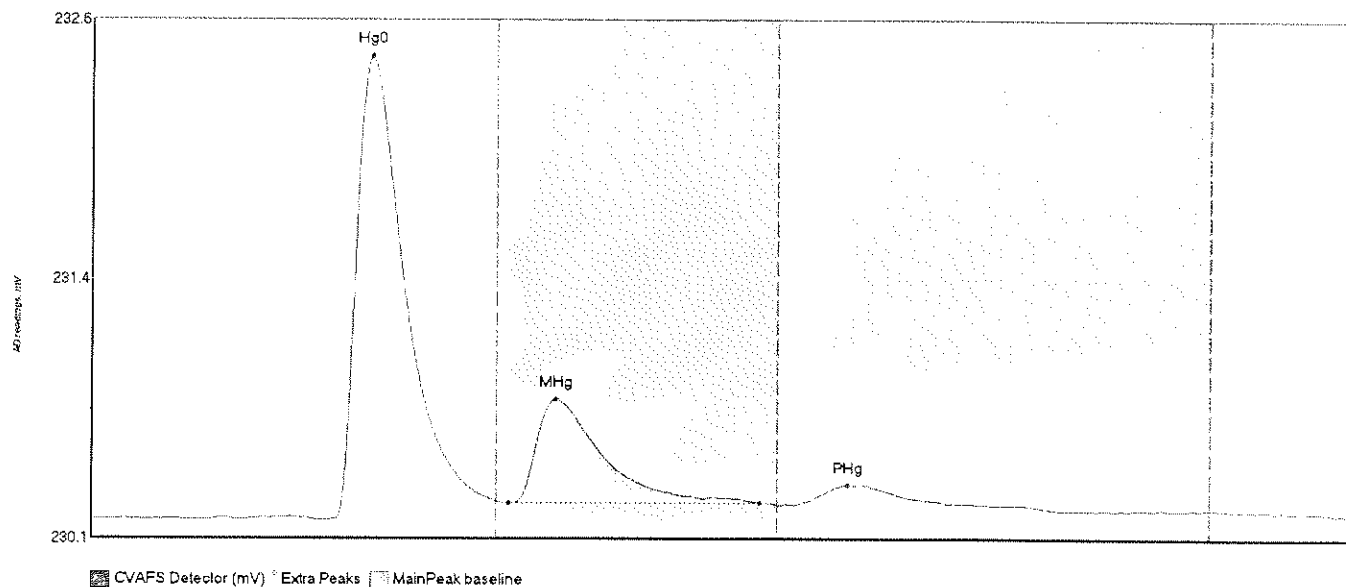
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0000062-05 Hg0	291.331	47.6	80.0	230.20	230.32	55.3	2.653	CF	230.2148	0.00	0.02	F005235
0000062-05 MHg	5.329	83.0	102.8	230.30	230.31	89.6	0.054	OK	230.2148	0.00	0.02	F005235
0000062-05 PHg	266.393	135.9	199.0	230.28	230.28	150.1	1.248	OK	230.2148	0.00	0.02	F005235

#65: 0D00062-06



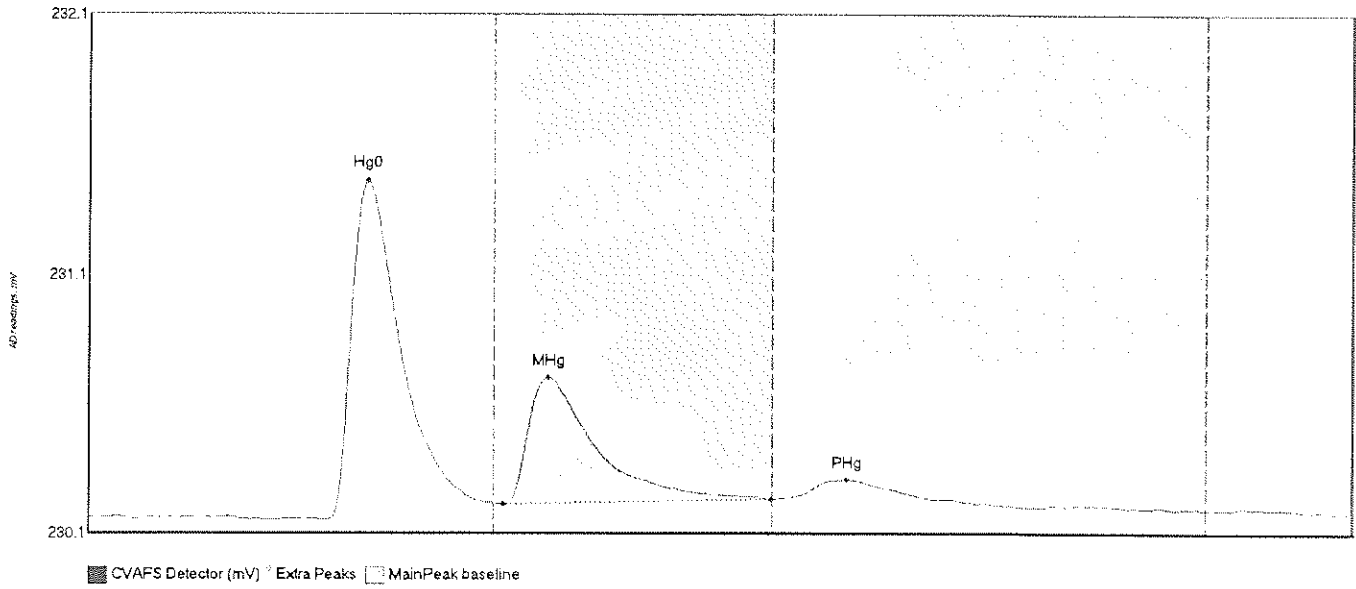
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0D00062-06 Hg0	454.692	46.9	80.0	230.20	230.37	55.2	4.203	CT	230.2077	0.00	0.04	P005235
0D00062-06 PHg	131.348	135.5	190.0	230.29	230.29	149.6	0.648	OK	230.2077	0.00	0.04	P005235

#66: SEQ-CCV5



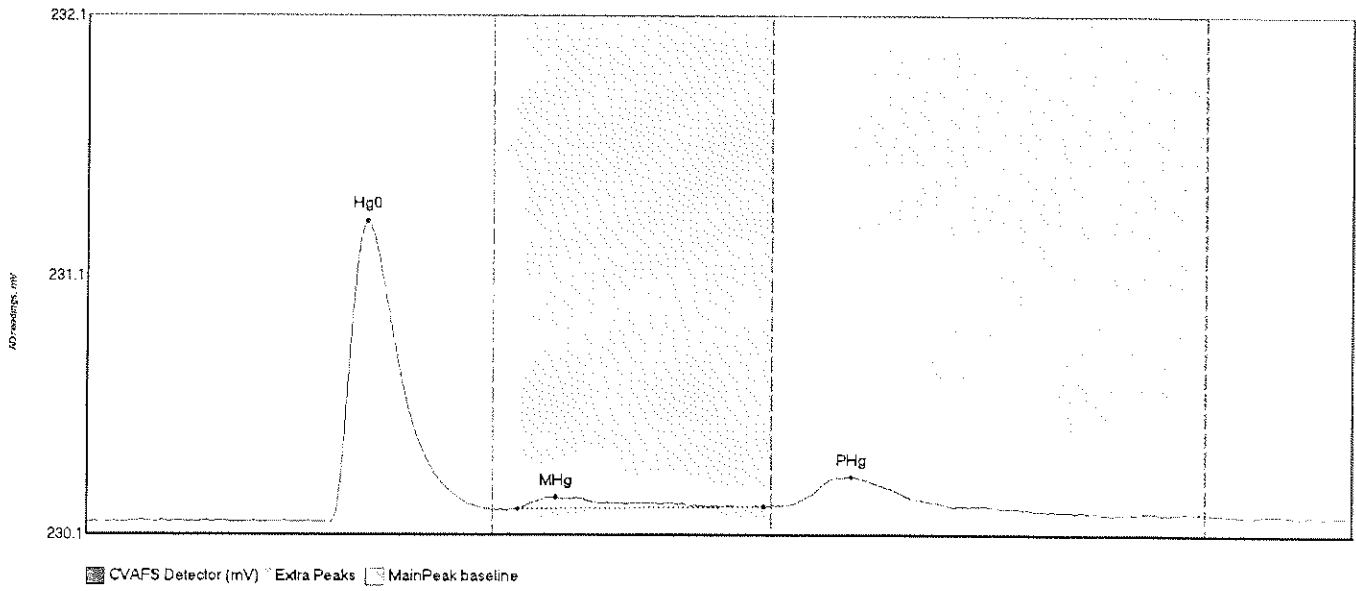
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RtDev	RtShift	Comment
SEQ-CCV5 Hg0	248.566	46.1	80.0	230.19	230.28	55.2	2.266	CF	230.1981	0.00	0.02	
SEQ-CCV5 MHg	75.340	82.5	131.5	230.27	230.28	91.6	0.506	OK	230.1981	0.00	0.02	
SEQ-CCV5 PHg	15.523	138.2	171.5	230.27	230.27	149.0	0.098	OK	230.1981	0.00	0.02	

#67: SEQ-CCB5



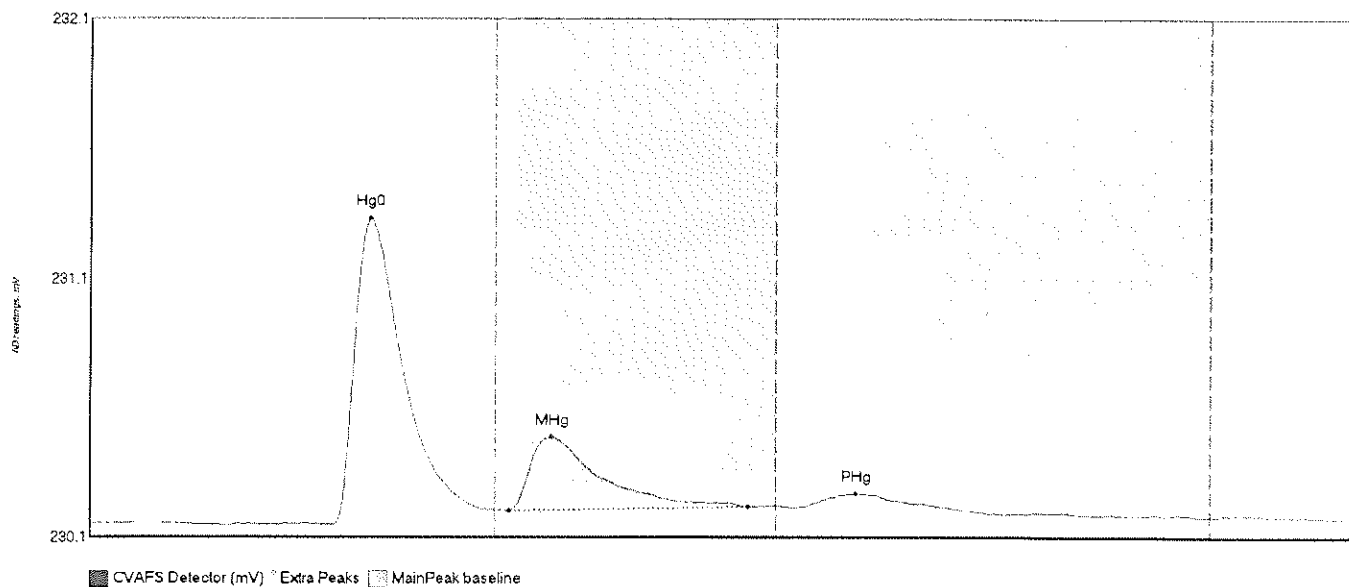
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Bibev	Bishift	Comment
SEQ-CCB5 Hg0	143.015	47.1	80.0	230.19	230.26	55.2	1.305	CT	230.2035	0.00	0.02	
SEQ-CCB5 MHg	75.779	81.8	134.7	230.25	230.27	90.6	0.490	OK	230.2035	0.00	0.02	
SEQ-CCB5 PHg	12.362	135.0	166.3	230.27	230.27	149.6	0.078	OK	230.2035	0.00	0.02	

#68: 0D0075-01



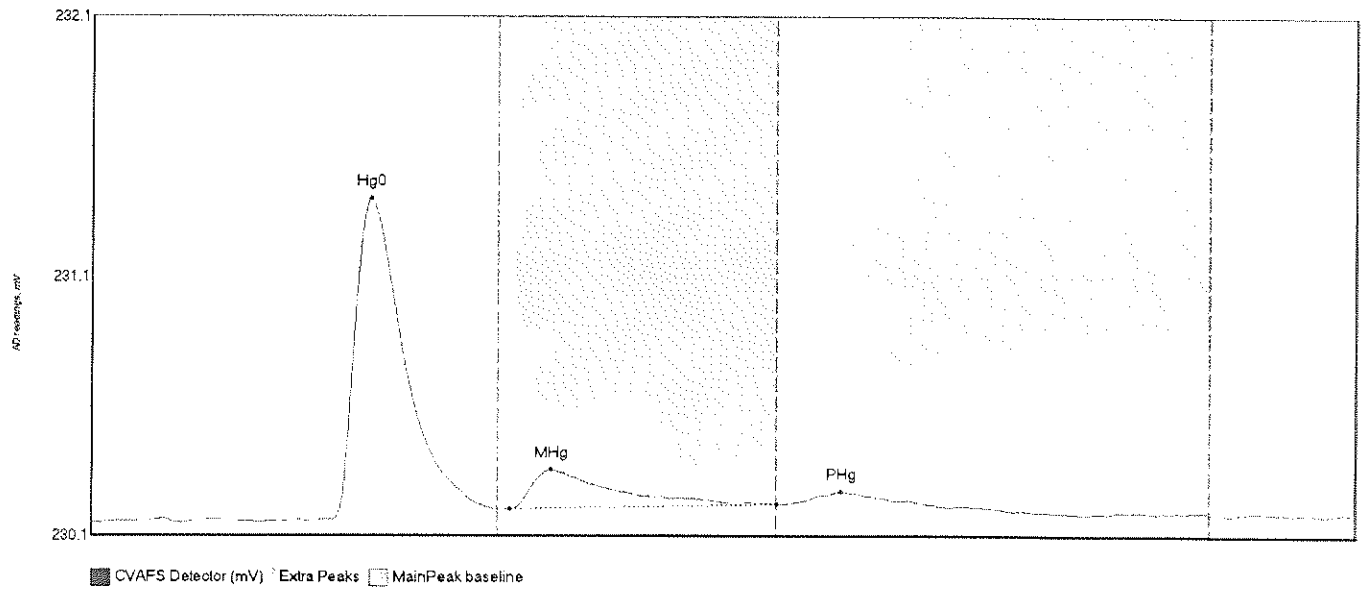
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDeg	GDShift	Comment
0D0075-01 Hg0	127.344	48.0	80.0	230.19	230.24	55.2	1.156	CT	230.1957	0.00	0.02	F005235
0D0075-01 MHg	8.987	85.0	113.4	230.24	230.25	92.5	0.046	OK	230.1957	0.00	0.02	F005235
0D0075-01 PHg	18.028	138.5	170.6	230.26	230.25	150.5	0.107	OK	230.1957	0.00	0.02	F005235

#69 CD0075-02



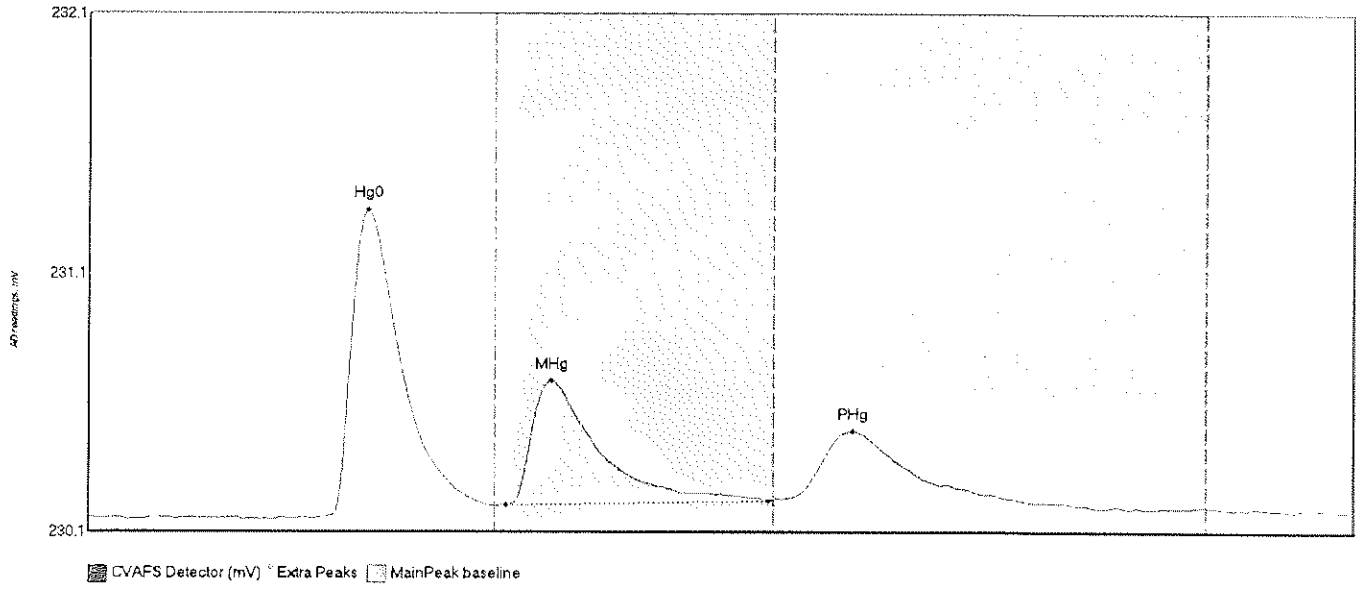
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
CD0075-02 Hg0	128.714	47.8	80.0	230.18	230.24	55.3	1.178	CT	230.1883	0.00	0.01	F005235
CD0075-02 MHg	44.760	82.7	129.5	230.23	230.25	91.2	0.284	OK	230.1883	0.00	0.01	F005235
CD0075-02 PHg	6.351	140.7	165.4	230.25	230.25	150.8	0.049	OK	230.1883	0.00	0.01	F005235

#70: 000075-03



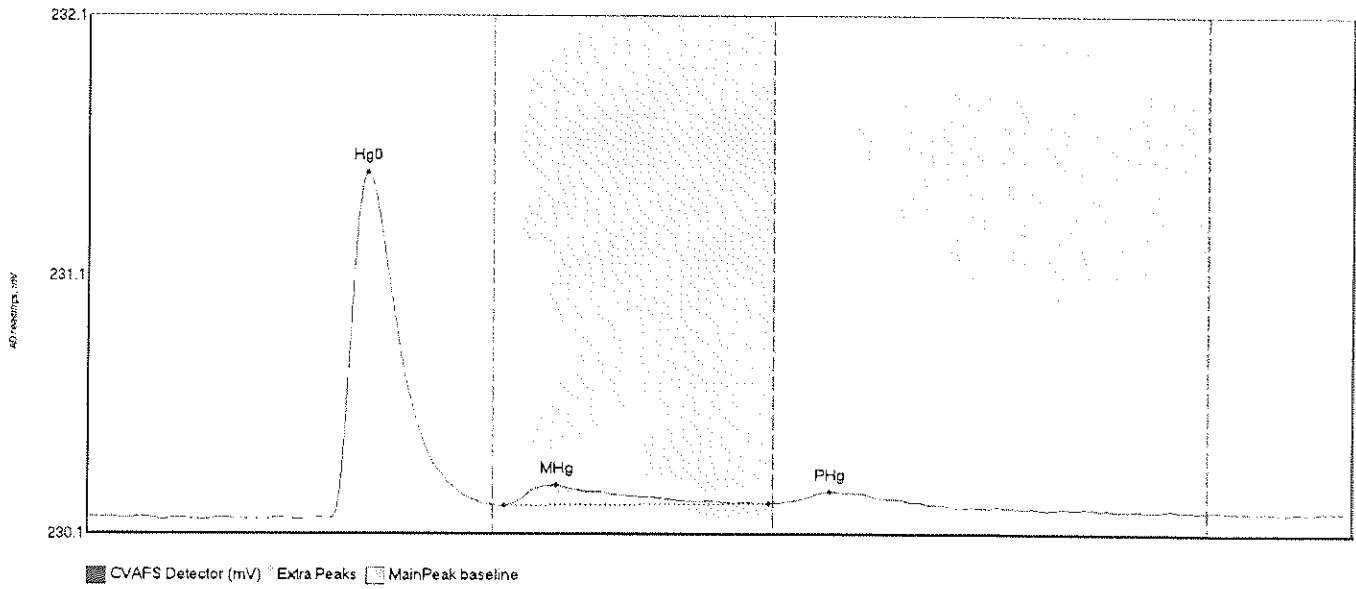
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
000075-03 Hg0	136.197	34.0	79.8	230.16	230.21	55.2	1.245	OK	230.1605	0.00	0.04	F005235
000075-03 MHg	27.665	82.4	135.0	230.21	230.23	90.4	0.153	CT	230.1605	0.00	0.04	F005235
000075-03 PHg	5.731	136.6	162.9	230.23	230.24	147.8	0.046	OK	230.1605	0.00	0.04	F005235

#71: 0D00075-04



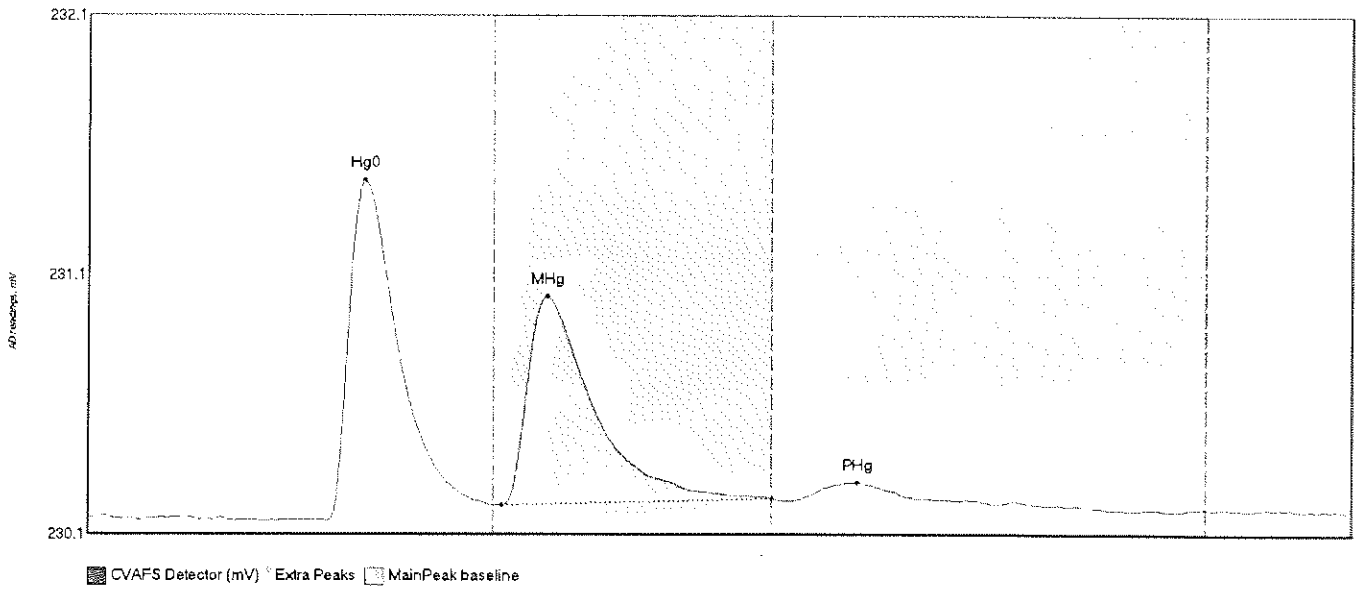
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0D00075-04 Hg0	131.357	44.9	79.8	230.17	230.22	55.0	1.188	OK	230.1716	0.00	0.02	F005235
0D00075-04 MHg	74.031	82.2	134.0	230.22	230.24	91.3	0.481	OK	230.1716	0.00	0.02	F005235
0D00075-04 PHg	46.553	156.9	181.1	230.24	230.25	150.4	0.264	OK	230.1716	0.00	0.02	F005235

#72: 0000075-05



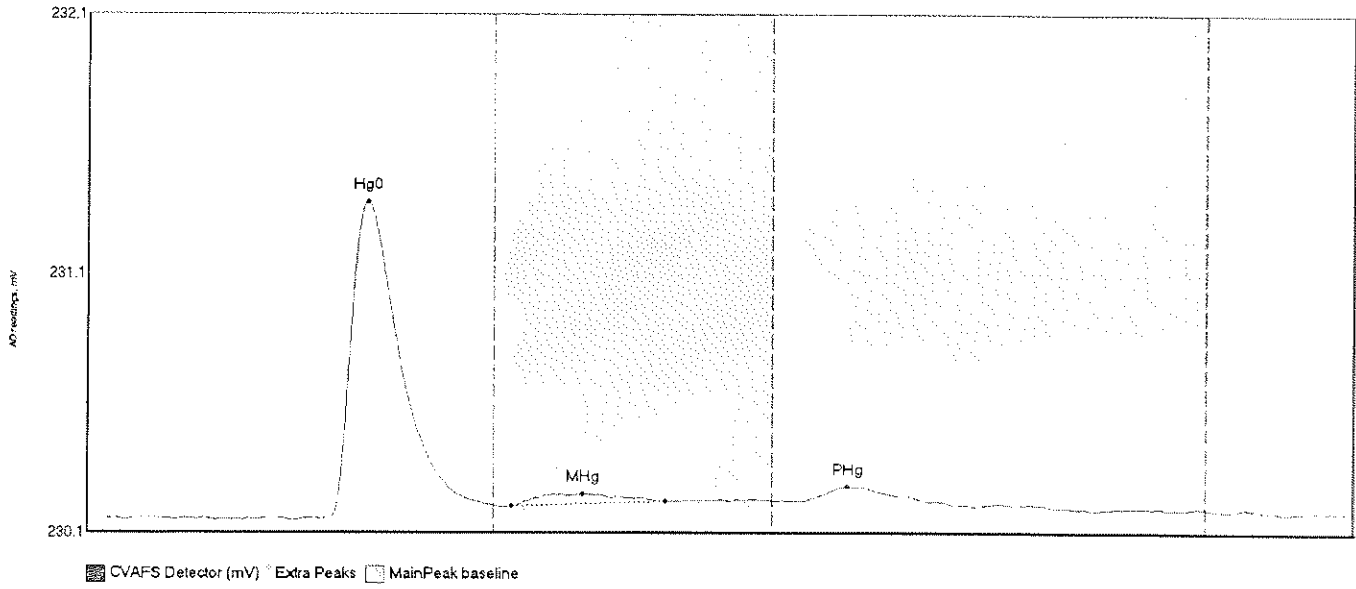
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0000075-05 Hg0	145.829	47.3	80.0	230.16	230.22	55.1	1.335	CT	230.1693	0.00	0.02	F005235
0000075-05 MHg	16.803	62.2	134.1	230.21	230.22	92.6	0.080	OK	230.1693	0.00	0.02	F005235
0000075-05 PHg	5.873	136.6	162.1	230.22	230.23	146.2	0.043	OK	230.1693	0.00	0.02	F005235

#78: 000075-06



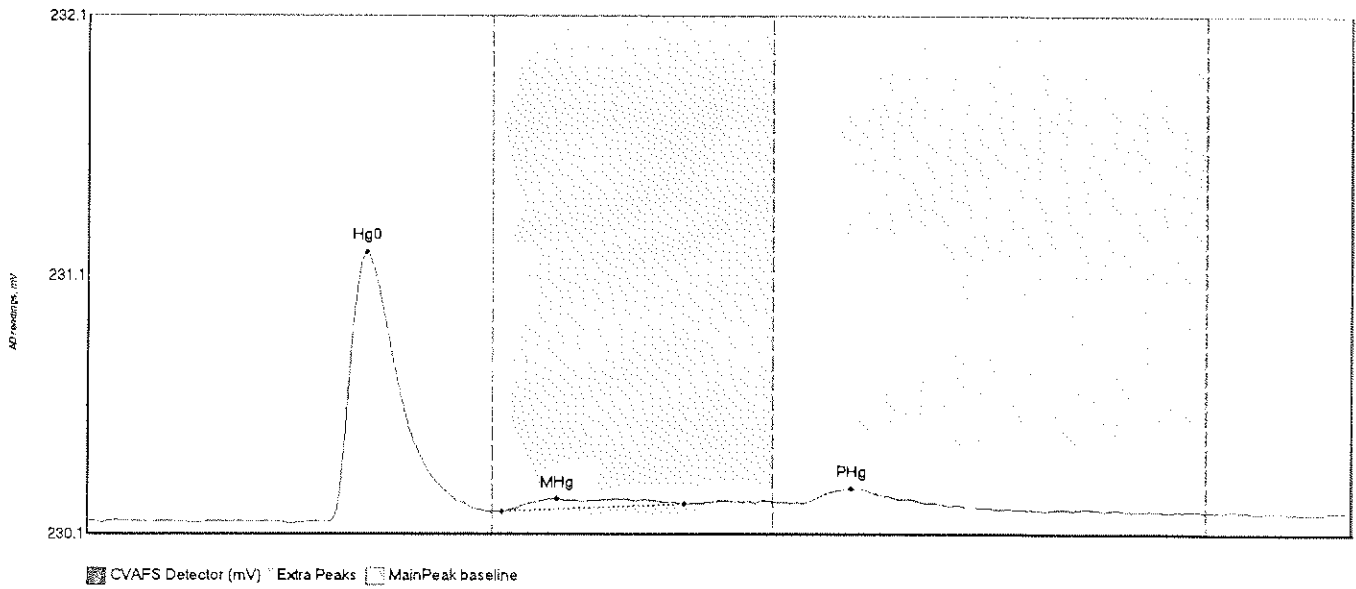
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
000075-06 Hg0	143.035	47.3	79.6	230.15	230.21	54.9	1.310	OK	230.1627	0.00	0.02	P005235
000075-06 MHg	120.927	81.6	135.0	230.21	230.23	90.4	0.801	CT	230.1627	0.00	0.02	P005235
000075-06 PHg	9.056	138.7	163.2	230.22	230.24	151.8	0.072	OK	230.1627	0.00	0.02	P005235

#74: SEQ-CCV6



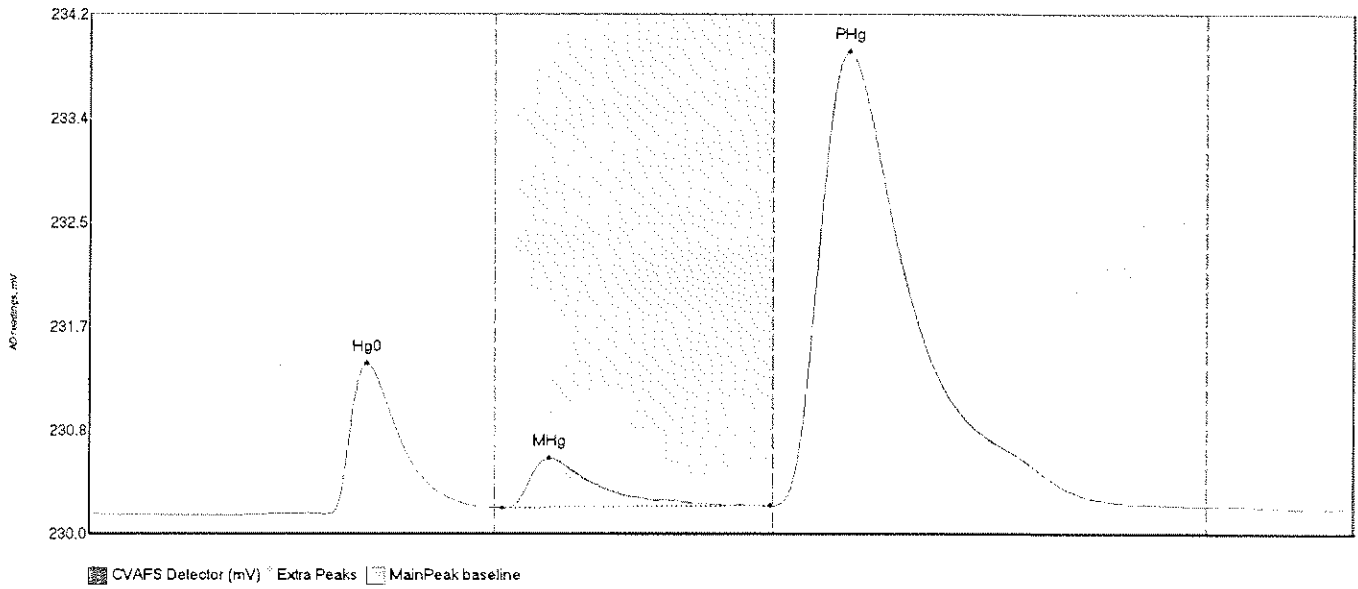
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV6 Hg0	131.909	47.7	80.0	230.15	230.20	55.2	1.215	CT	230.1551	0.00	0.02	
SEQ-CCV6 MHg	7.689	83.6	114.0	230.20	230.22	97.7	0.047	OK	230.1551	0.00	0.02	
SEQ-CCV6 PHg	7.239	141.2	165.0	230.22	230.22	149.7	0.056	OK	230.1551	0.00	0.02	

#76: SEQ-CCB6



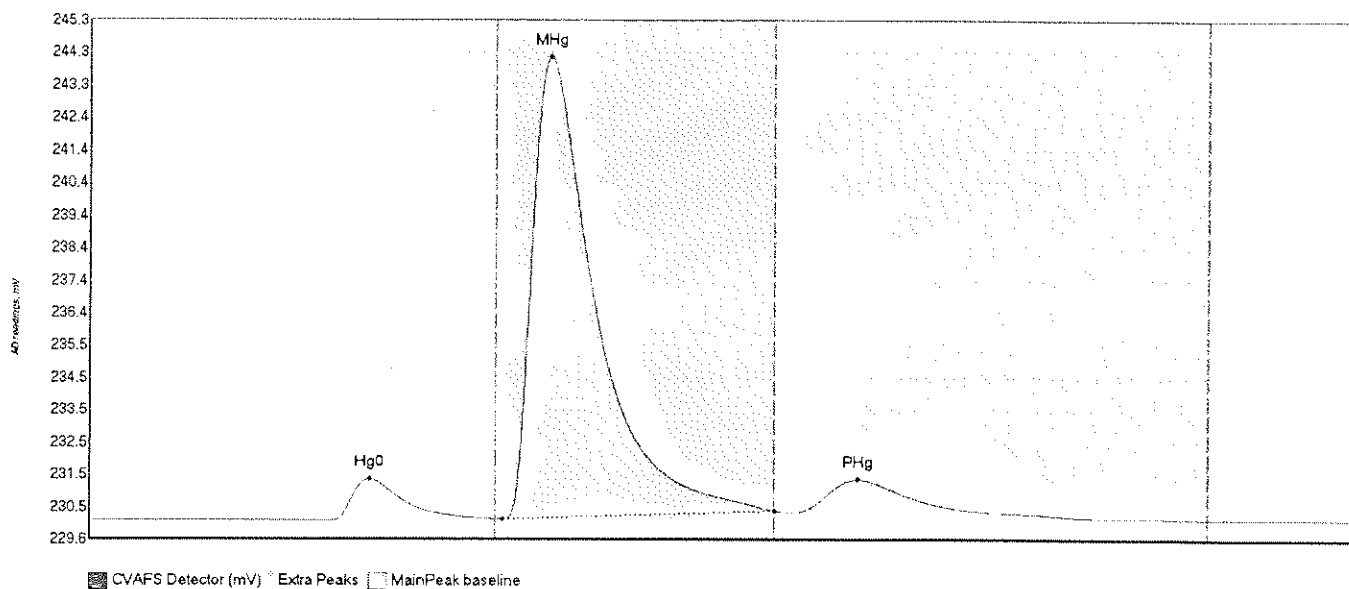
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
SEQ-CCB6 Hg0	114.372	47.3	79.6	230.13	230.17	55.1	1.039	OK	230.1368	0.00	0.04	
SEQ-CCB6 MHg	8.421	82.0	117.5	230.17	230.20	92.8	0.050	OK	230.1368	0.00	0.04	
SEQ-CCB6 PHg	7.439	141.1	165.8	230.21	230.21	150.5	0.055	OK	230.1368	0.00	0.04	

#76: 0D00075-01RE1



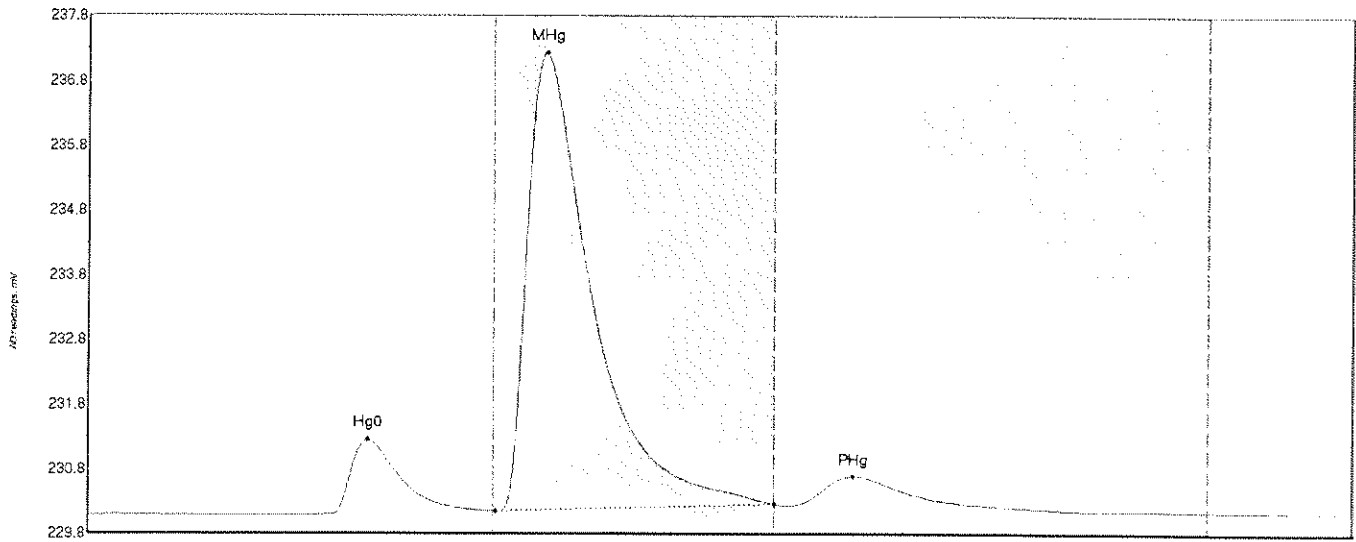
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	Shift	Comment
0D00075-01RE1 H	135.739	47.2	80.0	230.13	230.19	55.1	1.248	CT	230.1347	0.00	0.04	F005235
0D00075-01RE1 M	64.045	81.5	134.4	230.18	230.20	90.6	0.415	OK	230.1347	0.00	0.04	F005235
0D00075-01RE1 P	786.087	135.0	209.7	230.20	230.21	150.0	3.735	OK	230.1347	0.00	0.04	F005235

#77: 0D00075-02RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Bdev	BShift	Comment
0D00075-02RE1 H	140.607	47.0	80.0	230.12	230.18	55.2	1.265	CT	230.1258	0.00	0.04	F005235
0D00075-02RE1 M	2044.293	81.4	135.0	230.18	230.42	91.0	14.010	CT	230.1258	0.00	0.04	F005235
0D00075-02RE1 P	203.335	138.7	197.6	230.37	230.21	151.4	1.009	OK	230.1258	0.00	0.04	F005235

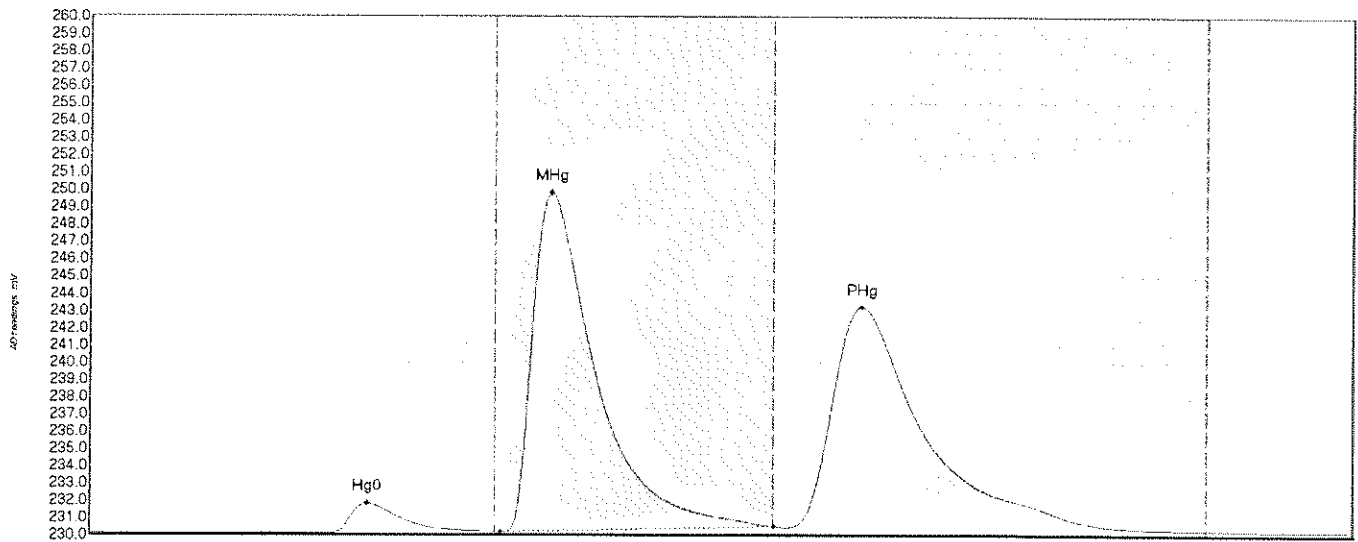
#78: 0D00075-03RE1



■ CVAFS Detector (mV) * Extra Peaks □ MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	Peakheight	Flags	Baseline	BlDev	BlShift	Comment
0D00075-03RE1 H	127.359	46.4	80.0	230.13	230.19	55.2	1.162	CT	230.1278	0.00	0.03	F005235
0D00075-03RE1 M	1041.345	80.5	135.0	230.18	230.30	90.4	7.064	CT	230.1278	0.00	0.03	F005235
0D00075-03RE1 P	73.099	138.0	173.9	230.27	230.28	150.7	0.453	OK	230.1278	0.00	0.03	F005235

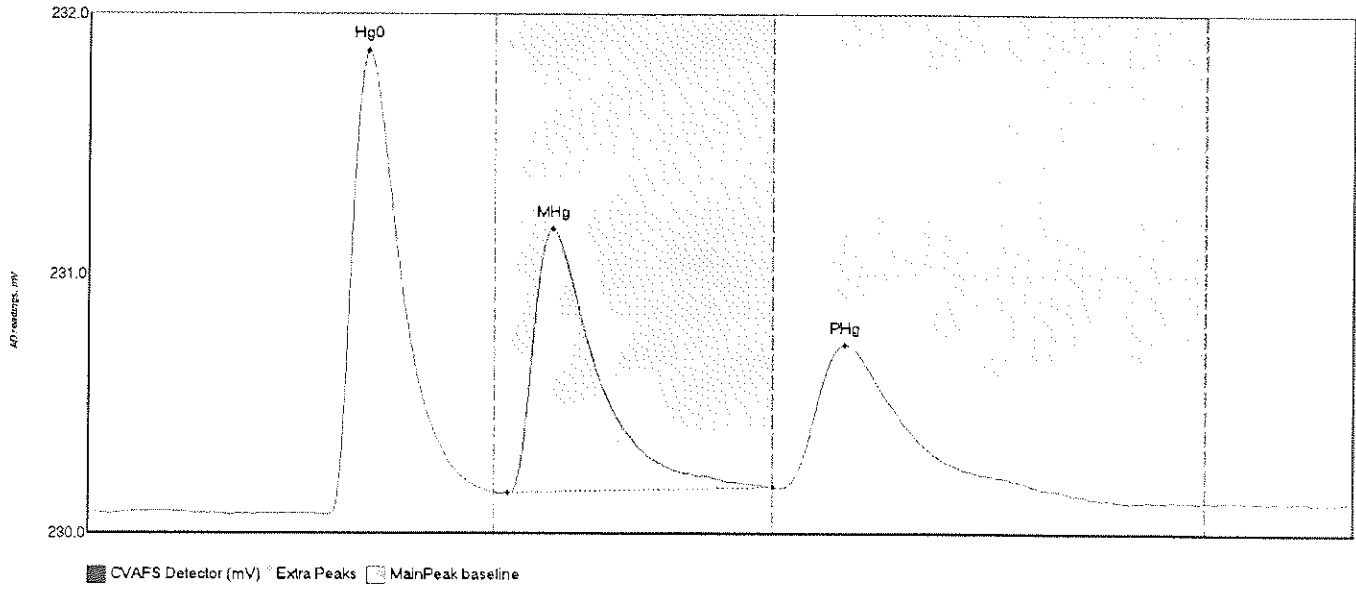
#79: 0D00075-04RE1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

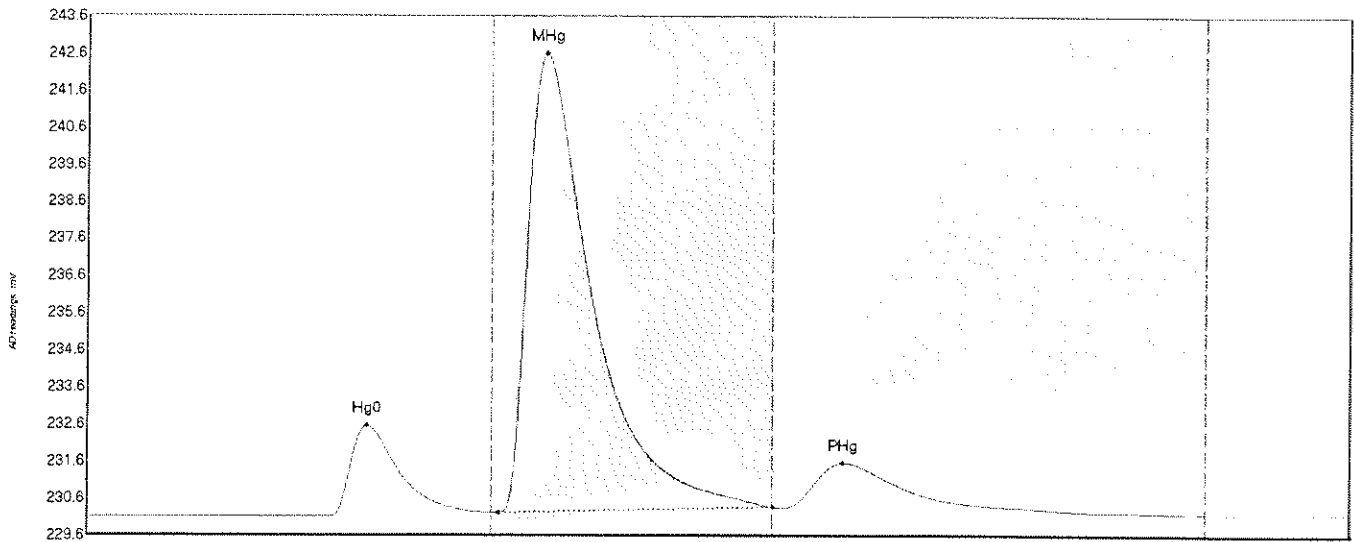
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	HiShift	Comment
0D00075-04RE1 H	187.121	47.3	80.0	230.11	230.19	55.1	1.699	CT	230.1213	0.00	0.13	F005235
0D00075-04RE1 M	2835.101	81.1	135.0	230.19	230.50	91.0	19.630	CT	230.1213	0.30	0.13	F005235
0D00075-04RE1 P	2629.168	137.4	215.6	230.44	230.30	152.3	12.009	OK	230.1213	0.00	0.13	F005235

#80: 0D00075-05RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0D00075-05RE1 H	197.334	47.2	60.0	230.10	230.18	55.1	1.796	CT	230.1062	0.00	0.04	F005235
0D00075-05RE1 M	150.026	82.8	135.0	230.18	230.20	91.6	1.023	CT	230.1062	0.00	0.04	F005235
0D00075-05RE1 P	106.566	136.2	189.4	230.20	230.19	148.9	0.556	OK	230.1062	0.00	0.04	F005235

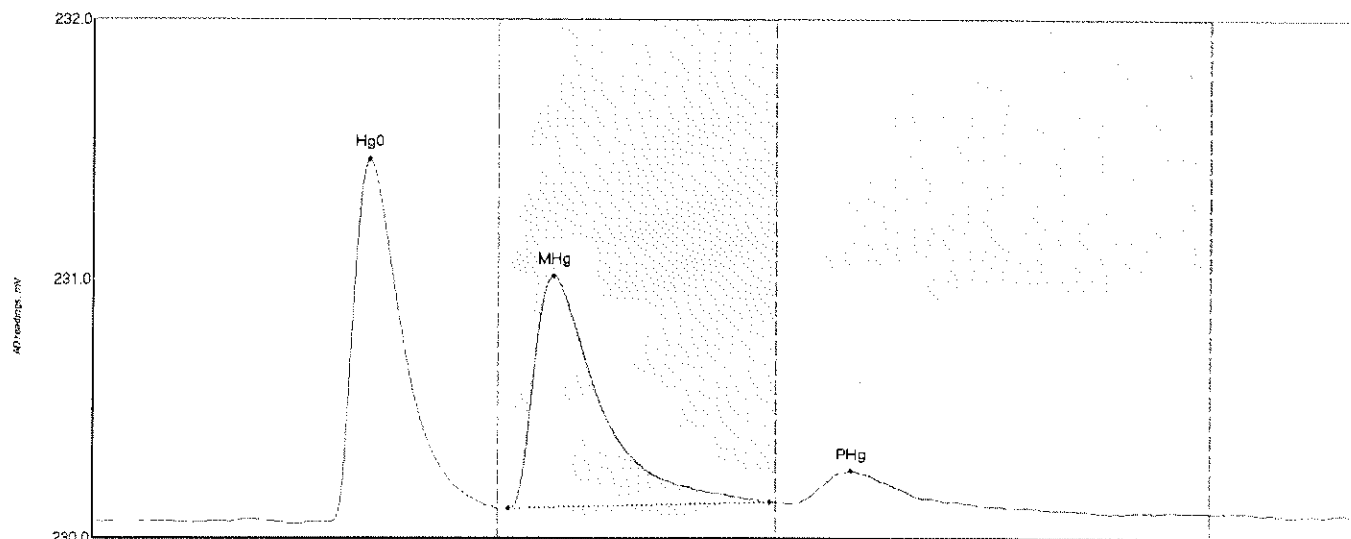
#81: CD00075-06RE1



■ CVAFS Detector (mV) * Extra Peaks □ MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Binov	HiShift	Comment
0000075-06RE1 H	268.805	46.3	80.0	230.09	230.21	55.2	2.462	CT	230.1068	0.00	0.06	F005235
0000075-06RE1 M	1816.616	81.4	135.0	230.20	230.36	90.8	12.421	CT	230.1068	0.00	0.06	F005235
0000075-06RE1 P	250.014	136.6	200.9	230.34	230.21	149.0	1.219	OK	230.1068	0.00	0.06	F005235

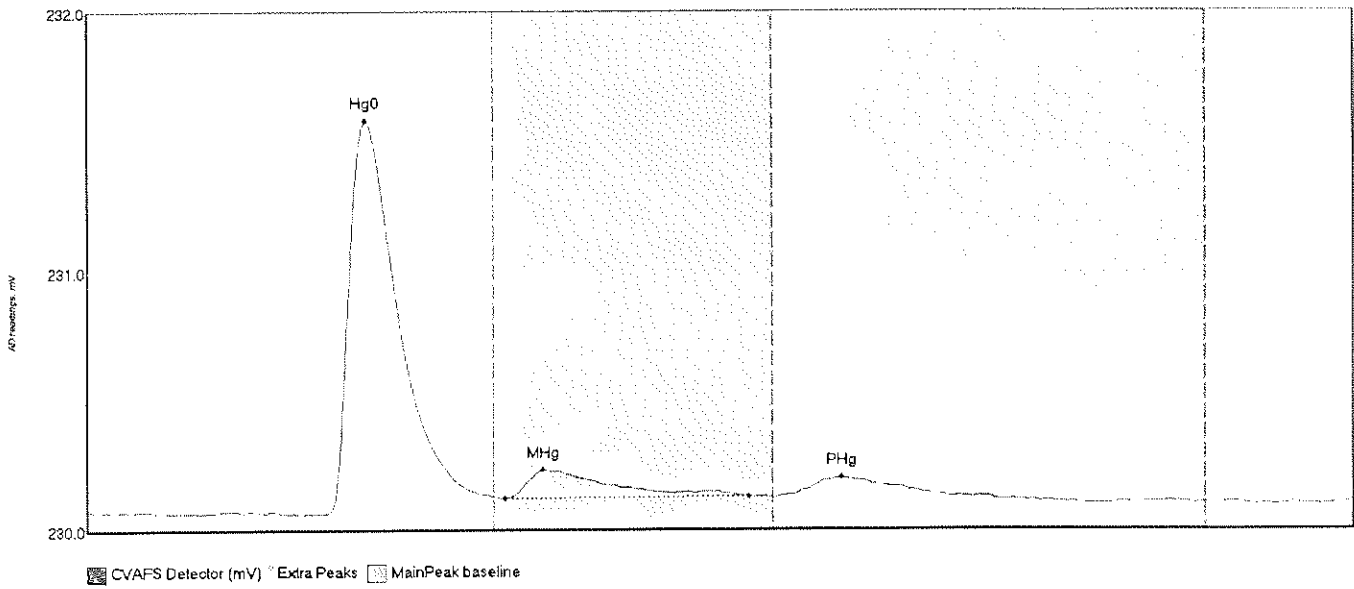
#82: SEQ-CCV7



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV7 Hg0	154.500	47.1	80.0	230.11	230.16	54.9	1.396	CT	230.1147	0.00	0.02	
SEQ-CCV7 MHg	115.113	82.1	133.8	230.16	230.19	90.9	0.897	OK	230.1147	0.00	0.02	
SEQ-CCV7 PHg	17.426	138.8	168.2	230.19	230.19	149.7	0.122	OK	230.1147	0.00	0.02	

#83: SEQ-CCB7



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB7 Hg0	165.145	46.6	80.0	230.10	230.17	54.8	1.517	CT	230.1143	0.00	0.03	
SEQ-CCB7 MHg	20.660	82.2	130.3	230.16	230.17	89.9	0.109	OK	230.1143	0.00	0.03	
SEQ-CCB7 PHg	12.651	135.1	169.8	230.17	230.17	148.5	0.076	OK	230.1143	0.00	0.03	

0E15004
0E15005
Attached

ANALYSIS SEQUENCE

0E15003



QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: *PS*

Analyzed: 5/14/2020

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

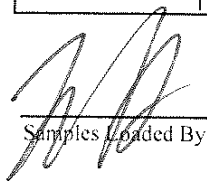
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E15003-IBL1	QC	1			
0E15003-CAL1	QC	2	2000433		
0E15003-CAL2	QC	3	2000434		
0E15003-CAL3	QC	4	2000435		
0E15003-CAL4	QC	5	2000436		
0E15003-CAL5	QC	6	2000437		
0E15003-ICV1	QC	7	2000842		
0E15003-ICB1	QC	8			
F005238-BS1	QC	9			
F005238-BSD1	QC	10			
F005238-BLK1	QC	11			
F005238-BLK2	QC	12			
F005238-BLK3	QC	13			
0D00074-07RE1	MHg-CVAFS-W-Dist	14			RR due to failed CCV - ZKH 5/12/2020
F005238-MS1	QC	15			
F005238-MSD1	QC	16			
0E15003-CCV1	QC	17	2000842		
0E15003-CCB1	QC	18			
0E15003-CCV2	QC	19	2000842		
0E15003-CCB2	QC	20			
0E00038-01	MHg-CVAFS-W-Dist	21			
0E15003-CCV3	QC	22	2000842		
0E15003-CCB3	QC	23			
0D00062-05RE1	MHg-CVAFS-W-Dist	24			RR due to failed CCV - ZKH 5/12/2020
F005238-MS2	QC	25			
F005238-MSD2	QC	26			
0D00062-01RE1	MHg-CVAFS-W-Dist	27			RR due to failed CCV - ZKH 5/12/2020
0D00062-02RE1	MHg-CVAFS-W-Dist	28			RR due to failed CCV - ZKH 5/12/2020
0D00062-06RE1	MHg-CVAFS-W-Dist	29			RR due to failed CCV - ZKH 5/12/2020
0D00074-08RE1	MHg-CVAFS-W-Dist	30			RR due to failed CCV - ZKH 5/12/2020
0E15003-CCV4	QC	31	2000842		
0E15003-CCB4	QC	32			
0D00075-07	MHg-CVAFS-W-Dist	33			
0D00075-08	MHg-CVAFS-W-Dist	34			
0D00075-09	MHg-CVAFS-W-Dist	35			
0D00075-10	MHg-CVAFS-W-Dist	36			

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 5/14/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0D00075-11	MHg-CVAFS-W-Dist	37			
0D00075-12	MHg-CVAFS-W-Dist	38			
0D00075-13	MHg-CVAFS-W-Dist	39			
0D00075-14	MHg-CVAFS-W-Dist	40			
0D00075-15	MHg-CVAFS-W-Dist	41			
0D00075-16	MHg-CVAFS-W-Dist	42			
0E15003-CCV5	QC	43	2000842		
0E15003-CCB5	QC	44			
0E00038-01RE1	MHg-CVAFS-W-Dist	45			Added 5/15/2020 by ZKH
0E15003-CCV6	QC	46	2000842		
0E15003-CCB6	QC	47			



Samples Loaded By

5/15/2020

Date



Data Processed By

5/15/2020

Date

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: ZKH	Sequence #: OE15003
Reviewer:	Dataset ID #: MHg27001-200514-1
Date: 5/15/2020	WO #:
Batch #(s): F005238	

• Select the correct preparation method.

Additional Comments:

Analyte	Prep Method	Matrix
<input checked="" type="checkbox"/> MHg	SOP2797 MHg Distillation	Water
<input type="checkbox"/> MHg	SOP2986 KOH/MeOH Digest	Tissue
<input type="checkbox"/> MHg	SOP5134 MeCl Extraction	Sed/Soil
<input type="checkbox"/> DMHg	SOP2816 (None Accredited method)	ALL

Analyst Initials:

Reviewer Initials/Date:

ZKH

PGS

- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <p>1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)</p> <p>2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data</p> <p style="margin-left: 20px;">(a) Reviewer: 100% of peak heights checked</p> <p style="margin-left: 20px;">(b) Are there peak height errors?</p> <p style="margin-left: 20px;">(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?</p> <p style="margin-left: 20px;">(d) Error on a Cal Pt, ICB/CCB, or PB: Has the data been reimported?</p> <p style="margin-left: 20px;">(e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).</p> <p style="margin-left: 20px;">(f) Check and compare masses (review prep bench sheet)</p> <p style="margin-left: 20px;">(g) Check and compare initial and final volumes</p> <p style="margin-left: 20px;">(h) Do aliquots and dilutions written on benchsheet match those in Excel?</p> <p style="margin-left: 20px;">(i) Is the pH>3.0 for all distilled samples? _____</p> <p style="margin-left: 20px;">(j) Is the sequence #, analyst, date, and instrument # on the QC page?</p> <p style="margin-left: 20px;">(k) Is the analysis status correct? (analyzed/initial review/reviewed)</p> <p style="margin-left: 20px;">(l) Original prep bench sheet added to data package?</p> <p style="margin-left: 20px;">(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)</p> <p>3. High QA? WO#(s)/Client(s): _____</p> <p>4. Client specific QC? (if Yes, refer to Project Notes/LIMS)</p> <p style="margin-left: 20px;">(a) Have the QC requirements been met for all WO#s?</p> <p>5. 20 or fewer samples in batch? _____</p> <p style="margin-left: 20px;">(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?</p> <p style="margin-left: 20px;">(b) 1 CCV and 1 CCB every 10 analytical runs? _____</p> <p>QA/QC Data Checked</p> <p>6. The calibration curve included a minimum of 5 Standards</p> <p style="margin-left: 20px;">Comments: _____</p> <p>7. 1st Calibration Standard % Recoveries (65-135%)</p> <p style="margin-left: 20px;">Comments: _____</p> <p>8. RSD CF (≤ 15%)</p> <p style="margin-left: 20px;">Comments: _____</p> | <table style="width:100%; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input checked="" type="checkbox"/> NO</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input checked="" type="checkbox"/> NO</td> <td><input type="checkbox"/> N/A <input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> YES</td> <td><input checked="" type="checkbox"/> NO</td> <td><input type="checkbox"/> N/A <input 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PASS</td> <td><input type="checkbox"/> FAIL</td> <td><input checked="" type="checkbox"/></td> </tr> </table> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input checked="" type="checkbox"/> | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/> | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A <input checked="" type="checkbox"/> | <input checked="" 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| <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: <u>ZKH</u>	Sequence #: <u>0E15003</u>
Reviewer: <u>0</u>	Dataset ID #: <u>MHg27001-200514-1</u>
Date: _____	WO #: <u>0</u>
Batch #(s): <u>F005238</u>	

Analyst Initials:

ZKH

Reviewer Initials/Date:

PGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------|--|
| 9. ICV % Recoveries 67-133%
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 10. CCV % Recoveries 67-133%
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 11. Are the absolute value of the ICB and CCBs < PQL?
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 13. LCS/LCSD or BS/BSD RPD (< 25%)
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 14. Water: Average of Preparation Blanks < 0.045 ng/L and standard deviation of 0.015 ng/L?
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | |
| 15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?
Comments: _____ | <input type="checkbox"/> PASS <input type="checkbox"/> FAIL <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | |
| 16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)
Comments: _____ | <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | |
| 17. Is the correct 'Source' designated for MD/MS/MSD?
Comments: _____ | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | |
| 18. For digested preps: was there a spike witness signature & date on the prep bench sheet?
Comments: _____ | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | |
| 19. MD RPD/MT RSD (< 35%)
Comments: <u>NA</u> | <input type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 20. Is there one set of MS/MSD per every 10 samples?
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 21. MS/MSD RPD (< 35%)
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 22. MS (AS) % Recoveries (65-130%)
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 23. MSD (ASD) % Recoveries (65-130%)
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> | |
| 24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)
Comments: _____ | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | |
| 25. Are all samples within instrument calibration range (or at maximum aliquot size)?
Comments: _____ | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | |
| 26. For instrumental dilutions, is the dilution factor in excel correct?
Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> NO <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | |
| 27. Dissolved < Total metals (if applicable)
Comments: _____ | <input type="checkbox"/> PASS <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | |
| 28. Effluent < Influent metals (visually confirm if needed)
Comments: _____ | <input type="checkbox"/> PASS <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | |

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: ZKH	Sequence #: 0E15003
Reviewer: 0	Dataset ID #: MHg27001-200514-1
Date:	WO #: 0
Batch #(s): F005238	

Analyst Initials:

ZKH

Reviewer Initials/Date:

PGS

29. Are re-runs noted with reason? YES NO N/A
 Comments: _____

30. For failing QC (CCV, CCB, PB, BS/BSO, CAL): YES NO N/A
 Was a bubbler and trap test run before the analytical run continued?
 Comments: _____

31. Do re-run results compare to initial analysis (< 35% RPD)? YES NO N/A
 Comments: _____

32. Are qualifiers consistent with the data review flowcharts? YES NO N/A
 Comments: _____

33. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
 Comments: _____

34. Have re-extracts been created for non-reportable samples? YES NO N/A
 35. Narrations in MMO box in LIMS?
 Comments: _____

36. Are there any HIGH QA projects within the data? YES NO
 If so, place dataset to the QA office.

37. Does the data set need scanning? YES N/A

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

38. Date of analyst IDOC/CDOC: 10/3/2019 IDOC/CDOC within last 12 months? YES NO

39. Date of analyst's SOP reading: 10/3/2019 Current SOP revision? YES NO

40. Date of LOD: 10/29/2019 LOD within last 3 months (within 12 months for MDN)? YES NO N/A

41. Date of LOQ: 10/29/2019 LOQ within last 3 months (within 12 months for MDN)? YES NO N/A

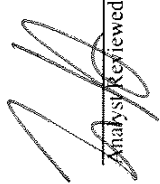
42. If MDN samples, date of last MDL study: _____
 43. MDL study within last 12 months? YES NO N/A

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Additional Comments: YES NO

Failing Data Report - 0E15003

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
0D00075-08	MHg-CVAFS-W-Dist	269	2.22				ng/L						FAIL-OVER	PASS	E
F005238-BLK3	MHg-CVAFS-W-Dist	-0.059	0.050				ng/L						PASS-OVER	FAIL-BLK	QB-10
0E15003-CCB5	MHg-CVAFS-W-Dist	-0.063	0.045				ng/L						PASS-OVER	FAIL-CCB	QB-10
0E15003-CCB6	MHg-CVAFS-W-Dist	-0.075	0.045				ng/L						PASS-OVER	FAIL-CCB	QB-10

 _____
 Analyst Reviewed By

 _____
 Peer Reviewed By

5/15/2020
 Date

5/18/2020
 Date

PREPARATION BENCH SHEET

F005238

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/13/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005238-BLK1	Blank	45	40					
F005238-BLK2	Blank	45	40					
F005238-BLK3	Blank	45	40					
F005238-BS1	LCS	45	40	2000428	50			
F005238-BSD1	LCS Dup	45	40	2000428	50			
F005238-MS1	Matrix Spike [0D00074-07RE1]	45.7689	40	2000428	50			
F005238-MS2	Matrix Spike [0D00062-05RE1]	45.203	40	2000428	50			
F005238-MSD1	Matrix Spike Dup [0D00074-07RE1]	45.2898	40	2000428	50			
F005238-MSD2	Matrix Spike Dup [0D00062-05RE1]	45.5205	40	2000428	50			

Standard ID(S)	Description	Expiration	Reagent ID(S)	Description	Expiration
2000428	MHg New Primary 1.0 ng/mL CAL	24-May-20 00:00	2000639	Acetate Buffer	24-Sep-20 00:00
			2000810	Ethylating Agent (For Methyl Mercury Analysis)	14-Jul-20 00:00
			2000983	1% APDC Solution	13-May-20 00:00
			2000997	2.5% Ascorbic Acid	19-May-20 00:00
			2001025	.4% HCl Distillation Dilute (Made Daily)	14-May-20 00:00

PREPARATION BENCH SHEET

F005238

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/13/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
01D00062-01RE1	GSLCEOP	45.9671	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
01D00062-02RE1	GSLCEOP (Blank)	45.7375	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
01D00062-03RE1	By Product C Plant	45.98	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
01D00062-06RE1	By Product C Plant (Blank)	45.2937	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
01D00074-07RE1	WQ1b-C_042720_SW_10_DUP TOTAL	45.2204	40	-	-		RR due to failed CCV - ZKH 5/12/202	
01D00074-08RE1	WQ1b-C_042720_SW_10_DUP DISSOLVED	45.1697	40	-	-		RR due to failed CCV - ZKH 5/12/202	
01D00075-07	P2-PW-Un-C-Do	38.3828	40	-	-	140603	Porewater	sample exh. added 7.3282 ml. DI - ZKH 5/14/2020
01D00075-08	P2-PW-Un-D-Do	40.506	40	-	-	140603	Porewater	sample exh. added 4.6062 ml. DI - ZKH 5/14/2020
01D00075-09	P2-OW-Alb1-A-Do	45.1218	40	-	-	140603	Overflowing Water	
01D00075-10	P2-OW-Alb1-B-Do	45.2988	40	-	-	140603	Overflowing Water	
01D00075-11	P2-OW-Alb1-C-Do	45.6577	40	-	-	140603	Overflowing Water	
01D00075-12	P2-OW-Alb1-D-Do	45.655	40	-	-	140603	Overflowing Water	
01D00075-13	P2-OW-Un-A-Do	45.801	40	-	-	140603	Overflowing Water	
01D00075-14	P2-OW-Un-B-Do	45.0268	40	-	-	140603	Overflowing Water	
01D00075-15	P2-OW-Un-C-Do	45.7937	40	-	-	140603	Overflowing Water	
01D00075-16	P2-OW-Un-D-Do	45.6498	40	-	-	140603	Overflowing Water	
01E00038-01	Outfall 002	42.5824	40	-	-	140603	On hold pending project creation. LOW	sample exh. added 2.9480 ml. DI - ZKH 5/14/2020
01E00038-01RE1	Outfall 002	42.5824	40	-	-	140603	On hold pending project creation. LOW	Added 5/15/2020 by ZKH

PREPARATION BENCH SHEET

F005238

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

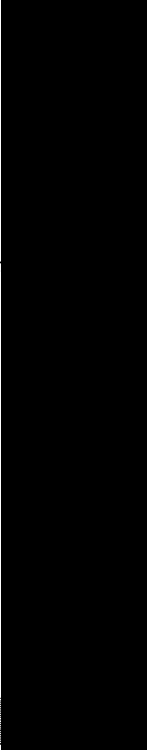
Prepared: 5/13/2020

Work Order

0D00062
0D00074
0D00075
0E00038

Client

Project



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: ZKH 5/14/2020 Samples to lab: 5/14/2020 Batch #: FO05238
 Upload/Date: ZKH 5/14/2020 Reviewer/Date: MFS 5/15/2020

EFGS Preparation Method

SOP2835 Oven Digestion (Total Recoverable Metals) ICPMS AFS

SOP2837 Tissue Nitric Digestion ICPMS CVAFS

SOP2840 Modified Aqua Regia

SOP2820 RP

SOP2821 HF Bomb Digestion ICPMS CVAFS

SOP2825 Nitric Bomb Digestion ICPMS CVAFS

SOP2993 Oven Digestion (As, Se Speciation)

SOP5145 Microwave Digestion (Nutraceuticals)

SOP5145 Microwave Digestion (3051)

NA Other: SOP 2797 Methyl Hg Distillation

Initials	SOP Date	OC Date
<u>ZKH</u>	<u>9/4/2019</u>	<u>5/8/2020</u>

Comments: _____

Conditionally formatted training files located at:
 \\us34filal\General and Admin\Quality Assurance\Training\Training Master
 (Contact QA for any problems regarding these training files.)

Analytes: MHg

Reviewer Initials: MFS Tertiary Review: PGS

- Is any SOP/DOC expiring within one week of Submission Date? YES NO
 Data cannot be reported without a current IDOC/CDOC. If YES, notify supervisor and technician immediately.
- Check prep method YES NO
 - For Ceuticals: Is correct Hg code being used in LIMS? ICPMS CV-AFS 70:30 N/A
 - Compare sample ID & container ID with benchsheet & in LIMS YES N/A
 - Check for transcription errors from benchsheet YES N/A
 - Check and compare initial and final volumes YES N/A
 - Check and compare mass YES N/A
 - Has the number of pills been documented (Special Info 5 in benchsheet)? YES N/A
 - Have assay logbook copies been attached & avg masses entered? YES N/A
 - For re-digests, have e-mails been attached and verified? YES N/A
 - Benchsheet prep date MUST match actual prep date YES NO
- Samples per Batch? Check QC Requirements ≤ 20 ≤ 10
 - PBs per batch? 3 PBs 2 PBs 1 PBs
 - Are pre and post homogenization blanks in batch? YES N/A
 - BS, BS/BSD or CRM in batch? BS BS/BSD CRM
 - MS/MSD in batch? YES N/A
 - MD in batch? YES N/A
 - Is there at least one duplicate QC source in batch? YES N/A
 - Are there any client specific requests, QC requests, etc? YES N/A

Document: _____
- Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? YES N/A
- Correct 'source' designated for MD/MS/MSD? YES N/A
- For EFGS-filtered samples, was a filtration blank included? YES N/A
- Special prep requirements? YES N/A
 - For 1638: Have samples sat for 48 hours after preservation? YES N/A
 - For 200.8: Have samples sat for 16 hours after preservation? YES N/A
 - For DOD have pipettes been calibrated day of prep? YES N/A
- Are the samples appropriately spiked? YES N/A
 - Is the spike and amount used appropriate and entered into LIMS? YES N/A
 - For all spiking was there a witness? (Initials must be in logbook) YES N/A
 - Spikes added: YES NO

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: 2000428

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>1mg/ml Mthg std</u>	<u>2000428</u>	<u>50</u>			

PREPARATION BENCH SHEET

F005238

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/13/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005238-BLK1	Blank	45	40					
F005238-BLK2	Blank	45	40					
F005238-BLK3	Blank	45	40					
F005238-BS1	LCS	45	40	2000428	50			
F005238-BSD1	LCS Dup	45	40	2000428	50			
F005238-MS1	Matrix Spike [0D00074-07RE1]	45.7689	40	2000428	50			
F005238-MS2	Matrix Spike [0D00062-05RE1]	45.203	40	2000428	50			
F005238-MSD1	Matrix Spike Dup [0D00074-07RE1]	45.2898	40	2000428	50			
F005238-MSD2	Matrix Spike Dup [0D00062-05RE1]	45.5205	40	2000428	50			

Standard ID(s)	Description	Expiration	Reagent ID(s)	Description	Expiration
2000428	MHg New Primary 1.0 ng/mL CAL	24-May-20 00:00	2000983	1% APDC Solution	13-May-20 00:00
			2001025	.4% HCl Distillation Dilute (Made Daily)	14-May-20 00:00

PREPARATION BENCH SHEET

F005238

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/13/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
01D00062-01RE1	GSLCEOP	45.9671	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
01D00062-02RE1	GSLCEOP (Blank)	45.7375	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
01D00062-05RE1	By Product C Plant	45.98	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
01D00062-06RE1	By Product C Plant (Blank)	45.2937	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
01D00074-07RE1	WQ1b-C_042720_SW_10_DUP TOTAL	45.2204	40	-	-		RR due to failed CCV - ZKH 5/12/202	
01D00074-08RE1	WQ1b-C_042720_SW_10_DUP DISSOLVED	45.1697	40	-	-		RR due to failed CCV - ZKH 5/12/202	
01D00075-07	P2-PW-Un-C-Do	38.3828	40	-	-	140603	Porewater	sample exh. added 7.3282 mL DI - ZKH 5/14/2020
01D00075-08	P2-PW-Un-D-Do	40.506	40	-	-	140603	Porewater	sample exh. added 4.6862 mL DI - ZKH 5/14/2020
01D00075-09	P2-OW-Alb1-A-Do	45.1218	40	-	-	140603	Overlying Water	
01D00075-10	P2-OW-Alb1-B-Do	45.2988	40	-	-	140603	Overlying Water	
01D00075-11	P2-OW-Alb1-C-Do	45.6577	40	-	-	140603	Overlying Water	
01D00075-12	P2-OW-Alb1-D-Do	45.655	40	-	-	140603	Overlying Water	
01D00075-13	P2-OW-Un-A-Do	45.801	40	-	-	140603	Overlying Water	
01D00075-14	P2-OW-Un-B-Do	45.0268	40	-	-	140603	Overlying Water	
01D00075-15	P2-OW-Un-C-Do	45.7937	40	-	-	140603	Overlying Water	
01D00075-16	P2-OW-Un-D-Do	45.6498	40	-	-	140603	Overlying Water	
01E00038-01	Outfall 002	42.5824	40	-	-	140603	On hold pending project creation LOW	sample exh. added 2.9480 mL DI - ZKH 5/14/2020

PREPARATION BENCH SHEET

F005238

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

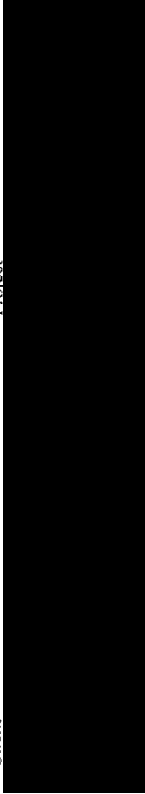
Prepared: 5/13/2020

Work Order

01D00062
01D00074
01D00075
0E00038

Client

Project



Methyl Mercury Distillations (EPA 1630)

Name: ZKH Date: 5/13/20 Batch #: F005238 Sample Matrix: Water
 WO#: 0D00062, 0D00074, 0D00075, 0E00038

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (≥3)	Time first sample distillation completed: <u>1410</u>
1	F005238-BS1	45.6787	<2	>3	Spike ID: <u>2000428</u> Spike Amount: <u>50</u> µL Spike Witness: <u>amb 5/13/20</u> Balance #: <u>25</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>NU09653</u> Cal. Date: <u>5/11/2020</u> Pipette #: <u>PU30538</u> Cal. Date: <u>5/11/2020</u> Pipette #: <u>NA</u> Cal. Date: <u>NA</u> APDC ID: <u>2000983</u> HCl ID: <u>2001075</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>123°C</u> Unit 2: <u>124°C</u> Unit 3: <u>123°C</u> Unit 4: <u>110.8°C</u> Unit 5: <u>120°C</u> Unit 6: <u>NA</u> Comments: * sample exhausted added 7.3282 mL DI ** sample exhausted added 4.6002 mL DI *** sample exhausted added 2.9480 mL DI
2	F005238-BS01	45.7081	<2	>3	
3	F005238-BLK1	<2	45.0268	>3	
4	F005238-BLK2	<2	45.3928	>3	
5	F005238-BLK3	<2	45.0389	>3	
6	0D00074-07RE1	<2	45.2204	>3	
7	F005238-MS1	<2	45.7689	>3	
8	F005238-MSD1	<2	45.2898	>3	
9	0D00062-05RE1	<2	45.9800	>3	
10	F005238-MS2	<2	45.2030	>3	
11	F005238-MSD2	<2	45.5205	2.5	
12	0D00062-01RE1	<2	45.9671	>3	
13	0D00062-02RE1	<2	45.7375	2.5	
14	0D00062-04RE1	<2	45.2937	2.5	
15	0D00074-08RE1	<2	45.1697	>3	
16	0D00075-07	<2	38.3828*	2.5	
17	0D00075-08	<2	40.5060**	2.5	
18	0D00075-09	<2	45.1218	>3	
19	0D00075-10	<2	45.2988	>3	
20	0D00075-11	<2	45.6577	>3	
21	0D00075-12	<2	45.6550	>3	
22	0D00075-13	<2	45.8010	>3	
23	0D00075-14	<2	45.0268	2	
24	0D00075-15	<2	45.7937	>3	
25	0D00075-16	<2	45.6498	2	
26	0E00038-01	<2	42.5824***	2	

ZKH 5/13/2020

PREPARATION BENCH SHEET

F005238

Eurofins Frontier Global Sciences, LLC

Prepared: 5/13/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005238-BLK1	Blank	45	40					
F005238-BLK2	Blank	45	40					
F005238-BLK3	Blank	45	40					
F005238-BS1	LCS	45	40	2000428	50			
F005238-BSD1	LCS Dup	45	40	2000428	50			
F005238-MS1	Matrix Spike [0D00074-07RE1]	45	40	2000428	50			
F005238-MS2	Matrix Spike [0D00062-05RE1]	45	40	2000428	50			
F005238-MSD1	Matrix Spike Dup [0D00074-07RE1]	45	40	2000428	50			
F005238-MSD2	Matrix Spike Dup [0D00062-05RE1]	45	40	2000428	50			

Standard ID(s): 2000428 Description: Methyl Mercury Primary 1.0 ng/mL CAL Expiration: 24-May-20 00:00

+ 660038-01

lh

PREPARATION BENCH SHEET

F005238

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/13/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00062-01RE1	GSLCEOP	45	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
0D00062-02RE1	GSLCEOP (Blank)	45	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
0D00062-05RE1	By Product C Plant	45	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
0D00062-06RE1	By Product C Plant (Blank)	45	40	-	-	010106	RR due to failed CCV - ZKH 5/12/202	
0D00074-07RE1	WQ1b-C_042720_SW_10_DUP TOTAL	45	40	-	-		RR due to failed CCV - ZKH 5/12/202	
0D00074-08RE1	WQ1b-C_042720_SW_10_DISSOLVED	45	40	-	-		RR due to failed CCV - ZKH 5/12/202	
0D00075-07	P2-PW-Un-C-Do	45	40	-	-	140603	Porewater	
0D00075-08	P2-PW-Un-D-Do	45	40	-	-	140603	Porewater	
0D00075-09	P2-OW-Alb1-A-Do	45	40	-	-	140603	Overflying Water	
0D00075-10	P2-OW-Alb1-B-Do	45	40	-	-	140603	Overflying Water	
0D00075-11	P2-OW-Alb1-C-Do	45	40	-	-	140603	Overflying Water	
0D00075-12	P2-OW-Alb1-D-Do	45	40	-	-	140603	Overflying Water	
0D00075-13	P2-OW-Un-A-Do	45	40	-	-	140603	Overflying Water	
0D00075-14	P2-OW-Un-B-Do	45	40	-	-	140603	Overflying Water	
0D00075-15	P2-OW-Un-C-Do	45	40	-	-	140603	Overflying Water	
0D00075-16	P2-OW-Un-D-Do	45	40	-	-	140603	Overflying Water	

Work Order

0D00062
0D00074
0D00075

Client

Project

Due Date: 5/20/2020

PREPARATION BENCH SHEET

F005238

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/13/2020



Frontier Global Sciences

MHg27001-200514-1

Analysis Datasheet for Methyl Mercury in Soil/Tissue

Date of Analysis: May 14, 2020

Instrument #: Hg2700-1

LIMS Sequence #: 0E15003_0E15004_0E15005

Analyst: Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	25.62 units	512.42	8.58 units	171.60	88.6 %Rec
SEQ-CAL2	1	0.20 ng/L	54.67 units	273.34	37.63 units	188.13	97.2 %Rec
SEQ-CAL3	1	1.00 ng/L	214.18 units	214.18	197.14 units	197.14	101.8 %Rec
SEQ-CAL4	1	2.00 ng/L	413.43 units	206.71	396.39 units	198.19	102.4 %Rec
SEQ-CAL5	1	4.00 ng/L	869.62 units	217.40	852.58 units	213.14	110.1 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 193.64
 +/- 15.24
 Corr. St Dev RF
 7.9% RSD
 Uncorr. Mean RF 284.81

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-1BL	1	17.04 units		0.06 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	-0.034 ng/L	±0.030
BLK	2	4	-9.213 ng/L	±3.828
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hq2700-1	00	CAL	SEQ-BL1	1	5/14/20 12:11	46912-1-RAW	12:11:02	17.04			0.0	0.000	0.000	ng/L	
Hq2700-1	00	CAL	SEQ-CAL1	1	5/14/20 12:21	46913-1-RAW	12:21:18	25.62			8.6	0.044	0.044	ng/L	
Hq2700-1	00	CAL	SEQ-CAL2	1	5/14/20 12:31	46914-1-RAW	12:31:34	54.67			37.6	0.194	0.194	ng/L	
Hq2700-1	00	CAL	SEQ-CAL3	1	5/14/20 12:41	46915-1-RAW	12:41:49	214.18			197.1	1.018	1.018	ng/L	
Hq2700-1	00	CAL	SEQ-CAL4	1	5/14/20 12:52	46916-1-RAW	12:52:05	413.43			396.4	2.047	2.047	ng/L	
Hq2700-1	00	CAL	SEQ-CAL5	1	5/14/20 13:02	46917-1-RAW	13:02:20	869.62			852.6	4.403	4.403	ng/L	
Hq2700-1	00	CAL	SEQ-HCV1	1	5/14/20 13:12	46918-1-RAW	13:12:35	110.01			93.0	0.480	0.480	ng/L	Late ethylation - ZKH 5/14/2020
Hq2700-1	00	CAL	SEQ-HCV1	1	5/14/20 13:22	46919-1-RAW	13:22:51	17.77			0.7	0.004	0.004	ng/L	
Hq2700-1	00	SAM	WS	1	5/14/20 13:33	46920-1-RAW	13:33:07	10.97			-6.1	Error	#VALUE!	ng/L	Late sample ethylation - ZKH 5/14/2020
Hq2700-1	00	SAM	F005238-B51	1.25	5/14/20 13:43	46921-1-RAW	13:43:22	10.77			-6.3	Error	#VALUE!	ng/L	
Hq2700-1	00	SAM	F005238-B5D1	1.25	5/14/20 13:53	46922-1-RAW	13:53:39	188.26	1		171.2	0.911	1.139	ng/L	F005238
Hq2700-1	00	BLK	F005238-BLK1	1.25	5/14/20 14:03	46923-1-RAW	14:03:55	171.76	1		154.7	0.826	1.032	ng/L	F005238
Hq2700-1	00	BLK	F005238-BLK2	1.25	5/14/20 14:14	46924-1-RAW	14:14:11	15.72	1		-1.3	-0.007	-0.008	ng/L	F005238
Hq2700-1	00	BLK	F005238-BLK3	1.25	5/14/20 14:24	46925-1-RAW	14:24:27	13.02	1		-4.0	-0.021	-0.026	ng/L	F005238
Hq2700-1	00	SAM	0000074-07RE1	1.25	5/14/20 14:34	46926-1-RAW	14:34:42	6.75	1		-10.3	-0.053	-0.066	ng/L	F005238
Hq2700-1	00	SAM	F005238-MS1	1.25	5/14/20 14:44	46927-1-RAW	14:44:58	12.19	1		-4.9	0.002	0.002	ng/L	F005238
Hq2700-1	00	SAM	F005238-MSD1	1.25	5/14/20 14:55	46928-1-RAW	14:55:14	211.96	1		194.9	1.034	1.292	ng/L	F005238
Hq2700-1	00	CAL	SEQ-CCV1	1	5/14/20 15:05	46929-1-RAW	15:05:31	216.40	1		199.4	1.056	1.321	ng/L	F005238
Hq2700-1	00	CAL	SEQ-CCB1	1	5/14/20 15:15	46930-1-RAW	15:15:47	116.65	1		99.6	0.514	0.514	ng/L	
Hq2700-1	00	SAM	F005259-B51	1000	5/14/20 15:26	46931-1-RAW	15:26:02	13.90	2		-3.1	-0.016	-0.016	ng/L	F005259
Hq2700-1	00	SAM	F005259-B5D1	1000	5/14/20 15:36	46932-1-RAW	15:36:18	297.98	2		280.9	1.460	1.460	ng/L	F005259
Hq2700-1	00	BLK	F005259-BLK1	500	5/14/20 15:46	46933-1-RAW	15:46:34	364.54	2		347.5	1.804	1.804	ng/L	F005259
Hq2700-1	00	BLK	F005259-BLK2	500	5/14/20 16:07	46934-1-RAW	16:07:06	12.48	2		-1.5	-0.008	-0.008	ng/L	F005259
Hq2700-1	00	BLK	F005259-BLK3	500	5/14/20 16:17	46935-1-RAW	16:17:22	13.56	2		-4.6	-0.024	-0.024	ng/L	F005259
Hq2700-1	00	SAM	0000049-01	2500	5/14/20 16:27	46937-1-RAW	16:27:38	12.32	2		-3.5	-0.018	-0.018	ng/L	F005259
Hq2700-1	00	SAM	0000048-01	500	5/14/20 16:37	46936-1-RAW	16:37:54	16.31	2		-4.7	-0.024	-0.024	ng/L	F005259
Hq2700-1	00	SAM	F005259-MS1	500	5/14/20 16:48	46938-1-RAW	16:48:09	20.93	2		-3.9	0.039	0.039	ng/L	F005259
Hq2700-1	00	SAM	0000049-01RE1	500	5/14/20 16:58	46940-1-RAW	16:58:25	237.91	2		-11.2	-0.040	-0.040	ng/L	F005259
Hq2700-1	00	CAL	SEQ-CCV2	1	5/14/20 17:08	46941-1-RAW	17:08:40	5.81	2		86.8	0.448	0.448	ng/L	F005259
Hq2700-1	00	CAL	SEQ-CCB2	1	5/14/20 17:18	46942-1-RAW	17:18:56	103.83	2		-4.5	-0.023	-0.023	ng/L	F005238
Hq2700-1	00	SAM	0000038-01	50	5/14/20 17:29	46943-1-RAW	17:29:12	12.51	1		-4.8	-0.024	-0.024	ng/L	F005238 - DS
Hq2700-1	00	SAM	0000075-09_DS	100	5/14/20 17:39	46944-1-RAW	17:39:28	11.99	1		-5.1	-0.026	-0.026	ng/L	F005238 - DS
Hq2700-1	00	SAM	0000075-10_DS	100	5/14/20 17:59	46945-1-RAW	17:59:59	12.24	1		-4.8	-0.024	-0.024	ng/L	F005238 - DS
Hq2700-1	00	SAM	0000075-11_DS	100	5/14/20 18:10	46947-1-RAW	18:10:15	10.99	1		-6.1	-0.031	-0.031	ng/L	F005238 - DS
Hq2700-1	00	SAM	0000075-12_DS	100	5/14/20 18:20	46948-1-RAW	18:20:31	12.59	1		-4.5	-0.023	-0.023	ng/L	F005238 - DS
Hq2700-1	00	SAM	0000075-13_DS	100	5/14/20 18:30	46949-1-RAW	18:30:47	8.81	1		-4.8	-0.025	-0.025	ng/L	F005238 - DS
Hq2700-1	00	SAM	0000075-14_DS	100	5/14/20 18:41	46950-1-RAW	18:41:04	8.57	1		-8.2	-0.042	-0.042	ng/L	F005238 - DS
Hq2700-1	00	SAM	0000075-15_DS	100	5/14/20 18:51	46951-1-RAW	18:51:20	10.84	1		-6.5	-0.043	-0.043	ng/L	F005238 - DS
Hq2700-1	00	CAL	SEQ-CCV3	1	5/14/20 19:01	46952-1-RAW	19:01:37	16.40	1		-0.6	-0.003	-0.003	ng/L	F005238 - DS
Hq2700-1	00	CAL	SEQ-CCB3	1	5/14/20 19:11	46953-1-RAW	19:11:53	111.84	1		94.8	0.490	0.490	ng/L	F005238 - DS
Hq2700-1	00	SAM	0000049-01RE2	1000	5/14/20 19:22	46954-1-RAW	19:22:10	11.85	2		-5.2	-0.027	-0.027	ng/L	F005259
Hq2700-1	00	SAM	F005259-MSD1	500	5/14/20 19:32	46955-1-RAW	19:32:37	13.87	2		-3.2	-0.007	-0.007	ng/L	F005259
Hq2700-1	00	SAM	0000049-01	500	5/14/20 19:42	46956-1-RAW	19:42:43	229.98	2		212.9	1.118	559.035	ng/L	F005238
Hq2700-1	00	SAM	0000049-01	500	5/14/20 19:52	46957-1-RAW	19:52:59	11.58	2		-5.5	-0.010	-0.010	ng/L	F005238

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	00	SAM	0D00062-08RE1	1.25	5/14/20 20:03	46958-1-RAW	20:03:16	17.11	1		0.1	0.027	0.034	ng/L	F005238
Hg2700-1	00	SAM	F005238-MS2	1.25	5/14/20 20:13	46959-1-RAW	20:13:32	228.07	1		211.0	1.117	1.396	ng/L	F005238
Hg2700-1	00	SAM	F005238-MSD2	1.25	5/14/20 20:23	46960-1-RAW	20:23:48	226.49	1		209.4	1.109	1.386	ng/L	F005238
Hg2700-1	00	SAM	0D00062-01RE1	1.25	5/14/20 20:34	46961-1-RAW	20:34:05	12.99	1		-4.1	0.006	0.007	ng/L	F005238
Hg2700-1	00	SAM	0D00062-02RE1	1.25	5/14/20 20:44	46962-1-RAW	20:44:21	11.57	1		-5.5	-0.001	-0.002	ng/L	F005238
Hg2700-1	00	SAM	0D00062-03RE1	1.25	5/14/20 20:54	46963-1-RAW	20:54:37	8.26	1		-8.8	-0.018	-0.023	ng/L	F005238
Hg2700-1	00	SAM	0D00074-08RE1	1.25	5/14/20 21:04	46964-1-RAW	21:04:54	33.35	1		16.3	0.111	0.139	ng/L	F005238
Hg2700-1	00	CAL	SEQ-CCV4	1	5/14/20 21:15	46965-1-RAW	21:15:10	114.74	1		97.7	0.505	0.505	ng/L	F005238
Hg2700-1	00	CAL	SEQ-CCB4	1	5/14/20 21:25	46966-1-RAW	21:25:27	13.44	1		-3.6	-0.019	-0.019	ng/L	F005238
Hg2700-1	00	SAM	0D00075-07	50	5/14/20 21:35	46967-1-RAW	21:35:43	364.30	1		347.3	1.794	89.700	ng/L	F005238
Hg2700-1	00	SAM	0D00075-08	50	5/14/20 21:45	46968-1-RAW	21:45:59	1072.39	1		1055.4	5.451	272.535	ng/L	F005238
Hg2700-1	00	SAM	0D00075-09	1.25	5/14/20 21:56	46969-1-RAW	21:56:16	10.96	1		-6.1	-0.004	-0.006	ng/L	F005238
Hg2700-1	00	SAM	0D00075-10	1.25	5/14/20 22:06	46970-1-RAW	22:06:32	36.44	1		19.4	0.127	0.159	ng/L	F005238
Hg2700-1	00	SAM	0D00075-11	1.25	5/14/20 22:16	46971-1-RAW	22:16:48	49.70	1		32.7	0.196	0.244	ng/L	F005238
Hg2700-1	00	SAM	0D00075-12	1.25	5/14/20 22:27	46972-1-RAW	22:27:05	111.30	1		94.3	0.642	0.642	ng/L	F005238
Hg2700-1	00	SAM	0D00075-13	1.25	5/14/20 22:37	46973-1-RAW	22:37:22	9.27	1		-7.8	-0.013	-0.017	ng/L	F005238
Hg2700-1	00	SAM	0D00075-14	1.25	5/14/20 22:47	46974-1-RAW	22:47:38	39.88	1		22.8	0.145	0.181	ng/L	F005238
Hg2700-1	00	SAM	0D00075-15	1.25	5/14/20 22:57	46975-1-RAW	22:57:55	246.77	1		229.7	1.213	1.517	ng/L	F005238
Hg2700-1	00	SAM	0D00075-16	1.25	5/14/20 23:08	46976-1-RAW	23:08:11	200.88	1		183.8	0.976	1.220	ng/L	F005238
Hg2700-1	00	CAL	SEQ-CCV5	1	5/14/20 23:18	46977-1-RAW	23:18:28	113.69	1		96.6	0.499	0.499	ng/L	F005238
Hg2700-1	00	CAL	SEQ-CCB5	1	5/14/20 23:28	46978-1-RAW	23:28:44	4.88	1		-12.2	-0.063	-0.063	ng/L	F005238
Hg2700-1	00	SAM	0D00075-19RE1	1	5/14/20 23:39	46979-1-RAW	23:39:01	13.17	3		-3.9	-0.020	-0.020	ng/L	F005227
Hg2700-1	00	SAM	0D00075-20RE1	500	5/14/20 23:49	46980-1-RAW	23:49:17	70.35	3		53.3	0.275	137.653	ng/L	F005227
Hg2700-1	00	SAM	0D00075-21RE1	500	5/14/20 23:59	46981-1-RAW	23:59:34	7.75	3		-9.3	-0.048	-0.048	ng/L	F005227
Hg2700-1	00	SAM	0E00038-01RE1	1.25	5/14/20 0:09	46982-1-RAW	0:09:50	3.73	1		-13.3	-0.042	-0.052	ng/L	F005238
Hg2700-1	00	CAL	SEQ-CCV6	1	5/14/20 0:20	46983-1-RAW	0:20:05	112.47	1		95.4	0.493	0.493	ng/L	F005238
Hg2700-1	00	CAL	SEQ-CCB6	1	5/14/20 0:30	46984-1-RAW	0:30:23	2.52	1		-14.5	-0.075	-0.075	ng/L	F005238

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Operat:	ZKH	Blanks:	17.041	Calib Eqn:	Conc = (Area-17.041)	Run Date:	###	Blank SD:	0			
Workst:	MHg270	CalibFa	193.64	Status:	OK,1 Warnings	Run Time:	10:53:35	Blank RSD	0			
Method	2012-07 R:	0.9994	R2:	0.9987379	CalibAnaly	MHg	CF SD:	15.24464444	0			
Descrip	MHg27001-200514-1	Blank	ConcHg0(pj	ConcMeHg(ConcH2(pj	ConcPthHg(c	Rec%	QA	RawData	RunEnd	PeakHg0 (Raw	PeakMeHg (Ri
Sample/ID	Location	Rinse	Dilute	17.041	0.0186131	0	0	46905-1.RAW	10:59:13	57.0938657	0	
WS	A1	1	17.041	0.0186131	0	0	0	46906-1.RAW	11:09:29	20.6451818	5.78611111	
Primer	A2	1	17.041	0.1090058	4.0992832	0.0765545	0	46907-1.RAW	11:19:45	38.1489583	810.832176	
Primer	A3	1	17.041	0.1231088	4.4600754	0.0525919	0	46908-1.RAW	11:30:00	40.8798828	880.696499	
Primer	A4	1	17.041	0.1202173	4.1646905	0.0971399	0	46909-1.RAW	11:40:16	40.3199653	823.497743	
WS	A5	1	17.041	0.0931345	0.0519257	0.1116617	0	46910-1.RAW	11:50:31	35.0756097	27.0958912	
WS	A6	1	17.041	0.0751011	0	0.110567	0	46911-1.RAW	12:00:47	31.5835937	15.038831	
SEQ-IBL1	A7	1	0	0.1779775	0.0880024	0.2416144	0	46912-1.RAW	12:11:02	34.463831	17.0409144	
SEQ-CAL1	A8	1	17.041	0.0825976	0.044308	0.0889079	88.62	46913-1.RAW	12:21:18	33.0352431	25.6207755	
SEQ-CAL2	A9	1	17.041	0.082236	0.194311	0.1060618	97.16	46914-1.RAW	12:31:34	32.9652199	54.6675926	
SEQ-CAL3	A10	1	17.041	0.1575494	1.0180661	0.0898102	101.81	46915-1.RAW	12:41:49	47.5490162	214.180729	
SEQ-CAL4	A11	1	17.041	0.1091678	2.0470074	0.103824	102.35	46916-1.RAW	12:52:05	38.1803188	413.426447	
SEQ-CAL5	A12	1	17.041	0.1266561	4.4028624	0.0669966	110.07	46917-1.RAW	13:02:20	41.5667824	869.617689	
SEQ-ICV1	A13	1	17.041	0.1926808	0.4801112	0.3948072	96.14	46918-1.RAW	13:12:35	54.351904	110.010359	
SEQ-ICB1	A14	1	17.041	0.0684945	0.0037653	0.1199256	0.00	46919-1.RAW	13:22:51	30.3042851	17.7700231	
WS	a15	1	17.041	0.045412	0	0	0	46920-1.RAW	13:33:07	25.8345522	10.9214699	
WS	a16	1	17.041	0.0416866	0	0	0	46921-1.RAW	13:43:22	25.1131655	10.7714699	
F005238-BS1	A17	1.25	17.041	0.2016867	1.1052655	1.7810476	0	46922-1.RAW	13:53:39	48.284838	188.261111	
F005238-BSD1	A18	1.25	17.041	0.243884	0.9987456	0.209192	0	46923-1.RAW	14:03:55	54.8217593	171.75978	
F005238-BLK1	A19	1.25	17.041	0.1439043	0	0.2557965	0	46924-1.RAW	14:14:11	39.3335938	15.7246528	
F005238-BLK2	A20	1.25	17.041	0.1296117	0	0.1773899	0	46925-1.RAW	14:24:27	37.1194734	13.0207465	
F005238-BLK3	A21	1.25	17.041	1.0677066	0	0.1479973	0	46926-1.RAW	14:34:42	182.442749	6.74548611	
0D00074-07RE1	B1	1.25	17.041	2.2763149	0	0.2404164	0	46927-1.RAW	14:44:58	369.672095	12.1862269	
F005238-MS1	B2	1.25	17.041	0.6434643	1.2582718	0.4717752	125.83	46928-1.RAW	14:55:14	116.722012	211.963802	
F005238-M5D1	B3	1.25	17.041	0.4769453	1.2869014	4.5851739	103.01	46929-1.RAW	15:05:31	90.9260333	216.3989	
SEQ-CCV1	B4	1	17.041	0.2674243	0.5144072	0.1401765	0.00	46930-1.RAW	15:15:47	68.8253472	116.651476	
SEQ-CCB1	B5	1	17.041	0.2031912	0	0.0668068	0.00	46931-1.RAW	15:26:02	56.3871528	13.8972222	
F005259-BS1	B6	1000	17.041	1685.3604	1450.8247	2386.4064	0	46932-1.RAW	15:36:18	343.396584	297.980758	
F005259-BSD1	B7	1000	17.041	1301.8614	1794.535	407.96014	0	46933-1.RAW	15:46:34	269.135287	364.537326	
F005259-BLK1	B8	500	17.041	282.88246	0	109.93792	0	46934-1.RAW	15:56:50	126.59647	15.5359954	
F005259-BLK2	B9	500	17.041	205.78268	0	369.20321	0	46935-1.RAW	16:07:06	96.737037	12.4785012	
F005259-BLK3	B10	500	17.041	126.29117	0	91.714603	0	46936-1.RAW	16:17:22	65.951331	13.5610532	
F005259-BLK4	B11	500	17.041	109.15343	0	139.64736	0	46937-1.RAW	16:27:54	101.986244	26.3104745	
0E00049-01	B12	2500	17.041	1096.683	0	744.18251	0	46938-1.RAW	16:37:54	92.1001448	20.9322338	
0E00048-01	B13	500	17.041	193.8098	10.047743	2002.1225	57031.30	46939-1.RAW	16:48:09	74.6429398	237.913426	
F005259-MS1	B14	500	17.041	148.7337	570.31302	2370.0515	0	46940-1.RAW	16:58:25	238.377951	5.8134838	
0E00049-01RE1	B15	500	17.041	571.51247	0	698.91709	89.75	46941-1.RAW	17:08:40	108.950752	103.825637	
SEQ-CCV2	B16	1	17.041	0.4746392	0.4481722	0.0642839	0	46942-1.RAW	17:18:56	108.950752	103.825637	

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PeakHg2(Raw)	PeakPrHg(Raw)	Control (ctf)	Flags	RunCount	Comment	V	W
1.69961138	0	cleandry	CT	1			
14.8078125	0	psample10	OK	1			
31.8650463	0	psample10	CT	1			
27.2248843	0	psample10	CT	1			
35.8512291	0	psample10	CT	1			
38.6632523	0	psample10	OK	1			
38.4512731	0	psample10	OK	1			
46.7865741	0	psample10	OK	1			
34.2571759	0	psample10	OK	1			
37.5788773	0	psample10	OK	1			
34.4318866	0	psample10	CT	1			
37.145544	0	psample10	CT	1			
30.0142361	0	psample10	CT	1			
93.491956	0	psample10	CT	1	Late ethylation - ZKH 5/14/2020		
40.2634838	0	psample10	CT	1			
4.87395833	0	psample10	OK	1	Late sample ethylation - ZKH 5/14/2020		
2.19577546	0	psample10	OK	1			
292.948669	0	psample10	OK	1	F005238		
49.4475116	0	psample10	OK	1	F005238		
56.6671586	0	psample10	OK	1	F005238		
44.5209491	0	psample10	OK	1	F005238		
39.9676505	0	psample10	CT	1	F005238		
54.2845775	0	psample10	CT	1	F005238		
90.1251157	0	psample10	CT	1	F005238		
727.344792	0	psample10	CT	1	F005238		
44.1848958	0	psample10	CT	1			
29.9774884	0	psample10	CT	1			
479.148177	0	psample10	CT	1	F005259		
96.0389178	0	psample10	CT	1	F005259		
59.6179977	0	psample10	OK	1	F005259		
160.027025	0	psample10	OK	1	F005259		
52.5604167	0	psample10	OK	1	F005259		
71.1239583	0	psample10	OK	1	F005259		
74.6827546	0	psample10	OK	1	F005259		
792.428819	0	psample10	CT	1	F005259		
934.92147	0	psample10	OK	1	F005259		
287.719589	0	psample10	CT	1	F005259		
29.4889468	0	psample10	CT	1	F005259		


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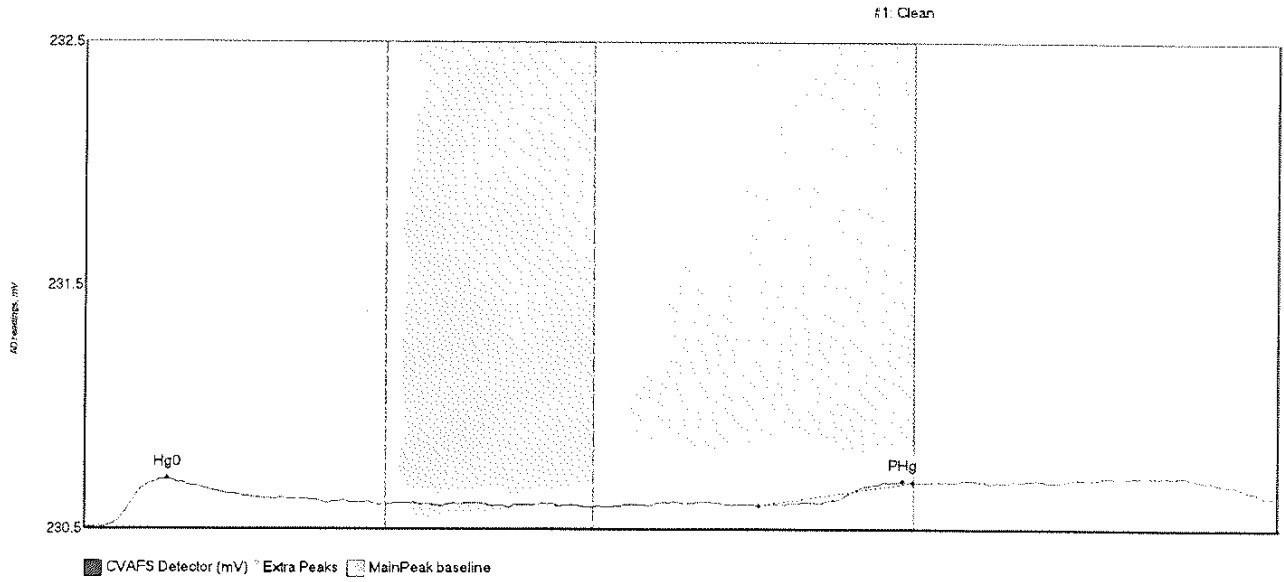
SEQ-CCB2	B17	1	17.041	0.2718522	0	0	0	0.00	46943-1.RAW	17:29:12	69.6827836	12.5104167
OE00038-01	B18	50	17.041	10.995952	0	3.4455829			46944-1.RAW	17:39:28	59.6263622	11.8941551
OD00075-09_DS	B19	100	17.041	17.237134	0	0			46945-1.RAW	17:49:44	50.4191551	12.2373264
OD00075-10_DS	B20	100	17.041	16.858935	0	0			46946-1.RAW	17:59:59	49.6868056	10.985706
OD00075-11_DS	B21	100	17.041	16.952611	0	10.928373			46947-1.RAW	18:10:15	49.8682002	12.5883681
OD00075-12_DS	C1	100	17.041	16.582107	0	102.08062			46948-1.RAW	18:20:31	49.1507523	12.1917245
OD00075-13_DS	C2	100	17.041	15.393867	0	0.2028914			46949-1.RAW	18:30:47	46.8498264	8.80792824
OD00075-14_DS	C3	100	17.041	14.748464	0	0			46950-1.RAW	18:41:04	45.6000579	8.57433449
OD00075-15_DS	C4	100	17.041	15.397125	0	17.484794			46951-1.RAW	18:51:20	46.8561343	10.8400463
OD00075-16_DS	C5	100	17.041	21.865802	0	171.60589			46952-1.RAW	19:01:37	59.3821759	16.4022859
SEQ-CCV3	C6	1	17.041	0.1730996	0.4895777	0.0343463		98.04	46953-1.RAW	19:11:53	50.5601852	111.843461
SEQ-CCB3	C7	1	17.041	0.1406315	0	0		0.00	46954-1.RAW	19:22:10	44.2730035	11.8529514
OE00049-01RE2	C8	1000	17.041	533.53434	0	589.83276			46955-1.RAW	19:32:27	120.355292	13.8654514
F005259-MSD1	C9	500	17.041	166.50425	549.82111	1039.1237			46956-1.RAW	19:42:43	81.5251736	229.977257
OE00054-01	C10	500	17.041	866.50556	0	2855.2284			46957-1.RAW	19:52:59	352.62375	11.5755787
OD00062-05RE1	C11	1.25	17.041	0.9111848	0.0004384	0.4851242			46958-1.RAW	20:03:16	158.195457	17.1088252
F005238-MS2	C12	1.25	17.041	0.632218	1.362271	0.4553148		68.11	46959-1.RAW	20:13:32	114.979816	228.074653
F005238-MSD2	C13	1.25	17.041	0.693045	1.3520108	0.4390437			46960-1.RAW	20:23:48	124.40272	226.485214
OD00062-01RE1	C14	1.25	17.041	0.355131	0	0.1127984			46961-1.RAW	20:34:05	72.0553819	12.9851852
OD00062-02RE1	C15	1.25	17.041	0.3145658	0	0.1202051			46962-1.RAW	20:44:21	65.7712963	11.5735532
OD00062-06RE1	C16	1.25	17.041	0.2119293	0	0.1374999			46963-1.RAW	20:54:37	49.8715567	8.25671296
OD00074-08RE1	C17	1.25	17.041	0.2216482	0.1052845	0.2905215			46964-1.RAW	21:04:54	51.3771412	33.3508681
SEQ-CCV4	C18	1	17.041	0.1589152	0.5045423	0		101.03	46965-1.RAW	21:15:10	47.8134838	114.741233
SEQ-CCB4	C19	1	17.041	0.1609714	0	0		0.00	46966-1.RAW	21:25:27	48.2116609	13.4355324
OD00075-07	C20	50	17.041	8.0967992	89.666113	0			46967-1.RAW	21:35:43	48.3984375	364.302488
OD00075-08	C21	50	17.041	9.6718152	272.50166	15.121567			46968-1.RAW	21:45:59	54.498206	1072.3934
OD00075-09	A1	1.25	17.041	2.4229045	0	0.0397258			46969-1.RAW	21:56:16	392.380762	10.9591146
OD00075-10	A2	1.25	17.041	1.7975277	0.1252113	0.2307034			46970-1.RAW	22:06:32	295.50165	36.4377894
OD00075-11	A3	1.25	17.041	2.175718	0.2108239	0.4756906			46971-1.RAW	22:16:48	354.08831	49.7003183
OD00075-12	A4	1.25	17.041	1.2728609	0.608477	2.5770457			46972-1.RAW	22:27:05	295.666204	111.302025
OD00075-13	A5	1.25	17.041	1.2728609	0	0.2315985			46973-1.RAW	22:37:22	214.223843	9.27326389
OD00075-14	A6	1.25	17.041	1.4132743	0.1474138	0.0831111			46974-1.RAW	22:47:38	235.975727	39.8772569
OD00075-15	A7	1.25	17.041	1.2654523	1.4829548	0.5904558			46975-1.RAW	22:57:55	213.076157	246.770168
OD00075-16	A8	1.25	17.041	1.5535296	1.186725	2.1878161			46976-1.RAW	23:08:11	257.703126	200.880266
SEQ-CCV5	A9	1	17.041	0.7845715	0.4991105	0		99.95	46977-1.RAW	23:18:28	168.966493	113.68941
SEQ-CCB5	A10	1	17.041	0.8075969	0	0		0.00	46978-1.RAW	23:28:44	173.425174	4.88220486
OD00075-17RE1	A11	1	17.041	0.7625122	0	0			46979-1.RAW	23:39:01	164.694907	13.1650752
OD00075-20RE1	A12	500	17.041	434.27898	137.65319	0			46980-1.RAW	23:49:17	185.229762	70.3516493
OD00075-21RE1	A13	500	17.041	443.97149	0	0			46981-1.RAW	23:59:34	188.983507	7.74933449
OE00038-01RE1	A14	1.25	17.041	1.2321924	0	0.0012189			46982-1.RAW	0:09:50	207.923753	3.7349733
SEQ-CCV6	A15	1	17.041	0.9753563	0.4928164	0		98.69	46983-1.RAW	0:20:06	205.910359	112.470602
SEQ-CCB6	A16	1	17.041	1.0963957	0	0		0.00	46984-1.RAW	0:30:23	229.348597	2.51730324

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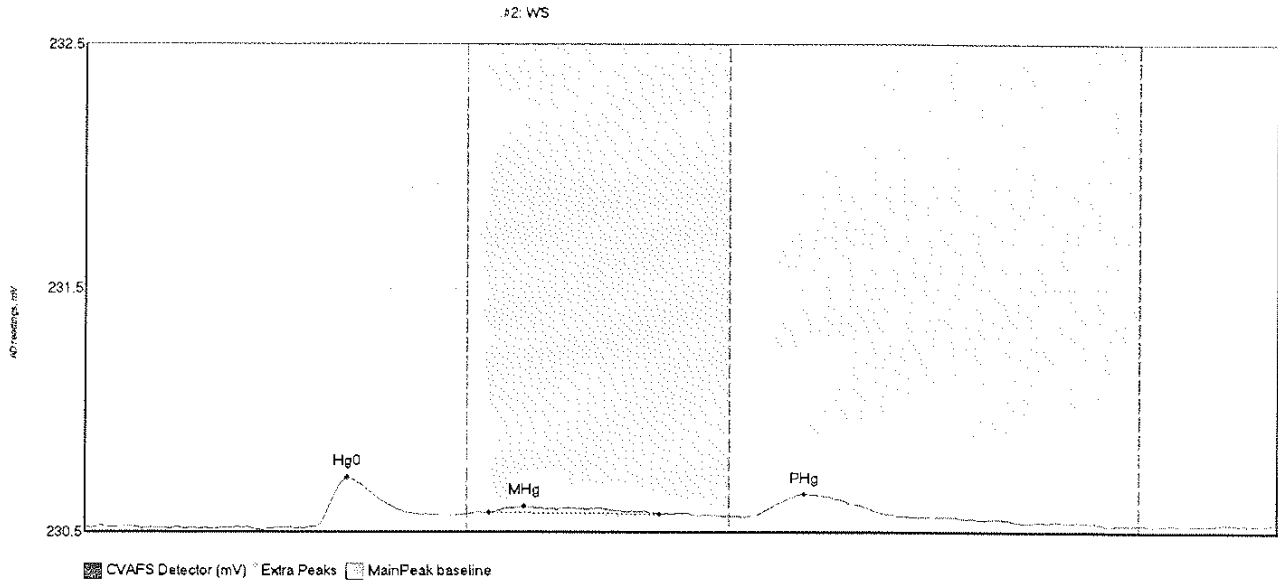
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214.711343	0	psample10	OK	1	F005238 - DS
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50.8987269	0	psample10	OK	1	F005238 - DS
349.341088	0	psample10	OK	1	F005238 - DS
23.6917824	0	psample10	CT	1	F005238 - DS
14.3561632	0	psample10	CT	1	
131.257002	0	psample10	OK	1	F005259
419.47581	0	psample10	CT	1	F005259
1122.82219	0	psample10	CT	1	F005238
92.1930556	0	psample10	CT	1	F005238
87.5751736	0	psample10	CT	1	F005238
85.0545718	0	psample10	CT	1	F005238
34.5148727	0	psample10	CT	1	F005238
35.6622685	0	psample10	CT	1	F005238
38.3414641	0	psample10	OK	1	F005238
62.0465278	0	psample10	CT	1	F005238
12.9612269	0	psample10	CT	1	
12.6655671	0	psample10	CT	1	
11.0659144	0	psample10	CT	1	
75.6041667	0	psample10	CT	1	F005238
23.1949653	0	psample10	CT	1	F005238
52.779919	0	psample10	CT	1	F005238
90.7316551	0	psample10	CT	1	F005238
416.259259	0	psample10	CT	1	F005238
52.9185764	0	psample10	CT	1	F005238
29.9159144	0	psample10	CT	1	F005238
108.510301	0	psample10	CT	1	F005238
355.962471	0	psample10	CT	1	F005238
13.4124421	0	psample10	CT	1	
5.15358796	0	psample10	CT	1	
6.86128472	0	psample10	CT	1	F005227
11.1344329	0	psample10	CT	1	F005227
10.7190394	0	psample10	CT	1	F005227
17.2297454	0	psample10	CT	1	F005238
6.84311343	0	psample10	CT	1	
3.87824074	0	psample10	CT	1	

WS	A1	0E00038-01	B18		
Primer	A2	0D00075-09_D	B19		
Primer	A3	0D00075-10_D	B20		
Primer	A4	0D00075-11_D	B21		
WS	A5	0D00075-12_D	C1		
WS	A6	0D00075-13_D	C2		
SEQ-IBL1	A7	0D00075-14_D	C3		
SEQ-CAL1	A8	0D00075-15_D	C4		
SEQ-CAL2	A9	0D00075-16_D	C5		
SEQ-CAL3	A10	SEQ-CCV3	C6		
SEQ-CAL4	A11	SEQ-CCB3	C7		
SEQ-CAL5	A12	0E00049-01RE	C8		
SEQ-ICV1	A13	F005259-MSD1	C9		
SEQ-ICB1	A14	0E00054-01	C10		
WS	a15	0D00062-05RE	C11		
WS	a16	F005238-MS2	C12		
F005238-BS1	A17	F005238-MSD2	C13		
F005238-BSD1	A18	0D00062-01RE	C14		
F005238-BLK1	A19	0D00062-02RE	C15		
F005238-BLK2	A20	0D00062-06RE	C16		
F005238-BLK3	A21	0D00074-08RE	C17		
0D00074-07RE	B1	SEQ-CCV4	C18		
F005238-MS1	B2	SEQ-CCB4	C19		
F005238-MSD1	B3	0D00075-07	C20		
SEQ-CCV1	B4	0D00075-08	C21		
SEQ-CCB1	B5	0D00075-09	A1		
F005259-BS1	B6	0D00075-10	A2		
F005259-BSD1	B7	0D00075-11	A3		
F005259-BLK1	B8	0D00075-12	A4		
F005259-BLK2	B9	0D00075-13	A5		
F005259-BLK3	B10	0D00075-14	A6		
F005259-BLK4	B11	0D00075-15	A7		
0E00049-01	B12	0D00075-16	A8		
0E00048-01	B13	SEQ-CCV5	A9		
F005259-MS1	B14	SEQ-CCB5	A10		
0E00049-01RE	B15	0D00075-17RE	A11	0E00038-01RE	A14
SEQ-CCV2	B16	0D00075-20RE	A12	SEQ-CCV6	A15
SEQ-CCB2	B17	0D00075-21RE	A13	SEQ-CCB6	A16

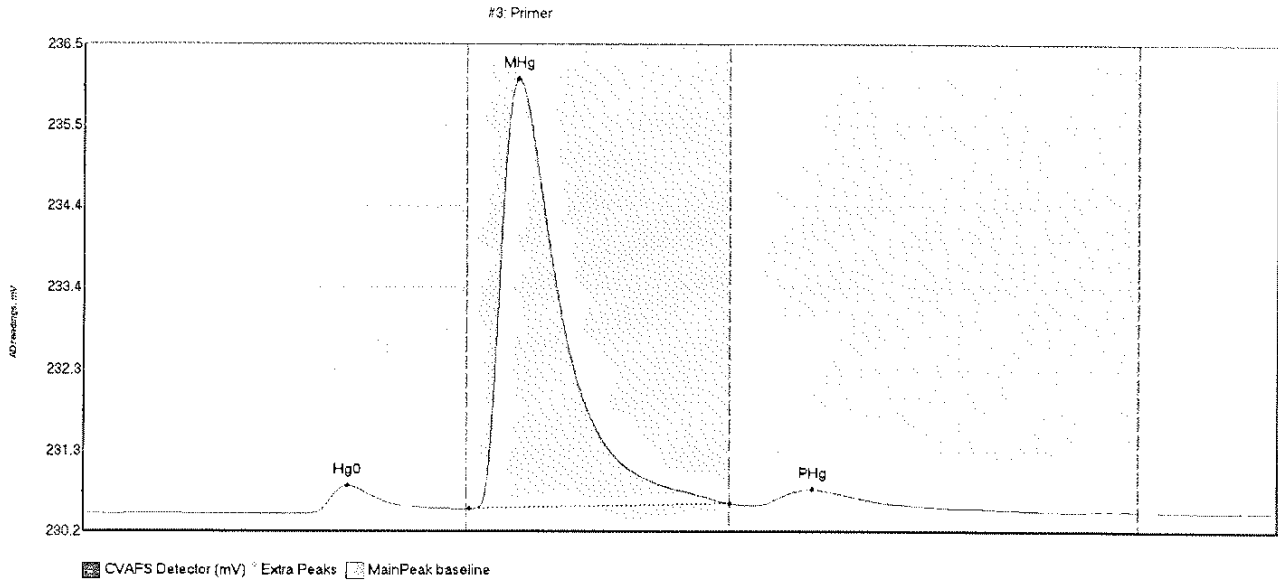

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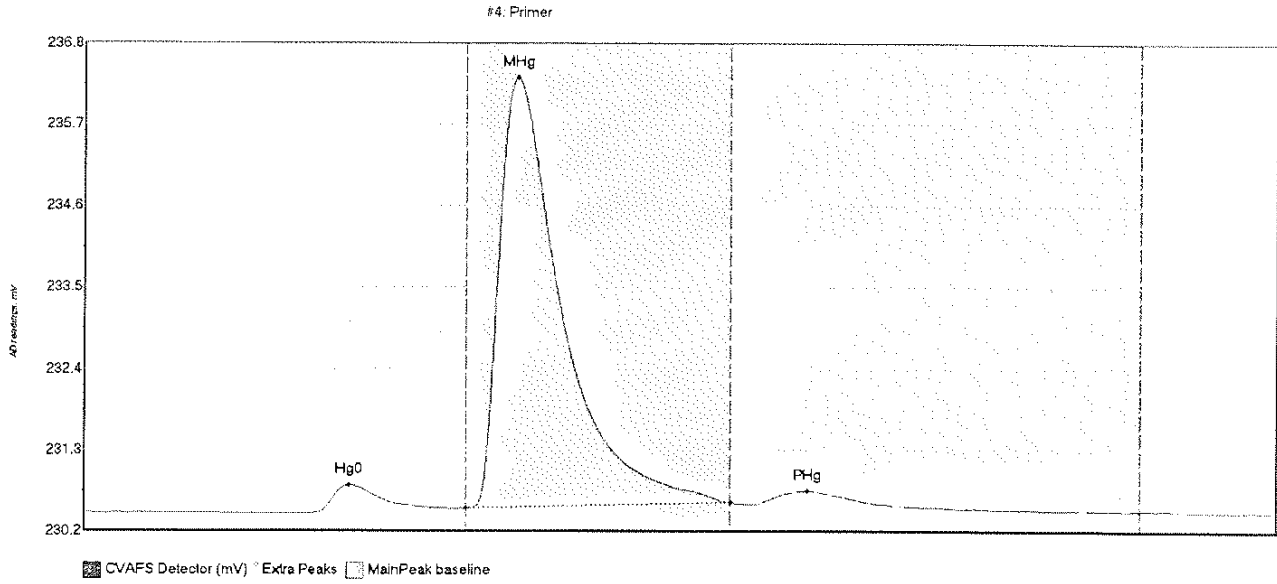
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
Clean Hg0	57.994	4.8	78.5	230.54	230.64	21.9	0.198	OK	230.5428	0.00	0.12	
Clean PHg	1.706	176.5	219.7	230.63	230.73	216.7	0.099	CT	230.5428	0.00	0.12	



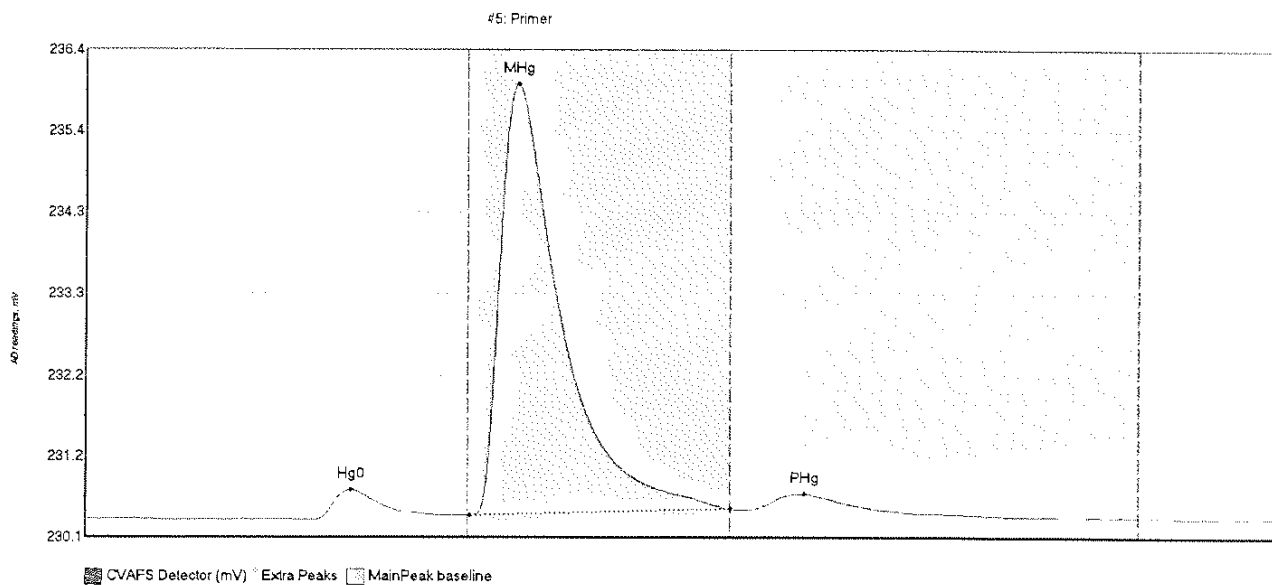
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	Shift	Comment
WS Hg0	20.645	48.0	75.9	230.53	230.57	55.3	0.202	OK	230.5259	0.00	0.01	
WS MHg	5.786	84.6	120.3	230.58	230.58	91.9	0.026	OK	230.5259	0.00	0.01	
WS PHg	14.808	140.3	169.9	230.57	230.57	150.6	0.089	OK	230.5259	0.00	0.01	



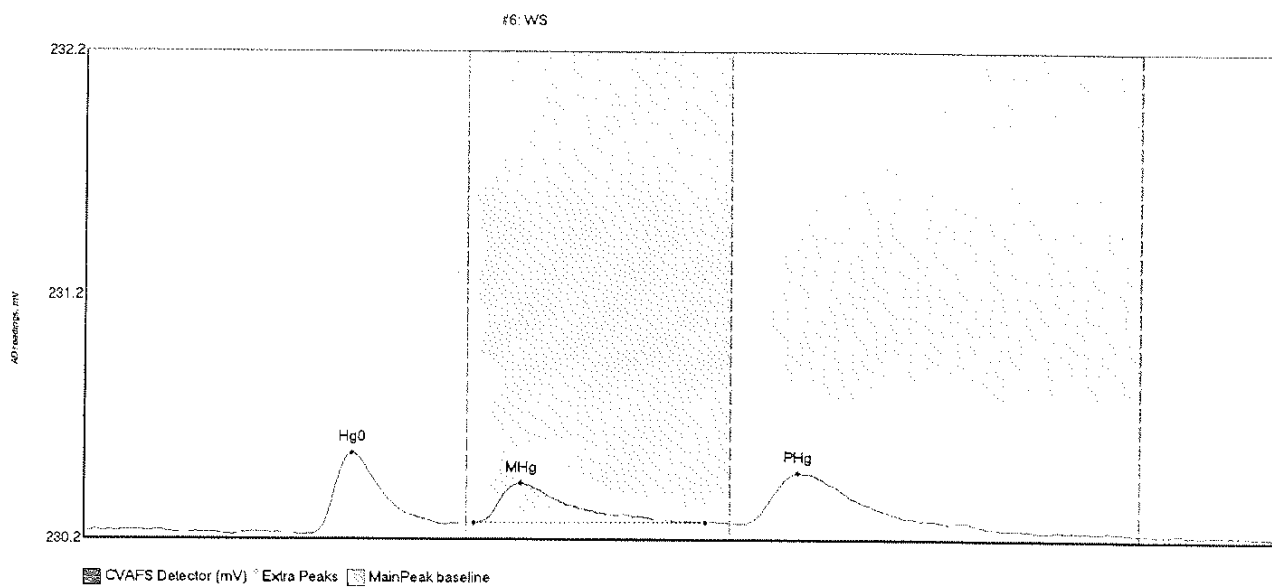
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BiShift	Comment
Primer Hg0	39.149	46.5	78.2	230.47	230.53	55.3	0.360	OK	230.4776	0.00	0.01	
Primer MHg	810.832	80.7	135.0	230.53	230.61	91.0	5.517	CT	230.4776	0.00	0.01	
Primer PHg	31.865	139.5	170.5	230.58	230.59	152.1	0.213	OK	230.4776	0.00	0.01	



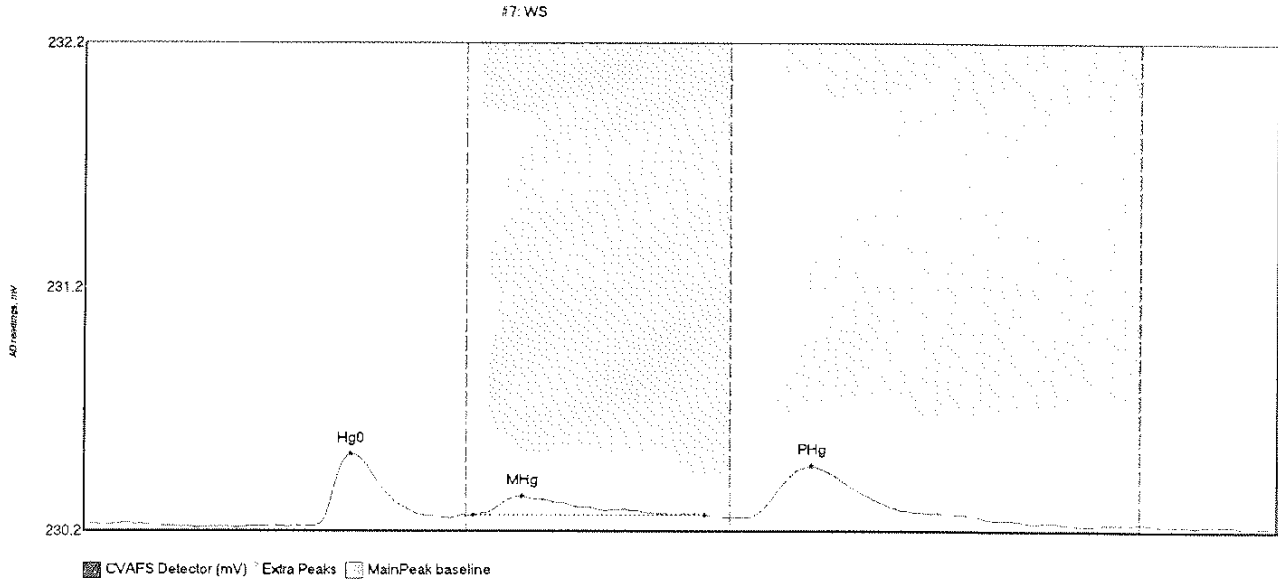
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
Primer Hg0	40.880	47.2	77.7	230.41	230.47	55.6	0.383	OK	230.4161	0.00	0.01	
Primer MHg	880.696	80.0	135.0	230.47	230.56	90.6	5.871	CT	230.4161	0.00	0.01	
Primer PHg	27.226	139.1	166.7	230.53	230.53	151.1	0.186	OK	230.4161	0.00	0.01	



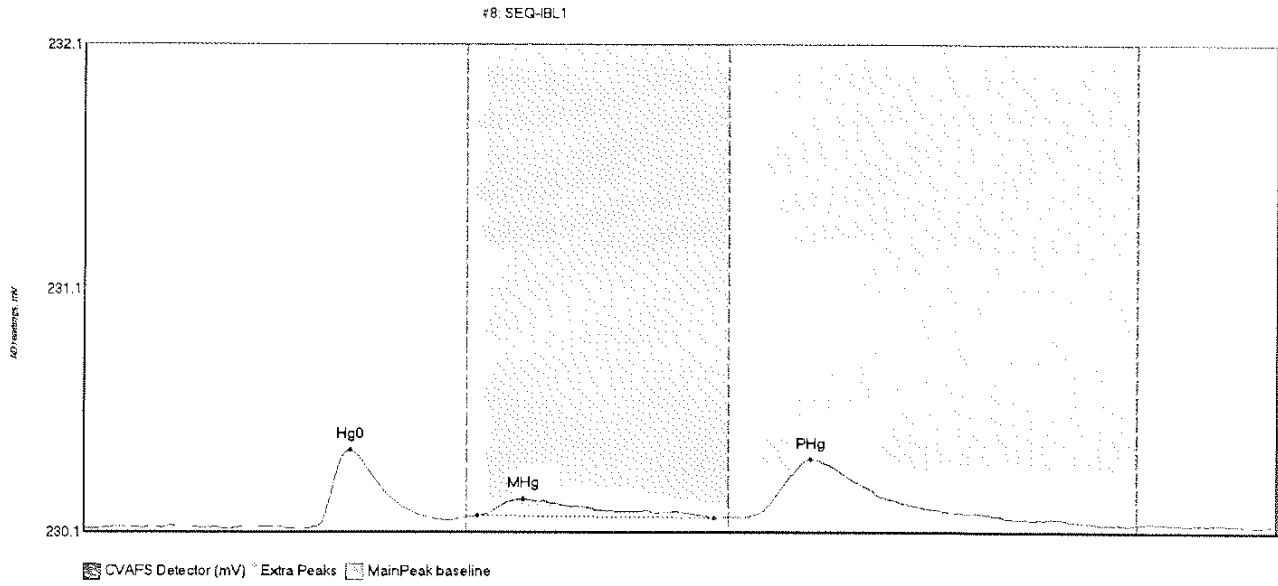
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
Primer Hg0	40.320	47.5	78.0	230.34	230.40	55.9	0.388	OK	230.3498	0.00	0.01	
Primer MHg	823.498	89.5	135.0	230.40	230.48	90.4	5.575	CT	230.3498	0.00	0.01	
Primer PHg	35.851	138.5	173.7	230.47	230.42	150.3	0.208	OK	230.3498	0.00	0.01	



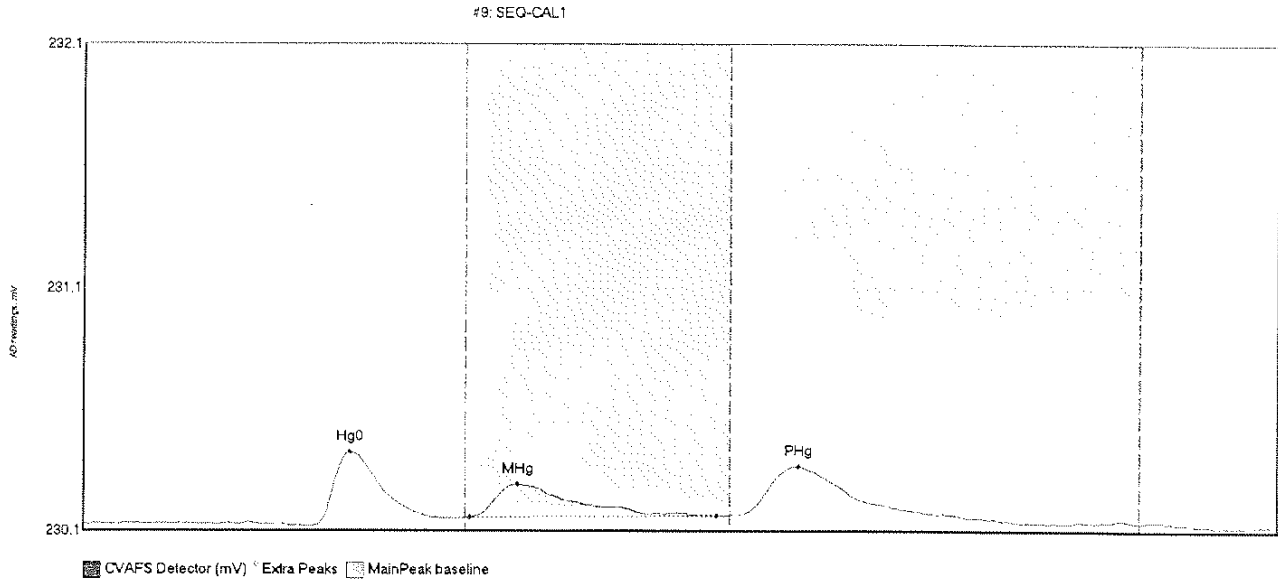
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	StShift	Comment
WS Hg0	35.076	47.5	75.6	230.26	230.30	55.8	0.330	OK	230.2737	0.00	-0.02	
WS MHg	27.096	81.7	129.7	230.31	230.31	91.4	0.162	OK	230.2737	0.00	-0.02	
WS PHg	38.663	139.1	180.6	230.30	230.31	148.9	0.210	OK	230.2737	0.00	-0.02	



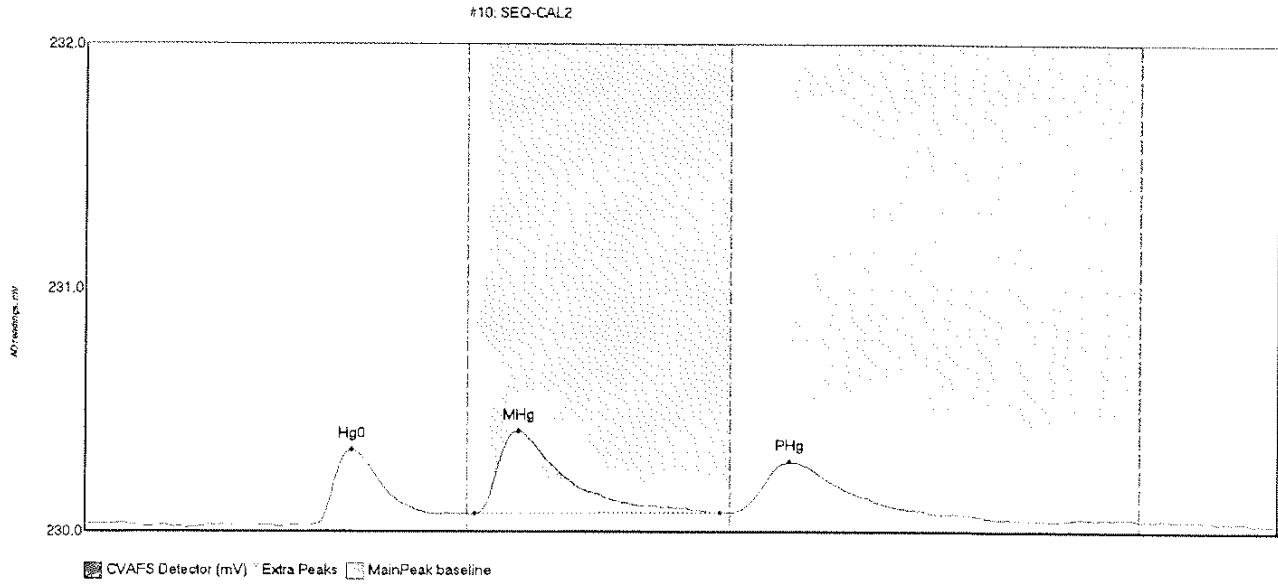
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Hide	Shift	Comment
WS Hg0	31.584	48.0	76.6	230.19	230.23	56.1	0.296	OK	230.2076	0.00	-0.02	
WS MHg	15.039	81.4	129.6	230.24	230.24	91.6	0.068	OK	230.2076	0.00	-0.02	
WS PHg	38.451	138.0	185.0	230.23	230.23	152.2	0.210	OK	230.2076	0.00	-0.02	



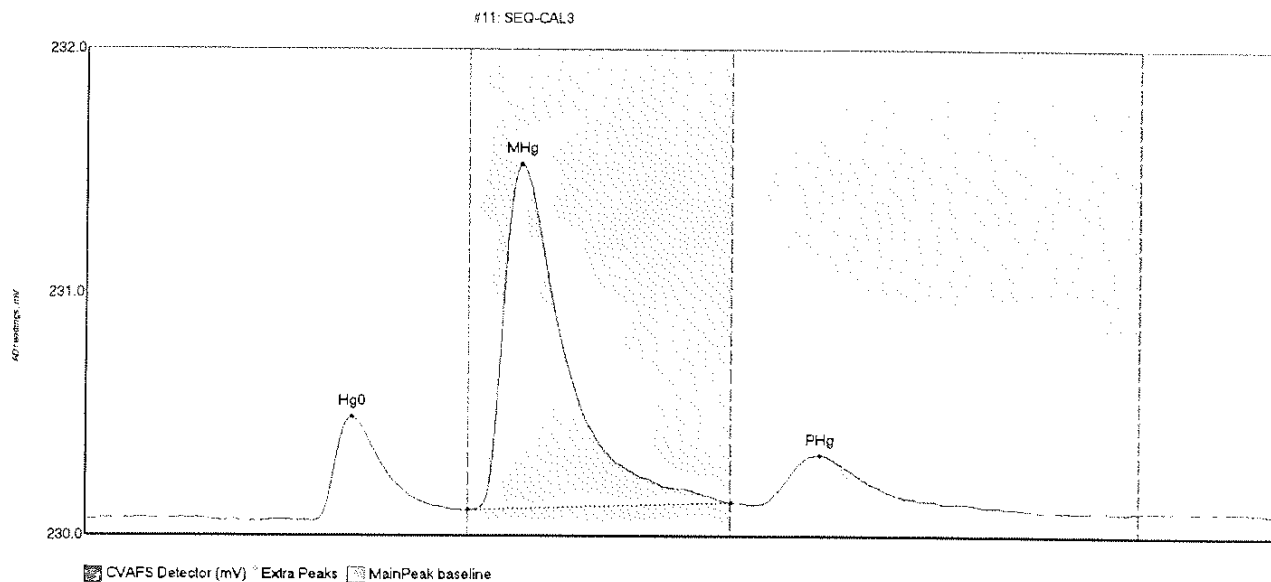
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-IBL1 Hg0	34.464	47.1	75.8	230.15	230.18	95.8	0.321	OK	230.1486	0.00	0.01	
SEQ-IBL1 MHg	17.041	82.2	132.0	230.20	230.19	91.9	0.069	OK	230.1486	0.00	0.01	
SEQ-IBL1 PHg	46.787	137.9	190.0	230.20	230.20	151.9	0.240	OK	230.1486	0.00	0.01	



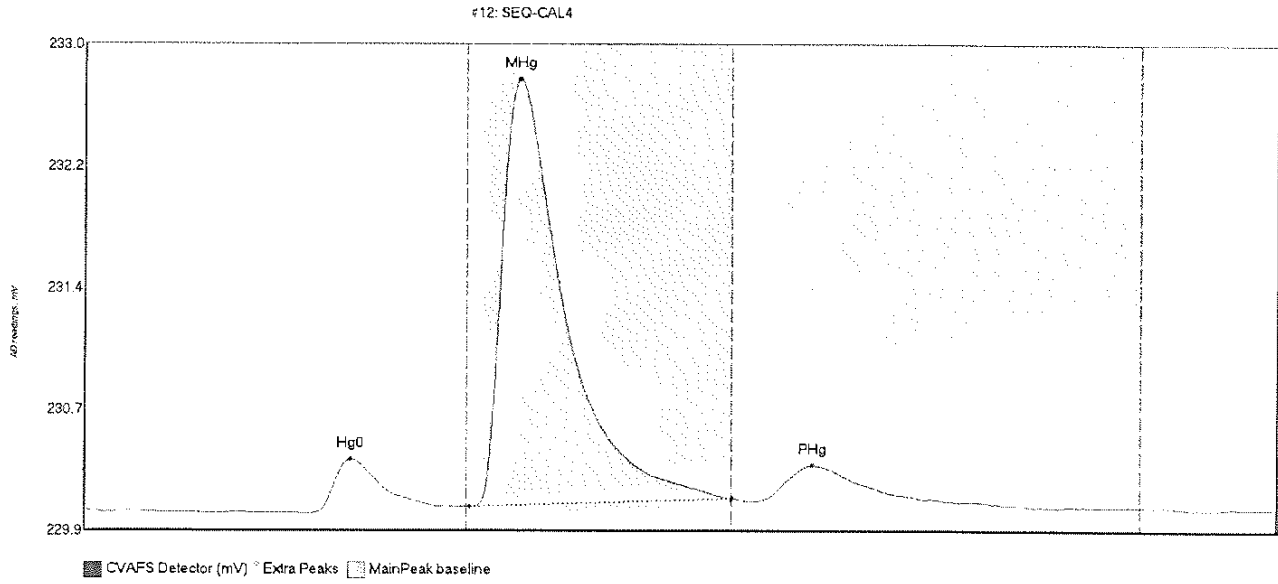
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
SEQ-CAL1 Hg0	33.018	47.2	75.4	230.10	230.13	55.7	0.308	OK	230.1062	0.00	-0.01	
SEQ-CAL1 MHg	25.621	81.0	132.1	230.14	230.14	90.9	0.135	OK	230.1062	0.00	-0.01	
SEQ-CAL1 PHg	34.257	137.0	176.2	230.15	230.15	149.3	0.200	OK	230.1062	0.00	-0.01	



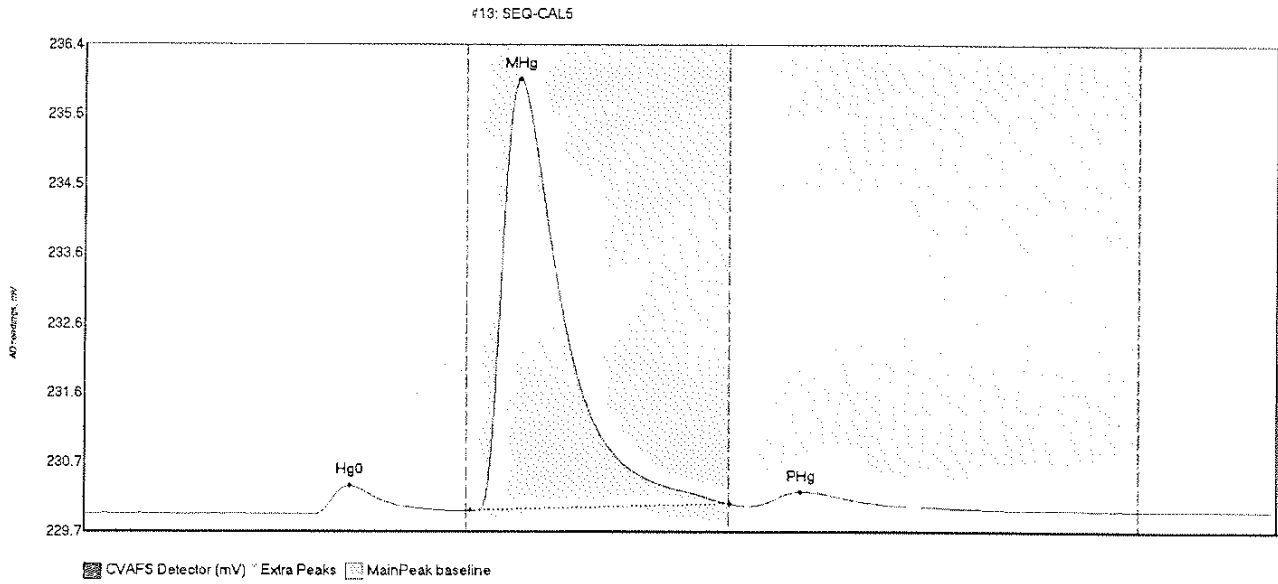
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	Shift	Comment
SEQ-CAL2 Hg0	32.965	47.2	77.4	230.06	230.11	56.1	0.310	OK	230.0664	0.00	0.00	
SEQ-CAL2 MHg	54.678	81.7	132.9	230.11	230.11	90.7	0.348	OK	230.0684	0.00	0.00	
SEQ-CAL2 PHg	37.579	135.6	177.1	230.11	230.11	147.3	0.209	OK	230.0684	0.00	0.00	



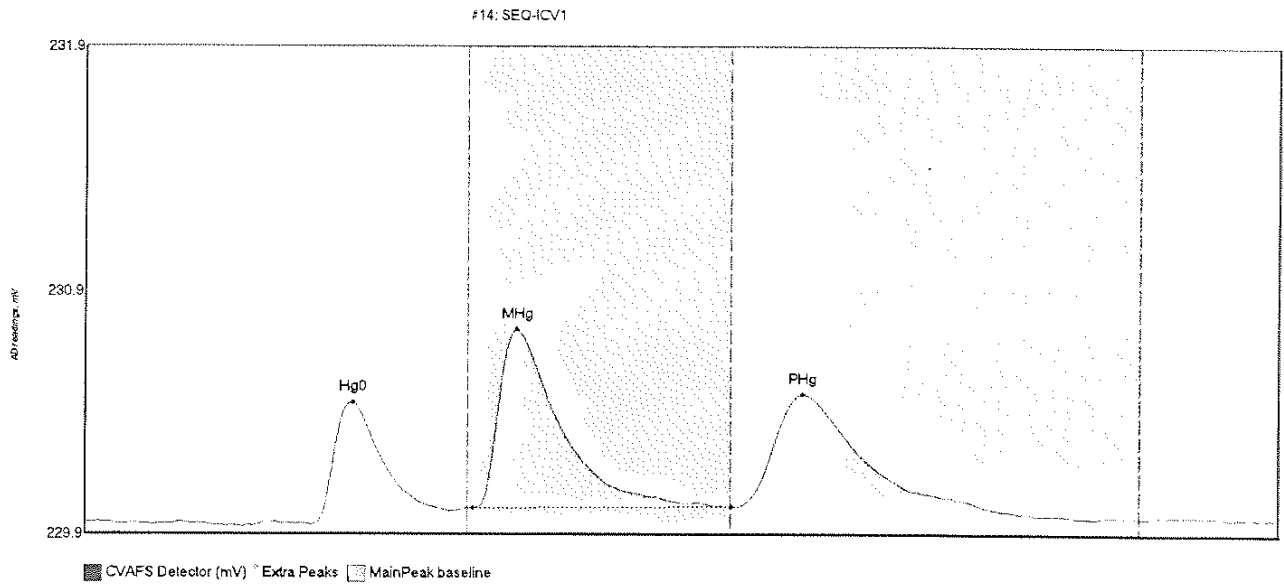
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BIShift	Comment
SEQ-CAL3 Hg0	47.549	48.0	79.5	230.02	230.06	55.8	0.428	OK	230.0236	0.00	0.02	
SEQ-CAL3 MHg	214.181	80.0	135.8	230.06	230.09	91.2	1.422	CT	230.0236	0.00	0.02	
SEQ-CAL3 PHg	35.154	139.9	179.8	230.08	230.09	153.4	0.207	OK	230.0236	0.00	0.02	



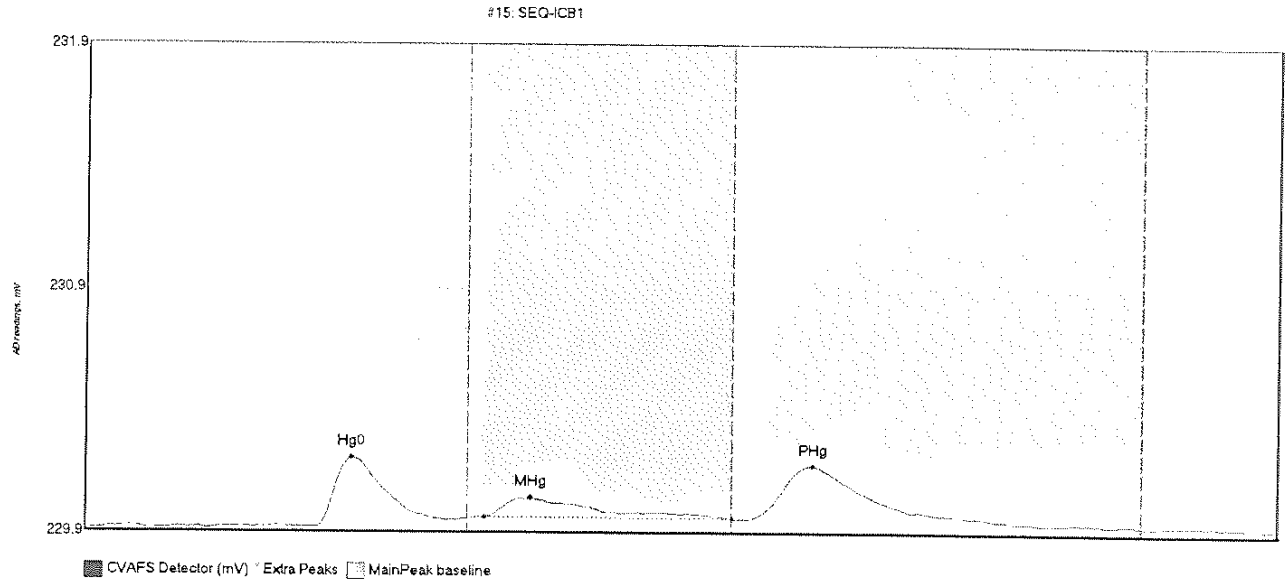
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Bibov	B1Shift	Comment
SEQ-CAL4 Hg0	28.201	47.0	78.0	229.99	230.03	55.6	0.352	OK	230.0120	0.00	0.01	
SEQ-CAL4 MHg	413.426	80.7	135.0	230.03	230.09	91.2	2.758	CT	230.0120	0.00	0.01	
SEQ-CAL4 PHg	37.146	140.4	175.6	230.07	230.08	151.9	0.231	OK	230.0120	0.00	0.01	



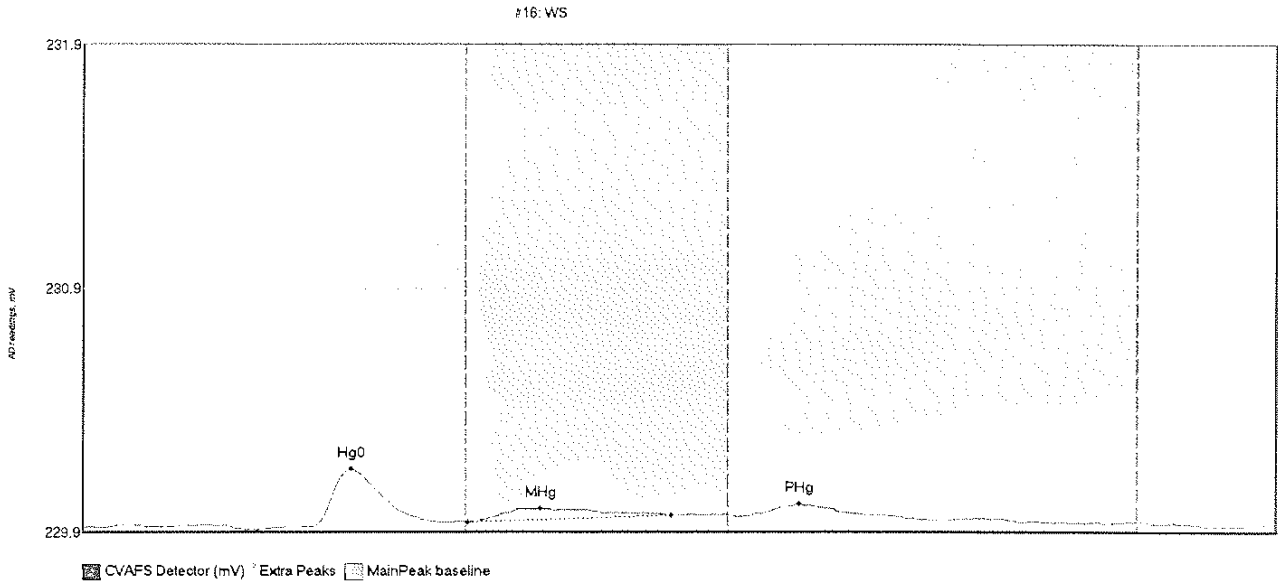
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Slope	IShift	Comment
SEQ-CALS Hg0	41.567	48.5	77.6	229.98	230.02	55.0	0.383	OK	229.9819	0.00	0.04	
SEQ-CALS MHg	869.619	80.9	139.0	230.02	230.12	91.1	5.944	CF	229.9819	0.00	0.04	
SEQ-CALS PHg	30.014	139.5	171.0	230.09	230.09	149.9	0.195	OK	229.9819	0.00	0.04	



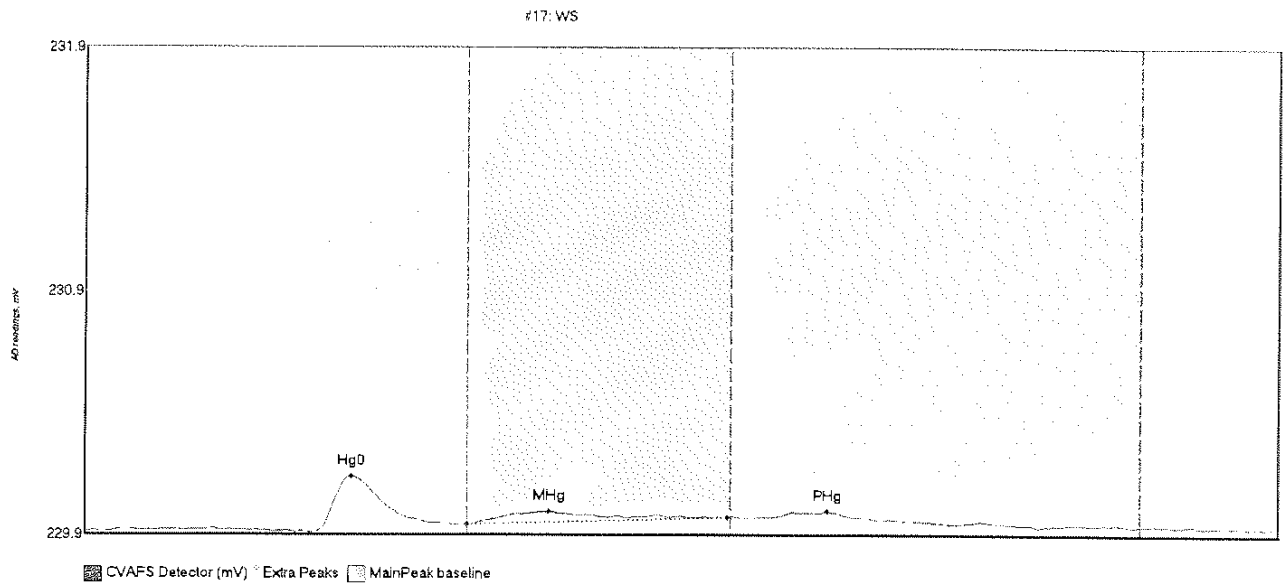
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Bllev	BlShift	Comment
SEQ-1CV1 Hg0	54.352	47.3	76.6	229.97	230.02	56.0	0.501	OK	229.9792	0.00	0.01	Late ethyl
SEQ-1CV1 MHg	110.010	81.1	135.0	230.04	230.04	90.4	0.735	CT	229.9792	0.00	0.01	Late ethyl
SEQ-1CV1 PHg	93.492	135.4	188.5	230.04	230.04	149.9	0.466	OK	229.9792	0.00	0.01	Late ethyl



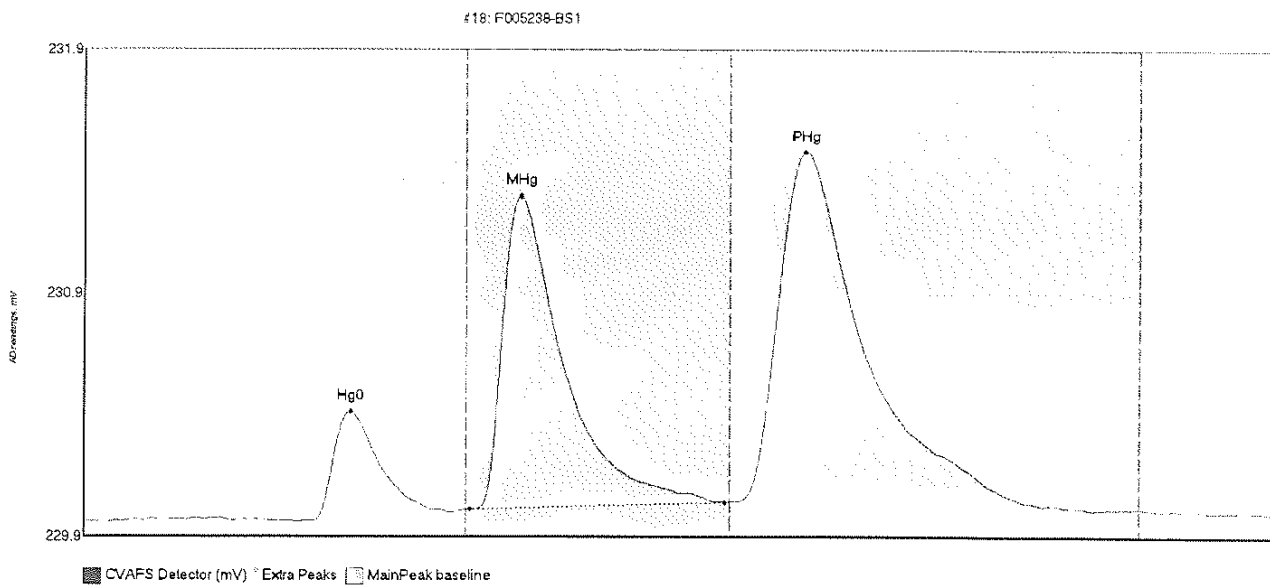
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
SEQ-ICB1 Hg0	30.304	25.7	75.5	229.96	229.99	55.7	0.290	OK	229.9560	0.00	0.01	
SEQ-ICB1 MHg	17.770	83.5	135.0	230.01	230.00	93.0	0.078	CT	229.9560	0.00	0.01	
SEQ-ICB1 PHg	40.263	138.4	187.6	230.00	230.00	151.9	0.217	OK	229.9560	0.00	0.01	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	HiShift	Comment
WS Hg0	25.826	47.8	76.9	229.95	229.97	56.3	0.235	OK	229.9498	0.00	0.01	Late sampl
WS MHg	10.921	80.5	123.2	229.97	229.99	95.7	0.056	OK	229.9498	0.00	0.01	Late sampl
WS PHg	4.874	141.4	164.1	230.00	230.00	149.7	0.040	OK	229.9498	0.00	0.01	Late sampl

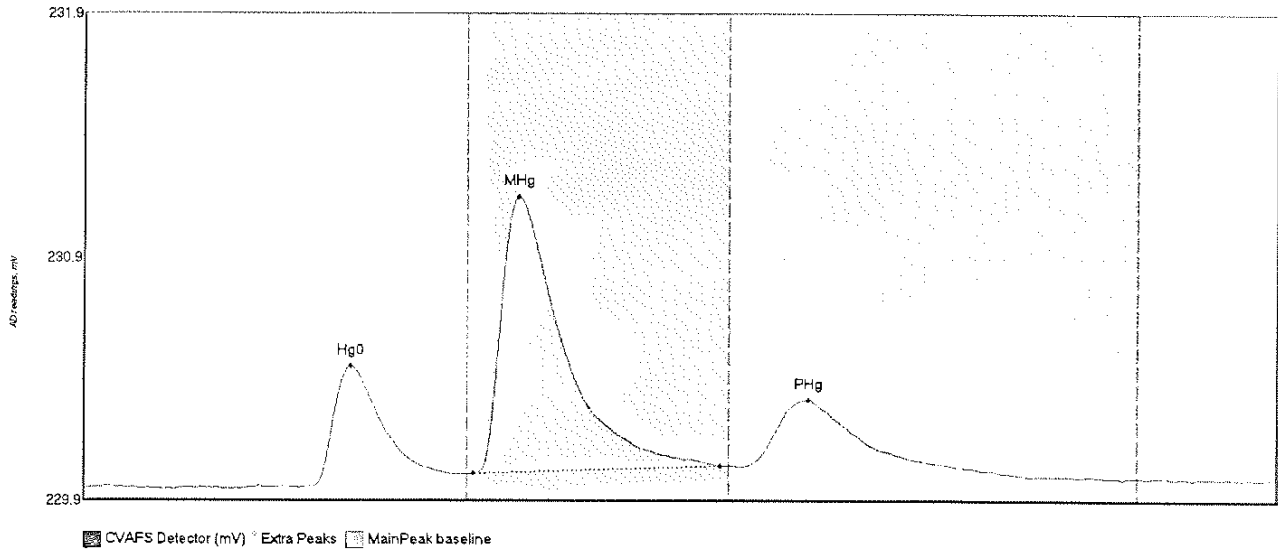


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BIShift	Comment
WS Hg0	25.113	47.2	77.0	229.92	229.96	55.7	0.232	OK	229.9286	0.00	0.01	
WS MHg	16.771	80.0	134.3	229.96	229.99	97.3	0.053	OK	229.9286	0.00	0.01	
WS PHg	2.196	144.5	160.6	229.99	229.99	155.0	0.021	OK	229.9286	0.00	0.01	

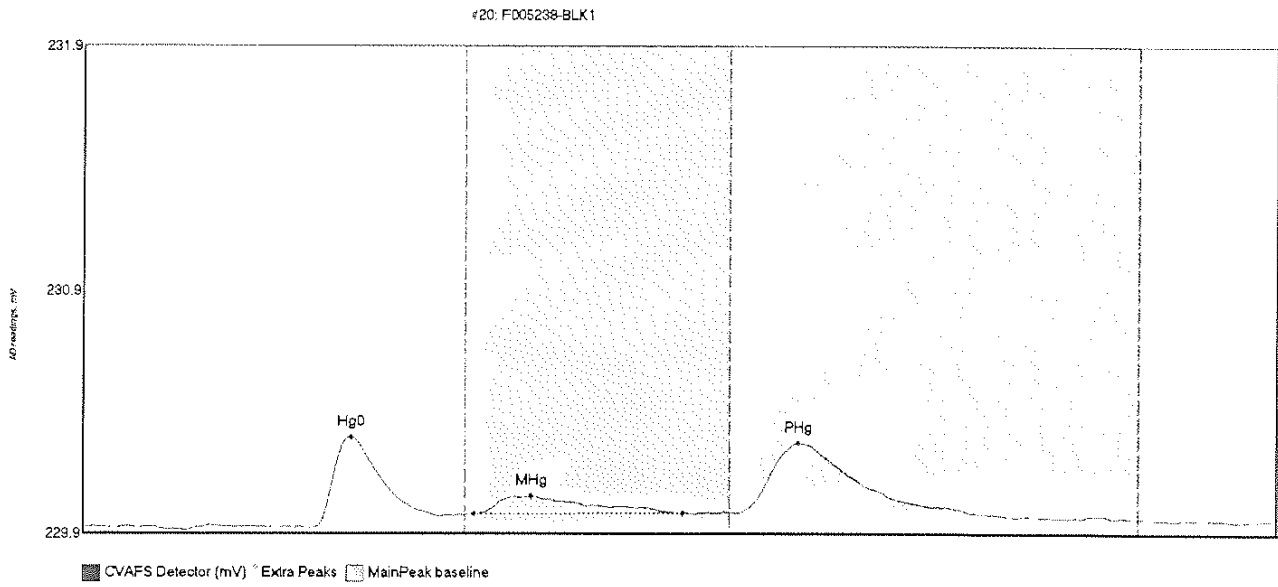


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005238-RS1 Hg0	48.285	48.1	76.4	229.93	229.96	55.8	0.446	OK	229.9226	0.00	0.03	F005238
F005238-RS1 MHg	188.261	80.8	133.9	229.97	230.00	91.3	1.281	OK	229.9226	0.00	0.03	F005238
F005238-RS1 PHg	292.949	136.4	196.5	230.00	230.00	150.9	1.436	OK	229.9226	0.00	0.03	F005238

#19: F005238-BSD1

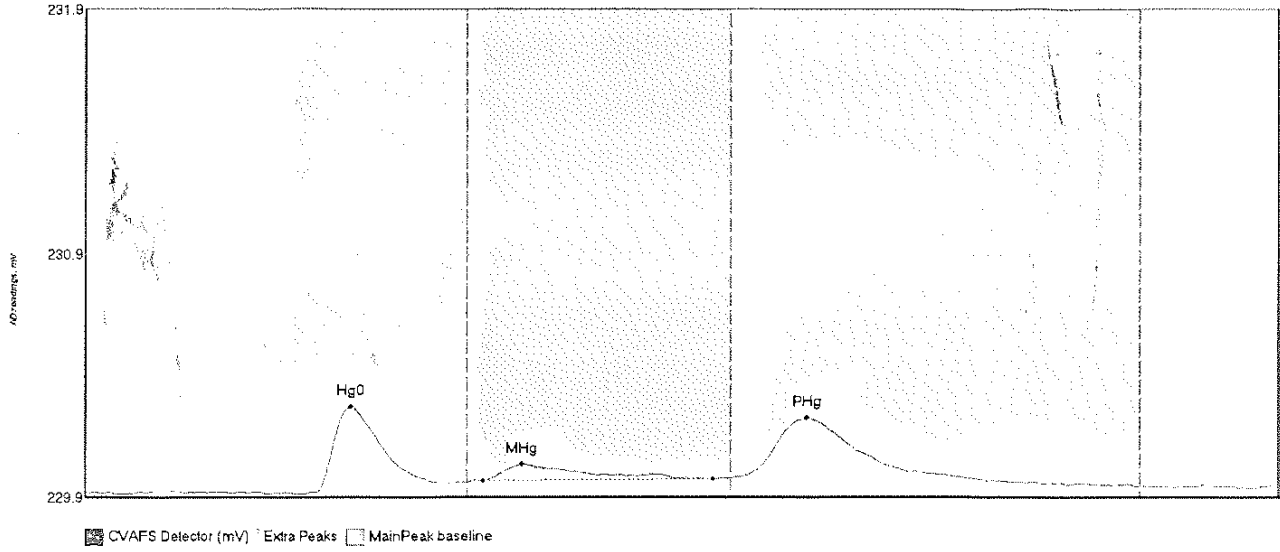


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005238-BSD1 Hg	54.822	46.0	79.9	229.93	229.99	55.9	0.497	OK	229.9315	0.00	0.03	F005238
F005238-BSD1 MH	171.760	81.3	133.1	229.99	230.02	90.8	1.137	OK	229.9315	0.00	0.03	F005238
F005238-BSD1 PH	49.448	137.4	182.2	230.02	230.02	161.3	0.276	OK	229.9315	0.00	0.03	F005238



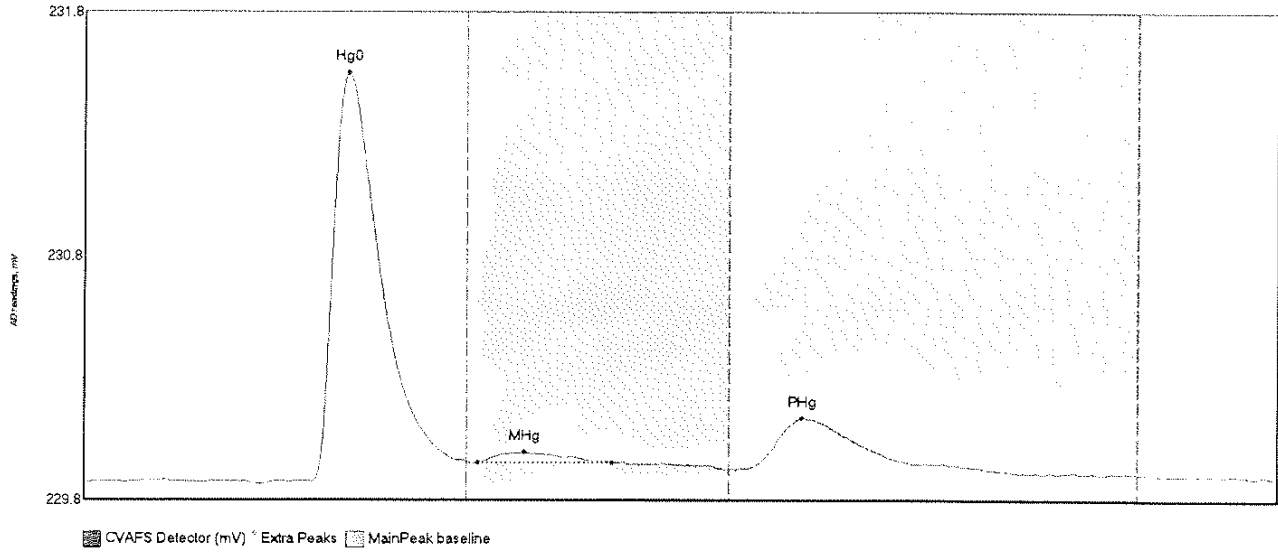
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005238-BLK1 Hg	39.292	47.3	74.5	229.92	229.97	56.0	0.373	OK	229.9307	0.00	0.03	F005238
F005238-BLK1 MH	15.725	81.9	125.2	229.96	229.99	93.8	0.075	OK	229.9307	0.00	0.03	F005238
F005238-BLK1 PH	56.667	136.8	185.6	229.99	229.98	149.3	0.287	OK	229.9307	0.00	0.03	F005238

#21: F005238-BLK2



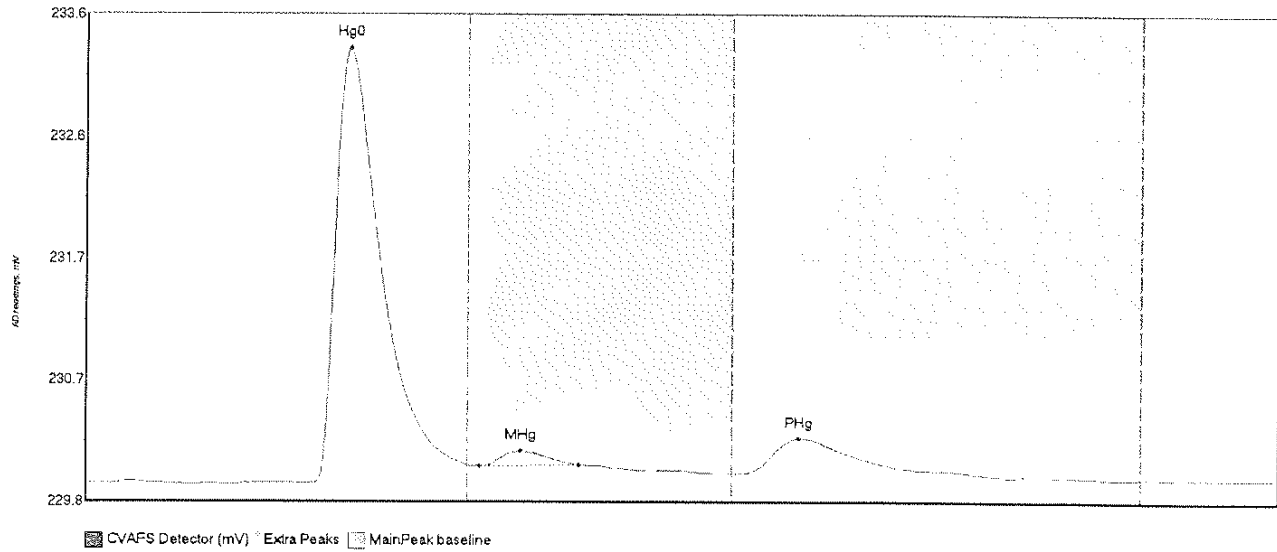
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BIShift	Comment
F005238-BLK2 Hg	37.119	47.7	76.9	229.92	229.96	55.8	0.350	OK	229.9243	0.00	0.03	F005238
F005238-BLK2 MH	13.018	83.3	131.0	229.97	229.98	91.0	0.067	OK	229.9243	0.00	0.03	F005238
F005238-BLK2 PH	44.524	135.0	182.4	229.98	229.99	150.8	0.247	OK	229.9243	0.00	0.03	F005238

#22: F005238-BLK3

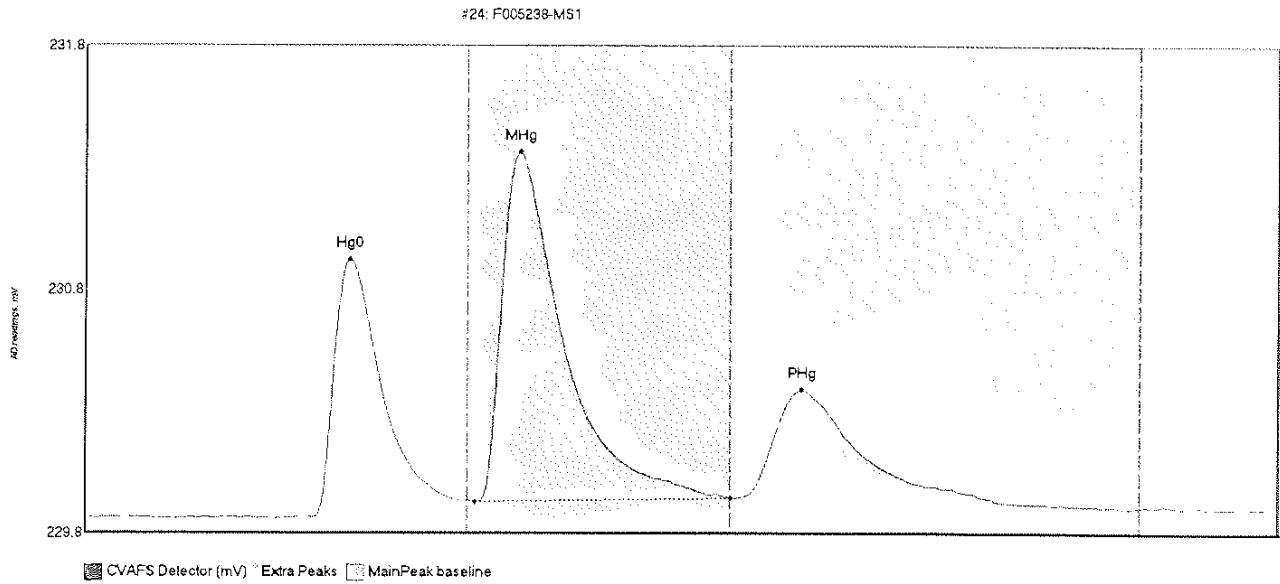


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005238-BLK3 Hg	182.443	37.9	80.0	229.91	230.00	55.4	1.682	CI	229.9116	0.00	0.02	F005238
F005238-BLK3 MH	6.745	82.5	110.6	229.99	230.00	92.1	0.042	OK	229.9116	0.00	0.02	F005238
F005238-BLK3 PH	39.860	138.6	188.8	229.97	229.96	150.1	0.206	OK	229.9116	0.00	0.02	F005238

#23: 0000074-07RE1

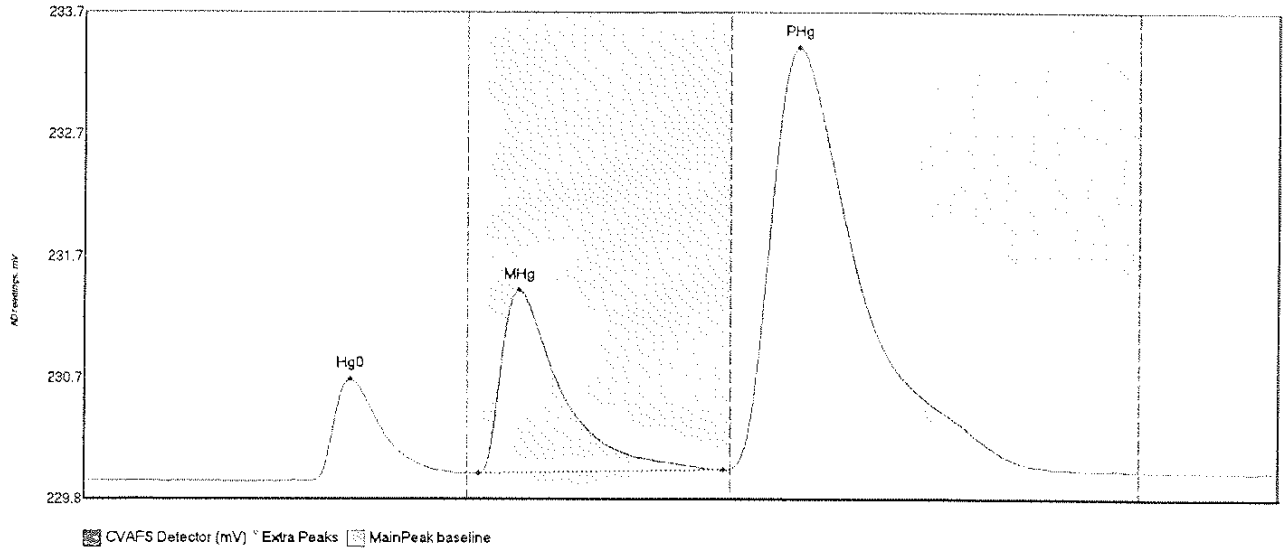


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0000074-07RE1 H	369.672	46.0	80.0	229.91	230.05	55.2	3.351	CT	229.9104	0.00	0.03	F005238
0000074-07RE1 M	12.186	62.6	103.2	230.04	230.05	91.2	0.117	OK	229.9104	0.00	0.03	F005238
0000074-07RE1 P	54.285	136.7	166.3	229.98	229.98	149.0	0.276	OK	229.9104	0.00	0.03	F005238

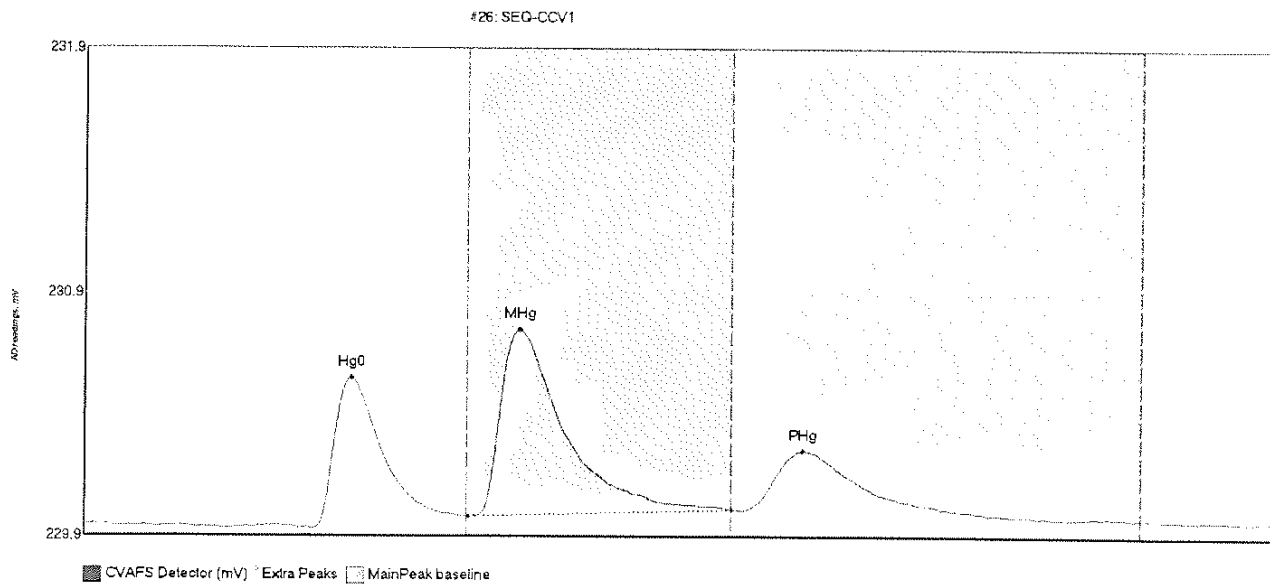


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005238-MS1 Hg0	116.722	47.8	60.0	229.91	229.98	55.6	1.058	CT	229.9120	0.00	0.04	F005238
F005238-MS1 MHg	211.964	81.6	135.0	229.97	229.99	90.9	1.432	CT	229.9120	0.00	0.04	F005238
F005238-MS1 PHg	90.127	135.6	190.7	229.99	229.97	149.9	0.446	OK	229.9120	0.00	0.04	F005238

#25: F005238-MSD1

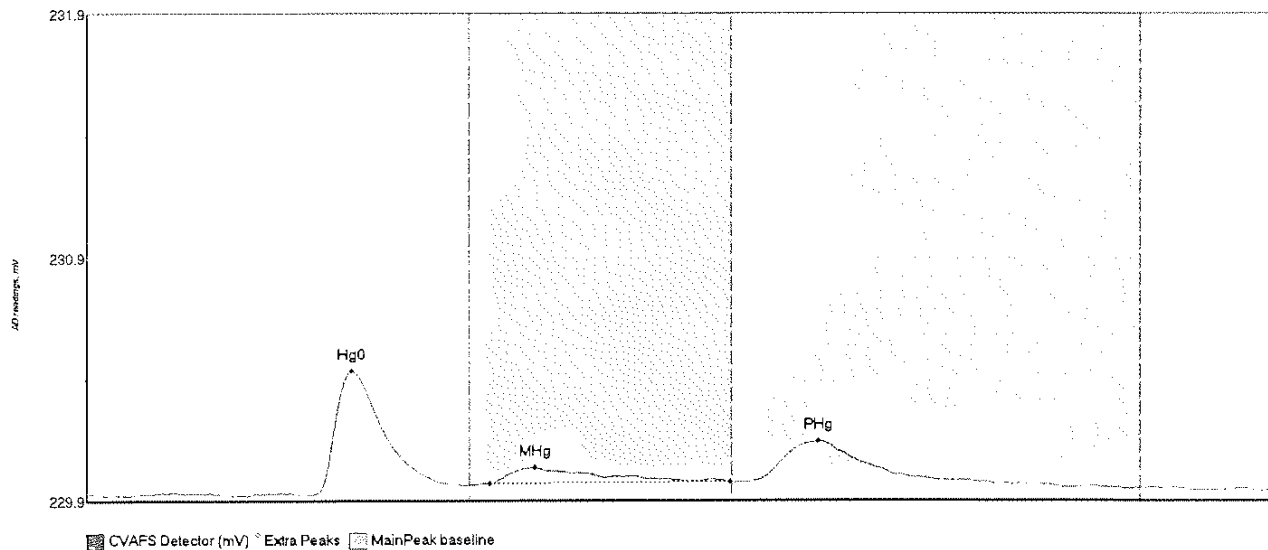


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	Shift	Comment
F005238-MSD1 Hg	90.926	46.0	80.0	229.91	229.97	55.5	0.620	CT	229.9160	0.00	0.06	F005238
F005238-MSD1 MH	216.359	82.5	133.5	229.97	230.00	91.0	1.474	OK	229.9160	0.00	0.06	F005238
F005238-MSD1 PH	727.345	135.0	203.0	230.01	230.00	149.2	3.386	OK	229.9160	0.00	0.06	F005238



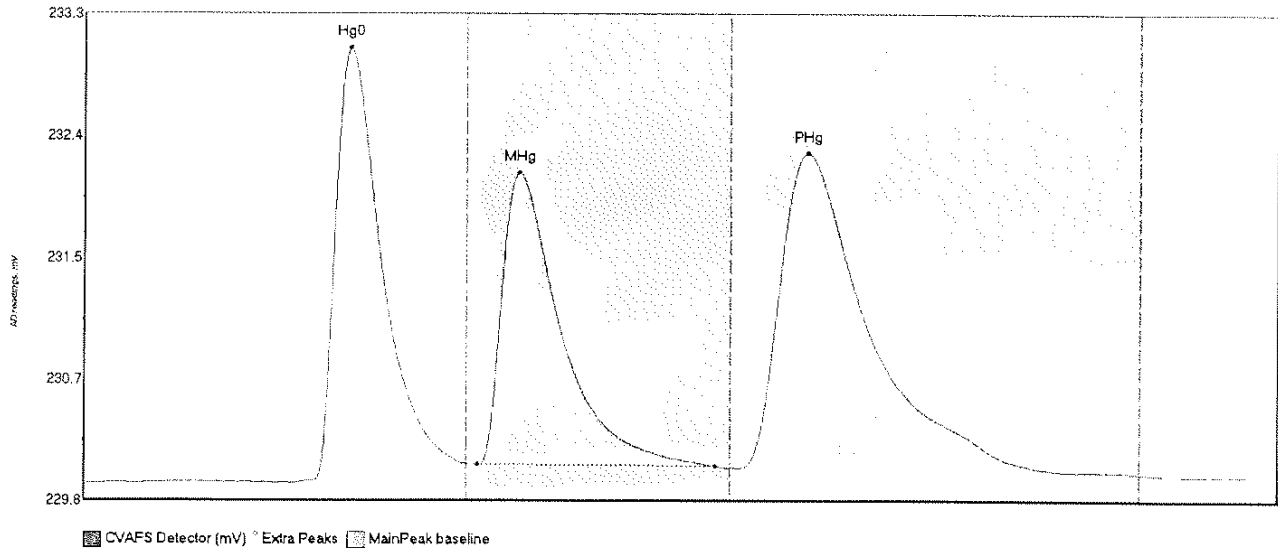
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CCV1 Hg0	66.825	47.7	60.0	229.90	229.96	55.8	0.616	CT	229.9232	0.00	0.01	
SEQ-CCV1 MHg	116.651	80.4	135.0	229.95	224.98	90.9	0.767	CT	229.9232	0.00	0.01	
SEQ-CCV1 PHg	44.185	127.6	179.0	229.98	229.98	150.0	0.244	OK	229.9232	0.00	0.01	

#27: SEQ-CCB1



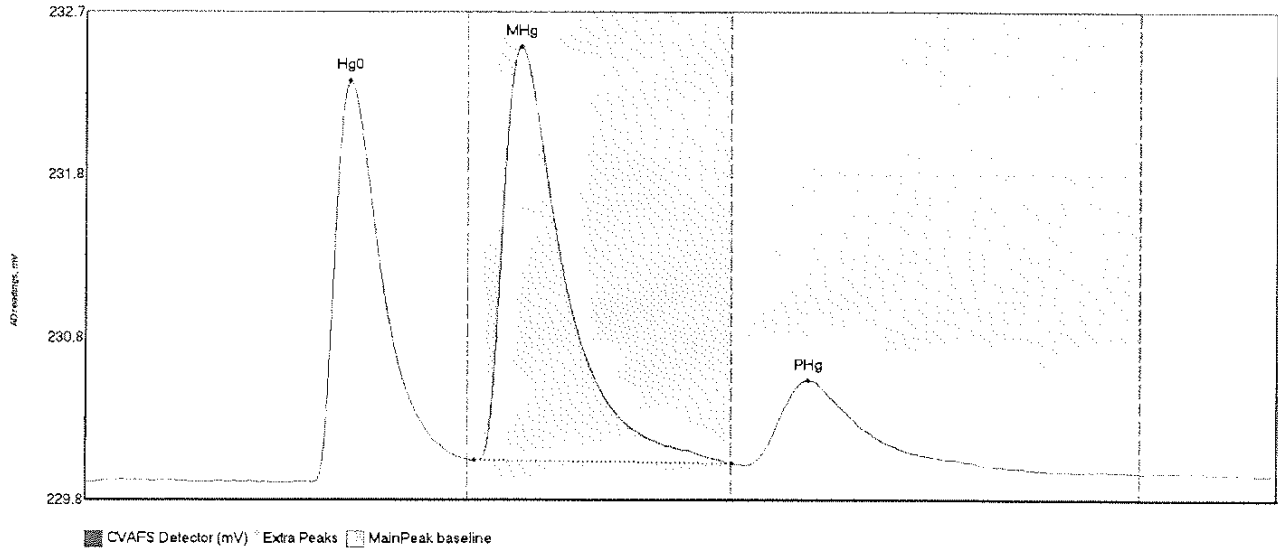
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCB1 Hg0	56.327	47.1	78.9	229.91	229.95	55.6	0.509	OK	229.9136	0.00	0.02	
SEQ-CCB1 MHg	13.880	84.2	134.6	229.95	229.96	93.7	0.065	OK	229.9136	0.00	0.02	
SEQ-CCB1 PHg	29.977	138.5	185.4	229.96	229.96	152.9	0.166	OK	229.9136	0.00	0.02	

#28: F005259-BS1

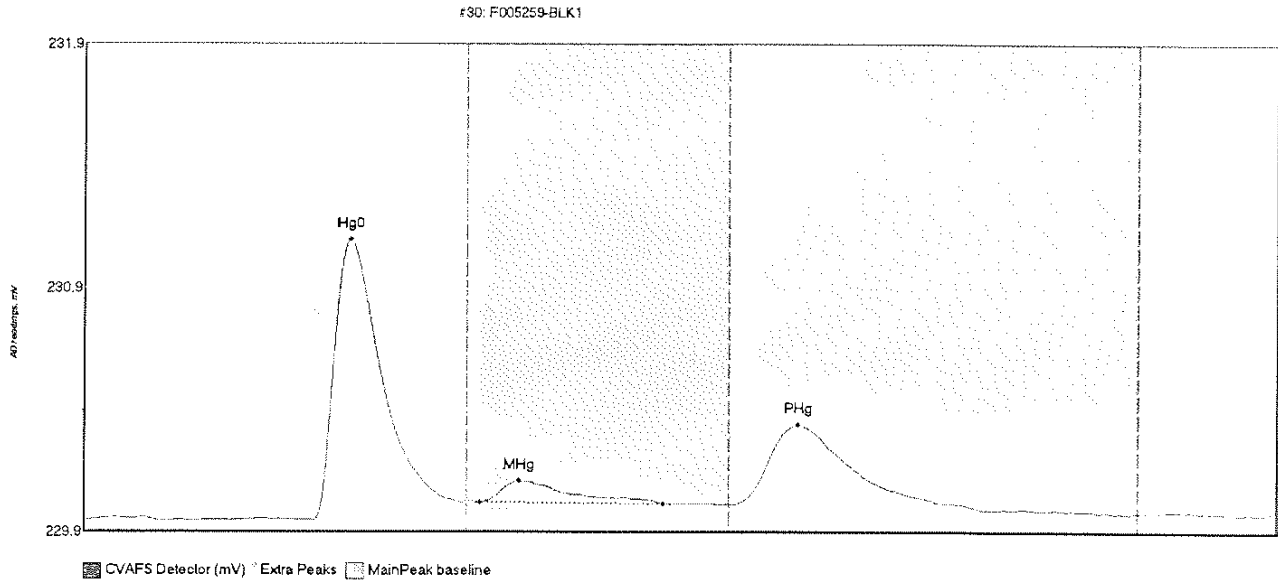


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
F005259-BS1 Hg0	343.397	43.8	80.0	229.91	230.05	55.6	3.122	CT	229.9094	0.00	0.06	F005259
F005259-BS1 MHg	297.981	82.5	131.9	230.04	230.03	91.2	2.097	OK	229.9094	0.00	0.06	F005259
F005259-BS1 PHg	479.148	136.3	199.7	230.02	230.01	151.0	2.268	OK	229.9094	0.00	0.06	F005259

#29: F005259-BSD1

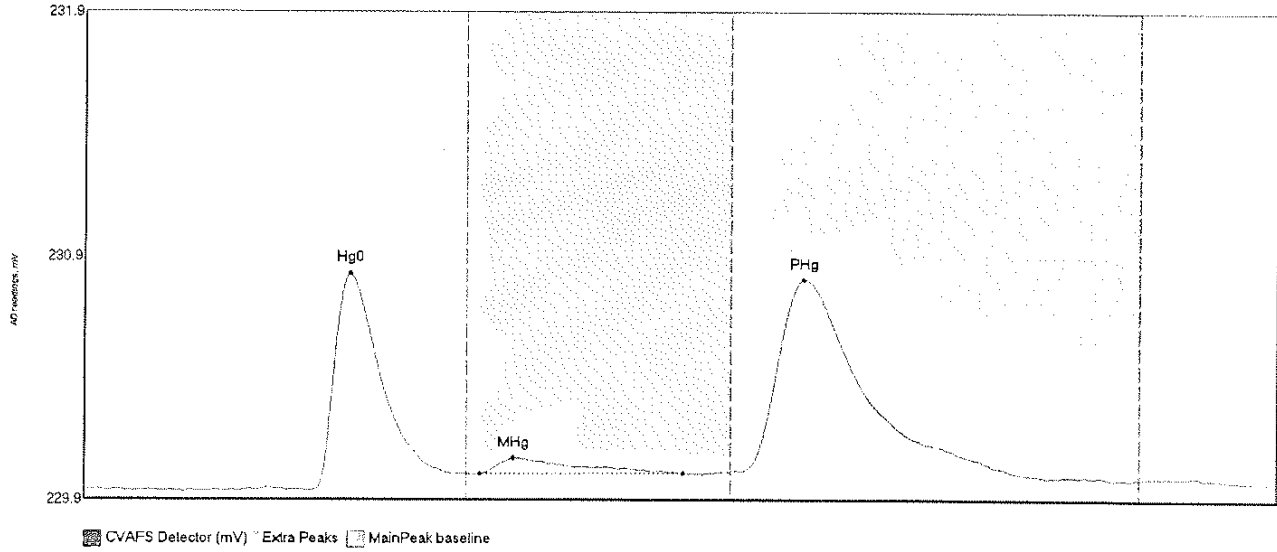


Base	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BIShift	Comment
F005259-BSD1 Hg	269.135	47.7	80.0	229.90	230.04	55.6	2.414	CT	229.9014	0.00	0.04	F005259
F005259-BSD1 MH	364.542	81.4	135.8	230.04	230.02	91.1	2.489	CT	229.9014	0.00	0.04	F005259
F005259-BSD1 PH	96.039	137.7	188.5	230.01	230.00	151.1	0.512	OK	229.9014	0.00	0.04	F005259



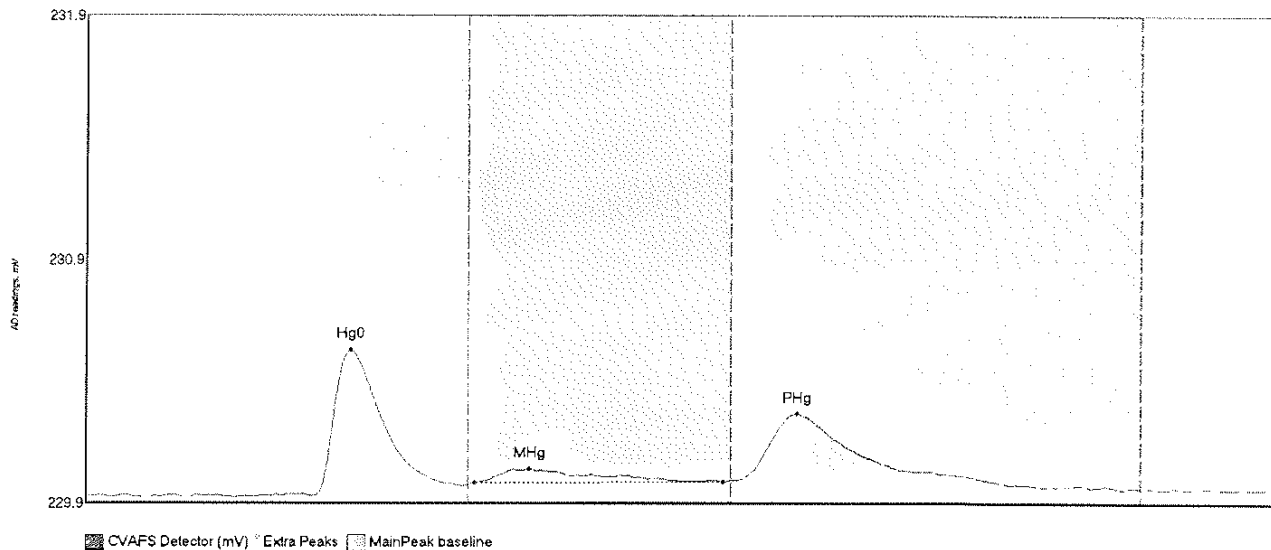
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005259-BLK1 Hg	126.596	48.1	78.8	229.92	229.99	55.8	1.145	OK	229.9212	0.03	0.03	F005259
F005259-BLK1 MHg	15.536	82.7	121.2	229.99	229.98	80.9	0.089	OK	229.9212	0.00	0.03	F005259
F005259-BLK1 PHg	59.618	135.8	179.5	229.90	229.98	149.3	0.328	OK	229.9212	0.00	0.03	F005259

*31: F005259-BLK2

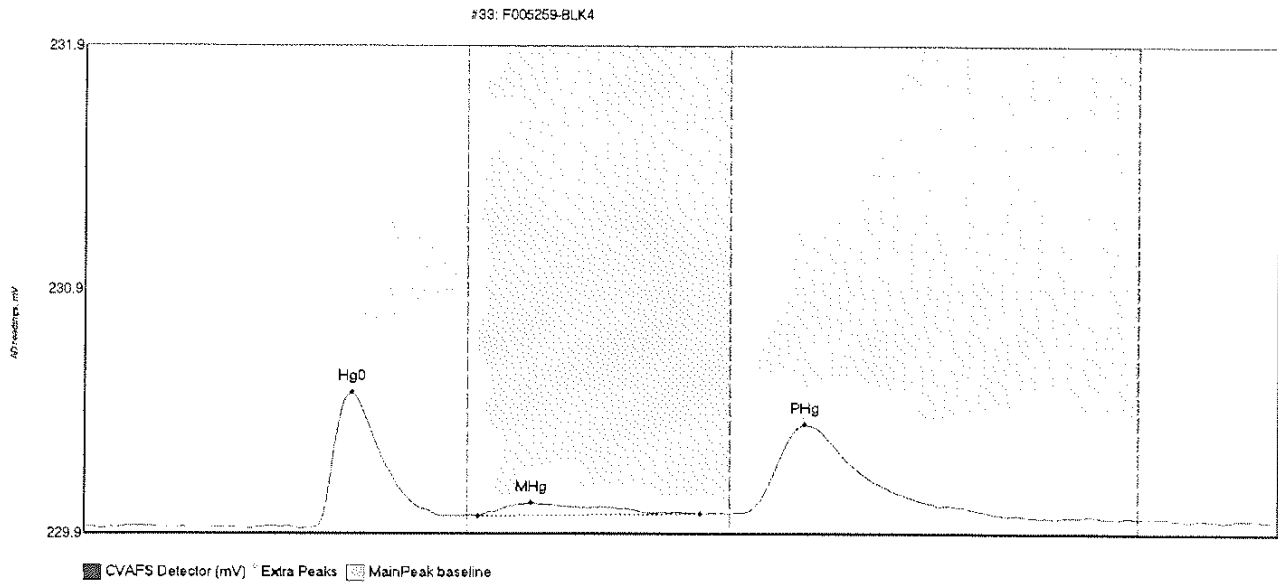


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005259-BLK2 Hg	96.737	46.8	77.3	229.92	229.99	55.6	0.890	OK	229.9255	0.00	0.03	F005259
F005259-BLK2 MH	12.479	82.9	125.1	229.99	229.99	89.8	0.966	OK	229.9255	0.00	0.03	F005259
F005259-BLK2 PH	160.248	136.9	196.0	230.00	229.99	150.2	0.791	OK	229.9255	0.00	0.03	F005259

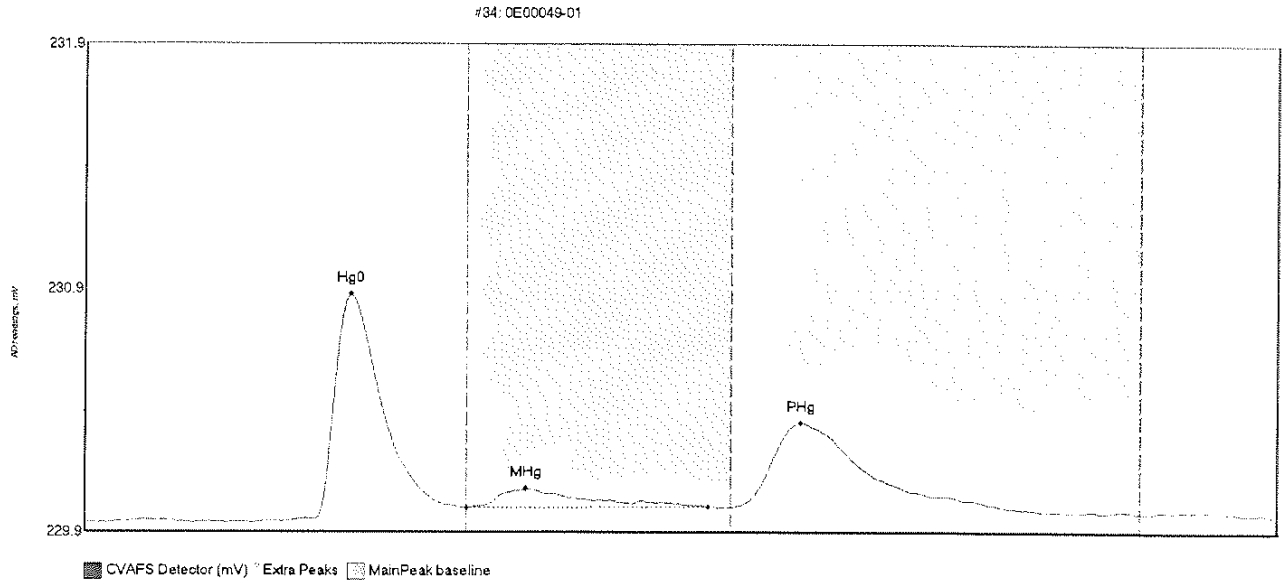
#32: F005259-BLK3



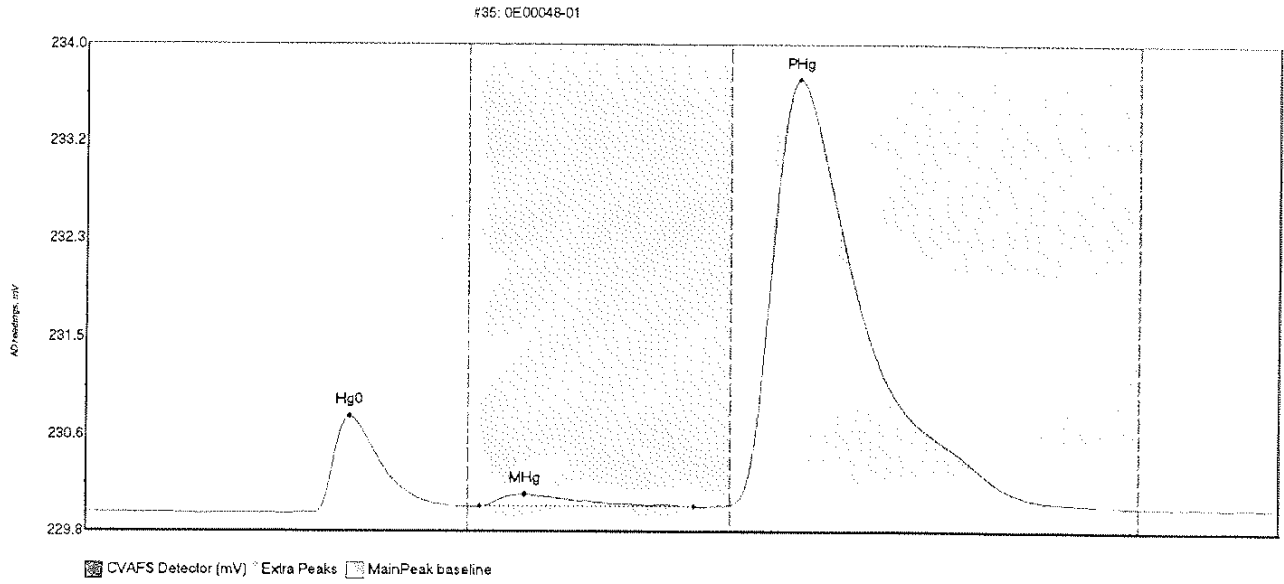
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F005259-BLK3 Hg	65.951	47.4	76.9	229.94	229.98	55.7	0.598	OK	229.9370	0.00	0.03	F005259
F005259-BLK3 MHg	13.561	81.4	133.3	229.99	229.99	92.6	0.058	OK	229.9370	0.00	0.03	F005259
F005259-BLK3 PHg	52.560	136.0	187.7	230.00	230.00	148.7	0.275	OK	229.9370	0.00	0.03	F005259



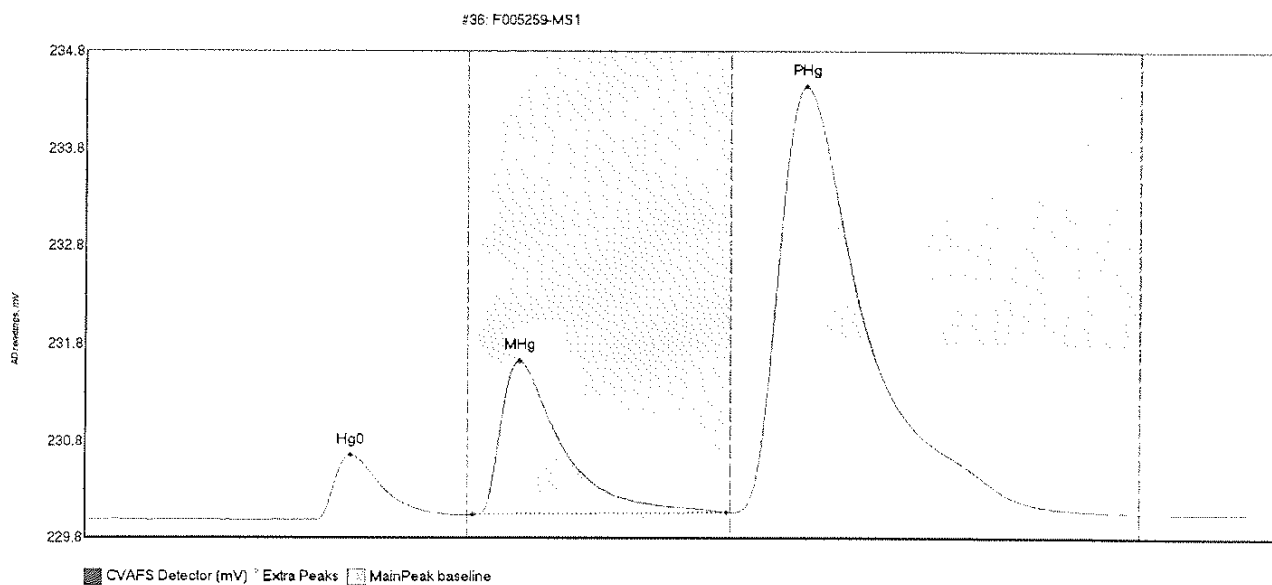
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	WDev	SlShift	Comment
F005259-BLK4 Hg	59.314	47.6	77.7	229.95	229.99	56.0	0.552	OK	229.9528	0.00	0.02	F005259
F005259-BLK4 MH	12.115	82.3	128.8	229.99	230.00	93.3	0.054	OK	229.9528	0.00	0.02	F005259
F005259-BLK4 PH	71.124	137.5	190.2	230.01	230.00	150.3	0.361	OK	229.9528	0.00	0.02	F005259



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0E00049-01 Hg0	101.986	36.2	79.9	229.94	230.00	55.6	0.933	OK	229.9415	0.00	0.03	F005259
0E00049-01 MHg	16.310	86.1	136.2	230.00	230.01	92.4	0.079	OK	229.9415	0.00	0.03	F005259
0E00049-01 PHg	74.683	135.0	191.4	230.00	230.01	149.5	0.348	OK	229.9415	0.00	0.03	F005259

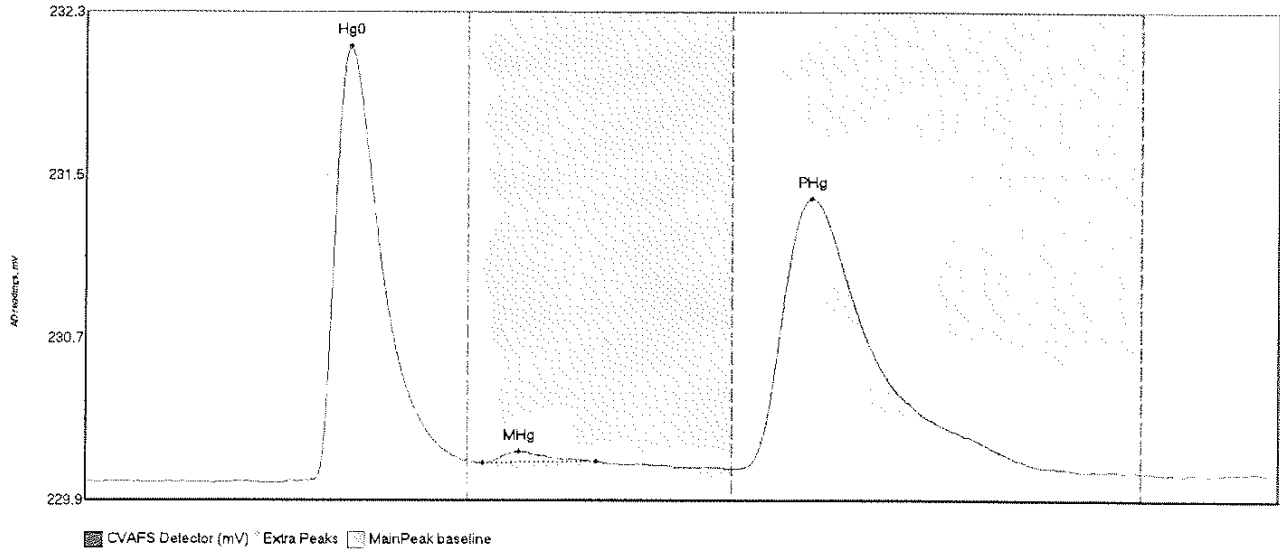


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00048-01 Hg0	52.100	46.2	60.0	229.97	230.02	55.6	0.834	CI	229.9743	0.00	0.03	F005259
0E00048-01 MHg	20.932	82.4	127.4	230.02	230.02	91.8	0.106	OK	229.9743	0.00	0.03	F005259
0E00048-01 PHg	792.429	135.0	203.9	230.04	230.05	149.4	3.695	OK	229.9743	0.00	0.03	F005259

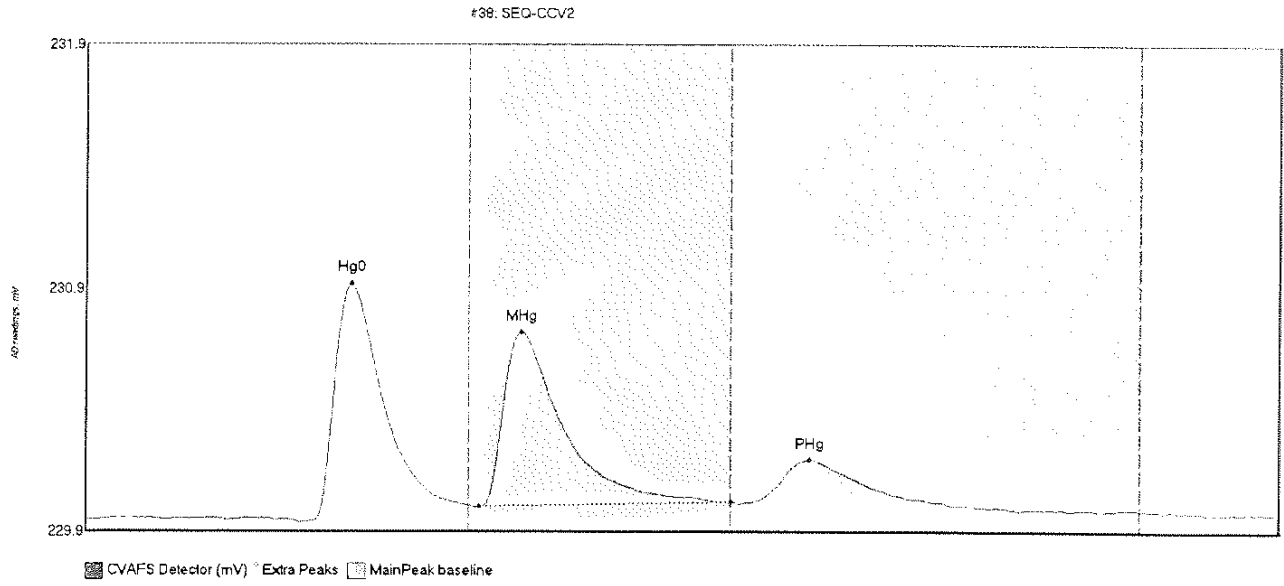


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BIShift	Comment
F005259-MS1 Hg0	74.643	47.7	79.6	229.95	230.00	55.6	0.674	OK	229.9595	0.00	0.07	F005259
F005259-MS1 MHg	237.913	81.1	134.1	230.00	230.03	90.9	1.699	OK	229.9595	0.00	0.07	F005259
F005259-MS1 PHg	934.921	135.5	212.2	230.03	230.03	150.7	4.446	OK	229.9595	0.00	0.07	F005259

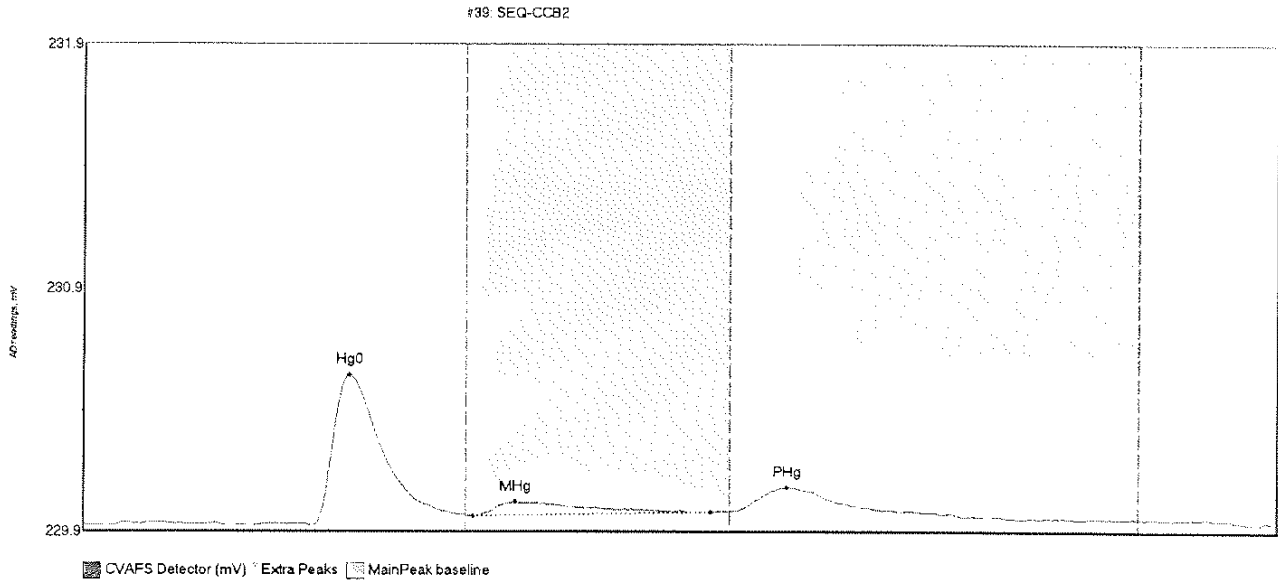
#37: 0E00049-01RE1



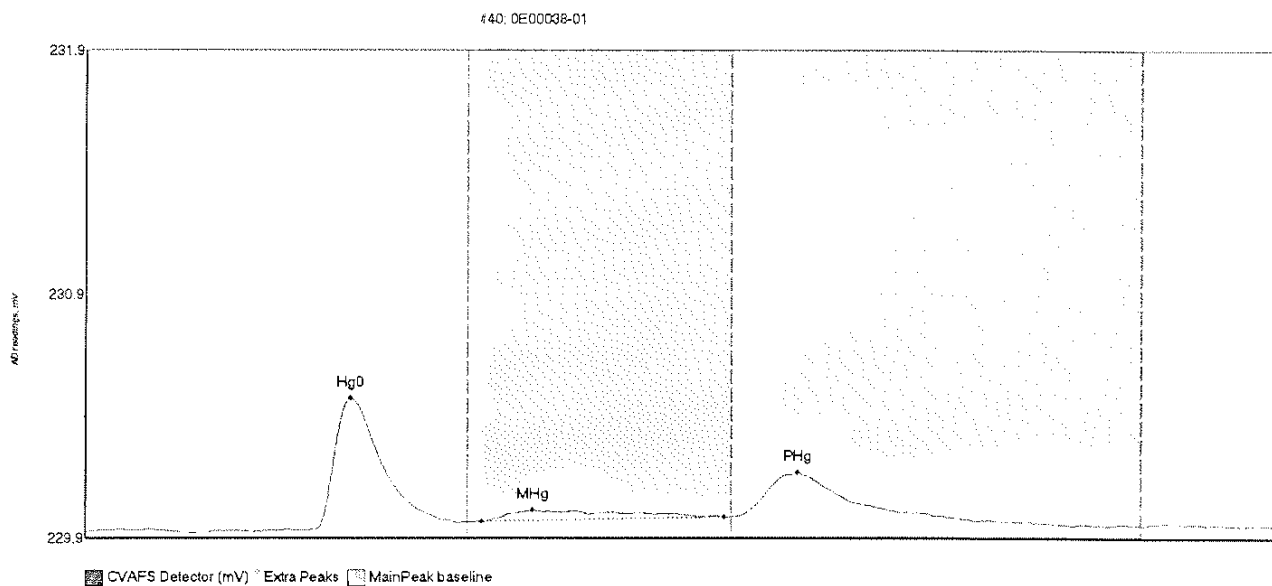
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
0E00049-01RE1 H	238.378	46.5	80.0	229.97	230.07	55.5	2.145	CT	229.9659	0.00	0.03	FO05259
0E00049-01RE1 M	5.913	83.2	106.5	230.66	230.06	90.7	0.057	OK	229.9659	0.00	0.03	FO05259
0E00049-01RE1 P	287.720	136.0	200.0	230.03	230.03	161.8	1.341	OK	229.9659	0.00	0.03	FO05259



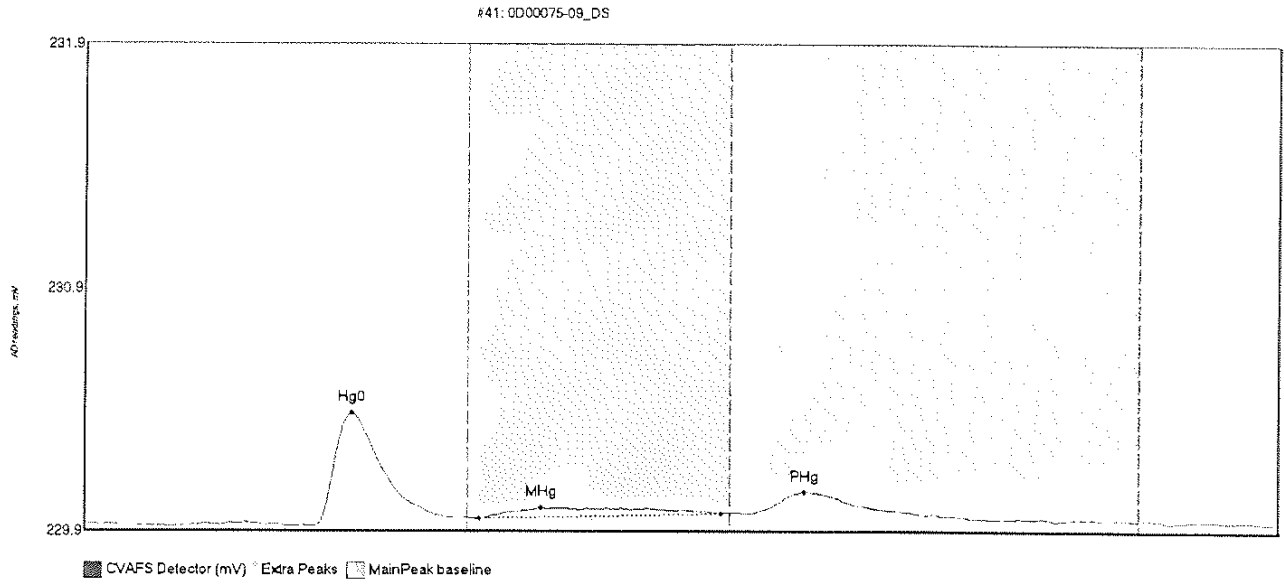
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CCV2 Hg0	168.951	47.9	80.0	229.96	230.93	55.7	0.974	CT	229.9709	0.00	0.02	
SEQ-CCV2 MHg	103.826	82.2	135.0	230.02	230.04	91.0	0.719	CT	229.9709	0.00	0.02	
SEQ-CCV2 PHg	29.489	139.1	176.7	230.04	230.04	151.4	0.175	OK	229.9709	0.00	0.02	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCB2 Hg0	69.706	47.9	78.4	229.97	230.02	55.5	0.617	OK	229.9756	0.00	0.01	
SEQ-CCB2 MHg	12.510	81.7	131.1	230.01	230.02	80.4	0.059	OK	229.9756	0.00	0.01	
SEQ-CCB2 PHg	14.014	136.6	166.0	230.03	230.04	146.9	0.094	OK	229.9756	0.00	0.01	

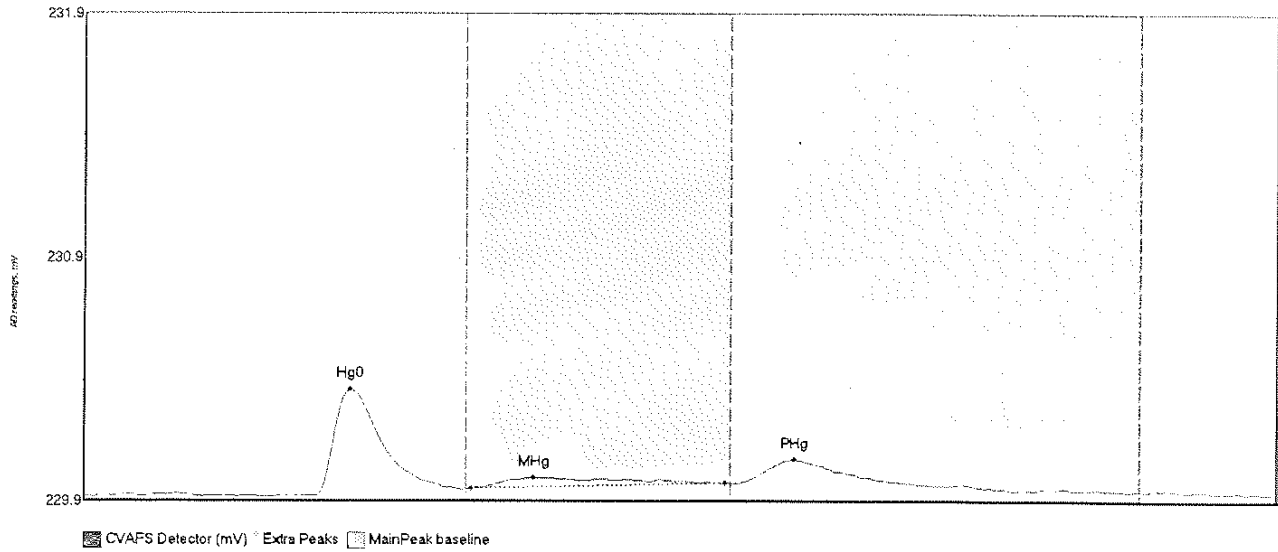


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00038-01 Hg0	55.626	40.7	78.3	229.97	230.00	55.6	0.538	OK	229.9648	0.00	0.02	FO05238
0E00038-01 MHg	11.894	82.9	133.5	230.00	230.02	93.5	0.047	OK	229.9648	0.00	0.02	FO05238
0E00038-01 PHg	30.167	136.3	177.2	230.03	230.03	149.0	0.179	OK	229.9648	0.00	0.02	FO05238



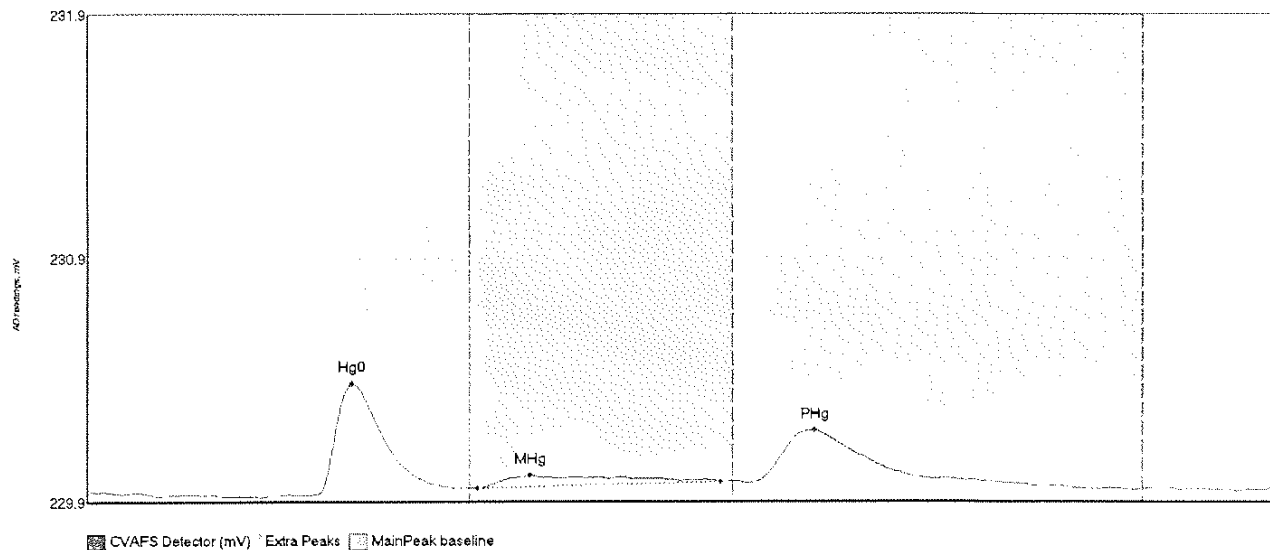
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0D00075-09_DS H	50.419	48.3	60.0	229.98	229.98	55.8	0.461	CT	229.9623	0.00	0.00	F005238 -
0D00075-09_DS M	12.237	82.4	133.1	229.98	230.00	95.4	0.045	OK	229.9623	0.00	0.00	F005238 -
0D00075-09_DS P	12.917	139.3	171.2	230.00	230.01	150.4	0.085	OK	229.9623	0.00	0.00	F005238 -

#42: 0D00075-10_DS

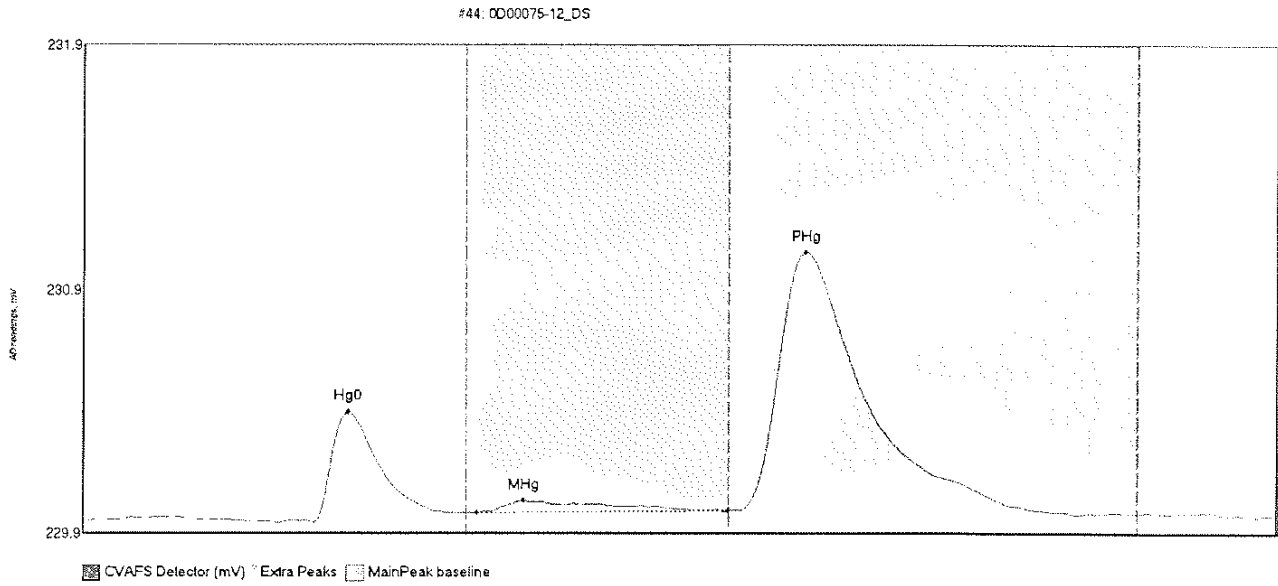


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0D00075-10_DS H	49.687	48.3	79.6	229.94	229.97	55.6	0.438	OK	229.9402	0.00	0.01	F005238 -
0D00075-10_DS M	10.986	81.1	133.8	229.97	229.99	94.2	0.045	OK	229.9402	0.00	0.01	F005238 -
0D00075-10_DS P	14.899	136.7	169.4	229.99	230.00	148.2	0.097	OK	229.9402	0.00	0.01	F005238 -

#43: 0D00075-11_DS

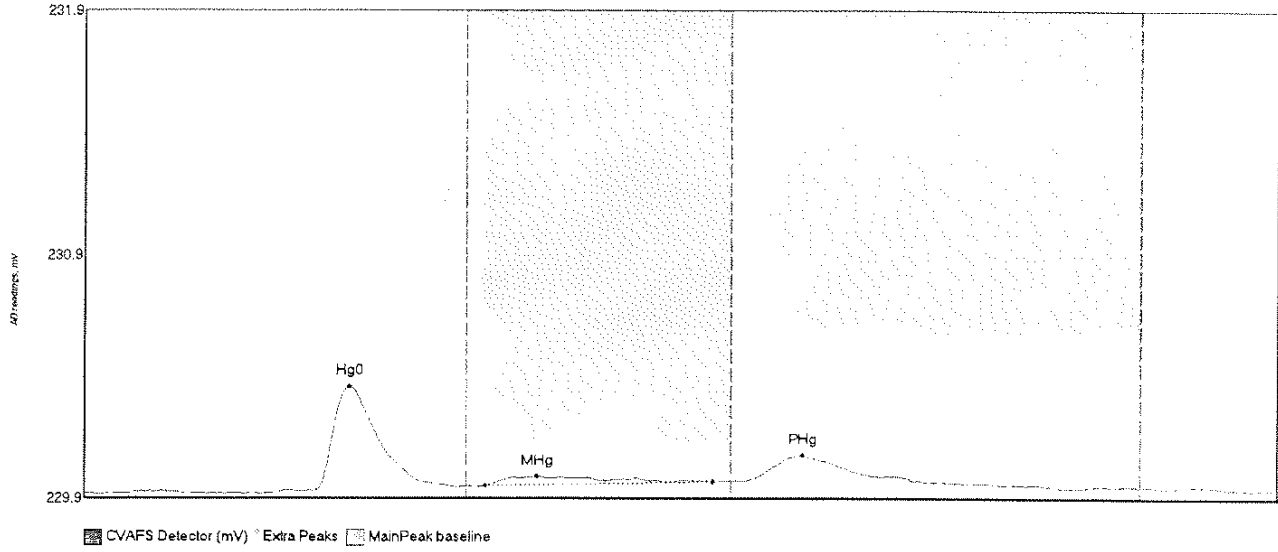


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0D00075-11_DS H	49.474	48.5	80.0	229.93	229.96	95.9	0.450	CT	229.9421	0.00	0.02	F005238 -
0D00075-11_DS M	12.597	81.7	132.3	229.96	229.98	92.6	0.052	OK	229.9421	0.00	0.02	F005238 -
0D00075-11_DS P	38.203	138.0	162.7	229.98	229.99	152.2	0.210	OK	229.9421	0.00	0.02	F005238 -

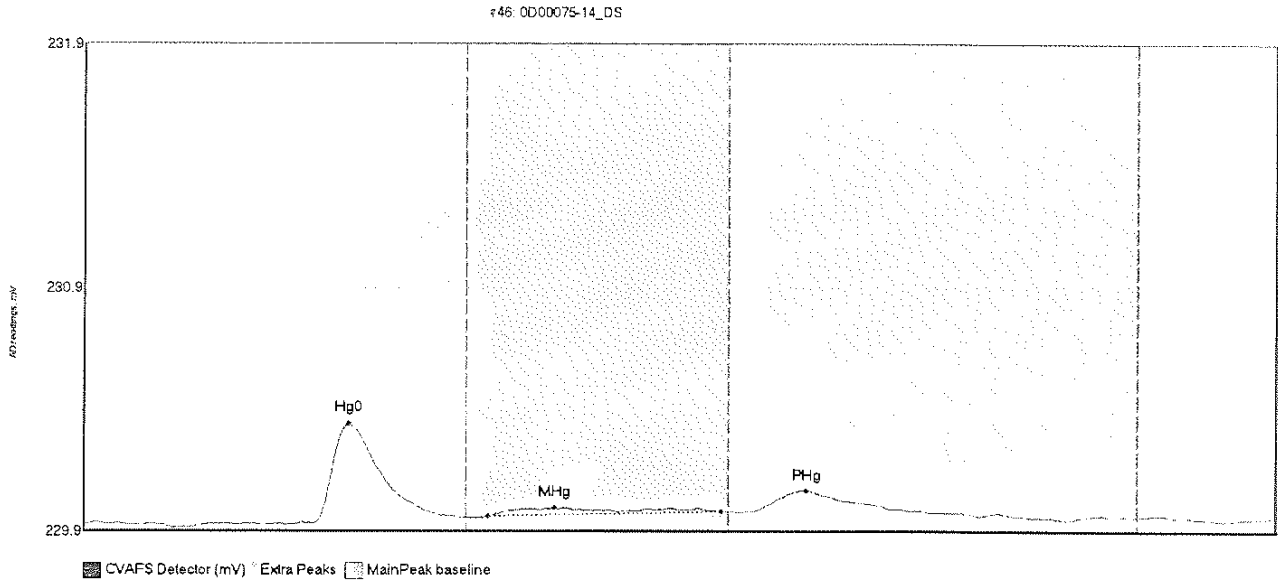


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift1	Comment
0000075-12_DS H	49.151	48.2	77.8	229.92	229.96	55.4	0.451	OK	229.9314	0.00	0.02	F005238 -
0000075-12_DS M	12.192	82.3	134.7	229.96	229.97	92.1	0.052	OK	229.9314	0.00	0.02	F005238 -
0000075-12_DS P	214.761	137.2	198.9	229.97	229.97	150.9	1.059	OK	229.9314	0.00	0.02	F005238 -

#45: 0000075-13_DS

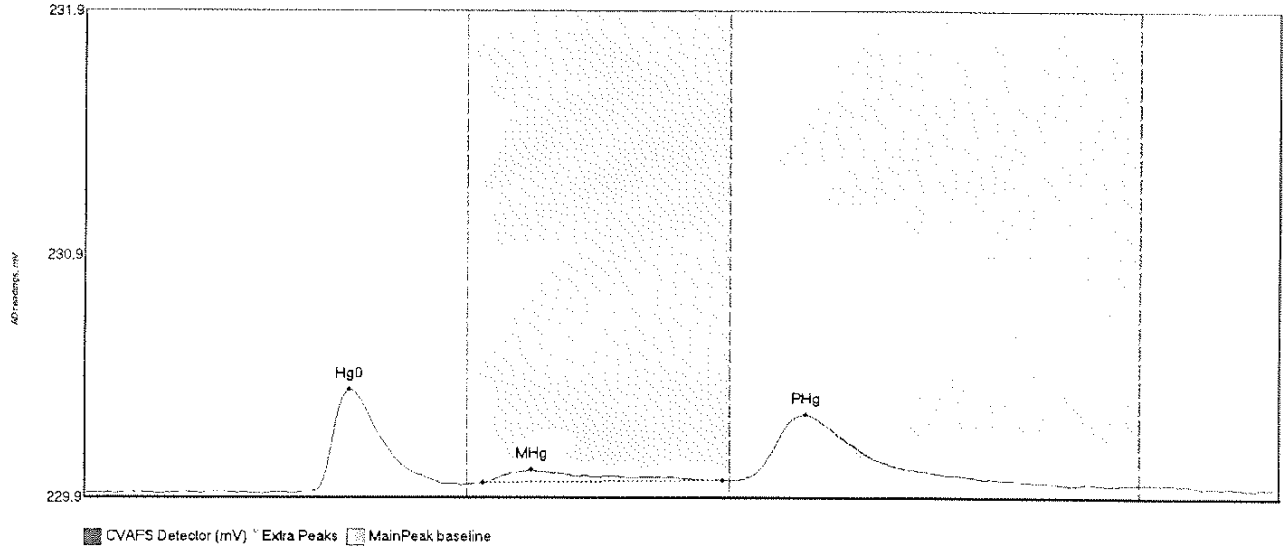


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BIShift	Comment
0000075-13_DS H	46.850	38.7	78.0	229.92	229.95	55.5	0.438	OK	229.9245	0.00	0.02	F005238 -
0000075-13_DS M	9.608	84.0	131.2	229.95	229.97	94.8	0.039	OK	229.9249	0.00	0.02	F005238 -
0000075-13_DS P	17.434	138.1	173.5	229.97	229.97	150.0	0.106	OK	229.9249	0.00	0.02	F005238 -

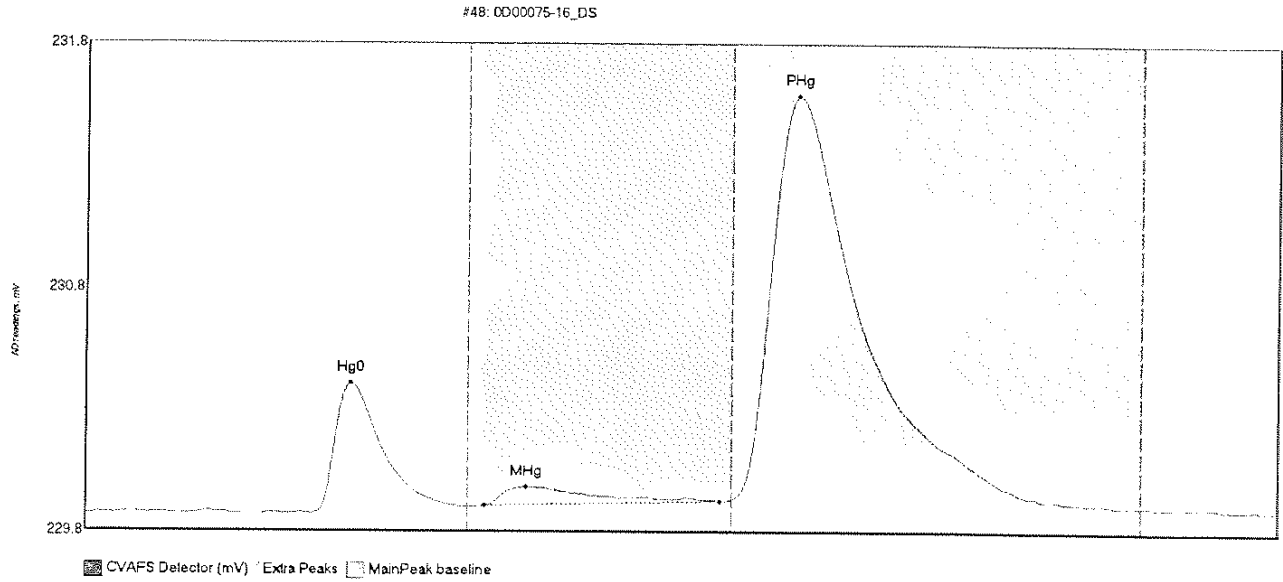


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
000075-14_DS R	45.600	98.3	80.0	229.92	229.95	55.7	0.408	CT	229.9209	0.00	0.02	F005238 -
000075-14_DS M	0.574	84.6	133.4	229.95	229.97	98.3	0.036	OK	229.9209	0.00	0.02	F005238 -
000075-14_DS P	13.383	139.8	172.4	229.97	229.97	151.1	0.087	OK	229.9209	0.00	0.02	F005238 -

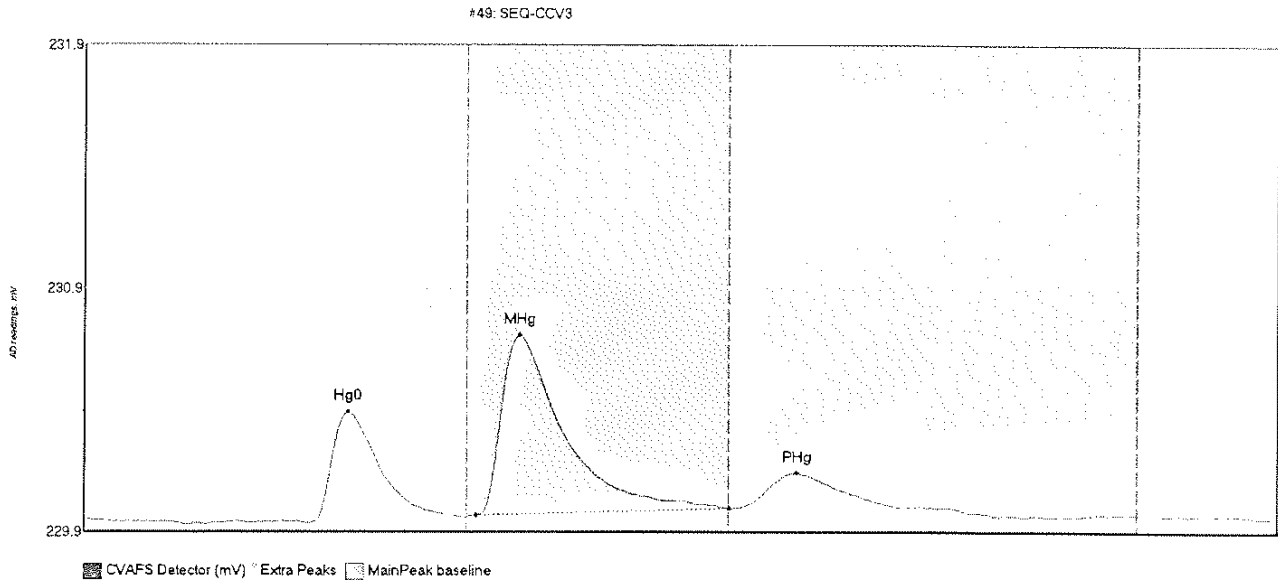
#47: 0D00075-15_DS



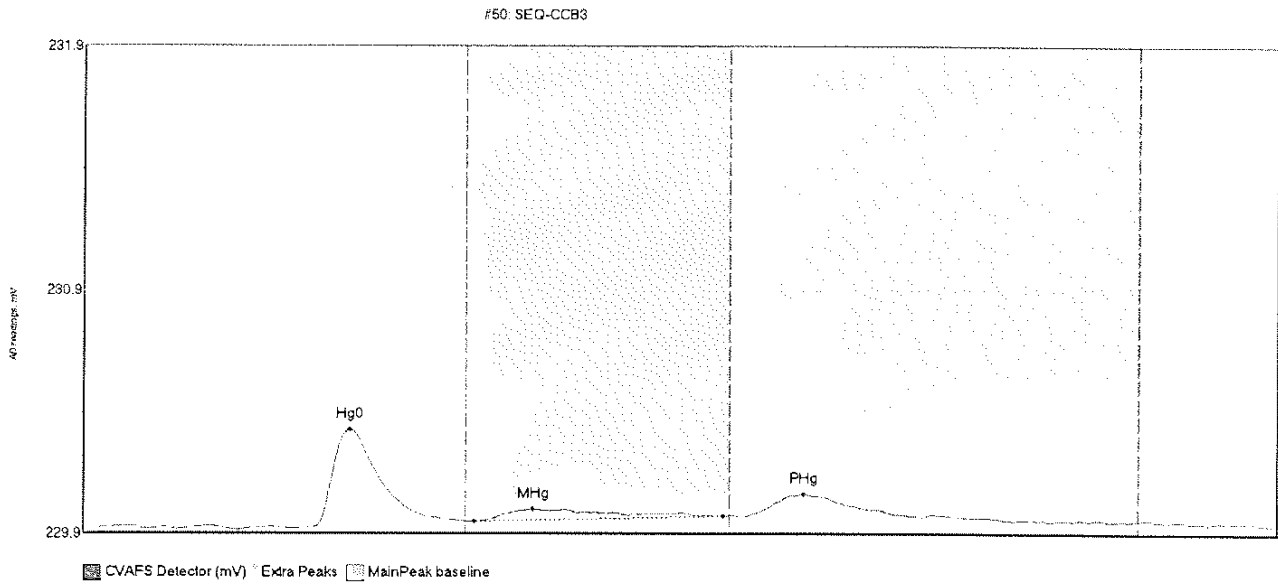
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0D00075-15_DS H	46.856	47.6	78.9	229.91	229.94	55.4	0.416	OK	229.9129	0.00	0.02	F005230 -
0D00075-15_DS M	10.840	83.4	133.5	229.95	229.96	93.7	0.054	OK	229.9129	0.00	0.02	F005238 -
0D00075-15_DS P	50.699	136.3	166.8	229.96	229.97	150.7	0.270	OK	229.9129	0.00	0.02	F005238 -



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
0000075-16_DS H	59.302	47.1	79.1	229.91	229.93	55.6	0.535	OK	229.9073	0.00	0.02	FO05238 -
0000075-16_DS M	16.402	83.5	132.5	229.94	229.96	92.1	0.879	OK	229.9073	0.00	0.02	FO05238 -
0000075-16_DS P	349.341	125.0	196.7	229.97	229.98	148.8	1.654	OK	229.9073	0.00	0.02	FO05238 -

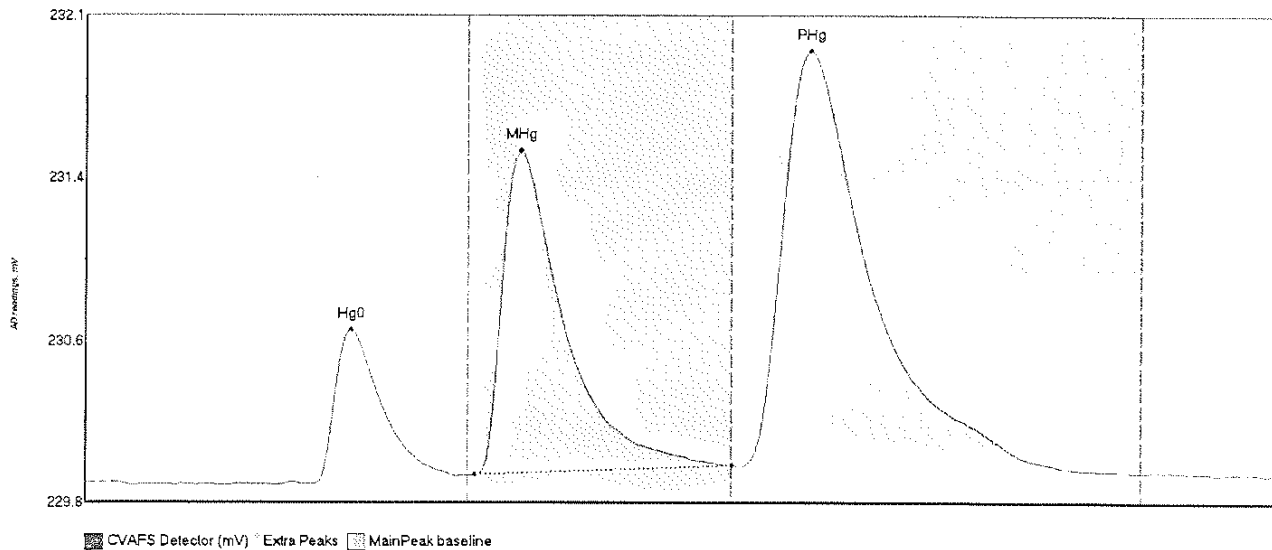


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CCV3 Hg0	50.560	47.3	79.6	229.90	229.92	55.4	0.454	OK	229.9143	0.00	0.00	
SEQ-CCV3 MHg	111.843	81.9	135.0	229.93	229.96	90.9	0.737	CT	229.9143	0.00	0.00	
SEQ-CCV3 PHg	23.739	136.6	175.9	229.96	229.96	149.1	0.146	OK	229.9143	0.00	0.00	



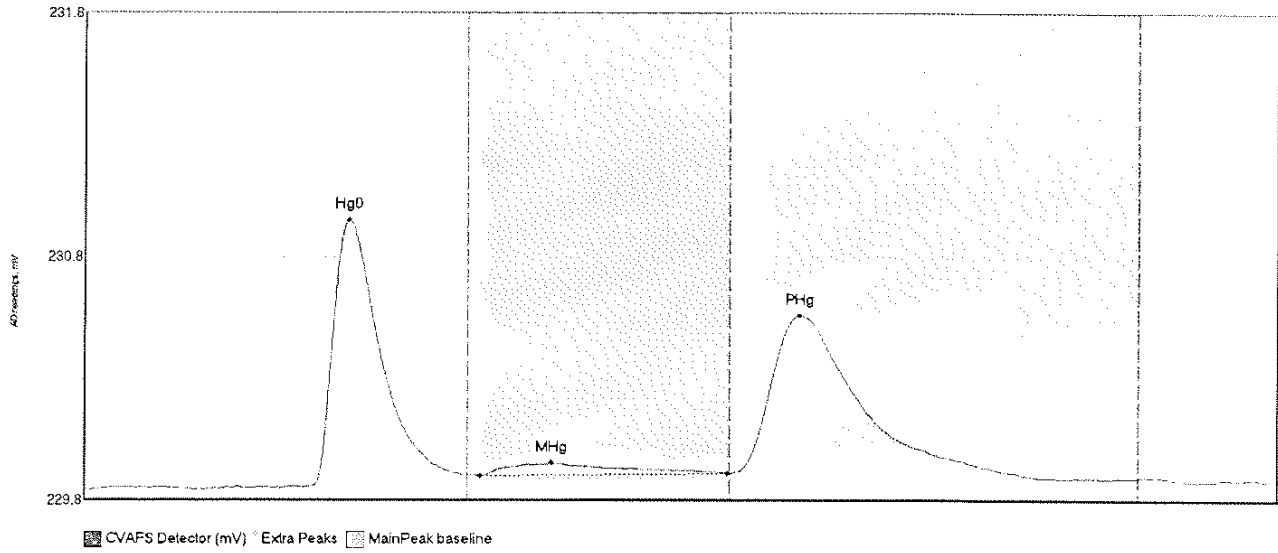
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCB3 Hg0	44.273	47.6	80.0	229.90	229.93	55.6	0.402	CI	229.9029	0.00	0.01	
SEQ-CCB3 MHg	11.853	81.8	133.7	229.92	229.95	94.2	0.051	OK	229.9029	0.00	0.01	
SEQ-CCB3 PHg	14.356	137.7	169.3	229.95	229.96	150.3	0.093	OK	229.9029	0.00	0.01	

#52: F005259-MSD1

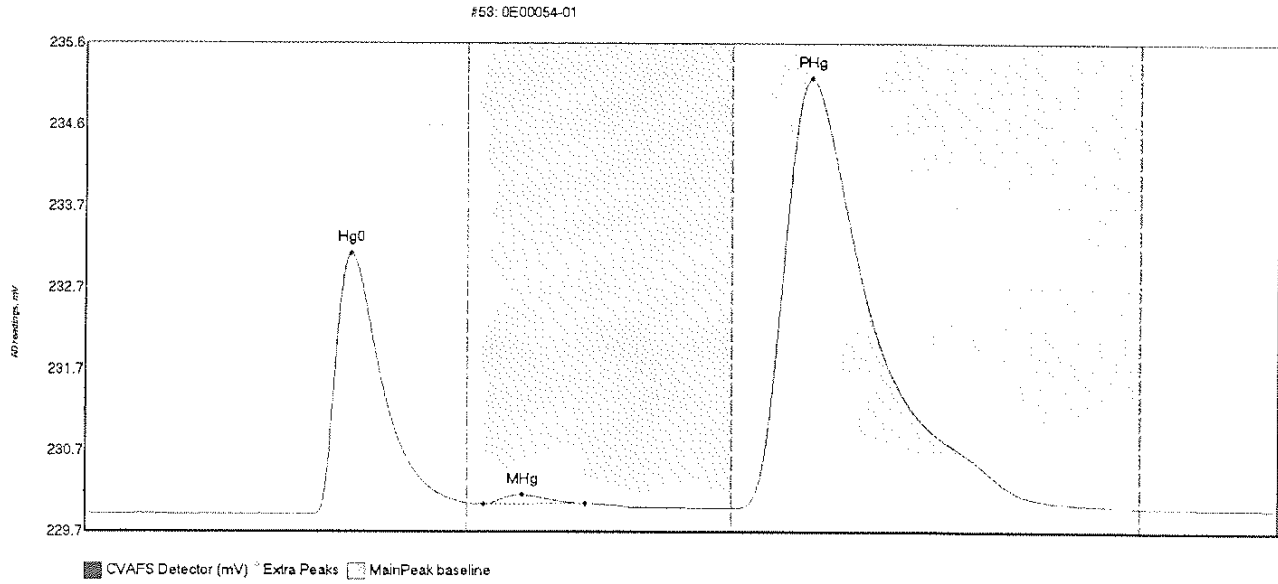


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F005259-MSD1 Hg	81.525	47.5	77.0	229.90	229.94	55.7	0.736	OK	229.9089	0.00	0.04	F005259
F005259-MSD1 MH	229.977	81.4	135.0	229.94	229.99	90.9	1.546	CT	229.9089	0.00	0.04	F005259
F005259-MSD1 PH	419.476	137.3	203.9	229.99	229.97	151.6	1.964	OK	229.9089	0.00	0.04	F005259

#51: 0E00049-01RE2

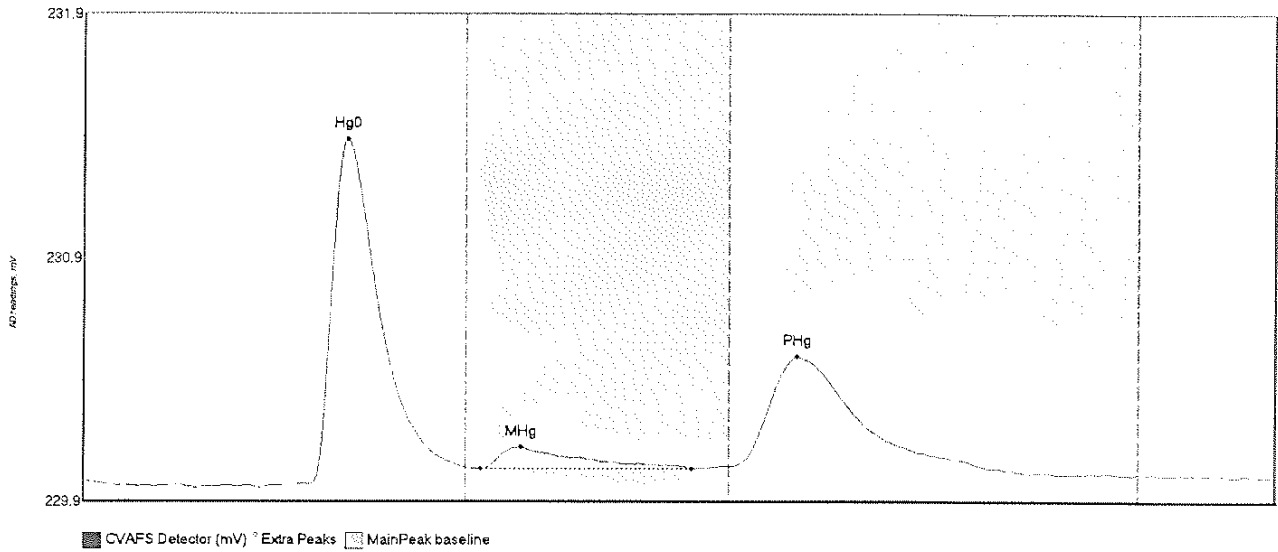


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00049-01RE2 H	120.355	41.5	79.8	229.90	229.95	55.4	1.096	OK	229.8953	0.00	0.03	F005259
0E00049-01RE2 M	13.865	82.6	134.5	229.95	229.96	97.5	0.052	OK	229.8953	0.00	0.03	F005259
0E00049-01RE2 P	131.257	135.0	191.3	229.96	229.97	149.4	0.650	OK	229.8953	0.00	0.03	F005259



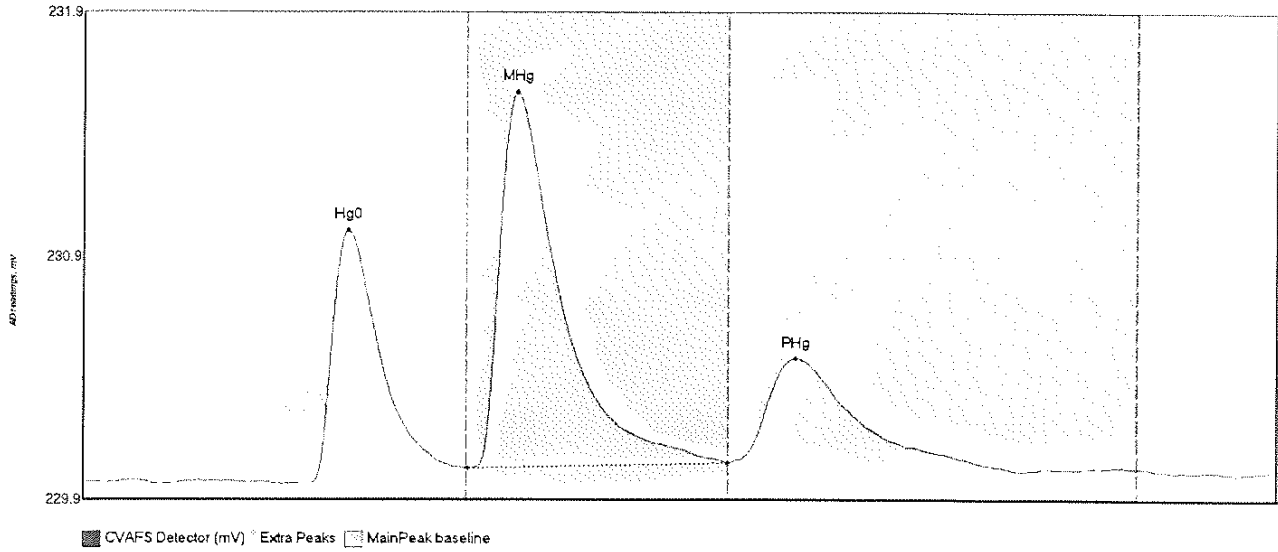
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00054-01 Hg0	352.624	47.4	80.0	229.91	230.05	55.5	3.175	CF	229.9177	0.00	0.05	F005238
0E00054-01 MHg	11.576	81.5	104.6	230.03	230.04	91.6	0.114	OK	229.9177	0.00	0.05	F005238
0E00054-01 PHg	1122.822	135.8	218.8	229.99	230.00	151.8	5.228	OK	229.9177	0.00	0.05	F005238

#54: 000062-05RE1



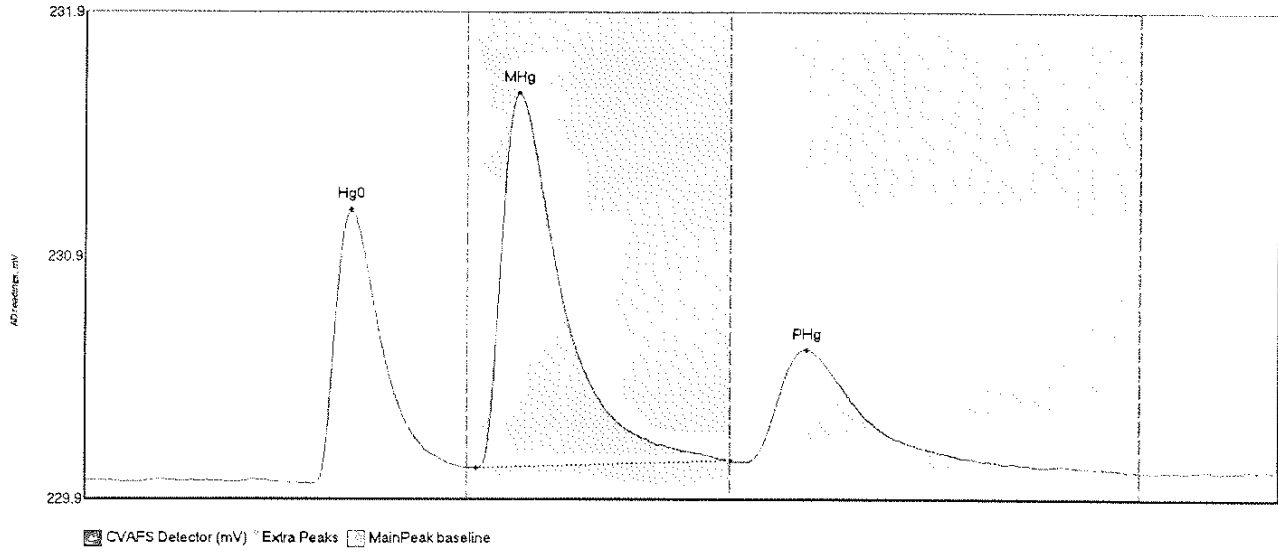
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
000062-05RE1 H	158.195	47.4	80.0	229.93	229.99	55.4	1.415	CT	229.9365	0.00	0.02	F005238
000062-05RE1 M	17.109	83.0	127.0	229.99	229.99	91.4	0.090	OK	229.9365	0.00	0.02	F005238
000062-05RE1 P	92.193	135.0	168.8	230.00	229.99	149.2	0.451	OK	229.9365	0.00	0.02	F005238

#55: F005238-MS2



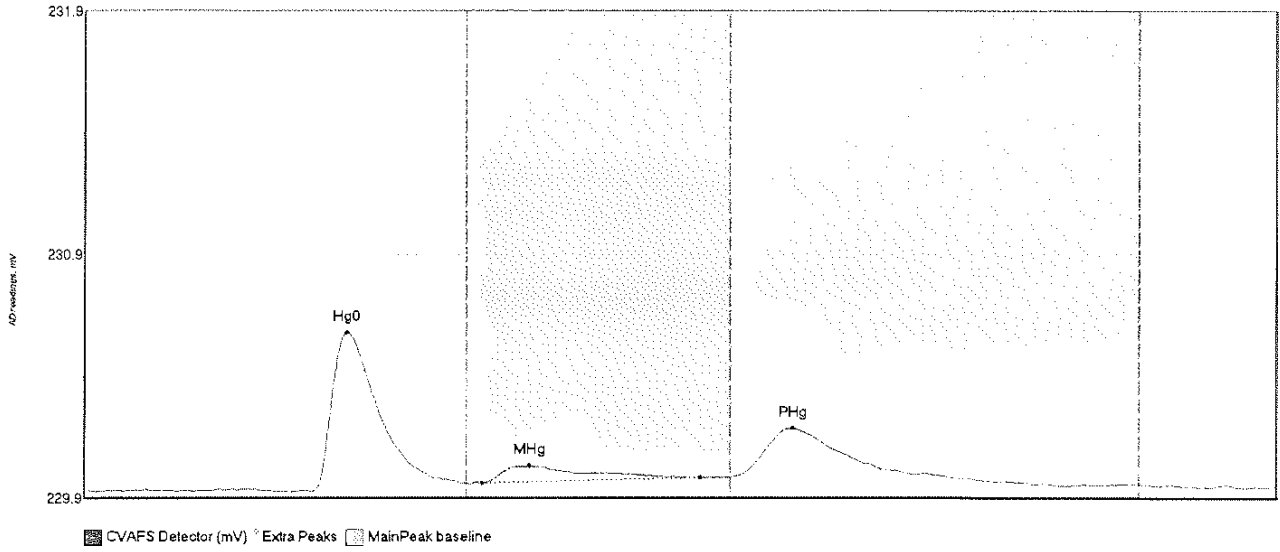
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	Shift	Comment
F005238-MS2 Hg0	114.980	47.7	80.0	229.93	229.99	55.5	1.036	CT	229.9336	0.00	0.04	F005238
F005238-MS2 MHg	228.075	80.3	134.9	229.99	230.01	90.7	1.543	OK	229.9336	0.00	0.04	F005238
F005238-MS2 PHg	87.575	135.2	190.3	230.01	230.00	149.0	0.428	OK	229.9336	0.00	0.04	F005238

756: F005238-MSD2



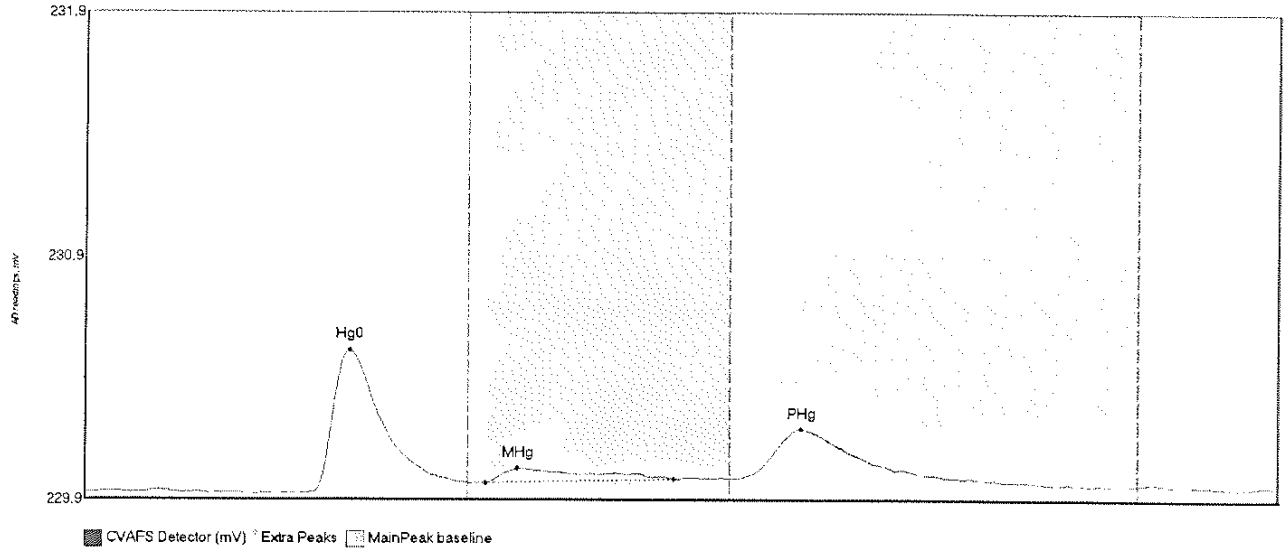
Name	Area	Start Time	Endtime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	SlDev	BIShift	Comment
F005238-MSD2 Hg	124.403	47.3	75.9	229.92	229.98	55.6	1.122	OK	229.9333	0.00	0.04	F005238
F005238-MSD2 MH	226.485	82.0	135.0	229.98	230.01	91.0	1.540	CF	229.9333	0.00	0.04	F005238
F005238-MSD2 PH	85.055	138.4	186.7	230.01	230.01	150.8	0.463	OK	229.9333	0.00	0.04	F005238

#67: 0D00062-01RE1



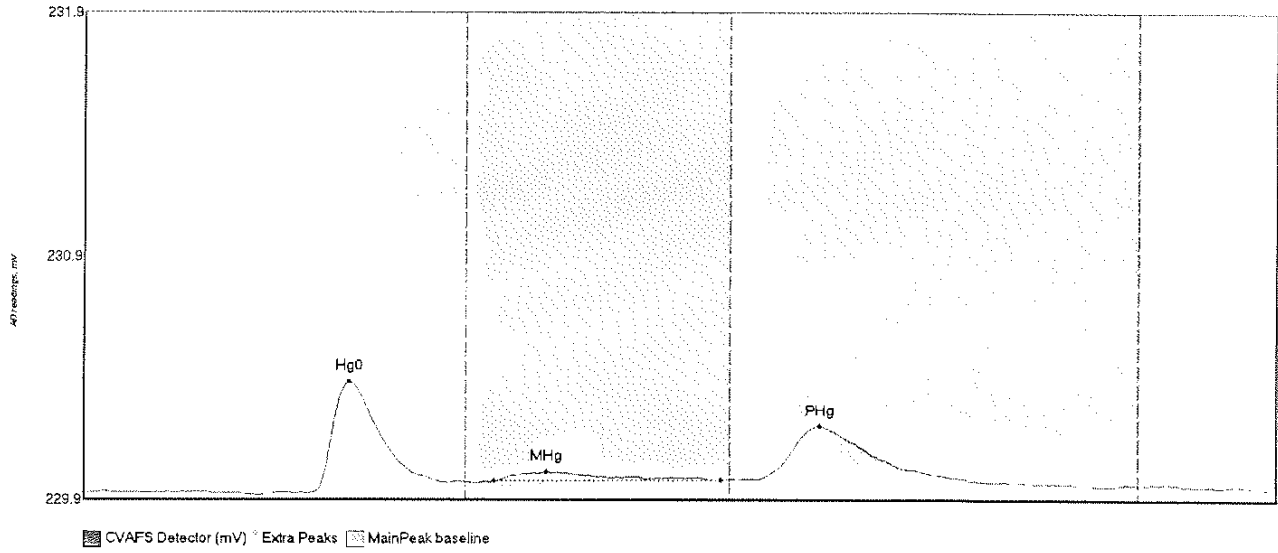
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0D00062-01RE1 H	72.055	47.9	80.0	229.93	229.96	55.3	0.650	CI	229.9327	0.00	0.01	F005238
0D00062-01RE1 M	12.996	83.3	128.6	229.96	229.98	93.0	0.070	OK	229.9327	0.00	0.01	F005238
0D00062-01RE1 P	34.516	135.2	179.2	229.99	229.99	148.1	0.200	OK	229.9327	0.00	0.01	F005238

#58: 000062-02RE1



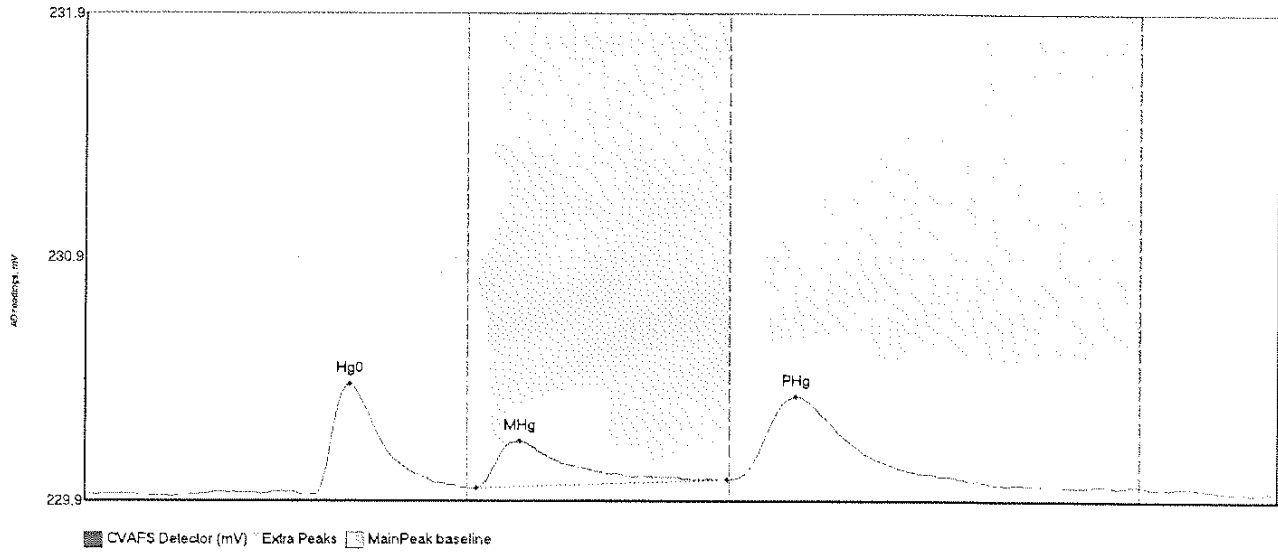
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
000062-02RE1 H	65.771	48.0	80.0	229.92	229.96	55.6	0.588	CT	229.9243	0.03	0.02	F005238
000062-02RE1 M	11.574	83.7	123.4	229.96	229.98	90.4	0.058	OK	229.9243	0.00	0.02	F005238
000062-02RE1 P	35.662	137.8	179.8	229.98	229.98	145.8	0.203	OK	229.9243	0.00	0.02	F005238

#59: 0D0062-06RE1

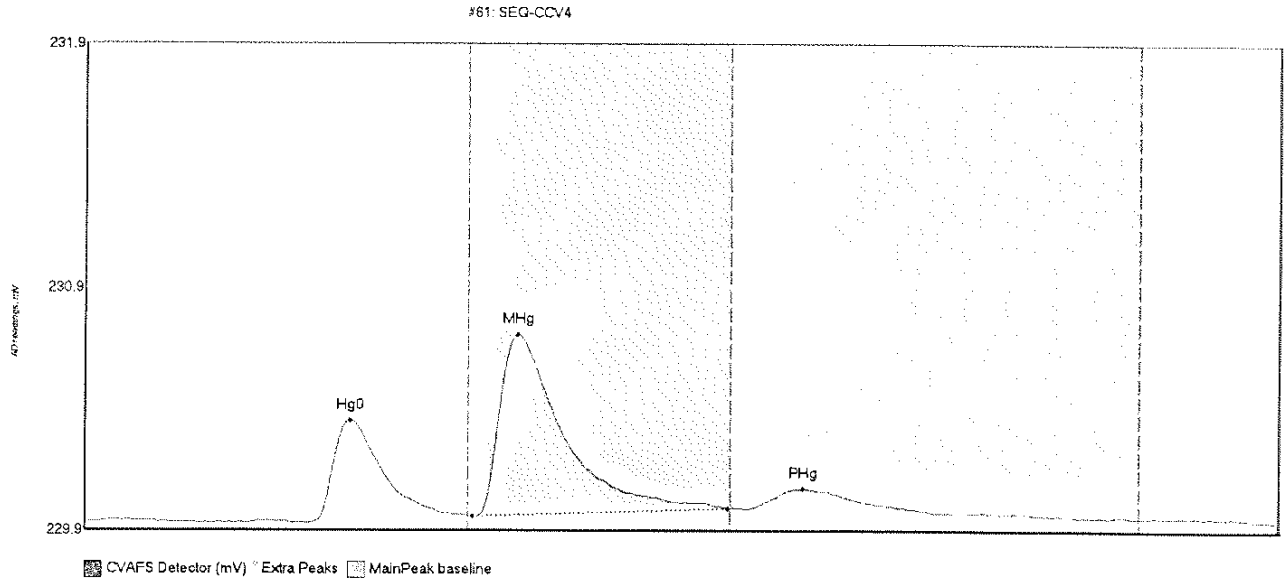


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0D0062-06RE1 H	49.872	46.8	76.6	229.92	229.96	55.6	0.460	OK	229.9177	0.03	0.02	F005238
0D0062-06RE1 M	8.260	85.9	133.1	229.96	229.97	96.9	0.038	OK	229.9177	0.03	0.02	F005238
0D0062-06RE1 P	38.381	140.8	183.6	229.97	229.98	153.7	0.217	OK	229.9177	0.03	0.02	F005238

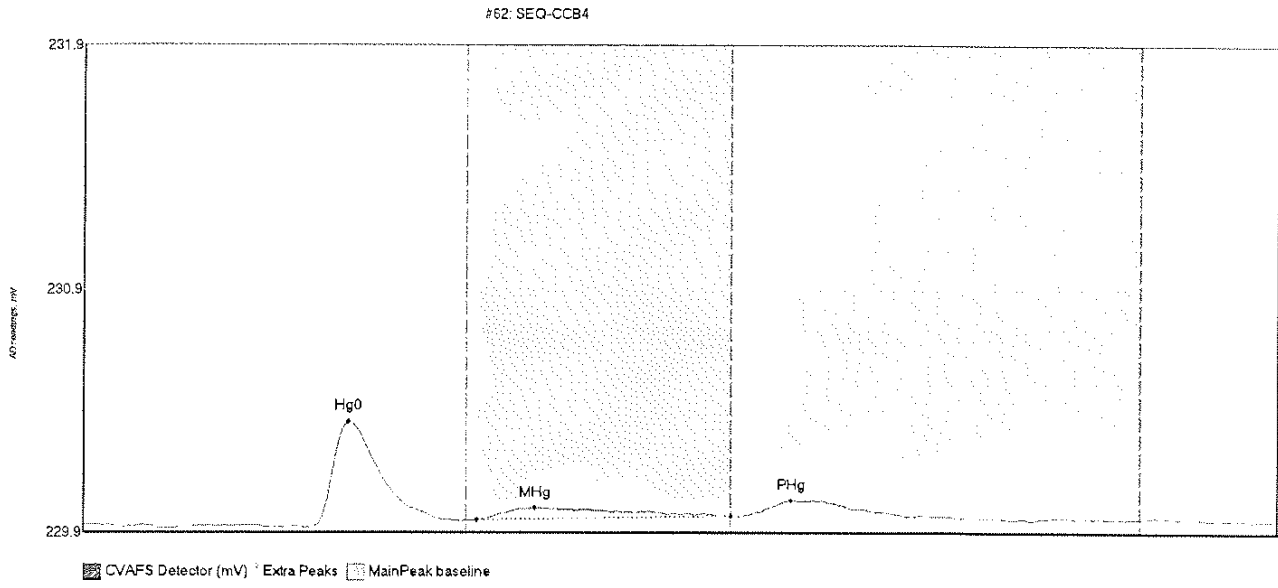
#60: 0D00074-08RE1



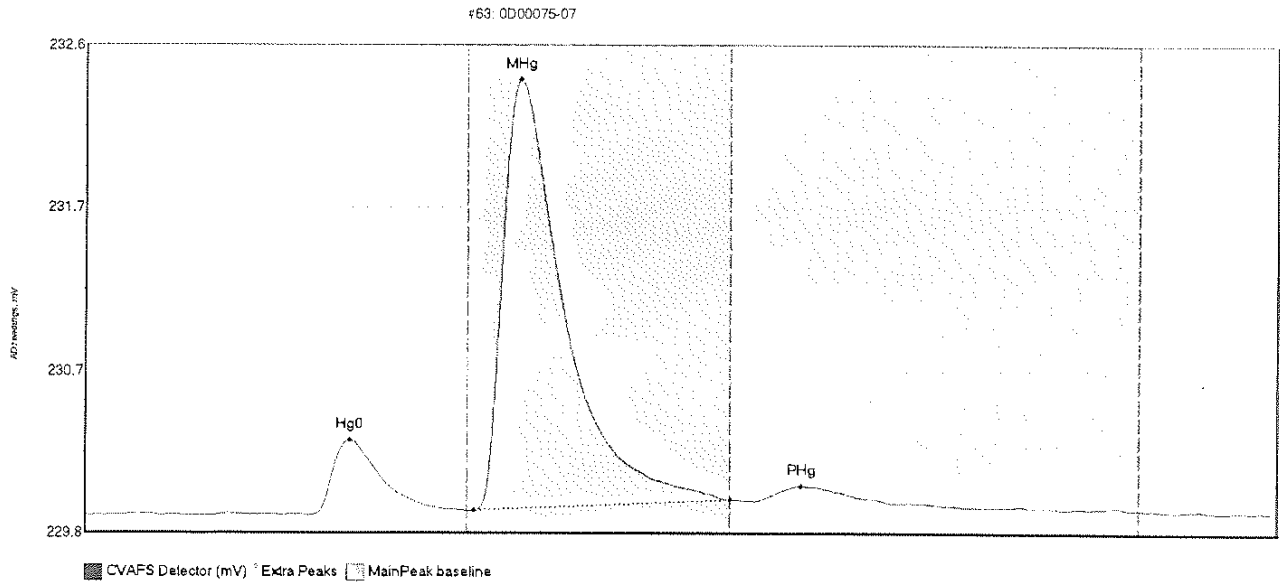
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0D00074-08RE1 H	51.377	48.4	80.0	229.92	229.94	55.7	0.454	CT	229.9171	0.00	0.01	F005238
0D00074-08RE1 M	33.351	81.9	134.4	229.94	229.98	90.9	0.193	OK	229.9171	0.00	0.01	F005238
0D00074-08RE1 P	62.047	135.0	182.5	229.98	229.98	140.0	0.341	OK	229.9171	0.00	0.01	F005238



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCV4 Hg0	47.813	46.9	80.0	229.92	229.95	55.5	0.422	CT	229.9218	0.00	0.00	
SEQ-CCV4 MHg	114.741	81.0	134.4	229.94	229.98	90.5	0.747	OK	229.9218	0.00	0.00	
SEQ-CCV4 PHg	12.961	138.7	169.5	229.97	229.98	150.0	0.004	OK	229.9218	0.00	0.00	

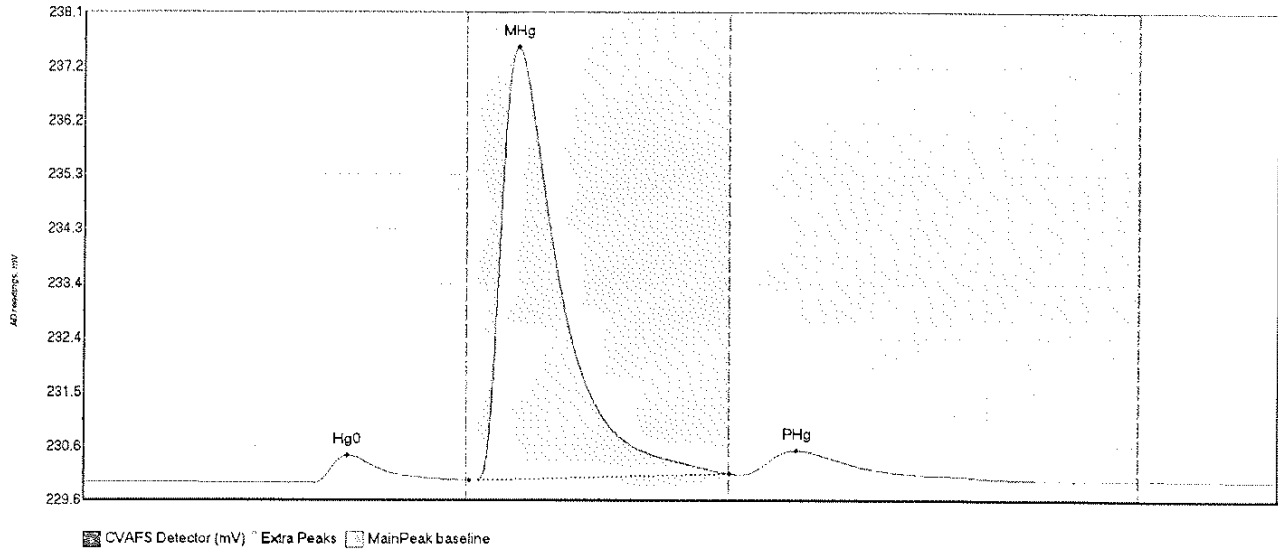


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CCB4 Hg0	48.212	46.3	79.1	229.90	229.93	55.3	0.432	OK	229.9178	0.00	0.02	
SEQ-CCB4 MHg	13.436	82.3	135.0	229.93	229.95	94.4	0.051	CT	229.9178	0.00	0.02	
SEQ-CCB4 PHg	12.666	136.7	171.6	229.95	229.95	147.6	0.066	OK	229.9178	0.00	0.02	



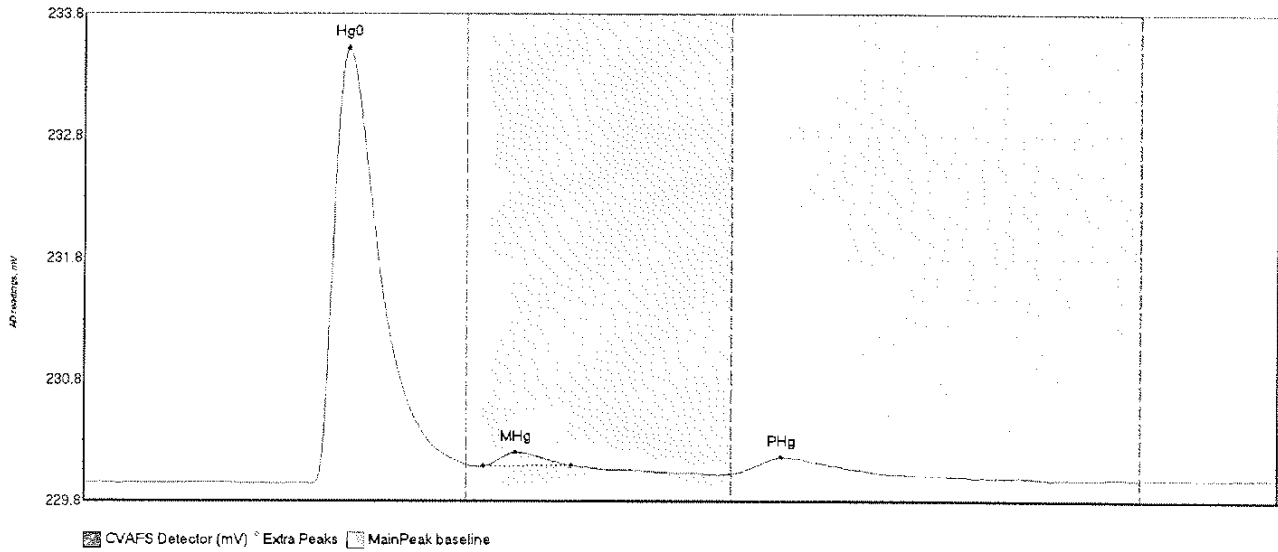
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0D00075-07 Hg0	48.399	47.3	79.7	229.91	229.94	55.5	0.430	OK	229.9096	0.00	0.02	
0D00075-07 MHg	364.382	61.5	135.0	229.93	230.00	91.0	2.468	CT	229.9096	0.00	0.02	
0D00075-07 PHg	11.066	140.2	164.5	229.99	230.00	149.9	0.086	OK	229.9096	0.00	0.02	

#64: OD00075-08



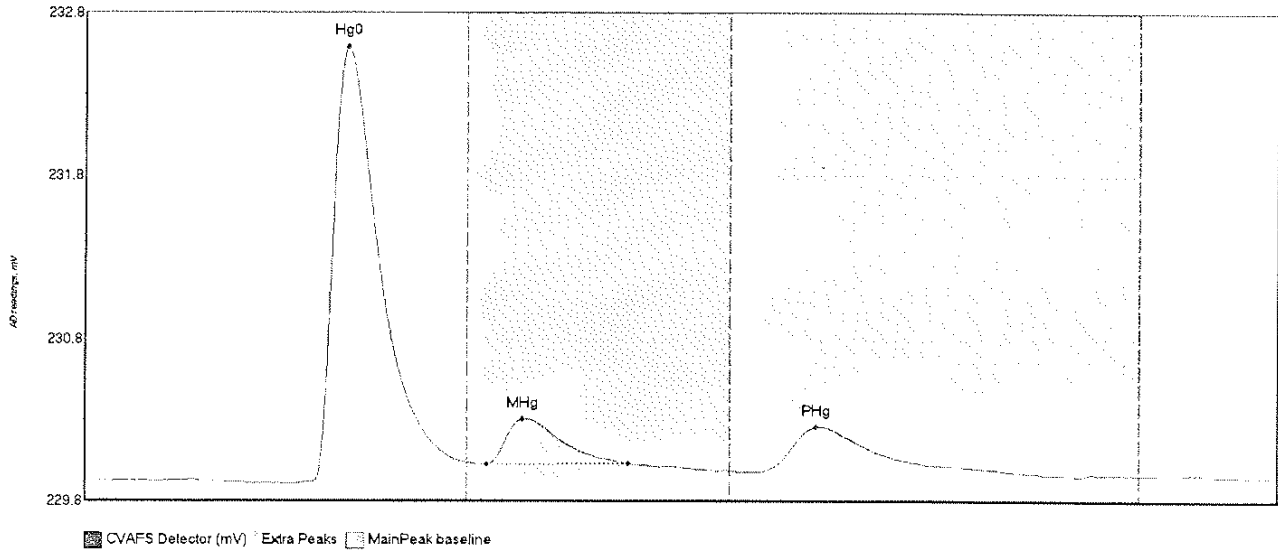
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
OD00075-08 Hg0	54.468	46.9	79.4	229.91	229.95	55.3	0.481	OK	229.9261	0.00	0.01	FO05238
OD00075-08 MHg	1072.393	80.7	135.0	229.95	230.08	90.9	7.565	CT	229.9261	0.00	0.01	FO05238
OD00075-08 PHg	75.604	137.3	177.0	230.05	230.04	149.1	0.433	OK	229.9261	0.00	0.01	FO05238

#65: 0000075-09



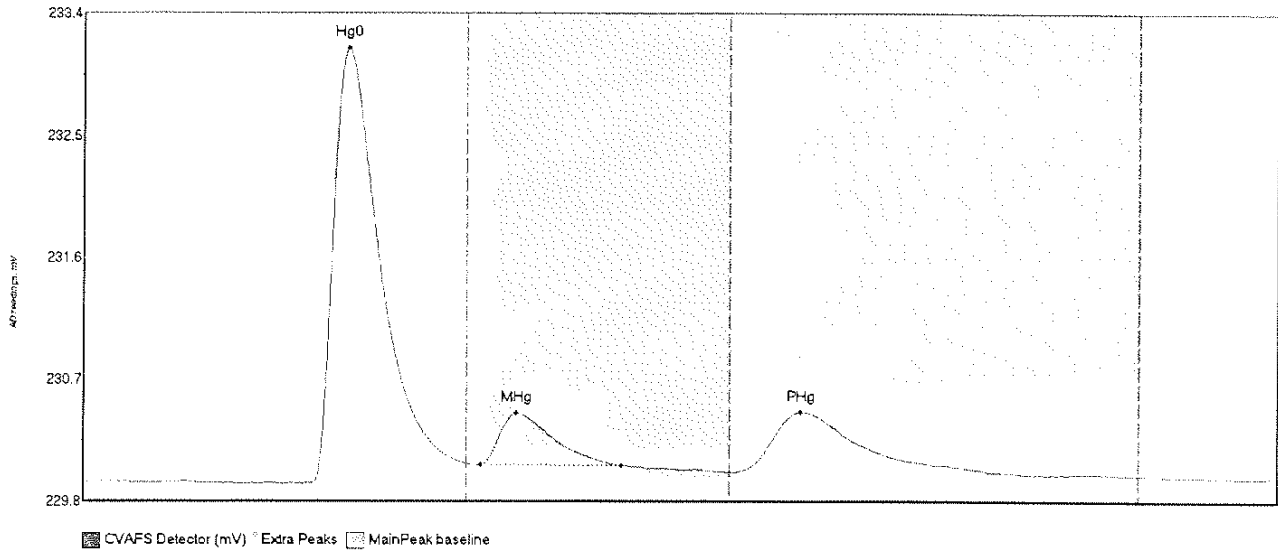
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0000075-09 Hg0	392.381	47.5	80.0	229.91	230.06	55.3	3.581	CI	229.9177	0.00	0.02	F005238
0000075-09 MHg	10.959	83.5	101.7	230.05	230.06	90.3	0.117	OK	229.9177	0.00	0.02	F005238
0000075-09 PHg	23.195	135.1	168.0	229.99	229.99	145.5	0.140	OK	229.9177	0.00	0.02	F005238

#66: 0D00075-10



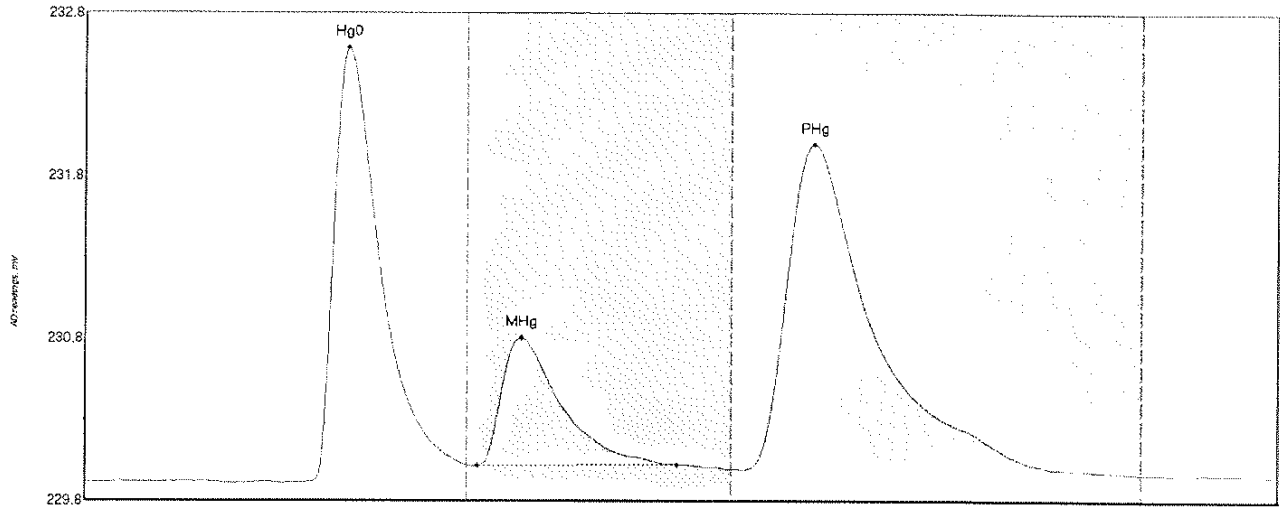
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	RIShift	Comment
0D00075-10 Hg0	295.502	47.8	80.0	229.91	230.04	55.3	2.696	CI	229.9188	0.00	0.02	F005238
0D00075-10 MHg	36.438	84.0	113.5	230.02	230.03	91.5	0.279	OK	229.9188	0.00	0.02	F005238
0D00075-10 PHg	52.788	141.1	192.2	229.98	229.98	153.0	0.279	OK	229.9188	0.00	0.02	F005238

#67: 0D00075-11



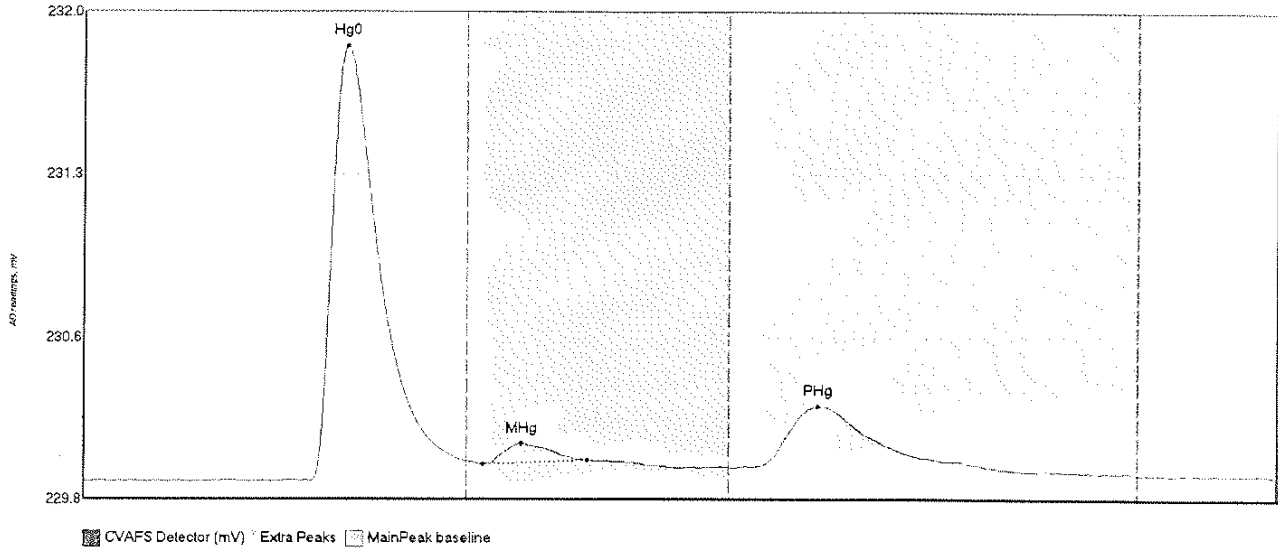
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	#Dev	High/Lt	Comment
0D00075-11 Hg0	354.088	47.5	80.0	229.90	230.05	55.2	3.219	CT	229.9089	0.00	0.03	F005238
0D00075-11 MHg	49.700	83.0	112.6	230.04	230.03	96.5	0.386	OK	229.9089	0.00	0.03	F005238
0D00075-11 PHg	96.732	136.2	189.1	229.98	229.98	149.7	0.445	OK	229.9089	0.00	0.03	F005238

#69: 0D00075-12



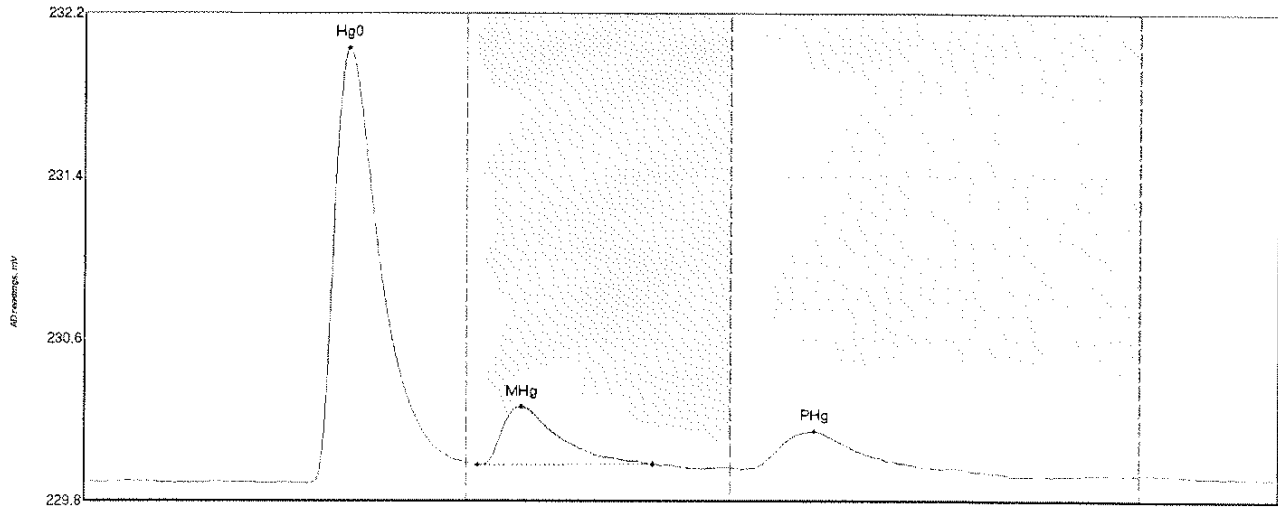
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
0D00075-12 Hg0	295.666	46.5	86.0	229.91	230.02	55.1	2.679	CT	229.9135	0.00	0.04	F005238
0D00075-12 MHg	111.302	82.2	123.5	230.01	230.02	91.3	0.791	CK	229.9135	0.00	0.04	F005238
0D00075-12 PHg	416.259	137.3	201.6	229.99	229.99	152.4	2.017	CK	229.9135	0.00	0.04	F005238

#69: 0000075-13



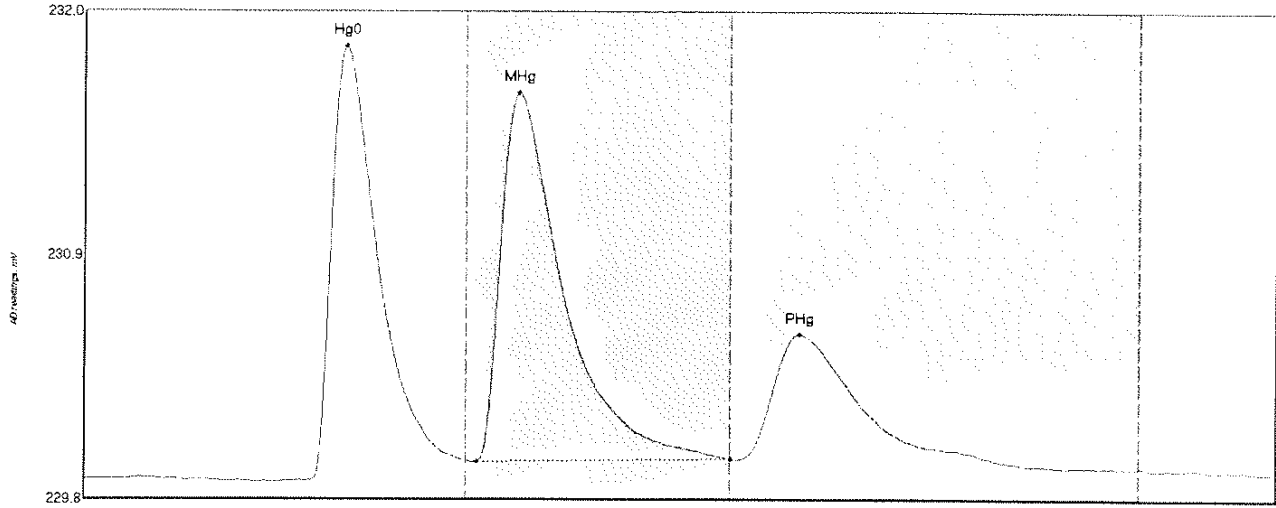
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0000075-13 Hg0	214.224	47.9	80.0	229.91	230.00	55.3	1.947	CI	229.9125	0.00	0.02	F005238
0000075-13 MHg	9.273	83.4	105.3	229.99	230.01	91.4	0.091	OK	229.9125	0.00	0.02	F005238
0000075-13 PHg	52.919	139.7	188.2	229.98	229.97	153.5	0.273	OK	229.9120	0.00	0.02	F005238

#70: 0000075-14



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0000075-14 Hg0	235.976	46.7	60.0	229.91	230.01	55.3	2.157	CT	229.9113	0.00	0.02	F005238
0000075-14 MHg	39.877	82.5	116.9	230.00	230.00	91.6	0.290	OK	229.9113	0.00	0.02	F005238
0000075-14 PHg	29.916	139.8	174.5	229.98	229.99	152.4	0.181	OK	229.9113	0.00	0.02	F005238

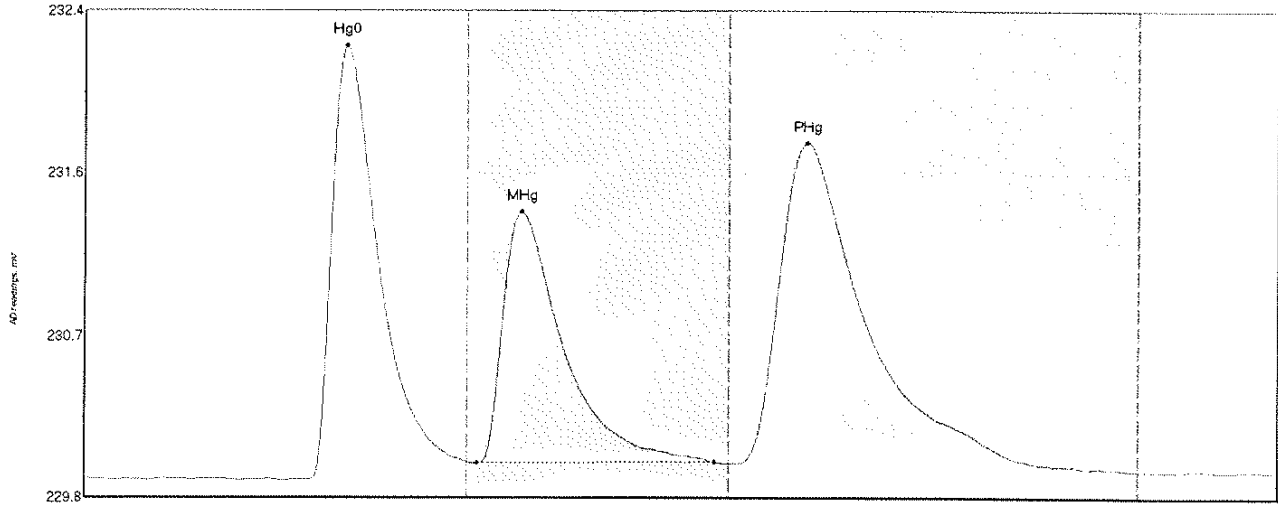
#71: CD00075-15



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BIShift	Comment
CD00075-15 Hg0	213.076	46.9	80.0	229.91	230.00	55.1	1.935	CF	229.9181	0.00	0.02	F005238
CD00075-15 MHg	246.770	82.2	135.0	229.99	230.00	91.0	1.645	CF	229.9181	0.00	0.02	F005238
CD00075-15 PHg	108.395	136.4	188.6	230.00	230.01	149.5	0.561	OK	229.9181	0.00	0.02	F005238

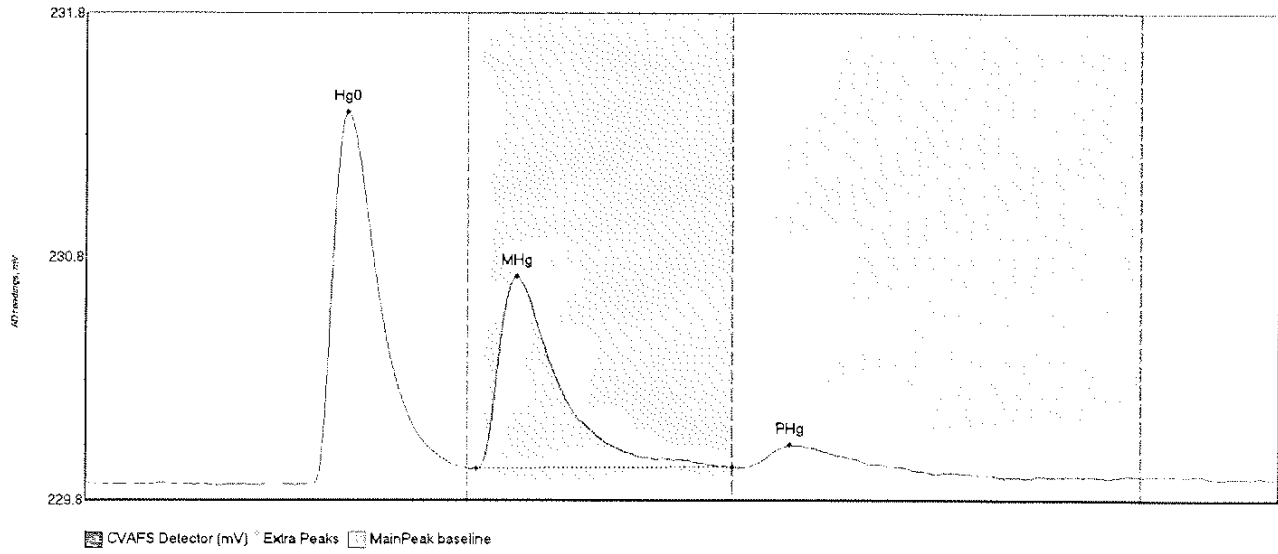
#72.000075-16



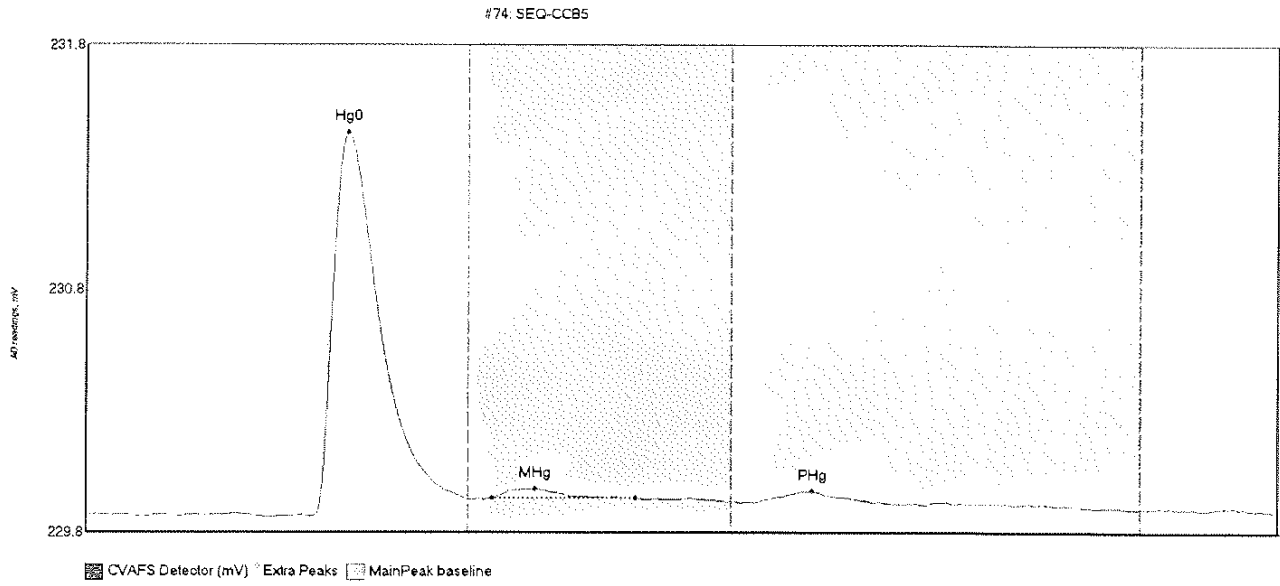
CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	SlDev	SlShift	Comment
0000075-16 Hg0	257.703	47.4	80.0	229.90	230.00	55.1	2.349	CT	229.9081	0.00	0.04	F005238
0000075-16 MHg	200.880	82.1	131.8	229.99	230.00	91.4	1.363	OK	229.9081	0.00	0.04	F005238
0000075-16 PHg	355.962	137.2	199.4	229.99	229.98	151.2	1.737	OK	229.9081	0.00	0.04	F005238

#73: SEQ-CCV5

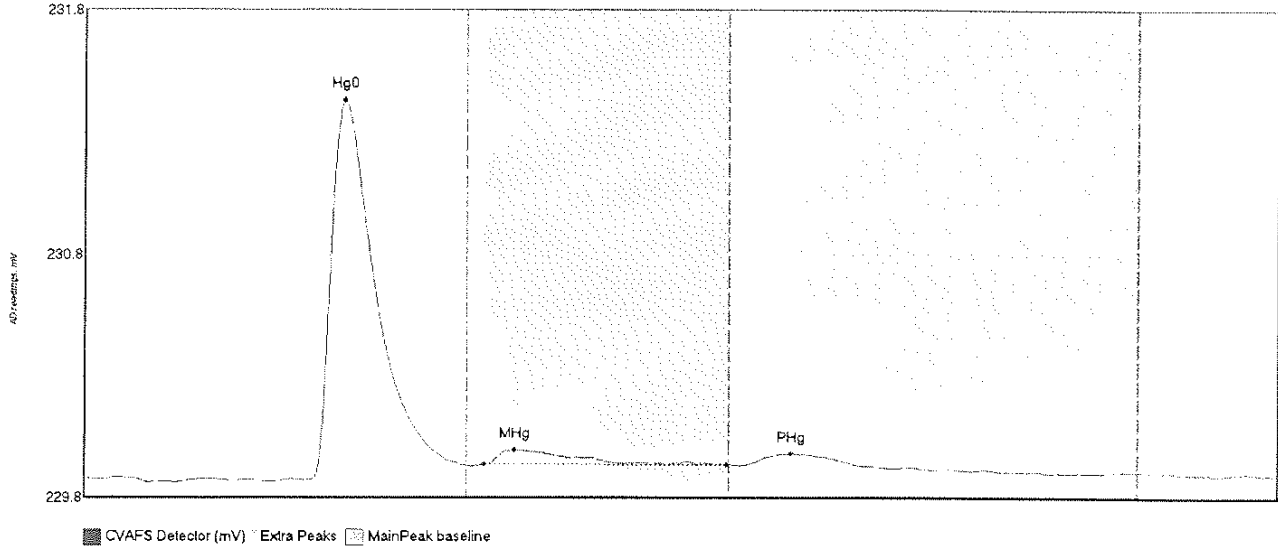


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CCV5 Hg0	168.966	47.5	86.0	229.91	229.97	54.8	1.523	CT	229.9124	0.00	0.02	
SEQ-CCV5 MHg	113.689	81.9	135.0	229.97	229.98	90.3	0.789	CT	229.9124	0.00	0.02	
SEQ-CCV5 PHg	13.412	139.5	168.2	229.98	229.98	147.0	0.088	OK	229.9124	0.00	0.02	



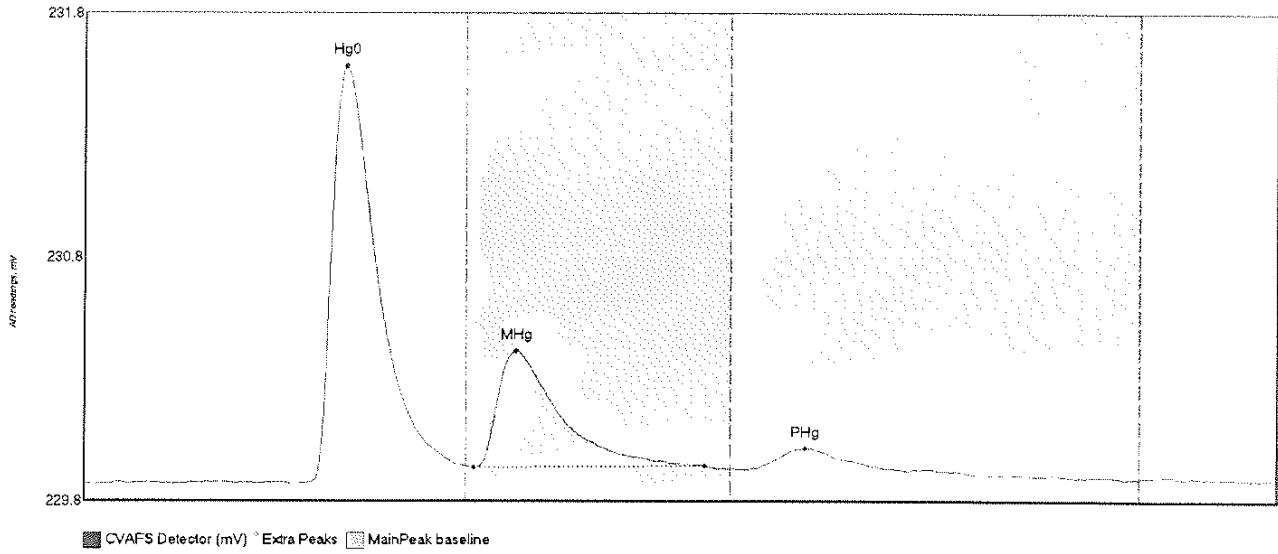
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCBS Hg0	173.425	47.5	80.0	229.89	229.97	55.1	1.573	CT	229.9011	0.00	0.01	
SEQ-CCBS MHg	4.882	85.6	114.6	229.97	229.97	93.6	6.036	OK	229.9011	0.00	0.01	
SEQ-CCBS PHg	5.154	139.7	162.6	229.95	229.96	152.0	0.049	OK	229.9011	0.00	0.01	

#75 0D00075-17RE1

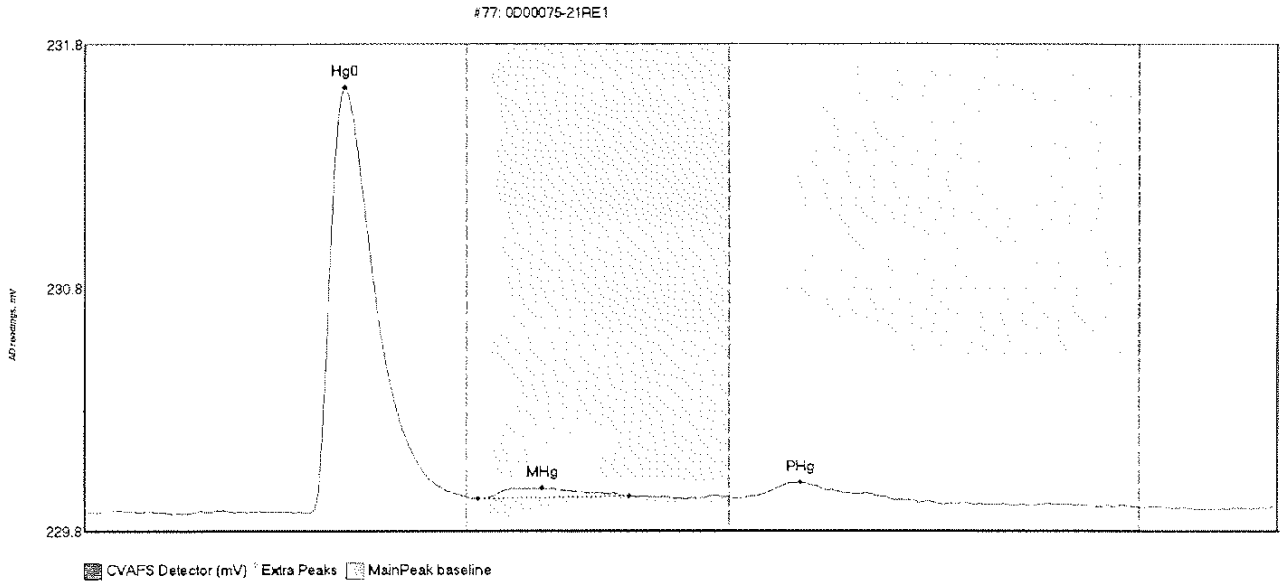


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0D00075-17RE1 H	164.695	46.8	80.0	229.91	229.96	54.8	1.555	CT	229.9117	0.00	0.01	P005227
0D00075-17RE1 M	11.452	83.7	134.5	229.97	229.97	90.0	0.060	OK	229.9117	0.00	0.01	P005227
0D00075-17RE1 P	6.861	136.0	161.5	229.96	229.96	147.8	0.047	OK	229.9117	0.00	0.01	P005227

#76: 0D00075-20RE1

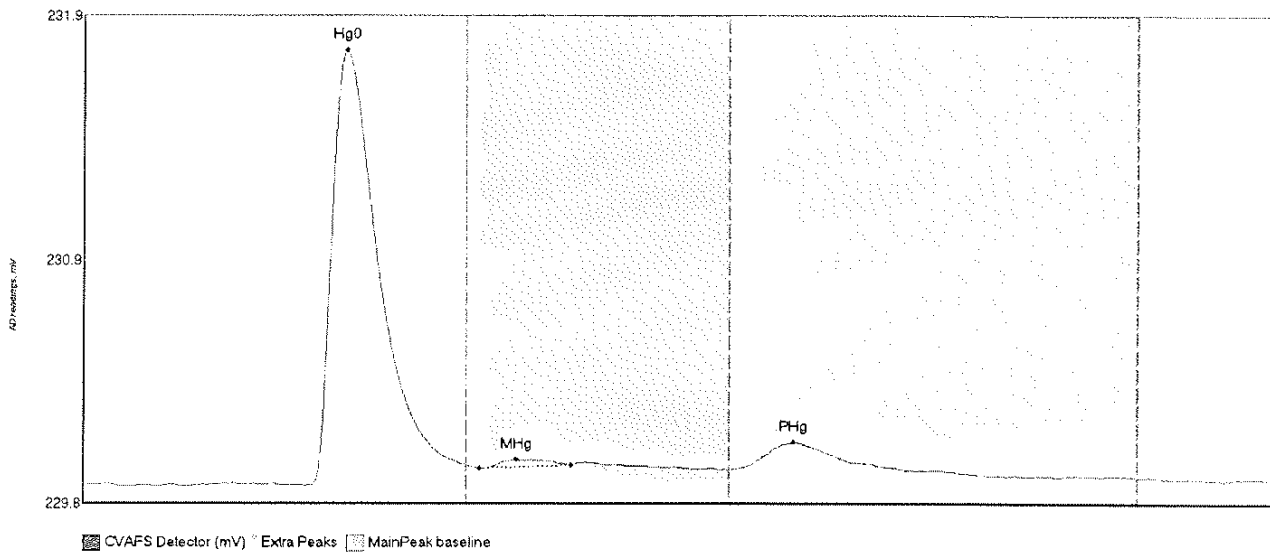


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0D00075-20RE1 H	185.230	44.2	80.0	229.89	229.97	54.9	1.712	CT	229.8974	0.00	0.01	F005227
0D00075-20RE1 M	70.352	81.8	129.6	229.96	229.97	90.4	0.476	OK	229.8974	0.00	0.01	F005227
0D00075-20RE1 P	11.094	140.4	167.1	229.96	229.96	150.5	0.081	OK	229.8874	0.00	0.01	F005227

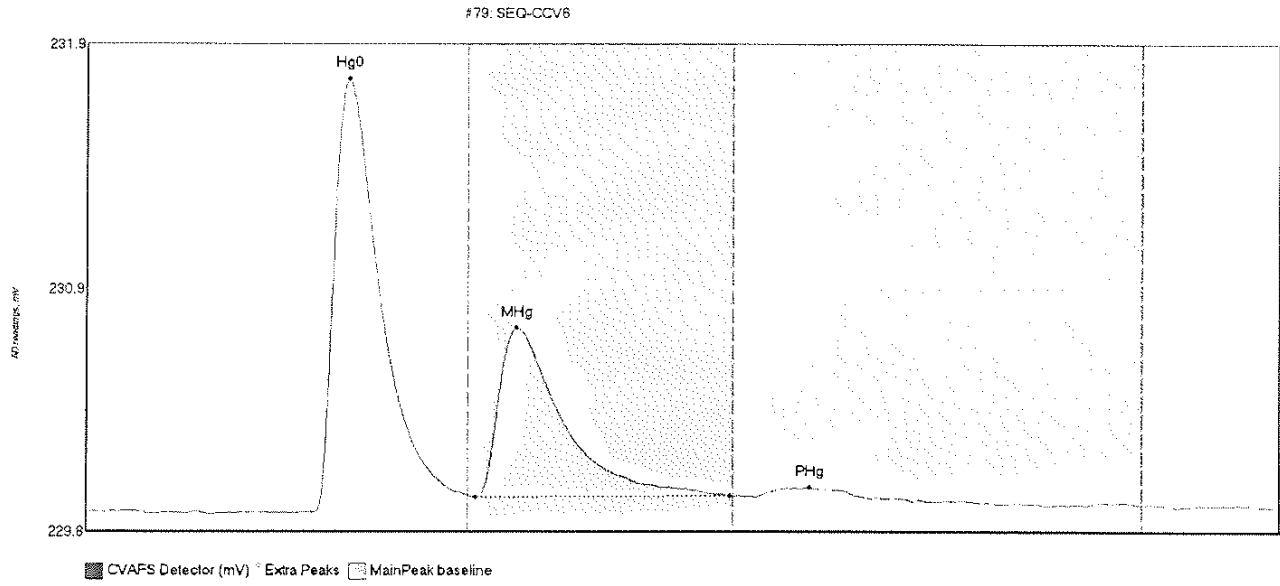


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
000075-21RE1 H	180.904	47.1	60.0	229.89	229.96	54.8	1.745	CF	229.8895	0.00	0.02	F005227
000075-21RE1 M	7.749	82.5	113.9	229.95	229.96	95.6	0.044	OK	229.8895	0.00	0.02	F005227
000075-21RE1 P	10.580	136.9	169.5	229.95	229.94	149.8	0.066	OK	229.8895	0.00	0.02	F005227

#78: 0E00038-01RE1

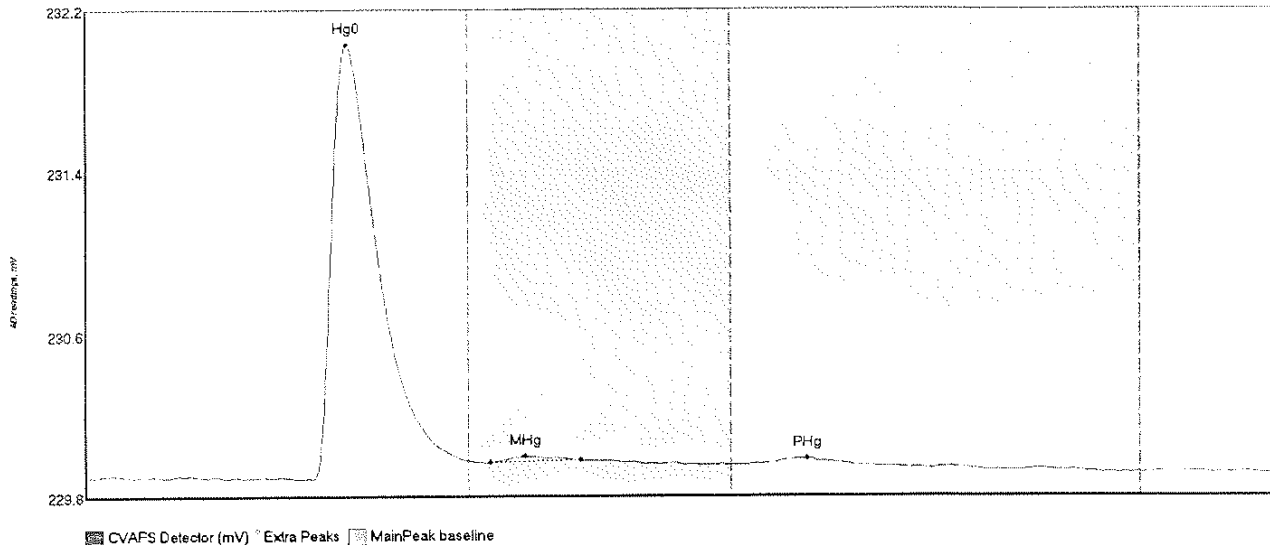


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
0E00038-01RE1 H	207.924	47.5	80.0	229.88	229.97	55.1	1.894	CT	229.8862	0.00	0.02	F005238
0E00038-01RE1 M	3.735	82.6	102.1	229.95	229.97	90.5	0.039	OK	229.8862	0.00	0.02	F005238
0E00038-01RE1 P	17.230	137.0	170.4	229.96	229.95	148.2	0.113	OK	229.8862	0.00	0.02	F005238



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIdev	BIShift	Comment
SEQ-CCV6 Hg0	205.857	47.4	60.0	229.89	229.96	55.0	1.871	CF	229.8942	0.00	0.02	
SEQ-CCV6 MHg	112.471	81.6	134.2	229.95	229.96	90.2	0.735	OK	229.8942	0.00	0.02	
SEQ-CCV6 PHg	6.843	139.5	144.0	229.96	229.95	151.1	0.040	OK	229.8942	0.00	0.02	

#80: SEQ-CCB6



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCB6 Hg0	229.349	47.6	80.0	229.88	229.97	54.9	2.106	CP	229.8937	0.00	0.01	
SEQ-CCB6 MHg	2.517	84.5	103.4	229.96	229.98	91.6	0.036	OK	229.8937	0.00	0.01	
SEQ-CCB6 PHg	3.878	138.5	161.4	229.95	229.95	150.8	0.029	OK	229.8937	0.00	0.01	



Frontier Global Sciences

5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310

28 May 2020

Denise King
Wood - MA
271 Mill Road
Chelmsford, MA 01824
RE: Penobscot

Enclosed are the analytical results for samples received by Eurofins Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Patrick Garcia-Strickland". The signature is written in a cursive style with a large initial "P".

Patrick Garcia-Strickland
Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WQ-FPT_042920_SW_10 TOTAL	0E00002-01	Water	29-Apr-20 17:50	01-May-20 10:30
WQ-FPT_042920_SW_10 DISSOLVED	0E00002-02	Water	29-Apr-20 17:50	01-May-20 10:30
ES-15_042920_SW_10 TOTAL	0E00002-03	Water	29-Apr-20 17:05	01-May-20 10:30
ES-15_042920_SW_10 DISSOLVED	0E00002-04	Water	29-Apr-20 17:05	01-May-20 10:30
WQ-ECH_042920_SW_10 TOTAL	0E00002-05	Water	29-Apr-20 16:15	01-May-20 10:30
WQ_ECH_042920_SW_10 DISSOLVED	0E00002-06	Water	29-Apr-20 16:15	01-May-20 10:30
OV-02_042920_SW_10 TOTAL	0E00002-07	Water	29-Apr-20 12:45	01-May-20 10:30
OV-02_042920_SW_10 DISSOLVED	0E00002-08	Water	29-Apr-20 12:45	01-May-20 10:30
ADD-02_042920_SW_10 TOTAL	0E00002-09	Water	29-Apr-20 10:14	01-May-20 10:30
ADD-02_042920_SW_10 DISSOLVED	0E00002-10	Water	29-Apr-20 10:14	01-May-20 10:30
EB-01_042920_SW TOTAL	0E00002-11	Water	29-Apr-20 19:10	01-May-20 10:30
EB-01_042920_SW DISSOLVED	0E00002-12	Water	29-Apr-20 19:10	01-May-20 10:30

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 01-May-20 10:30. The samples were received intact, on-ice within a sealed cooler at

Cooler	Temp C°
Cooler 1	-0.4
Cooler 2	-0.2

SAMPLE PREPARATION AND ANALYSIS

Samples were prepared and analyzed for total mercury by flow injection atomic fluorescence spectrometry (FI-AFS) in accordance with EPA 1631E.

Samples were prepared and analyzed for methyl mercury by cold vapor gas chromatography atomic fluorescence spectrometry (CV-GC-AFS) in accordance with EPA 1630 (EFGS-070).

ANALYTICAL AND QUALITY CONTROL ISSUES

Method blanks were prepared for every preparation to assess possible blank contribution from the sample preparation procedure. The method blanks were carried through the entire analytical procedure. All blanks fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

Liquid spikes, certified reference material (CRM) or a quality control samples (QCS) were prepared for every preparation as a measure of accuracy. All liquid spikes, CRMs and/or QCS samples fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

As an additional measure of the accuracy of the methods used and to check for matrix interference, matrix spikes (MS) and matrix spike duplicates (MSD) were digested and analyzed. All of the matrix spike recoveries fell within the established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

A reasonable measure of the precision of the analytical methods is the relative percent difference (RPD) between a matrix spike recovery and a matrix spike duplicate recovery and between laboratory control sample recovery and laboratory control sample duplicate recoveries. All of the relative percent differences fell within established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

Sample Receipt Checklist

Client: Wood Date & Time Received: 5/1/2020 1030 Date Labeled: 5/1/2020 Labeled By: JS

Matrix: Water Received By: JS Label Verified By: JS 5/1/2020

of Coolers Received: 3 ^{JS} 5/1/2020 Samples Arrived By: X Shipping Service _____ Courier _____ Hand _____ Other (Specify: _____)

Coolant: None/Ambient Loose Ice Gel Ice Dry Ice Coolant Required: (Y)/N Temp Blank Used: (Y)/N for Cooler(s): _____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: (Y)/N

Samples from Wisconsin have special requirements. Shipment received includes samples from Wisconsin: (Y)/N

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	<u>Y</u>	
Custody Seals are present and intact:	<u>Y</u>	
Custody seals signed:	<u>Y</u>	

TID:	CF:	°C	Date/time:	By:
* Cooler 1:	<u>-0.3</u>	°C	w/ CF: <u>-0.4</u> °C	Cooler 4: °C w/ CF: °C
* Cooler 2:	<u>0.2</u>	°C	w/ CF: <u>-0.2</u> °C	Cooler 5: °C w/ CF: °C
Cooler 3:	°C	w/ CF: °C	Cooler 6: °C w/ CF: °C	


Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	<u>Y</u>	
Date and time of collection:	<u>Y</u>	
Sampled by:	<u>N</u>	
Preservation type:	<u>N</u>	
Requested analyses:	<u>Y</u>	
Required signatures:	<u>Y</u>	
Internal COC required:	<u>N</u>	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	<u>Y</u>	
Sample labels are present and legible:	<u>Y</u>	
Sample ID on container/bag matches COC:	<u>Y</u>	
Correct sample containers used:	<u>Y</u>	
Samples received within holding times:	<u>Y</u>	
Sample volume sufficient for requested analyses:	<u>Y</u>	
Correct preservative used for requested analyses:	<u>Y</u>	

Anomalies/Non-conformances (attach additional pages if needed):

- * Cooler 1 → ^{JS 5/1/2020} ~~1222~~ 122405225 JS 5/1/2020 1111
- * Cooler 2 → 181139780 JS 5/1/2020 1111
- ~~Cooler 3~~ → JS 5/1/2020

0E00002



Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park
 Pittsburgh, PA 15238
 Phone: 412-963-7058 Fax: 412-963-2468

0600002
Chain of Custody Record



Client Information Client Contact: Robert Brunette Patrick Garcia-Strickland Company: Eurofins Frontier Global Sciences LLC Address: 5755 8th Street E City: Tacoma State, Zip: WA, 98424 Phone: 425-686-3560 (Tel) Email: RobertBrunette@EurofinsUS.com Project Name: Wood Penobscot River Proposal Site: PENOBSCOT		Sampler: Tom Gerhardt Phone: (207) 828-3460 Lab PM: Gamber, Carrie L. E-Mail: carrie.gamber@testamericainc.com Carrier Tracking No(s): COC No: 180-60149-12258.2 Page: Page 1 of 1 Job #: Analysis Requested	Due Date Requested: TAT Requested (days): NORMAL PO #: Purchase Order Requested WO #: Project #: 18022259 SSOW #: Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other: DIS Hg, DIS MeHg, AND DOC FIELD FILTERED @ 0.45um Special Instructions/Note:												
Sample Identification		Total Number of containers													
Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TOTAL MERCURY (1631e)	DISSOLVED MERCURY (1631c)	TOTAL METHYL Hg (1630)	DISSOLVED METHYL Hg (1630)	STOC (SW-846/9060A)	DOC (SW-846/9060A)	TSS (2450D)	SSC (D3977B-SMD)	Total Number of containers	Special Instructions/Note:
WQ-FPT-042920-SW-10	04/29/20	1750	G	W	X	X	X	X	X	X	X	X	X	10	NONE
ES-15-042920-SW-10	04/29/20	1705	G	W	X	X	X	X	X	X	X	X	X	10	NONE
WQ-ECH-042920-SW-10	04/29/20	1615	G	W	X	X	X	X	X	X	X	X	X	10	NONE
OV-02-042920-SW-10	04/29/20	1245	G	W	X	X	X	X	X	X	X	X	X	10	NONE
ADD-02-042920-SW-10	04/29/20	1014	G	W	X	X	X	X	X	X	X	X	X	10	NONE
EB-01-042920-SW	04/29/20	1910	G	W	X	X	X	X	X	X	X	X	X	4	NONE
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months													
Deliverable Requested: I, II, III, IV, Other (specify) MACTEC EQUIS EDD		Special Instructions/QC Requirements:													
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:									
Relinquished by: Tom Gerhardt		Date/Time: 4/30/2020, 1130		Company: WOODS		Received by: FedEx									
Relinquished by:		Date/Time:		Company:		Received by: PLS									
Relinquished by:		Date/Time:		Company:		Received by:									
Date/Time:		Company:		Date/Time: 5/11/2020 1030		Company: EEGS									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Page 6 of 266									

(735 9852 1171)

Ver: 01/16/2019



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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WQ-FPT_042920_SW_10 TOTAL
0E00002-01

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.103	0.026	0.049	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	2.07	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

**WQ-FPT_042920_SW_10 DISSOLVED
0E00002-02**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.025	0.049	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	1.48	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

ES-15_042920_SW_10 TOTAL
0E00002-03

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.131	0.026	0.050	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	2.69	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

**ES-15_042920_SW_10 DISSOLVED
0E00002-04**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.082	0.025	0.049	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	1.71	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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WQ-ECH_042920_SW_10 TOTAL
0E00002-05

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.126	0.025	0.049	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	3.39	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

**WQ_ECH_042920_SW_10 DISSOLVED
0E00002-06**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.189	0.025	0.049	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	1.87	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

OV-02_042920_SW_10 TOTAL
0E00002-07

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.189	0.026	0.050	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	2.92	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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**OV-02_042920_SW_10 DISSOLVED
0E00002-08**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.162	0.025	0.049	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	2.48	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

ADD-02_042920_SW_10 TOTAL
0E00002-09

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.198	0.026	0.050	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	4.47	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

**ADD-02_042920_SW_10 DISSOLVED
0E00002-10**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.117	0.026	0.050	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	3.40	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

EB-01_042920_SW TOTAL
0E00002-11

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	0.14	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	J



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

**EB-01_042920_SW DISSOLVED
0E00002-12**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.126	0.026	0.050	ng/L	1.25	F005268	20-May-20	0E21006	20-May-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	0.18	0.08	0.50	ng/L	1	F005228	05-May-20	0E05010	05-May-20	EPA 1631E	J



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0E05010 - F005228											
Cal Standard (0E05010-CAL1)					Prepared & Analyzed: 05-May-20						
Mercury	0.39	-		ng/L	0.50000		77.9				
Cal Standard (0E05010-CAL2)					Prepared & Analyzed: 05-May-20						
Mercury	0.97	-		ng/L	1.0000		97.4				
Cal Standard (0E05010-CAL3)					Prepared & Analyzed: 05-May-20						
Mercury	5.33	-		ng/L	5.0000		107				
Cal Standard (0E05010-CAL4)					Prepared & Analyzed: 05-May-20						
Mercury	21.51	-		ng/L	20.000		108				
Cal Standard (0E05010-CAL5)					Prepared & Analyzed: 05-May-20						
Mercury	44.20	-		ng/L	40.000		111				
Calibration Blank (0E05010-CCB1)					Prepared & Analyzed: 05-May-20						
Mercury	-0.27	-		ng/L							U
Calibration Blank (0E05010-CCB2)					Prepared & Analyzed: 05-May-20						
Mercury	-0.08	-		ng/L							U
Calibration Blank (0E05010-CCB3)					Prepared & Analyzed: 05-May-20						
Mercury	0.05	-		ng/L							
Calibration Check (0E05010-CCV1)					Prepared & Analyzed: 05-May-20						
Mercury	4.64	-		ng/L	5.0350		92.1				
Calibration Check (0E05010-CCV2)					Prepared & Analyzed: 05-May-20						
Mercury	5.34	-		ng/L	5.0350		106				



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0E05010 - F005228

Calibration Check (0E05010-CCV3)						Prepared & Analyzed: 05-May-20					
Mercury	4.67	-		ng/L	5.0350		92.8				
Instrument Blank (0E05010-IBL1)						Prepared & Analyzed: 05-May-20					
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (0E05010-IBL2)						Prepared & Analyzed: 05-May-20					
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (0E05010-IBL3)						Prepared & Analyzed: 05-May-20					
Mercury	0.12	0.08	0.50	ng/L							
Initial Cal Blank (0E05010-ICB1)						Prepared & Analyzed: 05-May-20					
Mercury	-0.07	-		ng/L							U
Initial Cal Check (0E05010-ICV1)						Prepared & Analyzed: 05-May-20					
Mercury	5.37	-		ng/L	5.0350		107				

Batch 0E08011 - F005235

Cal Standard (0E08011-CAL1)						Prepared & Analyzed: 08-May-20					
Methyl Mercury (as Mercury)	0.054	-		ng/L	0.050000		108				
Cal Standard (0E08011-CAL2)						Prepared & Analyzed: 08-May-20					
Methyl Mercury (as Mercury)	0.191	-		ng/L	0.200000		95.5				
Cal Standard (0E08011-CAL3)						Prepared & Analyzed: 08-May-20					
Methyl Mercury (as Mercury)	0.940	-		ng/L	1.0000		94.0				

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Patrick Garcia-Strickland, Business Unit Manager

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0E08011 - F005235											
Cal Standard (0E08011-CAL4)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	1.976	-		ng/L	2.0000		98.8				
Cal Standard (0E08011-CAL5)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	4.132	-		ng/L	4.0000		103				
Calibration Blank (0E08011-CCB1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.040	-		ng/L							
Calibration Blank (0E08011-CCB2)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.023	-		ng/L							
Calibration Blank (0E08011-CCB7)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.051	-		ng/L							QB-10
Calibration Check (0E08011-CCV1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.446	-		ng/L	0.50368		88.5	67-133			
Calibration Check (0E08011-CCV2)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.468	-		ng/L	0.50368		92.9	67-133			
Calibration Check (0E08011-CCV7)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.624	-		ng/L	0.50368		124	67-133			
Instrument Blank (0E08011-IBL1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	ND	0.021	0.044	ng/L							U
Initial Cal Blank (0E08011-ICB1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.041	-		ng/L							



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0E08011 - F005235											
Initial Cal Check (0E08011-ICV1)					Prepared & Analyzed: 08-May-20						
Methyl Mercury (as Mercury)	0.543	-		ng/L	0.50368		108	69-131			
Batch 0E21006 - F005268											
Cal Standard (0E21006-CAL1)					Prepared & Analyzed: 20-May-20						
Methyl Mercury (as Mercury)	0.046	-		ng/L	0.050000		91.6				
Cal Standard (0E21006-CAL2)					Prepared & Analyzed: 20-May-20						
Methyl Mercury (as Mercury)	0.198	-		ng/L	0.20000		98.8				
Cal Standard (0E21006-CAL3)					Prepared & Analyzed: 20-May-20						
Methyl Mercury (as Mercury)	1.021	-		ng/L	1.0000		102				
Cal Standard (0E21006-CAL4)					Prepared & Analyzed: 20-May-20						
Methyl Mercury (as Mercury)	2.080	-		ng/L	2.0000		104				
Cal Standard (0E21006-CAL5)					Prepared & Analyzed: 20-May-20						
Methyl Mercury (as Mercury)	4.138	-		ng/L	4.0000		103				
Calibration Blank (0E21006-CCB1)					Prepared & Analyzed: 20-May-20						
Methyl Mercury (as Mercury)	-0.002	-		ng/L							U
Calibration Blank (0E21006-CCB2)					Prepared & Analyzed: 20-May-20						
Methyl Mercury (as Mercury)	-0.029	-		ng/L							U
Calibration Blank (0E21006-CCB3)					Prepared & Analyzed: 20-May-20						
Methyl Mercury (as Mercury)	-0.005	-		ng/L							U



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0E21006 - F005268											
Calibration Blank (0E21006-CCB4) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	-0.018	-		ng/L							U
Calibration Blank (0E21006-CCB5) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	-0.027	-		ng/L							U
Calibration Check (0E21006-CCV1) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	0.502	-		ng/L	0.50368		99.6	67-133			
Calibration Check (0E21006-CCV2) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	0.553	-		ng/L	0.50368		110	67-133			
Calibration Check (0E21006-CCV3) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	0.501	-		ng/L	0.50368		99.5	67-133			
Calibration Check (0E21006-CCV4) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	0.380	-		ng/L	0.50368		75.5	67-133			
Calibration Check (0E21006-CCV5) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	0.454	-		ng/L	0.50368		90.0	67-133			
Instrument Blank (0E21006-IBL1) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U
Initial Cal Blank (0E21006-ICB1) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	0.022	-		ng/L							
Initial Cal Check (0E21006-ICV1) Prepared & Analyzed: 20-May-20											
Methyl Mercury (as Mercury)	0.570	-		ng/L	0.50368		113	69-131			





Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F005228 - EFGS SOP2796 EPA 1631 Oxidation

Blank (F005228-BLK1)				Prepared & Analyzed: 05-May-20							
Mercury	ND	0.08	0.50	ng/L							U
Blank (F005228-BLK2)				Prepared & Analyzed: 05-May-20							
Mercury	ND	0.08	0.50	ng/L							U
Blank (F005228-BLK3)				Prepared & Analyzed: 05-May-20							
Mercury	ND	0.08	0.50	ng/L							U
LCS (F005228-BS1)				Prepared & Analyzed: 05-May-20							
Mercury	5.46	0.08	0.50	ng/L	5.0000		109	80-120			
LCS Dup (F005228-BSD1)				Prepared & Analyzed: 05-May-20							
Mercury	5.57	0.08	0.50	ng/L	5.0000		111	80-120	1.98	24	
Matrix Spike (F005228-MS1)				Source: 0D00074-01		Prepared & Analyzed: 05-May-20					
Mercury	10.29	0.08	0.50	ng/L	5.0000	5.19	102	71-125			
Matrix Spike (F005228-MS2)				Source: 0D00074-02		Prepared & Analyzed: 05-May-20					
Mercury	7.84	0.08	0.50	ng/L	5.0000	2.68	103	71-125			
Matrix Spike Dup (F005228-MSD1)				Source: 0D00074-01		Prepared & Analyzed: 05-May-20					
Mercury	10.54	0.08	0.50	ng/L	5.0000	5.19	107	71-125	2.41	24	
Matrix Spike Dup (F005228-MSD2)				Source: 0D00074-02		Prepared & Analyzed: 05-May-20					
Mercury	8.30	0.08	0.50	ng/L	5.0000	2.68	112	71-125	5.66	24	

Batch F005233 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F005233-BLK1)				Prepared: 06-May-20 Analyzed: 08-May-20							
Methyl Mercury (as Mercury)	0.040	0.026	0.055	ng/L							J

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Patrick Garcia-Strickland, Business Unit Manager

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F005233 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F005233-BLK2) Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.041	0.026	0.055	ng/L							J
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Blank (F005233-BLK3) Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.049	0.026	0.055	ng/L							J
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LCS (F005233-BS1) Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.795	0.026	0.055	ng/L	1.1111		71.6	65-135			
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LCS Dup (F005233-BSD1) Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.863	0.026	0.055	ng/L	1.1111		77.7	65-135	8.18	35	
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Matrix Spike (F005233-MS1) Source: 0D00074-01 Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	1.178	0.026	0.055	ng/L	1.1024	0.418	69.0	65-130			
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Matrix Spike (F005233-MS2) Source: 0D00074-02 Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	0.910	0.026	0.055	ng/L	1.1043	0.074	75.8	65-130			
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Matrix Spike Dup (F005233-MSD1) Source: 0D00074-01 Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	1.231	0.026	0.054	ng/L	1.1007	0.418	73.9	65-130	4.37	35	
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Matrix Spike Dup (F005233-MSD2) Source: 0D00074-02 Prepared: 06-May-20 Analyzed: 08-May-20

Methyl Mercury (as Mercury)	1.069	0.026	0.055	ng/L	1.1092	0.074	89.7	65-130	16.0	35	
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Batch F005268 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F005268-BLK1) Prepared & Analyzed: 20-May-20

Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 18022259 Project Manager: Denise King	Reported: 28-May-20 16:09
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F005268 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F005268-BLK2) Prepared & Analyzed: 20-May-20

Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
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Blank (F005268-BLK3) Prepared & Analyzed: 20-May-20

Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
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LCS (F005268-BS1) Prepared & Analyzed: 20-May-20

Methyl Mercury (as Mercury)	1.171	0.026	0.050	ng/L	1.1111		105	65-135			
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LCS Dup (F005268-BSD1) Prepared & Analyzed: 20-May-20

Methyl Mercury (as Mercury)	0.979	0.026	0.050	ng/L	1.1111		88.1	65-135	17.8	35	
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Matrix Spike (F005268-MS1) Source: 0E00002-05RE1 Prepared & Analyzed: 20-May-20

Methyl Mercury (as Mercury)	1.286	0.026	0.050	ng/L	1.1055	0.126	105	65-130			
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Matrix Spike (F005268-MS2) Source: 0E00002-04RE1 Prepared & Analyzed: 20-May-20

Methyl Mercury (as Mercury)	1.251	0.026	0.049	ng/L	1.0982	0.082	106	65-130			
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Matrix Spike Dup (F005268-MSD1) Source: 0E00002-05RE1 Prepared & Analyzed: 20-May-20

Methyl Mercury (as Mercury)	1.327	0.025	0.049	ng/L	1.0930	0.126	110	65-130	3.15	35	
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Matrix Spike Dup (F005268-MSD2) Source: 0E00002-04RE1 Prepared & Analyzed: 20-May-20

Methyl Mercury (as Mercury)	1.331	0.026	0.049	ng/L	1.0998	0.082	114	65-130	6.21	35	
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Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 18022259
Project Manager: Denise King

Reported:
28-May-20 16:09

Notes and Definitions

- Z-01 CCV below range. All other QC parameters passing. Only samples with no sample volume remaining have been reported.
- U Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
- QB-10 The method blank and/or initial/continuing calibration blank contains analyte at a concentration above the MRL. Only report sample results greater than 10 times the contamination value (QB-01), or samples less than the MRL (QB-02).
- J The result is an estimated concentration.
- E-01 Sample was preceded by a sample exceeding the calibration curve and was reanalyzed for confirmation.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the method detection limit if reported to the MDL or above the reporting limit if reported to the MRL.
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



ANALYSIS SEQUENCE

0E05010

QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: PGS

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/5/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E05010-IBL1	QC	1			
0E05010-IBL2	QC	2			
0E05010-IBL3	QC	3			
0E05010-CAL1	QC	4	2000505		
0E05010-CAL2	QC	5	2000506		
0E05010-CAL3	QC	6	2000507		
0E05010-CAL4	QC	7	2000508		
0E05010-CAL5	QC	8	2000509		
0E05010-ICV1	QC	9	2000510		
0E05010-ICB1	QC	10			
F005228-BS1	QC	11			
F005228-BSD1	QC	12			
F005228-BLK1	QC	13			
F005228-BLK2	QC	14			
F005228-BLK3	QC	15			
0D00074-01	Hg-CVAFS-W-1631	16			
0D00074-02	Hg-CVAFS-W-1631	17			
F005228-MS1	QC	18			
F005228-MSD1	QC	19			
F005228-MS2	QC	20			
0E05010-CCV1	QC	21	2000510		
0E05010-CCB1	QC	22			
F005228-MSD2	QC	23			
0D00074-03	Hg-CVAFS-W-1631	24			
0D00074-04	Hg-CVAFS-W-1631	25			
0D00074-05	Hg-CVAFS-W-1631	26			
0D00074-06	Hg-CVAFS-W-1631	27			
0D00074-07	Hg-CVAFS-W-1631	28			
0D00074-08	Hg-CVAFS-W-1631	29			
0E00002-01	Hg-CVAFS-W-1631	30			
0E00002-02	Hg-CVAFS-W-1631	31			
0E00002-03	Hg-CVAFS-W-1631	32			
0E05010-CCV2	QC	33	2000510		
0E05010-CCB2	QC	34			
0E00002-04	Hg-CVAFS-W-1631	35			
0E00002-05	Hg-CVAFS-W-1631	36			

ANALYSIS SEQUENCE

0E05010

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 5/5/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E00002-06	Hg-CVAFS-W-1631	37			
0E00002-07	Hg-CVAFS-W-1631	38			
0E00002-08	Hg-CVAFS-W-1631	39			
0E00002-09	Hg-CVAFS-W-1631	40			
0E00002-10	Hg-CVAFS-W-1631	41			
0E00002-11	Hg-CVAFS-W-1631	42			
0E00002-12	Hg-CVAFS-W-1631	43			
0E05010-CCV3	QC	44	2000510		
0E05010-CCB3	QC	45			

M. J. Smith 3/5/2020
 Samples Loaded By Date

M. J. Smith 5/5/2020
 Data Processed By Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: MFS	Sequence(s) #: 0E05010
Reviewer: _____	Dataset ID(s): THg26003-200505-1
Date: 5/5/2020	WO (s) #: 0D00074, 0E00002
Batch #(s): F005228	

• Select the correct preparation method.

Analyte	Prep Method	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric
<input checked="" type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation
<input type="checkbox"/> Hg0	NA	NA
<input type="checkbox"/> inorg Hg	NA	NA

Analyst Initials: MFS **Reviewer Initials:** PGS

- | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|-------------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description?
Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (b) Check 5% of transcription from Instrument print-out and Excel file
Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel?
50 ml / aliquot = Excel dilution value | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): _____ | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0E05010
Reviewer:		Dataset ID(s):	THg26003-200505-1
Date:	5/5/2020	WO (s) #:	0D00074, 0E00002
Batch #(s):	F005228		0

Analyst Initials MFS

Reviewer Initials PLS

5b. Has the B/C section data been uploaded?

YES NO N/A

QA/QC Data Checked

6. RSD CF ($\leq 15\%$)

PASS FAIL

Comments: _____

7. The calibration curve included a minimum of 5 Standards

YES NO

Comments: _____

8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%)

PASS FAIL

9. ICV and CCV % Recoveries EPA 1631E (77-123%)

PASS FAIL

Comments: _____

10. Do all calibration points pass acceptance criteria?

YES NO

Comments: _____

11. Are qualifiers consistent with the data review flowcharts?

YES NO N/A

Comments: _____

12. Explain any items on the failed data report from Element

Comments: _____

13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list)

PASS FAIL

(a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit:

YES NO

(b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)?

YES NO N/A

(c) Was a BrCl Blank analyzed for each preservation level?

YES NO

(d) Are Preparation Blanks summarized on QC page?

YES NO

14. Filtration Blank Prepared (if yes, use FB qualifier)

(a) Filtration Blank prep date same as associated samples' prep date

YES NO N/A

(b) Filtration Blank absolute value < PQL or <2.2xMDL for WI

YES NO N/A

15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L?

PASS FAIL

Comments: _____

16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI?

PASS FAIL

Comments: _____

17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)

YES NO N/A

18. Is the correct 'Source' designated for MD/MS/MSD?

YES NO

19. For digested preps: was there a spike witness signature & date on the prep bench sheet?

YES NO N/A

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0E05010
Reviewer:		Dataset ID(s):	THg26003-200505-1
Date:	5/5/2020	WO (s) #:	0D00074, 0E00002
Batch #(s):	F005228		0

Analyst Initials MFS **Reviewer Initials** PGS

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? YES NO
- Comments: _____
21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
- Comments: _____
22. Are the samples run at the correct dilution level for the method? YES NO
- Comments: _____
23. Dissolved < Total (if applicable) YES NO N/A
- Comments: _____
24. Effluent < Influent (visually confirm if needed) YES NO N/A
- Comments: _____
25. Are re-runs noted with reason? YES NO N/A
- Comments: _____
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
- Comments: _____
27. Is the B trap <5% A Traps YES NO N/A
- Comments: _____
28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
- Comments: _____
29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
- Comments: _____
30. Have re-extracts been created for non-reportable samples? YES NO N/A
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
32. Does the data set need scanning? YES N/A
33. Does the dataset have an LOQ/LOQ or DOC? YES N/A
34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
35. Water samples-is the final volume correct in the sequence? YES NO N/A

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCS

36. Date of analyst IDOC/CDOC: 3/2/2020 IDOC/CDOC within last 12 months? YES NO
37. Date of analyst's SOP reading for method: 3/2/2020 Current SOP revision read? YES NO
38. Date of LOD: 12/29/2020 LOD within last 3 months? YES NO
39. Date of LOQ: 12/29/2020 LOQ within last 3 months? YES NO

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0E05010
Reviewer:		Dataset ID(s):	THg26003-200505-1
Date:	5/5/2020	WO (s) #:	0D00074, 0E00002
Batch #(s):	F005228		0

40. Peer Reviewer's comments (use Peer Review Checklist Additional Comments form if necessary):

Additional Page (s)? YES

Failing Data Report - 0E05010

Sample ID

Analysis

Result

MRL

Dup Result

Source Result

True Value

Units

% Rec.

Rec. LCL

Rec. UCL

RPD

RPD Limit

Over Cal

Failure

Qualifier

Anal Jinit
Analyst Reviewed By

5/5/2020
Date

[Signature]
Peer Reviewed By

5/5/2020
Date

PREPARATION BENCH SHEET

F005228

Eurofins Frontier Global Sciences, LLC

Prepared: 5/5/2020

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Matrix: Water

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005228-BLK1	Blank	50	50.5					
F005228-BLK2	Blank	50	50.5					
F005228-BLK3	Blank	50	50.5					
F005228-BS1	LCS	50	50.5	2000501	25			
F005228-BSD1	LCS Dup	50	50.5	2000501	25			
F005228-MS1	Matrix Spike [0D00074-01]	50	50.5	2000501	25			
F005228-MS2	Matrix Spike [0D00074-02]	50	50.5	2000501	25			
F005228-MSD1	Matrix Spike Dup [0D00074-01]	50	50.5	2000501	25			
F005228-MSD2	Matrix Spike Dup [0D00074-02]	50	50.5	2000501	25			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2000501	THg 10ng/mL Calibration Standard	21-May-20 00:00	2000233	25% Hydroxylamine-HCl working solution	29-Apr-20 00:00
			2000625	0.2 N BRCL March 2020	21-Sep-20 00:00
			2000765	THg Washstation (0.5% BrCl)	29-Apr-20 00:00
			2000767	THg 2% BrCl	24-Jul-20 00:00
			2000768	3% SnCl2 THg reductant	09-Sep-20 00:00

PREPARATION BENCH SHEET

F005228

Eurofins Frontier Global Sciences, LLC

Prepared: 5/5/2020

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Matrix: Water

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00074-01	WQ1b-C_042720_SW_10 TOTAL	50	50.5	QC	-	010301	MS/MSD	
0E00074-02	WQ1b-C_042720_SW_10 DISSOLVED	50	50.5	QC	-	010301	MS/MSD	
0D00074-03	WQ2-C_042720_SW_10 TOTAL	50	50.5	-	-	010301		
0D00074-04	WQ2-C_042720_SW_10 DISSOLVED	50	50.5	-	-	010301		
0D00074-05	WQ3-L_042720_SW_10 TOTAL	50	50.5	-	-	010301		
0D00074-06	WQ3-L_042720_SW_10 DISSOLVED	50	50.5	-	-	010301		
0D00074-07	WQ1b-C_042720_SW_10_DUP TOTAL	50	50.5	-	-	010301		
0D00074-08	WQ1b-C_042720_SW_10_DUP DISSOLVED	50	50.5	-	-	010301		
0E00002-01	WQ-FPT_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0E00002-02	WQ-FPT_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0E00002-03	ES-15_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0E00002-04	ES-15_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0E00002-05	WQ-ECH_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0E00002-06	WQ_ECH_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0E00002-07	OV-02_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0E00002-08	OV-02_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0E00002-09	ADD-02_042920_SW_10 TOTAL	50	50.5	-	-	010206		
0002-10	ADD-02_042920_SW_10 DISSOLVED	50	50.5	-	-	010206		
0002-11	EB-01_042920_SW TOTAL	50	50.5	-	-	010206		

PREPARATION BENCH SHEET

F005228

Eurofins Frontier Global Sciences, LLC

Prepared: 5/5/2020

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Matrix: Water

01E00002-12	EB-01_042920_SW DISSOLVED	50	50.5	-	-	010206	
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Work Order

0D00074

0E00002

Client

Project



Analysis Datasheet for Total Mercury

Date of Analysis: May 05, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 0E05010

Analyst: **MPS**
 Units: ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	420.09 units	840.18	154.78 units	309.56	77.9 %Rec
SEQ-CAL2	1	1.00 ng/L	652.08 units	652.08	386.77 units	386.77	97.4 %Rec
SEQ-CAL3	1	5.00 ng/L	2382.42 units	476.48	2117.11 units	423.42	106.6 %Rec
SEQ-CAL4	1	20.00 ng/L	8807.48 units	440.37	8542.17 units	427.11	107.5 %Rec
SEQ-CAL5	1	40.00 ng/L	17821.36 units	445.53	17556.05 units	438.90	110.5 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 397.15 Corr. St Dev RF +/- 52.71 Corr. RSD CF 13.3% RSD Uncorr. Mean RF 570.93

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-BL	3	265.31 units	±40.27	0.46 ng/L	±0.07

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	-0.218 ng/L	±0.064
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	5/5/2020 11:51:51 AM	8377-1 RAW	11:51:51 AM	243.85			-21.5	-0.054	-0.054	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	5/5/2020 11:55:59 AM	8378-1 RAW	11:55:59 AM	340.31			-25.0	-0.063	-0.063	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	5/5/2020 12:00:08 PM	8379-1 RAW	12:00:08 PM	311.76			46.5	0.117	0.117	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	5/5/2020 12:04:16 PM	8380-1 RAW	12:04:16 PM	420.09			154.8	0.390	0.390	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	5/5/2020 12:08:25 PM	8381-1 RAW	12:08:25 PM	652.08			211.1	0.974	0.974	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	5/5/2020 12:12:34 PM	8382-1 RAW	12:12:34 PM	2382.42			8542.2	5.331	5.331	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	5/5/2020 12:16:43 PM	8383-1 RAW	12:16:43 PM	8807.48			21509	21509	21509	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	5/5/2020 12:20:51 PM	8384-1 RAW	12:20:51 PM	17821.36			44205	44205	44205	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	5/5/2020 12:25:01 PM	8385-1 RAW	12:25:01 PM	2386.61			2131.3	5.366	5.366	ng/L	
Hg2600-3	00	SAM	F005228-B51	1	5/5/2020 12:29:10 PM	8386-1 RAW	12:29:10 PM	236.43			-28.9	-0.073	-0.073	ng/L	F005228
Hg2600-3	00	SAM	F005228-B5D1	1	5/5/2020 12:37:28 PM	8388-1 RAW	12:37:28 PM	2368.11			2059.9	5.405	5.405	ng/L	F005228
Hg2600-3	00	BLK	F005228-BLK1	1	5/5/2020 12:41:36 PM	8389-1 RAW	12:41:36 PM	166.28			2102.8	5.512	5.512	ng/L	F005228
Hg2600-3	00	BLK	F005228-BLK2	1	5/5/2020 12:45:45 PM	8390-1 RAW	12:45:45 PM	208.04			-99.0	-0.249	-0.249	ng/L	F005228
Hg2600-3	00	BLK	F005228-BLK3	1	5/5/2020 12:49:54 PM	8391-1 RAW	12:49:54 PM	162.14			-103.2	-0.144	-0.144	ng/L	F005228
Hg2600-3	00	SAM	0000074-01	1	5/5/2020 12:54:04 PM	8392-1 RAW	12:54:04 PM	2218.31			1953.0	5.135	5.135	ng/L	F005228
Hg2600-3	00	SAM	0000074-02	1	5/5/2020 12:58:13 PM	8393-1 RAW	12:58:13 PM	4225.47			968.2	2.656	2.656	ng/L	F005228
Hg2600-3	00	SAM	F005228-MS1	1	5/5/2020 13:02:21 PM	8394-1 RAW	1:02:21 PM	10.438			3962.0	10.189	10.189	ng/L	F005228
Hg2600-3	00	SAM	F005228-MSD1	1	5/5/2020 13:06:30 PM	8395-1 RAW	1:06:30 PM	4324.13			4058.8	10.438	10.438	ng/L	F005228
Hg2600-3	00	SAM	F005228-MS2	1	5/5/2020 13:10:39 PM	8396-1 RAW	1:10:39 PM	3262.46			2997.1	7.764	7.764	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCV1	1	5/5/2020 13:14:48 PM	8397-1 RAW	1:14:48 PM	2107.95			1842.6	4.640	4.640	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCB1	1	5/5/2020 13:18:57 PM	8398-1 RAW	1:18:57 PM	158.31			-107.0	-0.269	-0.269	ng/L	F005228
Hg2600-3	00	SAM	F005228-MSD2	1	5/5/2020 13:23:06 PM	8399-1 RAW	1:23:06 PM	3442.08			3176.8	8.217	8.217	ng/L	F005228
Hg2600-3	00	SAM	0000074-03	1	5/5/2020 13:27:15 PM	8400-1 RAW	1:27:15 PM	2654.62			2589.3	6.737	6.737	ng/L	F005228
Hg2600-3	00	SAM	0000074-04	1	5/5/2020 13:31:25 PM	8401-1 RAW	1:31:25 PM	1566.63			1301.3	3.494	3.494	ng/L	F005228
Hg2600-3	00	SAM	0000074-05	1	5/5/2020 13:35:34 PM	8402-1 RAW	1:35:34 PM	2105.47			1840.2	4.851	4.851	ng/L	F005228
Hg2600-3	00	SAM	0000074-06	1	5/5/2020 13:39:43 PM	8403-1 RAW	1:39:43 PM	1007.88			742.6	2.088	2.088	ng/L	F005228
Hg2600-3	00	SAM	0000074-07	1	5/5/2020 13:43:52 PM	8404-1 RAW	1:43:52 PM	2120.80			1855.5	4.890	4.890	ng/L	F005228
Hg2600-3	00	SAM	0000074-08	1	5/5/2020 13:48:01 PM	8405-1 RAW	1:48:01 PM	1239.43			974.1	2.671	2.671	ng/L	F005228
Hg2600-3	00	SAM	0E00002-01	1	5/5/2020 13:52:10 PM	8406-1 RAW	1:52:10 PM	993.49			728.2	2.051	2.051	ng/L	F005228
Hg2600-3	00	SAM	0E00002-02	1	5/5/2020 13:56:19 PM	8407-1 RAW	1:56:19 PM	762.50			497.2	1.470	1.470	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCB2	1	5/5/2020 14:00:28 PM	8408-1 RAW	2:00:28 PM	1238.53			973.2	2.668	2.668	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCV2	1	5/5/2020 14:04:37 PM	8409-1 RAW	2:04:37 PM	2387.59			2122.3	5.344	5.344	ng/L	F005228
Hg2600-3	00	SAM	0E00002-04	1	5/5/2020 14:08:46 PM	8410-1 RAW	2:08:46 PM	235.29			-30.0	-0.076	-0.076	ng/L	F005228
Hg2600-3	00	SAM	0E00002-05	1	5/5/2020 14:12:55 PM	8411-1 RAW	2:12:55 PM	852.75			587.4	1.697	1.697	ng/L	F005228
Hg2600-3	00	SAM	0E00002-06	1	5/5/2020 14:17:04 PM	8412-1 RAW	2:17:04 PM	1512.35			1247.0	3.358	3.358	ng/L	F005228
Hg2600-3	00	SAM	0E00002-07	1	5/5/2020 14:21:13 PM	8413-1 RAW	2:21:13 PM	913.26			648.0	1.849	1.849	ng/L	F005228
Hg2600-3	00	SAM	0E00002-08	1	5/5/2020 14:25:22 PM	8414-1 RAW	2:25:22 PM	1328.20			1062.9	2.894	2.894	ng/L	F005228
Hg2600-3	00	SAM	0E00002-09	1	5/5/2020 14:29:32 PM	8415-1 RAW	2:29:32 PM	1154.61			889.3	2.457	2.457	ng/L	F005228
Hg2600-3	00	SAM	0E00002-10	1	5/5/2020 14:33:41 PM	8416-1 RAW	2:33:41 PM	1935.28			1670.0	4.423	4.423	ng/L	F005228
Hg2600-3	00	SAM	0E00002-11	1	5/5/2020 14:37:50 PM	8417-1 RAW	2:37:50 PM	1514.89			1249.1	3.363	3.363	ng/L	F005228
Hg2600-3	00	SAM	0E00002-12	1	5/5/2020 14:41:59 PM	8418-1 RAW	2:41:59 PM	235.71			-29.6	0.143	0.143	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCV3	1	5/5/2020 14:46:08 PM	8419-1 RAW	2:46:08 PM	247.66			17.7	0.173	0.173	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCB3	1	5/5/2020 14:50:17 PM	8420-1 RAW	2:50:17 PM	2120.82			1855.5	4.672	4.672	ng/L	F005228
Hg2600-3	00	CAL	SEQ-CCB3	1	5/5/2020 14:54:26 PM	8421-1 RAW	2:54:26 PM	285.48			20.2	0.051	0.051	ng/L	F005228

192

40.26916616
15.17815832
52.70539808
13.27085814

RunEnd	Peak (Raw)	Control (ett)	Flags	RunCount	Comment
11:35:17	3505.85	Clean	OK	1	
11:39:26	243.53	Sample	OK	1	
11:43:34	199.73	Sample	OK	1	
11:47:43	193.21	Sample	OK	1	
11:51:51	243.85	Sample	OK	1	
11:55:59	240.31	Sample	OK	1	
12:00:08	311.76	Sample	OK	1	
12:04:16	420.09	Sample	OK	1	
12:08:25	652.08	Sample	OK	1	
12:12:34	2382.42	Sample	OK	1	
12:16:43	8807.48	Sample	OK	1	
12:20:51	17821.36	Sample	OK	1	
12:25:01	2396.61	Sample	OK	1	
12:29:10	236.43	Sample	OK	1	
12:33:19	2325.25	Sample	OK	1	F005228
12:37:28	2368.11	Sample	OK	1	F005228
12:41:36	166.28	Sample	OK	1	F005228
12:45:45	208.04	Sample	OK	1	F005228
12:49:54	162.14	Sample	OK	1	F005228
12:54:04	2218.31	Sample	OK	1	F005228
12:58:13	1233.52	Sample	OK	1	F005228
13:02:21	4225.47	Sample	OK	1	F005228
13:06:30	4324.13	Sample	OK	1	F005228
13:10:39	3262.46	Sample	OK	1	F005228
13:14:48	2107.95	Sample	OK	1	
13:18:57	158.31	Sample	OK	1	
13:23:06	3442.09	Sample	OK	1	F005228
13:27:15	2854.62	Sample	OK	1	F005228
13:31:25	1566.63	Sample	OK	1	F005228
13:35:34	2105.47	Sample	OK	1	F005228
13:39:43	1007.88	Sample	OK	1	F005228
13:43:52	2120.80	Sample	OK	1	F005228
13:48:01	1239.43	Sample	OK	1	F005228
13:52:10	993.49	Sample	OK	1	F005228
13:56:19	762.50	Sample	OK	1	F005228
14:00:28	1238.53	Sample	OK	1	F005228
14:04:37	2387.59	Sample	OK	1	
14:08:46	235.29	Sample	OK	1	
14:12:55	852.75	Sample	OK	1	F005228
14:17:04	1512.35	Sample	OK	1	F005228
14:21:13	913.26	Sample	OK	1	F005228
14:25:22	1328.20	Sample	OK	1	F005228
14:29:32	1154.61	Sample	OK	1	F005228
14:33:41	1935.28	Sample	OK	1	F005228
14:37:50	1514.39	Sample	OK	1	F005228
14:41:59	235.71	Sample	OK	1	F005228
14:46:08	247.66	Sample	OK	1	F005228
14:50:17	2120.82	Sample	OK	1	
14:54:26	285.49	Sample	OK	1	

TotalMercury EPA1631
 Operat MFS
 Worksh THg2600
 Method ##### R:
 Descrip THg26003-200505-1

BlankS: 265.31
 CalibFa 397.15
 R: 0.9999
 R²: 0.9998

Calib Eqn: Conc = (Area-265.3
 Status: QC Warnings:5/QC E
 Run Date: 5/5/2020
 Run Time: 11:32:25

Blank SD:
 Blank RSD%:
 CF SD:
 CF RSD%:

SampleID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawDate
Clean				0.00	8.83					
WS			1	265.31	0.00					8373-1.RAW
WS			1	265.31	0.00					8374-1.RAW
WS			1	265.31	0.00					8375-1.RAW
SEQ-IBL1	A1		1	0.00	0.61					8376-1.RAW
SEQ-IBL2	A2		1	0.00	0.61					8377-1.RAW
SEQ-IBL3	A3		1	0.00	0.79					8378-1.RAW
SEQ-CAL1	A4		1	265.31	0.39			77.94		8379-1.RAW
SEQ-CAL2	A5		1	265.31	0.97			97.39		8380-1.RAW
SEQ-CAL3	A6		1	265.31	5.33			106.61		8381-1.RAW
SEQ-CAL4	A7		1	265.31	21.51			107.54		8382-1.RAW
SEQ-CAL5	A8		1	265.31	44.20			110.51		8383-1.RAW
SEQ-ICV1	A9		1	265.31	5.37			107.33		8384-1.RAW
SEQ-ICB1	A10		1	265.31	0.00			0.00		8385-1.RAW
F005228-BS1	A11		1	265.31	5.19					8386-1.RAW
F005228-BSD1	A12		1	265.31	5.29					8387-1.RAW
F005228-BLK1	A13		1	265.31	0.00					8388-1.RAW
F005228-BLK2	A14		1	265.31	0.00					8389-1.RAW
F005228-BLK3	A15		1	265.31	0.00					8390-1.RAW
OD00074-01	A16		1	265.31	4.92					8391-1.RAW
OD00074-02	A17		1	265.31	2.44					8392-1.RAW
F005228-MS1	A18		1	265.31	9.97					8393-1.RAW
F005228-MSD1	A19		1	265.31	10.22			290.05		8394-1.RAW
F005228-MS2	A20		1	265.31	7.55					8395-1.RAW
SEQ-CCV1	A21		1	265.31	4.64			61.76		8396-1.RAW
SEQ-CCB1	B1		1	265.31	0.00			92.79		8397-1.RAW
F005228-MSD2	B2		1	265.31	8.00			0.00		8398-1.RAW
OD00074-03	B3		1	265.31	6.52					8399-1.RAW
OD00074-04	B4		1	265.31	3.28					8400-1.RAW
OD00074-05	B5		1	265.31	4.63					8401-1.RAW
OD00074-06	B6		1	265.31	1.87					8402-1.RAW
OD00074-07	B7		1	265.31	4.67					8403-1.RAW
OD00074-08	B8		1	265.31	2.45					8404-1.RAW
OE00002-01	B9		1	265.31	1.83					8405-1.RAW
OE00002-02	B10		1	265.31	1.25					8406-1.RAW
OE00002-03	B11		1	265.31	2.45					8407-1.RAW
SEQ-CCV2	B12		1	265.31	5.34			106.88		8408-1.RAW
SEQ-CCB2	B13		1	265.31	0.00			0.00		8409-1.RAW
OE00002-04	B14		1	265.31	1.48					8410-1.RAW
OE00002-05	B15		1	265.31	3.14					8411-1.RAW
OE00002-06	B16		1	265.31	1.63					8412-1.RAW
OE00002-07	B17		1	265.31	2.68					8413-1.RAW
OE00002-08	B18		1	265.31	2.24					8414-1.RAW
OE00002-09	B19		1	265.31	4.20					8415-1.RAW
OE00002-10	B20		1	265.31	3.15					8416-1.RAW
OE00002-11	B21		1	265.31	0.00					8417-1.RAW
OE00002-12	C1		1	265.31	0.00					8418-1.RAW
SEQ-CCV3	C2		1	265.31	4.67			93.44		8419-1.RAW
SEQ-CCB3	C3		1	265.31	0.05			0.00		8420-1.RAW
										8421-1.RAW

THg26003-200505-1

SEQ-IBL1	A1		
SEQ-IBL2	A2		
SEQ-IBL3	A3		
SEQ-CAL1	pot A4		
SEQ-CAL2	pot A5		
SEQ-CAL3	pot A6		
SEQ-CAL4	pot A7		
SEQ-CAL5	pot A8		
SEQ-ICV1	A9		
SEQ-ICB1	pot A10		
F005228-BS1	A11		
F005228-BSD1	A12		
F005228-BLK1	A13		
F005228-BLK2	A14		
F005228-BLK3	A15		
OD00074-01	A16	OE00002-02	B10
OD00074-02	A17	OE00002-03	B11
F005228-MS1	A18	SEQ-CCV2	B12
F005228-MSD1	A19	SEQ-CCB2	pot B13
F005228-MS2	A20	OE00002-04	B14
SEQ-CCV1	A21	OE00002-05	B15
SEQ-CCB1	pot B1	OE00002-06	B16
F005228-MSD2	B2	OE00002-07	B17
OD00074-03	B3	OE00002-08	B18
OD00074-04	B4	OE00002-09	B19
OD00074-05	B5	OE00002-10	B20
OD00074-06	B6	OE00002-11	B21
OD00074-07	B7	OE00002-12	C1
OD00074-08	B8	SEQ-CCV3	C2
OE00002-01	B9	SEQ-CCB3	pot C3

Verified by: ZKH 5/5/2020

ANALYSIS SEQUENCE

QUALITY ASSURANCE

0E08011

PEER - REVIEWED

INITIALS: *PES*
Analyzed: 5/8/2020

Instrument: Hg2700-1

Calibration ID: UNASSIGNED



Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E08011-IBL1	QC	1			
0E08011-CAL1	QC	2	2000433		
0E08011-CAL2	QC	3	2000434		
0E08011-CAL3	QC	4	2000435		
0E08011-CAL4	QC	5	2000436		
0E08011-CAL5	QC	6	2000437		
0E08011-ICV1	QC	7	2000842		
0E08011-ICB1	QC	8			
F005234-BS1	QC	9			
F005234-BS2	QC	10			
F005234-BS3	QC	11			
F005234-BS4	QC	12			
0C00107-01	MHg-CVAFS-W-Dist	13			
F005233-BLK1	QC	14			
F005233-BLK2	QC	15			
F005233-BLK3	QC	16			
F005233-BS1	QC	17			
F005233-BSD1	QC	18			
0E08011-CCV1	QC	19	2000842		
0E08011-CCB1	QC	20			
0D00074-01	MHg-CVAFS-W-Dist	21			
F005233-MS1	QC	22			
F005233-MSD1	QC	23			
0D00074-02	MHg-CVAFS-W-Dist	24			
F005233-MS2	QC	25			
F005233-MSD2	QC	26			
0D00074-03	MHg-CVAFS-W-Dist	27			
0D00074-04	MHg-CVAFS-W-Dist	28			
0D00074-05	MHg-CVAFS-W-Dist	29			
0D00074-06	MHg-CVAFS-W-Dist	30			
0E08011-CCV2	QC	31	2000842		
0E08011-CCB2	QC	32			
0D00074-07	MHg-CVAFS-W-Dist	33			
0D00074-08	MHg-CVAFS-W-Dist	34			
0E00002-01	MHg-CVAFS-W-Dist	35			
0E00002-02	MHg-CVAFS-W-Dist	36			

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 5/8/2020

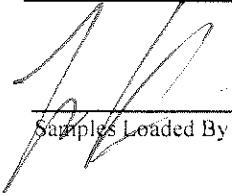
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E00002-03	MHg-CVAFS-W-Dist	37			
0E00002-04	MHg-CVAFS-W-Dist	38			
0E00002-05	MHg-CVAFS-W-Dist	39			
0E00002-06	MHg-CVAFS-W-Dist	40			
0E00002-07	MHg-CVAFS-W-Dist	41			
0E00002-08	MHg-CVAFS-W-Dist	42			
0E08011-CCV3	QC	43	2000842		
0E08011-CCB3	QC	44			
0E00002-09	MHg-CVAFS-W-Dist	45			
0E00002-10	MHg-CVAFS-W-Dist	46			
0E00002-11	MHg-CVAFS-W-Dist	47			
0E00002-12	MHg-CVAFS-W-Dist	48			
F005235-BS1	QC	49			
F005235-BSD1	QC	50			
F005235-BLK1	QC	51			
F005235-BLK2	QC	52			
F005235-BLK3	QC	53			
0D00062-01	MHg-CVAFS-W-Dist	54			
0E08011-CCV4	QC	55	2000842		
0E08011-CCB4	QC	56			
F005235-MS1	QC	57			
F005235-MSD1	QC	58			
0D00062-02	MHg-CVAFS-W-Dist	59			
F005235-MS2	QC	60			
F005235-MSD2	QC	61			
0D00062-05	MHg-CVAFS-W-Dist	62			
0D00062-06	MHg-CVAFS-W-Dist	63			
0E08011-CCV5	QC	64	2000842		
0E08011-CCB5	QC	65			
0D00075-01	MHg-CVAFS-W-Dist	66			
0D00075-02	MHg-CVAFS-W-Dist	67			
0D00075-03	MHg-CVAFS-W-Dist	68			
0D00075-04	MHg-CVAFS-W-Dist	69			
0D00075-05	MHg-CVAFS-W-Dist	70			
0D00075-06	MHg-CVAFS-W-Dist	71			
0E08011-CCV6	QC	72	2000842		

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 5/8/2020


Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E08011-CCB6	QC	73			
0D00075-01RE1	MHg-CVAFS-W-Dist	74			Sample Depleted. Added 12.43g Reagent Water for volume - MFS 5/7/2020
0D00075-02RE1	MHg-CVAFS-W-Dist	75			Added 5/8/2020 by ZKH
0D00075-03RE1	MHg-CVAFS-W-Dist	76			Sample Depleted. Added 7.17g Reagent Water for volume - MFS 5/7/2020
0D00075-04RE1	MHg-CVAFS-W-Dist	77			Added 5/8/2020 by ZKH
0D00075-05RE1	MHg-CVAFS-W-Dist	78			Sample Depleted. Added 3.59g Reagent Water for volume - MFS 5/7/2020
0D00075-06RE1	MHg-CVAFS-W-Dist	79			Sample Depleted. Added 3.45g Reagent Water for volume - MFS 5/7/2020
0E08011-CCV7	QC	80	2000842		
0E08011-CCB7	QC	81			



Samples Loaded By

5/8/2020

Date



Data Processed By

5/12/2020

Date

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: <u>ZKH</u>	Sequence #: <u>OE08011</u>
Reviewer: _____	Dataset ID #: <u>MHg27001-200508-2</u>
Date: <u>5/12/2020</u>	WO #: _____
Batch #(s): <u>F005234, F005233, F005235</u>	

• Select the correct preparation method.

Additional Comments:

Analyte	Prep Method	Matrix
<input checked="" type="checkbox"/> MHg	SOP2797 MHg Distillation	Water
<input type="checkbox"/> MHg	SOP2986 KOH/MeOH Digest	Tissue
<input type="checkbox"/> MHg	SOP5134 MeCl Extraction	Sed/Soil
<input type="checkbox"/> DMHg	SOP2816 (None Accredited method)	ALL

* sequence includes DOC
-ZKH 5/12/2020

	Analyst Initials: <u>ZKH</u>	Reviewer Initials/Date: <u>PGS</u>
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
(a) Reviewer: 100% of peak heights checked	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
(b) Are there peak height errors?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/>
(d) Error on a Cal Pt, ICB/CCB, or PB: Has the data been reimported?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/>
(e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>
(f) Check and compare masses (review prep bench sheet)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>
(g) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>
(h) Do aliquots and dilutions written on benchsheet match those in Excel?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>
(i) Is the pH>3.0 for all distilled samples? _____	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> N/A <input checked="" type="checkbox"/>
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
(l) Original prep bench sheet added to data package?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
3. High QA? WO#(s)/Client(s): _____	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
(a) Have the QC requirements been met for all WO#s?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
5. 20 or fewer samples in batch? _____	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
(b) 1 CCV and 1 CCB every 10 analytical runs? _____	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
QA/QC Data Checked		
6. The calibration curve included a minimum of 5 Standards	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
Comments: _____		
7. 1st Calibration Standard % Recoveries (65-135%)	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
Comments: _____		
8. RSD CF (≤ 15%)	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____		

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: ZKH	Sequence #: 0E08011
Reviewer: 0	Dataset ID #: MHg27001-200508-2
Date:	WO #: 0
Batch #(s): F005234, F005233, F005235	

	Analyst Initials: <u>ZKH</u>	Reviewer Initials/Date: <u>PGS</u>
9. ICV % Recoveries 67-133% Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
10. CCV % Recoveries 67-133% Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
11. Are the absolute value of the ICB and CCBs < PQL? Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
13. LCS/LCSD or BS/BSD RPD (< 25%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
14. Water: Average of Preparation Blanks < 0.045 ng/L and standard deviation of 0.015 ng/L? Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix? Comments: _____	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) Comments: _____	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
17. Is the correct 'Source' designated for MD/MS/MSD? Comments: _____	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
18. For digested preps: was there a spike witness signature & date on the prep bench sheet? Comments: _____	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
19. MD RPD/MT RSD(< 35%) Comments: <u>NA</u>	<input type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
20. Is there one set of MS/MSD per every 10 samples? Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
21. MS/MSD RPD(< 35%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
22. MS (AS) % Recoveries (65-130%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
23. MSD (ASD) % Recoveries (65-130%) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630) Comments: _____	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/>
25. Are all samples within instrument calibration range (or at maximum aliquot size)? Comments: <u>000075-02REL/03REL/04REL/06REL OVER CLIP</u>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>
26. For instrumental dilutions, is the dilution factor in excel correct? Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input checked="" type="checkbox"/>
27. Dissolved < Total metals (if applicable) Comments: _____	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
28. Effluent < Influent metals (visually confirm if needed) Comments: _____	<input type="checkbox"/> PASS <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: ZKH	Sequence #: 0E08011
Reviewer: 0	Dataset ID #: MHg27001-200508-2
Date:	WO #: 0
Batch #(s): F005234, F005233, F005235	

Analyst Initials:

ZKH

Reviewer Initials/Date:

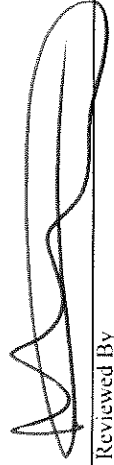
PGS

29. Are re-runs noted with reason?
 Comments: _____
 YES NO N/A
30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):
 Was a bubbler and trap test run before the analytical run continued?
 Comments: _____
 YES NO N/A
31. Do re-run results compare to initial analysis (< 35% RPD)?
 Comments: _____
 YES NO N/A
32. Are qualifiers consistent with the data review flowcharts?
 Comments: _____
 YES NO N/A
33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?
 Comments: _____
 YES NO N/A
34. Have re-extracts been created for non-reportable samples?
 YES NO N/A
35. Narrations in MMO box in LIMS?
 Comments: _____
36. Are there any HIGH QA projects within the data?
 If so, place dataset to the QA office.
 YES NO
37. Does the data set need scanning?
 YES N/A
- Files located at: \\Cuprum\gen admin\Quality Assurance\Training Master\DOCs**
38. Date of analyst IDOC/CDOC: 10/3/2019 IDOC/CDOC within last 12 months? YES NO
39. Date of analyst's SOP reading: ^{ZKH 5/12/20} 2/15/2019 Current SOP revision? YES NO
40. Date of LOD: 10/29/2020 LOD within last 3 months (within 12 months for MDN)? YES NO N/A
41. Date of LOQ: 10/29/2020 LOQ within last 3 months (within 12 months for MDN)? YES NO N/A
42. If MDN samples, date of last MDL study: _____
43. MDL study within last 12 months? YES NO N/A
- Data can not be reported without a current IDOC/CDOC, LOD or LOQ.**
- Additional Comments: _____
 YES NO

Failing Data Report - 0E08011

Sample ID Analysis Result MRI Dup Source True Units % Rec. Rec. Rec. RPD RPD Over Cal Failure Qualifier

 5/12/2020 / Date

 Peer Reviewed By 5/12/2020 / Date

0E08011-CCV3 - 0.320ppt 03.6%. recovery - Failed low

0E08011-CCV5 - 0.318 ppt

0E08011-CCB5 - Failed high, switched w/ a CCV

0E08011-CCV6 - ND, switched high w/ a CCB

0E08011-CCB7 - Failed high - 0.051 ppt

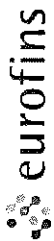
0D00075-02RE1 → OXS CURVE

0D00075-03RE1 → OXS CURVE

0D00075-04RE1 → OXS CURVE

0D00075-05RE1 → E-01

0D00075-06RE1 → OXS CURVE



Frontier Global Sciences

MHg27001-200508-2

Analysis Datasheet for Methyl Mercury in Soil/Tissue

Date of Analysis: May 08, 2020
 Instrument #: Hg2700-1
 LIMS Sequence #: 0E08011

Analyst:
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	21.23 units	424.50	10.84 units	216.74	108.4 %Rec
SEQ-CAL2	1	0.20 ng/L	48.59 units	242.95	38.20 units	191.01	95.5 %Rec
SEQ-CAL3	1	1.00 ng/L	198.29 units	198.29	187.91 units	187.91	94.0 %Rec
SEQ-CAL4	1	2.00 ng/L	405.39 units	202.70	395.00 units	197.50	98.8 %Rec
SEQ-CAL5	1	4.00 ng/L	836.55 units	209.14	826.17 units	206.54	103.3 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 199.94 Corr. St Dev RF +/- 11.79 Corr. RSD CF 5.9% RSD Uncorr. Mean RF 255.52

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-TBL	1	10.39 units		0.04 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	0	0.000 ng/L	
BLK	2	3	0.049 ng/L	±0.005
BLK	3	3	0.021 ng/L	±0.009
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hq2700-1	00	CAL	SEQ-18L1	1	5/8/20 13:32	46784-1.RAW	13:32:59	10.39			0.0	0.000	0.000	ng/L	
Hq2700-1	00	CAL	SEQ-CAL1	1	5/8/20 13:43	46785-1.RAW	13:43:14	21.23			10.8	0.054	0.054	ng/L	
Hq2700-1	00	CAL	SEQ-CAL2	1	5/8/20 13:53	46786-1.RAW	13:53:30	48.59			38.2	0.191	0.191	ng/L	
Hq2700-1	00	CAL	SEQ-CAL3	1	5/8/20 14:03	46787-1.RAW	14:03:45	198.29			187.9	0.940	0.940	ng/L	
Hq2700-1	00	CAL	SEQ-CAL4	1	5/8/20 14:14	46788-1.RAW	14:14:01	405.39			395.0	1.976	1.976	ng/L	
Hq2700-1	00	CAL	SEQ-CAL5	1	5/8/20 14:24	46789-1.RAW	14:24:16	836.55			826.2	4.132	4.132	ng/L	
Hq2700-1	00	CAL	SEQ-ICV1	1	5/8/20 14:34	46790-1.RAW	14:34:32	118.98			108.6	0.543	0.543	ng/L	108.6226448
Hq2700-1	00	CAL	SEQ-ICB1	1	5/8/20 14:44	46791-1.RAW	14:44:48	18.60			8.2	0.041	0.041	ng/L	
Hq2700-1	00	SAM	F005234-BS1	1.25	5/8/20 14:55	46792-1.RAW	14:55:04	150.32			139.9	0.875	0.875	ng/L	F005234
Hq2700-1	00	SAM	F005234-BS2	1.25	5/8/20 15:05	46793-1.RAW	15:05:20	179.79			169.4	1.059	1.059	ng/L	F005234
Hq2700-1	00	SAM	F005234-BS3	1.25	5/8/20 15:15	46794-1.RAW	15:15:36	170.89			160.5	1.003	1.003	ng/L	F005234
Hq2700-1	00	SAM	F005234-BS4	1.25	5/8/20 15:25	46795-1.RAW	15:25:52	148.39			138.0	0.863	0.863	ng/L	F005234
Hq2700-1	00	SAM	OC00107-01	1.25	5/8/20 15:36	46796-1.RAW	15:36:09	10.81			0.4	0.002	0.002	ng/L	F005234
Hq2700-1	00	SAM	F005233-BS1	1.25	5/8/20 15:46	46797-1.RAW	15:46:25	161.23			150.8	0.894	0.894	ng/L	F005233
Hq2700-1	00	SAM	F005233-BSD1	1.25	5/8/20 15:56	46798-1.RAW	15:56:41	173.43			163.0	0.971	0.971	ng/L	F005233
Hq2700-1	00	BLK	F005233-BLK1	1.25	5/8/20 16:06	46799-1.RAW	16:06:57	17.62			7.2	0.036	0.036	ng/L	F005233
Hq2700-1	00	BLK	F005233-BLK2	1.25	5/8/20 16:17	46800-1.RAW	16:17:12	17.69			7.3	0.037	0.037	ng/L	F005233
Hq2700-1	00	BLK	F005233-BLK3	1.25	5/8/20 16:27	46801-1.RAW	16:27:28	19.16			8.8	0.044	0.044	ng/L	F005233
Hq2700-1	00	CAL	SEQ-CCV1	1	5/8/20 16:37	46802-1.RAW	16:37:44	99.53			89.1	0.446	0.446	ng/L	89.16654765
Hq2700-1	00	CAL	SEQ-CCB1	1	5/8/20 16:47	46803-1.RAW	16:47:59	18.48			8.1	0.040	0.040	ng/L	
Hq2700-1	00	SAM	OD00074-01	1.25	5/8/20 16:58	46804-1.RAW	16:58:16	94.69			84.3	0.383	0.383	ng/L	F005233
Hq2700-1	00	SAM	F005233-MS1	1.25	5/8/20 17:08	46805-1.RAW	17:08:32	231.85			221.5	1.336	1.336	ng/L	F005233
Hq2700-1	00	SAM	F005233-MSD1	1.25	5/8/20 17:18	46806-1.RAW	17:18:48	241.74			231.3	1.118	1.118	ng/L	F005233
Hq2700-1	00	SAM	OD00074-02	1.25	5/8/20 17:29	46807-1.RAW	17:29:04	31.58			21.2	0.067	0.067	ng/L	F005233
Hq2700-1	00	SAM	F005233-MS2	1.25	5/8/20 17:39	46808-1.RAW	17:39:21	182.98			172.6	0.824	0.824	ng/L	F005233
Hq2700-1	00	SAM	F005233-MSD2	1.25	5/8/20 17:49	46809-1.RAW	17:49:37	210.77			200.4	0.963	0.963	ng/L	F005233
Hq2700-1	00	SAM	OD00074-03	1.25	5/8/20 17:59	46810-1.RAW	17:59:53	55.46			45.1	0.187	0.187	ng/L	F005233
Hq2700-1	00	CAL	SEQ-CCB2	1	5/8/20 18:10	46811-1.RAW	18:10:09	28.27			17.9	0.051	0.051	ng/L	F005233
Hq2700-1	00	SAM	OD00074-04	1.25	5/8/20 18:20	46812-1.RAW	18:20:25	28.54			18.1	0.052	0.052	ng/L	F005233
Hq2700-1	00	SAM	OD00074-05	1.25	5/8/20 18:30	46813-1.RAW	18:30:41	31.34			21.0	0.086	0.086	ng/L	F005233
Hq2700-1	00	CAL	SEQ-CCV2	1	5/8/20 18:40	46814-1.RAW	18:40:58	103.93			93.5	0.468	0.468	ng/L	93.57324503
Hq2700-1	00	CAL	SEQ-CCB2	1	5/8/20 18:51	46815-1.RAW	18:51:14	14.99			4.6	0.023	0.023	ng/L	F005233
Hq2700-1	00	SAM	OD00074-07	1.25	5/8/20 19:01	46816-1.RAW	19:01:30	23.24			12.9	0.025	0.025	ng/L	F005233
Hq2700-1	00	SAM	OE00002-01	1.25	5/8/20 19:11	46817-1.RAW	19:11:47	34.42			24.0	0.081	0.102	ng/L	F005233
Hq2700-1	00	SAM	OE00002-02	1.25	5/8/20 19:22	46818-1.RAW	19:22:03	50.82			40.4	0.163	0.204	ng/L	F005233
Hq2700-1	00	SAM	OE00002-03	1.25	5/8/20 19:32	46819-1.RAW	19:32:20	40.76			30.4	0.113	0.141	ng/L	F005233
Hq2700-1	00	SAM	OE00002-04	1.25	5/8/20 19:42	46820-1.RAW	19:42:36	46.85			36.5	0.144	0.179	ng/L	F005233
Hq2700-1	00	SAM	OE00002-05	1.25	5/8/20 19:52	46821-1.RAW	19:52:53	35.28			24.9	0.086	0.107	ng/L	F005233
Hq2700-1	00	SAM	OE00002-06	1.25	5/8/20 20:03	46822-1.RAW	20:03:09	30.72			20.3	0.063	0.079	ng/L	F005233
Hq2700-1	00	SAM	OE00002-07	1.25	5/8/20 20:13	46823-1.RAW	20:13:25	29.82			19.4	0.058	0.073	ng/L	F005233
Hq2700-1	00	SAM	OE00002-08	1.25	5/8/20 20:23	46824-1.RAW	20:23:42	17.48			7.1	-0.003	-0.004	ng/L	F005233
Hq2700-1	00	CAL	SEQ-CCV3	1	5/8/20 20:33	46825-1.RAW	20:33:58	43.07			32.7	0.125	0.156	ng/L	F005233
Hq2700-1	00	CAL	SEQ-CCB3	1	5/8/20 20:44	46826-1.RAW	20:44:14	74.43			64.0	0.320	0.320	ng/L	F005233
Hq2700-1	00	SAM	OE00002-09	1.25	5/8/20 21:04	46828-1.RAW	20:54:31	12.98			2.6	0.013	0.013	ng/L	F005233
Hq2700-1	00	SAM	OE00002-10	1.25	5/8/20 21:15	46829-1.RAW	21:15:04	35.66			25.3	0.088	0.109	ng/L	F005233

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	00	SAM	0E00002-11	1.25	5/8/20 21:25	46830-1.RAW	21:25:20	12.03	2		1.6	-0.031	-0.038	ng/L	F0052333
Hg2700-1	00	SAM	0E00002-12	1.25	5/8/20 21:35	46831-1.RAW	21:35:37	34.26	2		23.9	0.081	0.081	ng/L	F0052333
Hg2700-1	00	SAM	F005235-BS1	1.25	5/8/20 21:45	46832-1.RAW	21:45:53	203.00	3		192.6	0.947	1.183	ng/L	F0052335
Hg2700-1	00	SAM	F005235-BSD1	1.25	5/8/20 21:56	46833-1.RAW	21:56:10	190.96	3		180.6	0.886	1.108	ng/L	F0052335
Hg2700-1	00	BLK	F005235-BLK1	1.25	5/8/20 22:06	46834-1.RAW	22:06:26	15.25	3		4.9	0.030	0.030	ng/L	F0052335
Hg2700-1	00	BLK	F005235-BLK2	1.25	5/8/20 22:16	46835-1.RAW	22:16:43	12.46	3		2.1	0.013	0.013	ng/L	F0052335
Hg2700-1	00	BLK	F005235-BLK3	1.25	5/8/20 22:26	46836-1.RAW	22:26:59	13.45	3		3.1	0.015	0.019	ng/L	F0052335
Hg2700-1	00	SAM	0D00062-01	1.25	5/8/20 22:37	46837-1.RAW	22:37:16	9.88	3		-0.5	-0.019	-0.024	ng/L	F0052335
Hg2700-1	00	CAL	SEQ-CCV4	1	5/8/20 22:47	46838-1.RAW	22:47:33	85.14	3		74.8	0.374	0.374	ng/L	74.7602508
Hg2700-1	00	CAL	SEQ-CCB4	1	5/8/20 22:57	46839-1.RAW	22:57:49	11.44	3		1.1	0.005	0.005	ng/L	F0052335
Hg2700-1	00	SAM	F005235-MS1	1.25	5/8/20 23:08	46840-1.RAW	23:08:06	219.03	3		208.6	1.027	1.284	ng/L	F0052335
Hg2700-1	00	SAM	F005235-MSD1	1.25	5/8/20 23:18	46841-1.RAW	23:18:22	172.57	3		162.2	0.794	0.993	ng/L	F0052335
Hg2700-1	00	SAM	0D00062-02	1.25	5/8/20 23:28	46842-1.RAW	23:28:39	9.56	3		-0.8	-0.021	-0.026	ng/L	F0052335
Hg2700-1	00	SAM	F005235-MS2	1.25	5/8/20 23:38	46843-1.RAW	23:38:55	197.61	3		187.2	1.020	1.150	ng/L	F0052335
Hg2700-1	00	SAM	F005235-MSD2	1.25	5/8/20 23:49	46844-1.RAW	23:49:11	217.65	3		207.3	1.275	1.275	ng/L	F0052335
Hg2700-1	00	SAM	0D00062-05	1.25	5/8/20 23:59	46845-1.RAW	23:59:28	5.33	3		-5.1	-0.042	-0.052	ng/L	F0052335
Hg2700-1	00	SAM	0D00062-06	1.25	5/8/20 0:09	46846-1.RAW	0:09:44	0.00	3		-10.4	-0.069	-0.086	ng/L	F0052335
Hg2700-1	00	CAL	SEQ-CCV5	1	5/8/20 0:20	46847-1.RAW	0:20:00	73.87	3		63.5	0.318	0.318	ng/L	63.50159474
Hg2700-1	00	CAL	SEQ-CCB5	1	5/8/20 0:30	46848-1.RAW	0:30:16	75.78	3		65.4	0.377	0.377	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-01	50	5/8/20 0:40	46849-1.RAW	0:40:32	8.99	3		-1.4	-0.007	-0.371	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-02	50	5/8/20 0:50	46850-1.RAW	0:50:48	44.78	3		34.4	0.172	8.980	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-03	50	5/8/20 1:01	46851-1.RAW	1:01:05	27.67	3		17.3	0.086	4.300	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-04	50	5/8/20 1:11	46852-1.RAW	1:11:21	74.02	3		63.6	0.318	15.893	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-05	50	5/8/20 1:21	46853-1.RAW	1:21:38	16.80	3		6.4	0.032	1.583	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-06	50	5/8/20 1:31	46854-1.RAW	1:31:54	120.93	3		110.5	0.552	27.622	ng/L	F0052335
Hg2700-1	00	CAL	SEQ-CCV6	1	5/8/20 1:42	46855-1.RAW	1:42:11	7.69	3		2.7	-0.013	-0.013	ng/L	2.69976424
Hg2700-1	00	CAL	SEQ-CCB6	1	5/8/20 1:52	46856-1.RAW	1:52:27	8.42	3		-2.0	-0.010	-0.010	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-01RE1	1.25	5/8/20 2:02	46857-1.RAW	2:02:43	64.04	3		53.7	0.252	0.315	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-02RE1	1.25	5/8/20 2:13	46858-1.RAW	2:13:00	2044.29	3		2033.9	10.156	12.695	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-03RE1	1.25	5/8/20 2:23	46859-1.RAW	2:23:16	1041.34	3		1031.0	5.140	6.425	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-04RE1	1.25	5/8/20 2:33	46860-1.RAW	2:33:33	2835.10	3		2824.7	14.111	17.639	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-05RE1	1.25	5/8/20 2:43	46861-1.RAW	2:43:49	150.03	3		139.6	0.682	0.852	ng/L	F0052335
Hg2700-1	00	SAM	0D00075-06RE1	1.25	5/8/20 2:54	46862-1.RAW	2:54:06	1816.62	3		1806.2	9.017	11.271	ng/L	F0052335
Hg2700-1	00	CAL	SEQ-CCV7	1	5/8/20 3:04	46863-1.RAW	3:04:22	155.11	3		124.7	0.624	0.624	ng/L	124.7620691
Hg2700-1	00	CAL	SEQ-CCB7	1	5/8/20 3:14	46864-1.RAW	3:14:35	20.60	3		16.2	0.051	0.051	ng/L	F0052335

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: ZKH 5/7/20
Upload/Date: ZKH 5/7/20

Samples to lab: 5/16/2020
Reviewer/Date: _____

Batch #: FO05234

EFGS Preparation Method

SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS

SOP2837 Tissue Nitric Digestion ICPMS CVAFS

SOP2840 Modified Aqua Regia

SOP2820 RP

SOP2821 HF Bomb Digestion ICPMS CVAFS

SOP2825 Nitric Bomb Digestion ICPMS CVAFS

SOP2993 Oven Digestion (As, Se Speciation)

SOP5145 Microwave Digestion (Nutraceuticals)

SOP5145 Microwave Digestion (3051)

NA Other: _____

Initials	SOP Date	DOC Date
<u>ZKH</u>	_____	<u>5/16/2020</u>
_____	_____	_____
_____	_____	_____

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: Methyl Mercury Distillation

		Reviewer Initials	Tertiary Review
1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
If YES, notify supervisor and technician immediately.			
2. Check prep method	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>
(a) For Ceuticals: Is correct Hg code being used in LIMS?	<input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30	<input type="checkbox"/> N/A	<input type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input type="checkbox"/> ≤ 20 <input checked="" type="checkbox"/> ≤ 10	<input type="checkbox"/>	<input type="checkbox"/>
(a) PBs per batch?	<input type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(c) BS, BS/BSD or CRM in batch?	<input checked="" type="checkbox"/> BS <input type="checkbox"/> BS/BSD <input type="checkbox"/> CRM	<input type="checkbox"/>	<input type="checkbox"/>
(d) MS/MSD in batch?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(e) MD in batch?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
Document:			
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
6. Special prep requirements?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>
(c) Spikes added:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: 2000428

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>1.0ng/mL MHg</u>	<u>2000428</u>	<u>50</u>			

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Matrix: Water **Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water** **Prepared: 5/6/2020**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005234-BS1	LCS	45	40	2000428	50			
F005234-BS2	LCS	45	40	2000428	50			
F005234-BS3	LCS	45	40	2000428	50			
F005234-BS4	LCS	45	40	2000428	50			

Standard ID(s): 2000428	Description: MHg New Primary 1.0 ng/mL CAL	Expiration: 24-May-20 00:00	Reagent ID(s): 2000983 2000984	Description: 1% APDC Solution 0.4% HCl Distillation Dilute (Made Daily)	Expiration: 13-May-20 00:00 07-May-20 00:00
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PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/6/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0C00107-01	Zahra Dist. DOC	45.0929	40	-	-		This sample does not exist - ZKH 3/21/	

Work Order
0C00107

Client
[REDACTED]

Project
[REDACTED]

Methyl Mercury Distillations (EPA 1630)

Name: ZKH Date: 5/6/2020 Batch #: F005234 Sample Matrix: Water
 WO#: 0C00107

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (±3)	Time first sample distillation completed: <u>1416</u>
1	F005234-BS1	<u>~2</u>	<u>45.4563</u>	<u>2</u>	Spike ID: <u>2000428</u> Spike Amount: <u>50</u> µL Spike Witness: <u>MPS 5/14/2020</u> Balance #: <u>25</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>MU17683</u> Cal. Date: <u>4/30/2020</u> Pipette #: <u>U21647</u> Cal. Date: <u>4/30/2020</u> Pipette #: <u>PU30538</u> Cal. Date: <u>4/30/2020</u> APDC ID: <u>2000983</u> HCl ID: <u>2000984</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>NA</u> Unit 2: <u>123°C</u> Unit 3: <u>NA</u> Unit 4: <u>NA</u> Unit 5: <u>NA</u> Unit 6: <u>NA</u> Comments:
2	F005234-BS2	<u>~2</u>	<u>45.4788</u>	<u>2</u>	
3	F005234-BS3	<u>~2</u>	<u>45.5926</u>	<u>3</u>	
4	F005234-BS4	<u>~2</u>	<u>45.5785</u>	<u>3</u>	
5	F005234-BS5 <u>0C00107-01</u>	<u>~2</u>	<u>45.0929</u>	<u>3</u>	
<u>ZKH 5/6/2020</u>					

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/6/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005234-BS1	LCS	45	40	2000428	50			
F005234-BS2	LCS	45	40	2000428	50			
F005234-BS3	LCS	45	40	2000428	50			
F005234-BS4	LCS	45	40	2000428	50			

Standard ID(s): 2000428 Description: MHg New Primary 1.0 ng/mL CAL Expiration: 24-May-20 00:00

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

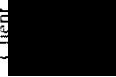
Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0C00107-01	Zahra Dist DOC	45	40	-	-		This sample does not exist - ZKH 3/21/	

Work Order
0C00107

Client



Project



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: ZKH 5/6/2020
Upload/Date: ZKH 5/7/2020

Samples to lab: 5/6/2020
Reviewer/Date: _____

Batch #: FO05233

EFGS Preparation Method

SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS

SOP2837 Tissue Nitric Digestion ICPMS CVAFS

SOP2840 Modified Aqua Regia

SOP2820 RP

SOP2821 HF Bomb Digestion ICPMS CVAFS

SOP2825 Nitric Bomb Digestion ICPMS CVAFS

SOP2993 Oven Digestion (As, Se Speciation)

SOP5145 Microwave Digestion (Nutraceuticals)

SOP5145 Microwave Digestion (3051)

NA Other:

Initials	SOP Date	DOC Date
<u>ZKH</u>		<u>5/6/2020</u>
Comments: _____		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analyses: Methy Mercury Distillation

	Reviewer Initials	Tertiary Review
1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/>
If YES, notify supervisor and technician immediately.		
2. Check prep method	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(a) For Ceuticals: Is correct Hg code being used in LIMS?	<input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30 <input type="checkbox"/> N/A	<input type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10	<input type="checkbox"/>
(a) PBs per batch?	<input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs	<input type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(c) BS, BS/BSD or CRM in batch?	<input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM	<input type="checkbox"/>
(d) MS/MSD in batch?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(e) MD in batch?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
Document: <u>0000074-01 / 0000074-02 QCD</u>		
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
6. Special prep requirements?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(b) For all spiking was there a witness? (Initials must be in logbook)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(c) Spikes added:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: 2000478

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>10mg/ml Mky</u>	<u>2000478</u>	<u>50</u>			

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Matrix: Water **Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water** **Prepared: 5/6/2020**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005233-BLK1	Blank	45	40					
F005233-BLK2	Blank	45	40					
F005233-BLK3	Blank	45	40					
F005233-BS1	LCS	45	40	2000428	50			
F005233-BSD1	LCS Dup	45	40	2000428	50			
F005233-MS1	Matrix Spike [0D00074-01]	45.3567	40	2000428	50			
F005233-MS2	Matrix Spike [0D00074-02]	45.2785	40	2000428	50			
F005233-MSD1	Matrix Spike Dup [0D00074-01]	45.4245	40	2000428	50			
F005233-MSD2	Matrix Spike Dup [0D00074-02]	45.0768	40	2000428	50			

Standard ID(s): 2000428	Description: MHg New Primary 1.0 ng/mL CAL	Expiration: 24-May-20 00:00	Reagent ID(s): 2000983 2000984	Description: 1% APDC Solution 0.4% HCl Distillation Dilute (Made Daily)	Expiration: 13-May-20 00:00 07-May-20 00:00
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PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/6/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
01D00074-01	WQ1b-C_042720_SW_10 TOTAL	45.8303	40	QC	-		MS/MSD	
01D00074-02	WQ1b-C_042720_SW_10 DISSOLVED	45.5742	40	QC	-	fms Test/	MS/MSD	
01D00074-03	WQ2-C_042720_SW_10 TOTAL	45.6076	40	-	-			
01D00074-04	WQ2-C_042720_SW_10 DISSOLVED	45.849	40	-	-	fms Test/		
01D00074-05	WQ3-L_042720_SW_10 TOTAL	45.0305	40	-	-			
01D00074-06	WQ3-L_042720_SW_10 DISSOLVED	45.9123	40	-	-	fms Test/		
01D00074-07	WQ1b-C_042720_SW_10 DUP TOTAL	45.7057	40	-	-			
01D00074-08	WQ1b-C_042720_SW_10 DUP DISSOLVED	45.7123	40	-	-			
0E000002-01	WQ-FPT_042920_SW_10 TOTAL	45.2003	40	-	-			
0E000002-02	WQ-FPT_042920_SW_10 DISSOLVED	45.0073	40	-	-			
0E000002-03	ES-15_042920_SW_10 TOTAL	45.5717	40	-	-			
0E000002-04	ES-15_042920_SW_10 DISSOLVED	45.7102	40	-	-			
0E000002-05	WQ-ECH_042920_SW_10 TOTAL	45.7094	40	-	-			
0E000002-06	WQ-ECH_042920_SW_10 DISSOLVED	45.0343	40	-	-			
0E000002-07	OV-02_042920_SW_10 TOTAL	45.3405	40	-	-			
0E000002-08	OV-02_042920_SW_10 DISSOLVED	45.9539	40	-	-			
000002-09	ADD-02_042920_SW_10 TOTAL	45.2179	40	-	-			
000002-10	ADD-02_042920_SW_10 DISSOLVED	45.6509	40	-	-			
000002-11	FB-01_042920_SW TOTAL	45.1209	40	-	-	010106		

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

0E00002-12	EB-01_042920_SW DISSOLVED	45.6572	40	-	-	010106	
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Work Order

0D000074

0E000002

Client



Project

Methyl Mercury Distillations (EPA 1630)

Name: ZLH Date: 5/6/2020 Batch #: FO05233 Sample Matrix: Water
 WO#: 0D00074, 0E00002

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (±3)	Time first sample distillation completed: <u>1416</u>
1	FO05233-BLK1	<2	45.1715	3	Spike ID: <u>2000428</u>
2	FO05233-BLK2	<2	45.7485	4	
3	FO05233-BLK3	<2	45.6258	3	Spike Amount: <u>50</u> µL
4	FO05233-BL4	<2	45.0152	3	Spike Witness: <u>MFS 5/6/2020</u>
5	FO05233-BSD1	<2	45.6982	3	Balance #: <u>75</u>
6	0D00074-01 (src MS1)	<2	45.8303	4	Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	FO05233-MS1 (src MS1)	<2	45.3567	4	Pipette #: <u>MU17683</u>
8	FO05233-MSD1	<2	45.4245	4	Cal. Date: <u>4/30/2020</u>
9	0D00074-02 (src MS2)	<2	45.5742	4	Pipette #: <u>PUB0538</u>
10	FO05233-MS2	<2	45.2785	3	Cal. Date: <u>4/30/2020</u>
11	FO05233-MSD2	<2	45.0768	3	Pipette #: <u>LI121647</u>
12	0D00074-03	<2	45.6076	4	Cal. Date: <u>4/30/2020</u>
13	0D00074-04	<2	45.8490	3	APDC ID: <u>2000983</u>
14	0D00074-05	<2	45.0305	2	HCl ID: <u>2000984</u>
15	0D00074-06	<2	45.9123	3	Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only.
16	0D00074-07	<2	45.7057	2	
17	0D00074-08	<2	45.7123	2	
18	0E00002-01	<2	45.2003	2	
19	0E00002-02	<2	45.0073	3	
20	0E00002-03	<2	45.5717	3	
21	0E00002-04	<2	45.7102	4	
22	0E00002-05	<2	45.7094	4	
23	0E00002-06	<2	45.0343	2	
24	0E00002-07	<2	45.3405	3	
25	0E00002-08	<2	45.9539	3	
26	0E00002-09	<2	45.2179	2	
27	0E00002-10	<2	45.6509	2	
28	0E00002-11	<2	45.1209	2	Unit 1: <u>NA</u>
29	0E00002-12	<2	45.6572	3	Unit 2: <u>NA</u>
<p style="text-align: center;">ZLH 5/6/2020</p>					Unit 3: <u>123 °C</u>
					Unit 4: <u>112 °C</u>
					Unit 5: <u>120 °C</u>
					Unit 6: <u>NA</u>
					Comments:

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005233-BLK1 ✓	Blank	45	40					
F005233-BLK2 ✓	Blank	45	40					
F005233-BLK3 ✓	Blank	45	40					
F005233-BS1 ✓	LCS	45	40	2000428	50			
F005233-BSD1 ✓	LCS Dup	45	40	2000428	50			
F005233-MS1 ✓	Matrix Spike [0D00074-01]	45	40	2000428	50			
F005233-MS2 ✓	Matrix Spike [0D00074-02]	45	40	2000428	50			
F005233-MSD1 ✓	Matrix Spike Dup [0D00074-01]	45	40	2000428	50			
F005233-MSD2 ✓	Matrix Spike Dup [0D00074-02]	45	40	2000428	50			

Standard ID(s): 2000428 Description: MHg New Primary 1.0 ng/mL CAL Expiration: 24-May-20 00:00

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/6/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00074-01	WQ1b-C_042720_SW_10 TOTAL	45	40	QC	-		MS/MSD	
0D00074-02	WQ1b-C_042720_SW_10 DISSOLVED	45	40	QC	-	fins Test	MS/MSD	
0D00074-03	WQ2-C_042720_SW_10 TOTAL	45	40	-	-			
0D00074-04	WQ2-C_042720_SW_10 DISSOLVED	45	40	-	-	fins Test		
0D00074-05	WQ3-L_042720_SW_10 TOTAL	45	40	-	-			
0D00074-06	WQ3-L_042720_SW_10 DISSOLVED	45	40	-	-	fins Test		
0D00074-07	WQ1b-C_042720_SW_10_DUP TOTAL	45	40	-	-			
0D00074-08	WQ1b-C_042720_SW_10_DUP DISSOLVED	45	40	-	-			
0E00002-01	WQ-FPT_042920_SW_10 TOTAL	45	40	-	-			
0E00002-02	WQ-FPT_042920_SW_10 DISSOLVED	45	40	-	-			
0E00002-03	ES-15_042920_SW_10 TOTAL	45	40	-	-			
0E00002-04	ES-15_042920_SW_10 DISSOLVED	45	40	-	-			
0E00002-05	WQ-FCH_042920_SW_10 TOTAL	45	40	-	-			
0E00002-06	WQ_FCH_042920_SW_10 DISSOLVED	45	40	-	-			
0E00002-07	OV-02_042920_SW_10 TOTAL	45	40	-	-			
0E00002-08	OV-02_042920_SW_10 DISSOLVED	45	40	-	-			
00002-09	ADD-02_042920_SW_10 TOTAL	45	40	-	-			
00002-10	ADD-02_042920_SW_10 DISSOLVED	45	40	-	-			
00002-11	EIB-01_042920_SW TOTAL	45	40	-	-	010106		

PREPARATION BENCH SHEET

F005233

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

0E00002-12	EB-01_042920_SW DISSOLVED	45	40	-	-	010106
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Work Order
0D00074
0E00002

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS 5/7/2020
Upload/Date: MFS 5/7/2020

Samples to lab: 5/7/2020 Batch #: EGC5235
Reviewer/Date: ZKH 5/18/2020

EFGS Preparation Method

SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS

SOP2837 Tissue Nitric Digestion ICPMS CVAFS

SOP2840 Modified Aqua Regia

SOP2820 RP

SOP2821 HF Bomb Digestion ICPMS CVAFS

SOP2825 Nitric Bomb Digestion ICPMS CVAFS

SOP2993 Oven Digestion (As, Se Speciation)

SOP5145 Microwave Digestion (Nutraceuticals)

SOP5145 Microwave Digestion (3051)

NA Other: SOP 2797 Distillation

Initials	SOP Date	DOC Date
<u>MFS</u>	<u>10/23/19</u>	<u>9J00236</u>

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: MHg

	Reviewer Initials	Tertiary Review
1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.	<input checked="" type="checkbox"/> NO	<input type="checkbox"/>
If YES, notify supervisor and technician immediately.		
2. Check prep method	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(a) For Ceuticals: Is correct Hg code being used in LIMS? <input type="checkbox"/> ICPMS <input type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> 20 <input type="checkbox"/> < 10	<input type="checkbox"/>
(a) PBs per batch?	<input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs	<input type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(c) BS, BS/BSD or CRM in batch? <input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM	<input type="checkbox"/> N/A	<input type="checkbox"/>
(d) MS/MSD in batch?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(e) MD in batch?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
Document: <u>N/A</u>		
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
6. Special prep requirements?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	<input type="checkbox"/>
(c) Spikes added:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: N/A

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL

MFS 5/17/2020

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/7/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005235-BLK1	Blank	45	40					
F005235-BLK2	Blank	45	40					
F005235-BLK3	Blank	45	40					
F005235-BS1	LCS	45	40	2000428	50			
F005235-BSD1	LCS Dup	45	40	2000428	50			
F005235-MS1	Matrix Spike [0D00062-01]	45.73	40	2000428	50			
F005235-MS2	Matrix Spike [0D00062-02]	45.42	40	2000428	50			
F005235-MSD1	Matrix Spike Dup [0D00062-01]	45.59	40	2000428	50			
F005235-MSD2	Matrix Spike Dup [0D00062-02]	45.44	40	2000428	50			

<u>Standard ID(s):</u> 2000428	<u>Description:</u> MHg New Primary 1.0 ng/mL CAL	<u>Expiration:</u> 24-May-20 00:00	<u>Reagent ID(s):</u> 2000983 2000991	<u>Description:</u> 1% APDC Solution .4% HCl Distillation Dilute (Made Daily)	<u>Expiration:</u> 13-May-20 00:00 08-May-20 00:00
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PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water **Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water** **Prepared: 5/7/2020**

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00062-01	GSLCEOP	45.34	40	-	-	S&R		
0D00062-02	GSLCEOP (Blank)	45.55	40	-	-	S&R		
0D00062-05	By Product C Plant	45.27	40	-	-	S&R		
0D00062-06	By Product C Plant (Blank)	45.13	40	-	-	S&R		
0D00075-01	P2-PW-Alb1-A-Do	34.87	40	-	-	140603	Porewater	Sample Depleted. Added 12.43g Reagent Water for volume - MFS 5/7/2020
0D00075-02	P2-PW-Alb1-B-Do	45.08	40	-	-	140603	Porewater	
0D00075-03	P2-PW-Alb1-C-Do	38.83	40	-	-	140603	Porewater	Sample Depleted. Added 7.17g Reagent Water for volume - MFS 5/7/2020
0D00075-04	P2-PW-Alb1-D-Do	45.01	40	-	-	140603	Porewater	
0D00075-05	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater	Sample Depleted. Added 3.59g Reagent Water for volume - MFS 5/7/2020
0D00075-06	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater	Sample Depleted. Added 3.45g Reagent Water for volume - MFS 5/7/2020

Work Order: 0D00062, 0D00075
 Client: [REDACTED]
 Project: [REDACTED]

Methyl Mercury Distillations (EPA 1630)

Name: MFS Date: 5/7/2020 Batch #: F005235 Sample Matrix: Water
 WO#: 0D00062, 0D00075

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (23)	Time first sample distillation completed: <u>1320</u>
1	F005235-BLK1	22	45.64	3	2000478 MFS Spike ID: <u>1964214</u> 5/7/2020 Spike Amount: <u>50</u> µL Spike Witness: <u>ZKH</u> Balance #: <u>2</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>NU01049</u> Cal. Date: <u>5/7/2020</u> Pipette #: <u>LU21657</u> Cal. Date: <u>5/7/2020</u> Pipette #: <u>NU004643</u> Cal. Date: <u>5/7/2020</u> APDC ID: <u>2000983</u> HCl ID: <u>2000991</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>123°C</u> Unit 2: <u>123°C</u> Unit 3: <u>123°C</u> Unit 4: <u>112.4°C</u> Unit 5: <u>121°C</u> Unit 6: <u>124.2°C</u> Comments: * Sample depleted. Added 12.43g H ₂ O for Volume ** Sample depleted. Added 7.17g H ₂ O for Volume *** Sample Depleted Added 3.59g H ₂ O for Volume **** Sample depleted. Added 3.45g H ₂ O for Volume
2	F005235-BLK2	22	45.90	4	
3	F005235-BLK3	22	45.83	4	
4	F005235-BS1	22	45.29	3	
5	F005235-BS2	22	45.84	3	
6	0D00062-01A (SOURCE MFS/MSD)	22	45.34	3	
7	F005235-MS1	22	45.73	3	
8	F005235-MSD1	22	45.59	3	
9	0D00062-02A (SOURCE MFS/MSD)	22	45.55	3	
10	F005235-MS2	22	45.42	3	
11	F005235-MSD2	22	45.44	3	
12	0D00062-05A	22	45.21	3	
13	0D00062-06A	22	45.13	3	
14	0D00075-01A	22	34.87	2	
15	0D00075-02A	22	45.08	2	
16	0D00075-03A	22	38.83	2	
17	0D00075-04A	22	45.01	2	
18	0D00075-05A	22	41.43	2	
19	0D00075-06A	22	41.58	3	
20	0D00075-07A				

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005235-BLK1	Blank	45	40					
F005235-BLK2	Blank	45	40					
F005235-BLK3	Blank	45	40					
F005235-BS1	LCS	45	40	2000428	50			
F005235-BSD1	LCS Dup	45	40	2000428	50			
F005235-MS1	Matrix Spike [0D00062-05]	45	40	2000428	50			
F005235-MS2	Matrix Spike [0D00062-02]	45	40	2000428	50			
F005235-MSD1	Matrix Spike Dup [0D00062-05]	45	40	2000428	50			
F005235-MSD2	Matrix Spike Dup [0D00062-02]	45	40	2000428	50			

Standard ID(s): 2000428
 Description: MHg New Primary 1.0 ng/mL CAL
 Expiration: 24-May-20 00:00

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/6/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00062-01	GSLCEOP	45	40	-	-	S&R		
0D00062-02	GSLCEOP (Blank)	45	40	-	-	S&R		
0D00062-03	By Product C Plant	45	40	-	-	S&R		
0D00062-04	By Product C Plant (Blank)	45	40	-	-	S&R		
0D00075-01	P2-PW-Alb1-A-Do	45	40	-	-	140603	Porewater	
0D00075-02	P2-PW-Alb1-B-Do	45	40	-	-	140603	Porewater	
0D00075-03	P2-PW-Alb1-C-Do	45	40	-	-	140603	Porewater	
0D00075-04	P2-PW-Alb1-D-Do	45	40	-	-	140603	Porewater	
0D00075-05	P2-PW-Un-A-Do	45	40	-	-	140603	Porewater	
0D00075-06	P2-PW-Un-B-Do	45	40	-	-	140603	Porewater	
0D00075-07	P2-PW-Un-C-Do	45	40	-	-	140603	Porewater	
0D00075-08	P2-PW-Un-D-Do	45	40	-	-	140603	Porewater	
0D00075-09	P2-OW-Alb1-A-Do	45	40	-	-	140603	Overlying Water	
0D00075-10	P2-OW-Alb1-B-Do	45	40	-	-	140603	Overlying Water	
0D00075-11	P2-OW-Alb1-C-Do	45	40	-	-	140603	Overlying Water	
0D00075-12	P2-OW-Alb1-D-Do	45	40	-	-	140603	Overlying Water	
0D00075-13	P2-OW-Un-A-Do	45	40	-	-	140603	Overlying Water	
0D00075-14	P2-OW-Un-B-Do	45	40	-	-	140603	Overlying Water	
0D00075-15	P2-OW-Un-C-Do	45	40	-	-	140603	Overlying Water	

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Prepared: 5/6/2020

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

0D00075-16	P2-OW-Un-D-Do	45	40	-	140603	Overlying Water
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Work Order
 0D00062
 0D00075

Client


Project

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Matrix: Water **Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water** **Prepared: 5/6/2020**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005234-BS1	LCS	45	40	2000428	50			
F005234-BS2	LCS	45	40	2000428	50			
F005234-BS3	LCS	45	40	2000428	50			
F005234-BS4	LCS	45	40	2000428	50			

Standard ID(s):	Description:	Reagent ID(s):	Description:	Expiration:
2000428	MHg New Primary 1.0 ng/mL CAL	2000639	Acetate Buffer	24-May-20 00:00
		2000810	Ethylating Agent (for Methyl Mercury Analysis)	24-Sep-20 00:00
		2000937	2.5% Ascorbic Acid	14-Jul-20 00:00
		2000983	1% APDC Solution	08-May-20 00:00
		2000984	0.4% HCl Distillation Dilute (Made Daily)	13-May-20 00:00
				07-May-20 00:00

PREPARATION BENCH SHEET

F005234

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix: Water

Prepared: 5/6/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0C00107-01	Zahra Dist. DOC	45.0929	40	-	-		This sample does not exist - ZKH 3/21/	

Work Order
0C00107

Client



Project

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/7/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005235-BLK1	Blank	45	40					
F005235-BLK2	Blank	45	40					
F005235-BLK3	Blank	45	40					
F005235-BS1	LCS	45	40	2000428	50			
F005235-BSD1	LCS Dup	45	40	2000428	50			
F005235-MS1	Matrix Spike [0D00062-01]	45.73	40	2000428	50			
F005235-MS2	Matrix Spike [0D00062-02]	45.42	40	2000428	50			
F005235-MSD1	Matrix Spike Dup [0D00062-01]	45.59	40	2000428	50			
F005235-MSD2	Matrix Spike Dup [0D00062-02]	45.44	40	2000428	50			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2000428	MHg New Primary 1.0 ng/mL CAL	24-May-20 00:00	2000639	Acetate Buffer	24-Sep-20 00:00
			2000810	Ethylating Agent (For Methyl Mercury Analysis)	14-Jul-20 00:00
			2000937	2.5% Ascorbic Acid	08-May-20 00:00
			2000983	1% APDC Solution	13-May-20 00:00
			2000991	4% HCl Distillation Dilute (Made Daily)	08-May-20 00:00

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/7/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs	Location	Sample Comments	Analysis Comments
0D00062-01	GSLCEOP	45.34	40	-	-	010106		
0D00062-02	GSLCEOP (Blank)	45.55	40	-	-	010106		
0D00062-05	By Product C Plant	45.27	40	-	-	010106		
0D00062-06	By Product C Plant (Blank)	45.13	40	-	-	010106		
0D00075-01	P2-PW-Alb1-A-Do	34.87	40	-	-	140603	Porewater	Sample Depleted. Added 12.43g Reagent Water for volume - MFS 5/7/2020
0D00075-01RE1	P2-PW-Alb1-A-Do	34.87	40	-	-	140603	Porewater Sample Depleted. Added 12	IX ran is same seq - ZKH 5/8/2020
0D00075-02	P2-PW-Alb1-B-Do	45.08	40	-	-	140603	Porewater	
0D00075-02RE1	P2-PW-Alb1-B-Do	45.08	40	-	-	140603	Porewater Added 5/8/2020 by ZKH	IX ran is same seq - ZKH 5/8/2020
0D00075-03	P2-PW-Alb1-C-Do	38.83	40	-	-	140603	Porewater	Sample Depleted. Added 7.17g Reagent Water for volume - MFS 5/7/2020
0D00075-03RE1	P2-PW-Alb1-C-Do	38.83	40	-	-	140603	Porewater Sample Depleted. Added 7.1	IX ran is same seq - ZKH 5/8/2020
0D00075-04	P2-PW-Alb1-D-Do	45.01	40	-	-	140603	Porewater	
0D00075-04RE1	P2-PW-Alb1-D-Do	45.01	40	-	-	140603	Porewater Added 5/8/2020 by ZKH	IX ran is same seq - ZKH 5/8/2020
0D00075-05	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater	Sample Depleted. Added 3.59g Reagent Water for volume - MFS 5/7/2020
0D00075-05RE1	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater Sample Depleted. Added 3.5	IX ran is same seq - ZKH 5/8/2020
0D00075-06	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater	Sample Depleted. Added 3.45g Reagent Water for volume - MFS 5/7/2020
0D00075-06RE1	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater Sample Depleted. Added 3.4	IX ran is same seq - ZKH 5/8/2020

ark Order
00062
00075

Client
Project

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/7/2020

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 5/7/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005235-BLK1	Blank	45	40					
F005235-BLK2	Blank	45	40					
F005235-BLK3	Blank	45	40					
F005235-BS1	LCS	45	40	2000428	50			
F005235-BSD1	LCS Dup	45	40	2000428	50			
F005235-MS1	Matrix Spike [0D00062-01]	45.73	40	2000428	50			
F005235-MS2	Matrix Spike [0D00062-02]	45.42	40	2000428	50			
F005235-MSD1	Matrix Spike Dup [0D00062-01]	45.59	40	2000428	50			
F005235-MSD2	Matrix Spike Dup [0D00062-02]	45.44	40	2000428	50			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2000428	MHg New Primary 1.0 ng/mL CAL	24-May-20 00:00	2000639	Acetate Buffer	24-Sep-20 00:00
			2000810	Ethylating Agent (For Methyl Mercury Analysis)	14-Jul-20 00:00
			2000937	2.5% Ascorbic Acid	08-May-20 00:00
			2000983	1% APDC Solution	13-May-20 00:00
			2000991	.4% HCl Distillation Dilute (Made Daily)	08-May-20 00:00

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/7/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0D00062-01	GSLCEOP	45.34	40	-	-	010106		
0D00062-02	GSLCEOP (Blank)	45.55	40	-	-	010106		
0D00062-05	By Product C Plant	45.27	40	-	-	010106		
0D00062-06	By Product C Plant (Blank)	45.13	40	-	-	010106		
0D00075-01	P2-PW-Albl-A-Do	34.87	40	-	-	140603	Porewater	Sample Depleted. Added 12.43g Reagent Water for volume - MFS 5/7/2020
0D00075-01RE1	P2-PW-Albl-A-Do	34.87	40	-	-	140603	Porewater Sample Depleted. Added 12	IX ran is same seq. - ZKH 5/8/2020
0D00075-02	P2-PW-Albl-B-Do	45.08	40	-	-	140603	Porewater	
0D00075-02RE1	P2-PW-Albl-B-Do	45.08	40	-	-	140603	Porewater Added 5/8/2020 by ZKH	IX ran is same seq. - ZKH 5/8/2020
0D00075-03	P2-PW-Albl-C-Do	38.83	40	-	-	140603	Porewater	Sample Depleted. Added 7.17g Reagent Water for volume - MFS 5/7/2020
0D00075-03RE1	P2-PW-Albl-C-Do	38.83	40	-	-	140603	Porewater Sample Depleted. Added 7.1	IX ran is same seq. - ZKH 5/8/2020
0D00075-04	P2-PW-Albl-D-Do	45.01	40	-	-	140603	Porewater	
0D00075-04RE1	P2-PW-Albl-D-Do	45.01	40	-	-	140603	Porewater Added 5/8/2020 by ZKH	IX ran is same seq. - ZKH 5/8/2020
0D00075-05	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater	Sample Depleted. Added 3.59g Reagent Water for volume - MFS 5/7/2020
0D00075-05RE1	P2-PW-Un-A-Do	41.43	40	-	-	140603	Porewater Sample Depleted. Added 3.5	IX ran is same seq. - ZKH 5/8/2020
0D00075-06	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater	Sample Depleted. Added 3.45g Reagent Water for volume - MFS 5/7/2020
0D00075-06RE1	P2-PW-Un-B-Do	41.58	40	-	-	140603	Porewater Sample Depleted. Added 3.4	IX ran is same seq. - ZKH 5/8/2020

Work Order
00062
00075

Client
[Redacted]

Product

PREPARATION BENCH SHEET

F005235

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/7/2020

28286

PeakMeHg (Ri)	PeakHg2 (Raw)	PeakPrHg (Raw Control (ef))	Flags	RunCount	Comment
2.14664352	0	0 cleandry	CT	1	
7.67679398	19.2907697	0 psample10	OK	1	
10.3882523	22.5737847	0 psample10	OK	1	
21.2252315	29.1563657	0 psample10	OK	1	
48.5908565	26.407147	0 psample10	OK	1	
198.293808	43.7965856	0 psample10	OK	1	
405.391927	28.8225116	0 psample10	CT	1	
836.554225	28.9585648	0 psample10	CT	1	
118.978472	30.5600405	0 psample10	OK	1	
18.6041088	24.1795139	0 psample10	CT	1	
150.319126	73.2152199	0 psample10	CT	1	F005234
179.7875	273.341551	0 psample10	OK	1	F005234
170.889265	126.519792	0 psample10	CT	1	F005234
148.392245	134.285966	0 psample10	OK	1	F005234
10.8074074	306.475637	0 psample10	CT	1	F005234
161.225984	39.9157118	0 psample10	OK	1	F005233
173.434809	43.9719329	0 psample10	OK	1	F005233
17.6160301	129.824595	0 psample10	CT	1	F005233
17.6947627	94.5689815	0 psample10	OK	1	F005233
19.162037	77.7193287	0 psample10	CT	1	F005233
99.5281829	20.9173611	0 psample10	OK	1	
18.4820602	23.4871817	0 psample10	CT	1	
94.6946759	8427.86672	0 psample10	CT	1	F005233
231.853356	642.811632	0 psample10	OK	1	F005233
241.736487	318.240683	0 psample10	CT	1	F005233
31.5778356	109.278009	0 psample10	OK	1	F005233
182.983044	141.192824	0 psample10	OK	1	F005233
210.766425	92.7081597	0 psample10	CT	1	F005233
55.4645255	57.562037	0 psample10	OK	1	F005233
28.2661458	84.3899016	0 psample10	CT	1	F005233
28.5365741	46.1140046	0 psample10	CT	1	F005233
31.3417245	39.7045718	0 psample10	OK	1	F005233
103.933565	28.9197338	0 psample10	CT	1	F005233
14.9862269	29.4260417	0 psample10	OK	1	
23.2449074	43.1289931	0 psample10	CT	1	F005233
34.4211806	66.2135417	0 psample10	OK	1	F005233
50.8194155	128.915683	0 psample10	CT	1	F005233
40.7585359	171.990683	0 psample10	OK	1	F005233

pg 384

0E00002-03	B17	1.25	10.388	0.4347364	0.227959939	8.8918488	46820-1.RAW	19:42:36	79.9253183
0E00002-04	B18	1.25	10.388	0.4475473	0.155633662	5.4583137	46821-1.RAW	19:52:53	81.9744502
0E00002-05	B19	1.25	10.388	0.3514554	0.127134667	0.6565798	46822-1.RAW	20:03:09	66.6043267
0E00002-06	B20	1.25	10.388	0.3791939	0.121468913	0.2756595	46823-1.RAW	20:13:25	71.0411712
0E00002-07	B21	1.25	10.388	0.6954367	0.044355689	1.7278125	46824-1.RAW	20:23:42	121.624913
0E00002-08	C1	1.25	10.388	0.4214478	0.204312653	0.4384584	46825-1.RAW	20:33:58	77.7997685
SEQ-CCV3	C2	1	10.388	0.2649153	0.320324787	0.1037601	46826-1.RAW	20:44:14	63.3554935
SEQ-CCB3	C3	1	10.388	0.2357598	0.012944258	0.0771922	46827-1.RAW	20:54:31	57.5261415
0E00002-09	C4	1.25	10.388	0.4465683	0.264176081	0.6703685	46828-1.RAW	21:04:47	81.817853
0E00002-10	C5	1.25	10.388	0.3872358	0.158010492	0.3549318	46829-1.RAW	21:15:04	72.3274884
0E00002-11	C6	1.25	10.388	1.637365	0.010281209	0.1940316	46830-1.RAW	21:25:20	272.288455
0E00002-12	C7	1.25	10.388	0.9498995	0.149265477	0.1702255	46831-1.RAW	21:35:37	162.326799
F005235-851	C8	1.25	10.388	0.7666418	1.204169497	0.114297	46832-1.RAW	21:45:53	133.014323
F005235-85D1	C9	1.25	10.388	0.5867821	1.128887693	0.273182	46833-1.RAW	21:56:10	104.24537
F005235-BLK1	C10	1.25	10.388	0.5056477	0.030416342	0.2498272	46834-1.RAW	22:06:26	91.2677373
F005235-BLK2	C11	1.25	10.388	0.4575027	0.012967557	0.1586588	46835-1.RAW	22:16:43	83.5668403
F005235-BLK3	C12	1.25	10.388	0.8299897	0.019150863	0.800384	46836-1.RAW	22:26:59	143.146962
0D00062-01	C13	10.388	0.4148858	0	0	0.1033445	46837-1.RAW	22:37:16	93.3406378
SEQ-CCV4	C14	1	10.388	0.338885	0.373880125	0.0486285	46838-1.RAW	22:47:33	78.1450231
SEQ-CCB4	C15	1	10.388	0.3081478	0.005267631	0.0222511	46839-1.RAW	22:57:49	71.9994213
F005235-M51	C16	1.25	10.388	0.4168582	1.304403773	0.7510318	46840-1.RAW	23:08:06	77.0656539
F005235-MSD1	C17	1.25	10.388	2.5432393	1.013942356	0.0990664	46841-1.RAW	23:18:22	417.185069
0D00062-02	C18	1.25	10.388	1.2486793	0	0.1410566	46842-1.RAW	23:28:39	210.117297
F005235-MS2	C19	1.25	10.388	0.7222496	1.17050299	0.0882544	46843-1.RAW	23:38:55	125.913696
F005235-MSD2	C20	1.25	10.388	0.5153227	1.295787919	0	46844-1.RAW	23:49:11	92.8152778
0D00062-05	C21	1.25	10.388	1.7564137	0	1.6005092	46845-1.RAW	0:09:44	291.330556
0D00062-06	A1	1.25					46846-1.RAW	0:20:00	248.565933
SEQ-CCV5	A2	1	10.388	1.191244	0.317507974	0.0256824	46847-1.RAW	0:30:16	143.014583
SEQ-CCB5	A3	1	10.388	0.6633297	0.327049016	0.009873	46848-1.RAW	0:40:32	127.344329
0D00075-01	A4	50	10.388	29.24775	0	1.9106108	46849-1.RAW	0:50:48	128.714439
0D00075-02	A5	50	10.388	29.59038	8.600462288	0	46850-1.RAW	1:01:05	136.196665
0D00075-03	A6	5	10.388	3.1461495	0.432058951	0	46851-1.RAW	1:11:21	131.397049
0D00075-04	A7	5	10.388	3.0261232	1.591344534	0.9043874	46852-1.RAW	1:21:38	145.829109
0D00075-05	A8	50	10.388	33.870325	1.604269399	0	46853-1.RAW	1:31:54	143.921875
0D00075-06	A9	50	10.388	33.393374	27.64284367	0	46854-1.RAW	1:42:11	131.90897
SEQ-CCV6	A10	1	10.388	0.607785	0	0	46855-1.RAW	1:52:27	114.371991
SEQ-CCB6	A11	1	10.388	0.5200739	0	0	46856-1.RAW	2:02:43	135.739207
0D00075-01RE1	A12	1.25	10.388	0.7836774	0.335454231	4.8491909	46857-1.RAW	2:13:00	140.607205
0D00075-02RE1	A13	1.25	10.388	0.8141115	12.71570074	1.2062799	46858-1.RAW	2:23:16	127.358854
0D00075-03RE1	A14	1.25	10.388	0.7312846	6.445401302	0.3920608	46859-1.RAW	2:33:33	187.1207
0D00075-04RE1	A15	1.25	10.388	1.1049076	17.6597237	16.37226	46860-1.RAW	2:43:49	197.333507
0D00075-05RE1	A16	1.25	10.388	1.1687567	0.872997143	0.6014183	46861-1.RAW		

msgh

46.8509549	1432.65938	0	psample10	CT	1	F005233
35.2822049	883.457755	0	psample10	OK	1	F005233
30.7237269	115.409664	0	psample10	CT	1	F005233
29.8174769	54.4806134	0	psample10	OK	1	F005233
17.483044	286.755729	0	psample10	OK	1	F005233
43.0685185	80.5206597	0	psample10	CT	1	F005233
74.4340856	31.1340856	0	psample10	CT	1	
12.976331	25.8220775	0	psample10	CT	1	
52.6438079	117.615191	0	psample10	OK	1	F005233
35.6623843	67.1603877	0	psample10	CT	1	F005233
12.0327546	41.4240451	0	psample10	CT	1	F005233
34.2635995	37.6162037	0	psample10	CT	1	F005233
202.997859	28.6703125	0	psample10	CT	1	F005235
190.956366	54.0843171	0	psample10	CT	1	F005235
15.2534144	50.348669	0	psample10	CT	1	F005235
12.4624421	35.766088	0	psample10	OK	1	F005235
13.4514757	138.411458	0	psample10	CT	1	F005235
9.8788731	31.0509838	0	psample10	OK	1	F005235
85.141956	20.1110532	0	psample10	CT	1	
11.4414641	14.8371528	0	psample10	CT	1	
219.030556	130.517477	0	psample10	CT	1	F005235
172.570602	26.2341435	0	psample10	CT	1	F005235
9.56368634	32.9505787	0	psample10	CT	1	F005235
197.612826	24.5047454	0	psample10	CT	1	F005235
217.652431	8.32025463	0	psample10	CT	1	F005235
5.32896412	266.393287	0	psample10	CT	1	F005235
0	134.329398	0	psample10	CT	1	
73.8708912	15.523206	0	psample10	CT	1	
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8.98721065	18.0284144	0	psample10	CT	1	F005235
44.7798322	6.35052083	0	psample10	CT	1	F005235
27.6654514	5.69675926	0	psample10	CT	1	F005235
74.0230324	46.5529514	0	psample10	OK	1	F005235
16.8034144	5.87291667	0	psample10	CT	1	F005235
120.92662	9.05648148	0	psample10	CT	1	F005235
7.68929398	7.22997685	0	psample10	CT	1	
8.42108656	7.48292917	0	psample10	OK	1	
64.0449074	786.027199	0	psample10	CT	1	F005235
2044.29305	203.335419	0	psample10	CT	1	F005235
1041.34462	73.0992477	0	psample10	CT	1	F005235
2835.10059	2629.16785	0	psample10	CT	1	F005235
150.0261	106.586458	0	psample10	CT	1	F005235

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0D00075-06RE1	A17	1.25	10.388	1.6164949	11.2922952	1.4981105	46862-1.RAW	2:54:06	268.950231
SEQ-CCV7	A18	1	10.388	0.7207727	0.623810345	0.0352003	46863-1.RAW	3:04:22	154.499769
SEQ-CCB7	A19	1	10.388	0.774014	0.051075142	0.0113162	46864-1.RAW	3:14:39	165.14485

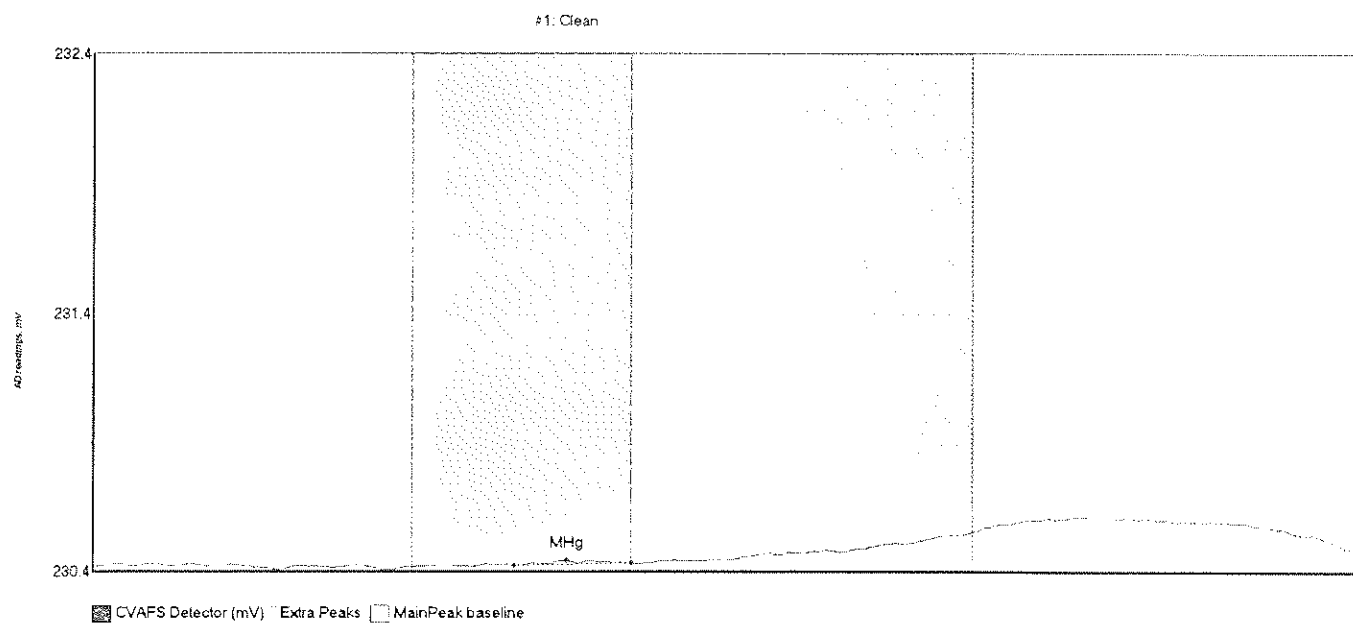
124.92
0.00

729 6084

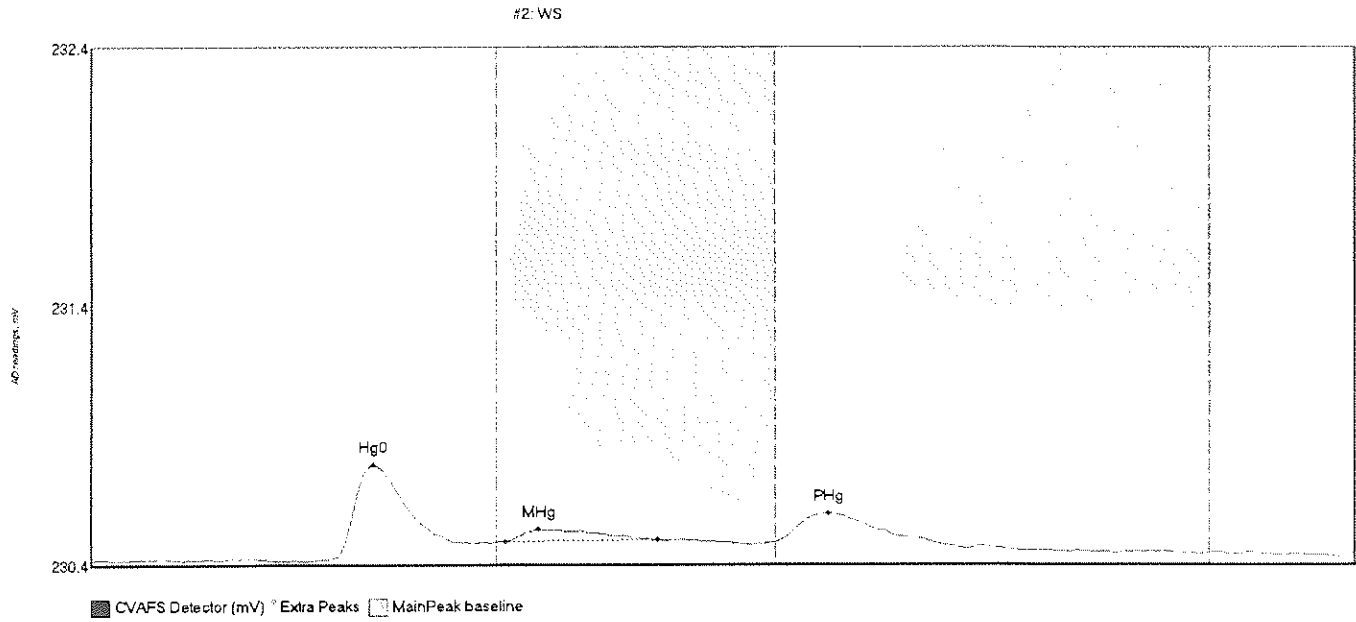
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135.113079	17.4262153	0	psample10	CT	1	
20.6002315	12.6508102	0	psample10	CT	1	

WS	A1				
SEQ-IBL1	A2	0E00002-03	B17		
SEQ-CAL1	A3	0E00002-04	B18		
SEQ-CAL2	A4	0E00002-05	B19		
SEQ-CAL3	A5	0E00002-06	B20		
SEQ-CAL4	A6	0E00002-07	B21		
SEQ-CAL5	A7	0E00002-08	C1		
SEQ-ICV1	A8	SEQ-CCV3	C2		
SEQ-ICB1	A9	SEQ-CCB3	C3		
F005234-BS1	A10	0E00002-09	C4		
F005234-BS2	A11	0E00002-10	C5		
F005234-BS3	A12	0E00002-11	C6		
F005234-BS4	A13	0E00002-12	C7		
OC00107-01	A14	F005235-BS1	C8		
F005233-BS1	A15	F005235-BSD1	C9		
F005233-BSD1	A16	F005235-BLK1	C10		
F005233-BLK1	A17	F005235-BLK2	C11		
F005233-BLK2	A18	F005235-BLK3	C12		
F005233-BLK3	A19	0D00062-01	C13		
SEQ-CCV1	A20	SEQ-CCV4	C14		
SEQ-CCB1	A21	SEQ-CCB4	C15		
OD00074-01	B1	F005235-MS1	C16		
F005233-MS1	B2	F005235-MSD1	C17		
F005233-MSD1	B3	0D00062-02	C18		
OD00074-02	B4	F005235-MS2	C19		
F005233-MS2	B5	F005235-MSD2	C20		
F005233-MSD2	B6	0D00062-05	C21		
OD00074-03	B7	0D00062-06	A1		
OD00074-04	B8	SEQ-CCV5	A2	SEQ-CCB6	A11
OD00074-05	B9	SEQ-CCB5	A3	OD00075-01RE	A12
OD00074-06	B10	OD00075-01	A4	OD00075-02RE	A13
SEQ-CCV2	B11	OD00075-02	A5	OD00075-03RE	A14
SEQ-CCB2	B12	OD00075-03	A6	OD00075-04RE	A15
OD00074-07	B13	OD00075-04	A7	OD00075-05RE	A16
OD00074-08	B14	OD00075-05	A8	OD00075-06RE	A17
0E00002-01	B15	OD00075-06	A9	SEQ-CCV7	A18
0E00002-02	B16	SEQ-CCV6	A10	SEQ-CCB7	A19

tube says
CCB. W/L 5-11-2020
black ink.
quality, see PLS. W/L
5-11-2020

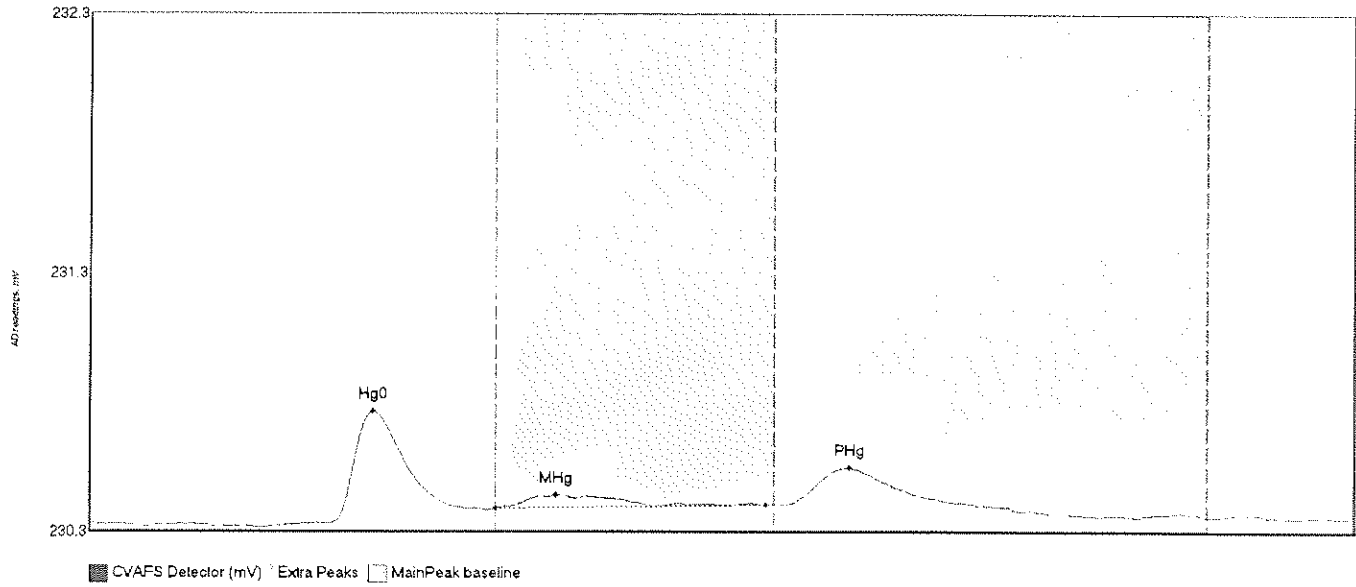


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
Clean	2.147	105.5	135.0	230.42	230.42	116.7	0.019	CT	230.4136	0.00	0.06	

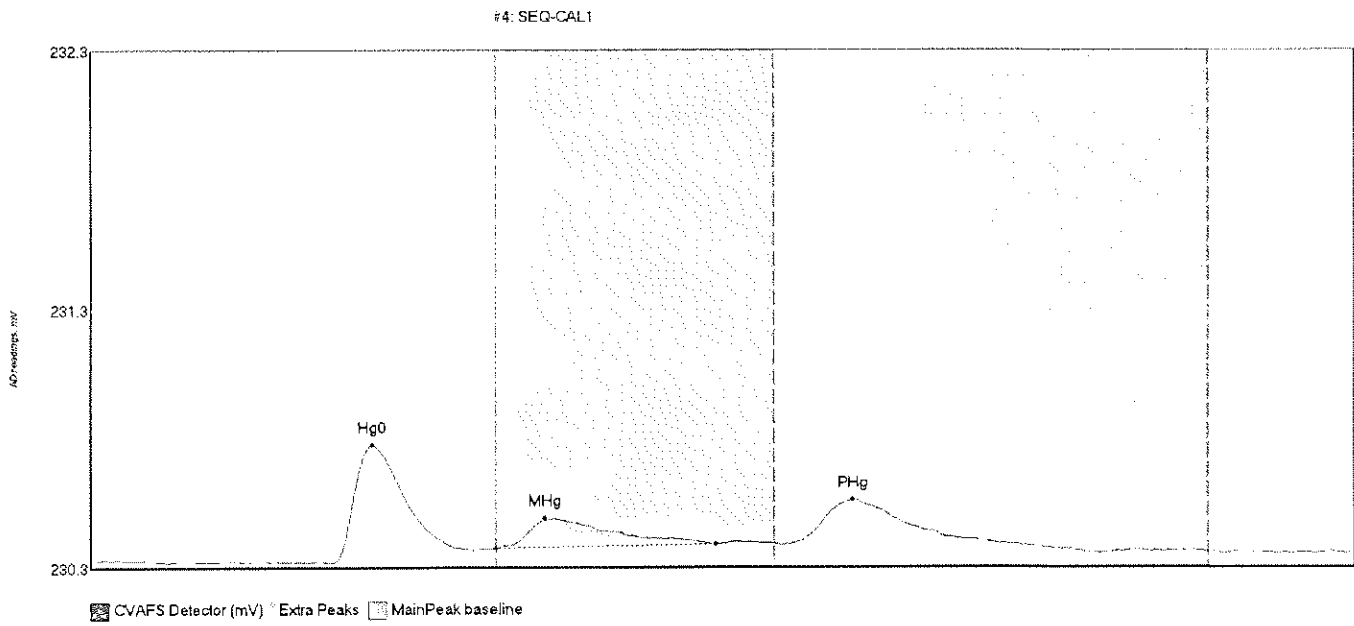


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
WS Hg0	38.862	47.2	75.3	230.38	230.44	55.9	0.364	OK	230.3776	0.00	0.01	
WS MHg	7.698	81.8	111.5	230.45	230.45	88.2	0.047	OK	230.3776	0.00	0.01	
WS PHg	19.291	135.0	168.8	230.45	230.43	145.4	0.110	OK	230.3776	0.00	0.01	

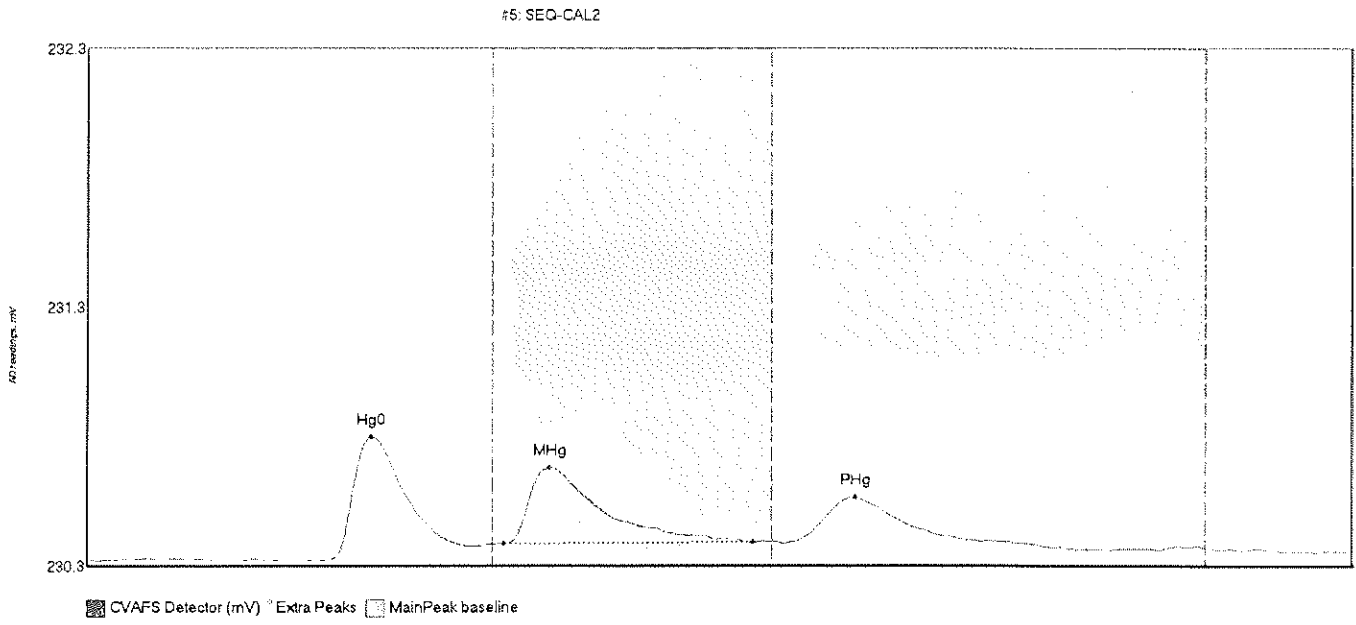
#3: SEQ-IBL1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Height	Comment
SEQ-IBL1 Hg0	46.612	47.9	78.3	230.36	230.41	55.9	0.420	OK	230.3596	0.00	0.02	
SEQ-IBL1 MHg	10.386	88.9	133.3	230.42	230.43	92.1	0.051	OK	230.3599	0.00	0.02	
SEQ-IBL1 PHg	22.574	137.6	173.3	230.43	230.43	149.5	0.142	OK	230.3599	0.00	0.02	

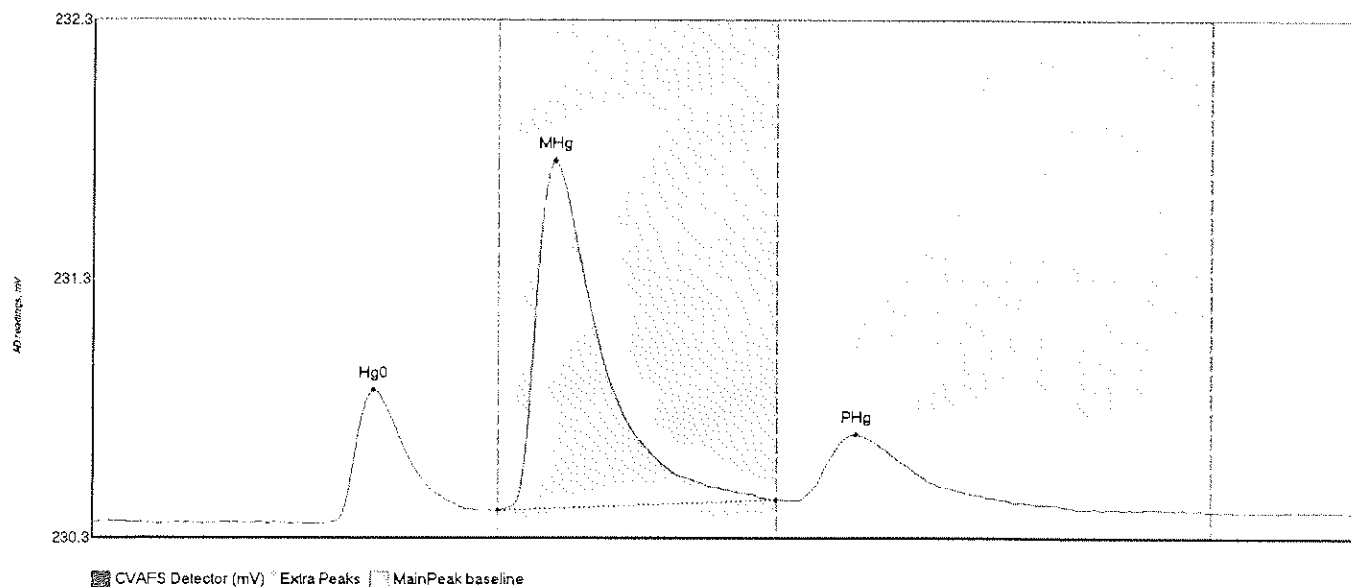


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlStift	Comment
SEQ-CAL1 Hg0	49.733	47.8	75.9	230.33	230.38	55.8	0.457	OK	230.3413	0.00	0.03	
SEQ-CAL1 MHg	21.225	80.0	123.4	230.39	230.41	89.5	0.115	OK	230.3413	0.00	0.03	
SEQ-CAL1 PHg	29.156	138.3	178.9	230.41	230.41	150.4	0.169	OK	230.3413	0.00	0.03	



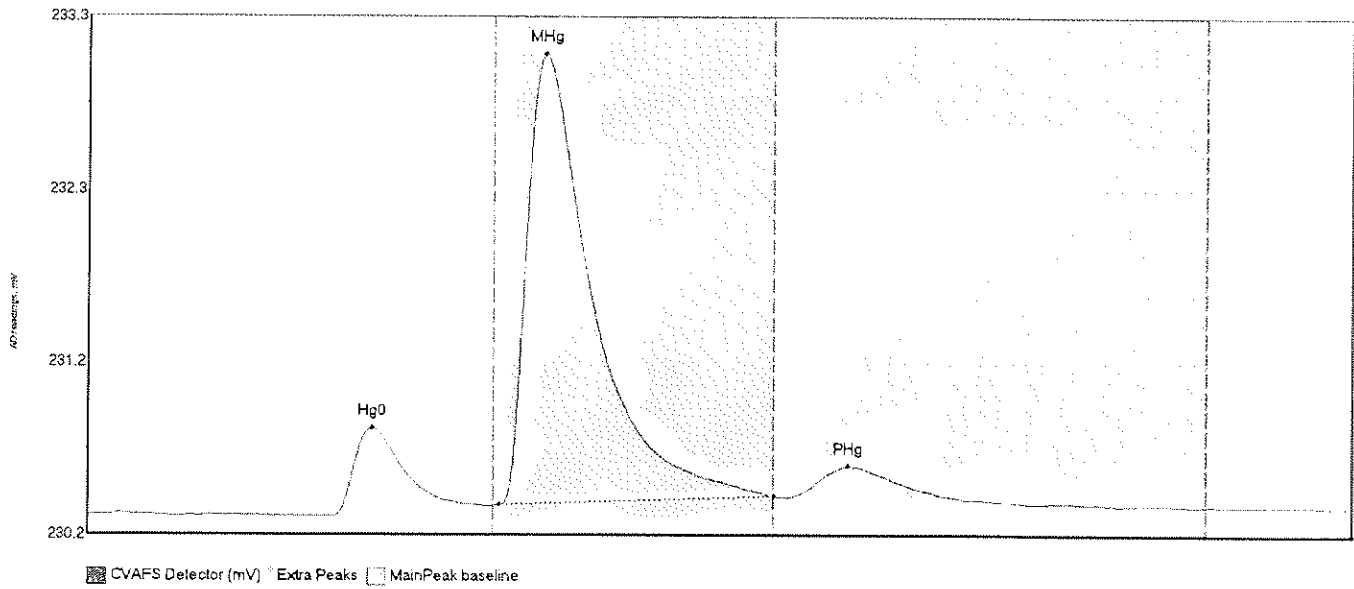
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RIDev	RIShift	Comment
SEQ-CAL2 Hg0	51.951	47.8	75.5	230.32	230.38	56.0	0.476	OK	230.3226	0.00	0.03	
SEQ-CAL2 MHg	48.591	82.3	131.2	230.39	230.39	91.5	0.295	OK	230.3226	0.00	0.03	
SEQ-CAL2 PHg	26.407	139.4	174.6	230.39	230.40	151.3	0.171	OK	230.3226	0.00	0.03	

#6: SEQ-CAL3

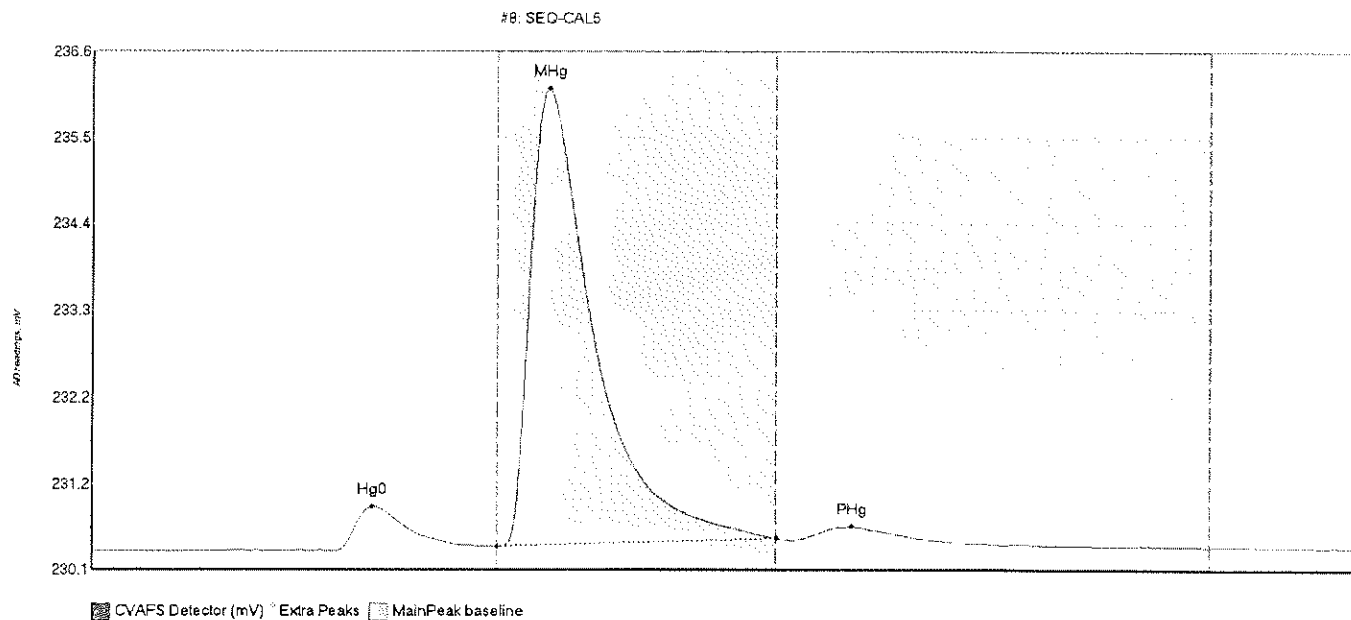


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Skew	Shift	Comment
SEQ-CAL3 Hg0	55.655	45.8	77.3	230.32	230.36	55.6	0.512	OK	230.3214	0.00	0.03	
SEQ-CAL3 MHg	198.294	80.0	134.7	230.36	230.41	91.1	1.349	OK	230.3214	0.00	0.03	
SEQ-CAL3 PHg	43.797	139.2	178.7	230.40	230.41	150.6	0.254	OK	230.3214	0.00	0.03	

#7: SEQ-CAL4

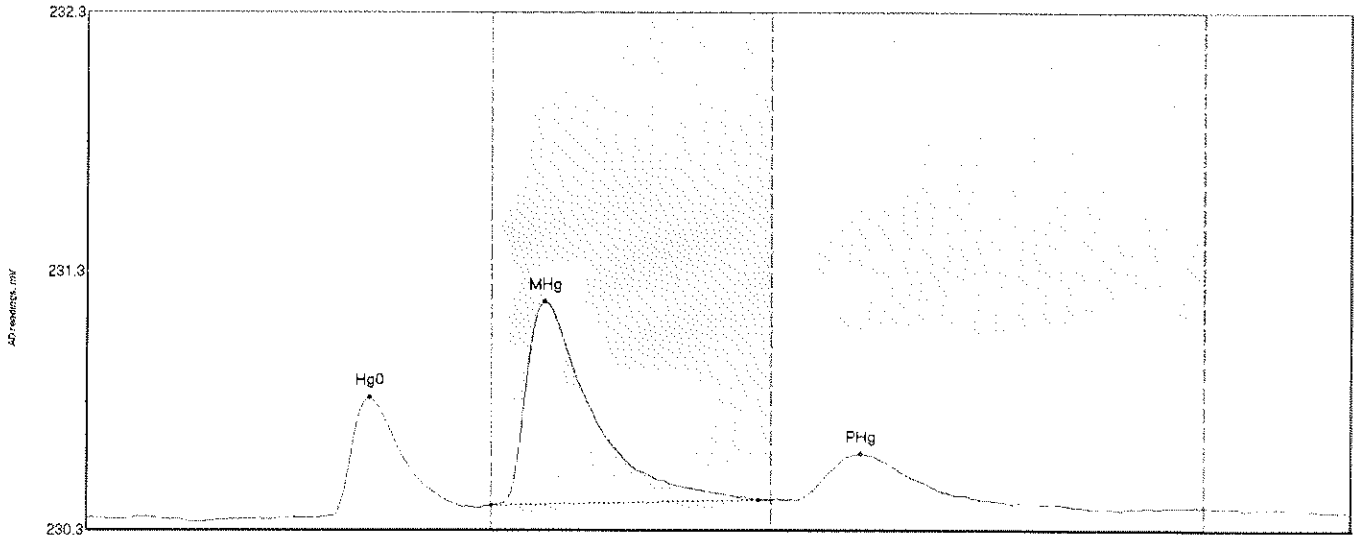


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	R1Dev	B1Shift	Comment
SEQ-CAL4 Hg0	57.424	47.7	78.6	230.30	230.36	55.6	0.524	OK	230.3123	0.00	0.04	
SEQ-CAL4 MHg	465.392	81.2	135.0	230.37	230.42	90.3	2.714	CT	230.3123	0.00	0.04	
SEQ-CAL4 PHg	20.923	137.6	168.8	230.41	230.42	149.6	0.195	OK	230.3123	0.00	0.04	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	B15bit	Comment
SEQ-CAL5 Hg0	62.373	47.7	80.0	230.31	230.36	55.6	0.560	CT	230.3119	0.00	0.04	
SEQ-CAL5 MHg	836.554	80.0	135.0	230.36	230.47	90.1	5.733	CT	230.3119	0.00	0.04	
SEQ-CAL5 PHg	20.959	138.6	172.5	230.45	230.40	149.9	0.169	OK	230.3119	0.00	0.04	

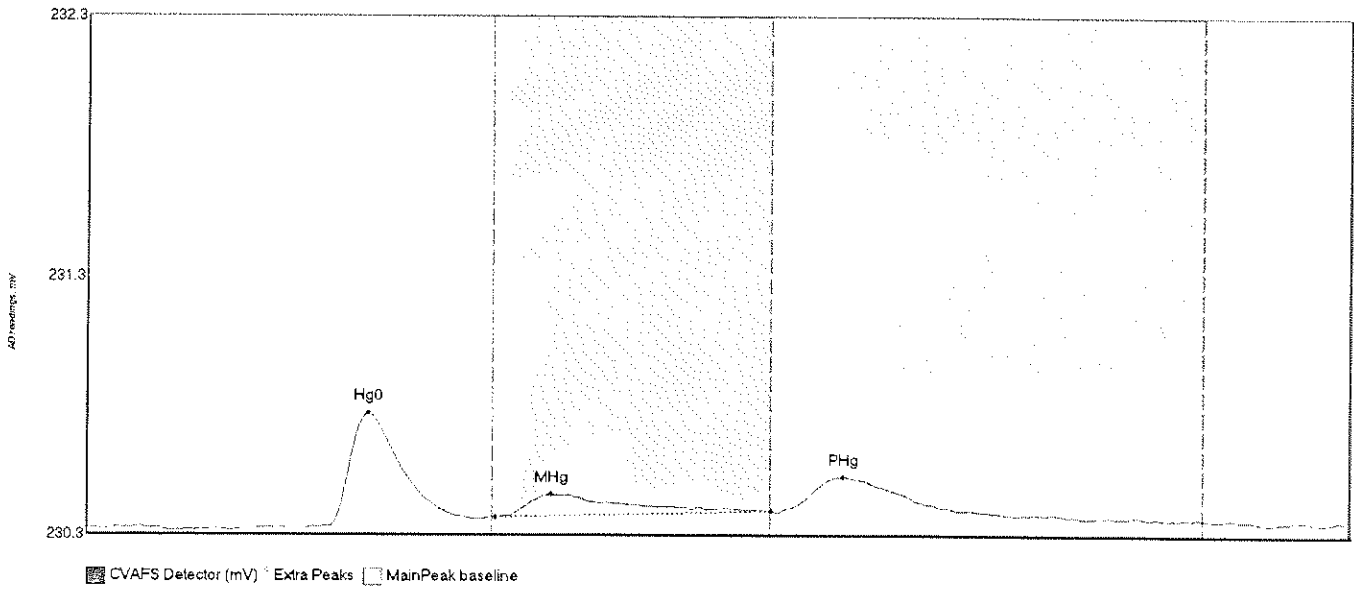
#9 SEQ-ICV1



☑ CVAFS Detector (mV) ☐ Extra Peaks ☐ MainPeak baseline

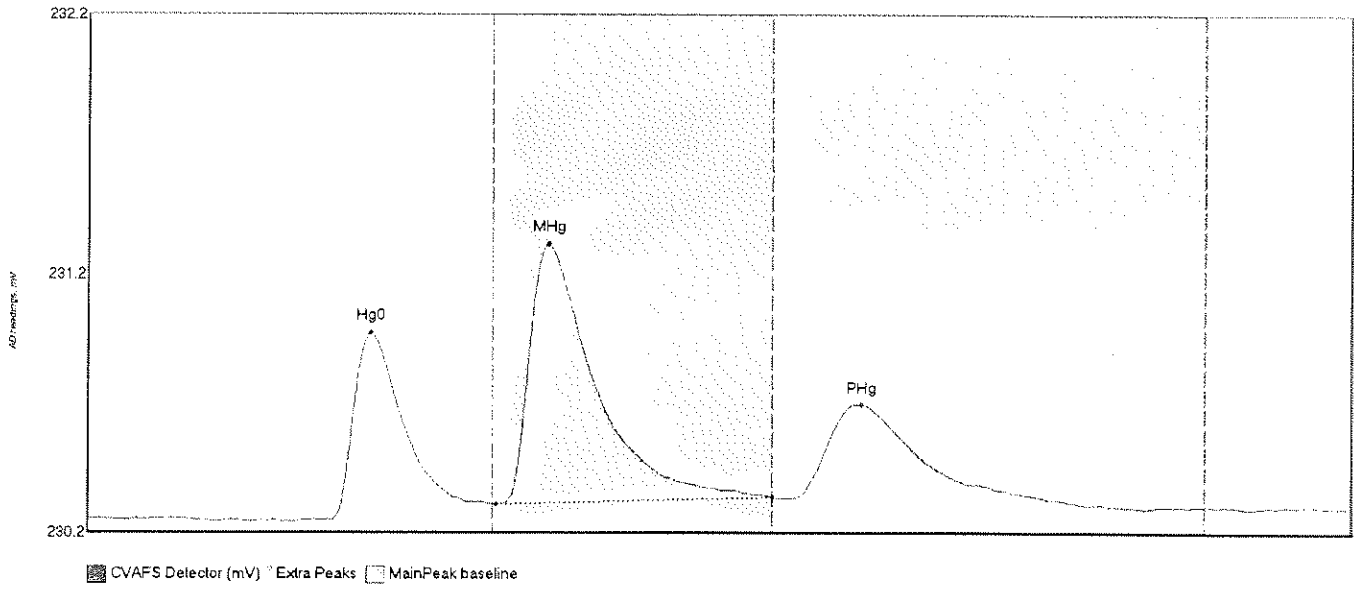
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	50.763	45.3	77.1	230.31	230.35	55.8	0.463	OK	230.3118	0.00	0.02	
SEQ-ICV1 MHg	118.978	80.0	132.5	230.36	230.38	90.7	0.786	OK	230.3118	0.00	0.02	
SEQ-ICV1 PHg	30.560	139.8	175.2	230.38	230.39	152.5	0.180	OK	230.3118	0.00	0.02	

#10: SEQ-ICB1



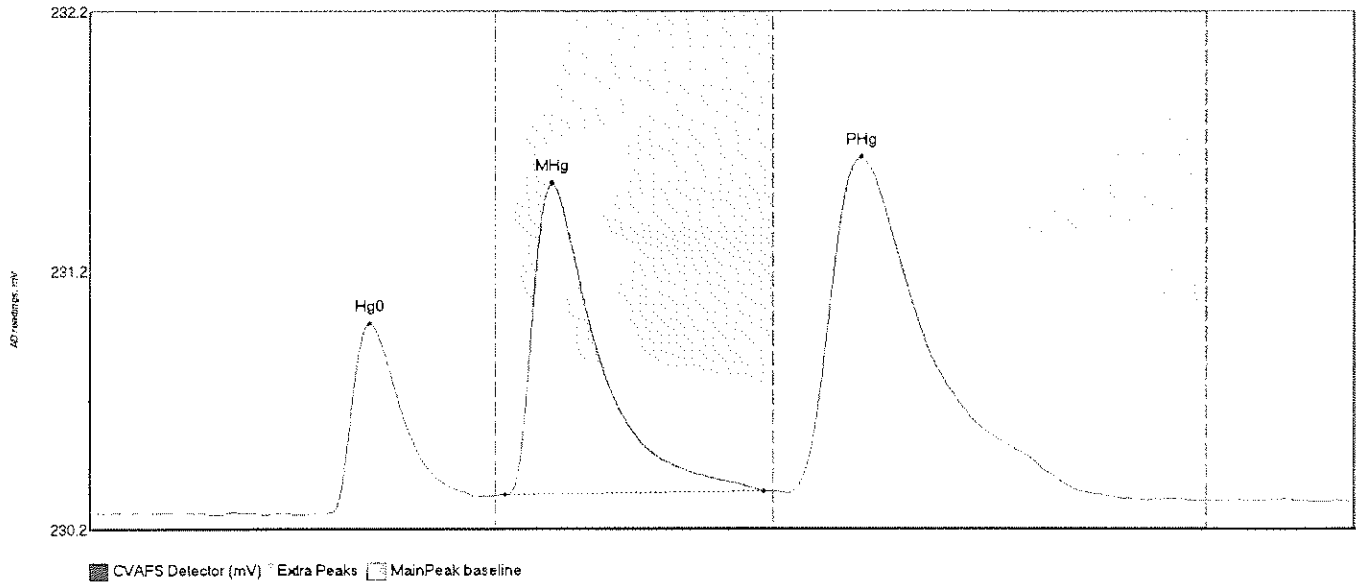
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-ICB1 Hg0	48.370	48.1	76.8	230.30	230.32	55.9	0.436	OK	230.2918	0.00	0.02	
SEQ-ICB1 MHg	18.604	88.7	135.0	230.33	230.36	91.6	0.090	CF	230.2918	0.00	0.02	
SEQ-ICB1 PHg	24.180	136.5	172.0	230.35	230.36	149.3	0.139	OK	230.2918	0.00	0.02	

#11: F005234-BS1



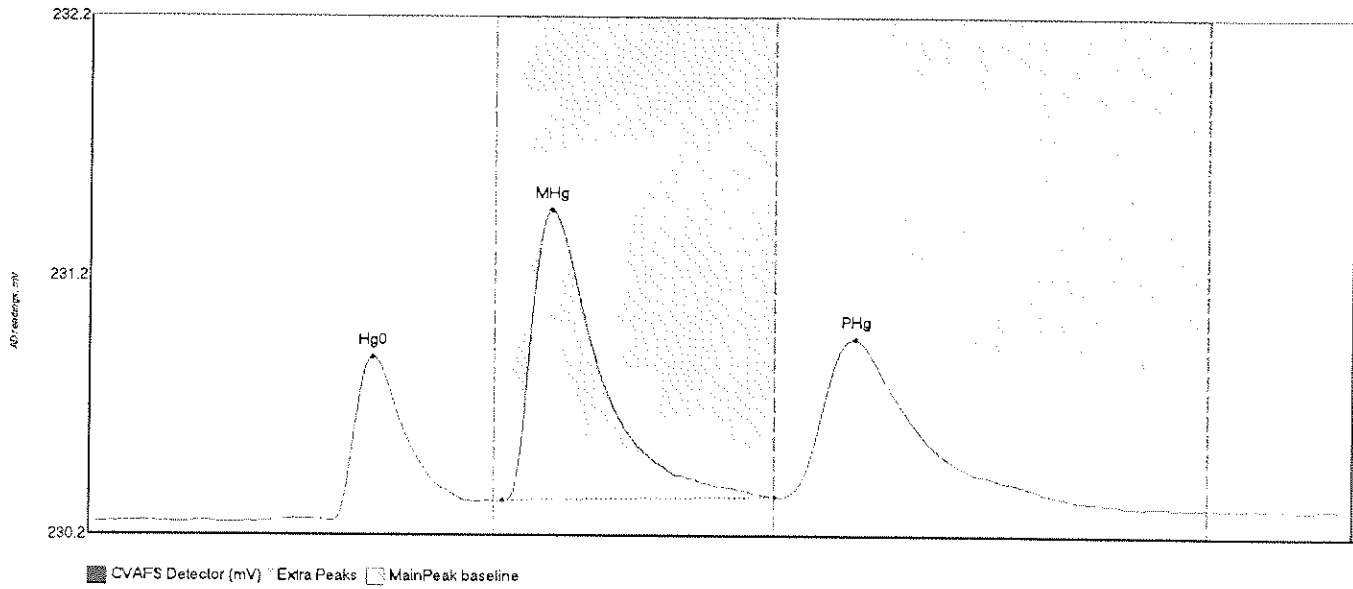
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
F005234-BS1 Hg0	79.344	48.2	80.0	230.29	230.35	55.8	0.721	CT	230.2966	0.00	0.04	F005234
F005234-BS1 MHg	150.319	80.8	135.0	230.35	230.38	91.1	1.005	CT	230.2966	0.00	0.04	F005234
F005234-BS1 PHg	93.215	138.3	189.5	230.37	230.37	152.4	0.366	OK	230.2966	0.00	0.04	F005234

#12: F005234-BS2



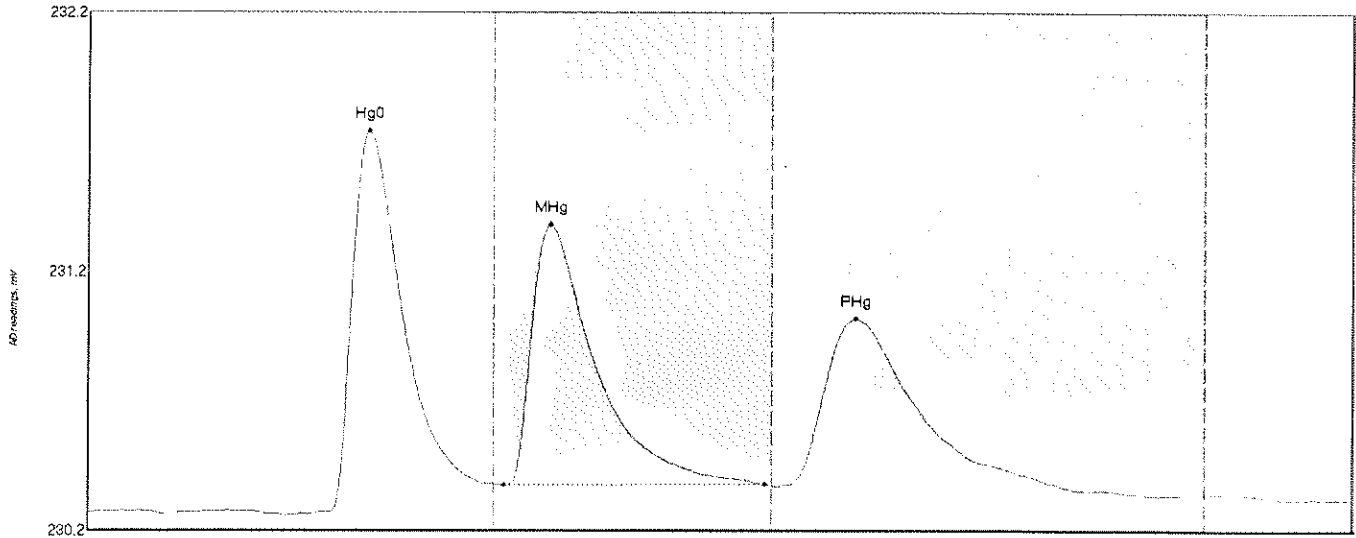
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005234-BS2 Hg0	78.952	45.8	76.5	230.29	230.36	55.5	0.736	OK	230.2933	0.00	0.05	F005234
F005234-BS2 MHg	179.787	82.0	133.1	230.36	230.38	91.2	1.209	OK	230.2933	0.00	0.05	F005234
F005234-BS2 PHg	273.342	137.7	195.2	230.37	230.38	152.3	1.295	OK	230.2933	0.00	0.05	F005234

#13: F005234-BS3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	WShift	Comment
F005234-BS3 Hg0	66.275	35.1	76.8	230.29	230.37	56.0	0.633	OK	230.2854	0.00	0.06	F005234
F005234-BS3 MHg	170.885	81.6	135.0	230.37	230.39	91.1	1.124	CT	230.2854	0.00	0.06	F005234
F005234-BS3 PHg	122.788	135.9	191.8	230.35	230.38	151.0	0.613	OK	230.2854	0.00	0.06	F005234

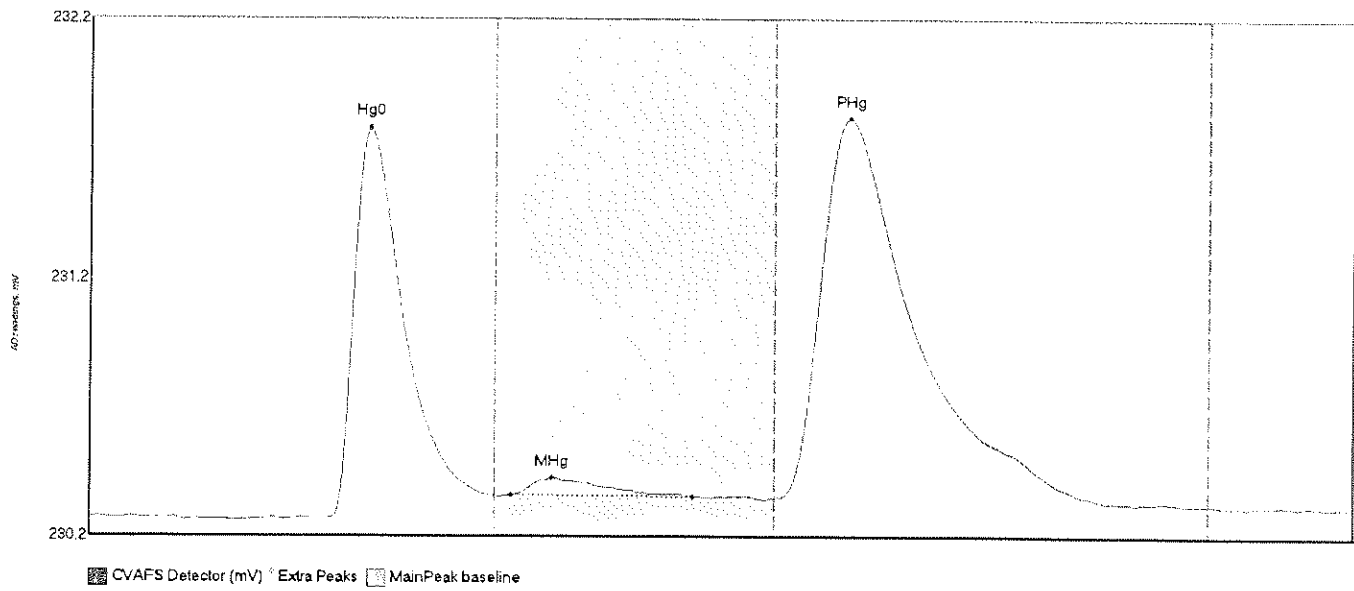
#14: F005234-BS4



CVAFS Detector (mV) Extra Peaks MainPeak baseline

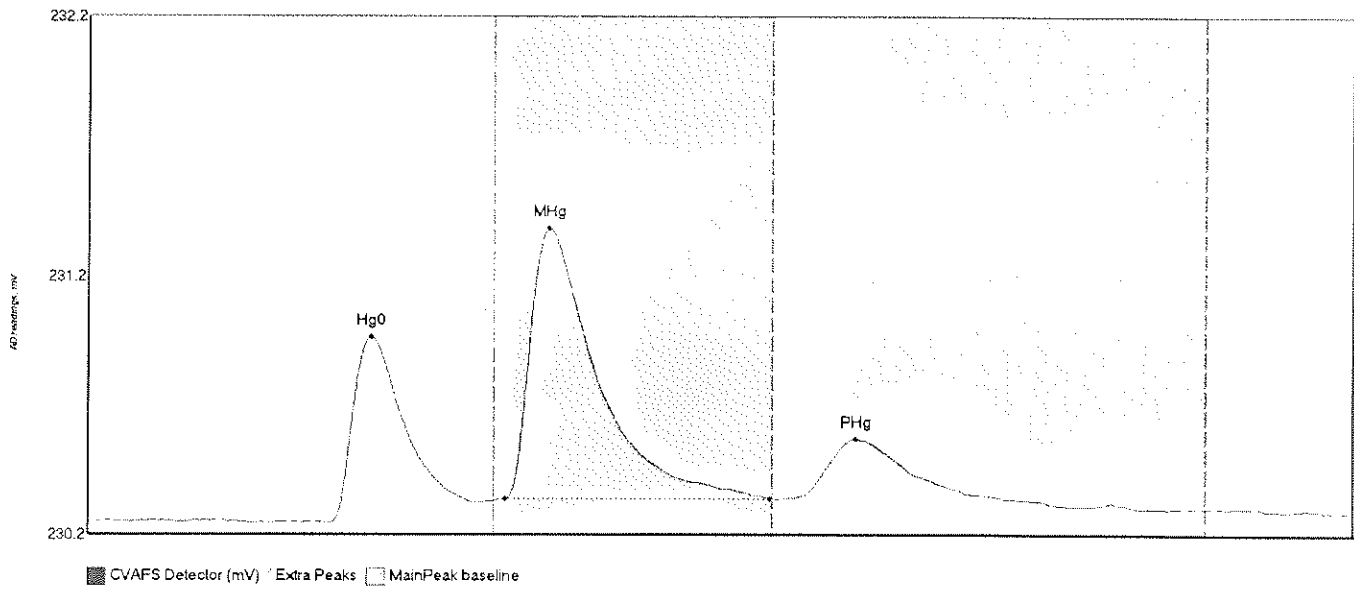
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RISDev	Shift	Comment
F005234-BS4 Hg0	161.921	47.6	79.1	230.30	230.43	55.6	1.472	OK	230.3016	0.00	0.05	F005234
F005234-BS4 MHg	148.392	82.1	133.6	230.40	230.41	91.3	1.005	OK	230.3016	0.00	0.05	F005234
F005234-BS4 PHg	134.286	138.3	194.7	230.41	230.38	151.4	0.642	OK	230.3016	0.00	0.05	F005234

#15: 0C00107-01



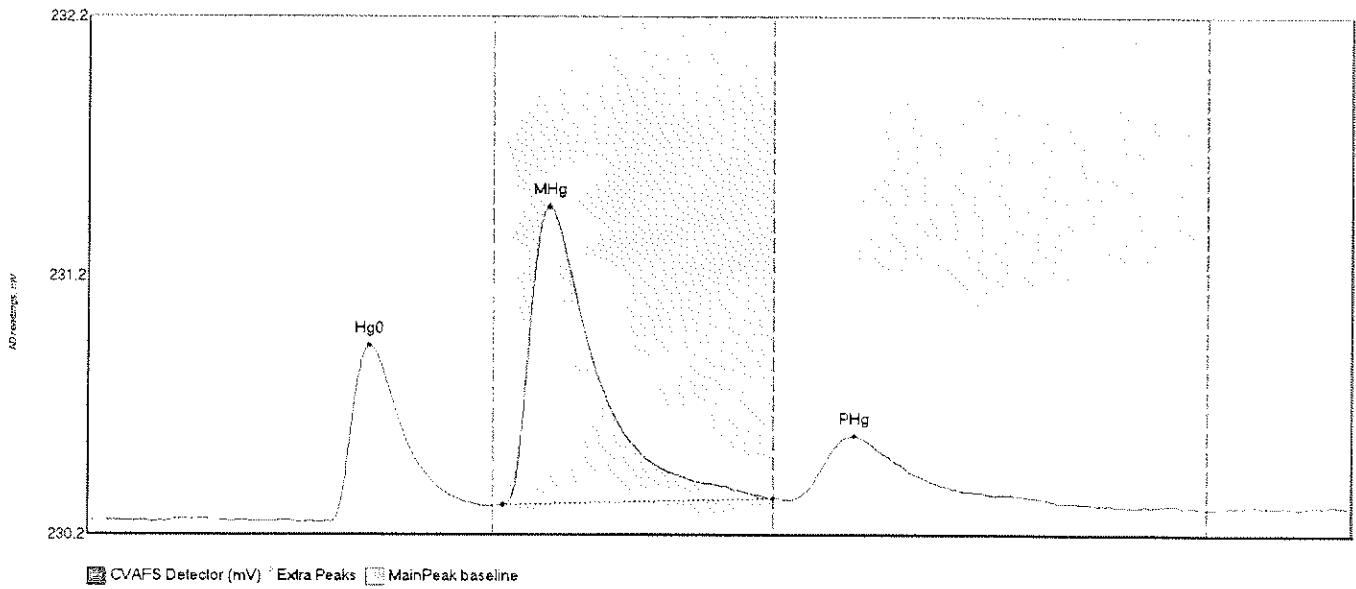
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0C00107-01 Hg0	166.977	45.9	80.0	230.30	230.39	55.4	1.508	CT	230.3047	0.00	0.04	F005234
0C00107-01 MHg	10.807	83.2	118.7	230.39	230.38	91.1	0.065	OK	230.3047	0.00	0.04	F005234
0C00107-01 PHg	306.476	135.0	196.0	230.38	230.38	145.9	1.471	OK	230.3047	0.00	0.04	F005234

#16: F005233-BS1



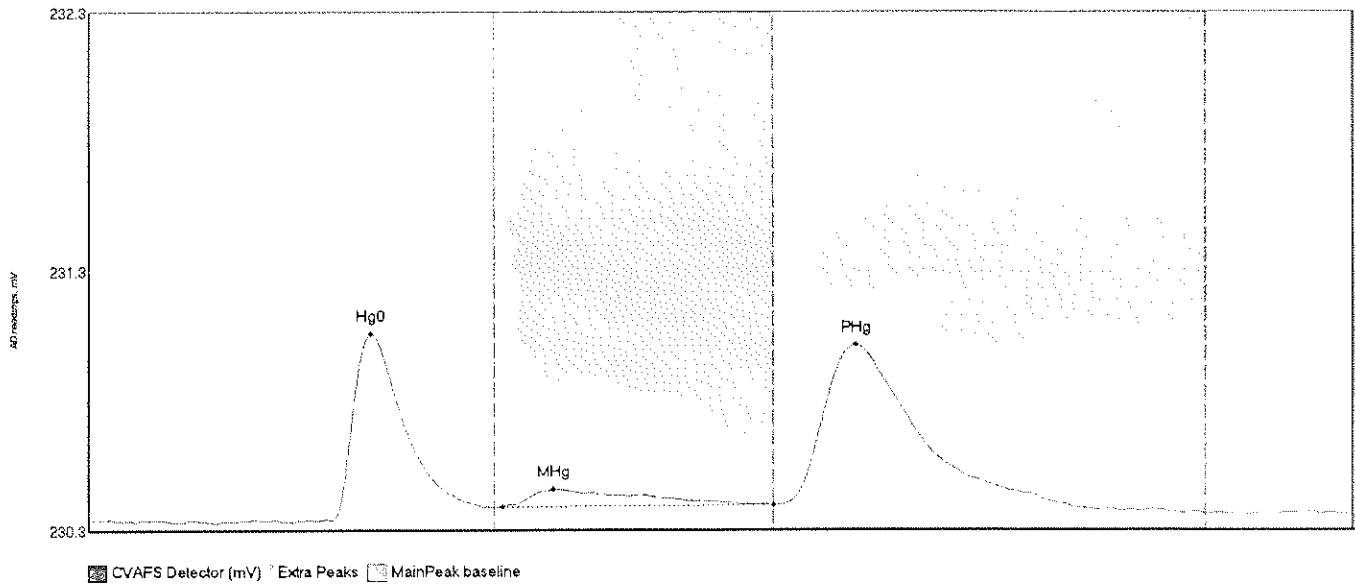
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005233-BS1 Hg0	78.902	47.4	76.5	230.29	230.37	55.9	0.719	OK	230.2992	0.00	0.03	F005233
F005233-BS1 MHg	161.226	62.2	134.5	230.38	230.38	91.0	1.048	OK	230.2992	0.00	0.03	F005233
F005233-BS1 PHg	39.916	130.0	180.8	230.39	230.38	151.4	0.228	OK	230.2992	0.00	0.03	F005233

#17: F005233-BSD1



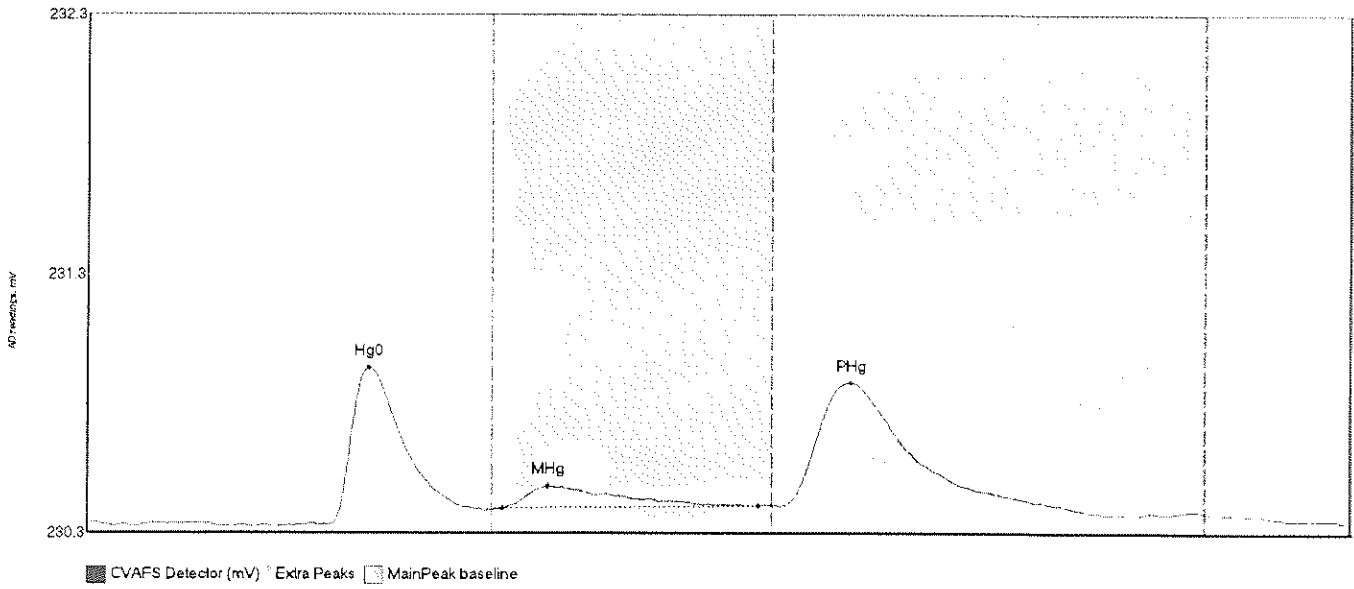
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	SlDev	BIShift	Comment
F005233-BSD1 Hg	75.814	48.0	77.7	230.29	230.35	55.6	0.660	OK	230.3009	0.00	0.05	F005233
F005233-BSD1 MH	173.447	62.0	134.9	230.36	230.38	90.9	1.146	OK	230.3009	0.00	0.05	F005233
F005233-BSD1 PH	44.227	137.7	186.6	230.30	230.38	151.0	0.250	OK	230.3009	0.00	0.05	F005233

#18: F005233-BLK1



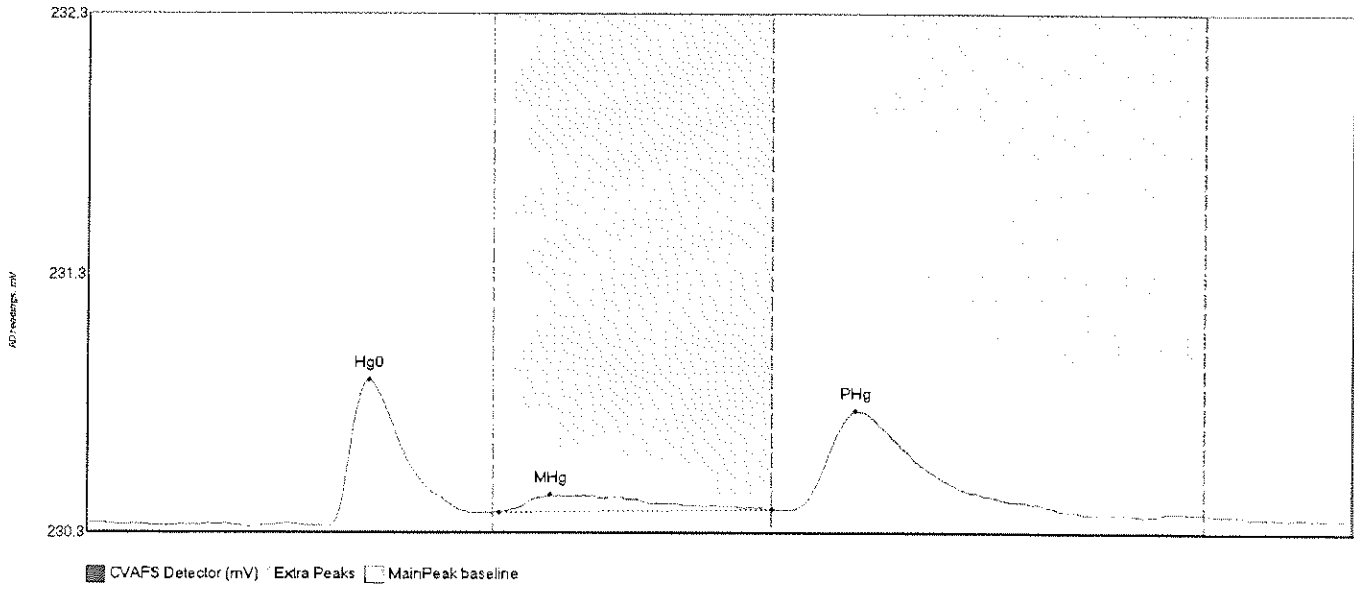
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	HiShift	Comment
F005233-BLK1 Hg	80.447	48.0	79.4	230.30	230.34	55.7	0.718	OK	230.2934	0.00	0.03	F005233
F005233-BLK1 MH	16.988	81.6	135.0	230.35	230.35	91.8	0.066	CT	230.2934	0.00	0.03	F005233
F005233-BLK1 PH	129.825	136.6	194.7	230.35	230.34	151.1	0.616	OK	230.2934	0.00	0.03	F005233

#19: F005233-BLK2



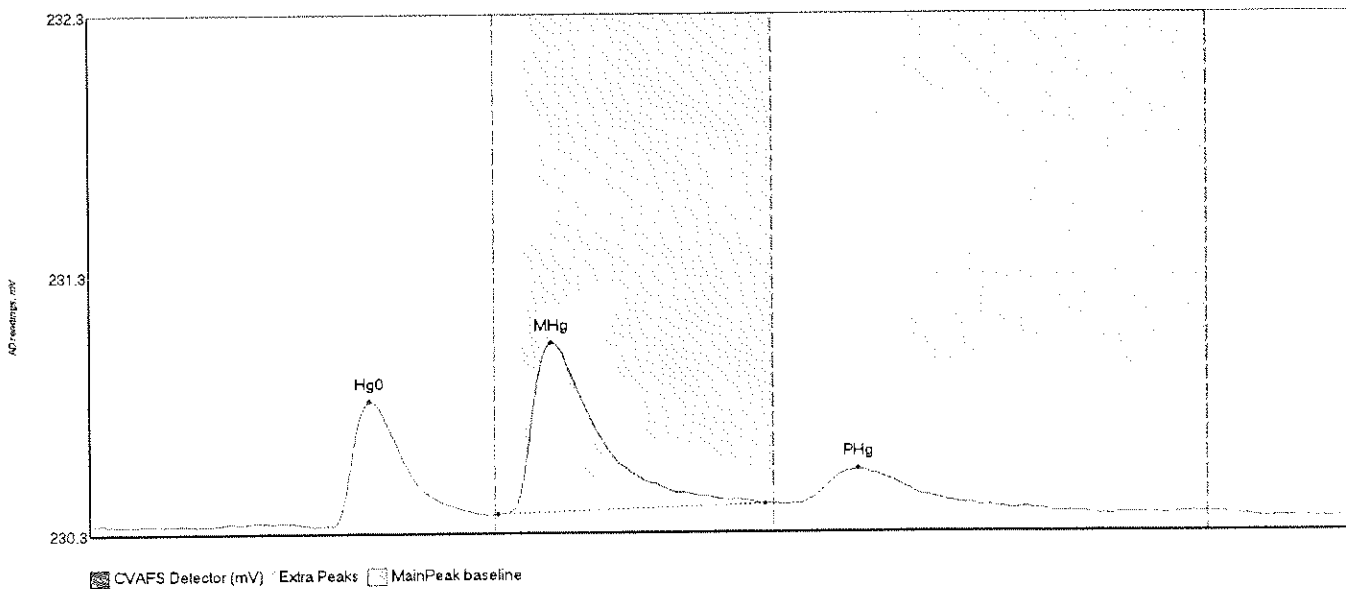
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005233-BLK2 Hg	68.171	47.7	78.5	230.29	230.34	55.8	0.604	OK	230.2927	0.00	0.00	F005233
F005233-BLK2 MH	17.695	82.1	132.3	230.35	230.36	90.9	0.085	OK	230.2927	0.00	0.00	F005233
F005233-BLK2 PH	94.569	136.6	189.5	230.36	230.36	150.7	0.480	OK	230.2927	0.00	0.00	F005233

#20: F005233-BLK3



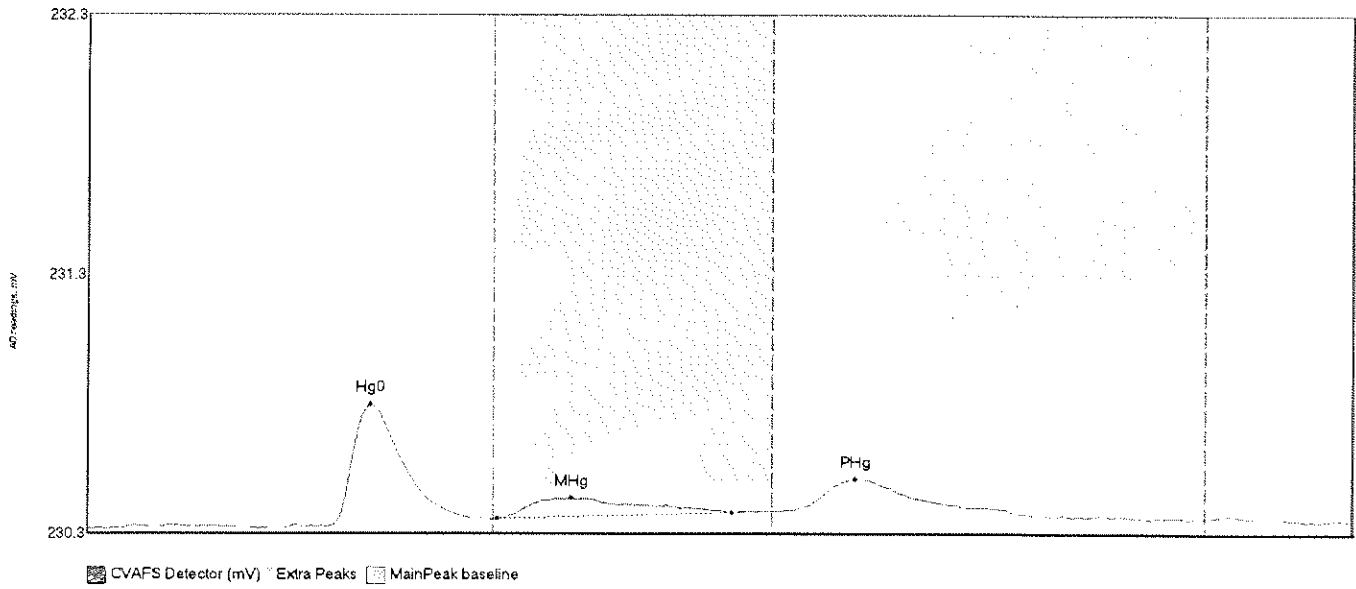
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005233-BLK3 Hg	62.359	47.5	76.3	230.28	230.33	55.7	0.565	OK	230.2894	0.00	0.01	F005233
F005233-BLK3 MH	19.162	81.3	135.0	230.33	230.34	91.5	0.069	CT	230.2894	0.00	0.01	F005233
F005233-BLK3 PH	77.727	138.8	192.8	230.34	230.33	151.3	0.381	OK	230.2894	0.00	0.01	F005233

#21: SEQ-CCV1



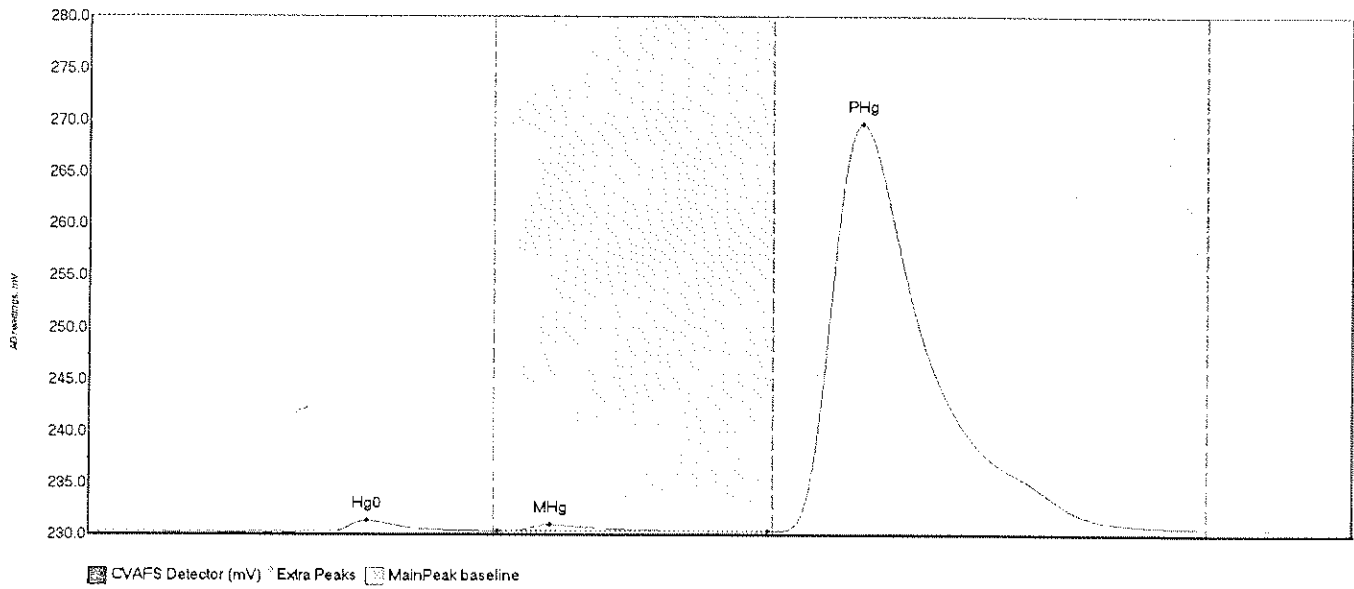
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCV1 Hg0	54.363	48.2	76.9	230.28	230.32	55.6	0.492	OK	230.2895	0.00	0.02	
SEQ-CCV1 MHg	99.253	86.6	133.3	230.32	230.36	91.2	0.663	OK	230.2895	0.00	0.02	
SEQ-CCV1 PHg	20.917	140.2	172.9	230.36	230.36	151.7	0.131	OK	230.2895	0.00	0.02	

#22: SEQ-CCB1



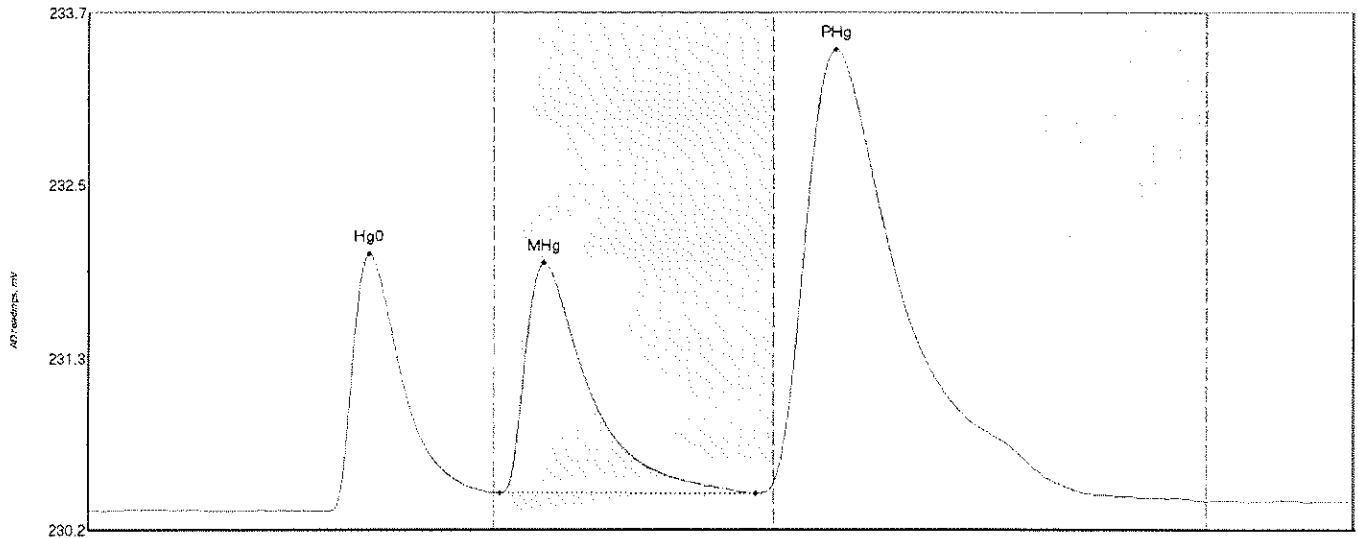
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CCB1 Hg0	52.366	38.0	80.0	230.27	230.31	55.7	0.473	CF	230.2725	0.00	0.03	
SEQ-CCB1 MHg	18.482	80.8	127.1	230.31	230.33	95.5	0.081	OK	230.2725	0.00	0.03	
SEQ-CCB1 PHg	23.487	139.3	183.3	230.34	230.33	151.2	0.118	OK	230.2725	0.00	0.03	

#29: 000074-01



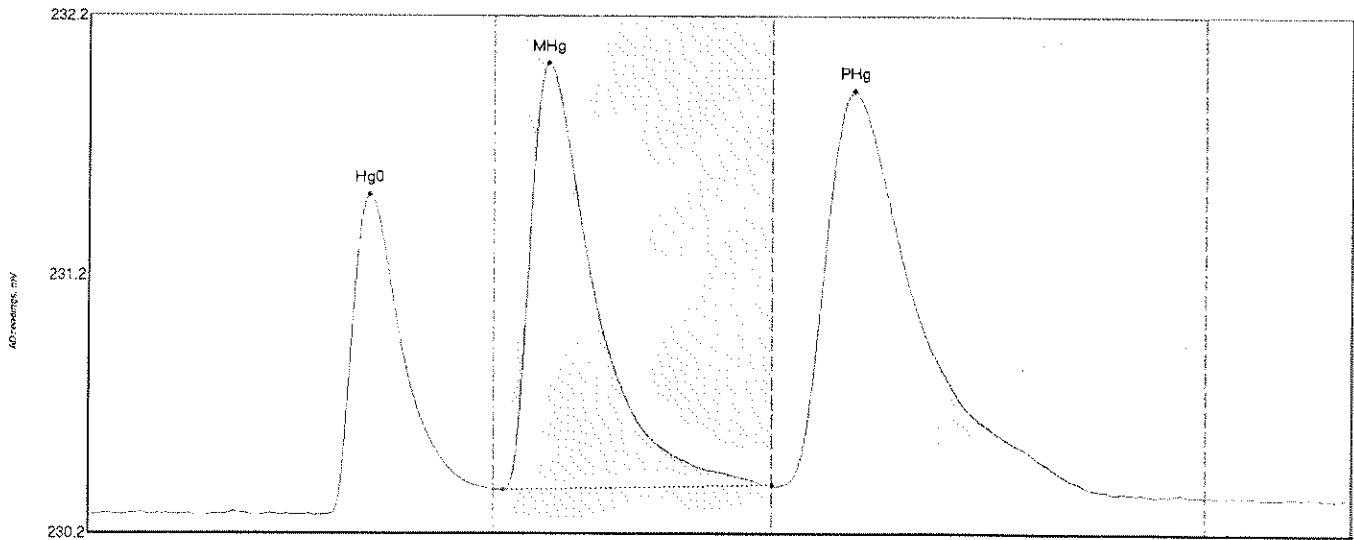
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
000074-01 Hg0	117.381	47.8	78.9	230.28	230.35	55.2	1.072	OK	230.2785	0.00	0.34	F005233
000074-01 MHg	94.695	80.8	134.0	230.36	230.37	91.2	0.611	OK	230.2785	0.00	0.34	F005233
000074-01 PHg	8427.867	135.0	219.7	230.37	230.66	152.6	39.347	CT	230.2785	0.00	0.34	F005233

#24: F005233-MS1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005233-MS1	Hg0 195.376	46.9	79.6	230.28	230.41	55.3	1.777	OK	230.2894	0.00	0.06	F005233
F005233-MS1	MHg 231.853	81.2	131.3	230.41	230.41	89.9	1.585	OK	230.2894	0.00	0.06	F005233
F005233-MS1	PHg 642.812	135.0	196.6	230.49	230.41	147.1	2.984	OK	230.2894	0.00	0.06	F005233

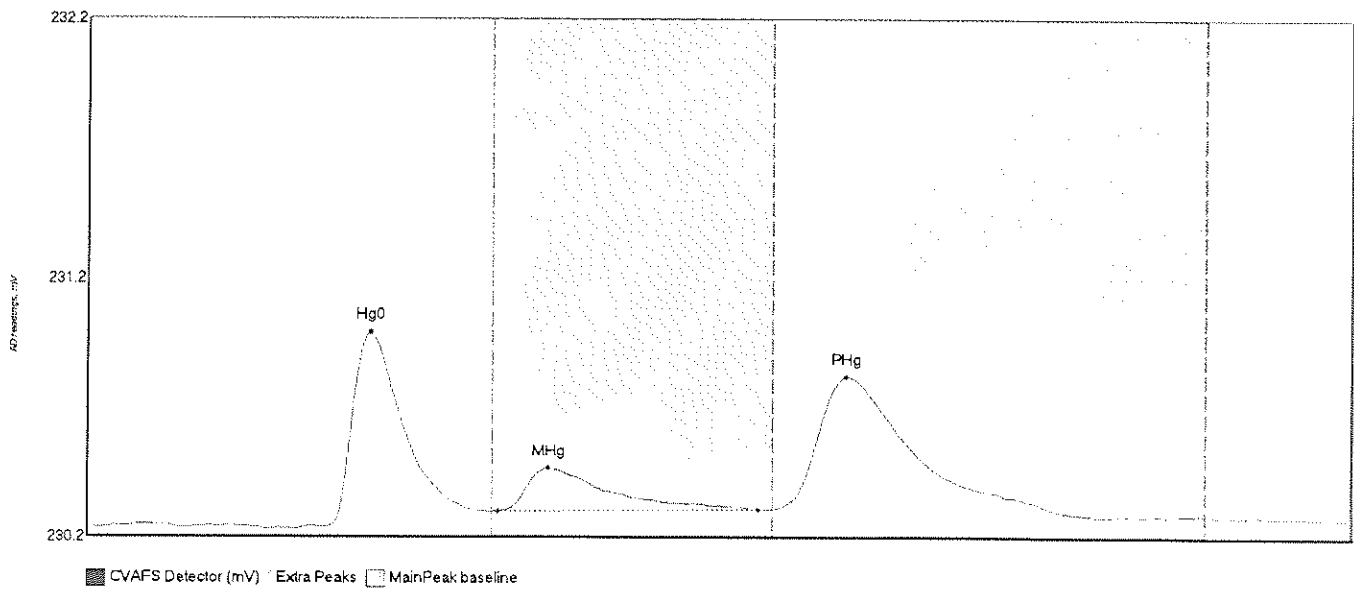
#25: F005233-MSD1



CVAFS Detector (mV) * Extra Peaks MainPeak baseline

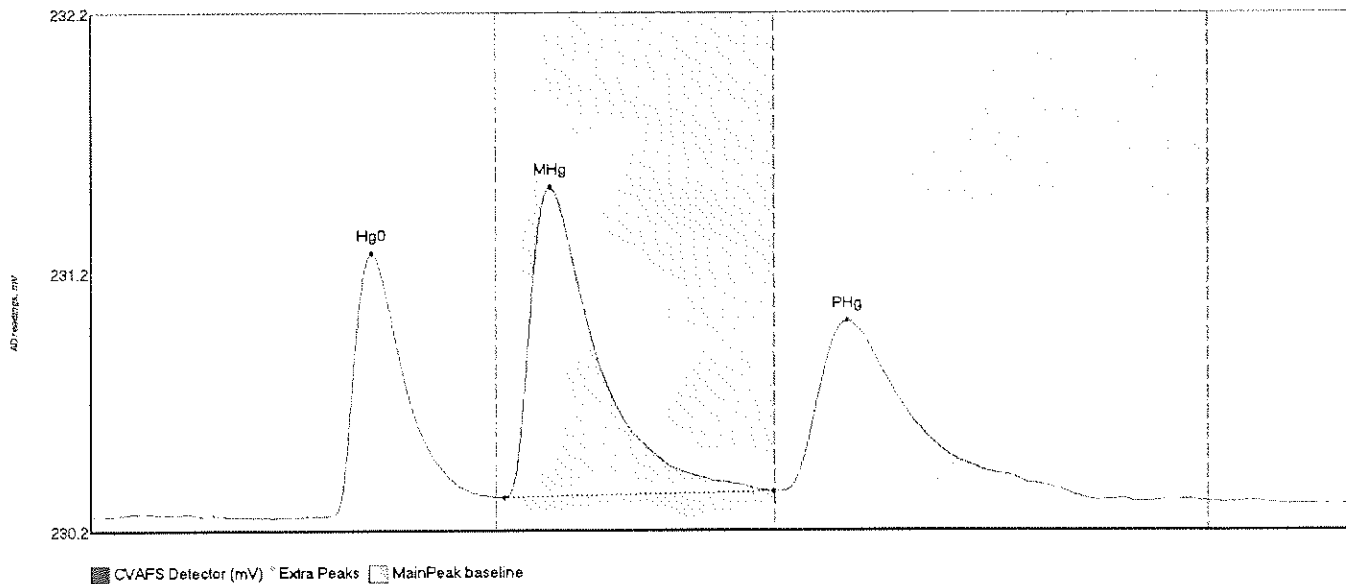
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BinDev	BinShift	Comment
F005233-MSD1 Hg	137.660	47.9	80.0	230.26	230.36	55.6	1.235	CT	230.2618	0.00	0.07	F005233
F005233-MSD1 MH	241.736	82.0	135.0	230.36	230.38	90.7	1.646	CT	230.2618	0.00	0.07	F005233
F005233-MSD1 PH	313.241	136.1	198.8	230.37	230.36	151.2	1.524	OK	230.2618	0.00	0.07	F005233

#26: 000074-02



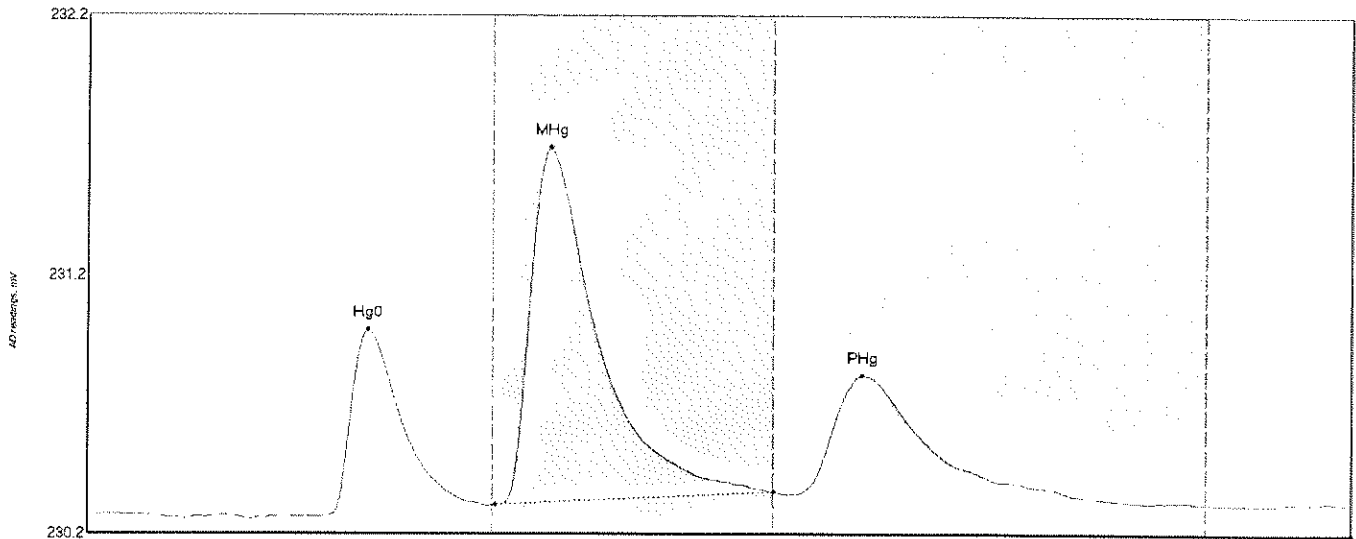
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BIShift	Comment
000074-02 Hg0	84.145	47.1	79.8	230.26	230.32	55.7	0.750	OK	230.2560	0.00	0.04	F005233
000074-02 MHg	31.578	81.1	132.2	230.32	230.32	91.1	0.167	OK	230.2560	0.00	0.04	F005233
000074-02 PHg	104.278	135.0	192.7	230.33	230.31	149.4	0.515	OK	230.2560	0.00	0.04	F005233

#27: F005233-MS2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RIDev	RIShift	Comment
F005233-MS2 Hg0	112.306	46.5	79.8	230.26	230.33	55.7	1.016	OK	230.2613	0.00	0.04	F005233
F005233-MS2 MHg	192.983	81.7	134.7	230.33	230.36	90.7	1.201	OK	230.2613	0.00	0.04	F005233
F005233-MS2 PHg	141.193	136.1	197.8	230.36	230.32	149.3	0.660	OK	230.2613	0.00	0.04	F005233

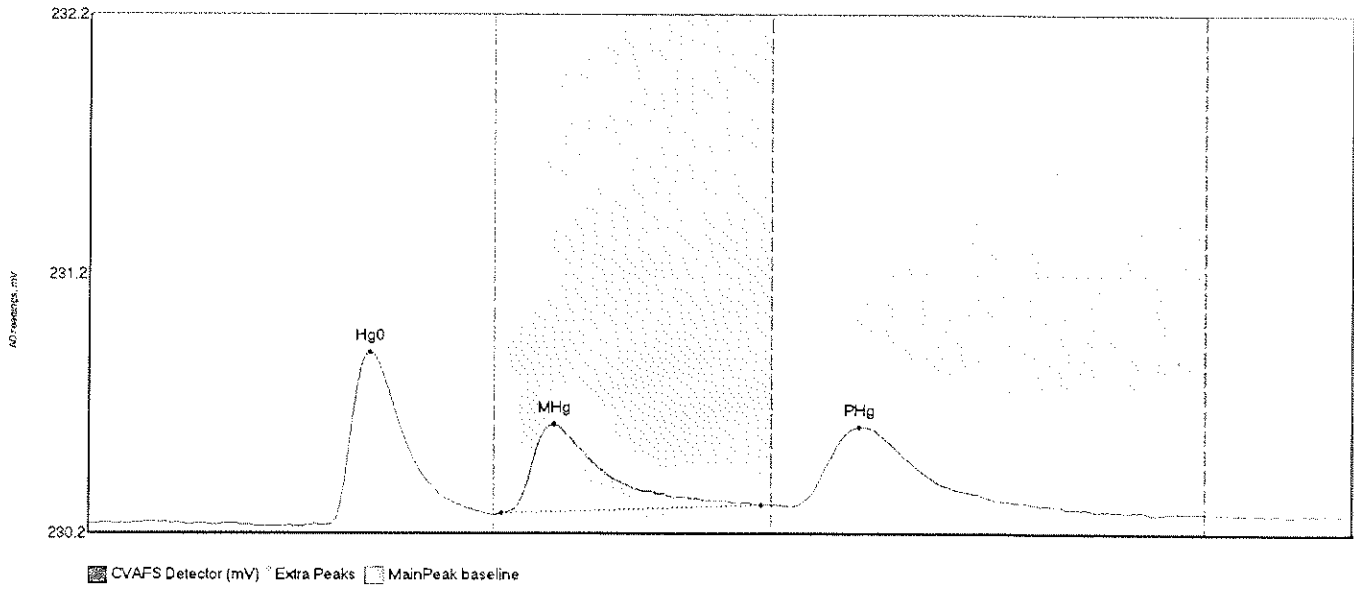
#28: F005233-MSD2



CVAFS Detector (mV) Extra Peaks MainPeak baseline

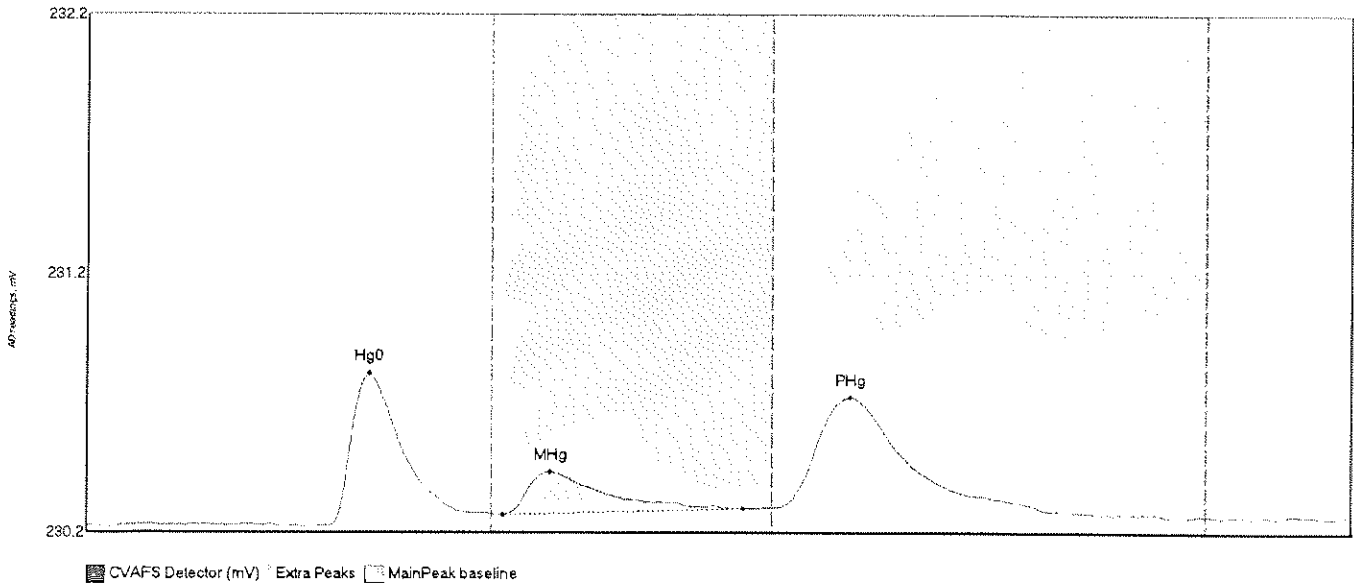
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	ElDev	BinShift	Comment
F005233-MSD2 Hg	80.525	47.4	79.0	230.26	230.30	55.2	0.715	OK	230.2638	0.00	0.05	F005233
F005233-MSD2 MH	210.804	80.7	135.0	230.31	230.36	91.4	1.399	CT	230.2638	0.00	0.05	F005233
F005233-MSD2 PH	92.711	139.4	194.1	230.35	230.34	152.6	0.438	OK	230.2638	0.00	0.05	F005233

#29: 0D00074-03



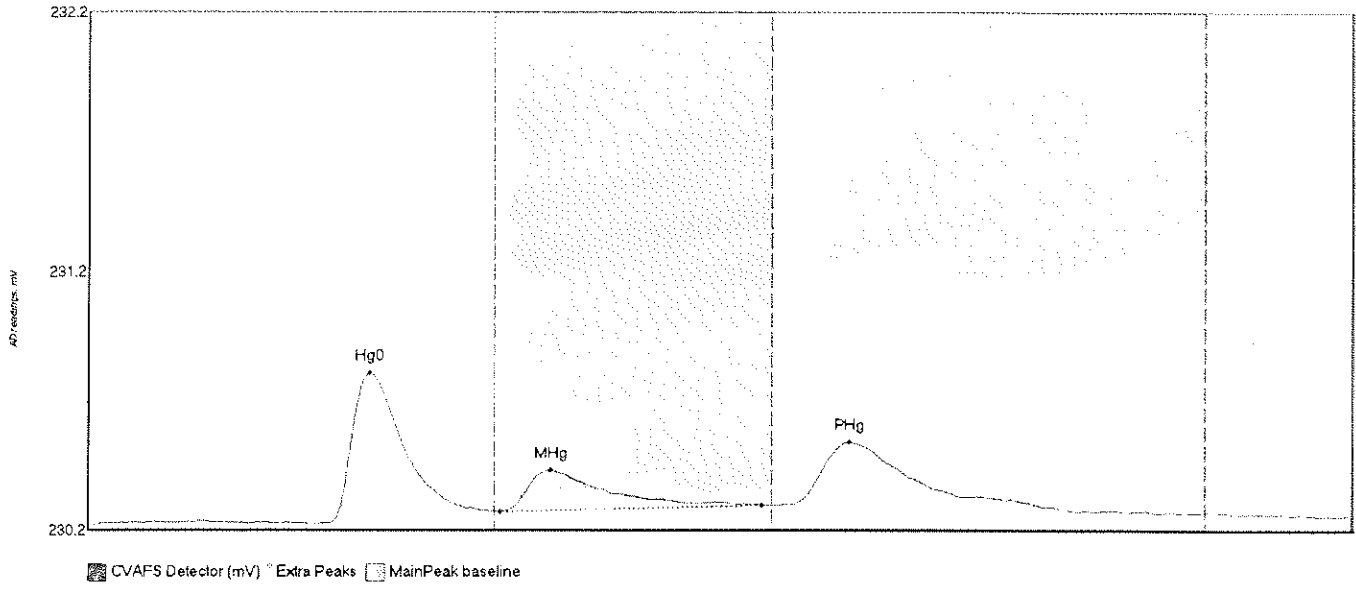
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Height	Comment
0D00074-03 Hg0	76.400	48.1	79.9	230.26	230.30	55.0	0.662	OK	230.2658	0.00	0.03	F005233
0D00074-03 MHg	55.465	81.5	133.0	230.31	230.34	91.8	0.343	OK	230.2658	0.00	0.03	F005233
0D00074-03 PHg	57.562	138.9	185.6	230.33	230.34	152.2	0.307	OK	230.2658	0.00	0.03	F005233

#30: 000074-04



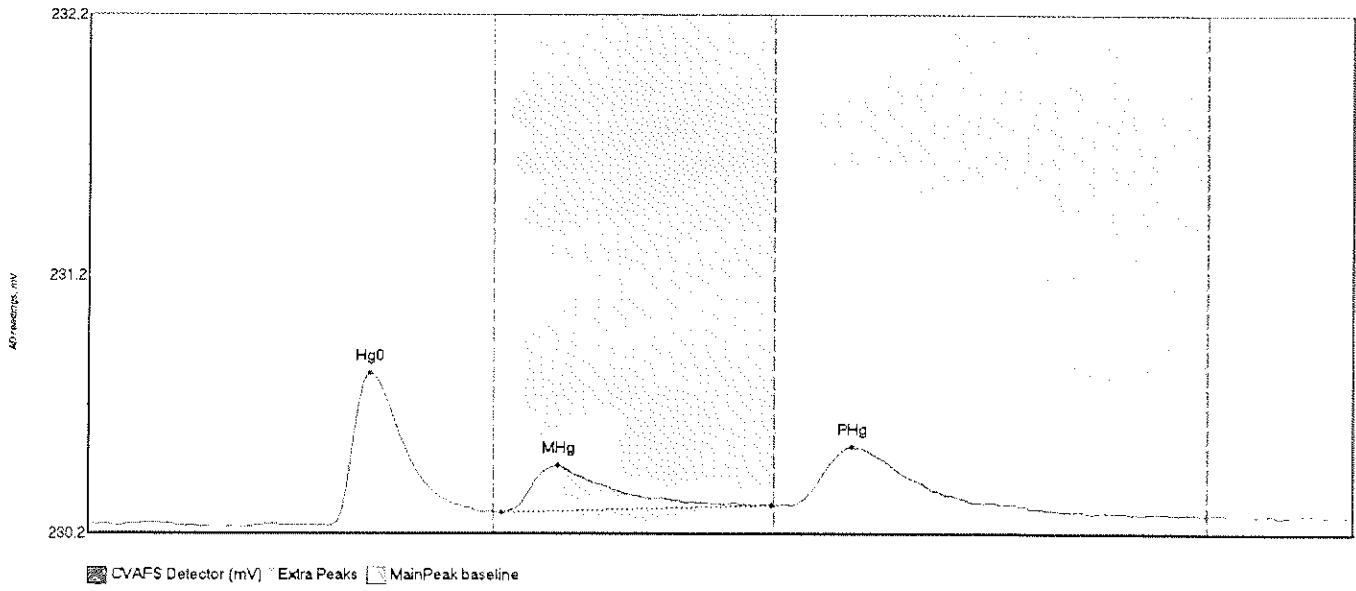
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
000074-04 Hg0	64.729	48.1	60.0	230.27	230.31	55.7	0.565	CT	230.2680	0.00	0.03	F005233
000074-04 MHg	28.266	82.2	129.2	230.31	230.33	91.6	0.167	OK	230.2680	0.00	0.03	F005233
000074-04 PHg	84.390	136.1	189.1	230.34	230.33	150.4	0.424	OK	230.2680	0.00	0.03	F005233

#31: 000074-05



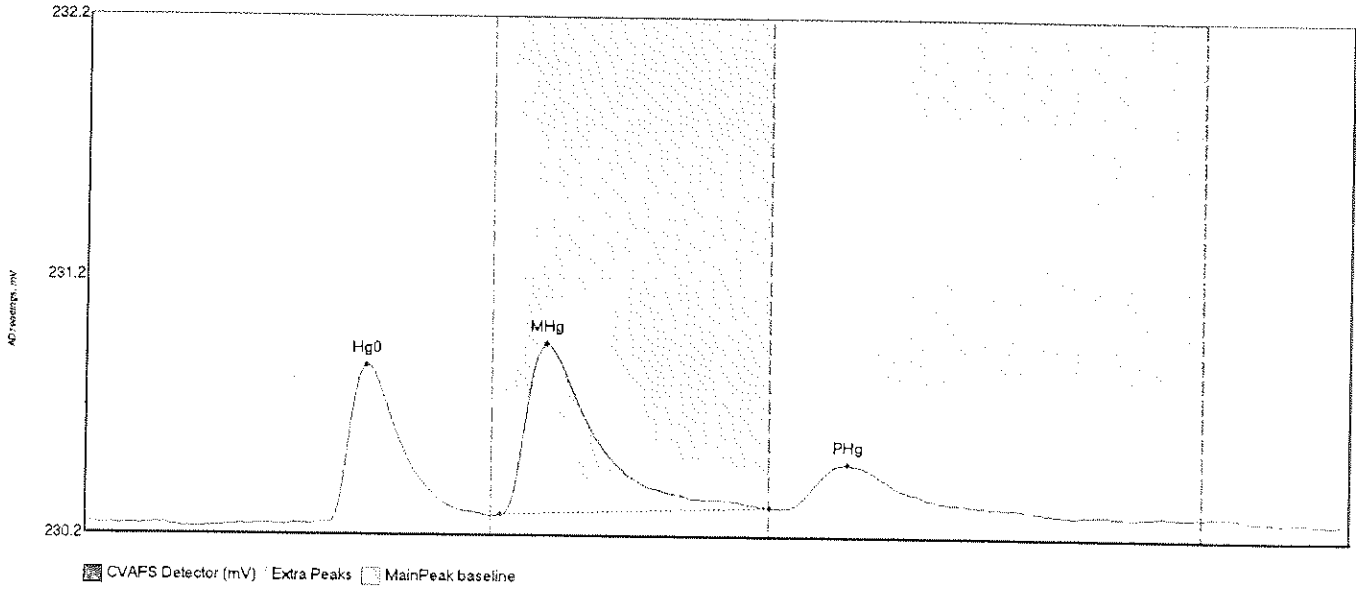
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
000074-05 Hg0	65.620	47.3	60.0	230.26	230.30	55.7	0.582	CT	230.2557	0.00	0.03	F005233
000074-05 MHg	28.537	81.1	133.0	230.30	230.33	91.1	0.161	OK	230.2557	0.00	0.03	F005233
000074-05 PHg	46.114	139.3	187.9	230.33	230.32	150.0	0.241	OK	230.2557	0.00	0.03	F005232

#32: 0000074-06

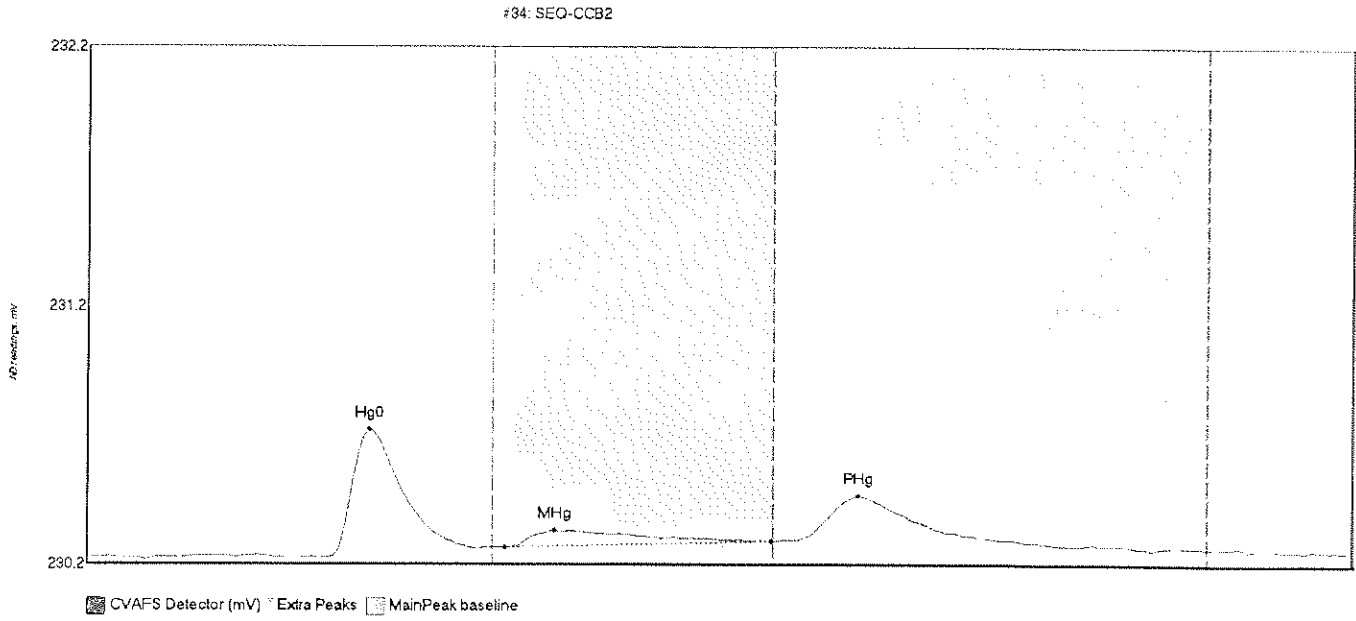


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0000074-06 Hg0	65.825	47.5	77.9	230.25	230.31	55.6	0.589	OK	230.2623	0.00	0.03	F005233
0000074-06 MHg	31.342	81.6	134.5	230.30	230.33	92.7	0.181	OK	230.2623	0.00	0.03	F005233
0000074-06 PHg	39.705	138.4	179.9	230.33	230.33	150.3	0.223	OK	230.2623	0.00	0.03	F005233

#33. SEQ-CCV2

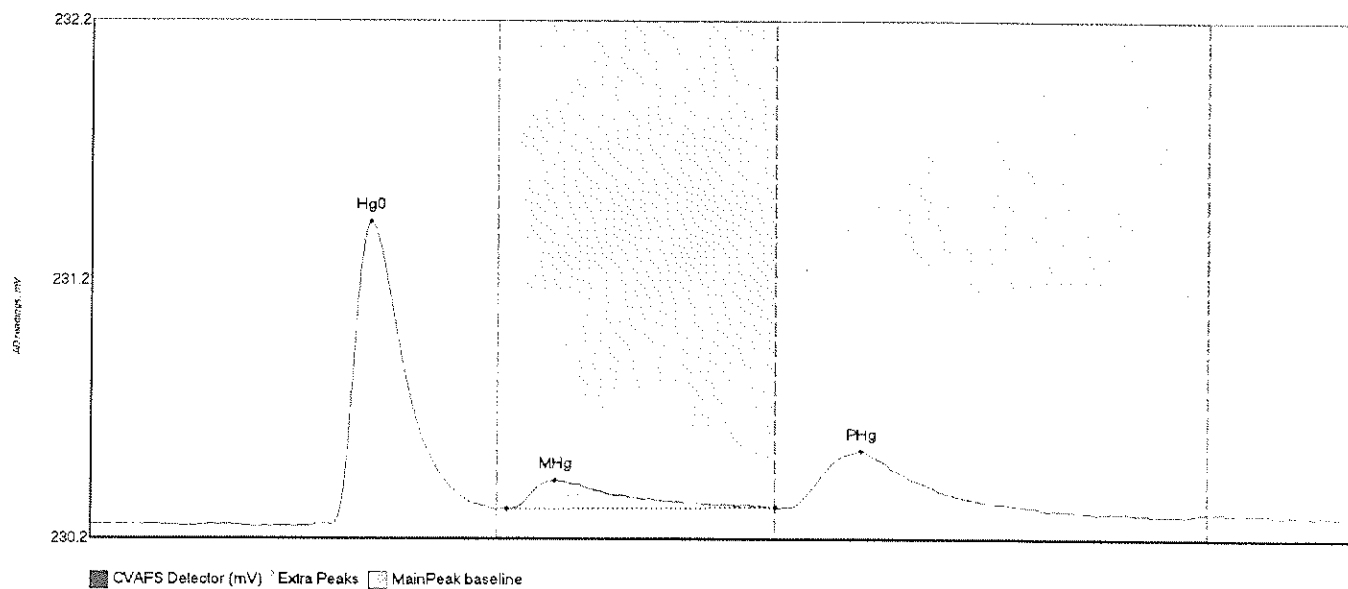


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCV2 Hg0	68.893	48.2	79.5	230.26	230.29	55.6	0.606	OK	230.2580	0.00	0.02	
SEQ-CCV2 MHg	103.934	82.0	135.0	230.29	230.32	90.7	0.662	CT	230.2580	0.00	0.02	
SEQ-CCV2 PHg	28.920	138.6	178.4	230.32	230.33	150.3	0.172	OK	230.2580	0.00	0.02	

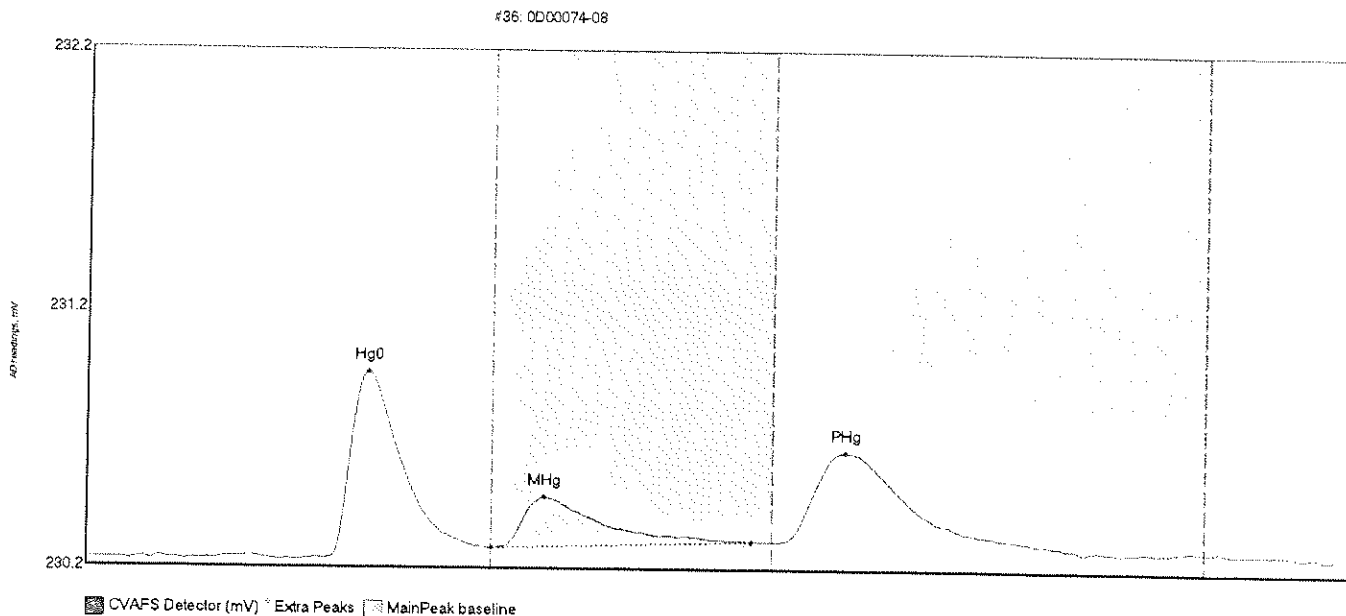


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CCB2 Hg0	54.973	47.5	77.4	230.25	230.28	55.5	0.495	OK	230.2553	0.00	0.02	
SEQ-CCB2 MHg	14.986	82.5	134.6	230.29	230.31	92.2	0.065	OK	230.2553	0.00	0.02	
SEQ-CCB2 PHg	29.426	139.3	179.9	230.32	230.32	151.8	0.172	OK	230.2553	0.00	0.02	

#35: 0000074-07

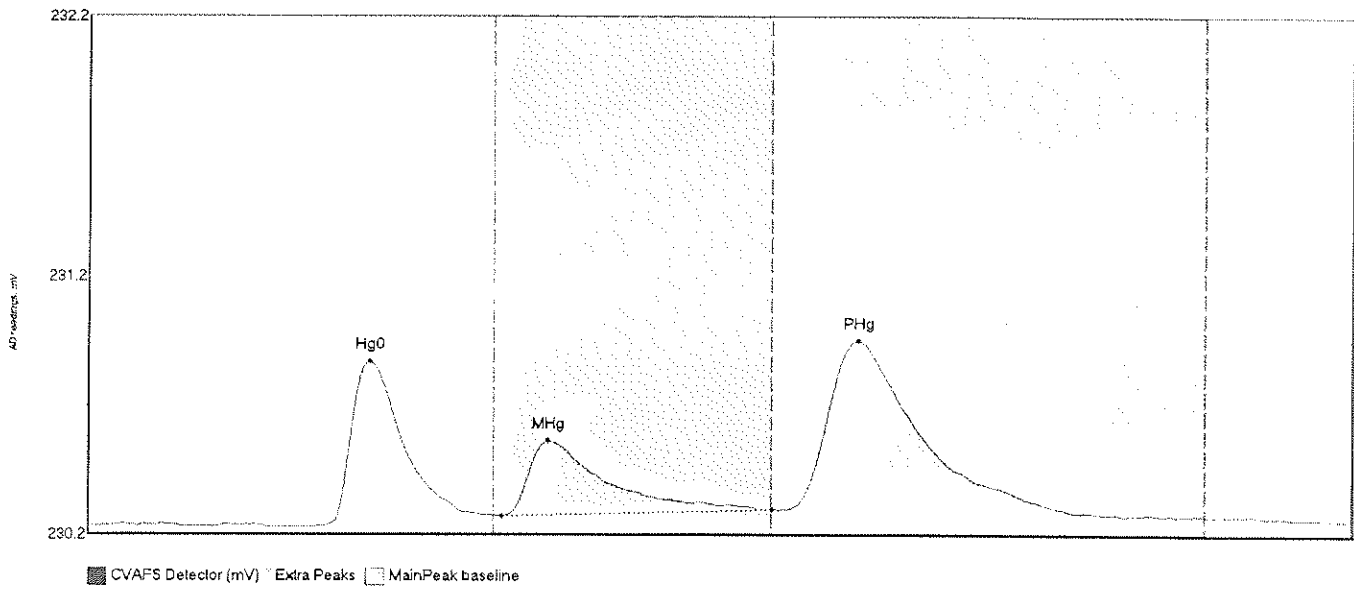


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0000074-07 Hg0	128.758	47.6	79.5	230.25	230.31	55.3	1.166	OK	230.2510	0.00	0.03	F005233
0000074-07 MHg	23.245	81.9	135.0	230.31	230.32	91.6	0.112	CF	230.2510	0.00	0.03	F005233
0000074-07 PHg	43.129	137.9	184.6	230.32	230.32	151.8	0.220	OK	230.2510	0.00	0.03	F005233



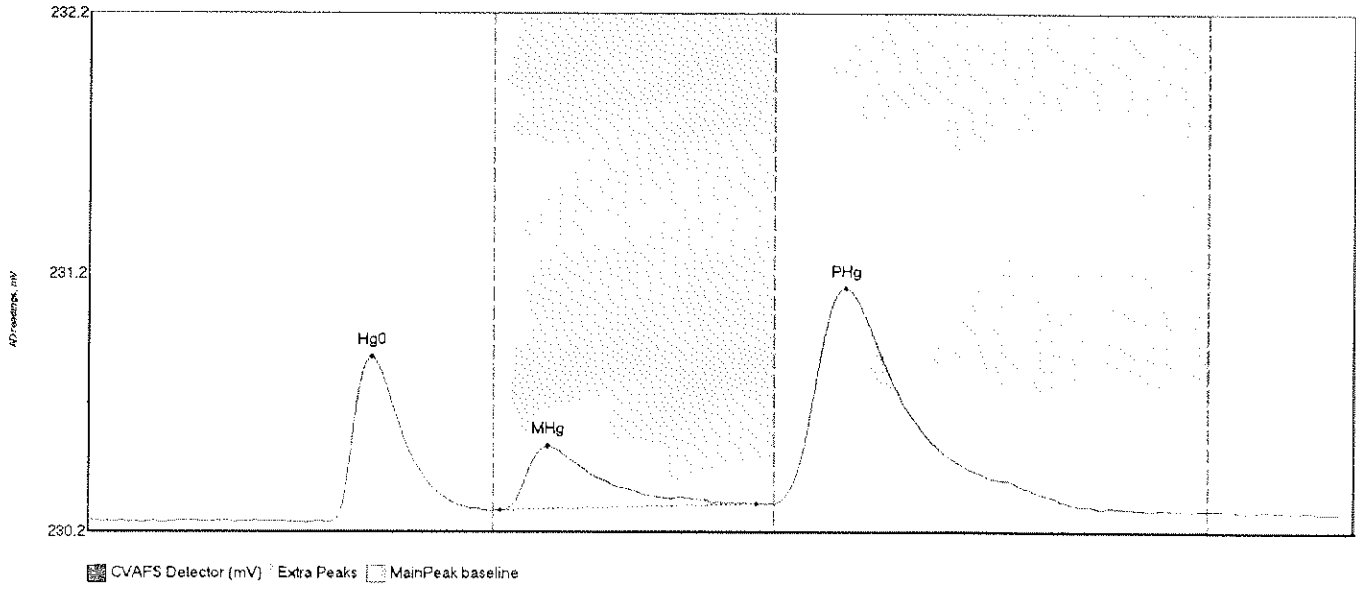
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
0000074-08 Hg0	80.991	47.0	79.5	230.25	230.29	55.5	0.718	OK	230.2464	0.00	0.03	F005233
0000074-08 MHg	34.421	80.0	130.9	230.29	230.32	90.3	0.197	OK	230.2464	0.00	0.03	F005233
0000074-08 PHg	66.212	136.2	184.1	230.32	230.32	148.4	0.346	OK	230.2464	0.00	0.03	F005233

#37: 0E00002-01



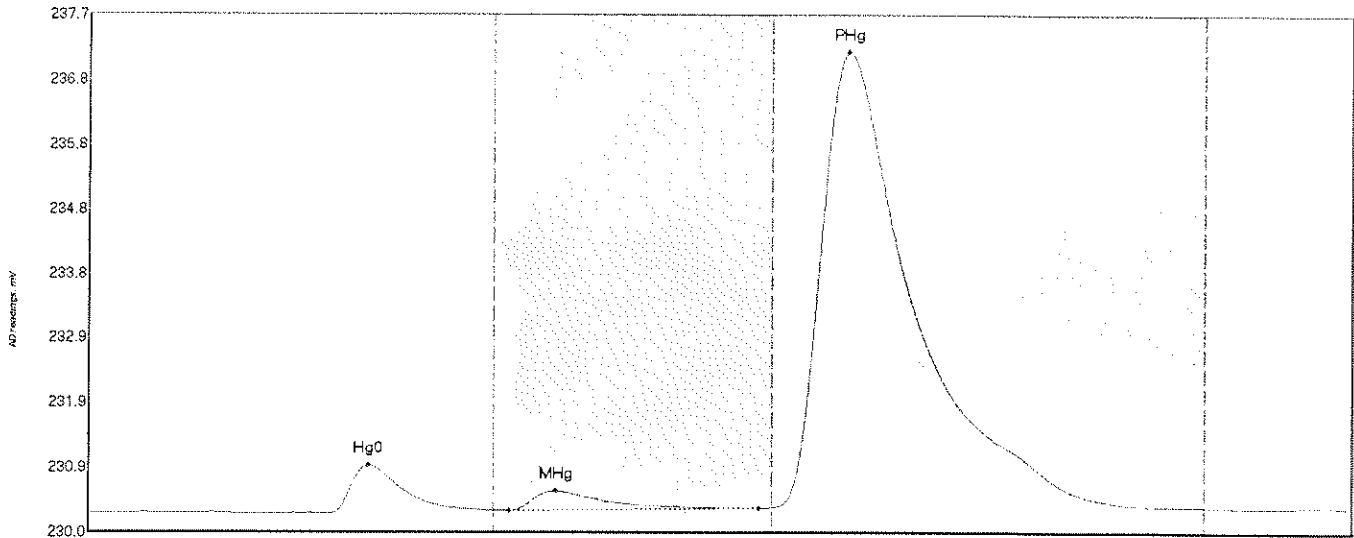
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00002-01 Hg0	71.136	46.3	79.5	230.25	230.29	55.8	0.636	OK	230.2466	0.00	0.02	F005233
0E00002-01 MHg	50.815	81.6	135.0	230.28	230.31	80.6	0.293	CT	230.2466	0.00	0.02	F005233
0E00002-01 PHg	128.516	137.9	191.2	230.31	230.31	152.0	0.656	OK	230.2466	0.00	0.02	F005233

#38: 0E00002-02



Nano	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00002-02 Hg0	71.002	47.1	79.3	230.24	230.29	55.9	0.638	OK	230.2526	0.00	0.02	F005213
0E00002-02 MHg	40.480	81.5	131.5	230.29	230.32	90.6	0.246	OK	230.2526	0.00	0.02	F005213
0E00002-02 PHg	171.991	135.0	194.7	230.32	230.31	149.1	0.833	OK	230.2526	0.00	0.02	F005213

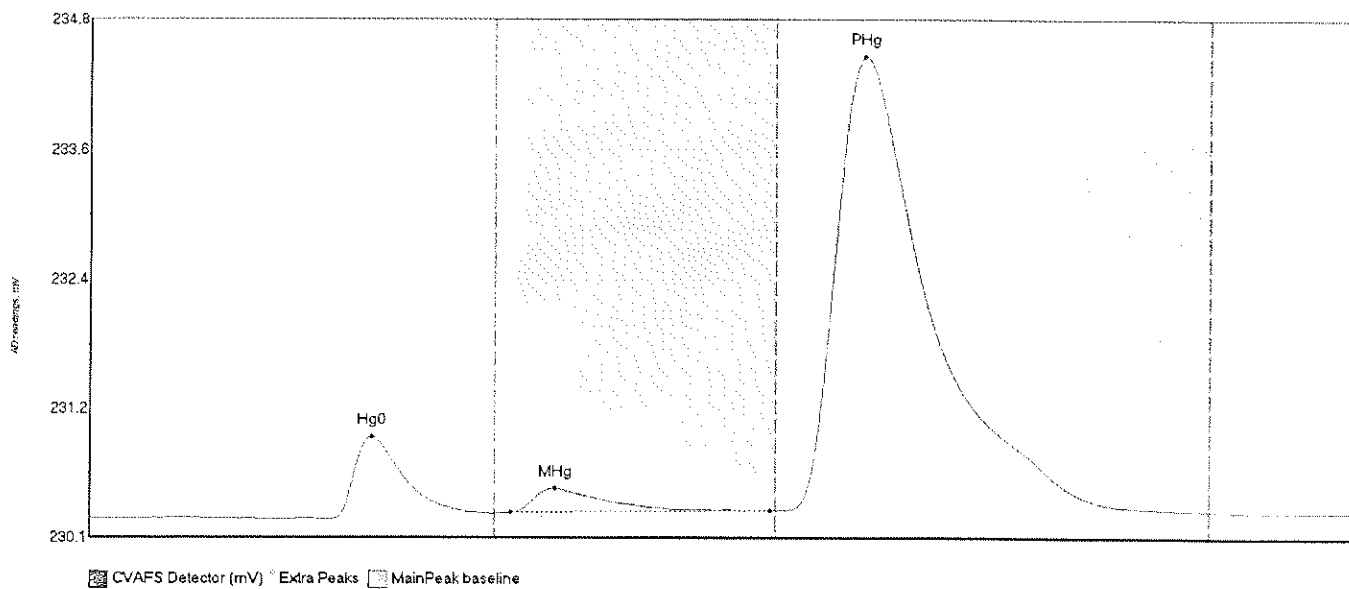
#39: 0E00002-03



☐ CVAFS Detector (mV) ☐ Extra Peaks ☐ MainPeak baseline

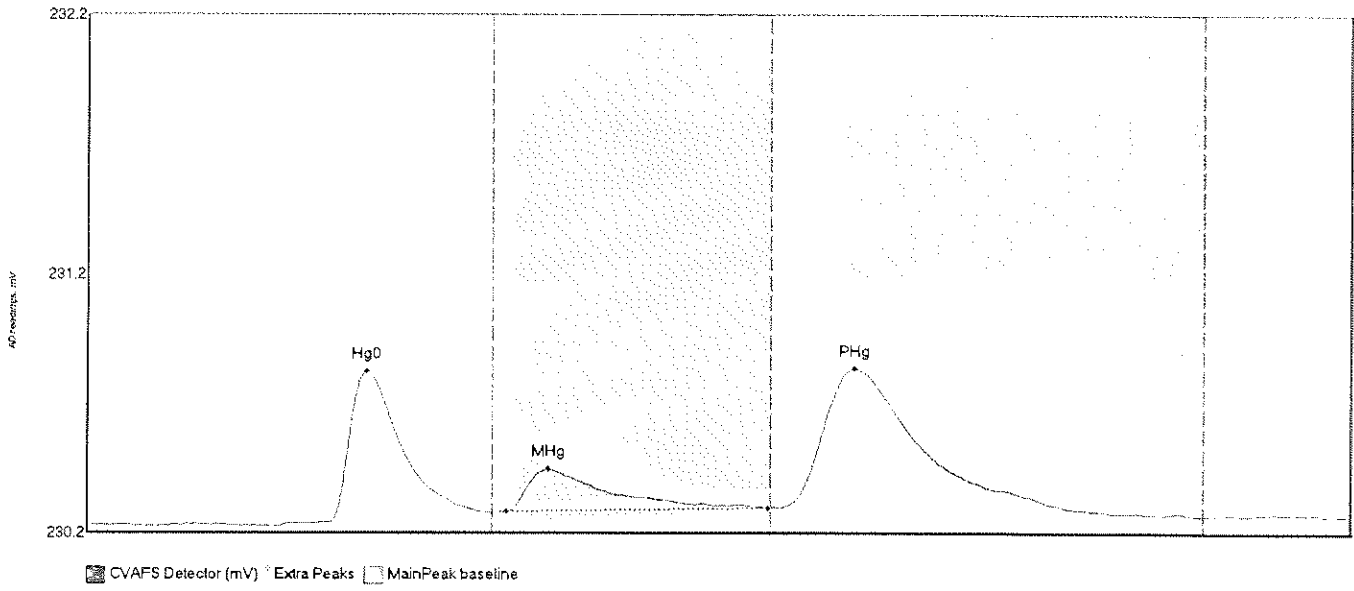
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00002-03 Hg0	79.525	47.6	80.0	230.24	230.29	55.6	0.720	CT	230.2522	0.00	0.07	F005233
0E00002-03 MHg	46.851	83.1	132.5	230.28	230.32	92.2	0.293	OK	230.2522	0.00	0.07	F005233
0E00002-03 PHg	1432.659	135.0	219.7	230.33	230.34	150.1	6.856	CT	230.2522	0.00	0.07	F005233

#40: 0E00002-04



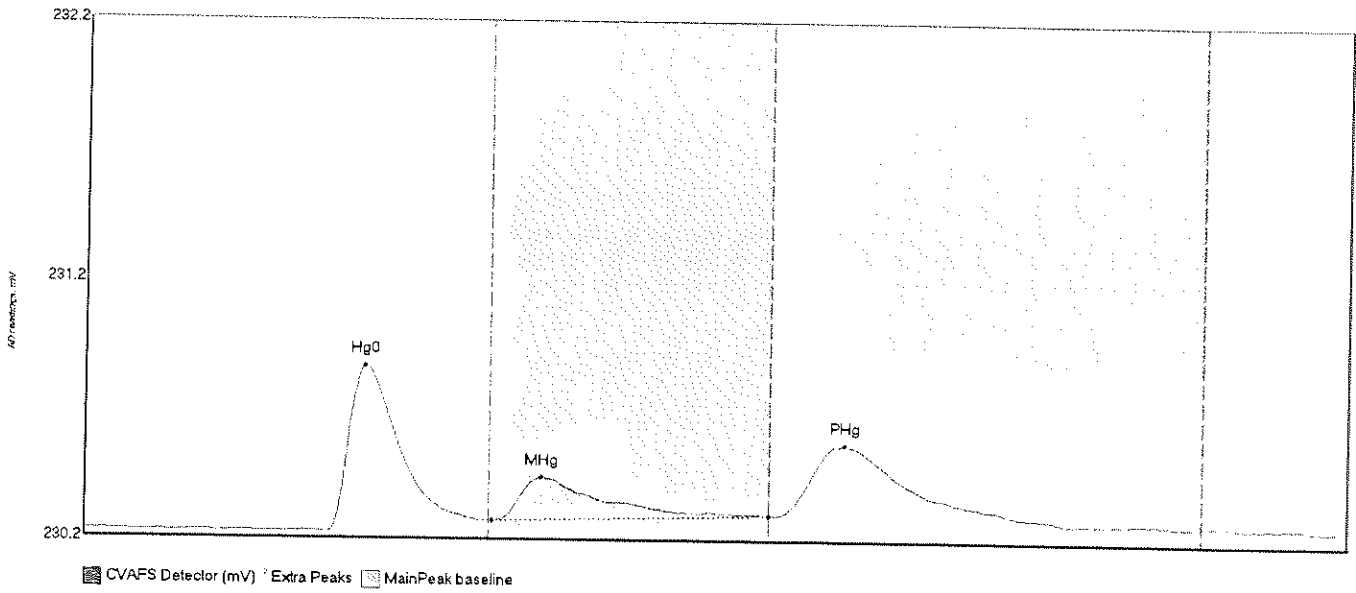
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00002-04 Hg0	61.974	47.6	79.4	230.24	230.29	55.5	0.745	OK	230.2462	0.00	0.06	P005233
0E00002-04 MHg	35.292	83.2	134.0	230.30	230.32	91.9	0.220	OK	230.2462	0.00	0.06	F005233
0E00002-04 PHg	883.458	136.4	214.0	230.32	230.32	152.7	4.115	OK	230.2462	0.00	0.06	P005233

#41: 0E00002-05

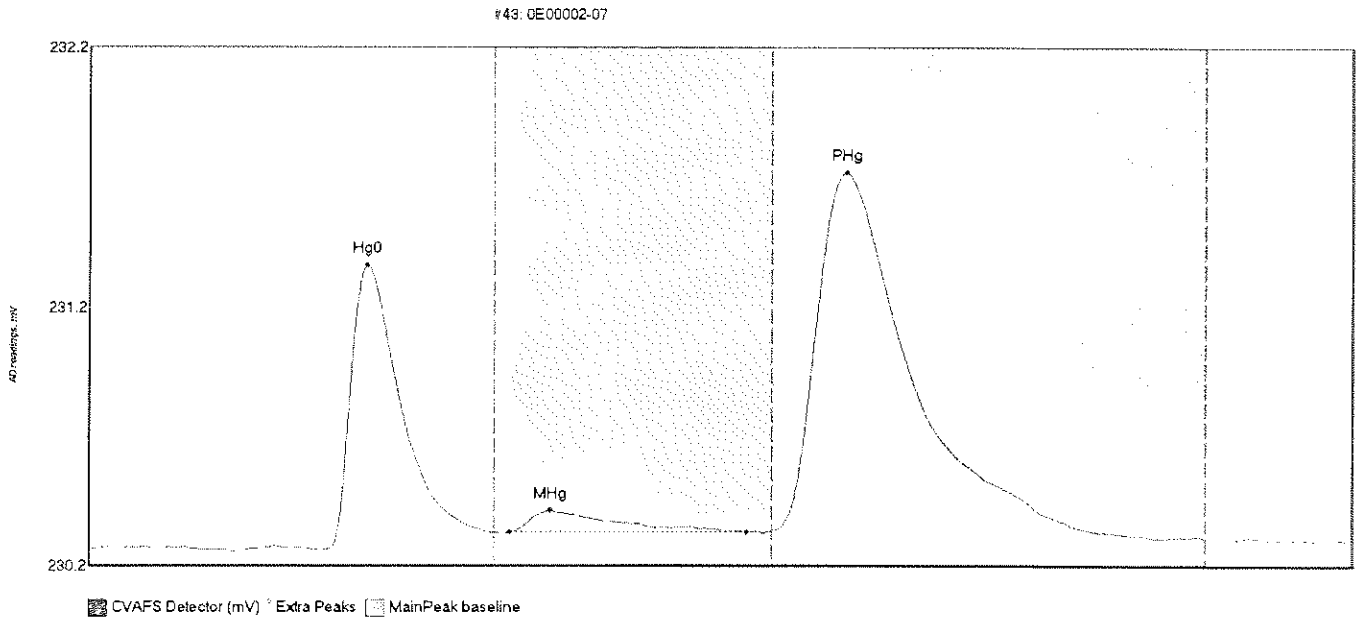


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00002-05 Hg0	66.604	38.2	80.0	230.24	230.29	55.4	0.567	CT	230.2414	0.00	0.03	F005233
0E00002-05 MHg	30.724	82.7	134.4	230.29	230.31	90.9	0.168	OK	230.2414	0.00	0.03	F005233
0E00002-05 PHg	115.406	136.7	194.7	230.31	230.30	151.4	0.539	OK	230.2414	0.00	0.03	F005233

#42: 0E00002-06

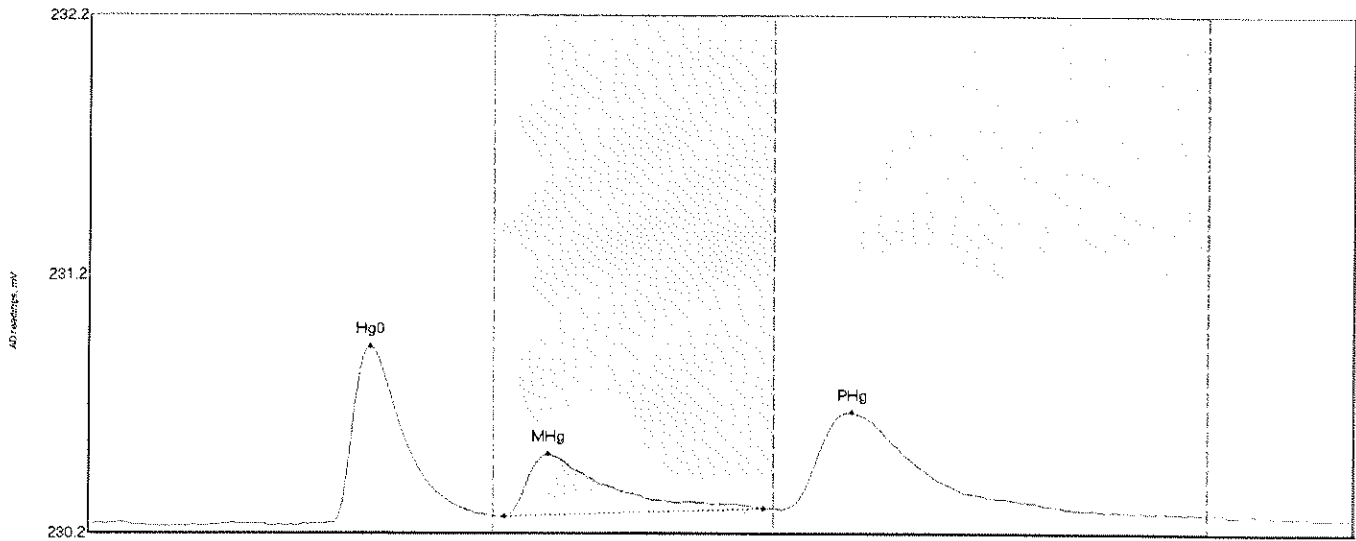


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0E00002-06 Hg0	71.041	47.5	73.6	230.24	230.29	55.3	8.637	OK	230.2482	0.00	0.03	F005233
0E00002-06 MHg	29.817	80.7	134.9	230.29	230.31	90.3	0.165	OK	230.2482	0.00	0.03	F005233
0E00002-06 PHg	54.401	136.7	184.2	230.32	230.31	149.8	0.271	OK	230.2482	0.00	0.03	F005233



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BShift	Comment
GE00002-07 Hg0	121.625	46.2	79.8	230.24	230.31	55.3	1.102	OK	230.2502	0.30	0.03	F005233
GE00002-07 MHg	16.298	83.1	129.9	230.31	230.32	91.0	0.085	OK	230.2502	0.30	0.03	F005233
GE00002-07 PHg	286.756	135.0	196.8	230.32	230.32	149.5	1.381	OK	230.2502	0.30	0.03	F005233

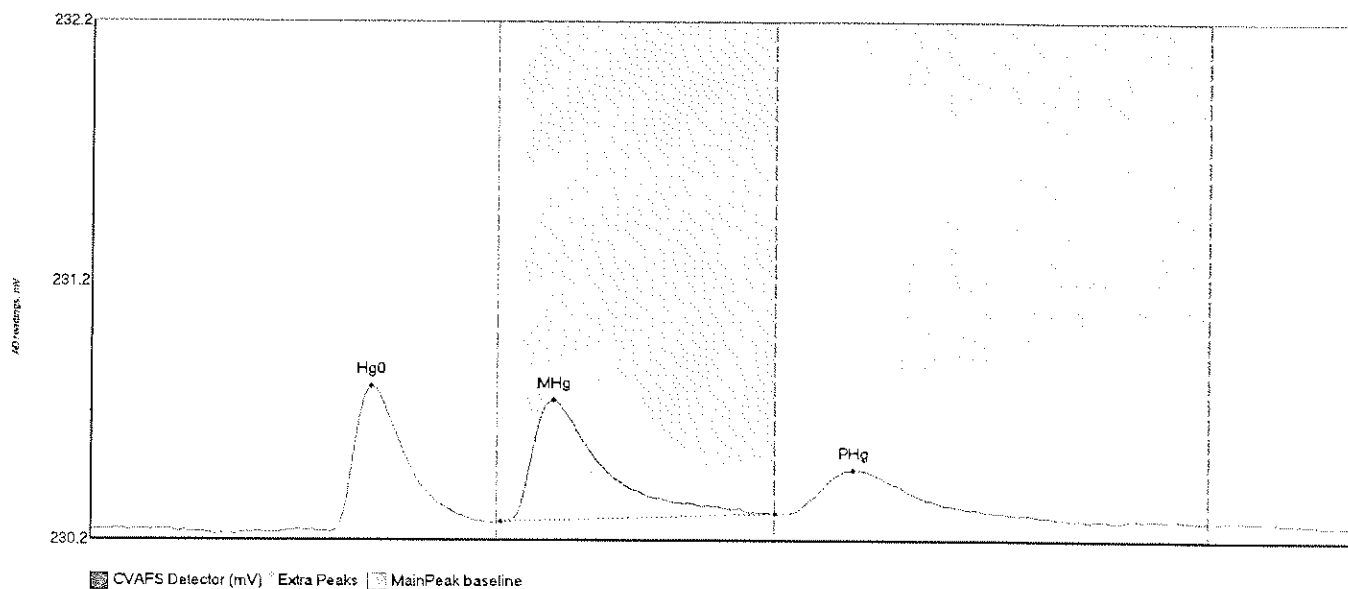
#44: 0E00002-08



CVAFS Detector (mV) Extra Peaks MainPeak baseline

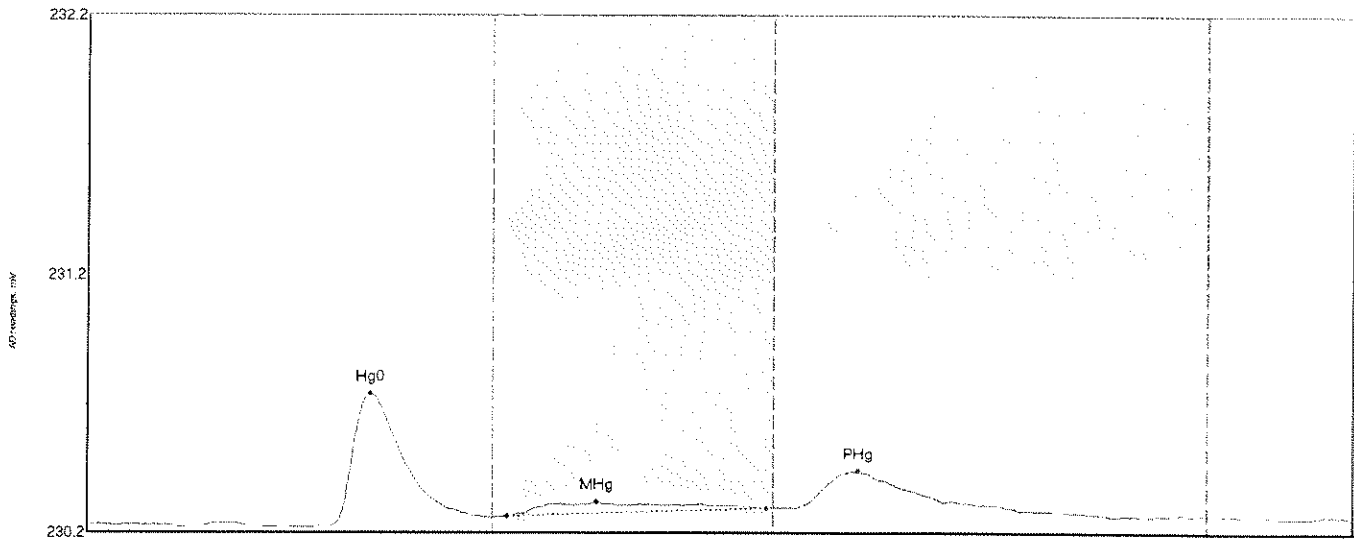
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00002-08 Hg0	77.800	47.8	80.0	230.25	230.28	55.5	0.683	CT	230.2515	0.00	0.02	F005233
0E00002-08 MHg	43.053	82.2	133.0	230.28	230.31	90.8	0.242	OK	230.2515	0.00	0.02	F005233
0E00002-08 PHg	60.521	136.6	193.1	230.31	230.31	150.3	0.370	OK	230.2515	0.00	0.02	F005233

#45: SEQ-CCV3



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CCV3 Hg0	63.355	47.4	79.0	230.25	230.28	58.6	0.561	OK	230.2567	0.00	0.02	
SEQ-CCV3 MHg	74.434	86.8	135.0	230.29	230.32	91.1	6.469	CP	230.2567	0.00	0.02	
SEQ-CCV3 PHg	31.134	136.5	179.2	230.32	230.32	150.3	0.169	OK	230.2567	0.00	0.02	

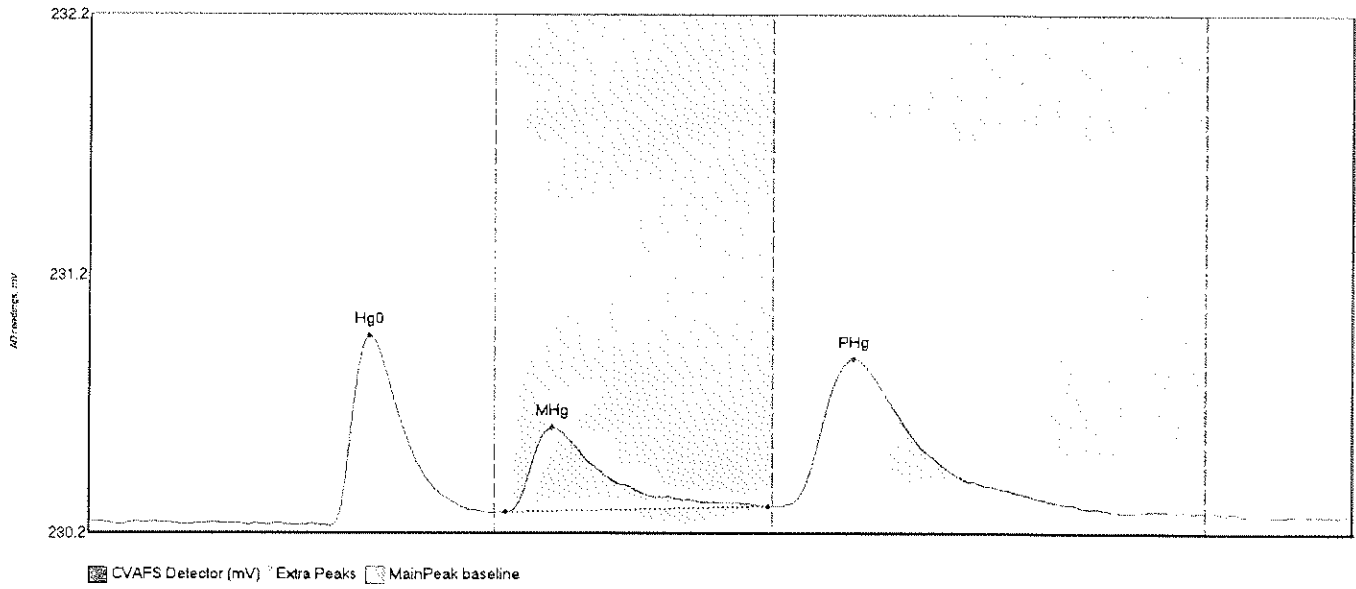
#46: SEQ-CCB3



CVAFS Detector (mV) * Extra Peaks MainPeak baseline

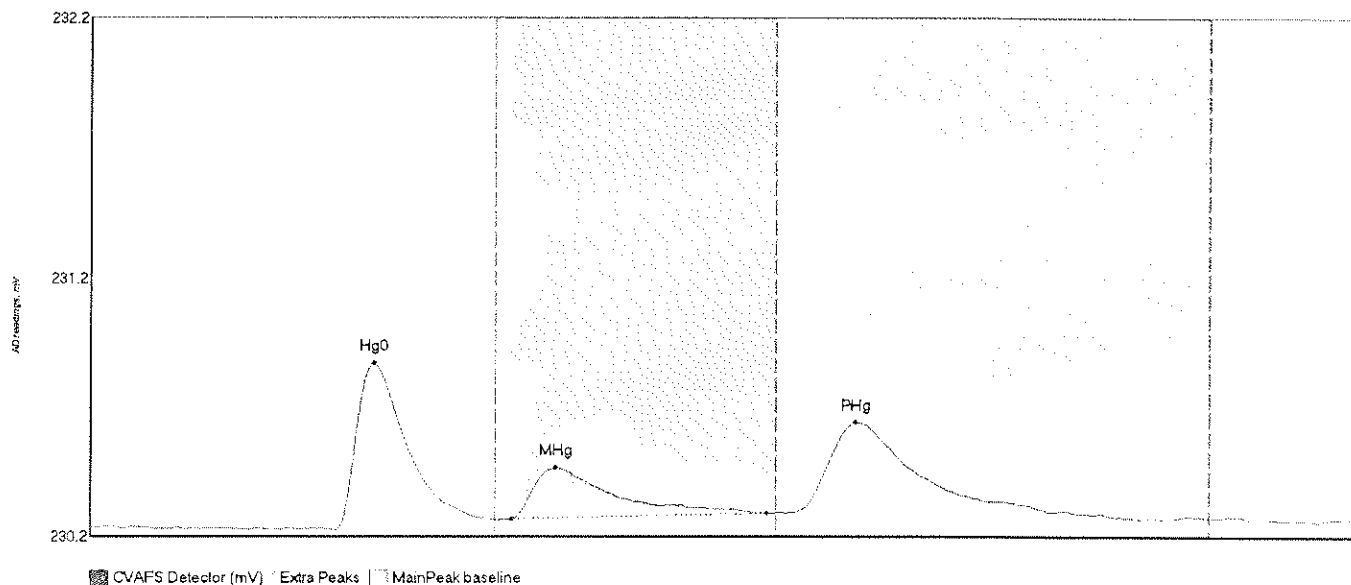
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	R1Dev	R1Shift	Comment
SEQ-CCB3 Hg0	57.526	47.1	80.0	230.25	230.28	55.7	0.518	CT	230.2561	0.00	0.03	
SEQ-CCB3 MHg	12.976	82.9	133.6	230.29	230.32	100.4	0.057	OK	230.2561	0.00	0.03	
SEQ-CCB3 PHg	25.622	139.3	181.3	230.32	230.32	151.7	0.142	OK	230.2561	0.00	0.03	

#47: DE00002-09



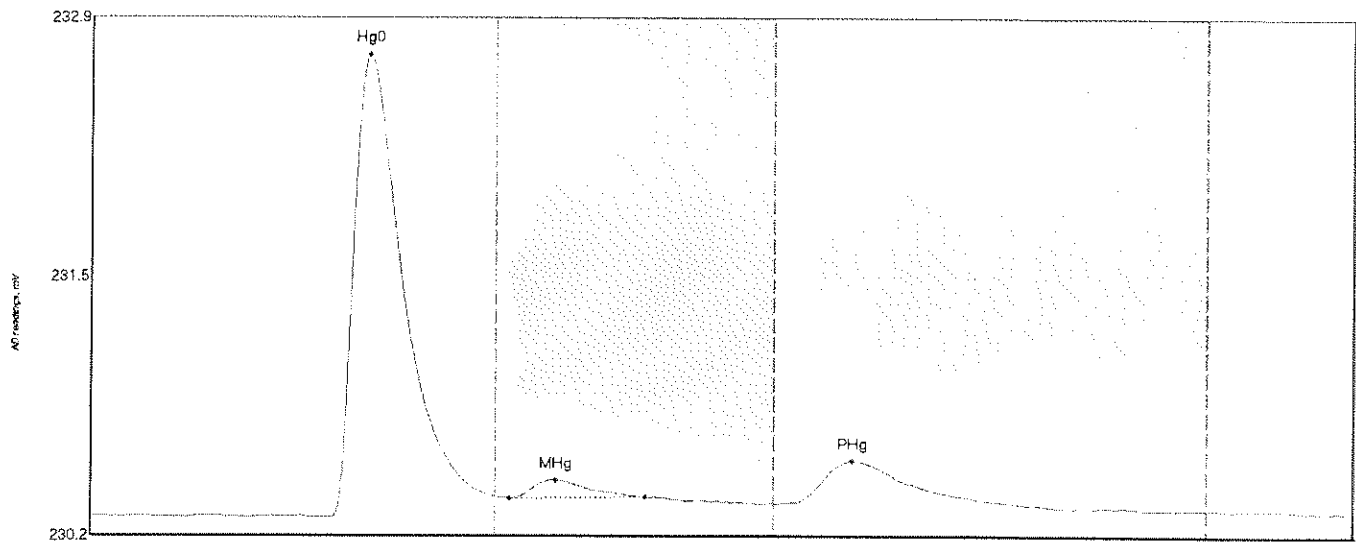
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
DE00002-09 Hg0	81.918	48.0	79.6	230.24	230.29	55.6	0.733	OK	230.2608	0.00	0.02	F005233
DE00002-09 MHg	52.644	52.2	134.1	230.29	230.32	91.3	0.326	OK	230.2608	0.00	0.02	F005233
DE00002-09 PHg	117.615	136.7	195.7	230.32	230.31	150.9	0.573	OK	230.2608	0.00	0.02	F005233

#48 0E00002-10



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0E00002-10 Hg0	72.327	48.2	80.0	230.24	230.28	55.8	0.644	CT	230.2548	0.00	0.03	F005233
0E00002-10 MHg	35.662	83.3	133.1	230.28	230.31	91.9	0.199	OK	230.2548	0.00	0.03	F005233
0E00002-10 PHg	67.160	138.7	188.9	230.31	230.31	150.7	0.348	OK	230.2548	0.00	0.03	F005233

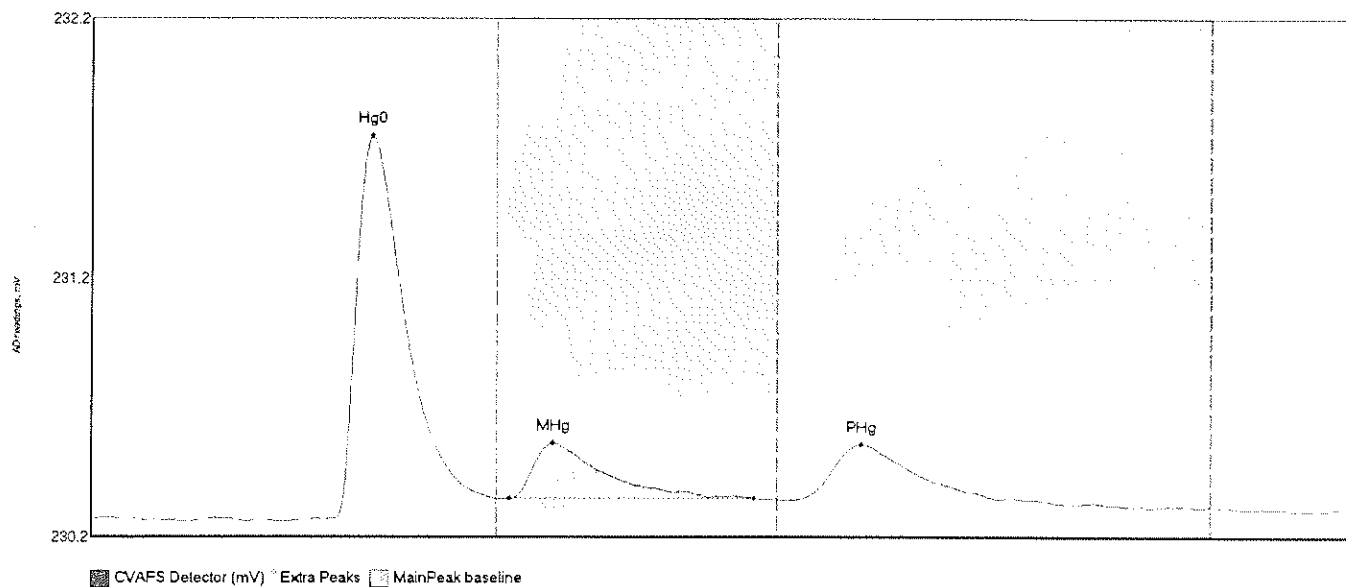
#49: 0E0002-11



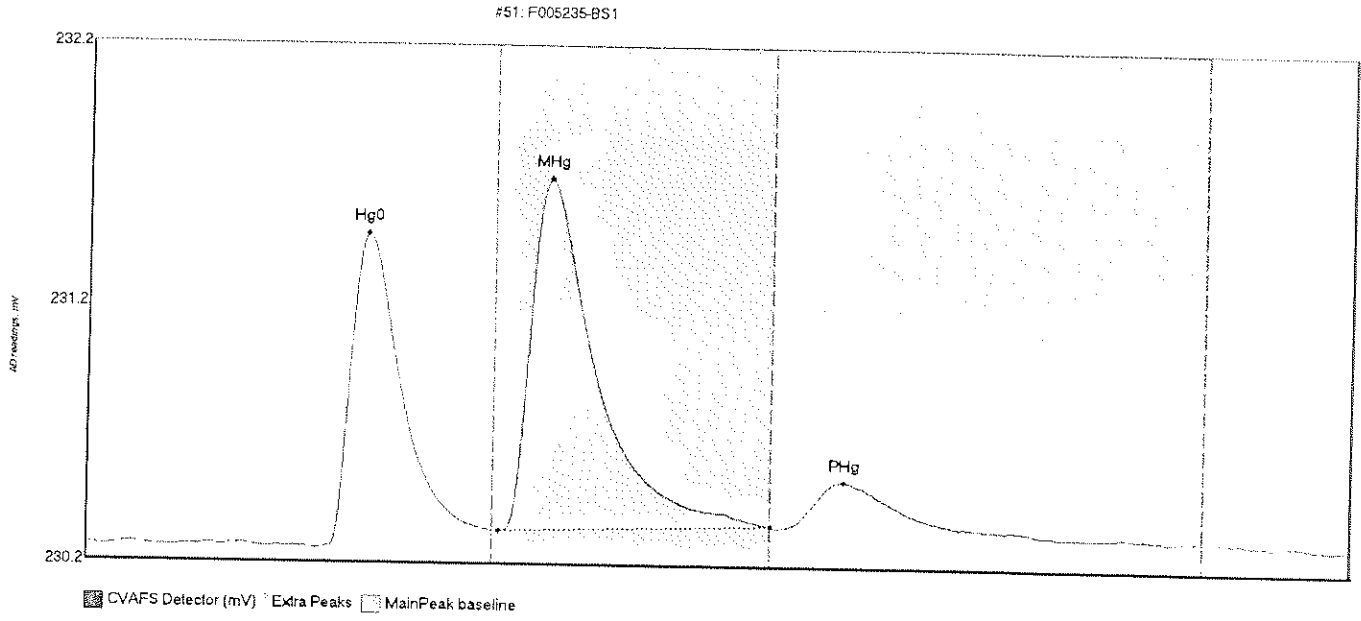
CVAFS Detector (mV)
 Extra Peaks
 MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BiShift	Comment
0E0002-11 Hg0	272.288	47.8	80.0	230.26	230.37	55.4	2.485	CT	230.2606	0.00	0.02	F005233
0E0002-11 MHg	12.033	82.8	109.5	230.36	230.36	91.8	0.097	OK	230.2606	0.00	0.02	F005233
0E0002-11 PHg	41.424	138.1	181.7	230.33	230.33	150.3	0.228	OK	230.2606	0.00	0.02	F005233

#50 OE00002-12

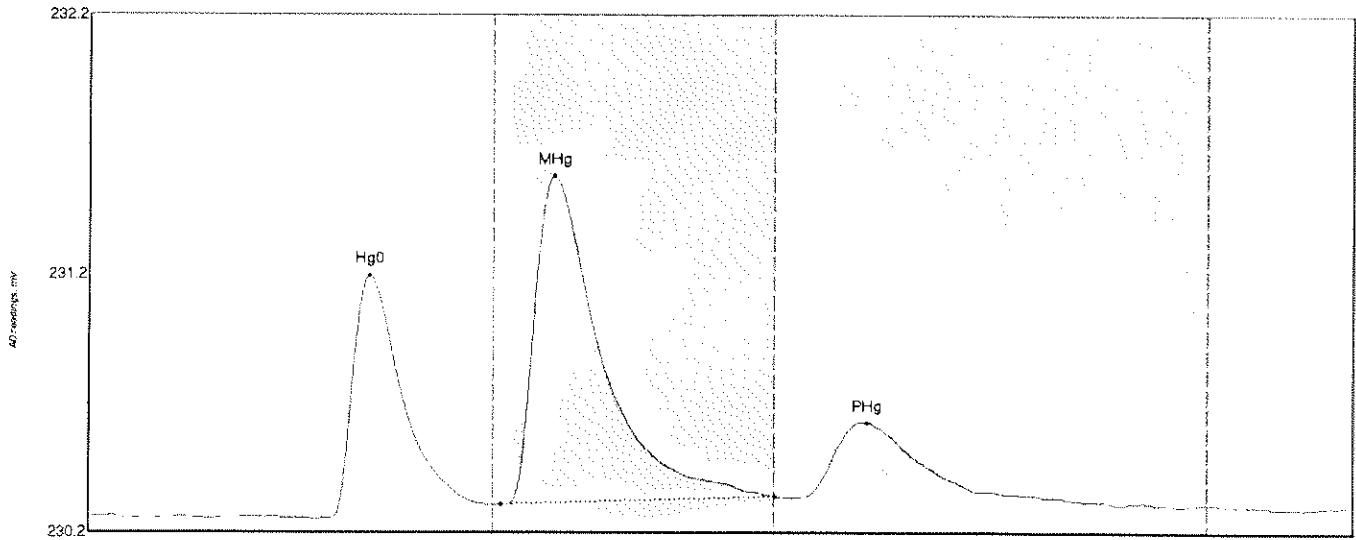


Nano	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BlShift	Comment
OE00002-12 Hg0	162.327	47.8	80.0	230.25	230.33	55.4	1.474	CT	230.2527	0.00	0.03	F005233
OE00002-12 MHg	34.264	82.6	130.4	230.33	230.33	91.1	0.215	OK	230.2527	0.00	0.03	F005233
OE00002-12 PHg	37.616	138.0	178.3	230.32	230.33	151.5	0.215	OK	230.2527	0.00	0.03	F005233



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005235-BS1 Hg0	133.014	48.2	80.0	230.25	230.32	55.3	1.203	CF	230.2569	0.00	0.03	F005235
F005235-BS1 MHg	262.791	81.3	135.0	230.32	230.35	91.0	1.356	CT	230.2569	0.00	0.03	F005235
F005235-BS1 PHg	28.670	137.3	171.6	230.34	230.35	149.4	0.183	OK	230.2569	0.00	0.03	F005235

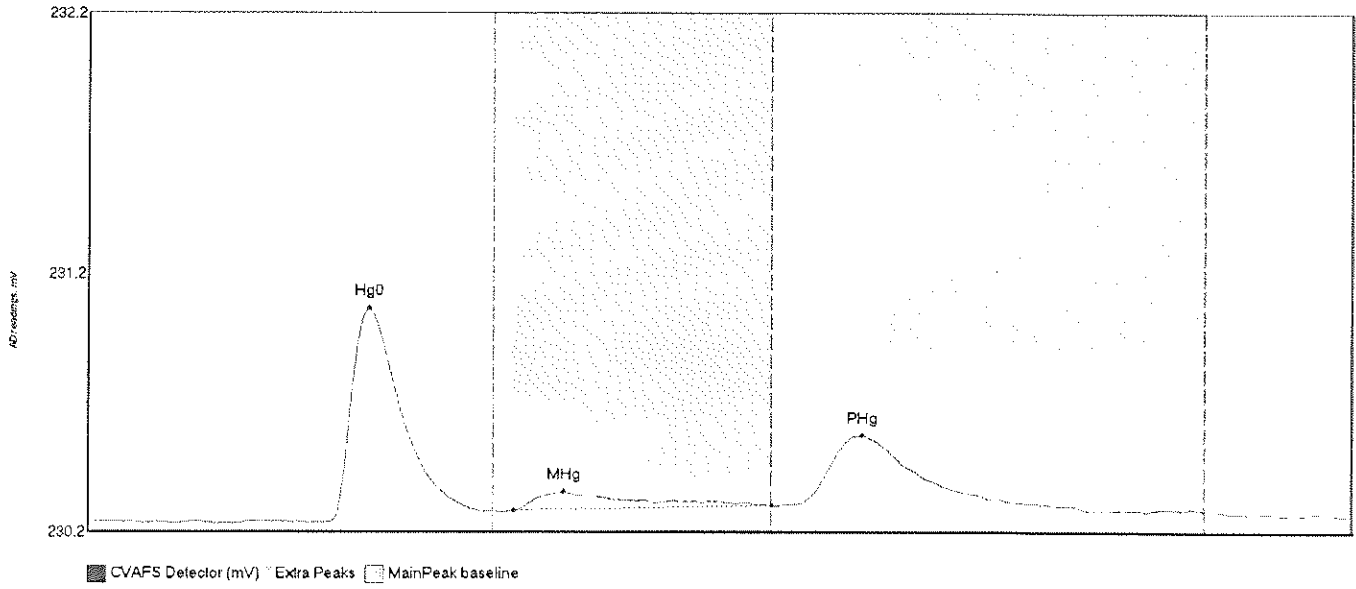
#52: F005235-BSD1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

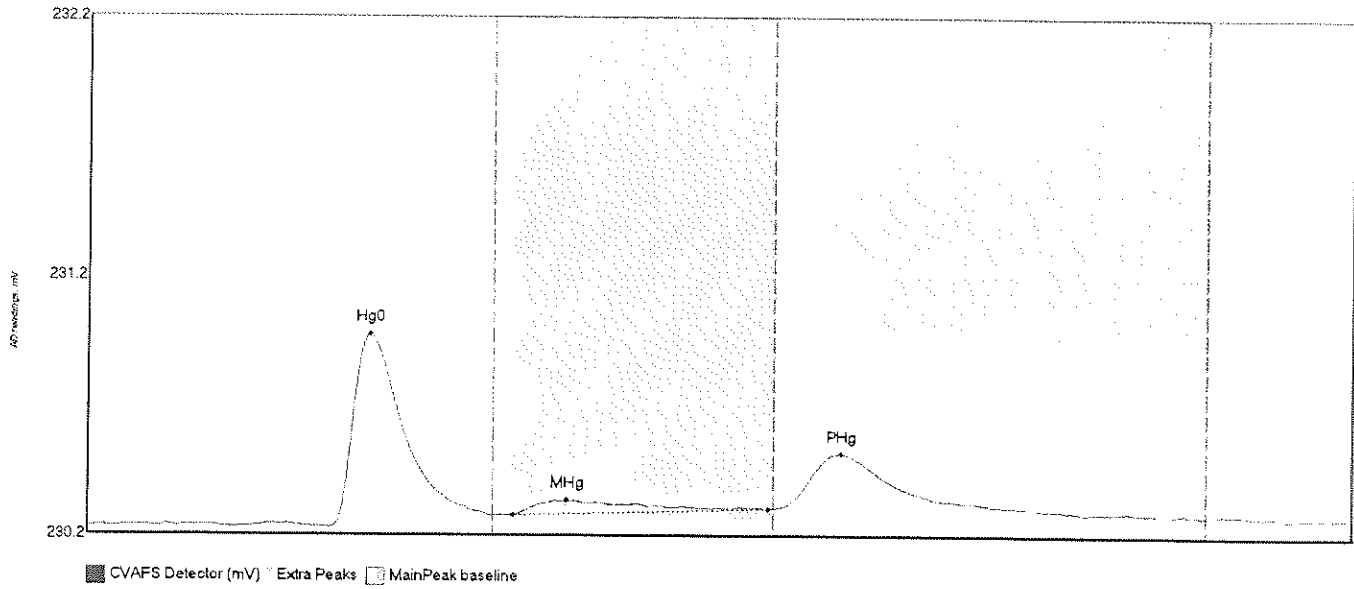
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
F005235-BSD1 Hg	104.249	47.1	80.0	230.25	230.30	55.4	0.937	CT	230.2598	0.00	0.04	F005235
F005235-BSD1 MH	190.985	81.7	135.0	230.30	230.34	92.0	1.269	CT	230.2598	0.00	0.04	F005235
F005235-BSD1 PH	54.084	139.9	188.5	230.33	230.33	153.3	0.292	OK	230.2598	0.00	0.04	F005235

#53: F005235-BLK1



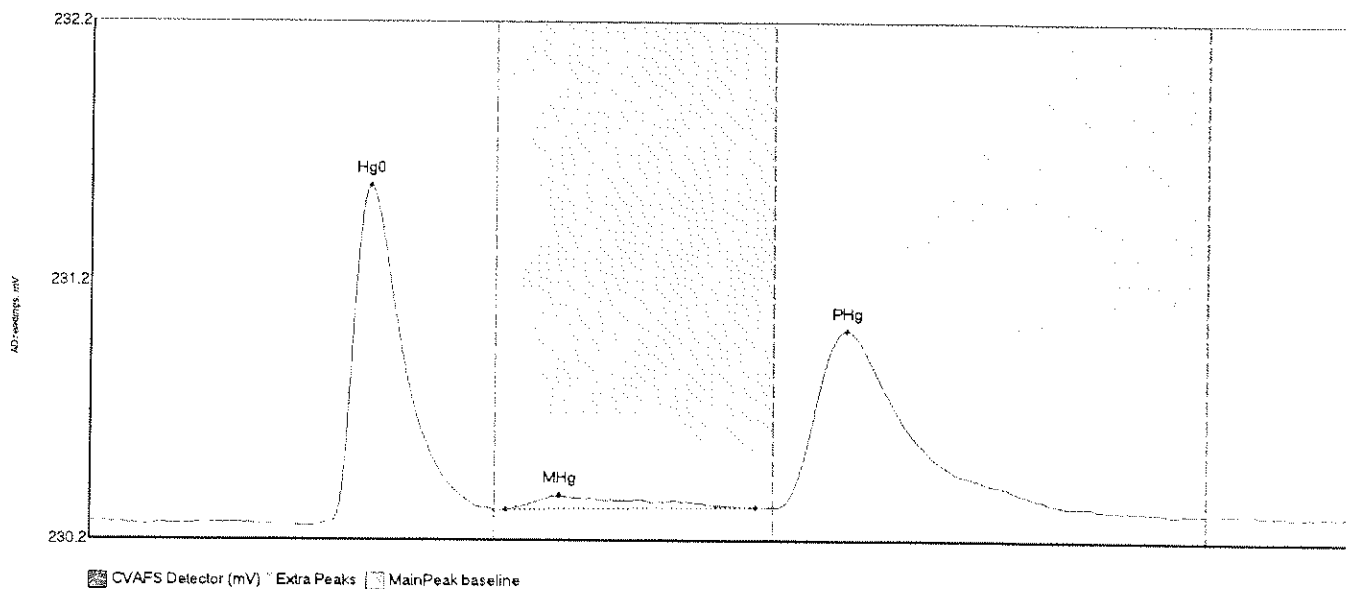
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
F005235-BLK1 Hg	51.268	47.8	78.0	230.25	230.29	55.7	0.824	OK	230.2564	0.00	0.02	F005235
F005235-BLK1 MH	15.253	84.0	135.0	230.30	230.32	93.9	0.072	CT	230.2569	0.00	0.02	F005235
F005235-BLK1 PH	50.349	136.6	187.7	230.32	230.32	152.0	0.270	OK	230.2564	0.00	0.02	F005235

#54: F005235-BLK2



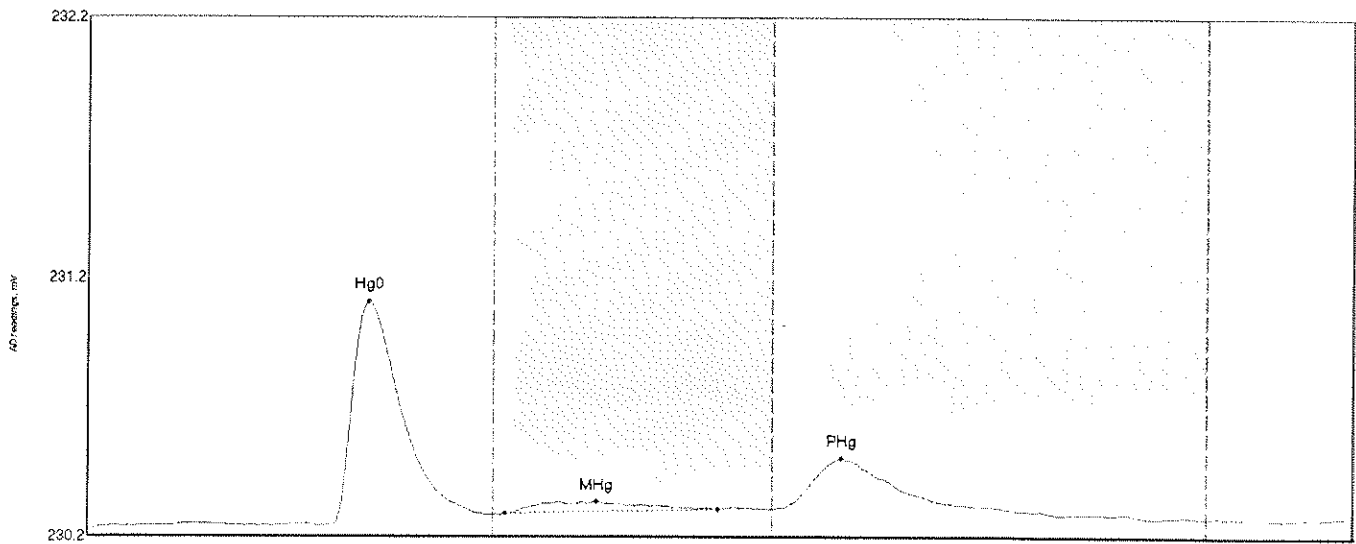
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	B1Shift	Comment
F005235-BLK2 Hg	83.567	47.6	79.9	230.24	230.29	55.5	0.744	OK	230.2459	0.00	0.04	F005235
F005235-BLK2 MH	12.462	84.1	133.9	230.29	230.31	94.6	0.059	OK	230.2459	0.00	0.04	F005235
F005235-BLK2 PH	35.765	136.4	180.6	230.32	230.32	140.3	0.207	OK	230.2459	0.00	0.04	F005235

#65: F005235-BLK3



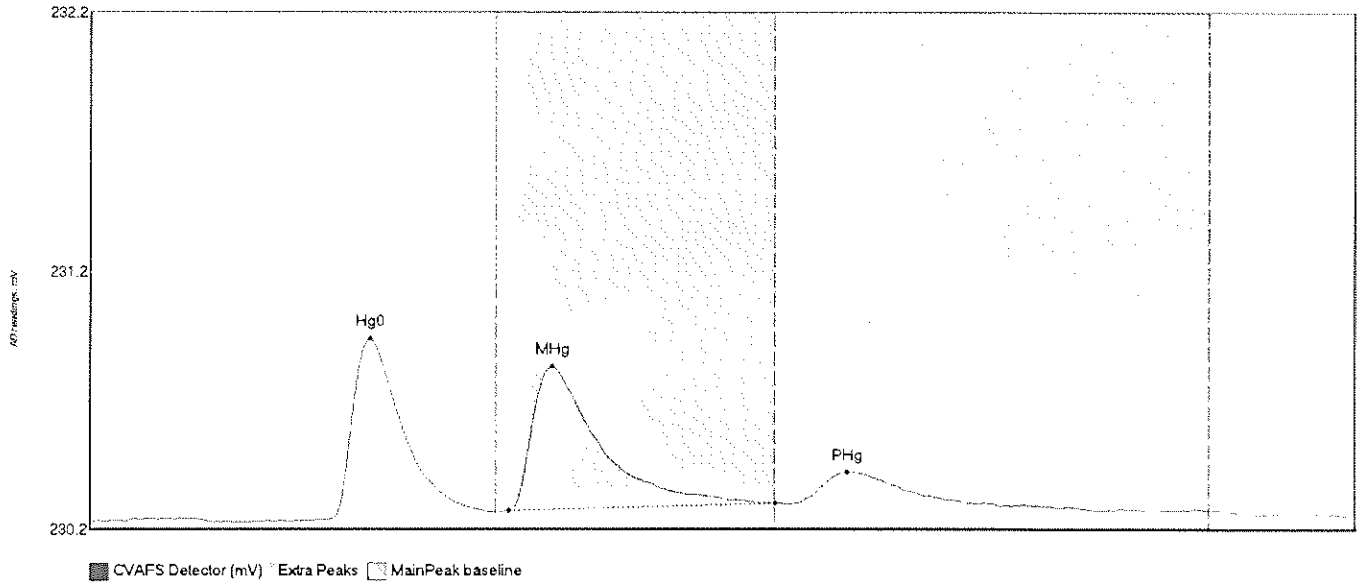
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005235-BLK3 Hg	143.147	46.0	80.0	230.25	230.30	55.5	1.298	CI	230.2545	0.00	0.03	F005235
F005235-BLK3 MH	13.451	62.2	131.6	230.30	230.31	92.7	0.055	OK	230.2545	0.00	0.03	F005235
F005235-BLK3 PH	138.411	136.0	192.7	230.31	230.31	149.4	0.651	OK	230.2545	0.00	0.03	F005235

#56: 0D0062-01

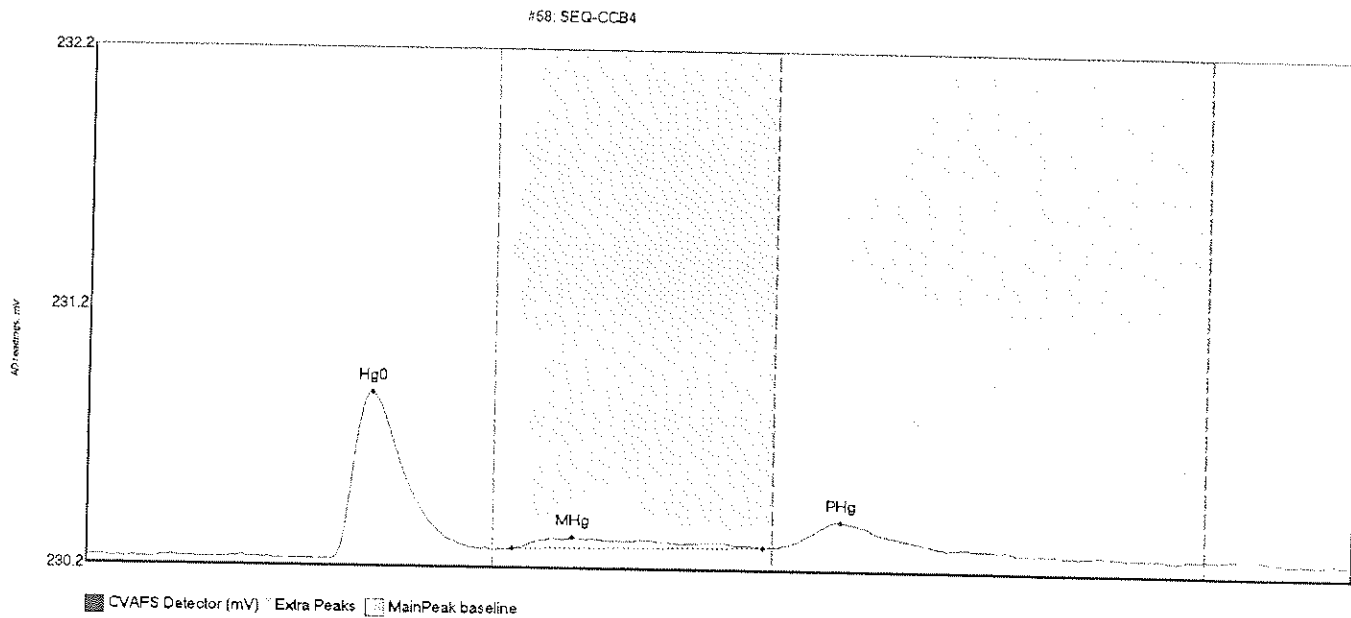


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0D0062-01 Hg0	93.341	36.4	78.8	230.24	230.29	55.4	0.865	OK	230.2399	0.00	0.04	F005235
0D0062-01 MHg	9.679	82.4	124.3	230.29	230.31	100.4	0.048	OK	230.2399	0.00	0.04	F005235
0D0062-01 PHg	31.051	136.9	178.0	230.32	230.32	148.4	0.192	OK	230.2399	0.00	0.04	F005235

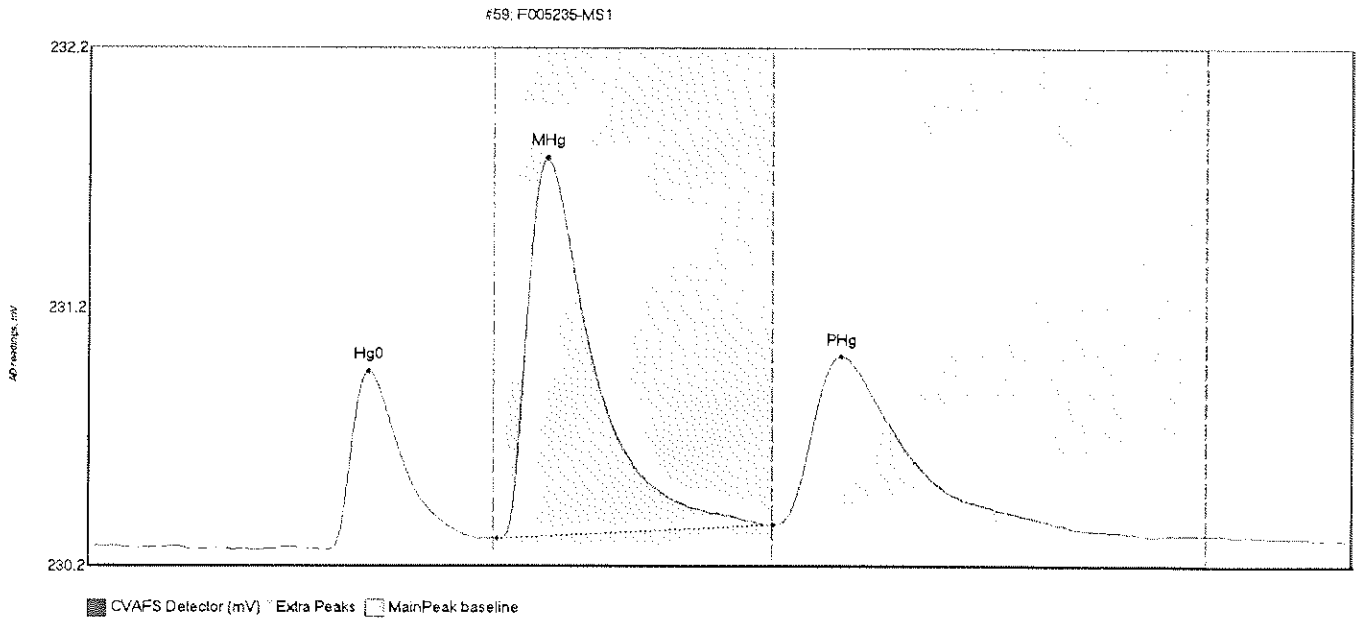
#57: SEQ-CCV4



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RiDev	BiShift	Comment
SEQ-CCV4 Hg0	78.145	46.1	79.0	230.24	230.27	55.5	0.702	OK	230.2401	0.00	0.02	
SEQ-CCV4 MHg	85.142	82.6	135.0	230.28	230.31	91.2	0.559	CT	230.2401	0.00	0.02	
SEQ-CCV4 PHg	20.109	137.0	172.7	230.31	230.31	149.2	0.124	OK	230.2401	0.00	0.02	

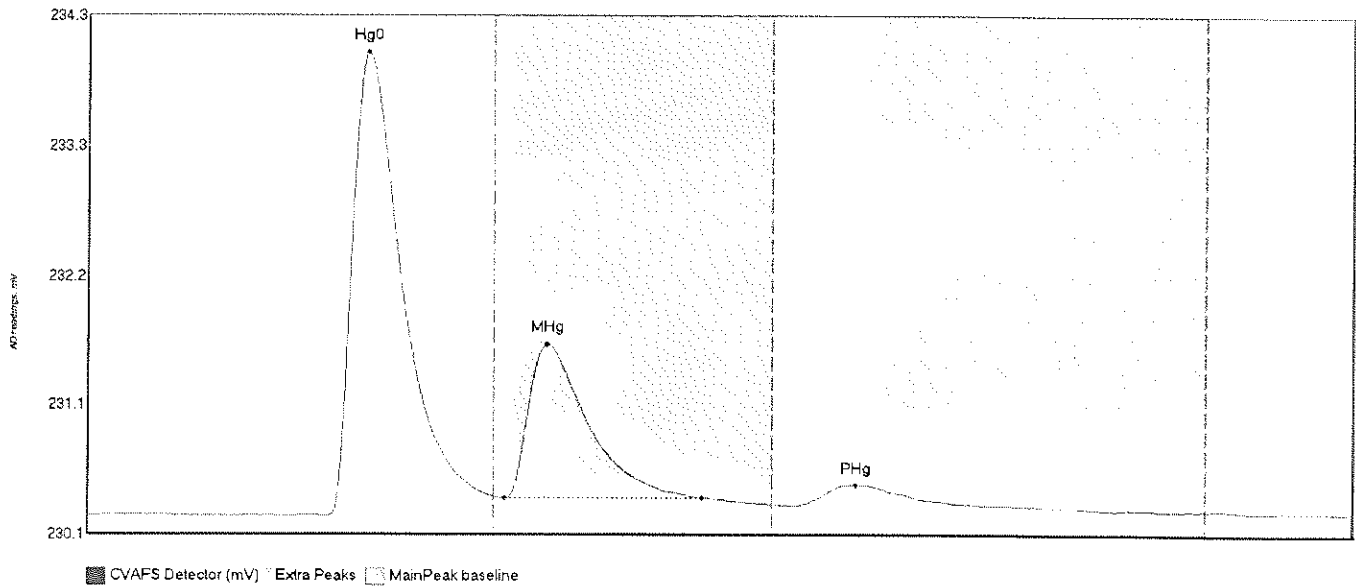


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BShift	Comment
SEQ-CCB4 Hg0	71.999	47.7	80.0	230.24	230.28	55.8	0.647	CF	230.2456	0.00	0.02	
SEQ-CCB4 MHg	11.441	83.8	133.2	230.28	230.30	95.8	0.044	OK	230.2456	0.00	0.02	
SEQ-CCB4 PHg	14.837	135.9	167.7	230.30	230.30	148.3	0.097	OK	230.2456	0.00	0.02	



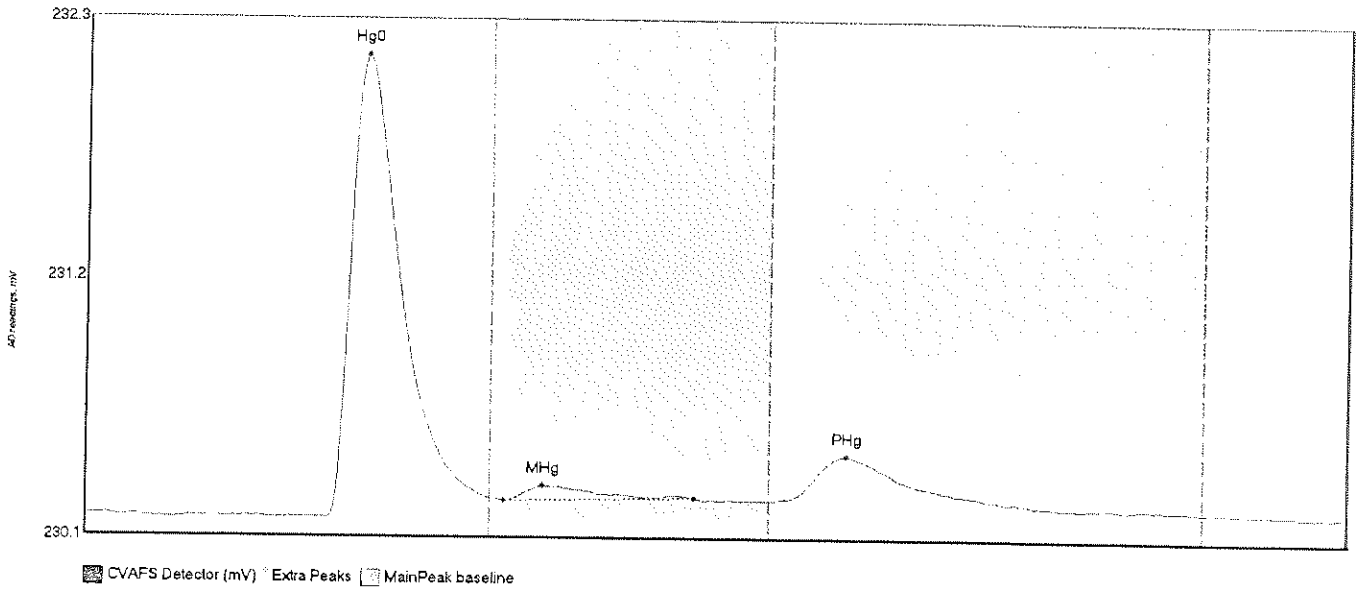
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Offset	Shift	Comment
F005235-MS1 Hg0	77.866	46.6	60.0	230.23	230.27	55.5	0.669	CT	230.2472	0.00	0.02	F005235
F005235-MS1 MHg	219.031	80.8	135.0	230.27	230.33	90.4	1.468	CT	230.2472	0.00	0.02	F005235
F005235-MS1 PHg	130.517	135.4	190.7	230.32	230.32	148.6	0.652	OK	230.2472	0.00	0.02	F005235

#60: F005235-MSD1



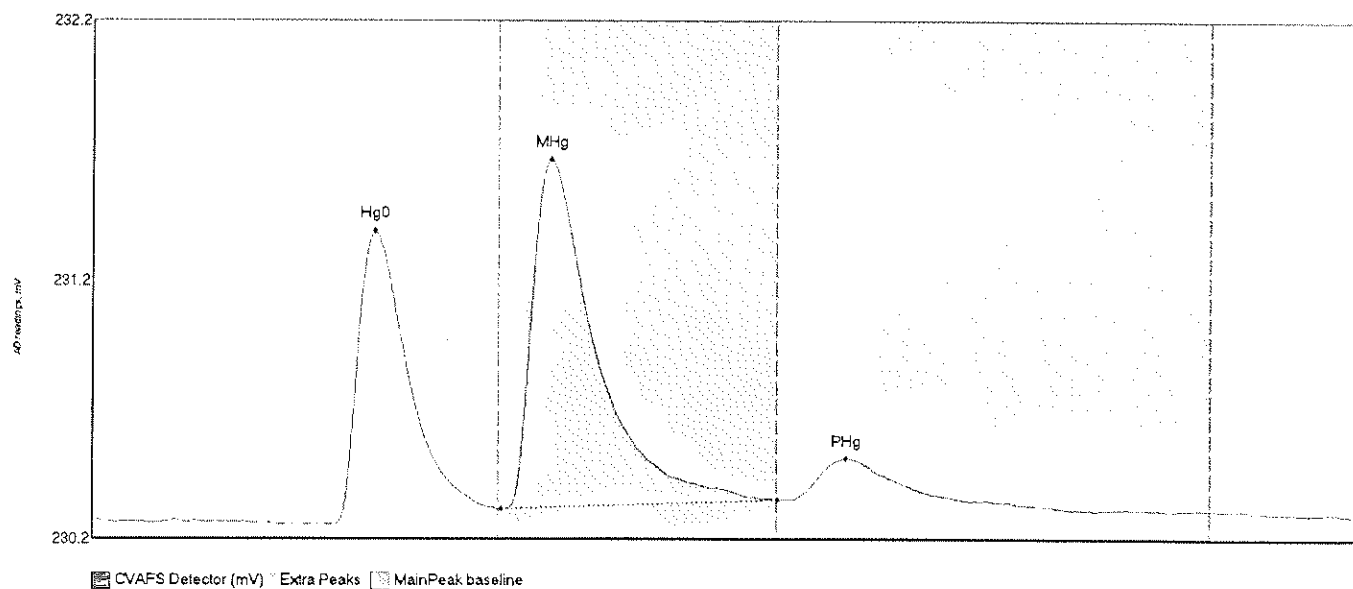
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BiShift	Comment
F005235-MSD1 Hg	417.185	47.6	60.6	230.23	230.35	55.3	3.784	OT	230.2298	0.00	0.03	F005235
F005235-MSD1 MH	172.571	62.3	121.2	230.37	230.38	90.7	1.268	OK	230.2298	0.00	0.03	F005235
F005235-MSD1 PH	26.224	139.5	171.4	230.32	230.33	151.3	0.171	OK	230.2298	0.00	0.03	F005235

#61: 0000062-02



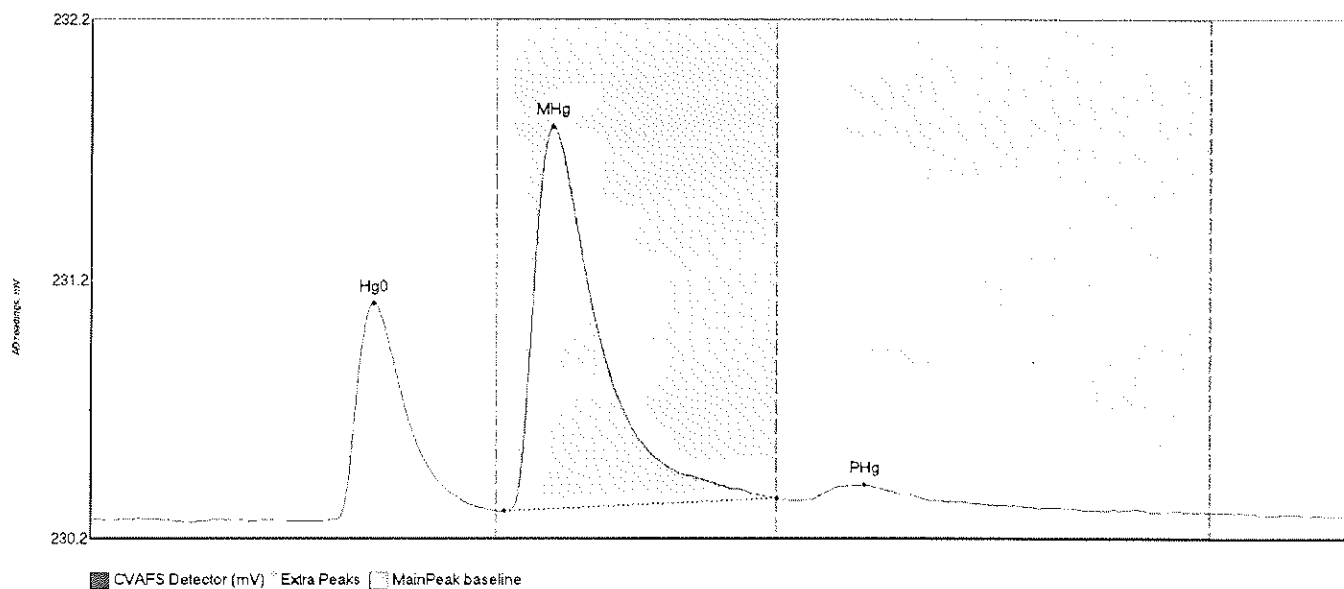
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0000062-02 Hg0	210.117	47.8	80.0	230.22	230.31	55.6	1.893	CT	230.2357	0.00	0.02	F005235
0000062-02 MHg	9.564	82.7	120.1	230.30	230.31	90.3	0.063	OK	230.2357	0.00	0.02	F005235
0000062-02 PHg	32.951	135.9	178.5	230.30	230.30	150.2	0.184	OK	230.2357	0.00	0.02	F005235

#62: F005235-MS2



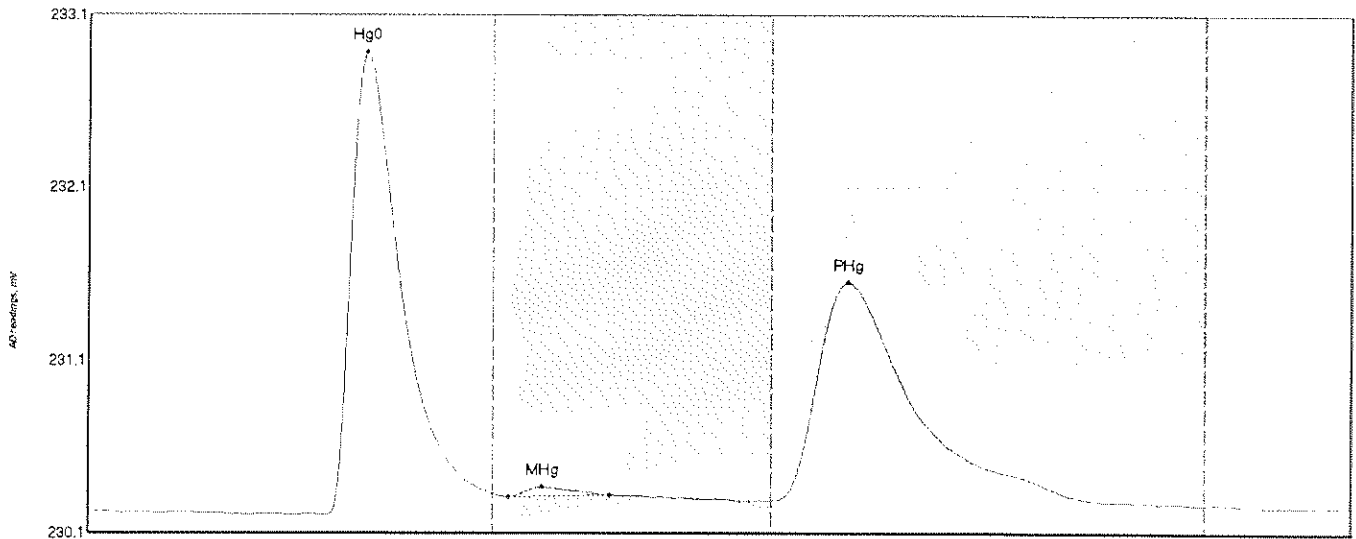
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	HiDev	BiShift	Comment
F005235-MS2 Hg0	125.914	48.7	60.0	230.21	230.27	55.7	1.122	CF	230.2280	0.00	0.02	F005235
F005235-MS2 MHg	197.631	80.6	135.0	230.27	230.30	90.5	1.350	CF	230.2280	0.00	0.02	F005235
F005235-MS2 PHg	24.505	137.8	170.9	230.30	230.30	148.5	0.161	OK	230.2280	0.00	0.02	F005235

#63: F005235-MSD2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005235-MSD2 Hg	92.815	48.3	80.0	230.23	230.26	55.7	0.635	CT	230.2263	0.00	0.01	F005235
F005235-MSD2 MH	217.652	81.7	135.0	230.26	230.31	91.2	1.482	CT	230.2263	0.00	0.01	F005235
F005235-MSD2 PH	8.320	141.5	165.8	230.30	230.30	152.4	0.057	OK	230.2263	0.00	0.01	F005235

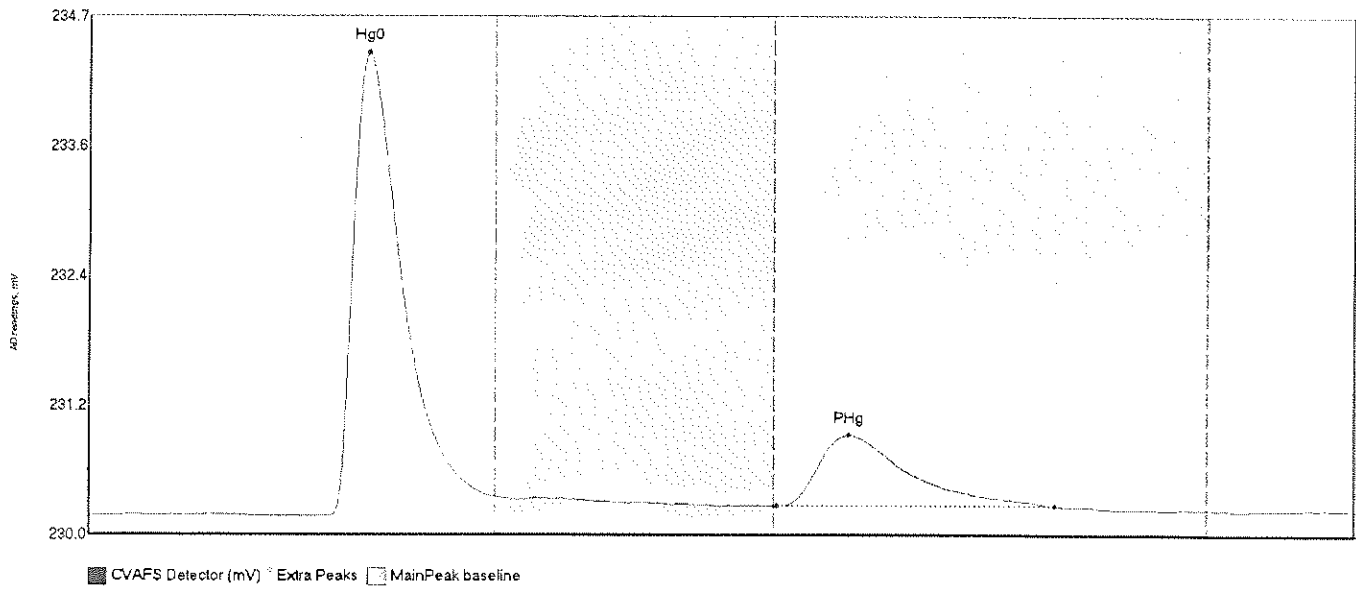
#64: 000062-05



CVAFS Detector (mV)
 Extra Peaks
 MainPeak baseline

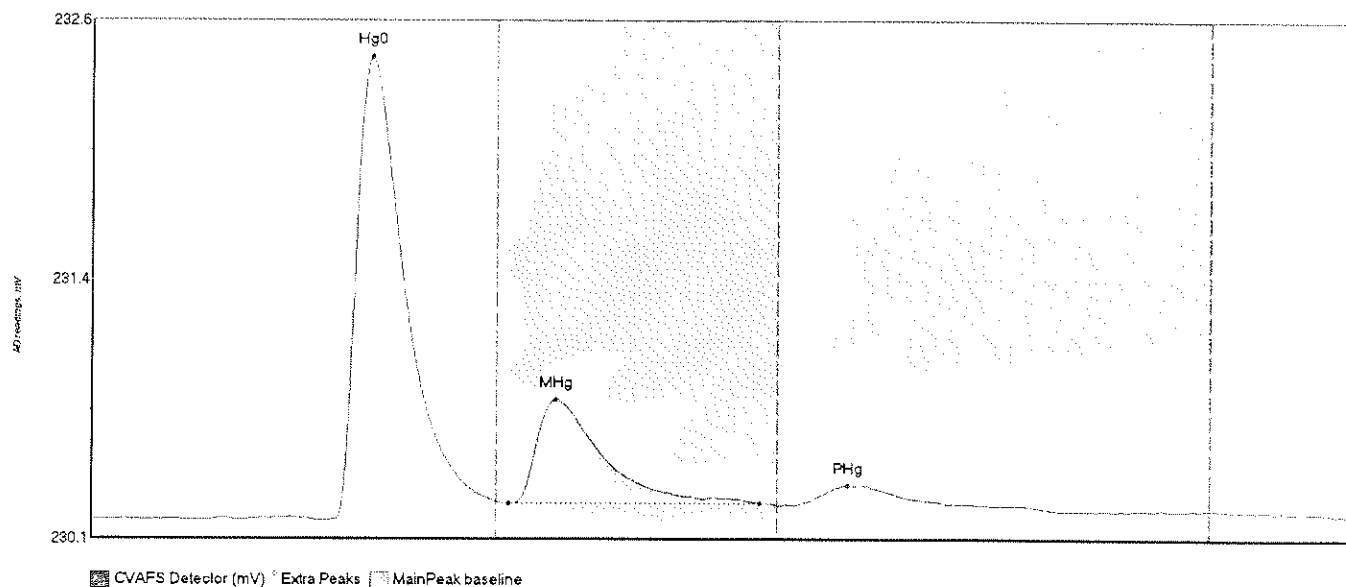
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
000062-05 Hg0	291.331	47.6	80.0	230.20	230.32	55.3	2.653	CF	230.2148	0.00	0.02	F005235
000062-05 MHg	5.329	83.0	102.8	230.30	230.31	89.6	0.054	OK	230.2148	0.00	0.02	F005235
000062-05 PHg	266.393	135.9	199.0	230.28	230.26	150.1	1.248	OK	230.2148	0.00	0.02	F005235

#65: 0D00062-06



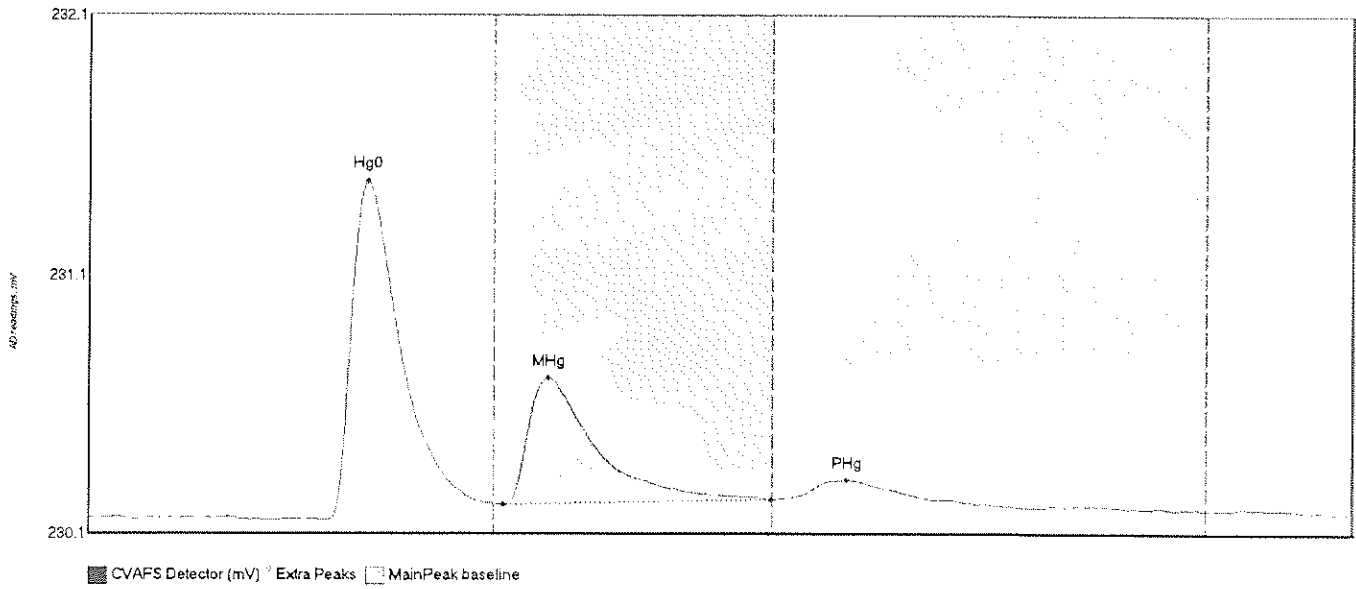
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0D00062-06 Hg0	454.692	46.9	80.0	230.20	230.37	55.2	4.203	CT	230.2077	0.00	0.04	P005235
0D00062-06 PHg	131.348	135.5	190.0	230.29	230.29	149.6	0.648	OK	230.2077	0.00	0.04	P005235

#66: SEQ-CCV5



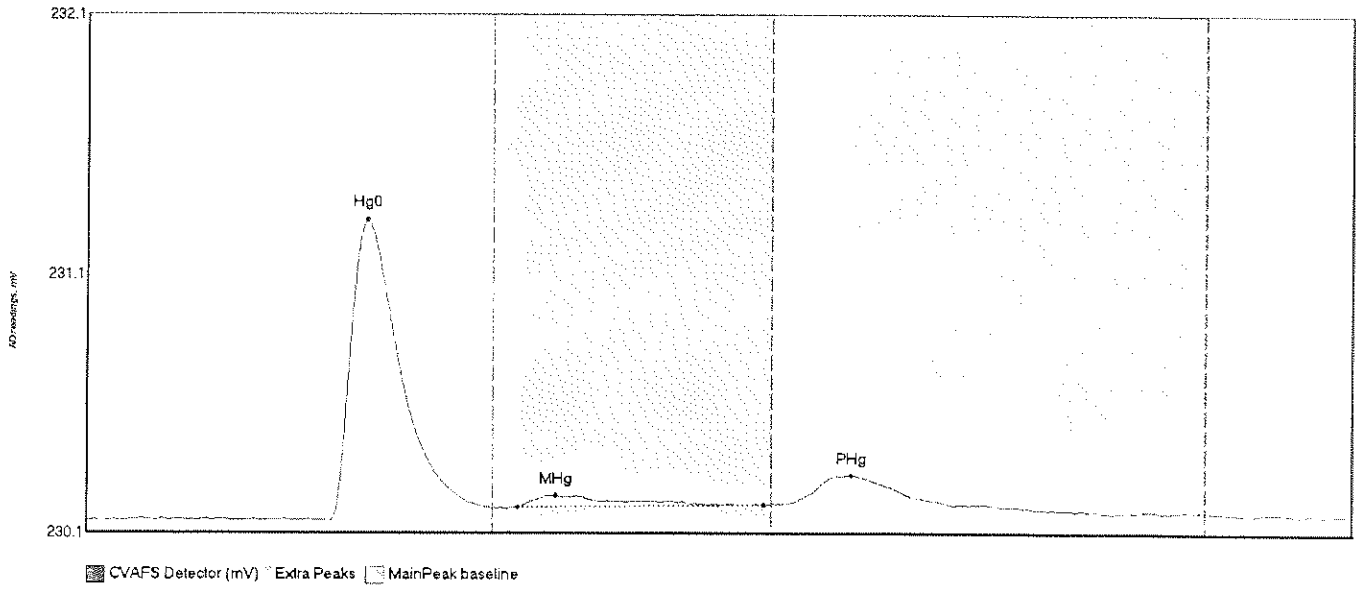
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RtDev	RtShift	Comment
SEQ-CCV5 Hg0	248.566	46.1	80.0	230.19	230.28	55.2	2.266	CF	230.1981	0.00	0.02	
SEQ-CCV5 MHg	75.340	82.5	131.5	230.27	230.28	91.6	0.506	OK	230.1981	0.00	0.02	
SEQ-CCV5 PHg	15.523	138.2	171.5	230.27	230.27	149.0	0.098	OK	230.1981	0.00	0.02	

#67-SEQ-CCB5

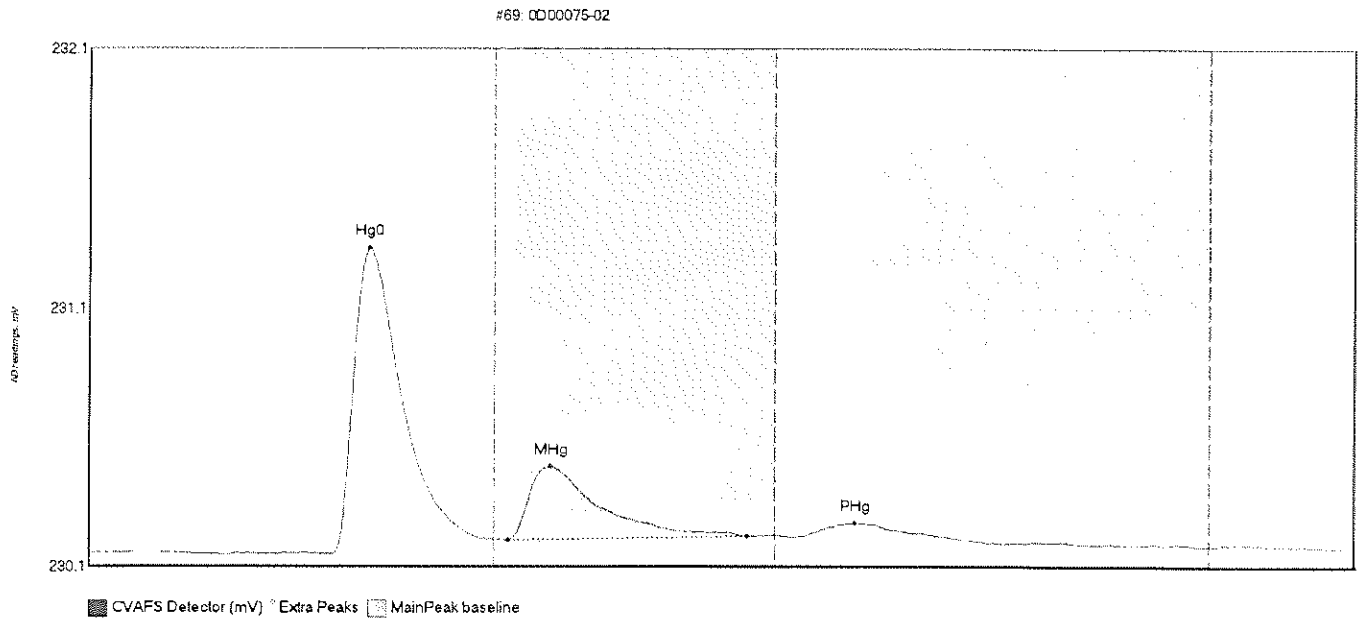


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Bibev	Bishift	Comment
SEQ-CCB5 Hg0	143.015	47.1	80.0	230.19	230.26	55.2	1.305	CT	230.2035	0.00	0.02	
SEQ-CCB5 MHg	75.779	81.8	134.7	230.25	230.27	90.6	0.490	OK	230.2035	0.00	0.02	
SEQ-CCB5 PHg	12.362	135.0	166.3	230.27	230.27	149.6	0.078	OK	230.2035	0.00	0.02	

#68: 0D00075-01

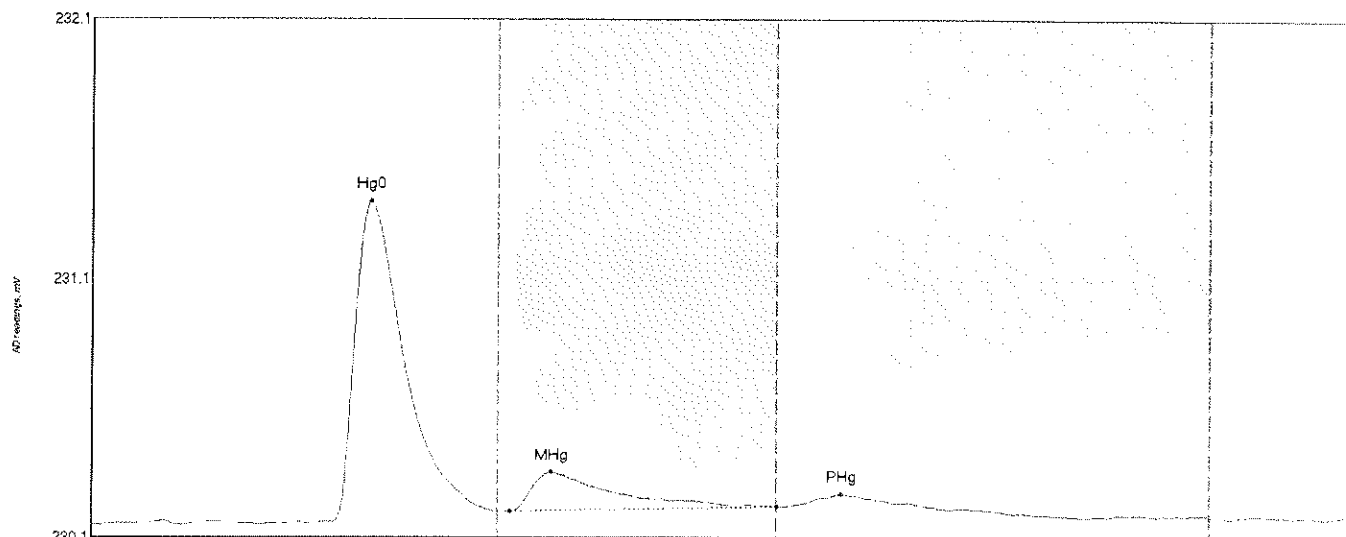


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0D00075-01 Hg0	127.344	48.0	80.0	230.19	230.24	55.2	1.156	CT	230.1957	0.00	0.02	F005235
0D00075-01 MHg	8.987	85.0	113.4	230.24	230.25	92.5	0.046	OK	230.1957	0.00	0.02	F005235
0D00075-01 PHg	18.028	138.5	170.6	230.26	230.25	150.5	0.107	OK	230.1957	0.00	0.02	F005235



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
000075-02 Hg0	128.714	47.8	80.0	230.18	230.24	55.3	1.178	CT	230.1883	0.00	0.01	F005235
000075-02 MHg	44.760	82.7	129.5	230.23	230.25	91.2	0.284	OK	230.1883	0.00	0.01	F005235
000075-02 PHg	6.351	140.7	165.4	230.25	230.25	150.8	0.049	OK	230.1883	0.00	0.01	F005235

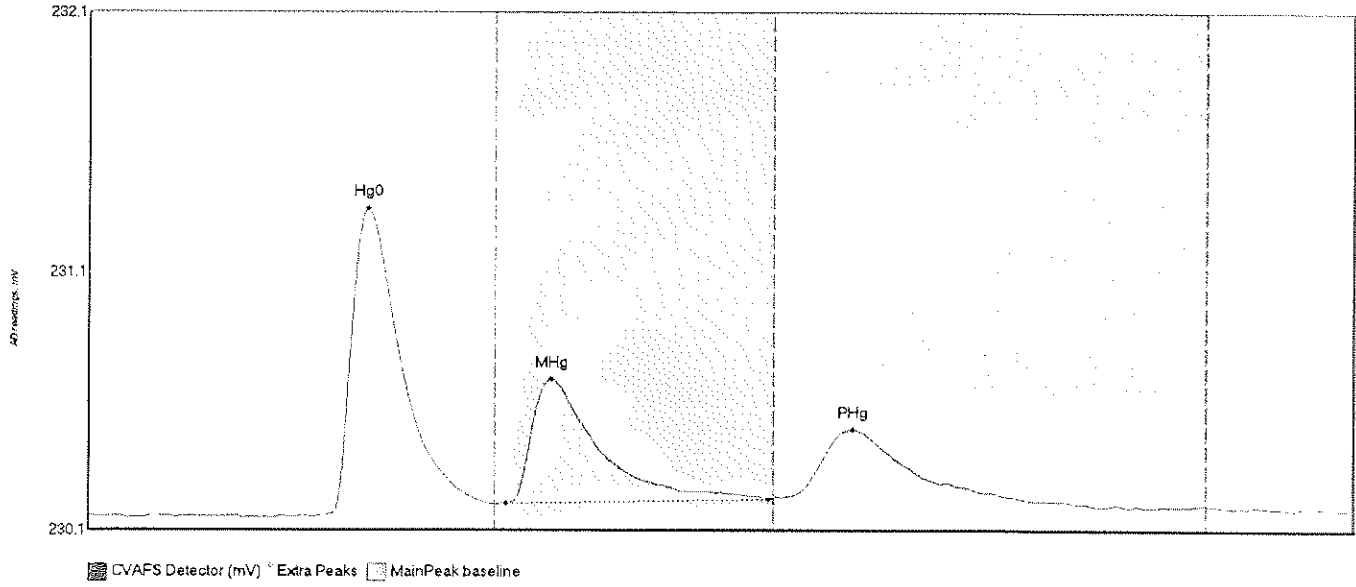
#70: 000075-03



■ CVAFS Detector (mV) ▨ Extra Peaks □ MainPeak baseline

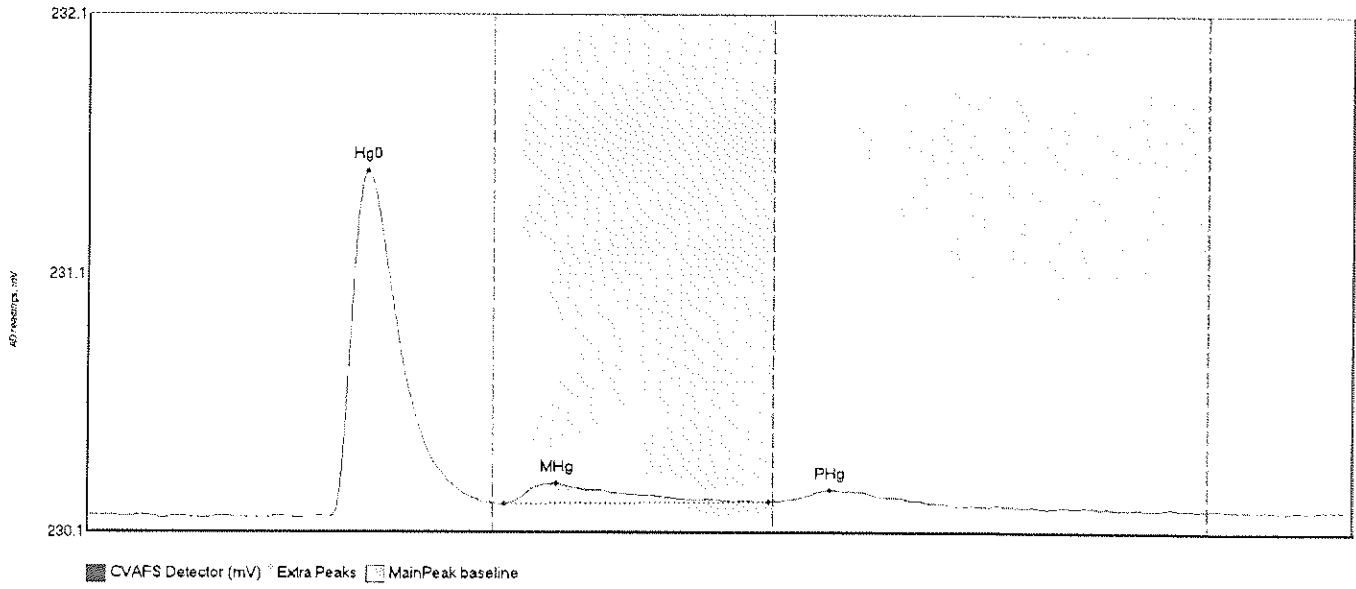
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
000075-03 Hg0	136.197	34.0	79.8	230.16	230.21	55.2	1.245	OK	230.1605	0.00	0.04	F005235
000075-03 MHg	27.665	82.4	135.0	230.21	230.23	90.4	0.153	CT	230.1605	0.00	0.04	F005235
000075-03 PHg	5.731	136.6	162.9	230.23	230.24	147.8	0.046	OK	230.1605	0.00	0.04	F005235

#71: 0D00075-04



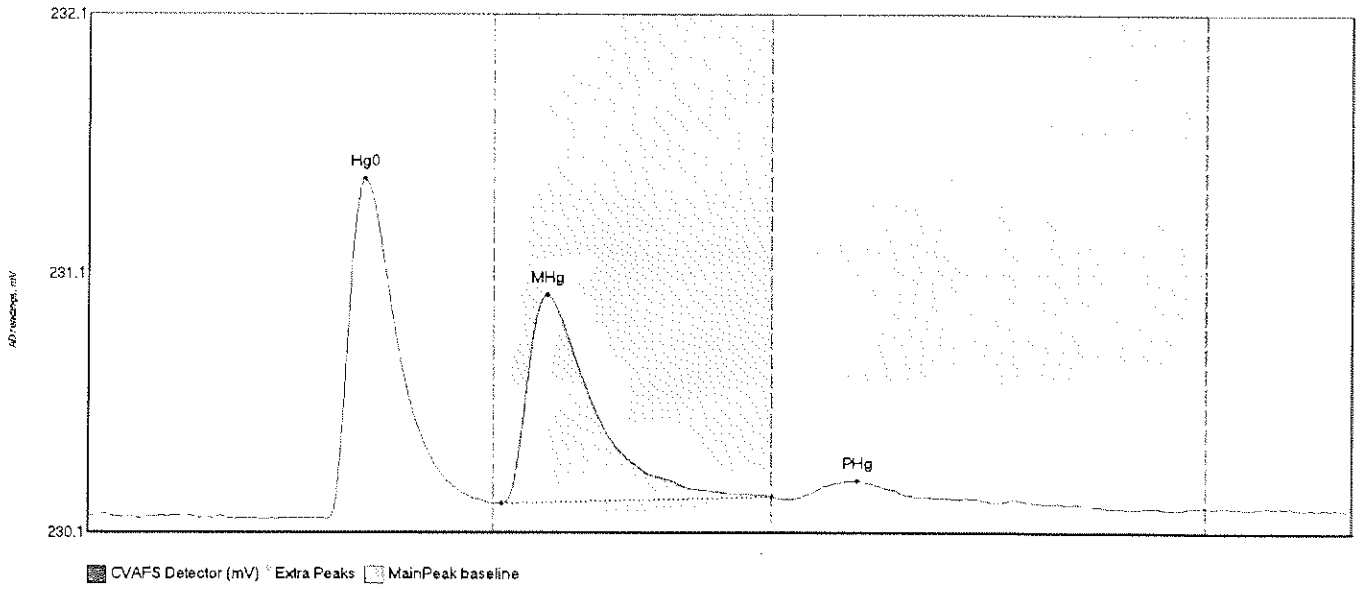
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0D00075-04 Hg0	131.357	44.9	79.8	230.17	230.22	55.0	1.188	OK	230.1716	0.00	0.02	F005235
0D00075-04 MHg	74.031	82.2	134.0	230.22	230.24	91.3	0.481	OK	230.1716	0.00	0.02	F005235
0D00075-04 PHg	46.553	156.9	181.1	230.24	230.25	150.4	0.264	OK	230.1716	0.00	0.02	F005235

#72: 0000075-05



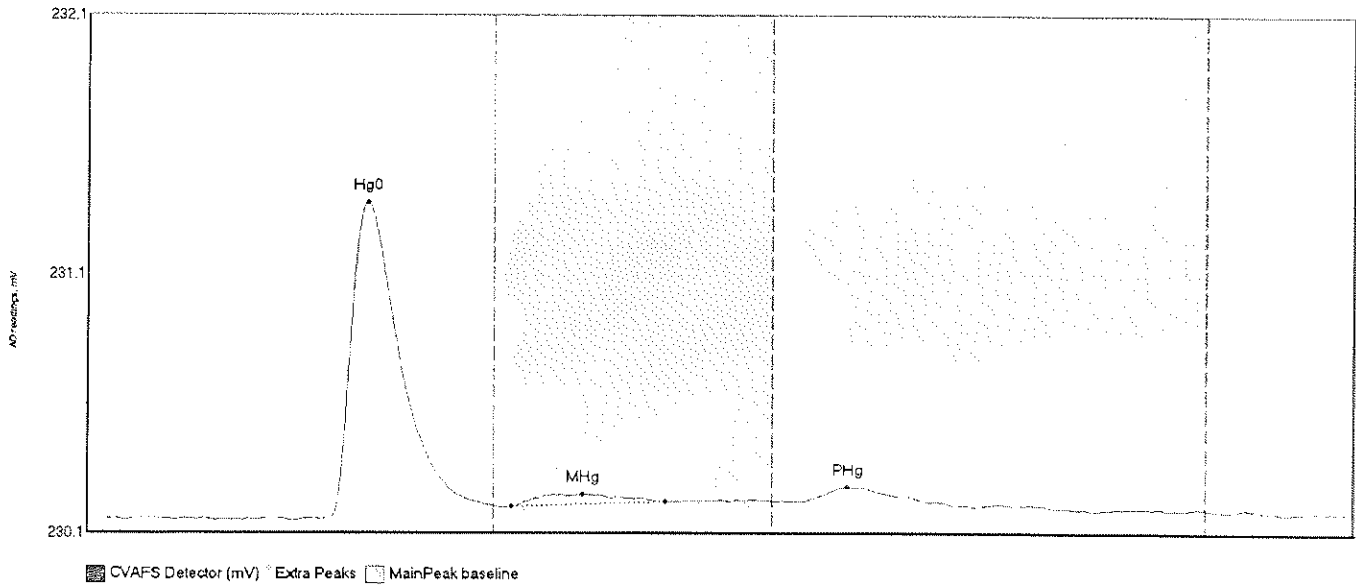
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0000075-05 Hg0	145.829	47.3	80.0	230.16	230.22	55.1	1.335	CT	230.1693	0.00	0.02	F005235
0000075-05 MHg	16.803	62.2	134.1	230.21	230.22	92.6	0.080	OK	230.1693	0.00	0.02	F005235
0000075-05 PHg	5.873	136.6	162.1	230.22	230.23	146.2	0.043	OK	230.1693	0.00	0.02	F005235

#78.000075-06



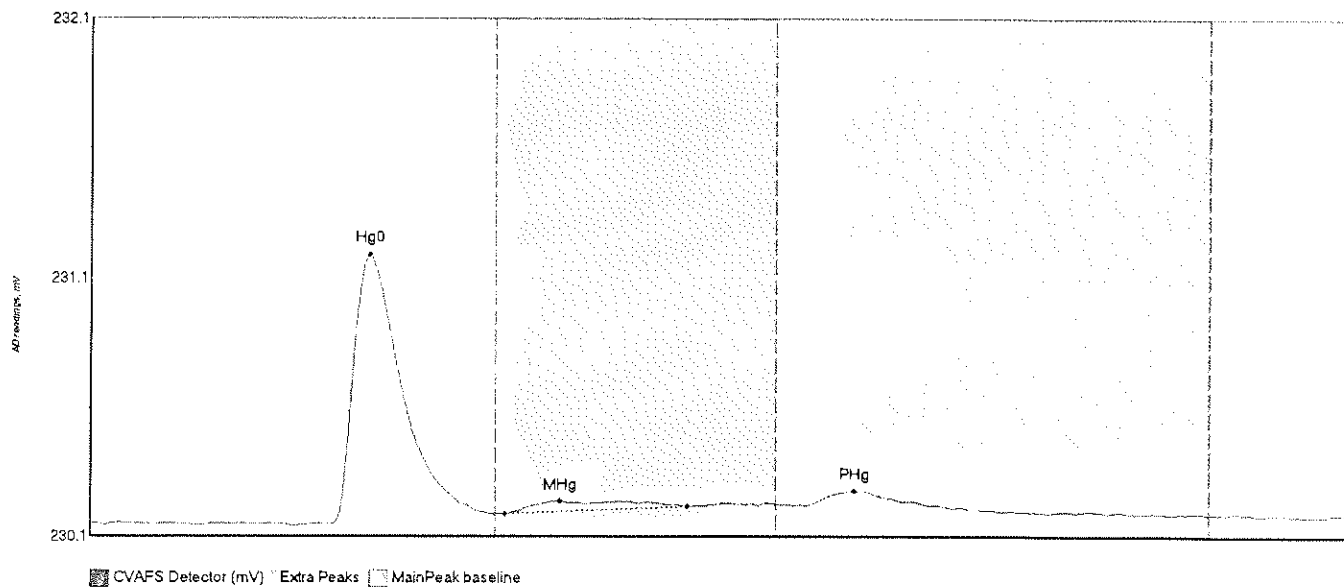
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
000075-06 Hg0	143.035	47.3	79.6	230.15	230.21	54.9	1.310	OK	230.1627	0.00	0.02	P005235
000075-06 MHg	120.927	81.6	135.0	230.21	230.23	90.4	0.801	CT	230.1627	0.00	0.02	P005235
000075-06 PHg	9.056	138.7	163.2	230.22	230.24	151.8	0.072	OK	230.1627	0.00	0.02	P005235

#74: SEQ-CCV6



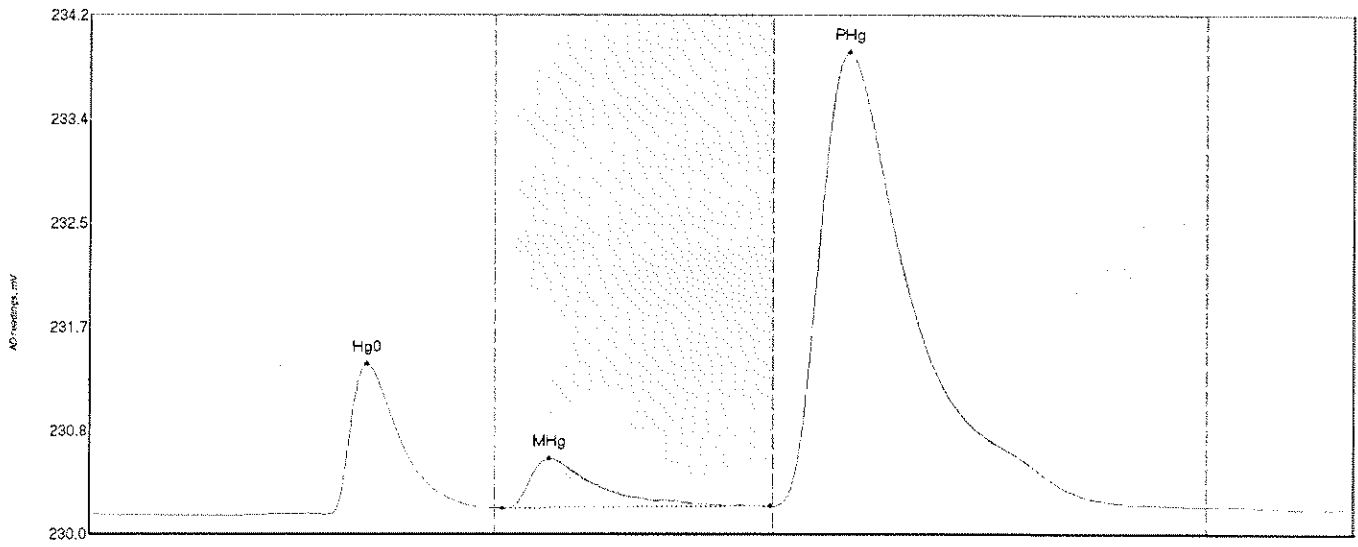
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV6 Hg0	131.909	47.7	80.0	230.15	230.20	55.2	1.215	CT	230.1551	0.00	0.02	
SEQ-CCV6 MHg	7.689	83.6	114.0	230.20	230.22	97.7	0.047	OK	230.1551	0.00	0.02	
SEQ-CCV6 PHg	7.230	141.2	165.0	230.22	230.22	149.7	0.056	OK	230.1551	0.00	0.02	

#75: SEQ-CCB6



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
SEQ-CCB6 Hg0	114.372	47.3	79.6	230.13	230.17	55.1	1.039	OK	230.1368	0.00	0.04	
SEQ-CCB6 MHg	8.421	82.0	117.5	230.17	230.20	92.8	0.050	OK	230.1368	0.00	0.04	
SEQ-CCB6 PHg	7.439	141.1	165.8	230.21	230.21	150.5	0.055	OK	230.1368	0.00	0.04	

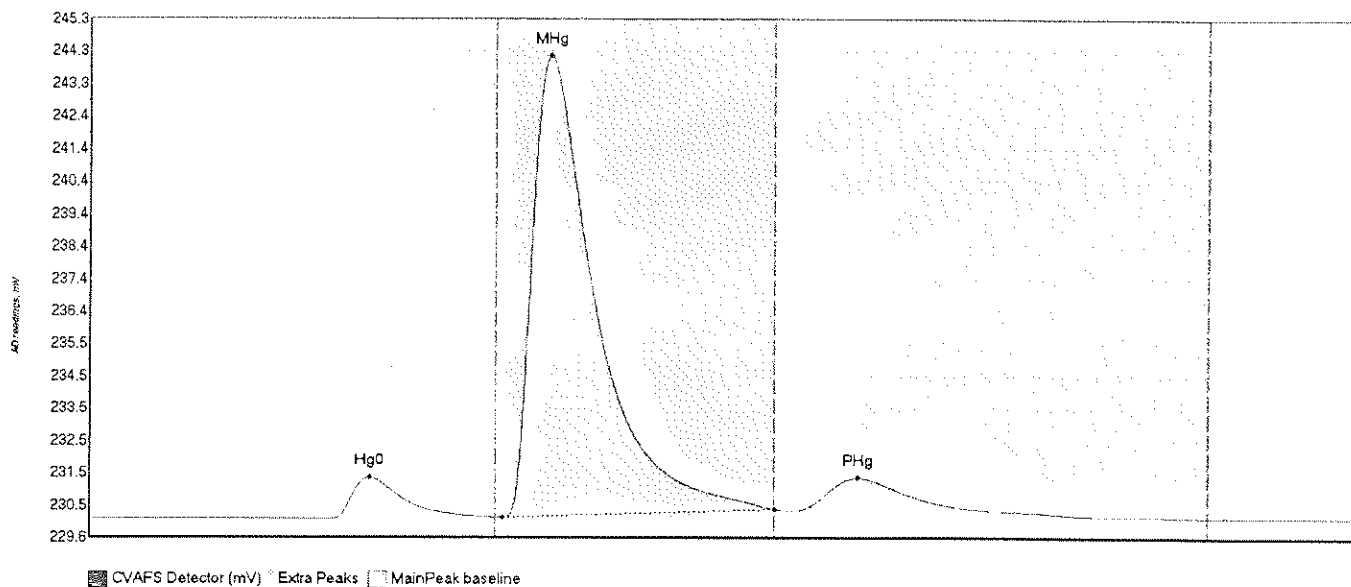
#76: 0D00075-01RE1



CVAFS Detector (mV) * Extra Peaks MainPeak baseline

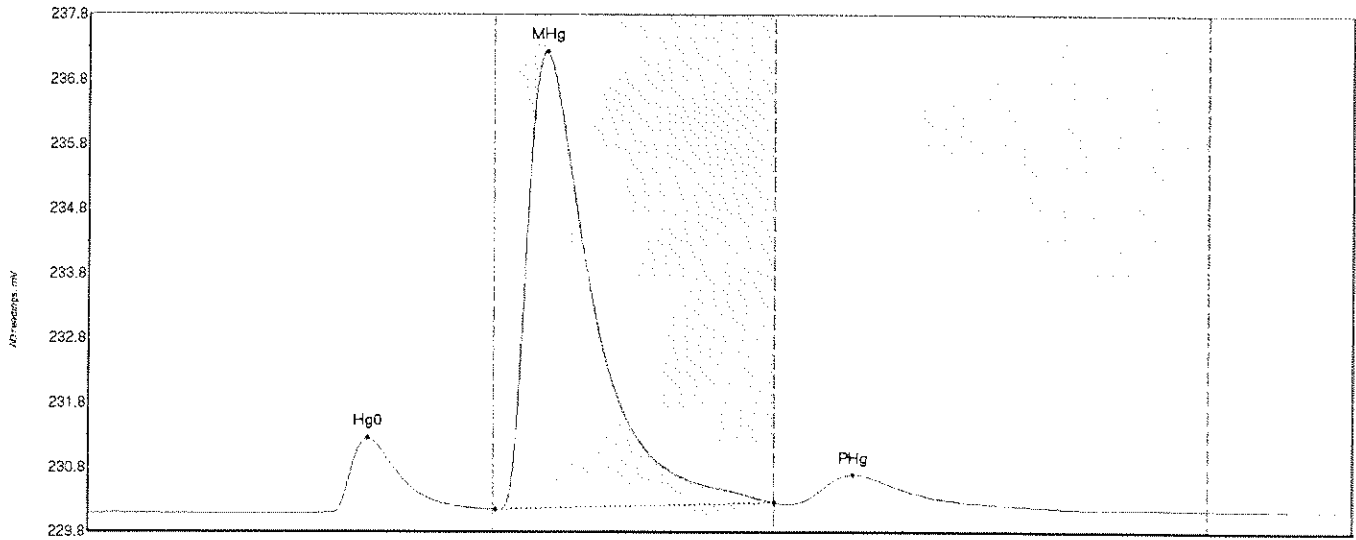
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	Shift	Comment
0D00075-01RE1 H	135.739	47.2	80.0	230.13	230.19	55.1	1.248	CT	230.1347	0.00	0.04	F005235
0D00075-01RE1 M	64.045	81.5	134.4	230.18	230.20	90.6	0.415	OK	230.1347	0.00	0.04	F005235
0D00075-01RE1 P	786.087	135.0	209.7	230.20	230.21	150.0	3.735	OK	230.1347	0.00	0.04	F005235

#77: 0D00075-02RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Bldev	Blshift	Comment
0D00075-02RE1 H	140.607	47.0	80.0	230.12	230.18	55.2	1.265	CT	230.1258	0.00	0.04	F005235
0D00075-02RE1 M	2044.293	91.4	135.0	230.18	230.42	91.0	14.010	CT	230.1258	0.00	0.04	F005235
0D00075-02RE1 P	203.335	138.7	197.6	230.37	230.21	151.4	1.009	OK	230.1258	0.00	0.04	F005235

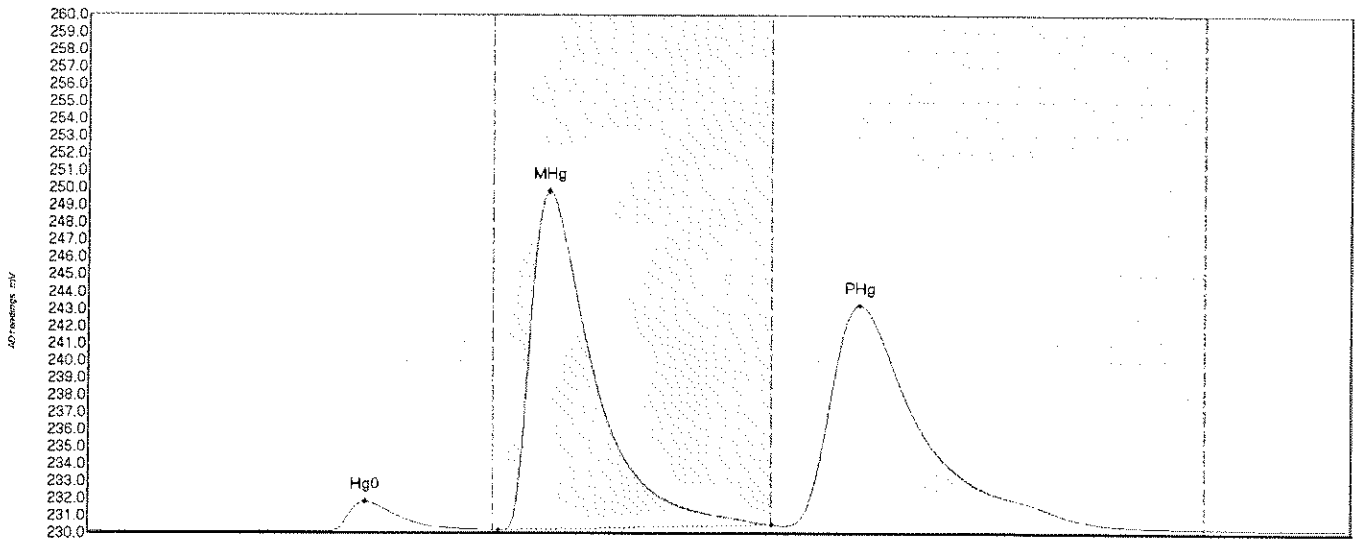
#78: 0D00075-03RE1



■ CVAFS Detector (mV) * Extra Peaks □ MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	Peakheight	Flags	Baseline	BlDev	BlShift	Comment
0D00075-03RE1 H	127.359	46.4	80.0	230.13	230.19	55.2	1.162	CT	230.1278	0.00	0.03	F005235
0D00075-03RE1 M	1041.345	80.5	135.0	230.18	230.30	90.4	7.064	CT	230.1278	0.00	0.03	F005235
0D00075-03RE1 P	73.099	138.0	173.9	230.27	230.28	150.7	0.453	OK	230.1278	0.00	0.03	F005235

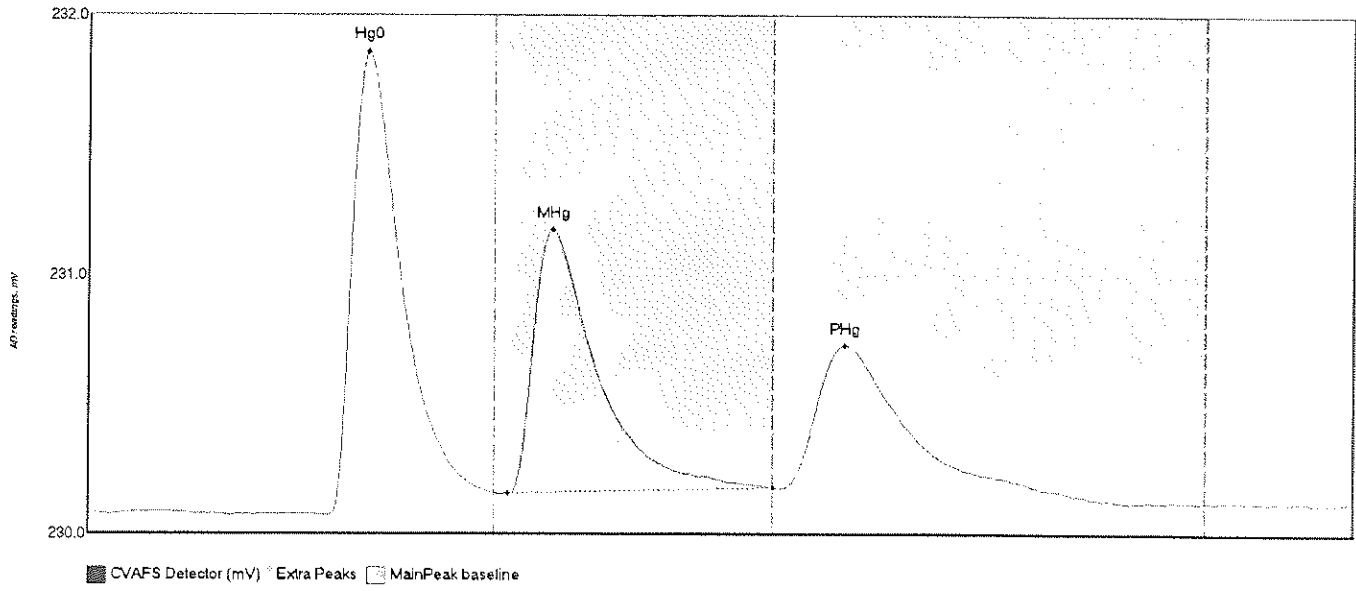
#79: 0D00075-04RE1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

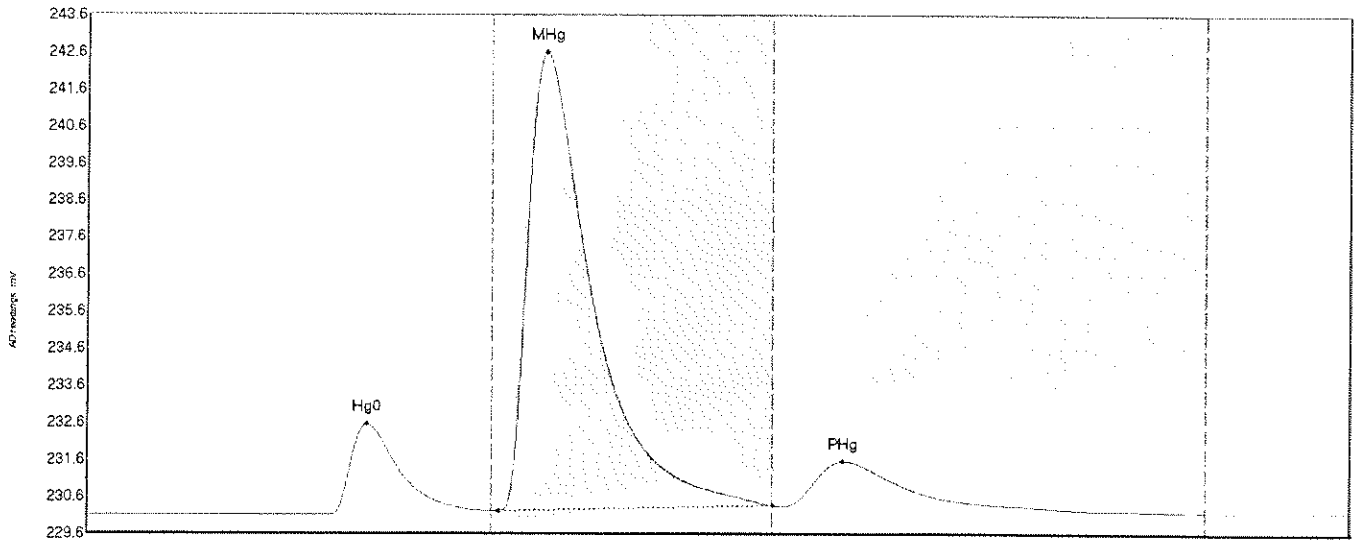
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	HiShift	Comment
0D00075-04RE1 H	187.121	47.3	80.0	230.11	230.19	55.1	1.699	CT	230.1213	0.00	0.13	F005235
0D00075-04RE1 M	2835.101	81.1	135.0	230.19	230.50	91.0	19.630	CT	230.1213	0.30	0.13	F005235
0D00075-04RE1 P	2629.168	137.4	215.6	230.44	230.30	152.3	12.009	OK	230.1213	0.00	0.13	F005235

#80: 0D00075-05RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0D00075-05RE1 H	197.334	47.2	60.0	230.10	230.18	55.1	1.796	CT	230.1062	0.00	0.04	F005235
0D00075-05RE1 M	150.026	82.8	135.0	230.18	230.20	91.6	1.023	CT	230.1062	0.00	0.04	F005235
0D00075-05RE1 P	106.566	136.2	189.4	230.20	230.19	148.9	0.556	OK	230.1062	0.00	0.04	F005235

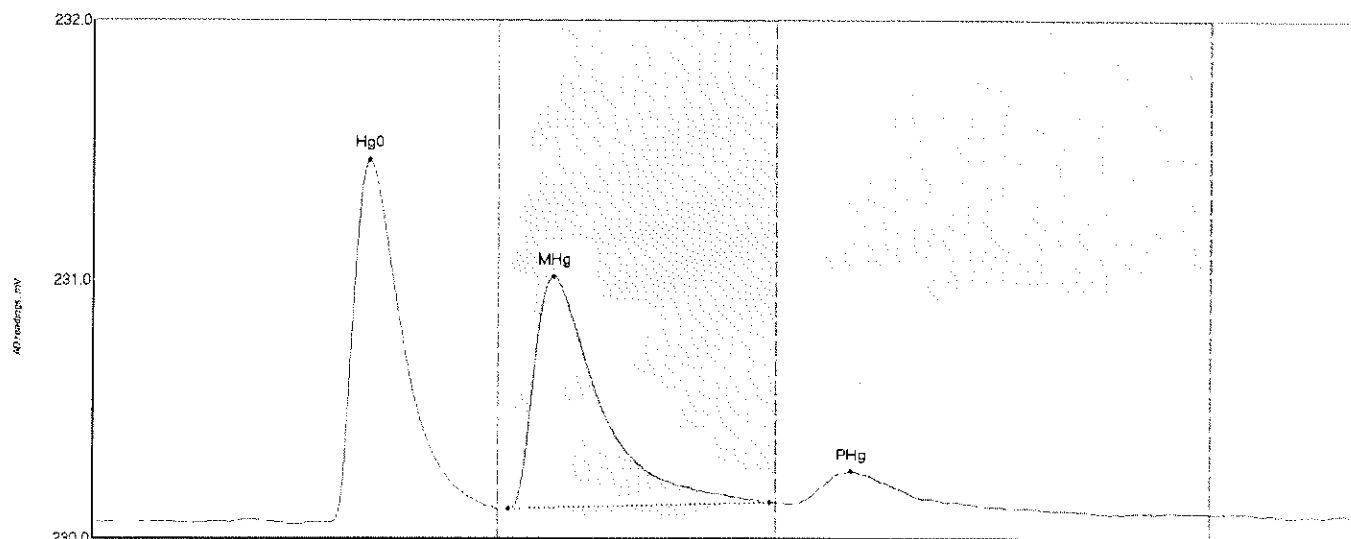
#81: 0D00075-06RE1



■ CVAFS Detector (mV) * Extra Peaks □ MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Binov	HiShift	Comment
0D00075-06RE1 H	268.805	46.3	80.0	230.09	230.21	55.2	2.462	CT	230.1068	0.00	0.06	F005235
0D00075-06RE1 M	1816.616	81.4	135.0	230.20	230.36	90.8	12.421	CT	230.1068	0.00	0.06	F005235
0D00075-06RE1 P	250.014	136.6	200.9	230.34	230.21	149.0	1.219	OK	230.1068	0.00	0.06	F005235

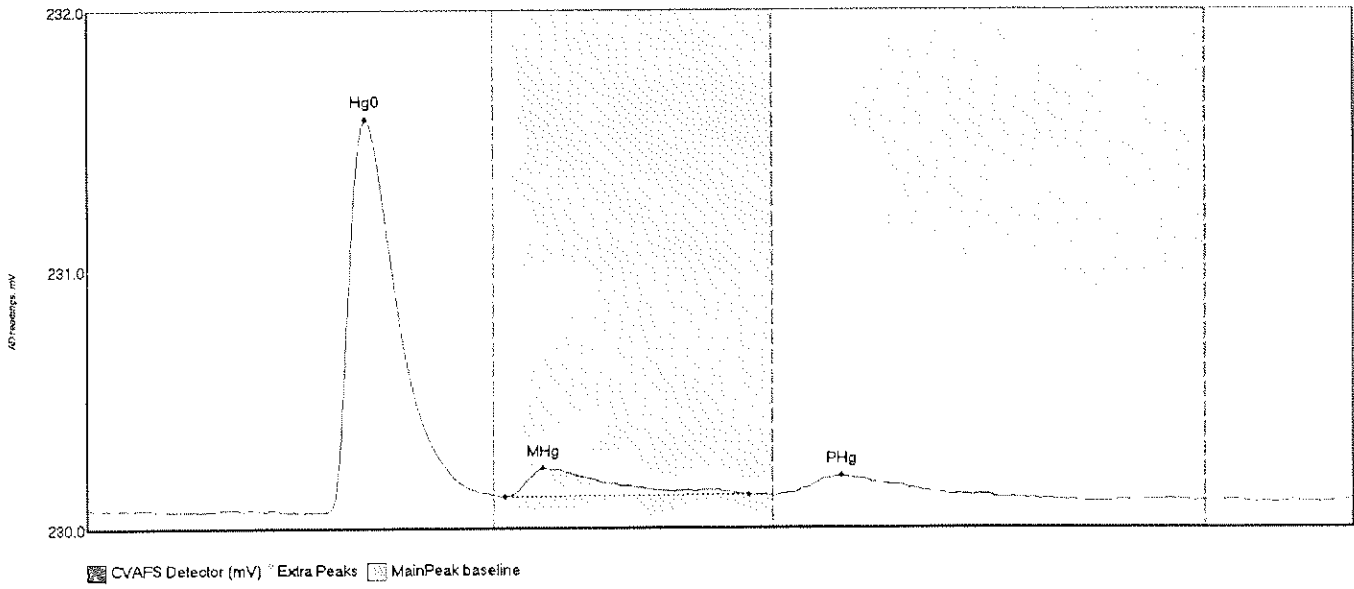
#82: SEQ-CCV7



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV7 Hg0	154.500	47.1	80.0	230.11	230.16	54.9	1.396	CT	230.1147	0.00	0.02	
SEQ-CCV7 MHg	115.113	82.1	133.8	230.16	230.19	90.9	0.897	OK	230.1147	0.00	0.02	
SEQ-CCV7 PHg	17.426	138.8	168.2	230.19	230.19	149.7	0.122	OK	230.1147	0.00	0.02	

#83: SEQ-CCB7



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB7 Hg0	165.145	46.6	80.0	230.10	230.17	54.8	1.517	CT	230.1143	0.00	0.03	
SEQ-CCB7 MHg	20.660	82.2	130.3	230.16	230.17	89.9	0.109	OK	230.1143	0.00	0.03	
SEQ-CCB7 PHg	12.651	135.1	169.8	230.17	230.17	148.5	0.076	OK	230.1143	0.00	0.03	

OE21005
Attached

ANALYSIS SEQUENCE

0E21006



QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: PGS

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 5/20/2020


Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E21006-IBL1	QC	1			
0E21006-CAL1	QC	2	2000433		
0E21006-CAL2	QC	3	2000434		
0E21006-CAL3	QC	4	2000435		
0E21006-CAL4	QC	5	2000436		
0E21006-CAL5	QC	6	2000437		
0E21006-ICV1	QC	7	2000842		
0E21006-ICB1	QC	8			
0E21006-CCV1	QC	9	2000842		
0E21006-CCB1	QC	10			
0E21006-CCV2	QC	11	2000842		
0E21006-CCB2	QC	12			
F005268-BS1	QC	13			
F005268-BSD1	QC	14			
F005268-BLK1	QC	15			
F005268-BLK2	QC	16			
F005268-BLK3	QC	17			
0E00002-05RE1	MHg-CVAFS-W-Dist	18			Re-extract added 5/19/2020 by PGS
F005268-MS1	QC	19			
F005268-MSD1	QC	20			
0E00002-04RE1	MHg-CVAFS-W-Dist	21			Re-extract added 5/19/2020 by PGS
F005268-MS2	QC	22			
0E21006-CCV3	QC	23	2000842		
0E21006-CCB3	QC	24			
F005268-MSD2	QC	25			
0E00002-01RE1	MHg-CVAFS-W-Dist	26			Re-extract added 5/19/2020 by PGS
0E00002-02RE1	MHg-CVAFS-W-Dist	27			Re-extract added 5/19/2020 by PGS
0E00002-03RE1	MHg-CVAFS-W-Dist	28			Re-extract added 5/19/2020 by PGS
0E00002-06RE1	MHg-CVAFS-W-Dist	29			Re-extract added 5/19/2020 by PGS
0E00002-07RE1	MHg-CVAFS-W-Dist	30			Re-extract added 5/19/2020 by PGS
0E00002-08RE1	MHg-CVAFS-W-Dist	31			Re-extract added 5/19/2020 by PGS
0E00002-09RE1	MHg-CVAFS-W-Dist	32			Re-extract added 5/19/2020 by PGS
0E00002-10RE1	MHg-CVAFS-W-Dist	33			Re-extract added 5/19/2020 by PGS
0E00002-11RE1	MHg-CVAFS-W-Dist	34			Re-extract added 5/19/2020 by PGS
0E21006-CCV4	QC	35	2000842		
0E21006-CCB4	QC	36			

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 5/20/2020


Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0E00002-12RE1	MHg-CVAFS-W-Dist	37			Re-extract added 5/19/2020 by PGS
0E00045-01	MHg-CVAFS-W-Dist	38			
0E00045-02	MHg-CVAFS-W-Dist	39			
0E00045-03	MHg-CVAFS-W-Dist	40			
0E00045-04	MHg-CVAFS-W-Dist	41			
0E00045-05	MHg-CVAFS-W-Dist	42			
0E00045-06	MHg-CVAFS-W-Dist	43			
0E00045-07	MHg-CVAFS-W-Dist	44			
0E00045-08	MHg-CVAFS-W-Dist	45			
0E21006-CCV5	QC	46	2000842		
0E21006-CCB5	QC	47			



Samples Loaded By

5/21/2020

Date



Data Processed By

5/21/2020

Date

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: ZKH	Sequence #: 0E21006
Reviewer:	Dataset ID #: MHg27001-200520-1
Date: 5/21/2020	WO #: 0E00002, 0E00045
Batch #(s): F005268	

• Select the correct preparation method.

Additional Comments:

Analyte	Prep Method	Matrix
<input checked="" type="checkbox"/> MHg	SOP2797 MHg Distillation	Water
<input type="checkbox"/> MHg	SOP2986 KOH/MeOH Digest	Tissue
<input type="checkbox"/> MHg	SOP5134 MeCl Extraction	Sed/Soil
<input type="checkbox"/> DMHg	SOP2816 (None Accredited method)	ALL

Analyst Initials: ZKH

Reviewer Initials/Date: PGS

- | | | | |
|---------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------|-----------------------------------------|
| 1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (a) Reviewer: 100% of peak heights checked | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (b) Are there peak height errors? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (c) Error on a sample: Do peak heights, responses, & initial results match corrected data? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| (d) Error on a Cal Pt, ICB/CCB, or PB: Has the data been reimported? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| (e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (f) Check and compare masses (review prep bench sheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (g) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (h) Do aliquots and dilutions written on benchsheet match those in Excel? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (i) Is the pH>3.0 for all distilled samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (j) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (k) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (l) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 5. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| (b) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| QA/QC Data Checked | | | |
| 6. The calibration curve included a minimum of 5 Standards | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> N/A |
| Comments: | | | |
| 7. 1st Calibration Standard % Recoveries (65-135%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> N/A |
| Comments: | | | |
| 8. RSD CF (≤ 15%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> |
| Comments: | | | |

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: ZKH	Sequence #: 0E21006
Reviewer: 0	Dataset ID #: MHg27001-200520-1
Date: 5/21/2020	WO #: 0E00002, 0E00045
Batch #(s): F005268	

Analyst Initials:

ZKH

Reviewer Initials/Date:

PGS

9. ICV % Recoveries 67-133%	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____			
10. CCV % Recoveries 67-133%	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____			
11. Are the absolute value of the ICB and CCBs < PQL?	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____			
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____			
13. LCS/LCSD or BS/BSD RPD (< 25%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____			
14. Water: Average of Preparation Blanks < 0.045 ng/L and standard deviation of 0.015 ng/L?	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> N/A
Comments: _____			
15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?	<input type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/> N/A
Comments: _____	<input type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A
17. Is the correct 'Source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
19. MD RPD/MT RSD(< 35%)	<input type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: NA			
20. Is there one set of MS/MSD per every 10 samples?	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____			
21. MS/MSD RPD(< 35%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____			
22. MS (AS) % Recoveries (65-130%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____			
23. MSD (ASD) % Recoveries (65-130%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input checked="" type="checkbox"/>
Comments: _____			
24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
25. Are all samples within instrument calibration range (or at maximum aliquot size)?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>
Comments: _____			
26. For instrumental dilutions, is the dilution factor in excel correct?	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
27. Dissolved < Total metals (if applicable)	<input type="checkbox"/> PASS	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A
Comments: _____			
28. Effluent < Influent metals (visually confirm if needed)	<input type="checkbox"/> PASS	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A
Comments: _____			

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: <u>ZKH</u>	Sequence #: <u>0E21006</u>
Reviewer: <u>0</u>	Dataset ID #: <u>MHg27001-200520-1</u>
Date: <u>5/21/2020</u>	WO #: <u>0E00002, 0E00045</u>
Batch #(s): <u>F005268</u>	

Analyst Initials:

ZKH
 YES NO

Reviewer Initials/Date:

DGS
 N/A

29. Are re-runs noted with reason?

Comments: _____

YES NO N/A

30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):

Was a bubbler and trap test run before the analytical run continued?

Comments: _____

YES NO N/A

31. Do re-run results compare to initial analysis (< 35% RPD)?

Comments: _____

YES NO N/A

32. Are qualifiers consistent with the data review flowcharts?

Comments: _____

YES NO N/A

33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?

Comments: _____

YES NO N/A

34. Have re-extracts been created for non-reportable samples?

Comments: _____

YES NO N/A

36. Are there any HIGH QA projects within the data?

If so, place dataset to the QA office.

YES NO

37. Does the data set need scanning?

YES N/A

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

38. Date of analyst IDOC/CDOC: 10/3/2019 IDOC/CDOC within last 12 months?

YES NO

39. Date of analyst's SOP reading: 10/3/2019 Current SOP revision?

YES NO

40. Date of LOD: 10/29/2019 LOD within last 3 months (within 12 months for MDN)?

YES NO N/A

41. Date of LOQ: 10/29/2019 LOQ within last 3 months (within 12 months for MDN)?

YES NO N/A

42. If MDN samples, date of last MDL study: _____

YES NO N/A

43. MDL study within last 12 months?

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Additional Comments:

YES NO

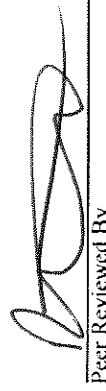
Failing Data Report - 0E21006

Sample ID Analysis Result MRL Dup Result Source Result True Value Units % Rec Rec. LCL Rec. UCL RPD RPD Limit Over Cal Failure Qualifier



Analyst Reviewed By


Date 5/21/2020


Peer Reviewed By

5/22/20
Date

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: ZKH 5/20/2020 Samples to lab: 5/20/2020 Batch #: FC05268
 Upload/Date: ZKH 5/20/2020 Reviewer/Date: PGS

EFGS Preparation Method

- SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS
- SOP2837 Tissue Nitric Digestion ICPMS CVAFS
- SOP2840 Modified Aqua Regia
- SOP2820 RP
- SOP2821 HF Bomb Digestion ICPMS CVAFS
- SOP2825 Nitric Bomb Digestion ICPMS CVAFS
- SOP2993 Oven Digestion (As, Se Speciation)
- SOP5145 Microwave Digestion (Nutraceuticals)
- SOP5145 Microwave Digestion (3051)
- NA Other: SOP2797 Hg Distillation for water

Initials	SOP Date	DOC Date
<u>ZKH</u>		
Comments: _____		

Conditionally formatted training files located at:
 \\us34filat\General and Admin\Quality Assurance\Training\Training Master
 (Contact QA for any problems regarding these training files.)

Analytes: MHg

- | | | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|-----------------|------------|----------------|------------|
| <p>1. Is any SOP/DOC expiring within one week of Submission Date?
 Data cannot be reported without a current IDOC/CDOC.</p> <p>2. Check prep method</p> <p>(a) For Ceuticals: Is correct Hg code being used in LIMS? <input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30 <input type="checkbox"/> N/A</p> <p>3. Compare sample ID & container ID with benchsheet & in LIMS <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>4. Check for transcription errors from benchsheet</p> <p>(a) Check and compare initial and final volumes <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(b) Check and compare mass <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(c) Has the number of pills been documented (Special Info 5 in benchsheet)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>(d) Have assay logbook copies been attached & avg masses entered? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>(e) For re-digests, have e-mails been attached and verified? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>(f) Benchsheet prep date MUST match actual prep date <input checked="" type="checkbox"/> YES</p> <p>5. Samples per Batch? Check QC Requirements</p> <p>(a) PBs per batch? <input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10 <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs</p> <p>(b) Are pre and post homogenization blanks in batch? <input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs</p> <p>(c) BS, BS/BSD or CRM in batch? <input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM</p> <p>(d) MS/MSD in batch? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(e) MD in batch? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>(f) Is there at least one duplicate QC source in batch? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(g) Are there any client specific requests, QC requests, etc? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>Document:</p> <p>(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(i) Correct 'source' designated for MD/MS/MSD? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(j) For EFGS-filtered samples, was a filtration blank included? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>6. Special prep requirements?</p> <p>(a) For 1638: Have samples sat for 48 hours after preservation? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>(b) For 200.8: Have samples sat for 16 hours after preservation? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>(c) For DOD have pipettes been calibrated day of prep? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>7. Are the samples appropriately spiked?</p> <p>(a) Is the spike and amount used appropriate and entered into LIMS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(b) For all spiking was there a witness? (Initials <u>must</u> be in logbook) <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>(c) Spikes added: <input checked="" type="checkbox"/> YES</p> | <table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Reviewer Initials</td> <td style="text-align: center;">SOP Date</td> <td style="text-align: center;">Tertiary Review</td> </tr> <tr> <td style="text-align: center;"><u>EMB</u></td> <td style="text-align: center;"><u>5/20/20</u></td> <td style="text-align: center;"><u>PGS</u></td> </tr> </table> | Reviewer Initials | SOP Date | Tertiary Review | <u>EMB</u> | <u>5/20/20</u> | <u>PGS</u> |
| Reviewer Initials | SOP Date | Tertiary Review | | | | | |
| <u>EMB</u> | <u>5/20/20</u> | <u>PGS</u> | | | | | |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: 2000428

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
<u>MHg Primary 1.0 µg/mL</u>	<u>2000428</u>	<u>50</u>			

PREPARATION BENCH SHEET

F005268

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/20/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F005268-BLK1	Blank	45	40					
F005268-BLK2	Blank	45	40					
F005268-BLK3	Blank	45	40					
F005268-BS1	LCS	45	40	2000428	50			
F005268-BSD1	LCS Dup	45	40	2000428	50			
F005268-MS1	Matrix Spike [0E00002-05RE1]	45.2266	40	2000428	50			
F005268-MS2	Matrix Spike [0E00002-04RE1]	45.5274	40	2000428	50			
F005268-MSD1	Matrix Spike Dup [0F00002-05RE1]	45.7449	40	2000428	50			
F005268-MSD2	Matrix Spike Dup [0F00002-04RE1]	45.4631	40	2000428	50			

Standard ID(s): 2000428

Description: MHg New Primary 1.0 ng/mL C.A.I.

Expiration: 24-May-20 00:00

Reagent ID(s): 2001144

Description: 4% HCl Distillation Dilute (Made Daily)

Expiration: 21-May-20 00:00

Standard ID(s): 2001145

Description: 1% APDC Solution

Expiration: 03-Jun-20 00:00

PREPARATION BENCH SHEET

F005268

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/20/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0E00002-01RE1	WQ-FPT_042920_SW_10 TOTAL	45.5102	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-02RE1	WQ-FPT_042920_SW_10 DISSOLVED	45.8054	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-03RE1	ES-15_042920_SW_10 TOTAL	45.2231	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-04RE1	ES-15_042920_SW_10 DISSOLVED	45.7437	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-05RE1	WQ-ECH_042920_SW_10 TOTAL	45.7287	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-06RE1	WQ_ECH_042920_SW_10 DISSOLVED	45.7006	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-07RE1	OV-02_042920_SW_10 TOTAL	45.0165	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-08RE1	OV-02_042920_SW_10 DISSOLVED	45.8042	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-09RE1	ADD-02_042920_SW_10 TOTAL	45.1841	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-10RE1	ADD-02_042920_SW_10 DISSOLVED	45.19	40	-	-		Re-extract added 5/19/2020 by PGS	
0E00002-11RE1	EB-01_042920_SW TOTAL	45.2535	40	-	-	010106	Re-extract added 5/19/2020 by PGS	
0E00002-12RE1	EB-01_042920_SW DISSOLVED	45.2763	40	-	-	010106	Re-extract added 5/19/2020 by PGS	
0E00045-01	P2-OW-ALBI-A-D7	45.1829	40	-	-	010106	Approx 150 ml. of volume	
0E00045-02	P2-OW-ALBI-B-D7	45.1643	40	-	-	010106	Approx 150 ml. of volume	
0E00045-03	P2-OW-ALBI-C-D7	45.3309	40	-	-	010106	Approx 150 ml. of volume	
0E00045-04	P2-OW-ALBI-D-D7	45.5295	40	-	-	010106	Approx 150 ml. of volume	
0E00045-05	P2-OW-UN-A-D7	45.8953	40	-	-	010106	Approx 150 ml. of volume	
00045-06	P2-OW-UN-B-D7	45.2369	40	-	-	010106	Approx 150 ml. of volume	
00045-07	P2-OW-UN-C-D7	45.8141	40	-	-	010106	Approx 150 ml. of volume	

PREPARATION BENCH SHEET

F005268

Eurofins Frontier Global Sciences, LLC

Prepared: 5/20/2020

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

01E00045-08	P2-OW-UN+D-D7	45.2207	40	-	-	010106	Approx 150 ml. of volume
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Work Order	Client	Project
01E00002	Wood - MA	Penobscot
01E00045	Physis Labs	Methyl Mercury

Methyl Mercury Distillations (EPA 1630)

Name: ZKH, ^{WAL} ZKH Date: 5/20/2020 Batch #: FO05268 Sample Matrix: Water
 WO#: 0E0002, 0E00045

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (23)	Time first sample distillation completed: <u>1324</u>
1	FO05268-B51	<2	45.0866	4.0	Spike ID: <u>2000428</u> Spike Amount: <u>50</u> µL Spike Witness: <u>WAL 5/20/2020</u> Balance #: <u>25</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>NU09053</u> Cal. Date: <u>5/20/2020</u> Pipette #: <u>PU30358</u> ^{538 ZKH} _{5/20/2020} Cal. Date: <u>5/20/2020</u> Pipette #: <u>NA</u> Cal. Date: <u>NA</u> APDC ID: <u>2001145</u> HCl ID: <u>2001144</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>123</u> Unit 2: <u>124</u> Unit 3: <u>122</u> Unit 4: <u>102</u> Unit 5: <u>120</u> Unit 6: <u>NA</u> Comments:
2	FO05268-BSD1	<2	45.1704	4.0	
3	FO05268-BLK1	<2	45.6042	3.0	
4	FO05268-BLK2	<2	45.2050	3.0	
5	FO05268-BLK3	<2	45.9189	3.0	
6	0E0002-05RE1B (MS1/MSD1) SRC	<2	45.7287	3.0	
7	FO05268-MS1	<2	45.2266	3.0	
8	FO05268-MSD1	<2	45.7449	3.0	
9	0E0002-04RE1B (MS2/MSD2) SRC	<2	45.7437	3.0	
10	FO05268-MS2	<2	45.5274	3.0	
11	FO05268-MSD2	<2	45.4631	3.0	
12	0E0002-01RE1B	<2	45.5102	3.0	
13	0E0002-02RE1B	<2	45.8054	3.0	
14	0E0002-03RE1B	<2	45.2231	3.0	
15	0E0002-06RE1B	<2	45.7000	3.0	
16	0E0002-07RE1B	<2	45.0165	4.0	
17	0E0002-08RE1B	<2	45.7072	4.0	
18	0E0002-09RE1B	<2	45.1841	4.0	
19	0E0002-10RE1B	<2	45.1900	4.0	
20	0E0002-11RE1B	<2	45.2535	4.0	
21	0E0002-12RE1B	<2	45.2763	4.0	
22	0E00045-01A	<2	45.1829	3.0	
23	0E00045-02A	<2	45.1643	3.0	
24	0E00045-03A	<2	45.3309	3.0	
25	0E00045-04A	<2	45.5295	3.0	
26	0E00045-05A	<2	45.8953	3.0	
27	0E00045-06A	<2	45.2369	3.0	
28	0E00045-07A	<2	45.8141	3.0	
29	0E00045-08A	<2	45.2209	3.0	

ZKH
5/20/2020

PREPARATION BENCH SHEET

F005268

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/20/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spikel1 ID	µl Spikel	Spikel2 ID	µl Spike2	Extraction Comments
F005268-BLK1	Blank	45	40					
F005268-BLK2	Blank	45	40					
F005268-BLK3	Blank	45	40					
F005268-BS1	LCS	45	40					
F005268-BSD1	LCS Dup	45	40					
F005268-MS1	Matrix Spike <i>0.00002-05/20</i>	45	40					
F005268-MS2	Matrix Spike <i>0.00002-04/20</i>	45	40					
F005268-MSD1	Matrix Spike Dup <i>0.00002-05/20</i>	45	40					
F005268-MSD2	Matrix Spike Dup <i>0.00002-04/20</i>	45	40					

Standard ID(s):

Expiration:

Reagent ID(s):

Description:

Expiration:

2001144

.4% HCl Distillation Dilute (Made Daily)

21-May-20 00:00

PREPARATION BENCH SHEET

F005268

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/20/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0E:00002-01RE1	WQ-FPT_042920_SW_10 TOTAL	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-02RE1	WQ-FPT_042920_SW_10 DISSOLVED	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-03RE1	ES-15_042920_SW_10 TOTAL	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-04RE1	ES-15_042920_SW_10 DISSOLVED	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-05RE1	WQ-ECH_042920_SW_10 TOTAL	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-06RE1	WQ-ECH_042920_SW_10 DISSOLVED	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-07RE1	OV-02_042920_SW_10 TOTAL	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-08RE1	OV-02_042920_SW_10 DISSOLVED	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-09RE1	ADD-02_042920_SW_10 TOTAL	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-10RE1	ADD-02_042920_SW_10 DISSOLVED	45	40	-	-		Re-extract added 5/19/2020 by PGS	
0E:00002-11RE1	FB-01_042920_SW TOTAL	45	40	-	-	010106	Re-extract added 5/19/2020 by PGS	
0E:00002-12RE1	FB-01_042920_SW DISSOLVED	45	40	-	-	010106	Re-extract added 5/19/2020 by PGS	
0E:00045-01	P2-OW-ALB1-A-D7	45	40	-	-	010106	Approx 150 mL of volume	
0E:00045-02	P2-OW-ALB1-B-D7	45	40	-	-	010106	Approx 150 mL of volume	
0E:00045-03	P2-OW-ALB1-C-D7	45	40	-	-	010106	Approx 150 ml. of volume	
0E:00045-04	P2-OW-ALB1-D-D7	45	40	-	-	010106	Approx 150 ml. of volume	
0E:00045-05	P2-OW-UN-A-D7	45	40	-	-	010106	Approx 150 ml. of volume	
0E:00045-06	P2-OW-UN-B-D7	45	40	-	-	010106	Approx 150 ml. of volume	
0E:00045-07	P2-OW-UN-C-D7	45	40	-	-	010106	Approx 150 ml. of volume	

PREPARATION BENCH SHEET

F005268

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Hg Aquatic/Solids - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 5/20/2020

0E00045-08	P2-OW-UN-D-D7	45	40	-	-	010106	Approx 150 mL of volume
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Work_Order

0E00002

0E00045

Client



Project

Analysis Datasheet for Methyl Mercury in Soil/Tissue

Date of Analysis: May 20, 2020

Instrument #: Hg2700-1

LIMS Sequence #: 0E21005, 0E21006

Analyst:

Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	21.88 units	437.70	7.72 units	154.40	91.6 %Rec
SEQ-CAL2	1	0.20 ng/L	47.45 units	237.25	33.28 units	166.42	98.8 %Rec
SEQ-CAL3	1	1.00 ng/L	186.23 units	186.23	172.07 units	172.07	102.1 %Rec
SEQ-CAL4	1	2.00 ng/L	364.65 units	182.33	350.49 units	175.24	104.0 %Rec
SEQ-CAL5	1	4.00 ng/L	711.41 units	177.85	697.25 units	174.31	103.5 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 168.49 Corr. St Dev RF +/- 8.59 Corr. RSD CF 5.1% RSD Uncorr. Mean RF 244.27

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-1BL	1	14.16 units		0.06 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	-4.376 ng/L	±3.926
BLK	2	3	-14.307 ng/L	±19.236
BLK	3	3	-0.011 ng/L	±0.015
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	00	CAL	SEQ-IBL1	1	5/20/20 14:02	47041-1.RAW	14:02:26	14.16			0.0	0.000	0.000	ng/L	
Hg2700-1	00	CAL	SEQ-CAL1	1	5/20/20 14:12	47042-1.RAW	14:12:41	21.88			7.7	0.046	0.046	ng/L	
Hg2700-1	00	CAL	SEQ-CAL2	1	5/20/20 14:22	47043-1.RAW	14:22:57	47.45			33.3	0.198	0.198	ng/L	
Hg2700-1	00	CAL	SEQ-CAL3	1	5/20/20 14:33	47044-1.RAW	14:33:12	186.23			172.1	1.021	1.021	ng/L	
Hg2700-1	00	CAL	SEQ-CAL4	1	5/20/20 14:43	47045-1.RAW	14:43:28	364.65			350.5	2.080	2.080	ng/L	
Hg2700-1	00	CAL	SEQ-CAL5	1	5/20/20 14:53	47046-1.RAW	14:53:44	711.41			697.2	4.138	4.138	ng/L	
Hg2700-1	00	CAL	SEQ-ICV1	1	5/20/20 15:03	47047-1.RAW	15:03:59	110.18			96.0	0.570	0.570	ng/L	113.9776471
Hg2700-1	00	CAL	SEQ-ICB1	1	5/20/20 15:14	47048-1.RAW	15:14:15	17.94			3.8	0.022	0.022	ng/L	
Hg2700-1	00	BLK	F005244-BLK1_KOH	500	5/20/20 15:24	47049-1.RAW	15:24:31	13.77		1	-0.4	-0.002	-1.177	ng/L	KOH
Hg2700-1	00	BLK	F005244-BLK2_KOH	500	5/20/20 15:34	47050-1.RAW	15:34:46	11.21		1	-3.0	-0.018	-8.758	ng/L	KOH
Hg2700-1	00	BLK	F005244-BLK3_KOH	500	5/20/20 15:45	47051-1.RAW	15:45:02	13.09		1	-1.1	-0.006	-3.193	ng/L	KOH
Hg2700-1	00	SAM	F005244-BSD3_KOH	500	5/20/20 15:55	47052-1.RAW	15:55:18	19.60		1	5.4	0.041	20.518	ng/L	KOH
Hg2700-1	00	SAM	F005244-BSD3_KOH	500	5/20/20 16:05	47053-1.RAW	16:05:34	13.71		1	-0.5	0.006	3.023	ng/L	KOH
Hg2700-1	00	SAM	F005244-BSD2_KOH	500	5/20/20 16:15	47054-1.RAW	16:15:50	18.85		1	4.7	0.037	18.273	ng/L	KOH
Hg2700-1	00	SAM	F005244-BSD1_KOH	1000	5/20/20 16:26	47055-1.RAW	16:26:06	483.94		1	469.8	2.793	2793.539	ng/L	KOH
Hg2700-1	00	SAM	F005244-BSD1_KOH	1000	5/20/20 16:36	47056-1.RAW	16:36:21	453.93		1	439.8	2.614	2614.409	ng/L	KOH
Hg2700-1	00	SAM	F005244-BSD2_KOH	4000000	5/20/20 16:46	47057-1.RAW	16:46:38	17.36		1	3.2	0.019	75753.673	ng/L	KOH
Hg2700-1	00	CAL	SEQ-CCV1	1	5/20/20 16:56	47058-1.RAW	16:56:53	98.69			84.5	0.502	0.502	ng/L	100.335396
Hg2700-1	00	CAL	SEQ-CCB1	1	5/20/20 17:07	47059-1.RAW	17:07:09	13.89			-0.3	-0.002	-0.002	ng/L	
Hg2700-1	00	BLK	F005245-BLK1_TMAOH	500	5/20/20 17:17	47060-1.RAW	17:17:25	15.25		2	1.1	0.006	3.213	ng/L	TMAOH
Hg2700-1	00	BLK	F005245-BLK2_TMAOH	500	5/20/20 17:27	47061-1.RAW	17:27:41	2.41		2	-11.8	-0.070	-34.891	ng/L	TMAOH
Hg2700-1	00	BLK	F005245-BLK3_TMAOH	500	5/20/20 17:37	47062-1.RAW	17:37:57	10.38		2	-3.8	-0.022	-11.244	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-BSD3_TMAOH	500	5/20/20 17:48	47063-1.RAW	17:48:13	16.94		2	2.8	0.045	22.540	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-BSD3_TMAOH	500	5/20/20 17:58	47064-1.RAW	17:58:29	15.09		2	0.9	0.034	17.053	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-BSD3_TMAOH	500	5/20/20 18:08	47065-1.RAW	18:08:45	9.48		2	-4.7	0.001	0.406	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-BSD3_TMAOH	500	5/20/20 18:19	47066-1.RAW	18:19:01	512.03		2	497.9	2.969	2969.210	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-BSD1_TMAOH	1000	5/20/20 18:29	47067-1.RAW	18:29:17	552.00		2	537.8	3.206	3206.424	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-BSD2_TMAOH	2000000	5/20/20 18:39	47068-1.RAW	18:39:33	24.89		2	10.7	0.064	127384.127	ng/L	TMAOH
Hg2700-1	00	CAL	SEQ-CCV2	1	5/20/20 18:49	47069-1.RAW	18:49:49	107.38			93.2	0.553	0.553	ng/L	110.654067
Hg2700-1	00	CAL	SEQ-CCB2	1	5/20/20 19:00	47070-1.RAW	19:00:05	9.31			-4.9	-0.029	-0.029	ng/L	
Hg2700-1	00	SAM	F005268-BSD1	1.25	5/20/20 19:10	47071-1.RAW	19:10:21	190.24		3	176.1	1.053	1.317	ng/L	F005268
Hg2700-1	00	SAM	F005268-BSD1	1.25	5/20/20 19:20	47072-1.RAW	19:20:37	161.17		3	147.0	0.881	1.101	ng/L	F005268
Hg2700-1	00	BLK	F005268-BLK1	1.25	5/20/20 19:30	47073-1.RAW	19:30:53	13.87		3	-0.3	-0.002	-0.002	ng/L	F005268
Hg2700-1	00	BLK	F005268-BLK2	1.25	5/20/20 19:41	47074-1.RAW	19:41:09	13.97		3	-0.2	-0.001	-0.001	ng/L	F005268
Hg2700-1	00	BLK	F005268-BLK3	1.25	5/20/20 19:51	47075-1.RAW	19:51:25	10.38		3	-3.8	-0.022	-0.028	ng/L	F005268
Hg2700-1	00	SAM	F000002-05RE1	1.25	5/20/20 20:01	47076-1.RAW	20:01:41	32.19		3	18.0	0.115	0.144	ng/L	F005268
Hg2700-1	00	SAM	F005268-MS1	1.25	5/20/20 20:11	47077-1.RAW	20:11:57	208.73		3	194.6	1.163	1.454	ng/L	F005268
Hg2700-1	00	SAM	F005268-MS1	1.25	5/20/20 20:22	47078-1.RAW	20:22:13	217.33		3	203.2	1.214	1.518	ng/L	F005268
Hg2700-1	00	SAM	F000002-04RE1	1.25	5/20/20 20:32	47079-1.RAW	20:32:30	25.45		3	11.3	0.075	0.094	ng/L	F005268
Hg2700-1	00	SAM	F005268-MS2	1.25	5/20/20 20:42	47080-1.RAW	20:42:46	204.71		3	190.5	1.139	1.424	ng/L	F005268
Hg2700-1	00	CAL	SEQ-CCV3	1	5/20/20 20:53	47081-1.RAW	20:53:03	98.57			84.4	0.501	0.501	ng/L	100.1863319
Hg2700-1	00	CAL	SEQ-CCB3	1	5/20/20 21:03	47082-1.RAW	21:03:19	13.32			-0.8	-0.005	-0.005	ng/L	
Hg2700-1	00	SAM	F005268-MSD2	1.25	5/20/20 21:13	47083-1.RAW	21:13:36	216.72		3	202.6	1.211	1.513	ng/L	F005268
Hg2700-1	00	SAM	F000002-01RE1	1.25	5/20/20 21:23	47084-1.RAW	21:23:52	28.47		3	14.3	0.093	0.117	ng/L	F005268
Hg2700-1	00	SAM	F000002-02RE1	1.25	5/20/20 21:34	47085-1.RAW	21:34:08	15.92		3	1.8	0.019	0.024	ng/L	F005268
Hg2700-1	00	SAM	F000002-03RE1	1.25	5/20/20 21:44	47086-1.RAW	21:44:24	32.75		3	18.6	0.119	0.148	ng/L	F005268

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	00	CAL	SEQ 1BL1	1	5/20/20 14:02	47041-1.RAW	14:02:26	14.16			0.0	0.000	0.000	ng/L	
Hg2700-1	00	CAL	SEQ-CAL1	1	5/20/20 14:12	47042-1.RAW	14:12:41	21.88			7.7	0.046	0.046	ng/L	
Hg2700-1	00	CAL	SEQ-CAL2	1	5/20/20 14:22	47043-1.RAW	14:22:57	47.45			33.3	0.198	0.198	ng/L	
Hg2700-1	00	CAL	SEQ-CAL3	1	5/20/20 14:33	47044-1.RAW	14:33:12	186.23			172.1	1.021	1.021	ng/L	
Hg2700-1	00	CAL	SEQ-CAL4	1	5/20/20 14:43	47045-1.RAW	14:43:28	364.65			350.5	2.080	2.080	ng/L	
Hg2700-1	00	CAL	SEQ-CAL5	1	5/20/20 14:53	47046-1.RAW	14:53:44	711.41			697.2	4.138	4.138	ng/L	
Hg2700-1	00	CAL	SEQ-1CV1	1	5/20/20 15:03	47047-1.RAW	15:03:59	110.10			96.0	0.570	0.570	ng/L	113.9776471
Hg2700-1	00	CAL	SEQ-1CB1	1	5/20/20 15:14	47048-1.RAW	15:14:15	17.94			3.8	0.022	0.022	ng/L	
Hg2700-1	00	BLK	F005244-BLK1_KOH	500	5/20/20 15:24	47049-1.RAW	15:24:31	13.77	1		-0.4	-0.002	-1.177	ng/L	KOH
Hg2700-1	00	BLK	F005244-BLK2_KOH	500	5/20/20 15:34	47050-1.RAW	15:34:46	11.21	1		-3.0	-0.018	-8.758	ng/L	KOH
Hg2700-1	00	BLK	F005244-BLK3_KOH	500	5/20/20 15:45	47051-1.RAW	15:45:02	13.09	1		-1.1	-0.006	-3.193	ng/L	KOH
Hg2700-1	00	SAM	F005244-B53_KOH	500	5/20/20 15:55	47052-1.RAW	15:55:18	19.60	1		5.4	0.041	20.518	ng/L	KOH
Hg2700-1	00	SAM	F005244-B53_KOH	500	5/20/20 16:05	47053-1.RAW	16:05:34	13.71	1		-0.5	0.006	3.023	ng/L	KOH
Hg2700-1	00	SAM	F005244-B51_KOH	1000	5/20/20 16:15	47054-1.RAW	16:15:50	18.85	1		4.7	0.037	18.273	ng/L	KOH
Hg2700-1	00	SAM	F005244-B51_KOH	1000	5/20/20 16:26	47055-1.RAW	16:26:06	483.94	1		469.8	2.793	2792.539	ng/L	KOH
Hg2700-1	00	SAM	F005244-B50D1_KOH	4000000	5/20/20 16:36	47056-1.RAW	16:36:21	453.93	1		439.8	2.614	2614.409	ng/L	KOH
Hg2700-1	00	SAM	F005244-B50D2_KOH	4000000	5/20/20 16:46	47057-1.RAW	16:46:38	98.69	1		3.2	0.019	75753.673	ng/L	KOH
Hg2700-1	00	CAL	SEQ-CCV1	1	5/20/20 17:07	47058-1.RAW	17:07:09	13.89			84.5	0.502	0.502	ng/L	100.3353396
Hg2700-1	00	BLK	F005245-BLK1_TMAOH	500	5/20/20 17:17	47060-1.RAW	17:17:25	15.25	2		-0.3	-0.002	-0.002	ng/L	
Hg2700-1	00	BLK	F005245-BLK2_TMAOH	500	5/20/20 17:27	47061-1.RAW	17:27:41	2.41	2		-11.8	-0.070	-34.891	ng/L	TMAOH
Hg2700-1	00	BLK	F005245-BLK3_TMAOH	500	5/20/20 17:37	47062-1.RAW	17:37:57	10.38	2		-3.8	-0.072	-11.244	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-B53_TMAOH	500	5/20/20 17:48	47063-1.RAW	17:48:13	16.94	2		2.8	0.045	22.540	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-B5D3_TMAOH	500	5/20/20 17:58	47064-1.RAW	17:58:29	15.09	2		0.9	0.034	17.053	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-B51_TMAOH	1000	5/20/20 18:08	47065-1.RAW	18:08:45	9.48	2		-4.7	0.001	4.006	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-B51_TMAOH	1000	5/20/20 18:19	47066-1.RAW	18:19:01	512.03	2		497.9	2.969	2969.210	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-B5D1_TMAOH	2000000	5/20/20 18:29	47067-1.RAW	18:29:17	552.00	2		537.8	3.206	3206.474	ng/L	TMAOH
Hg2700-1	00	SAM	F005245-B5D2_TMAOH	2000000	5/20/20 18:39	47068-1.RAW	18:39:33	107.38	2		10.7	0.064	127384.127	ng/L	TMAOH
Hg2700-1	00	CAL	SEQ-CCV2	1	5/20/20 18:49	47069-1.RAW	18:49:49	24.89			93.2	0.553	0.553	ng/L	110.654067
Hg2700-1	00	SAM	F005268-B51	1.25	5/20/20 19:10	47071-1.RAW	19:10:21	190.24	3		-4.9	-0.079	-0.028	ng/L	F005268
Hg2700-1	00	SAM	F005268-B5D1	1.25	5/20/20 19:20	47072-1.RAW	19:20:37	161.17	3		147.0	0.881	1.101	ng/L	F005268
Hg2700-1	00	BLK	F005268-BLK1	1.25	5/20/20 19:30	47073-1.RAW	19:30:53	13.87	3		-0.3	-0.002	-0.002	ng/L	F005268
Hg2700-1	00	BLK	F005268-BLK2	1.25	5/20/20 19:41	47074-1.RAW	19:41:09	13.97	3		-0.2	-0.001	-0.001	ng/L	F005268
Hg2700-1	00	BLK	F005268-BLK3	1.25	5/20/20 19:51	47075-1.RAW	19:51:25	10.38	3		-3.8	-0.022	-0.028	ng/L	F005268
Hg2700-1	00	SAM	0E00002-03RE1	1.25	5/20/20 20:01	47076-1.RAW	20:01:41	32.19	3		18.0	1.115	1.144	ng/L	F005268
Hg2700-1	00	SAM	F005268-MS1	1.25	5/20/20 20:11	47077-1.RAW	20:11:57	208.73	3		194.6	1.163	1.454	ng/L	F005268
Hg2700-1	00	SAM	F005268-MSD1	1.25	5/20/20 20:22	47078-1.RAW	20:22:13	217.33	3		203.2	1.214	1.518	ng/L	F005268
Hg2700-1	00	SAM	0E00002-04RE1	1.25	5/20/20 20:32	47079-1.RAW	20:32:30	25.45	3		11.3	0.075	0.094	ng/L	F005268
Hg2700-1	00	SAM	F005268-MS2	1.25	5/20/20 20:42	47080-1.RAW	20:42:46	204.71	3		190.5	1.139	1.474	ng/L	F005268
Hg2700-1	00	CAL	SEQ-CCV3	1	5/20/20 20:53	47081-1.RAW	20:53:03	98.57			84.4	0.501	0.501	ng/L	100.1863319
Hg2700-1	00	CAL	SEQ-CCB3	1	5/20/20 21:03	47082-1.RAW	21:03:19	13.32			-0.8	-0.005	-0.005	ng/L	F005268
Hg2700-1	00	SAM	F005268-MSD2	1.25	5/20/20 21:13	47083-1.RAW	21:13:36	216.72	3		202.6	1.211	1.513	ng/L	F005268
Hg2700-1	00	SAM	0E00002-01RE1	1.25	5/20/20 21:23	47084-1.RAW	21:23:52	28.47	3		14.3	0.093	0.117	ng/L	F005268
Hg2700-1	00	SAM	0E00002-02RE1	1.25	5/20/20 21:34	47085-1.RAW	21:34:08	15.92	3		1.8	0.019	0.024	ng/L	F005268
Hg2700-1	00	SAM	0E00002-03RE1	1.25	5/20/20 21:44	47086-1.RAW	21:44:24	32.75	3		18.6	0.119	0.148	ng/L	F005268

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2700-1	00	SAM	0E00002-06RE1	1.25	5/20/20 21:54	47087-1.RAW	21:54:41	41.77	3		27.6	0.172	0.215	ng/L	F005268
Hg2700-1	00	SAM	0E00002-07RE1	1.25	5/20/20 22:04	47088-1.RAW	22:04:57	41.47	3		27.3	0.171	0.213	ng/L	F005268
Hg2700-1	00	SAM	0E00002-08RE1	1.25	5/20/20 22:15	47089-1.RAW	22:15:14	37.72	3		23.6	0.148	0.185	ng/L	F005268
Hg2700-1	00	SAM	0E00002-09RE1	1.25	5/20/20 22:25	47090-1.RAW	22:25:30	42.82	3		28.7	0.179	0.223	ng/L	F005268
Hg2700-1	00	SAM	0E00002-10RE1	1.25	5/20/20 22:35	47091-1.RAW	22:35:47	30.56	3		16.4	0.106	0.132	ng/L	F005268
Hg2700-1	00	SAM	0E00002-11RE1	1.25	5/20/20 22:46	47092-1.RAW	22:46:03	15.33	3		1.2	0.015	0.019	ng/L	F005268
Hg2700-1	00	CAL	SEQ-CCV4	1	5/20/20 22:56	47093-1.RAW	22:56:19	78.20			64.0	0.380	0.380	ng/L	76.01486513
Hg2700-1	00	CAL	SEQ-CCB4	1	5/20/20 23:06	47094-1.RAW	23:06:35	11.20			-3.0	-0.018	-0.018	ng/L	F005268
Hg2700-1	00	SAM	0E00002-12RE1	1.25	5/20/20 23:16	47095-1.RAW	23:16:52	31.95	3		17.8	0.114	0.142	ng/L	F005268
Hg2700-1	00	SAM	0E00045-01	1.25	5/20/20 23:27	47096-1.RAW	23:27:08	3.18	3		-11.0	-0.057	-0.071	ng/L	F005268
Hg2700-1	00	SAM	0E00045-02	1.25	5/20/20 23:37	47097-1.RAW	23:37:25	34.70	3		20.5	0.130	0.163	ng/L	F005268
Hg2700-1	00	SAM	0E00045-03	1.25	5/20/20 23:47	47098-1.RAW	23:47:42	26.44	3		12.3	0.081	0.102	ng/L	F005268
Hg2700-1	00	SAM	0E00045-04	1.25	5/20/20 23:57	47099-1.RAW	23:57:58	47.38	3		33.2	0.206	0.257	ng/L	F005268
Hg2700-1	00	SAM	0E00045-05	1.25	5/20/20 0:08	47100-1.RAW	0:08:15	1.73	3		-12.4	-0.065	-0.082	ng/L	F005268
Hg2700-1	00	SAM	0E00045-06	1.25	5/20/20 0:18	47101-1.RAW	0:18:31	63.95	3		49.8	0.304	0.380	ng/L	F005268
Hg2700-1	00	SAM	0E00045-07	50	5/20/20 0:28	47102-1.RAW	0:28:48	20.86	3		6.7	0.040	1.997	ng/L	F005268
Hg2700-1	00	SAM	0E00045-08	50	5/20/20 0:39	47103-1.RAW	0:39:04	35.80	3		21.6	0.129	6.431	ng/L	F005268
Hg2700-1	00	CAL	SEQ-CCV5	1	5/20/20 0:49	47104-1.RAW	0:49:20	90.58			75.4	0.454	0.454	ng/L	90.71025081
Hg2700-1	00	CAL	SEQ-CCB5	1	5/20/20 0:59	47105-1.RAW	0:59:37	9.70			-4.5	-0.027	-0.027	ng/L	F005268

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Sample/ID	Location	Rinse	Dilute	Blank	Conc	Hg0 (ppb)	Conc	Hg2 (ppb)	Conc	PrHg (F Rec%)	QA	RawData	RunEnd	PeakHg0 (Raw)	PeakMeHg (R)
MethylMercury EPA1630	Operat: ZKH	Blanks: 14.165	Calib Eqn: Conc = (Area-14.165)	Run Date: #####	Blank SD: 0										
	Method 2012-07 R:	CalibFa 168.49	Status: OK, 1 Warnings	Run Time: 12:45:00	Blank RSD 0										
	Descr: MHg27001-200520-1	R: 1	R2: 0.9999766	CalibAnalyt MHg	CF SD: 8.588363051										
					CF RSD%: 5.097268317										
Clean															
WS	A1	1	14.165	0.0621719	0	0						47034-1.RAW	12:50:38	90.0424769	0
PRIMER	A2	1	14.165	0.2489642	4.1024397	0.0077606						47035-1.RAW	13:00:53	24.6400174	9.43038194
PRIMER	A3	1	14.165	0.2525982	4.0923724	0.0489494						47036-1.RAW	13:11:08	56.1125579	705.382812
PRIMER	A4	1	14.165	0.2115359	3.998698	0.0470627						47037-1.RAW	13:21:24	56.7248553	703.686574
WS	A5	1	14.165	0.0709786	0.0782406	0.0908257						47038-1.RAW	13:31:39	49.8062789	687.903414
WS	A6	1	14.165	0.0642947	0.0210105	0.0607625						47039-1.RAW	13:41:55	26.1238426	27.3474248
SEQ-IBL1	A7	1	0	0.1591692	0.0840687	0.1724301						47040-1.RAW	13:52:10	24.9976852	17.7047454
SEQ-CAL1	A8	1	14.165	0.0834034	0.0458197	0.0916961			91.64			47041-1.RAW	14:02:26	26.8183449	14.1646991
SEQ-CAL2	A9	1	14.165	0.060774	0.1975455	0.0534742			98.77			47042-1.RAW	14:12:41	28.2173032	21.884838
SEQ-CAL3	A10	1	14.165	0.1034769	1.0212289	0.0315815			102.12			47043-1.RAW	14:22:57	24.404485	47.4490451
SEQ-CAL4	A11	1	14.165	0.1498998	2.0801845	0.0715022			104.01			47044-1.RAW	14:33:12	31.5994661	186.231076
SEQ-CAL5	A12	1	14.165	0.2310428	4.1382296	0.0893237			103.46			47045-1.RAW	14:43:28	39.4212384	364.653993
SEQ-ICV1	A13	1	14.165	0.3674544	0.5698882	0.1598098			114.12			47046-1.RAW	14:53:44	53.0929977	711.413021
SEQ-ICB1	A14	1	14.165	0.0650274	0.0224307	0.1107217			0.00			47047-1.RAW	15:03:59	76.0769105	110.184896
F005244-BLK1_K A15		500	14.165	56.262943	0	255.84072						47048-1.RAW	15:14:15	25.1211388	17.9440394
F005244-BLK2_K A16		500	14.165	33.194562	0	102.0677						47049-1.RAW	15:24:31	33.1241319	13.7680556
F005244-BLK3_K A17		500	14.165	34.197162	0	108.75257						47050-1.RAW	15:34:46	25.3505709	11.2134838
F005244-BSD3_K A18		500	14.165	46.72181	16.14263	720.60424						47051-1.RAW	15:45:02	25.6884259	13.088831
F005244-BSD3_K A19		500	14.165	43.131992	0	303.32022						47052-1.RAW	15:55:18	29.9089699	19.6044271
F005244-BSD2_K A20		500	14.165	39.481896	13.896794	210.32182						47053-1.RAW	16:05:34	28.6992766	13.7087384
F005244-BSD1_K B1		1000	14.165	227.98222	2788.1627	1643.3995						47054-1.RAW	16:15:50	27.4692708	18.8476273
F005244-BSD2_K B2		1000	14.165	296.62281	2610.0332	3071.2262						47055-1.RAW	16:26:06	52.5773148	483.940903
SEQ-CCV1	B3	4E+06	14.165	0.1263574	0.0189373	0.1876164						47056-1.RAW	16:36:21	64.1425347	453.927951
SEQ-CCB1	B4	1	14.165	0.1167014	0.501677	0.084237			100.46			47057-1.RAW	16:46:38	35.4546007	17.3554398
F005245-BLK1_T B5		1	14.165	0.087502	0	0.0612396			0.00			47058-1.RAW	16:56:53	33.827662	98.6920139
F005245-BLK2_T B6		1	14.165	52.407111	3.2132933	232.25528						47059-1.RAW	17:07:09	28.9078704	13.8926794
F005245-BLK3_T B7		500	14.165	991.6804	0	366.50528						47060-1.RAW	17:17:25	31.8247975	15.2475116
F005245-BSD3_T B8		500	14.165	49.747399	0	228.21191						47061-1.RAW	17:27:41	348.340214	2.40717593
F005245-BSD3_T B9		500	14.165	57.74766	8.2331302	601.09982						47062-1.RAW	17:37:57	30.9285301	10.3758681
F005245-BSD2_T B10		500	14.165	50.133197	2.7463517	656.26239						47063-1.RAW	17:48:13	33.6244502	16.9390914
F005245-BSD1_T B11		500	14.165	625.34991	0	722.08372						47064-1.RAW	17:58:29	31.0585359	15.090162
F005245-BSD1_T B12		1000	14.165	347.85484	2954.903	6844.3485						47065-1.RAW	18:08:45	224.894515	9.48029514
F005245-BSD2_T B13		1000	14.165	314.06572	3192.1166	4930.4225						47066-1.RAW	18:19:01	72.7745949	512.034896
SEQ-CCV2	B14	2E+06	14.165	0.2912493	0.0636849	0.3161732						47067-1.RAW	18:29:17	67.0814815	552.002894
SEQ-CCB2	B15	1	14.165	0.1441824	0.5532703	0.0714977			110.79			47068-1.RAW	18:39:33	63.2371528	24.8949392
F005268-B51	B16	1	14.165	0.0912646	0	0.0400775			0.00			47069-1.RAW	18:49:49	38.4579282	107.384954
		1.25	14.165	0.8767185	1.306276	0.1311867						47070-1.RAW	19:00:05	29.5418252	9.30671296
												47071-1.RAW	19:10:21	132.339007	190.239757

PS 20FY

PeakHg2(Raw)	PeakPr(Hg)	RawControl (etf)	Flags	RunCount	Comment
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22.4121528		0 psample10	CT	1	
22.0942708		0 psample10	CT	1	
29.4678819		0 psample10	CT	1	
24.4025463		0 psample10	OK	1	
29.052662		0 psample10	OK	1	
29.6145255		0 psample10	OK	1	
23.174537		0 psample10	OK	1	
19.4858507		0 psample10	OK	1	
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41.0909722		0 psample10	CT	1	
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48.559375		0 psample10	OK	1	KOH
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256.993229		0 psample10	OK	1	KOH
116.377257		0 psample10	OK	1	KOH
85.0387442		0 psample10	OK	1	KOH
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Pg 3084

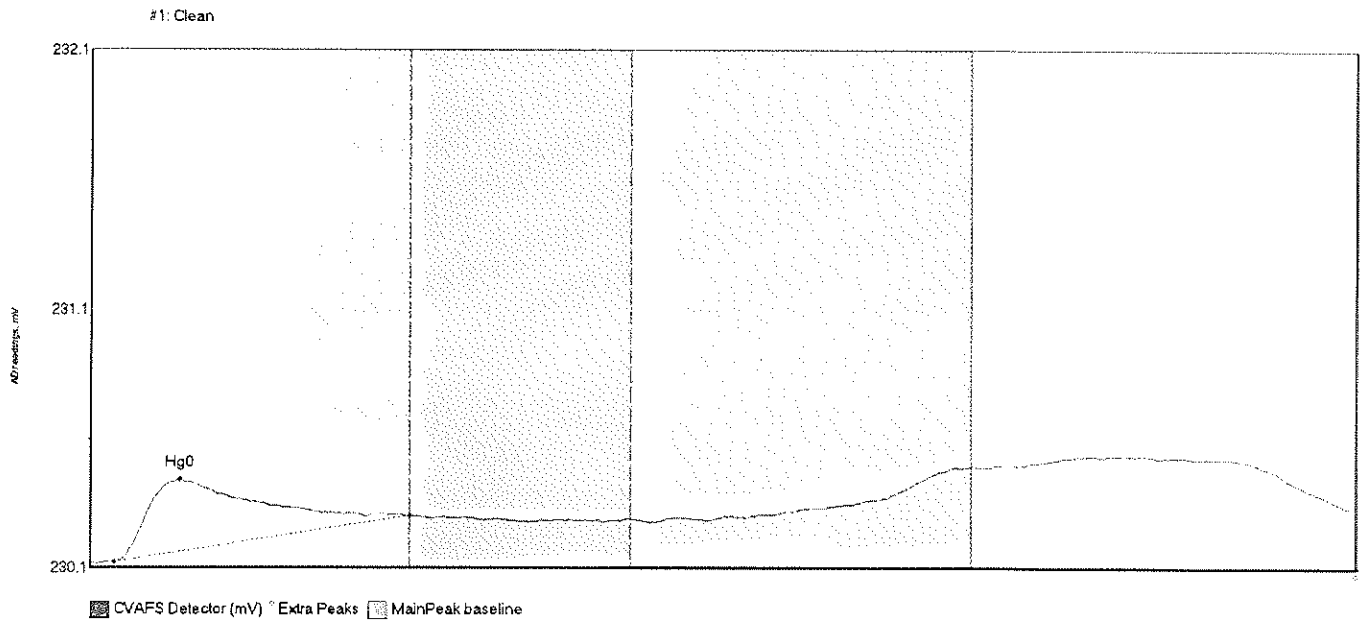
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F005268-BLK2	B19	1.25	14.165	0.2178171	0	0.2422603	47074-1.RAW	19:41:09	43.5246238	13.9655382
F005268-BLK3	B20	1.25	14.165	0.3695341	0	0.6725479	47075-1.RAW	19:51:25	63.9747975	10.3822338
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F005268-MS1	C1	1.25	14.165	0.2041612	1.4434684	0.3365483	47077-1.RAW	20:11:57	41.683912	208.732147
F005268-MSD1	C2	1.25	14.165	0.548774	1.5072597	0.1032956	47078-1.RAW	20:22:13	88.134838	217.330671
0E00002-04RE1	C3	1.25	14.165	0.3300293	0.0837241	0.59298	47079-1.RAW	20:32:30	58.6498843	25.45
F005268-MS2	C4	1.25	14.165	0.2780741	1.4136318	0.1739873	47080-1.RAW	20:42:46	51.6467593	204.710417
SEQ-CCV3	C5	1	14.165	0.1840425	0.5009317	0	47081-1.RAW	20:53:03	45.1739294	98.5664352
SEQ-CCB3	C6	1	14.165	0.1495721	0	0	47082-1.RAW	21:03:19	39.3660301	13.3221933
F005268-MSD2	C7	1.25	14.165	0.1996611	1.502756	0.1731359	47083-1.RAW	21:13:36	41.0773438	216.723611
0E00002-01RE1	C8	1.25	14.165	0.2096446	0.1061326	0.3398902	47084-1.RAW	21:23:52	42.4230324	28.4704861
0E00002-02RE1	C9	1.25	14.165	0.146	0.0130444	0.165119	47085-1.RAW	21:34:08	33.8442708	15.9229745
0E00002-03RE1	C10	1.25	14.165	0.1924902	0.1378972	0.3622112	47086-1.RAW	21:44:24	40.1107639	32.7520833
0E00002-06RE1	C11	1.25	14.165	0.181551	0.2048367	0.1667938	47087-1.RAW	21:54:41	38.6362558	41.7749711
0E00002-07RE1	C12	1.25	14.165	0.2103201	0.2025975	0.8866698	47088-1.RAW	22:04:57	42.5140914	41.4731481
0E00002-08RE1	C13	1.25	14.165	0.3765749	0.1747219	0.2503298	47089-1.RAW	22:15:14	64.9238348	37.7157407
0E00002-09RE1	C14	1.25	14.165	0.8944486	0.2125804	0.6698646	47090-1.RAW	22:25:30	134.728877	42.81875
0E00002-10RE1	C15	1.25	14.165	0.4336557	0.1216051	0.1443509	47091-1.RAW	22:35:47	72.617853	30.5560475
0E00002-11RE1	C16	1.25	14.165	1.890284	0.0086656	0.6895516	47092-1.RAW	22:46:03	268.959144	15.3327546
SEQ-CCV4	C17	1	14.165	0.8442367	0.3800743	0.0131516	47093-1.RAW	22:56:19	156.409735	78.2032407
SEQ-CCB4	C18	1	14.165	0.5201421	0	0	47094-1.RAW	23:06:35	101.803193	11.1999132
0E00002-12RE1	C19	1.25	14.165	0.657632	0.1319151	0.0338166	47095-1.RAW	23:16:52	102.807986	31.9457465
0E00045-01	C20	1.25	14.165	1.2665785	0	0	47096-1.RAW	23:27:08	184.888859	3.18148148
0E00045-02	C21	1.25	14.165	1.6440153	0.1523262	0.1673648	47097-1.RAW	23:37:25	235.764178	34.6969907
0E00045-03	A1	1.25	14.165	1.7373272	0.0910884	0.0283293	47098-1.RAW	23:47:42	248.34184	26.4426505
0E00045-04	A2	1.25	14.165	2.0991347	0.246427	0.9172638	47099-1.RAW	23:57:58	297.110457	47.3809896
0E00045-05	A3	1.25	14.165	2.5524563	0	1.5118282	47100-1.RAW	0:08:15	358.214409	1.73086488
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0E00045-07	A5	50	14.165	48.20802	1.9859873	0.5028853	47102-1.RAW	0:28:48	176.615625	20.8570602
0E00045-08	A6	50	14.165	41.993883	6.4202668	19.648487	47103-1.RAW	0:39:04	155.675284	35.7996528
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AS 4/24

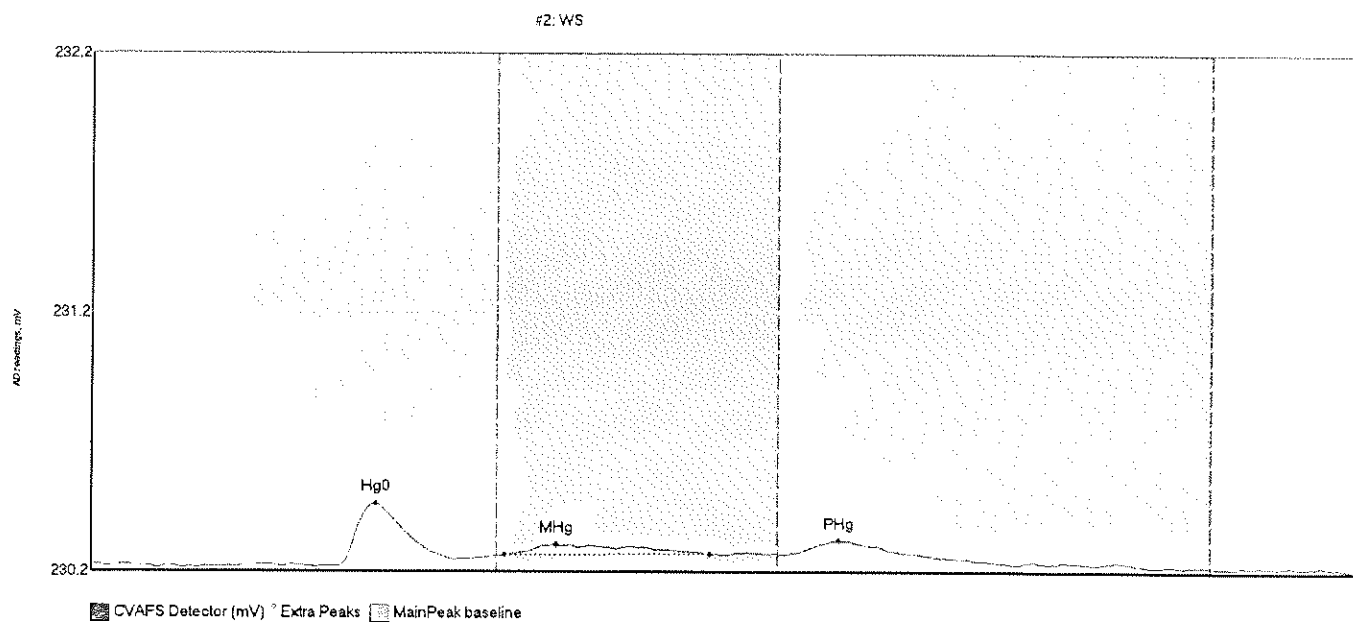
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WS	A5	F005268-BLK1 B18
WS	A6	F005268-BLK2 B19
SEQ-IBL1	A7	F005268-BLK3 B20
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SEQ-CAL1	A8	0E00002-05RE B21
SEQ-CAL2	A9	F005268-MS1 C1
SEQ-CAL3	A10	F005268-MSD1 C2
SEQ-CAL4	A11	0E00002-04RE C3
SEQ-CAL5	A12	F005268-MS2 C4
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SEQ-ICV1	A13	SEQ-CCV3 C5
SEQ-ICB1	A14	SEQ-CCB3 C6
F005244-BLK1_	A15	F005268-MSD2 C7
F005244-BLK2_	A16	0E00002-01RE C8
F005244-BLK3_	A17	0E00002-02RE C9
F005244-BS3_	A18	0E00002-03RE C10
F005244-BSD3_	A19	0E00002-06RE C11
F005244-BS2_	A20	0E00002-07RE C12
F005244-BS1_	A21	0E00002-08RE C13
F005244-BSD1_	B1	0E00002-09RE C14
F005244-BSD2_	B2	0E00002-10RE C15
SEQ-CCV1	B3	0E00002-11RE C16
SEQ-CCB1	B4	SEQ-CCV4 C17
F005245-BLK1_	B5	SEQ-CCB4 C18
F005245-BLK2_	B6	0E00002-12RE C19
F005245-BLK3_	B7	0E00045-01 C20
F005245-BS3_	B8	0E00045-02 C21
F005245-BSD3_	B9	0E00045-03 A1
F005245-BS2_	B10	0E00045-04 A2
F005245-BS1_	B11	0E00045-05 A3
F005245-BSD1_	B12	0E00045-06 A4
F005245-BSD2_	B13	0E00045-07 A5
SEQ-CCV2	B14	0E00045-08 A6
SEQ-CCB2	B15	SEQ-CCV5 A7
F005268-BS1	B16	SEQ-CCB5 A8

Verified by: JLS 5/21/2020

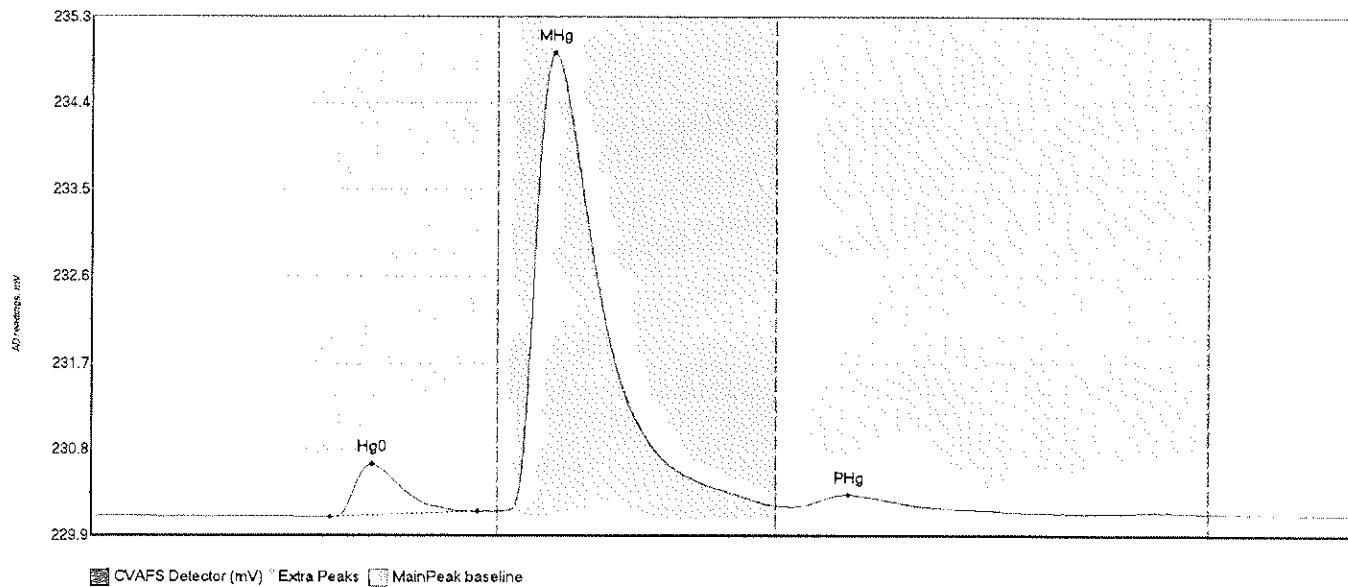


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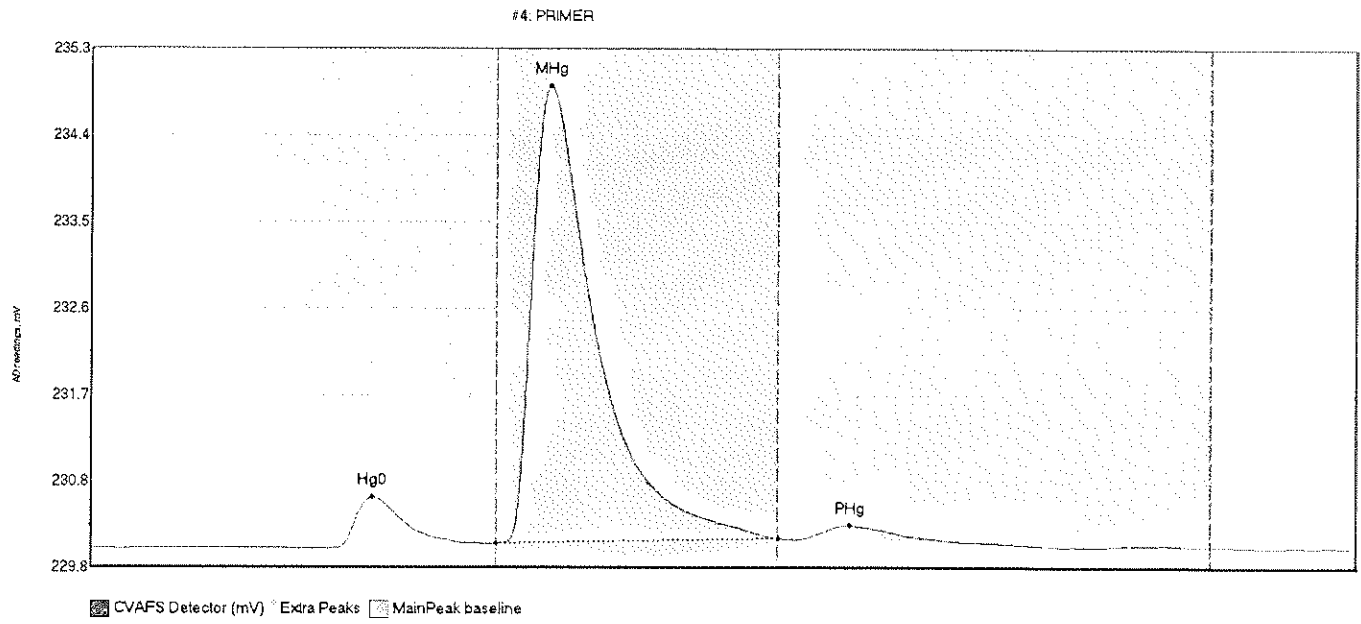


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
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WS MHg	9.430	81.6	121.7	230.23	230.23	91.8	0.040	OK	230.1897	0.00	-0.02	
WS PHg	7.181	136.4	161.3	230.23	230.23	147.0	0.057	OK	230.1897	0.00	-0.02	

#3: PRIMER

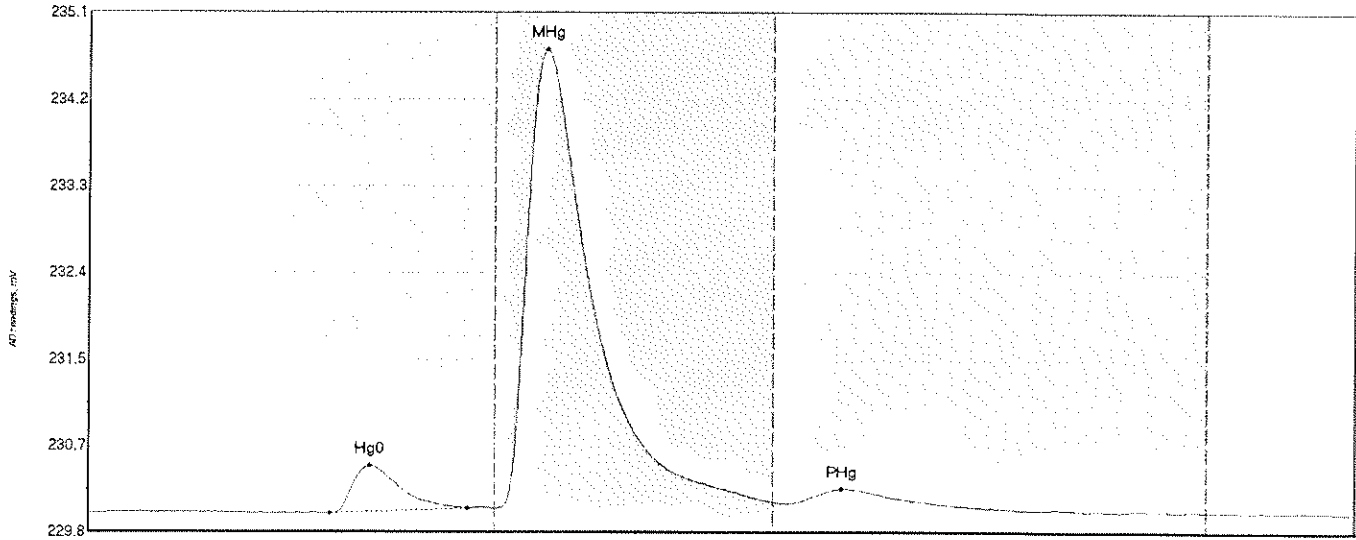


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
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PRIMER MHg	705.383	80.0	135.0	230.17	230.22	91.3	4.726	CT	230.1166	0.00	0.00	
PRIMER PHg	15.472	138.1	162.5	230.21	230.22	149.3	0.125	OK	230.1166	0.00	0.00	



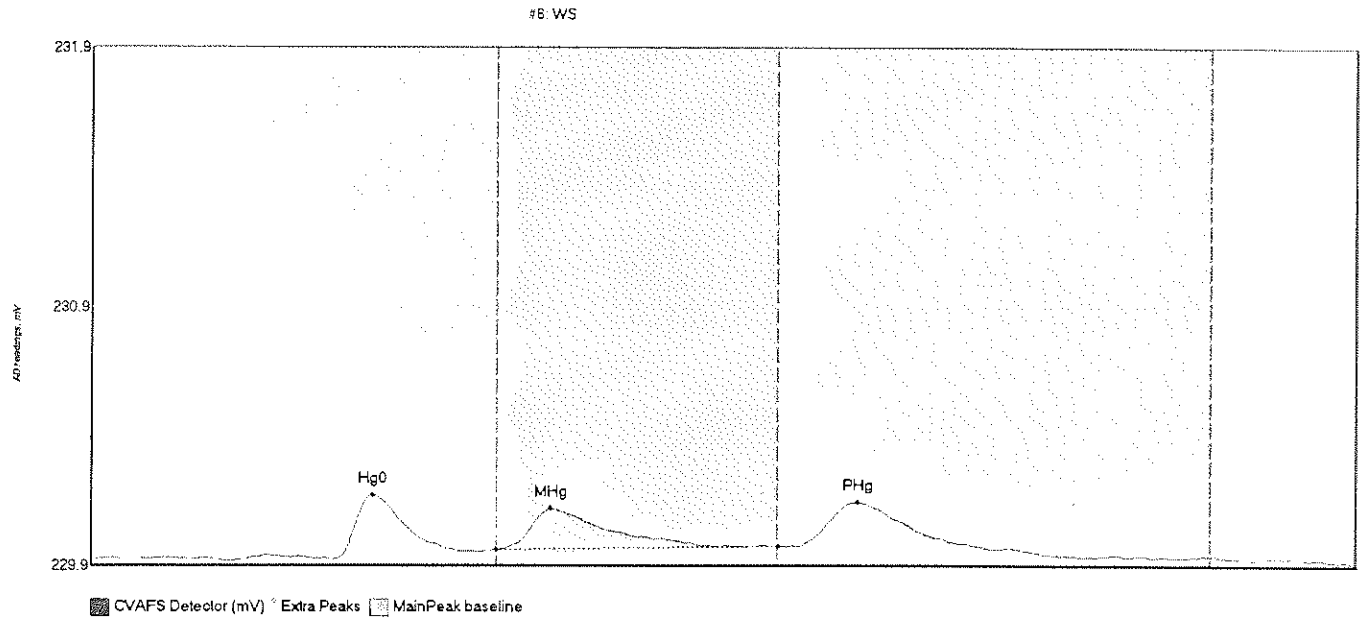
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	lDev	lShift	Comment
PRIMER Hg0	56.773	46.1	79.3	230.05	230.10	55.4	0.537	OK	230.0542	0.00	0.00	
PRIMER MHg	703.687	80.0	135.0	230.10	230.16	90.7	4.835	CT	230.0542	0.00	0.00	
PRIMER PHg	22.412	138.5	168.5	230.14	230.13	149.3	0.149	OK	230.0542	0.00	0.00	

#5: PRIMER

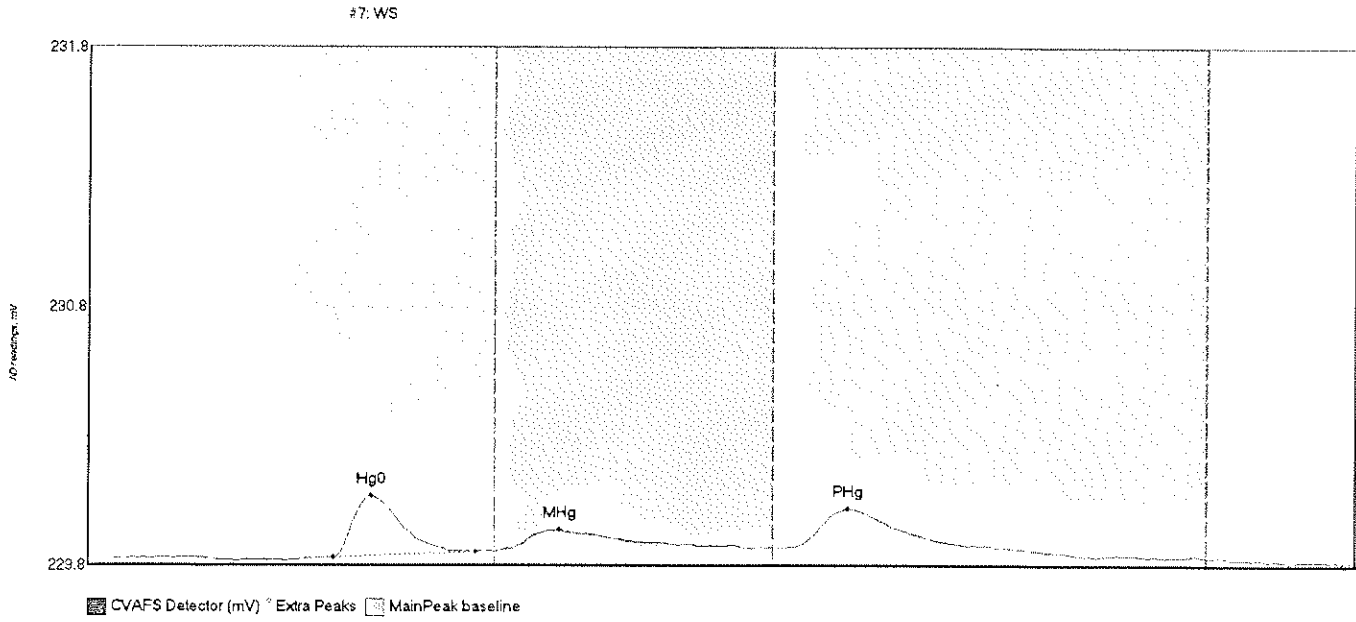


CVAFS Detector (mV) * Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
PRIMER Hg0	49.806	47.9	74.7	229.98	230.03	55.7	0.484	OK	229.9833	0.00	-0.01	
PRIMER MHg	687.903	80.6	135.0	230.03	230.09	90.1	4.659	CT	229.9833	0.00	-0.01	
PRIMER PHg	22.020	137.7	167.6	230.08	230.07	148.3	0.147	OK	229.9833	0.00	-0.01	

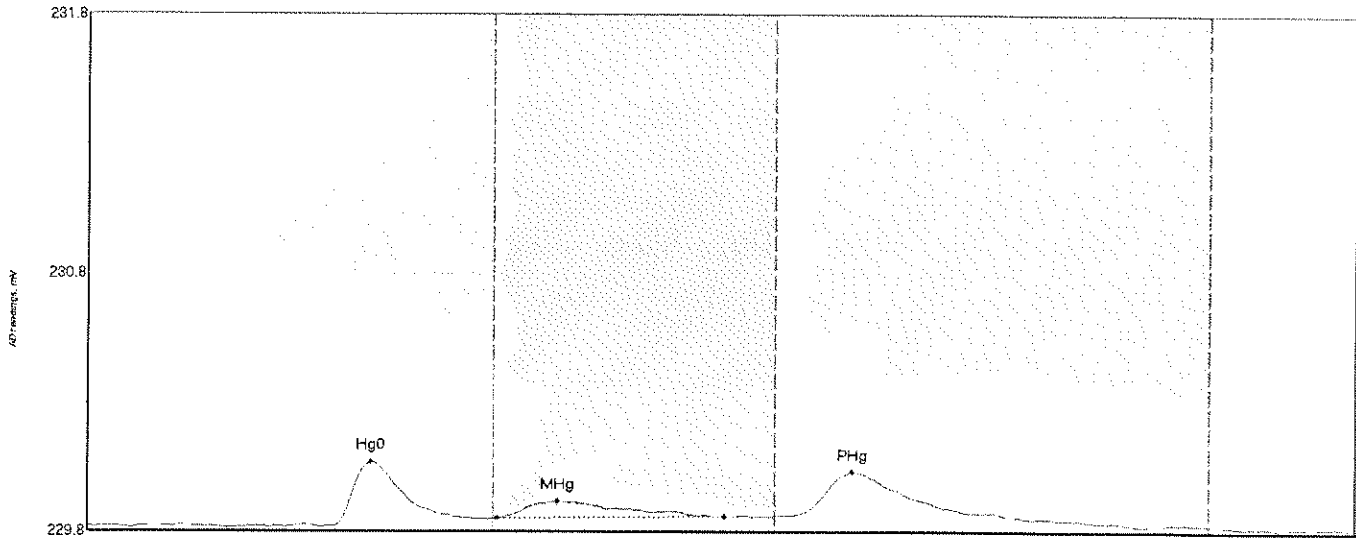


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
WS Hg0	26.124	47.5	76.6	229.91	229.94	55.6	0.247	OK	229.9095	0.00	-0.01	
WS MHg	27.347	80.0	135.0	229.95	229.96	90.6	0.157	CT	229.9095	0.00	-0.01	
WS PHg	29.468	139.2	177.1	229.96	229.95	150.8	0.170	OK	229.9095	0.00	-0.01	



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
WS Hg0	24.998	48.6	76.3	229.84	229.86	56.1	0.238	OK	229.8367	0.00	-0.01	
WS MHg	17.705	80.2	130.7	229.86	229.88	92.7	0.085	OK	229.8367	0.00	-0.01	
WS PHg	24.403	139.3	178.4	229.88	229.88	149.6	0.146	OK	229.8367	0.00	-0.01	

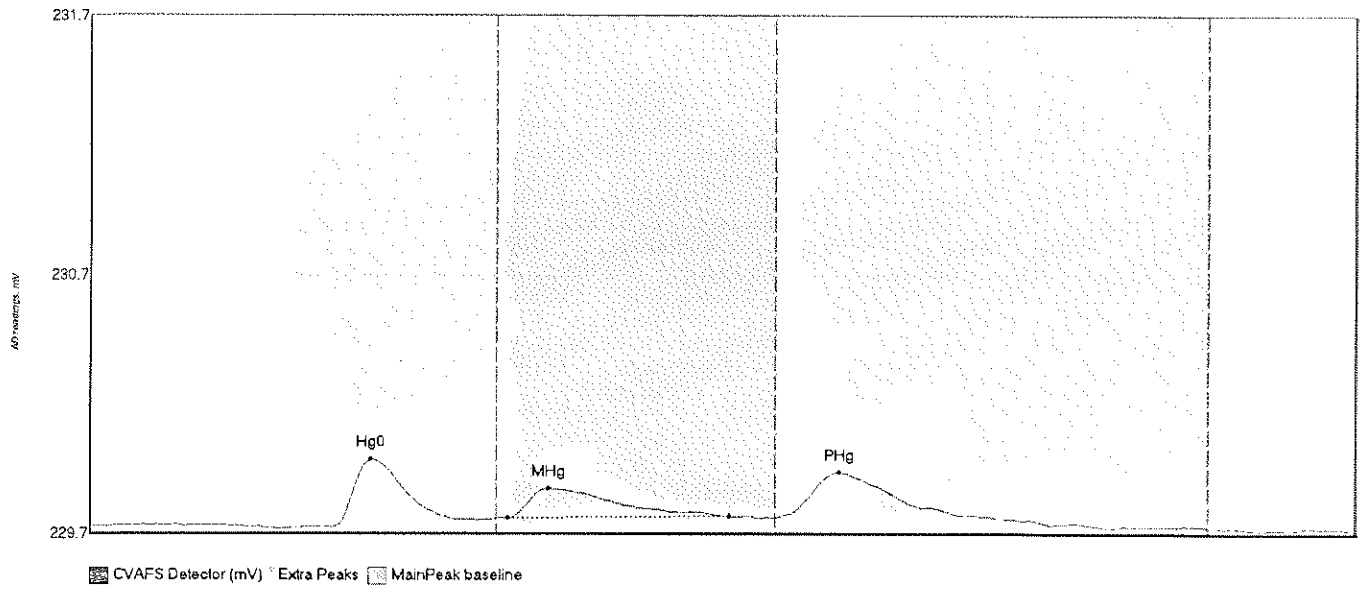
#8: SEQ-IBL1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

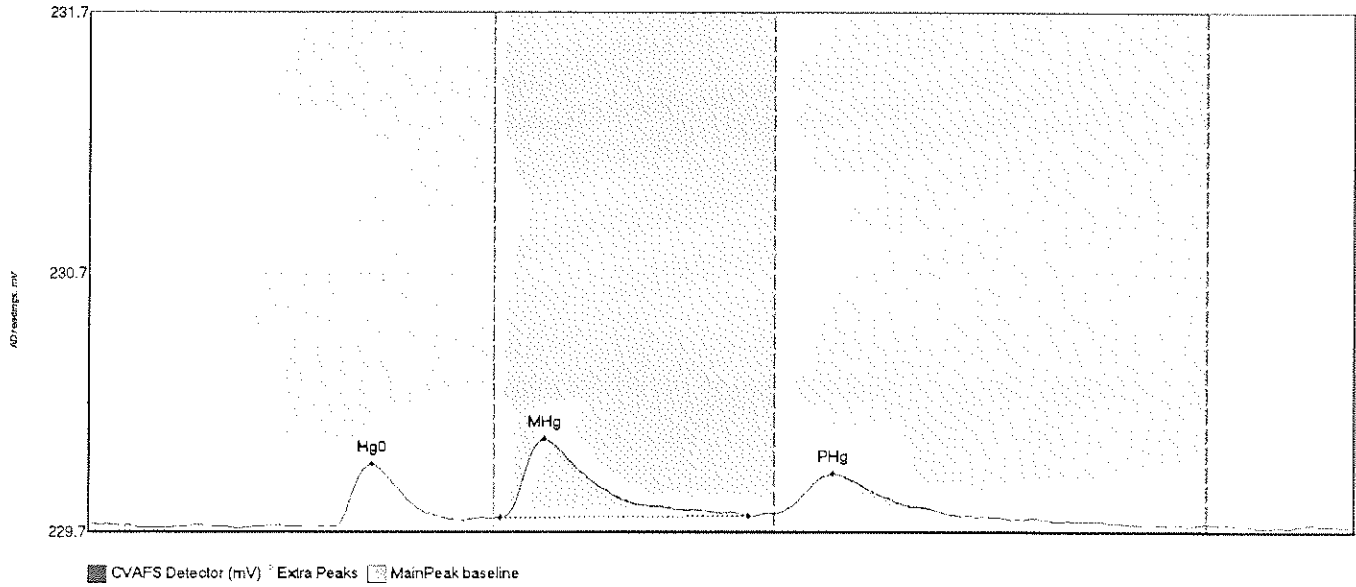
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	26.818	48.0	78.9	229.77	229.80	55.7	0.249	OK	229.7733	0.00	-0.01	
SEQ-IBL1 MHg	14.165	80.8	125.1	229.80	229.81	92.5	0.066	OK	229.7733	0.00	-0.01	
SEQ-IBL1 PHg	29.466	138.0	180.8	229.81	229.81	150.2	0.172	OK	229.7733	0.00	-0.01	

#9: SEQ-CAL1



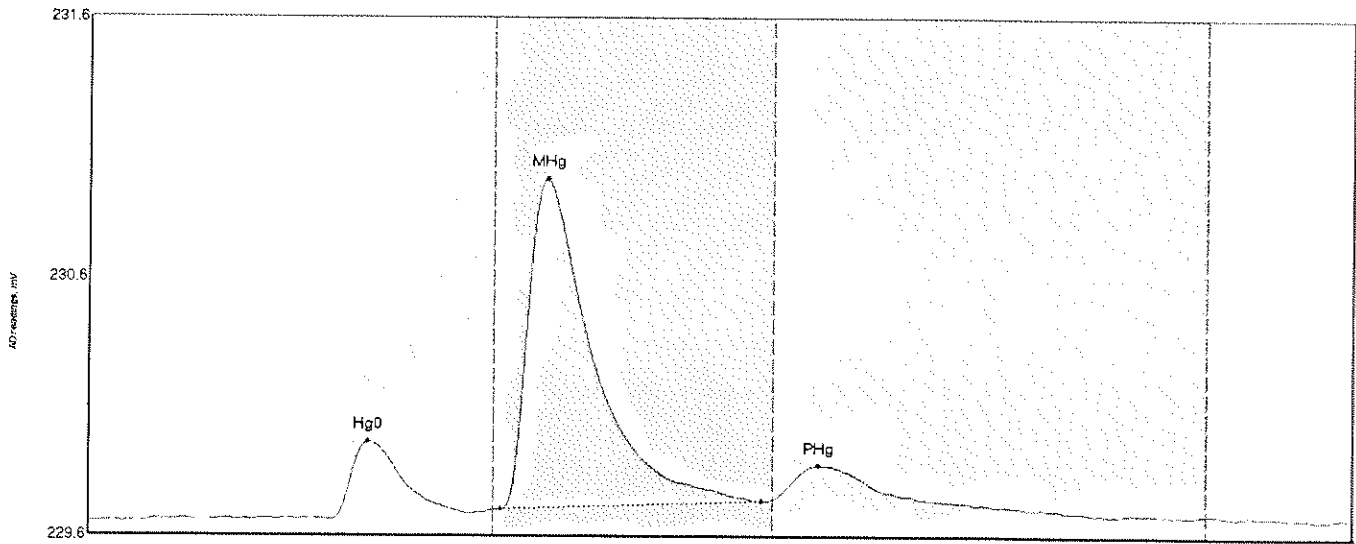
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIdev	BIShift	Comment
SEQ-CAL1 Hg0	26.217	47.8	76.1	229.72	229.75	55.6	0.263	OK	229.7274	0.00	-0.01	
SEQ-CAL1 MHg	21.885	82.2	125.9	229.76	229.76	90.1	0.114	OK	229.7274	0.00	-0.01	
SEQ-CAL1 PHg	29.615	135.0	175.3	229.76	229.76	147.4	0.175	OK	229.7274	0.00	-0.01	

#10: SEQ-CAL2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CAL2 Hg0	24.404	46.7	73.9	229.68	229.70	55.8	0.240	OK	229.6896	0.00	-0.02	
SEQ-CAL2 MRg	47.449	81.3	129.9	229.71	229.72	90.0	0.304	OK	229.6896	0.00	-0.02	
SEQ-CAL2 PHg	23.175	135.0	168.1	229.73	229.73	146.3	0.152	OK	229.6896	0.00	-0.02	

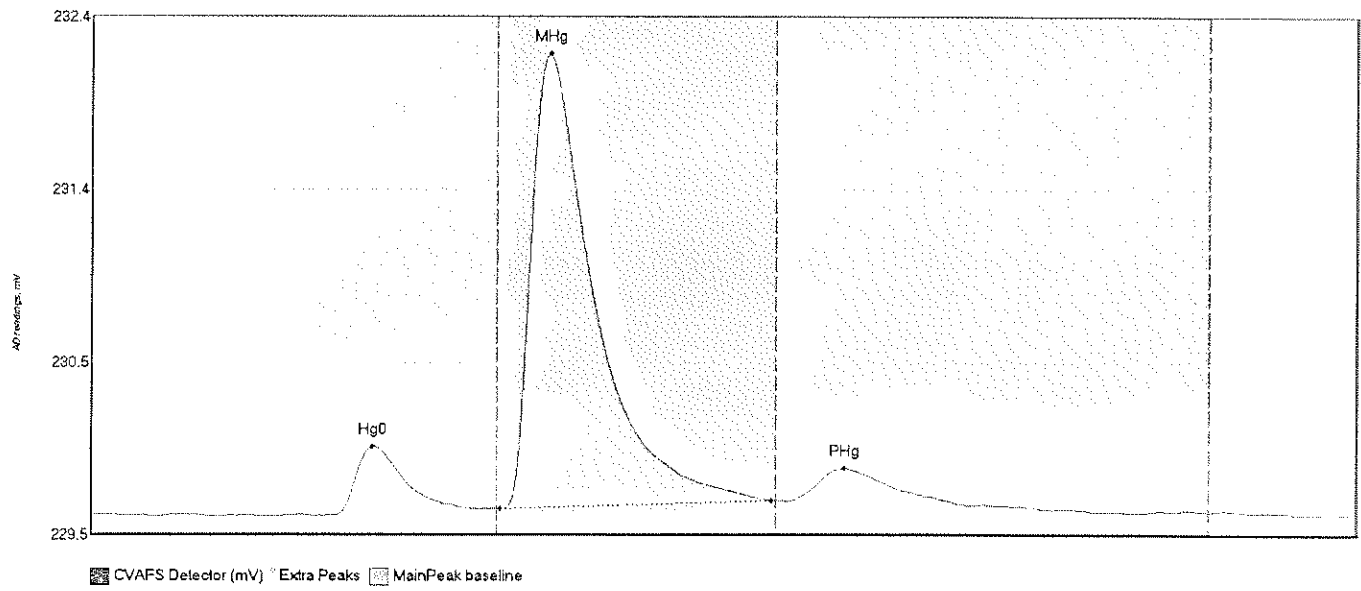
#11: SEQ-CAL3



CVAFS Detector (mV) Extra Peaks MainPeak baseline

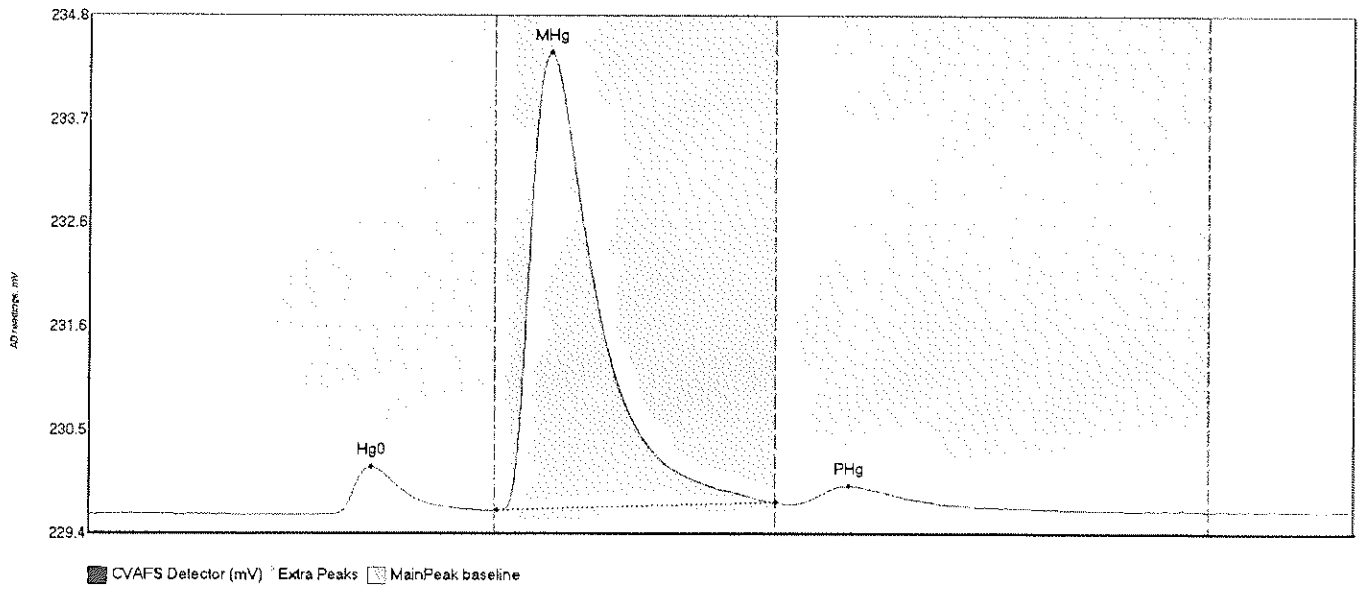
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL3 Hg0	31.599	10.9	75.0	229.83	229.66	55.4	0.305	OK	229.6279	0.00	0.02	
SEQ-CAL3 MHg	186.231	81.4	132.6	229.68	229.71	98.4	1.275	OK	229.6279	0.00	0.02	
SEQ-CAL3 PHg	19.486	135.0	163.6	229.72	229.72	143.9	0.133	OK	229.6279	0.00	0.02	

#12: SEQ-CAL4



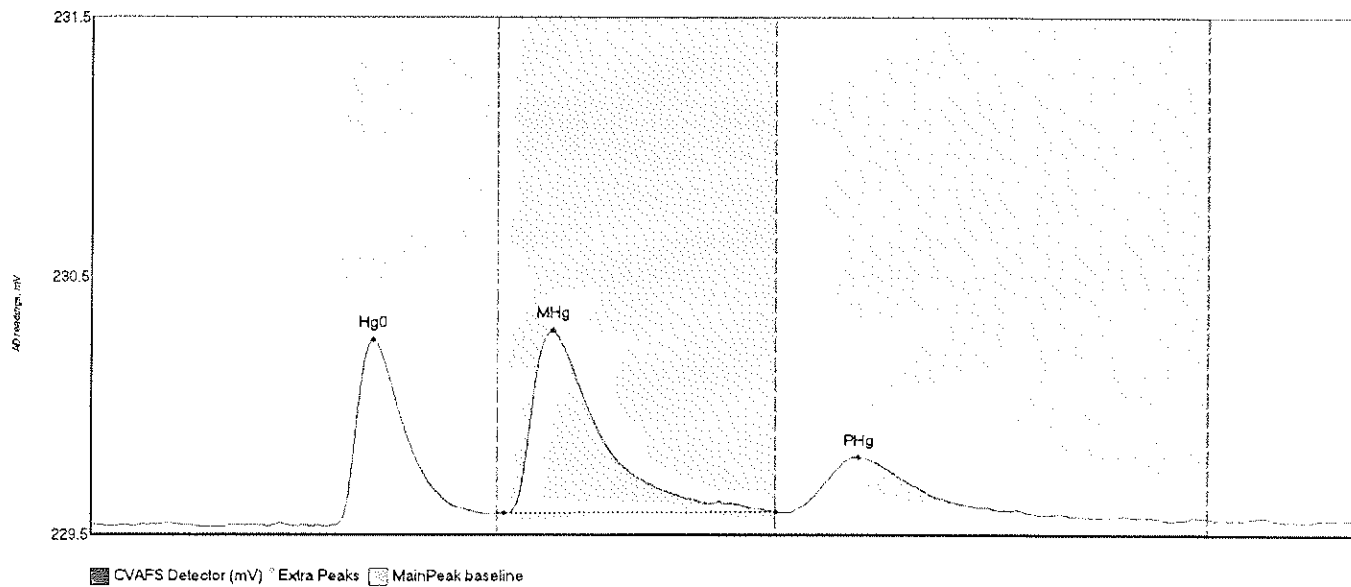
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
SEQ-CAL4 Hg0	39.421	48.1	76.6	229.62	229.65	55.6	0.377	OK	229.6235	0.00	0.00	
SEQ-CAL4 MHg	364.654	80.6	134.1	229.65	229.70	90.4	2.514	OK	229.6235	0.00	0.00	
SEQ-CAL4 PHg	26.212	137.2	168.0	229.70	229.70	148.2	0.181	OK	229.6235	0.00	0.00	

#13: SEQ-CAL5

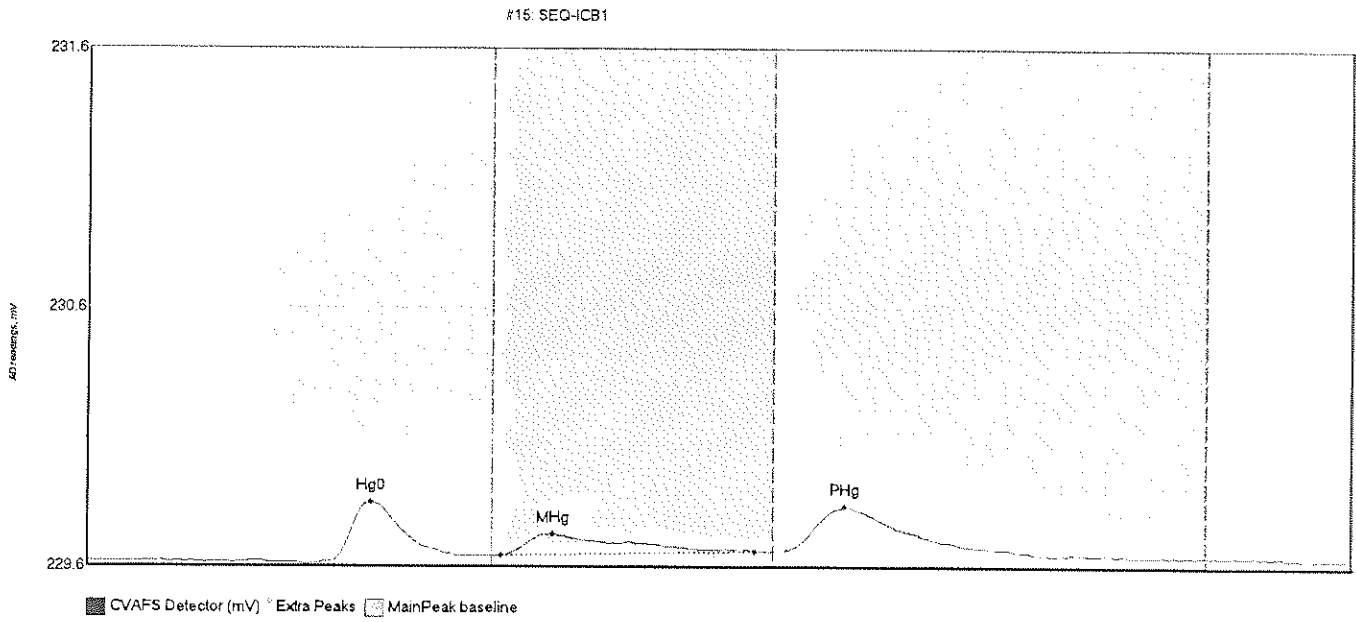


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Stdev	Shift	Comment
SEQ-CAL5 Hg0	53.093	47.9	79.8	229.60	229.63	55.7	0.493	OK	229.5929	0.00	0.03	
SEQ-CAL5 MHg	711.413	80.5	135.0	229.63	229.72	90.9	4.777	CT	229.5929	0.00	0.03	
SEQ-CAL5 PHg	29.215	138.5	169.3	229.70	229.69	149.6	0.190	OK	229.5929	0.00	0.03	

#14 SEQ-ICV1

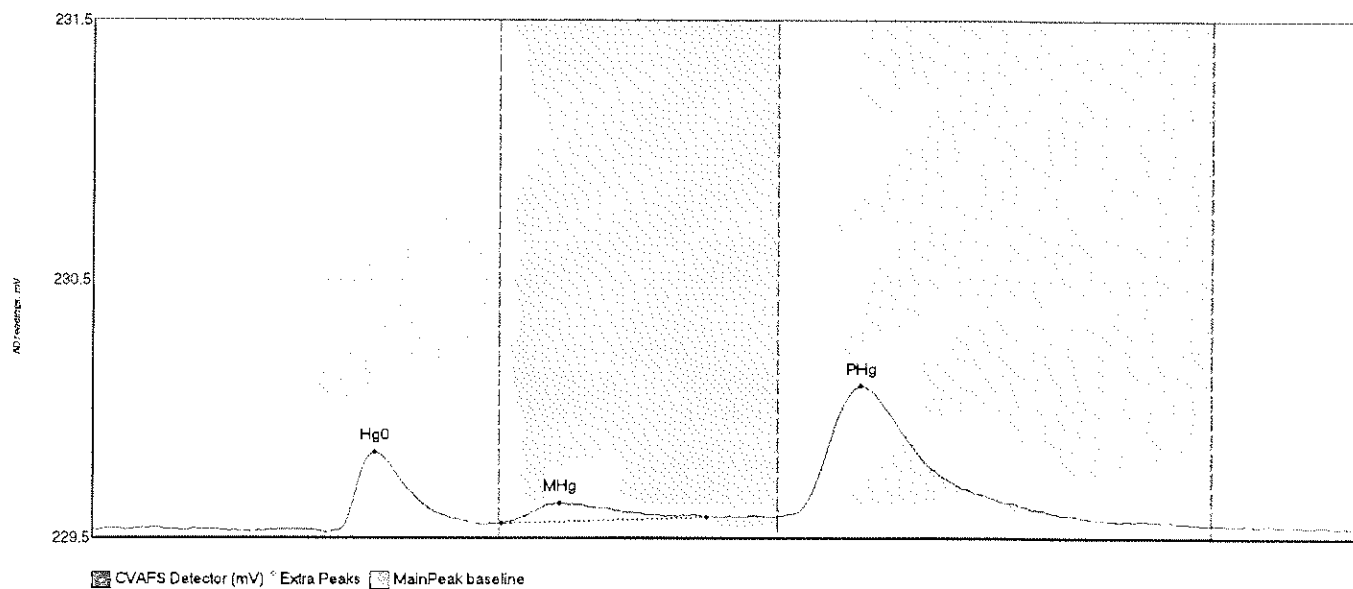


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	76.077	46.5	79.1	229.58	229.62	55.7	0.721	OK	229.5838	0.00	0.02	
SEQ-ICV1 MHg	110.165	81.3	135.0	229.63	229.63	90.9	0.708	CT	229.5838	0.00	0.02	
SEQ-ICV1 PHg	43.607	137.5	166.5	229.63	229.62	151.1	0.216	OK	229.5838	0.00	0.02	



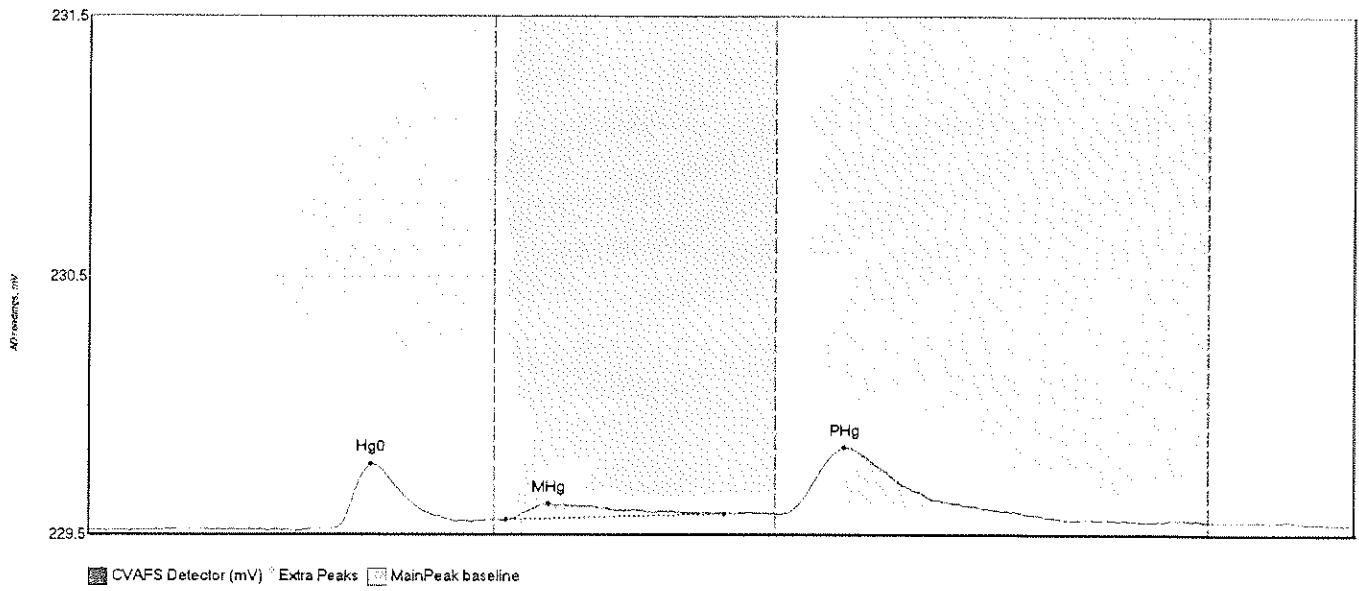
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
SEQ-ICB1 Hg0	25.121	47.1	76.1	229.58	229.60	56.1	0.230	OK	229.5814	0.00	0.01	
SEQ-ICB1 MHg	17.944	81.8	131.3	229.60	229.62	91.9	0.084	OK	229.5814	0.00	0.01	
SEQ-ICB1 PHg	32.820	136.7	182.9	229.62	229.62	149.1	0.175	OK	229.5814	0.00	0.01	

#18: F005244-BLK1_KOH



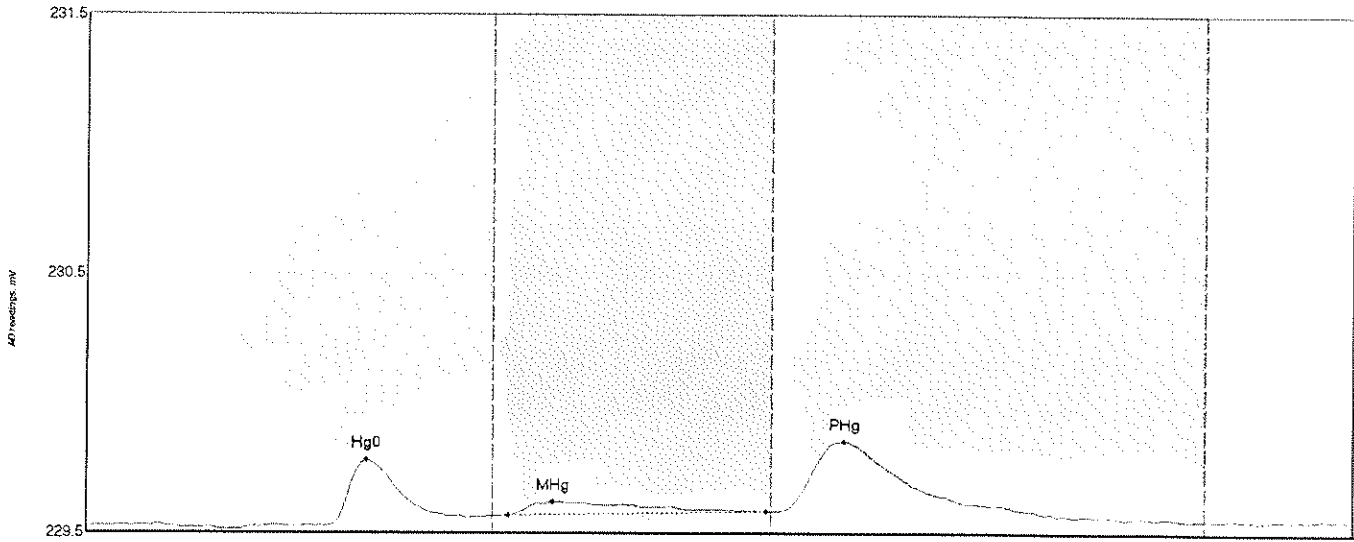
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005244-BLK1_KO	33.124	48.1	76.6	229.57	229.59	55.9	0.300	OK	229.5702	0.00	0.01	KOH
F005244-BLK1_KO	13.768	80.5	121.0	229.59	229.62	92.0	0.077	OK	229.5702	0.00	0.01	KOH
F005244-BLK1_KO	100.378	135.7	190.4	229.62	229.62	151.2	0.504	OK	229.5702	0.00	0.01	KOH

#17: F005244-BLK2_KOH



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005244-BLK2_KO	25.351	44.4	75.5	229.56	229.59	55.6	0.248	OK	229.5583	0.00	0.02	KOH
F005244-BLK2_KO	11.213	82.5	125.0	229.60	229.62	90.7	0.061	OK	229.5583	0.00	0.02	KOH
F005244-BLK2_KO	48.559	135.9	184.7	229.62	229.62	148.6	0.259	OK	229.5583	0.00	0.02	KOH

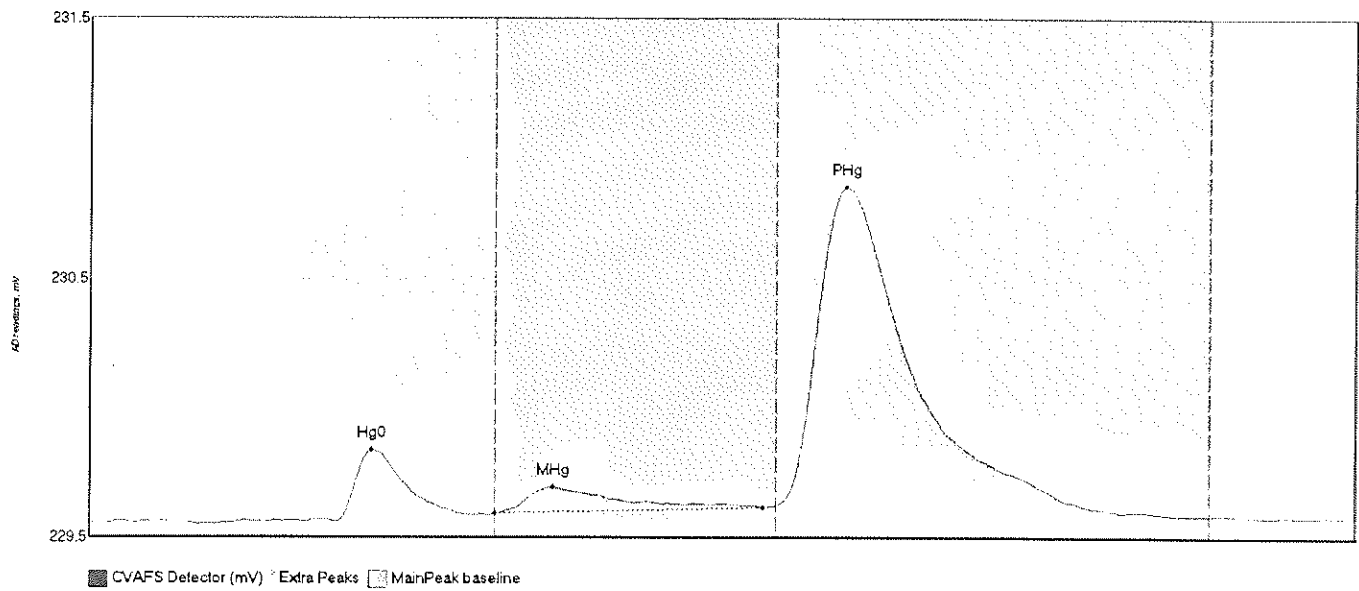
#18: F005244-BLK3_KOH



CVAFS Detector (mV) ° Extra Peaks MainPeak baseline

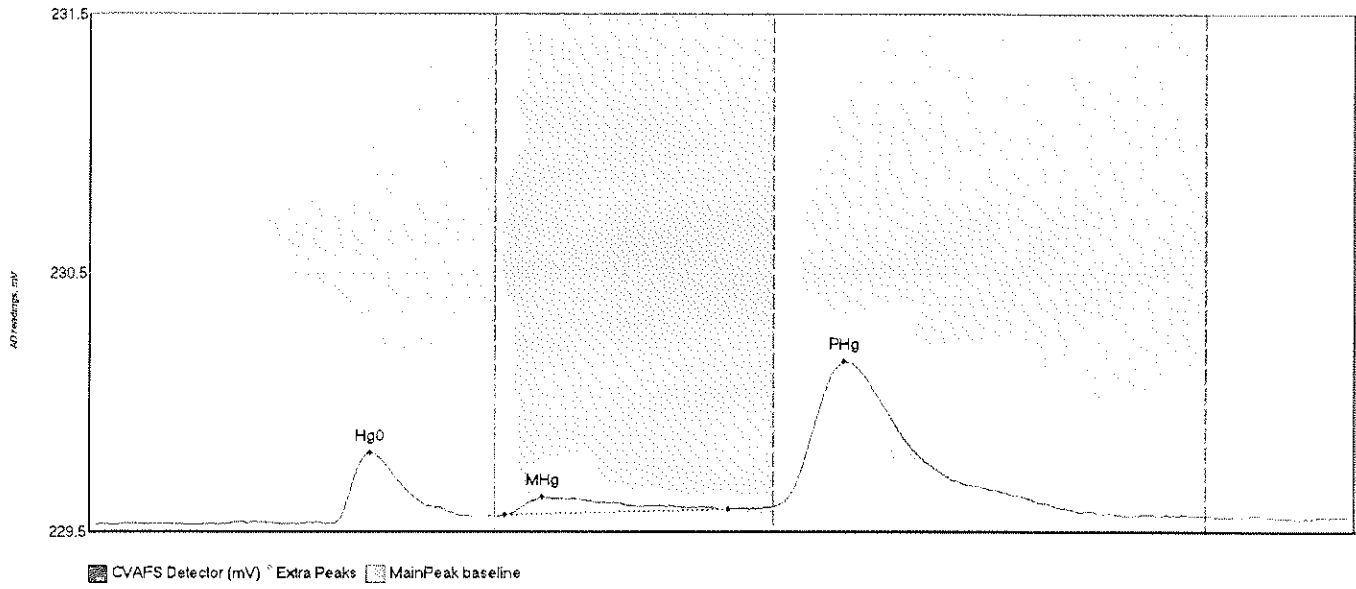
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	R1Dev	R1S1:11	Comment
F005244-BLK3_KO	25.617	47.9	74.9	229.57	229.60	55.4	0.252	OK	229.5729	0.00	0.02	KOH
F005244-BLK3_KO	13.089	83.1	134.0	229.61	229.63	91.7	0.054	OK	229.5729	0.00	0.02	KOH
F005244-BLK3_KO	50.810	136.2	183.4	229.63	229.63	149.2	0.271	OK	229.5729	0.00	0.02	KOH

#19: F005244-BS3_KOH



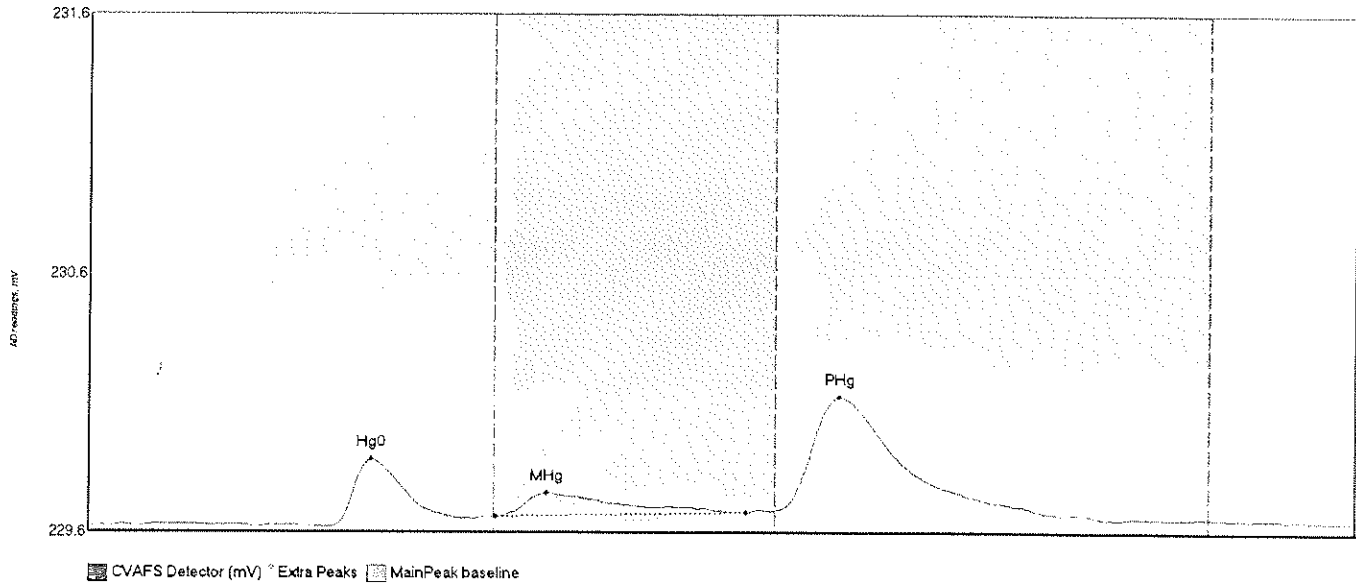
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005244-BS3_KOH	29.909	48.4	78.6	229.58	229.60	55.5	0.274	OK	229.5728	0.00	0.02	KOH
F005244-BS3_KOH	19.604	80.0	132.4	229.61	229.63	91.5	0.101	OK	229.5728	0.00	0.02	KOH
F005244-BS3_KOH	256.935	135.0	197.1	229.64	229.63	146.8	1.228	OK	229.5728	0.00	0.02	KOH

#20: F005244-BSD3_KOH



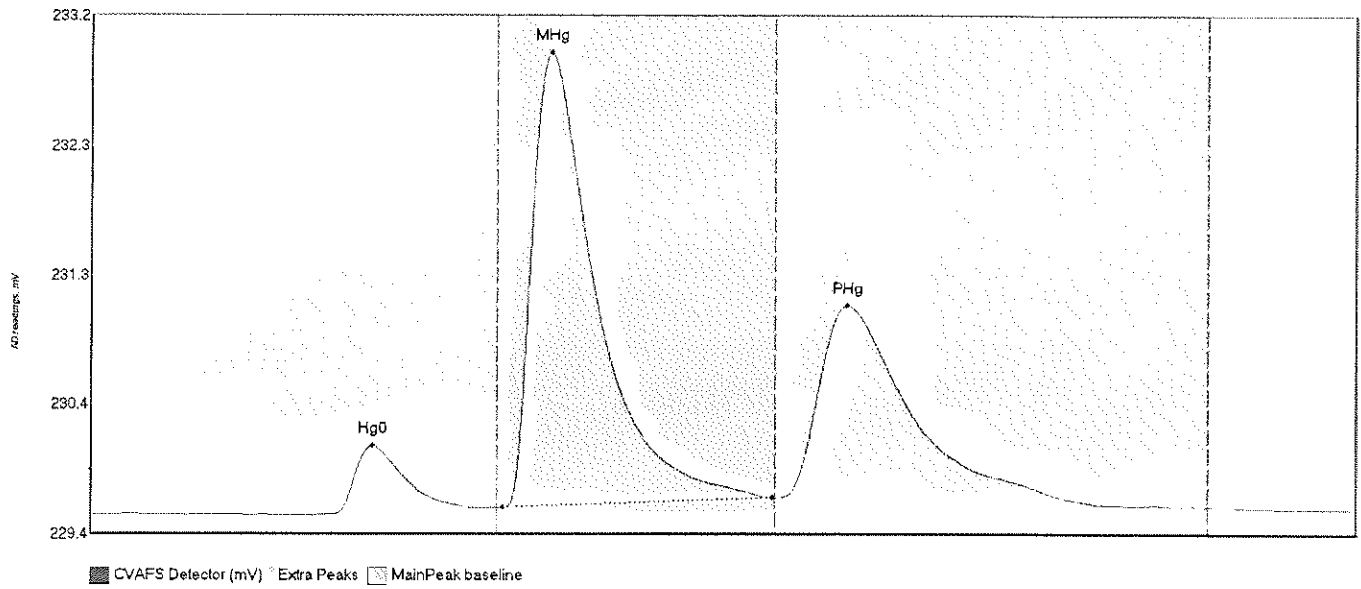
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005244-BSD3_KO	28.699	26.6	76.2	229.57	229.60	55.7	0.278	OK	229.5684	0.00	0.03	KOH
F005244-BSD3_KO	13.709	81.9	126.0	229.61	229.63	89.4	0.070	OK	229.5684	0.00	0.03	KOH
F005244-BSD3_KO	116.377	135.0	191.3	229.64	229.63	148.8	0.559	OK	229.5684	0.00	0.03	KOH

#21: F005244-BS2_KOH



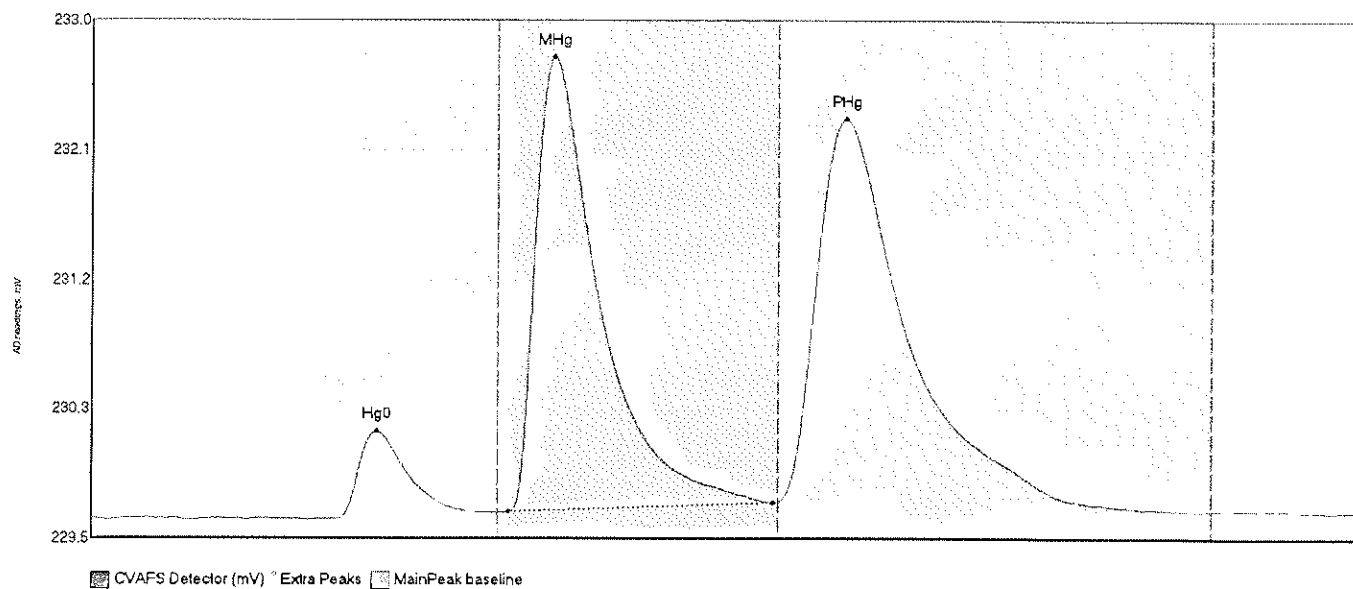
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F005244-BS2_KOH	27.469	47.1	75.9	229.56	229.62	55.7	0.262	OK	229.5882	0.00	0.02	KOH
F005244-BS2_KOH	18.848	80.4	129.3	229.62	229.64	90.3	0.092	OK	229.5882	0.00	0.02	KOH
F005244-BS2_KOH	85.039	135.6	188.2	229.65	229.64	147.6	0.436	OK	229.5882	0.00	0.02	KOH

#22: F005244-BS1_KOH



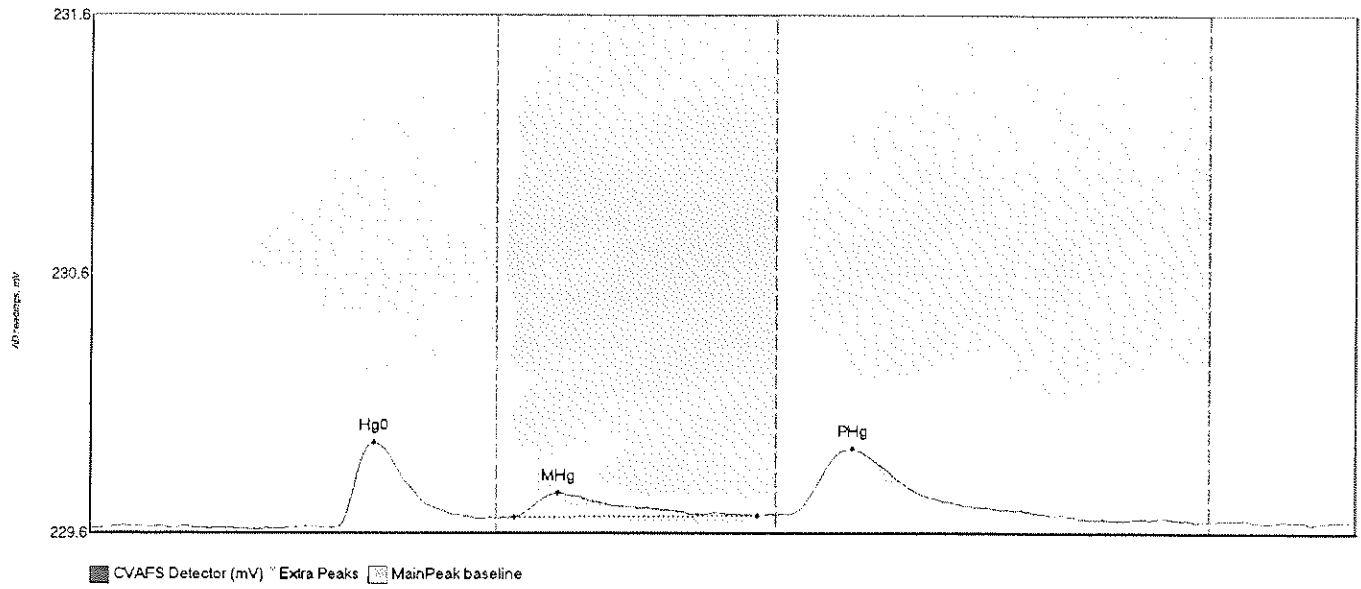
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F005244-BS1_KOH	52.577	46.2	76.1	229.59	229.63	55.9	0.497	OK	229.5892	0.00	0.03	KOH
F005244-BS1_KOH	483.941	81.1	134.5	229.64	229.71	90.6	3.301	OK	229.5892	0.00	0.03	KOH
F005244-BS1_KOH	291.060	135.7	198.3	229.71	229.66	149.1	1.396	OK	229.5892	0.00	0.03	KOH

#23: F005244-BSD1_KOH

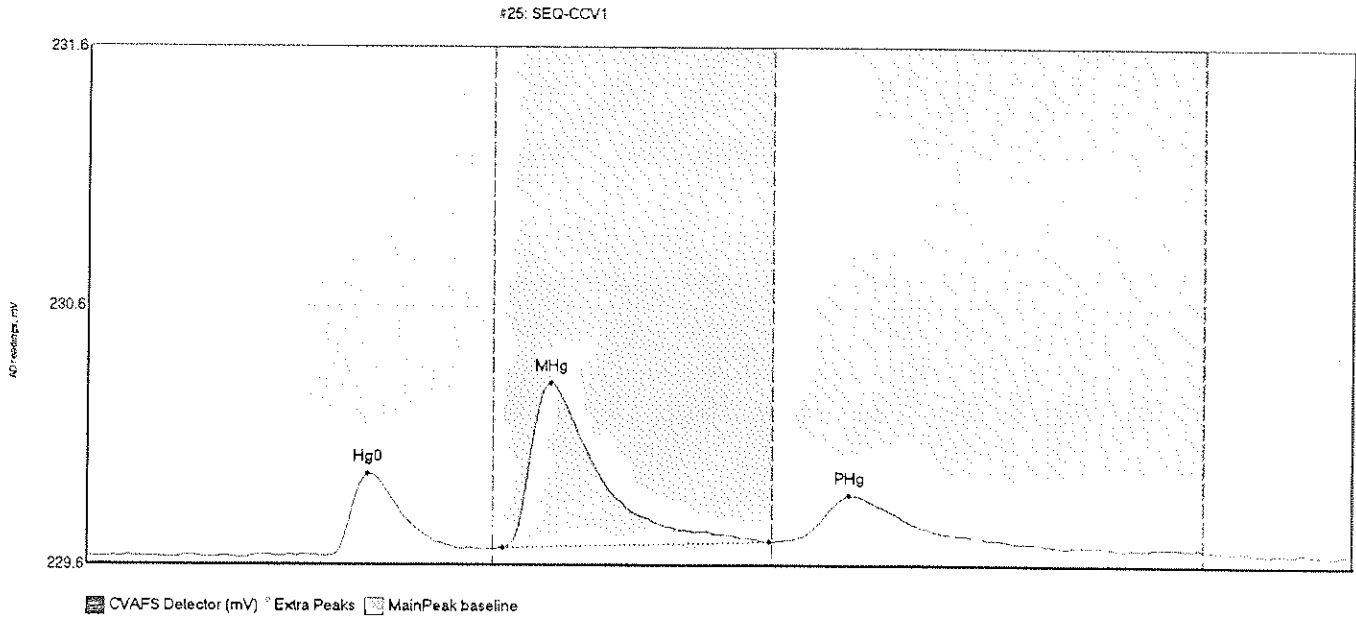


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005244-BSD1_KO	64.143	47.6	80.0	229.59	229.64	56.0	0.597	CT	229.5963	0.00	0.04	KOH
F005244-BSD1_KO	453.897	82.1	133.9	229.64	229.70	91.2	3.112	OK	229.5963	0.00	0.04	KOH
F005244-BSD1_KO	531.634	135.0	197.1	229.71	229.69	148.2	2.621	OK	229.5963	0.00	0.04	KOH

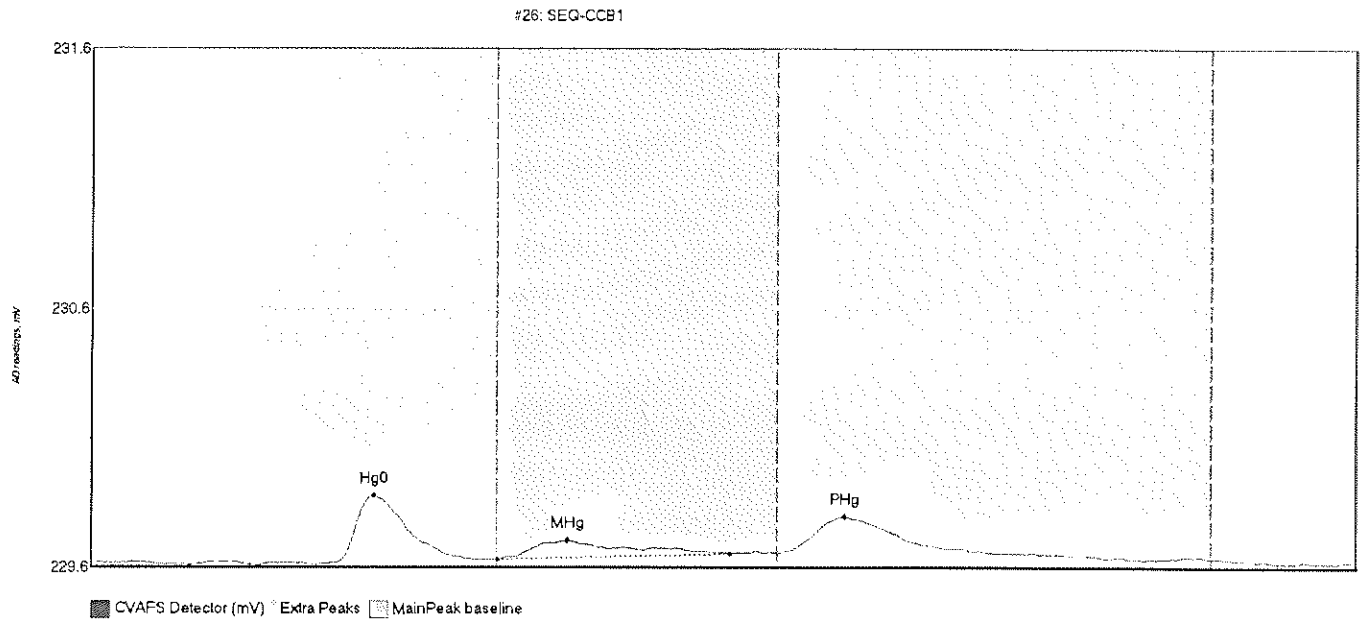
#24: F005244-BSD2_KOH



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005244-BSD2_KO	35.455	49.0	77.0	229.59	229.63	56.0	0.323	OK	229.5924	0.00	0.02	KOH
F005244-BSD2_KO	17.355	83.5	131.2	229.63	229.64	92.1	0.093	OK	229.5924	0.00	0.02	KOH
F005244-BSD2_KO	45.776	137.5	186.1	229.64	229.65	150.0	0.252	OK	229.5924	0.00	0.02	KOH

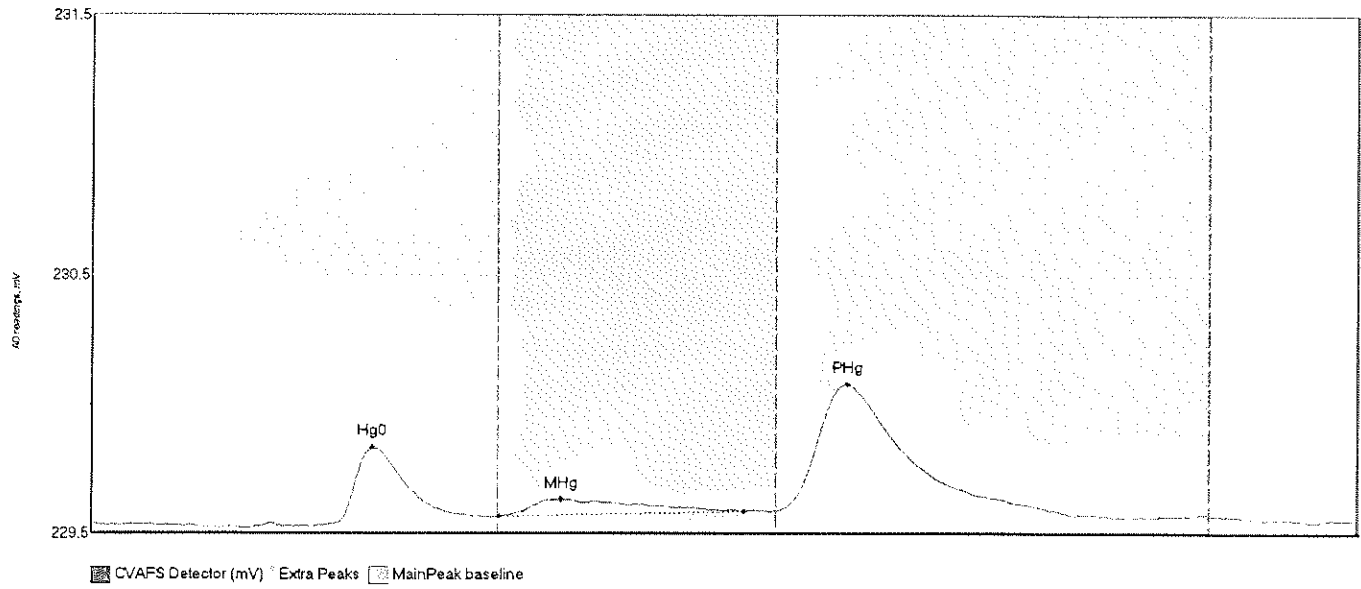


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
SEQ-CCV1 Hg0	33.028	47.8	78.4	229.59	229.62	55.4	0.313	OK	229.5901	0.00	0.01	
SEQ-CCV1 MHg	98.692	82.0	134.4	229.62	229.65	91.5	0.636	OK	229.5901	0.00	0.01	
SEQ-CCV1 PHg	29.210	137.7	180.7	229.65	229.65	150.0	0.172	OK	229.5901	0.00	0.01	



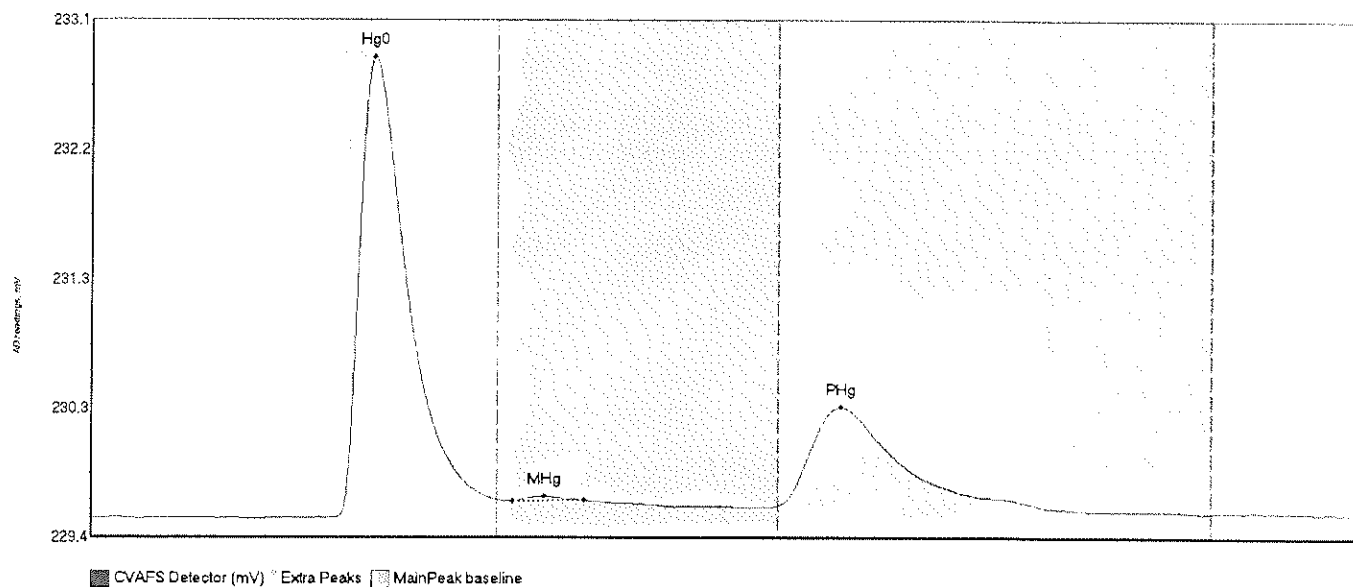
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	28.914	48.3	76.5	229.59	229.60	55.8	0.258	OK	229.5945	0.00	0.00	
SEQ-CCB1 MHg	13.893	80.1	125.7	229.60	229.62	93.8	0.071	OK	229.5945	0.00	0.00	
SEQ-CCB1 PHg	24.483	135.0	176.5	229.62	229.63	148.3	0.140	OK	229.5945	0.00	0.00	

#27: F005245-BLK1_TMAOH



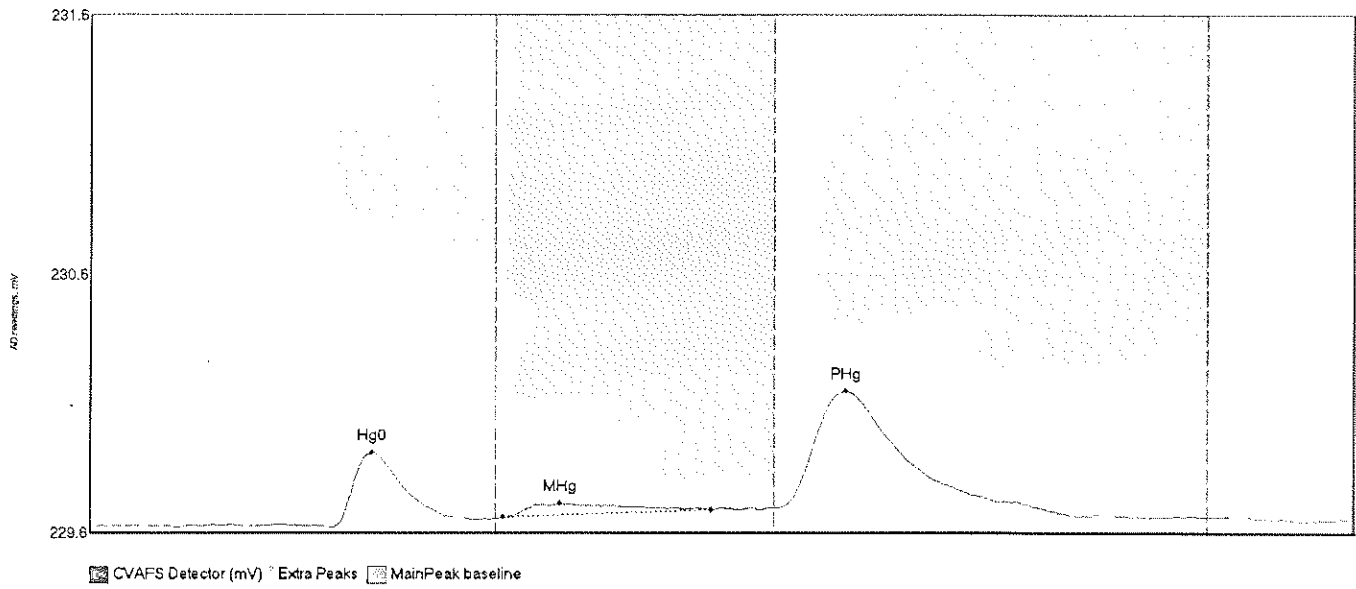
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Bdev	BShift	Comment
F005245-BLK1_TM	31.825	47.7	78.7	229.58	229.60	55.5	0.293	OK	229.5803	0.00	0.01	TMAOH
F005245-BLK1_TM	15.248	80.4	128.6	229.61	229.63	92.4	0.067	OK	229.5803	0.00	0.01	TMAOH
F005245-BLK1_TM	92.430	135.0	188.5	229.63	229.63	149.0	0.489	OK	229.5803	0.00	0.01	TMAOH

#26: F005245-BLK2_TMAOH



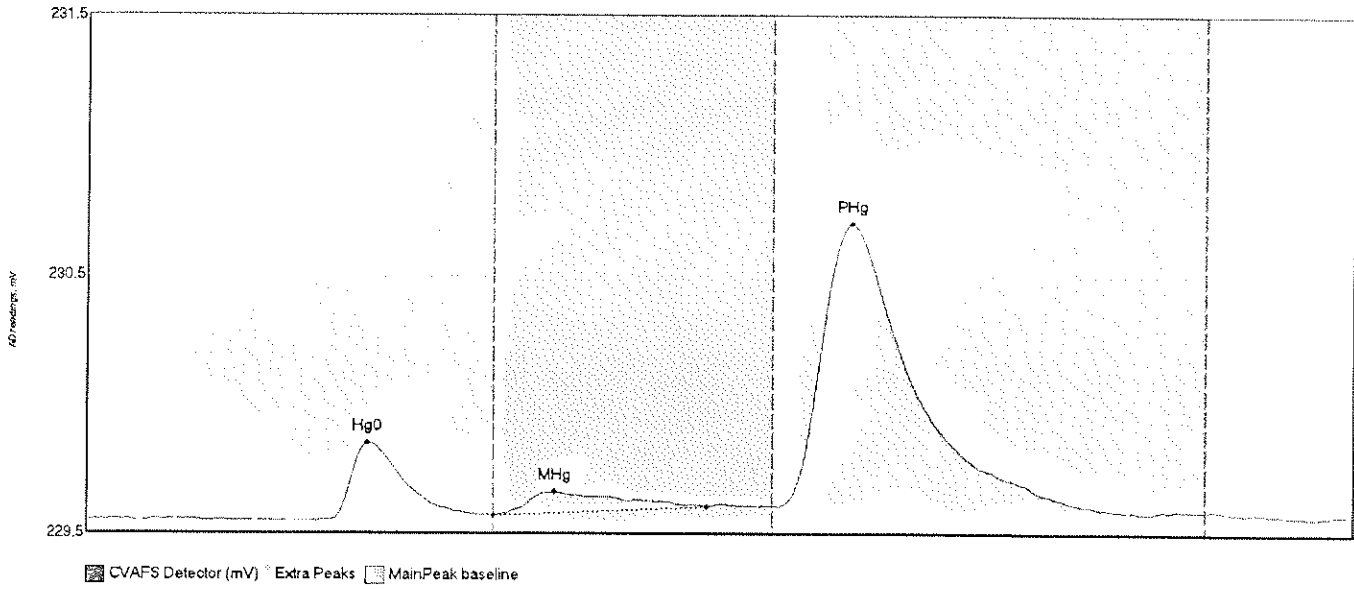
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005245-BLK2_TM	348.340	45.8	80.0	229.57	229.70	55.6	3.246	CT	229.5707	0.00	0.03	TMAOH
F005245-BLK2_TM	2.464	83.0	97.1	229.69	229.70	69.4	0.032	OK	229.5707	0.00	0.03	TMAOH
F005245-BLK2_TM	137.669	135.0	188.0	229.66	229.64	147.1	0.700	OK	229.5707	0.00	0.03	TMAOH

#29: F005245-BLK3_TMAOH



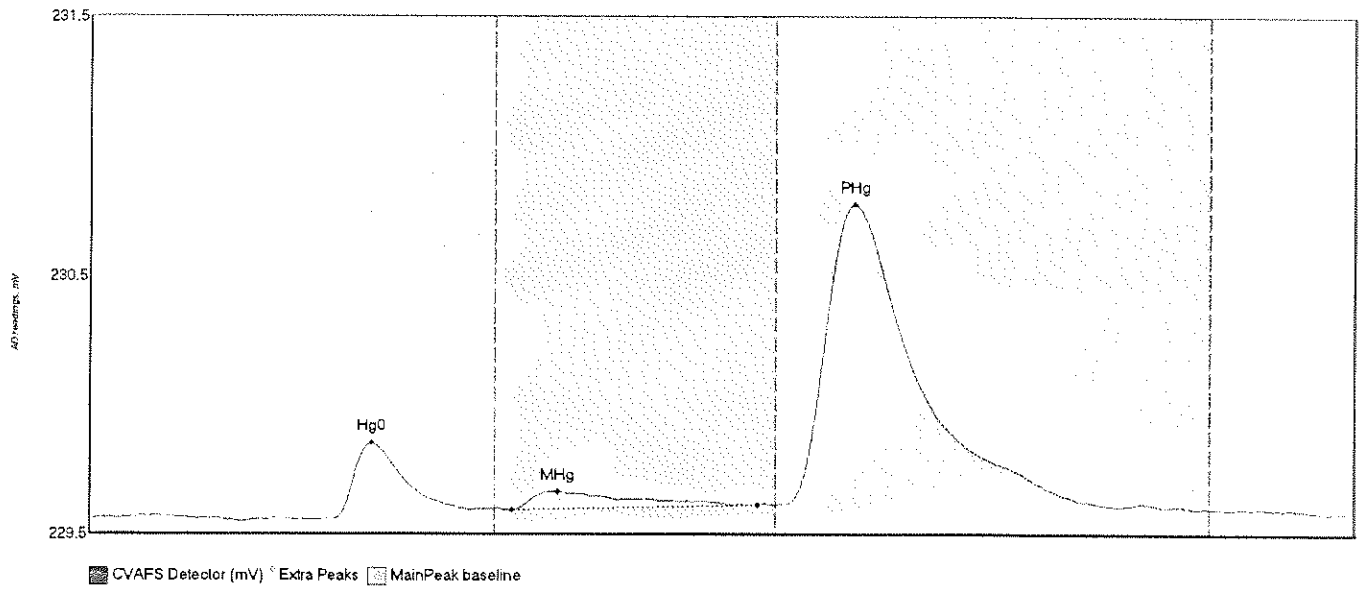
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BiShift	Comment
F005245-BLK3_TM	30.929	48.2	75.6	229.58	229.61	55.9	0.288	OK	229.5817	0.00	0.03	TMAOH
F005245-BLK3_TM	9.863	81.5	122.3	229.62	229.65	92.6	0.054	OK	229.5817	0.00	0.03	TMAOH
F005245-BLK3_TM	91.067	136.0	190.8	229.66	229.64	148.9	0.451	OK	229.5817	0.00	0.03	TMAOH

#30: F005245-BS3_TMAOH



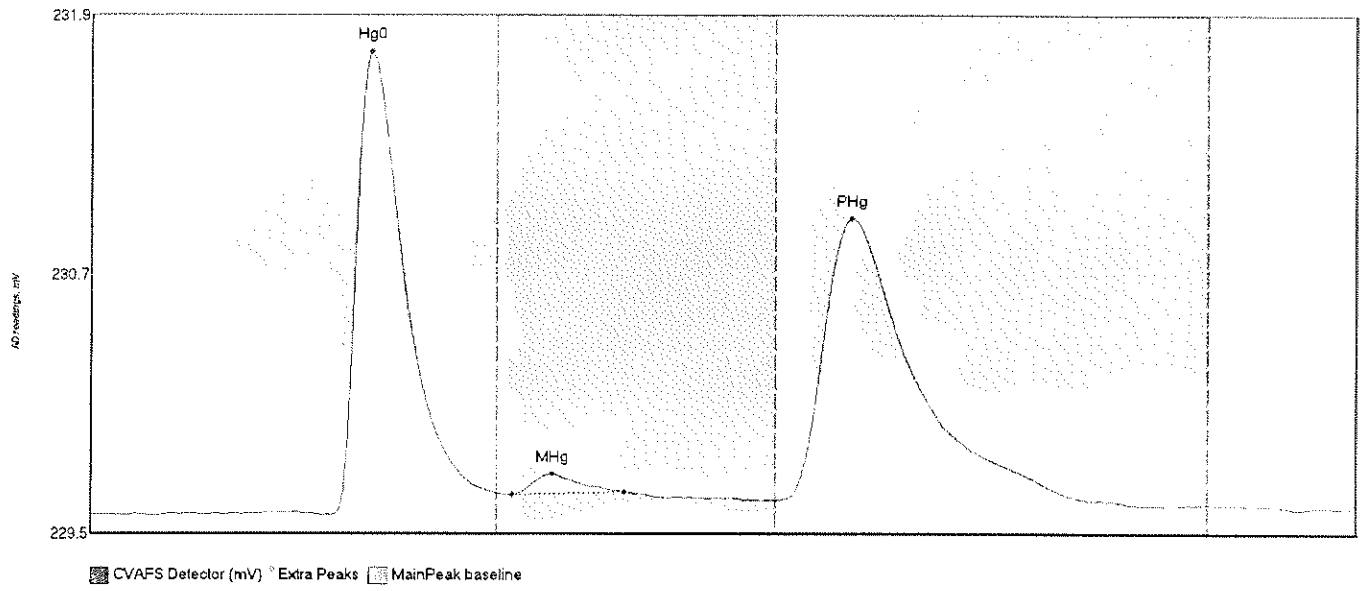
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	RShift	Comment
F005245-BS3_TMA	33.600	47.9	79.6	229.60	229.61	55.3	0.294	OK	229.5964	0.00	0.02	TMAOH
F005245-BS3_TMA	16.939	80.0	122.2	229.61	229.65	92.1	0.092	OK	229.5964	0.00	0.02	TMAOH
F005245-BS3_TMA	216.723	136.2	196.1	229.65	229.65	150.3	1.093	OK	229.5964	0.00	0.02	TMAOH

#31: F005245-BSD3_TMAOH



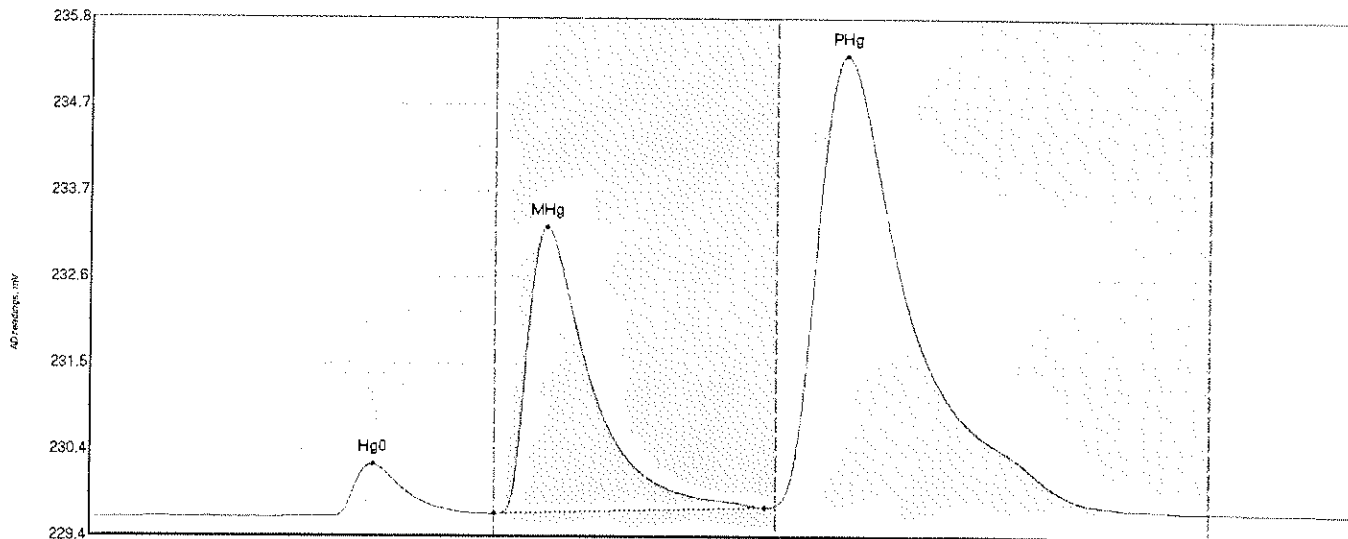
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
F005245-INGD3_TM	31.059	48.2	75.2	229.60	229.64	55.7	0.293	OK	229.6037	0.00	0.02	TMAOH
F005245-BSD3_TM	15.090	83.4	131.3	229.63	229.65	92.3	0.071	OK	229.6037	0.00	0.02	TMAOH
F005245-BSD3_TM	235.311	136.9	198.9	229.66	229.65	150.7	1.160	OK	229.6037	0.00	0.02	TMAOH

#32: F005245-BS2_TMAOH



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005245-BS2_TMA	224.895	47.5	80.0	229.61	229.71	55.6	2.101	CF	229.6142	0.00	0.02	TMAOH
F005245-BS2_TMA	9.480	83.1	105.1	229.70	229.71	91.0	0.095	OK	229.6142	0.00	0.02	TMAOH
F005245-BS2_TMA	257.492	135.3	196.2	229.67	229.67	149.9	1.284	OK	229.6142	0.00	0.02	TMAOH

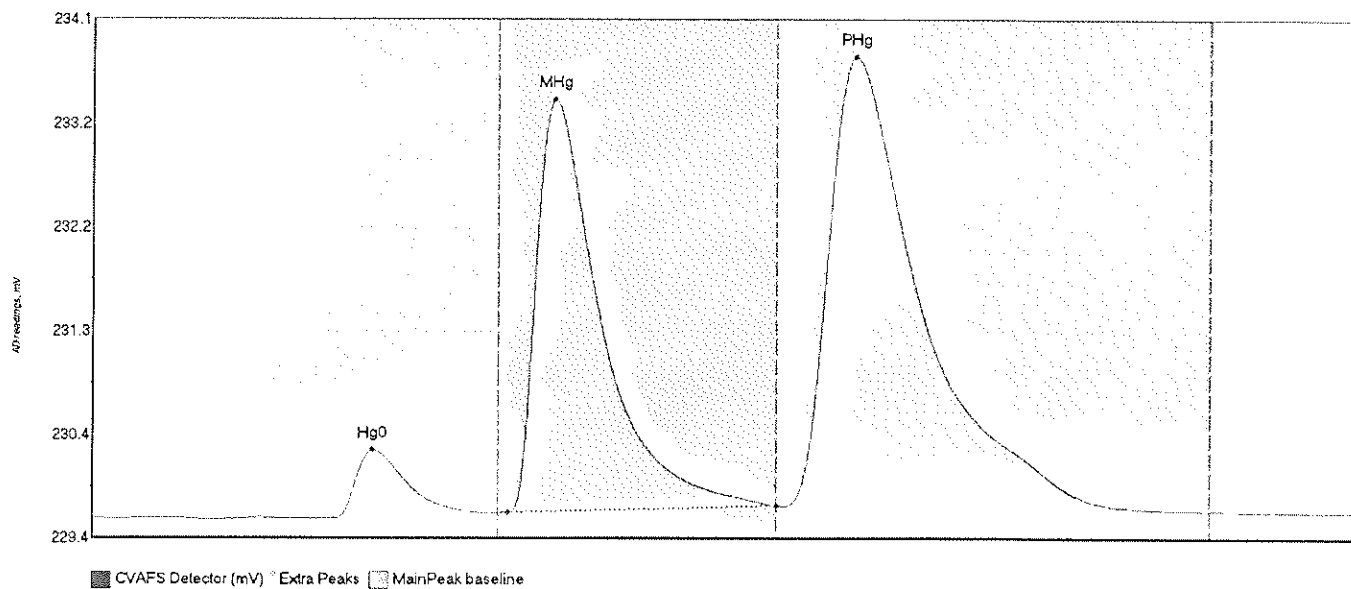
#33: F005245-BS1_TMAOH



■ CVAFS Detector (mV) ^ Extra Peaks □ MainPeak baseline

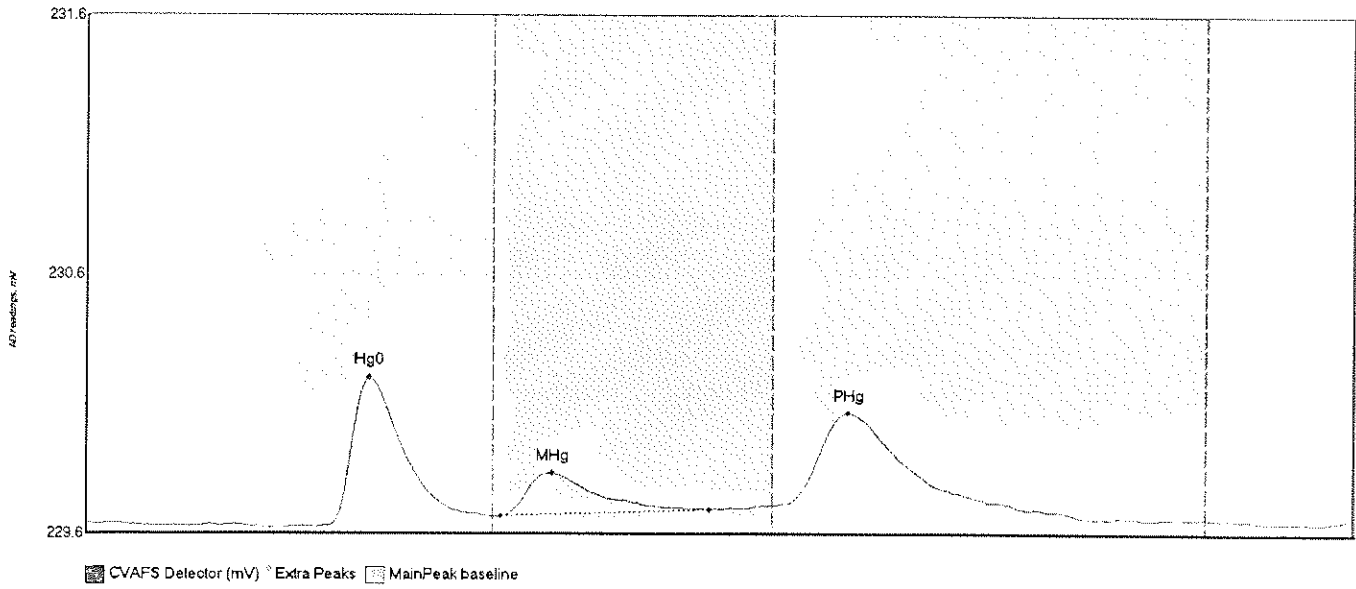
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005245-BS1_TMA	72.775	36.6	79.6	229.60	229.65	55.8	0.662	OK	229.6103	0.00	0.06	TMAOH
F005245-BS1_TMA	512.935	80.0	132.9	229.65	229.74	90.1	3.567	OK	229.6103	0.00	0.06	TMAOH
F005245-BS1_TMA	1161.291	135.0	197.2	229.76	229.77	140.7	5.588	OK	229.6103	0.00	0.06	TMAOH

#34: F005245-BSD1_TMAOH



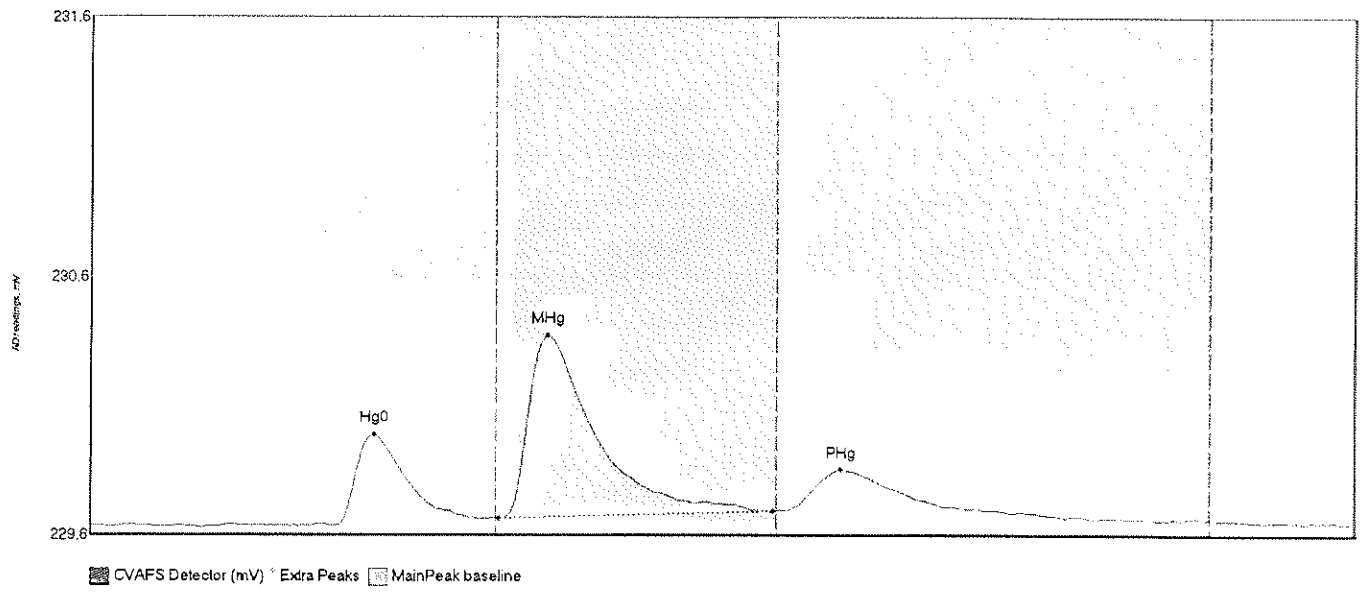
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Stdev	Shift	Comment
F005245-BSD1_TM	67.001	48.2	78.7	229.62	229.67	55.6	0.614	OK	229.6240	0.00	0.05	TMAOH
F005245-BSD1_TM	552.034	82.0	135.0	229.67	229.73	91.2	3.734	CT	229.6240	0.00	0.05	TMAOH
F005245-BSD1_TM	844.889	136.3	202.4	229.73	229.72	150.6	4.061	OK	229.6240	0.00	0.05	TMAOH

#35: F005245-RSD2_TMAOH

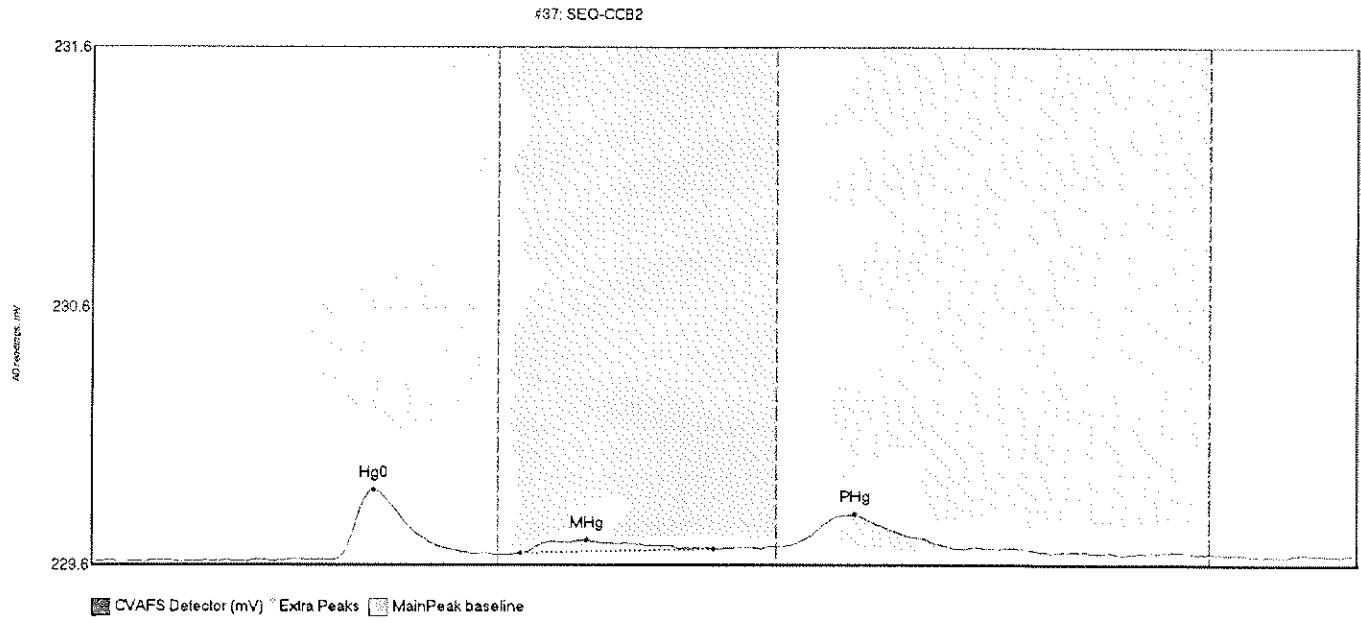


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	HiShift	Comment
F005245-RSD2_TM	63.237	47.7	79.6	229.62	229.65	55.6	0.569	OK	229.6258	0.00	0.01	TMAOH
F005245-RSD2_TM	24.895	81.7	122.7	229.65	229.68	91.7	0.165	OK	229.6258	0.00	0.01	TMAOH
F005245-RSD2_TM	62.332	135.4	181.0	229.69	229.70	149.8	0.357	OK	229.6258	0.00	0.01	TMAOH

#86: SEQ-CCV2

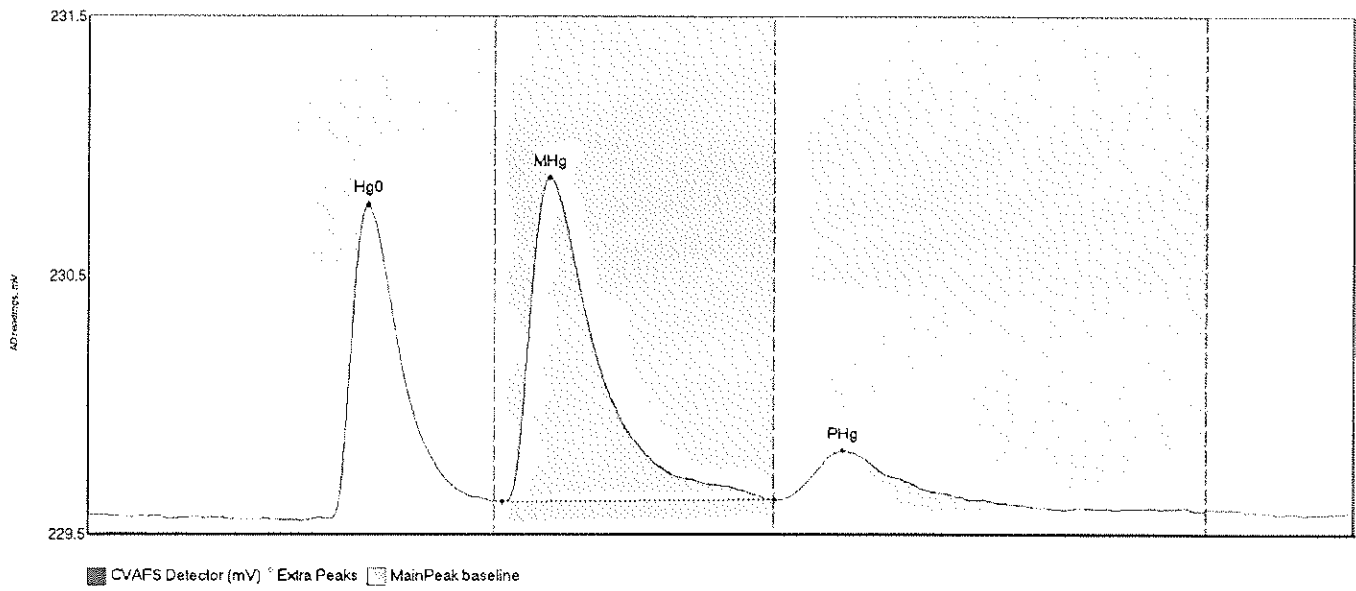


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCV2 Hg0	39.458	47.9	76.6	229.62	229.65	56.0	0.353	OK	229.6210	0.00	0.01	
SEQ-CCV2 MHg	107.371	80.7	134.2	229.65	229.67	90.2	0.707	OK	229.6210	0.00	0.01	
SEQ-CCV2 PHg	26.211	136.8	172.8	229.68	229.68	147.7	0.159	OK	229.6210	0.00	0.01	



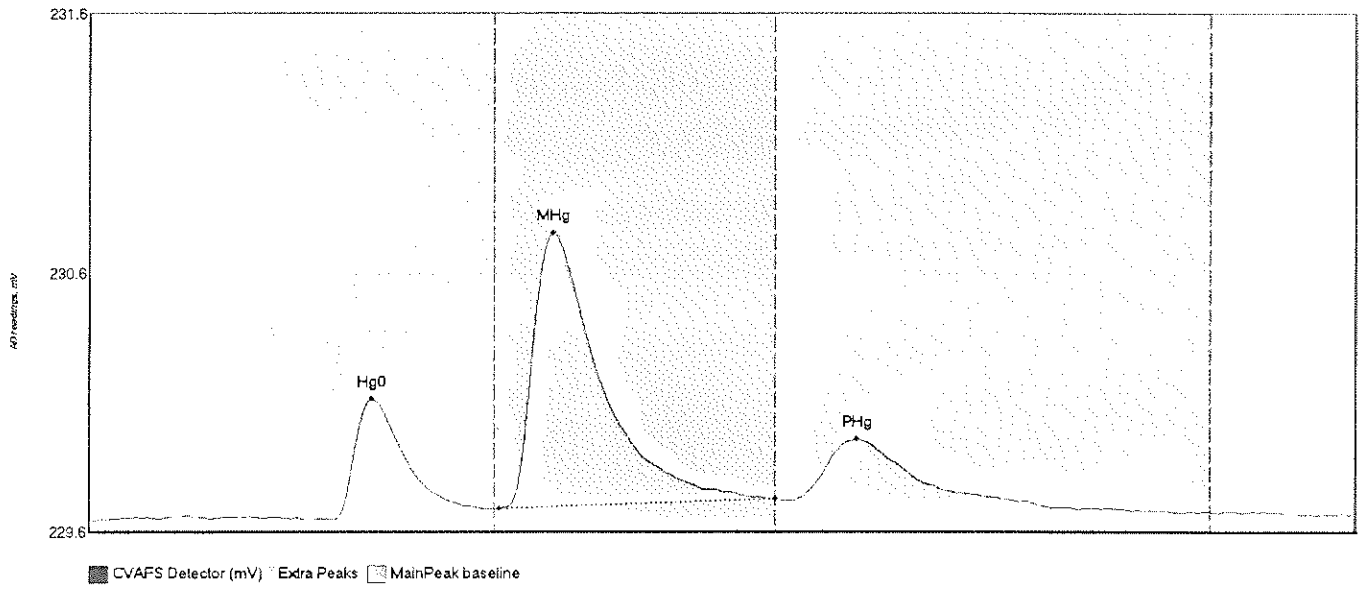
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BiShift	Comment
SEQ-CCB2 Hg0	29.542	37.8	80.0	229.61	229.63	55.9	0.272	CF	229.6061	0.00	0.02	
SEQ-CCB2 MHg	9.307	84.3	122.6	229.64	229.66	97.4	0.050	OK	229.6061	0.00	0.02	
SEQ-CCB2 PHg	20.917	135.9	170.5	229.66	229.66	180.3	0.124	OK	229.6061	0.00	0.02	

#38: F005268-BS1

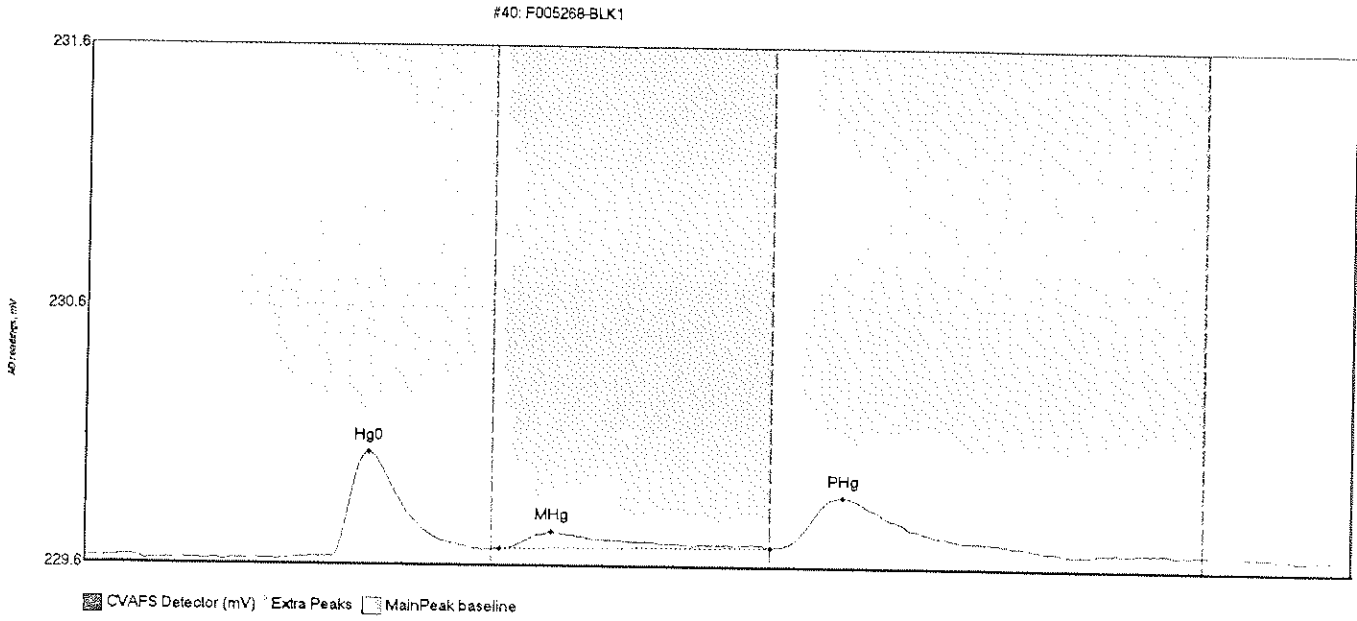


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
F005268-BS1 Hg0	132.339	47.8	79.7	229.61	229.67	55.0	1.207	OK	229.6246	0.00	0.01	F005268
F005268-BS1 MHg	190.240	81.7	135.0	229.67	229.68	90.9	1.249	CT	229.6246	0.00	0.01	F005268
F005268-BS1 PHg	31.900	135.4	173.9	229.68	229.68	148.4	0.191	OK	229.6246	0.00	0.01	F005268

#39: F005268-BSD1

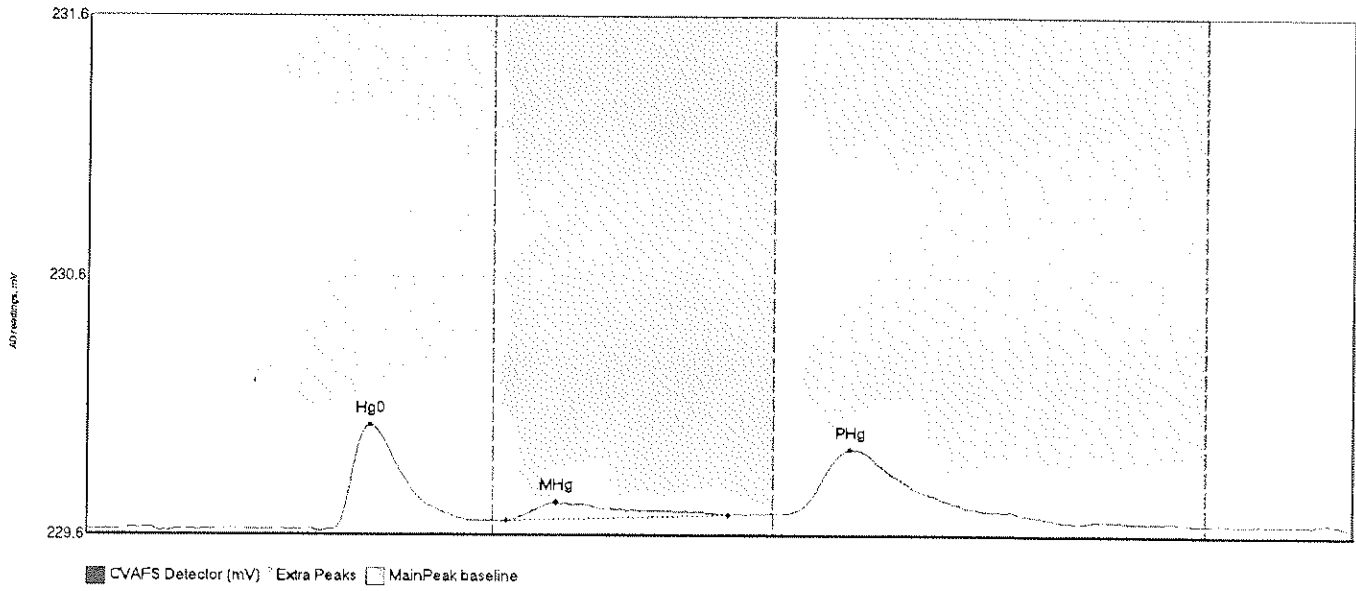


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F005268-BSD1 Hg	51.469	48.2	79.6	229.60	229.64	55.8	0.467	OK	229.6043	0.00	0.02	F005268
F005268-BSD1 MH	161.166	81.0	134.9	229.65	229.68	91.5	1.065	OK	229.6043	0.00	0.02	F005268
F005268-BSD1 PH	39.984	138.4	179.7	229.68	229.68	151.2	0.237	OK	229.6043	0.00	0.02	F005268



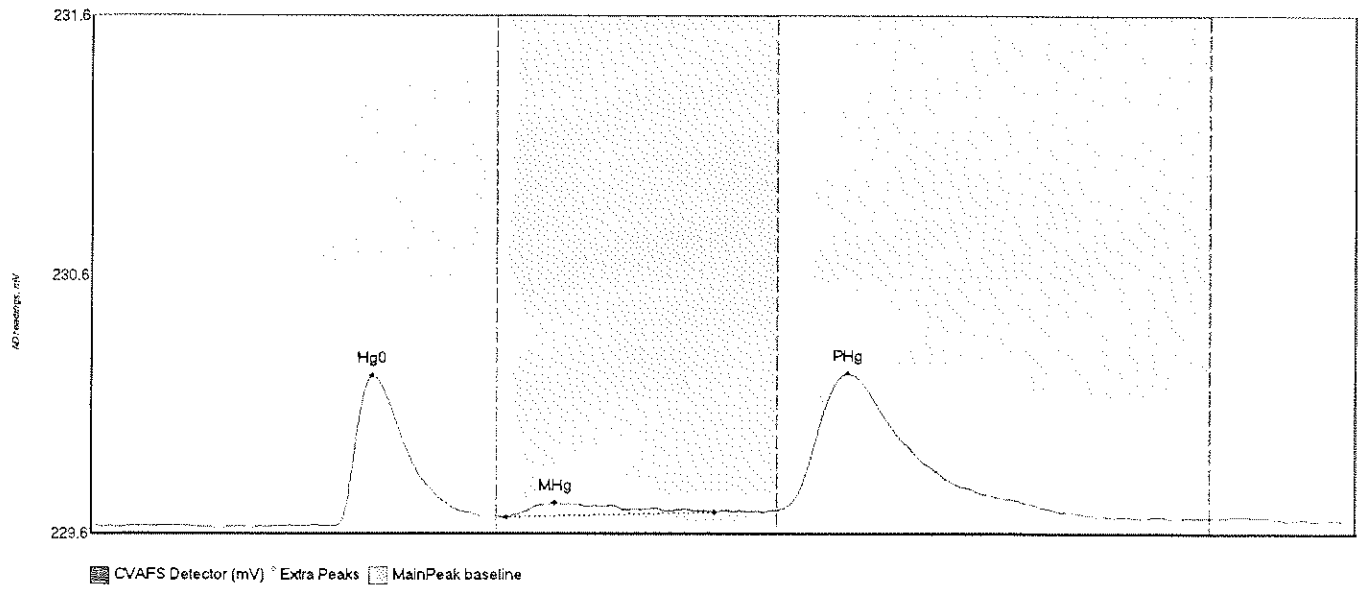
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
F005268-BLK1 Hg	44.404	48.8	78.4	229.61	229.64	55.8	0.403	OK	229.6122	0.00	0.02	F005268
F005268-BLK1 MHg	13.871	81.6	135.0	229.65	229.66	91.7	0.066	CT	229.6122	0.00	0.02	F005268
F005268-BLK1 PHg	40.188	136.3	188.9	229.66	229.65	149.1	0.194	OK	229.6122	0.00	0.02	F005268

#41: F005268-BLK2



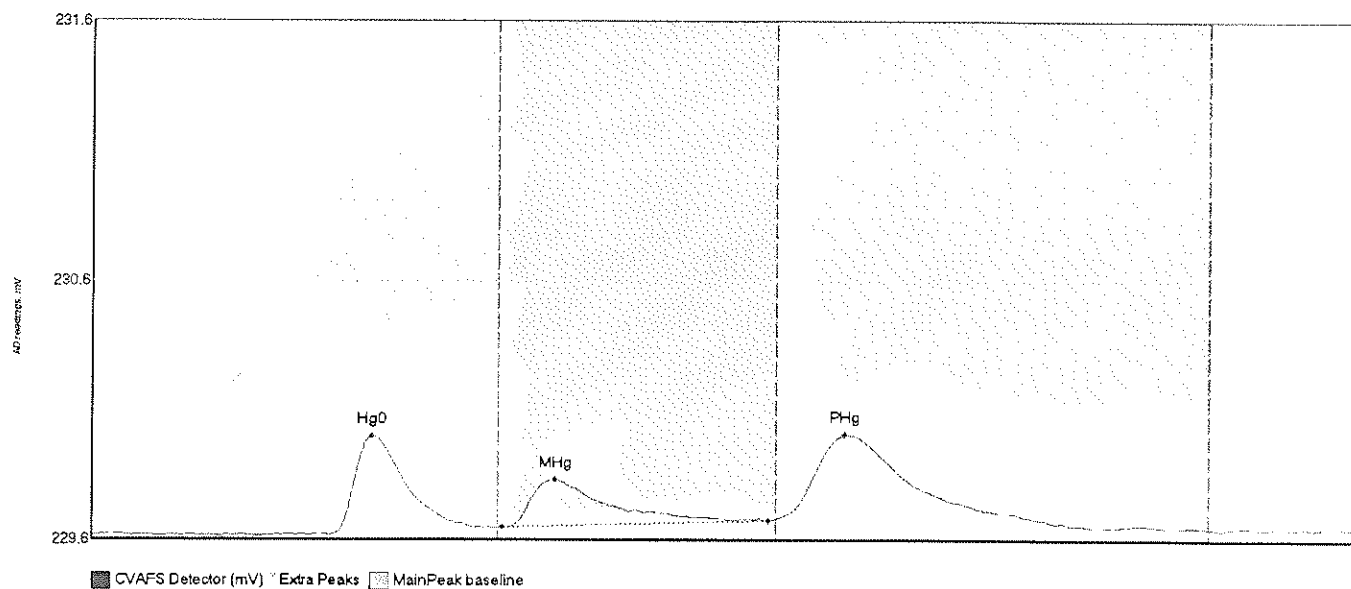
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F005268-BLK2 Hg	43.525	48.3	77.7	229.61	229.64	55.7	0.402	OK	229.6105	0.00	0.01	F005268
F005268-BLK2 MH	13.966	82.8	126.2	229.64	229.66	92.6	0.071	OK	229.6105	0.00	0.01	F005268
F005268-BLK2 PH	46.819	137.1	185.9	229.67	229.66	150.1	0.249	OK	229.6105	0.00	0.01	F005268

#42: F005268-BLK3



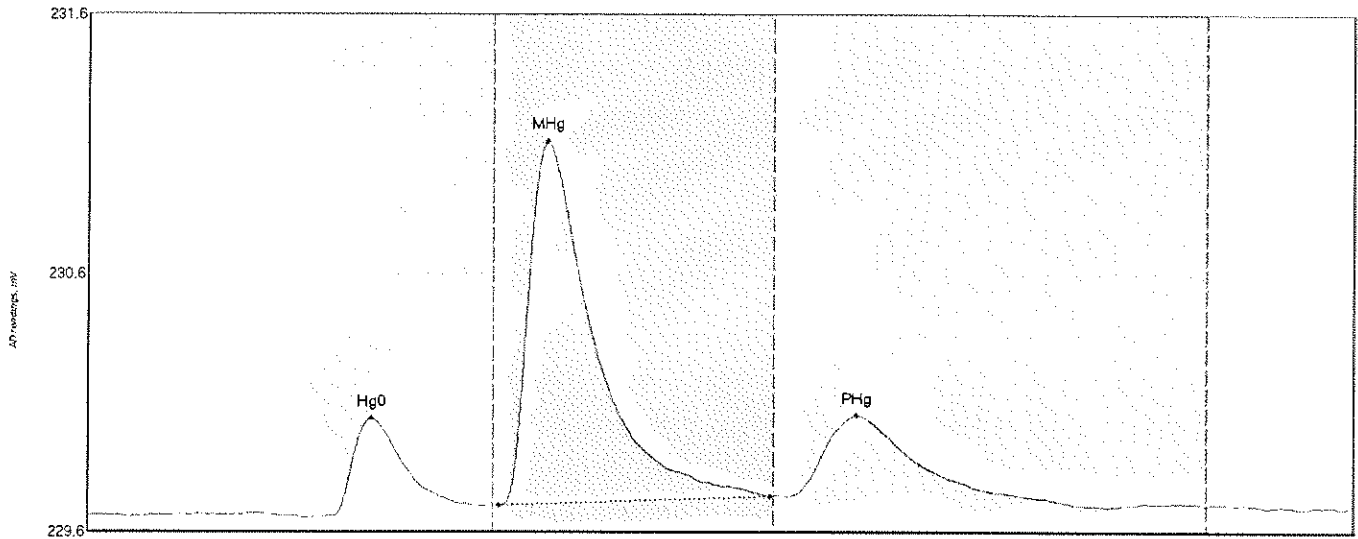
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F005268-BLK3 Hg	63.975	48.6	79.4	229.61	229.65	55.6	0.578	OK	229.6148	0.00	0.01	F005268
F005268-BLK3 MH	10.382	82.0	122.5	229.65	229.67	91.4	0.057	OK	229.6148	0.00	0.01	F005268
F005268-BLK3 PH	104.019	135.0	188.2	229.67	229.68	149.0	0.529	OK	229.6148	0.00	0.01	F005268

#43: 0E00002-05RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00002-05RE1 H	42.663	47.5	80.0	229.61	229.64	55.4	0.381	CT	229.6089	0.00	0.02	F005268
0E00002-05RE1 M	32.194	80.9	133.4	229.64	229.66	91.3	0.196	OK	229.6089	0.00	0.02	F005268
0E00002-05RE1 P	62.775	135.0	183.4	229.67	229.68	148.2	0.325	OK	229.6089	0.00	0.02	F005268

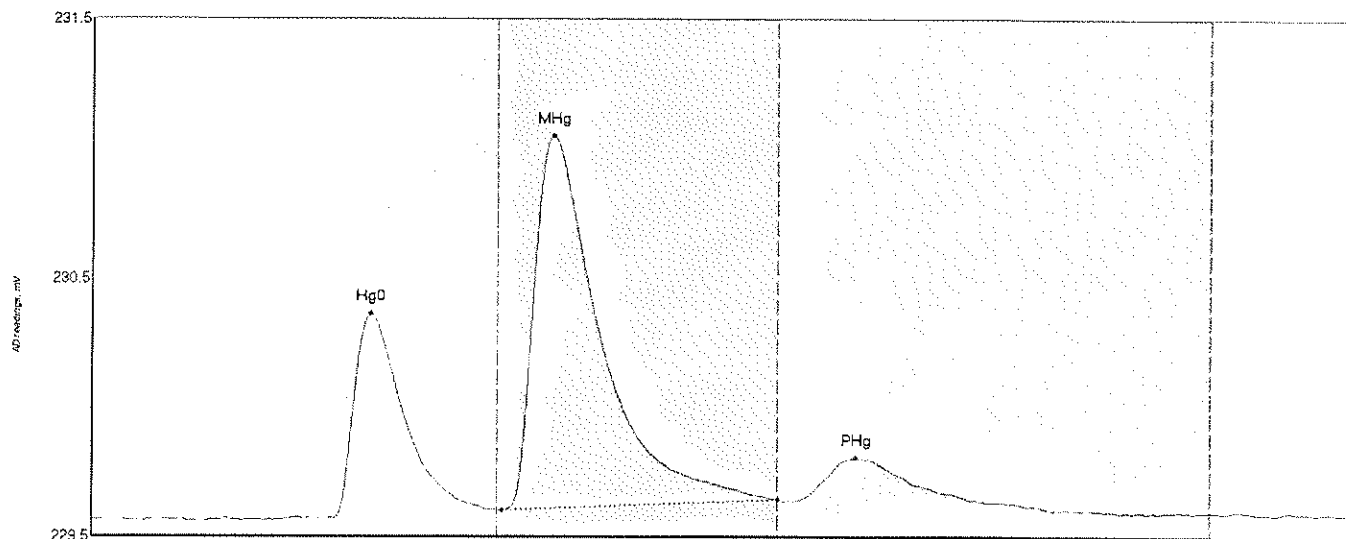
#44: F005268-MS1



■ CVAFS Detector (mV) * Extra Peaks ▨ MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RiDev	BiShift	Comment
F005268-MS1 Hg0	41.684	48.4	77.9	229.62	229.65	55.9	0.377	OK	229.6197	0.00	0.03	F005268
F005268-MS1 MHg	208.732	81.2	134.2	229.66	229.69	90.7	1.403	OK	229.6197	0.00	0.03	F005268
F005268-MS1 PHg	57.522	137.6	182.1	229.69	229.70	151.2	0.314	OK	229.6197	0.00	0.03	F005268

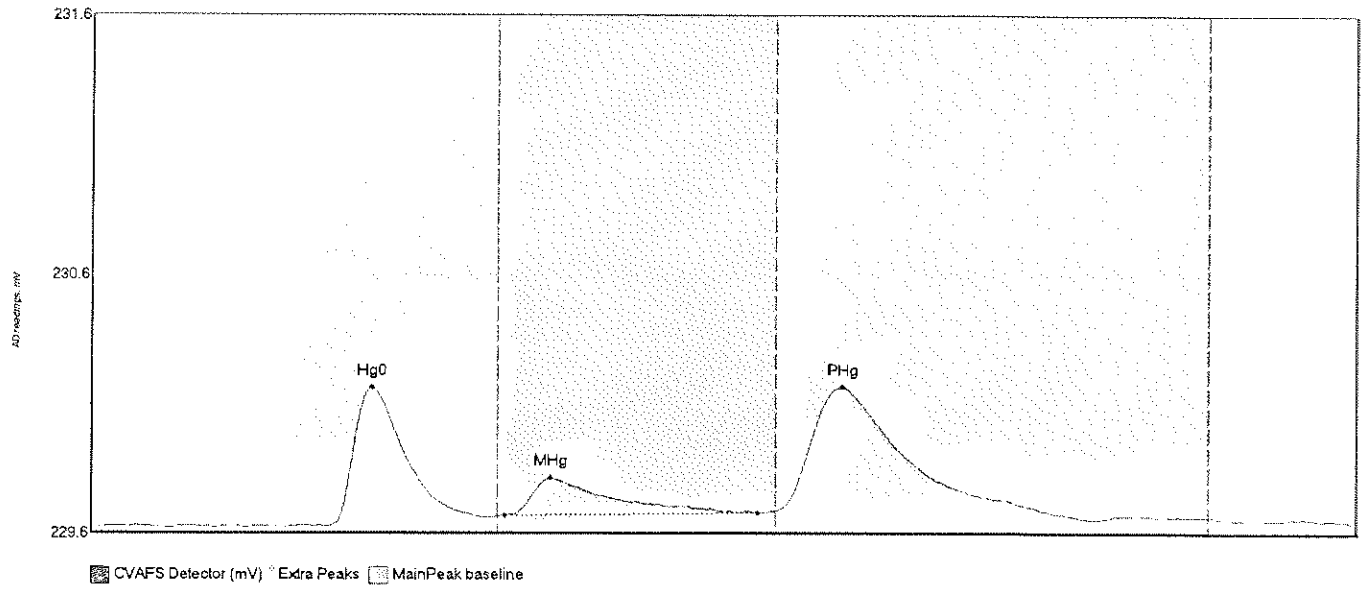
#45: F005268-MSD1



■ CVAFS Detector (mV) ◊ Extra Peaks □ MainPeak baseline

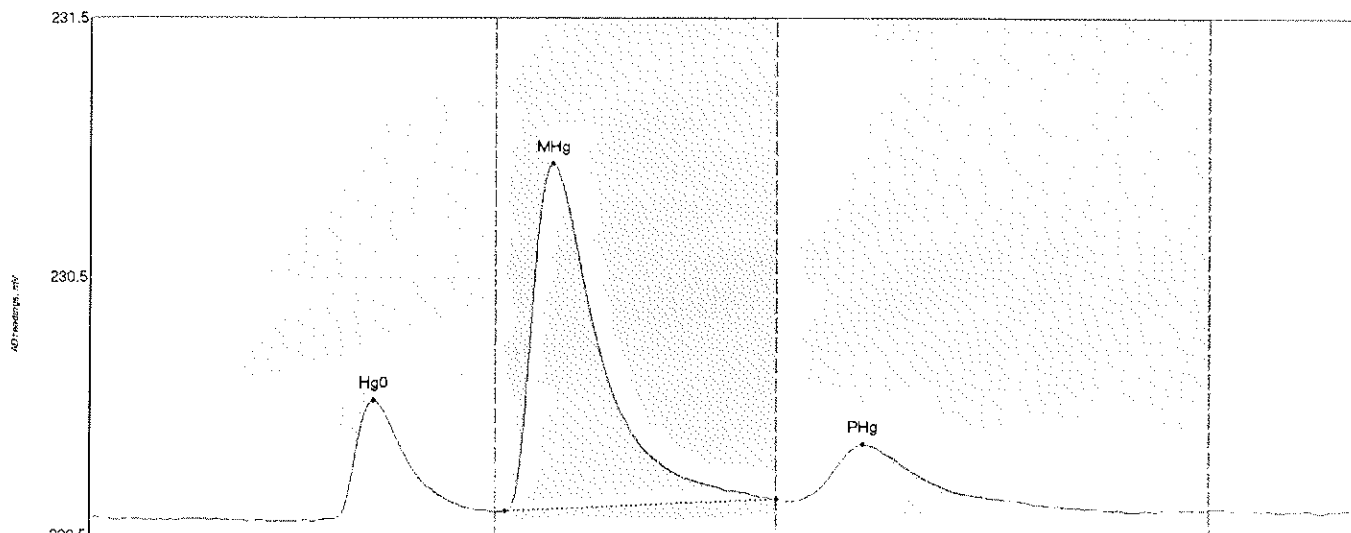
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F005268-MSD1 Hg	88.135	47.7	80.0	229.62	229.65	55.1	0.791	CT	229.6129	0.00	0.01	F005268
F005268-MSD1 MH	217.331	81.0	135.0	229.65	229.69	90.9	1.446	CT	229.6129	0.00	0.01	F005268
F005268-MSD1 PH	28.988	138.4	173.5	229.69	229.69	150.5	0.167	OK	229.6129	0.00	0.01	F005268

#46: CE00002-04RE1



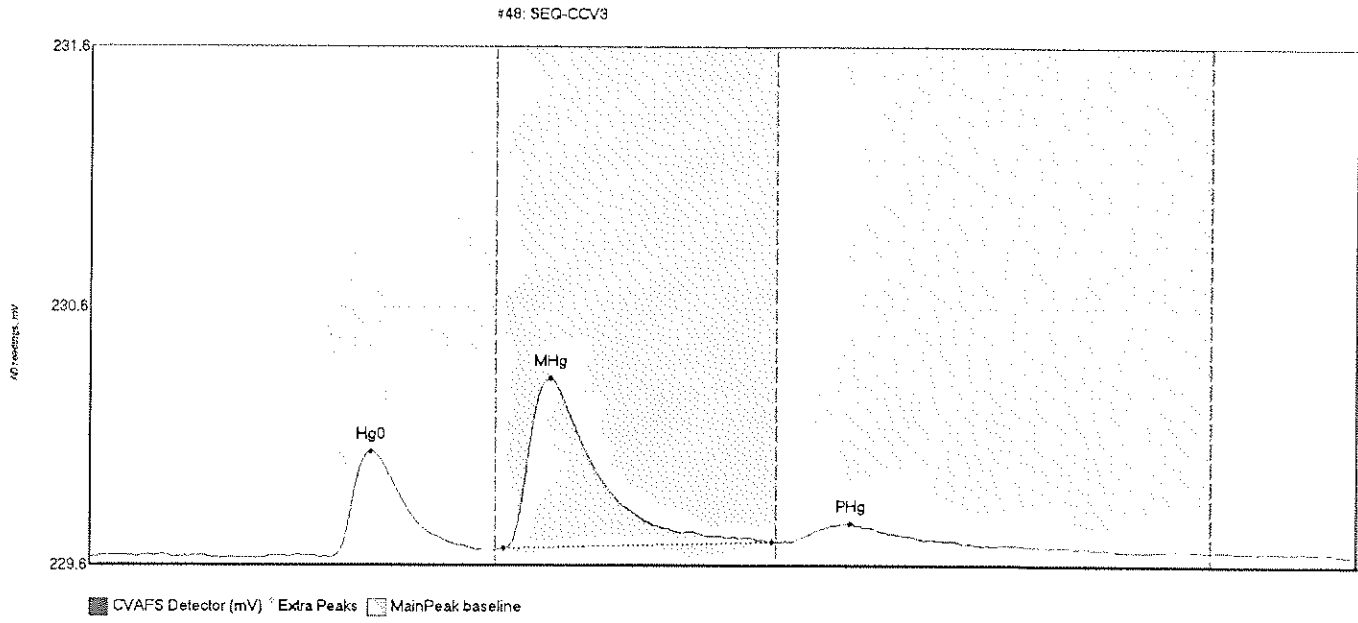
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
CE00002-04RE1 H	58.650	47.0	77.0	229.61	229.64	55.5	0.533	OK	229.6072	0.00	0.02	F005268
CE00002-04RE1 M	25.450	81.4	131.3	229.65	229.66	90.4	0.144	OK	229.6072	0.00	0.02	F005268
CE00002-04RE1 P	94.093	135.0	187.0	229.67	229.67	147.9	0.475	OK	229.6072	0.00	0.02	F005268

#47: F005268-MS2



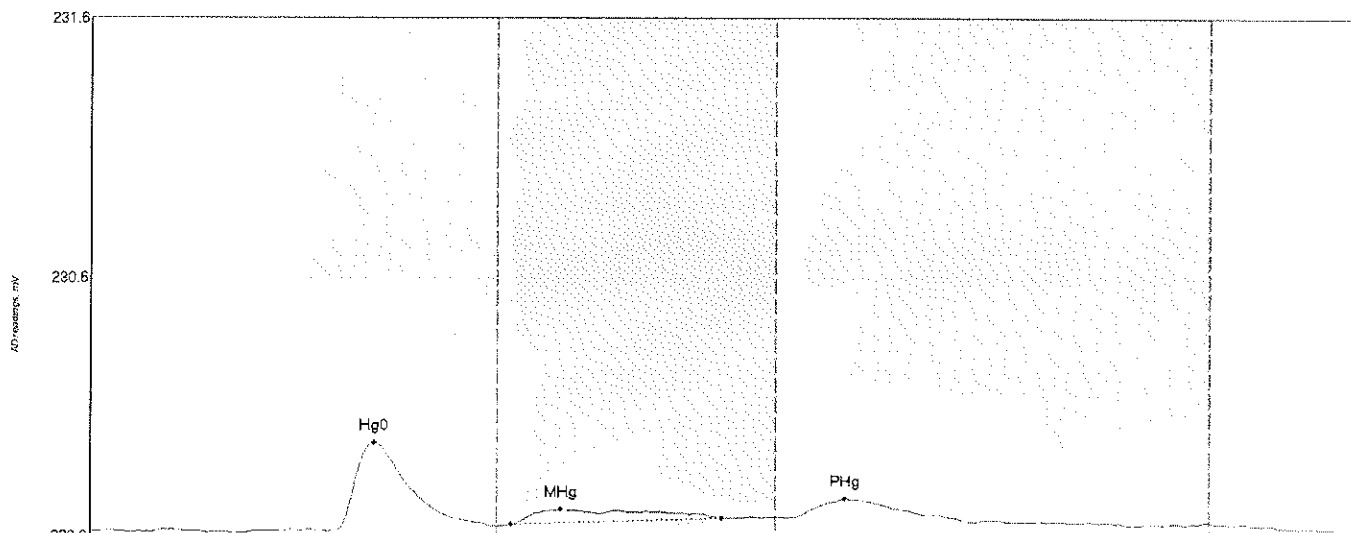
CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	lDev	lShift	Comment
F005268-MS2 Hg0	51.647	47.9	80.0	229.61	229.63	55.9	0.455	CT	229.6155	0.00	0.03	F005268
F005268-MS2 MHg	204.710	81.9	135.0	229.64	229.69	91.4	1.342	CT	229.6155	0.00	0.03	F005268
F005268-MS2 PHg	37.529	139.5	180.3	229.68	229.68	151.9	0.218	OK	229.6155	0.00	0.03	F005268



Base	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CCV3 Hg0	45.174	47.6	78.2	229.61	229.63	55.5	0.467	OK	229.6070	0.00	0.01	
SEQ-CCV3 MHg	98.566	81.6	134.1	229.64	229.66	90.6	0.657	OK	229.6070	0.00	0.01	
SEQ-CCV3 PHg	10.479	138.0	168.2	229.66	229.67	149.7	0.071	OK	229.6070	0.00	0.01	

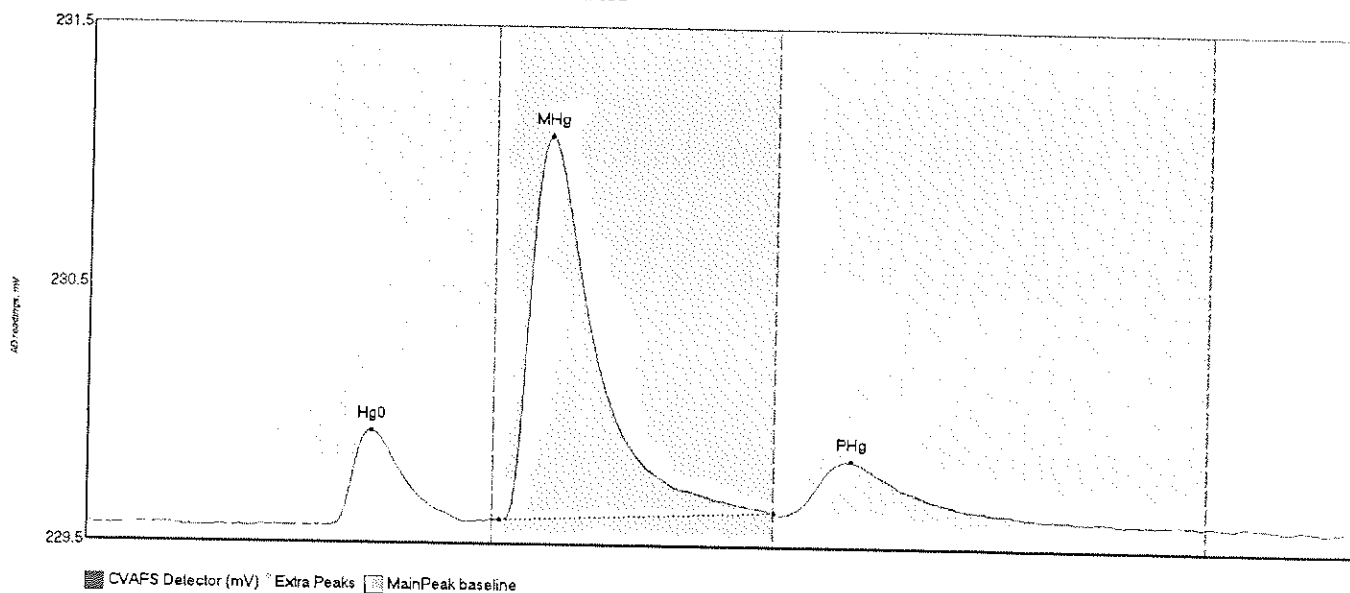
#49: SEQ-CCB3



CVAFS Detector (mV) Extra Peaks MainPeak baseline

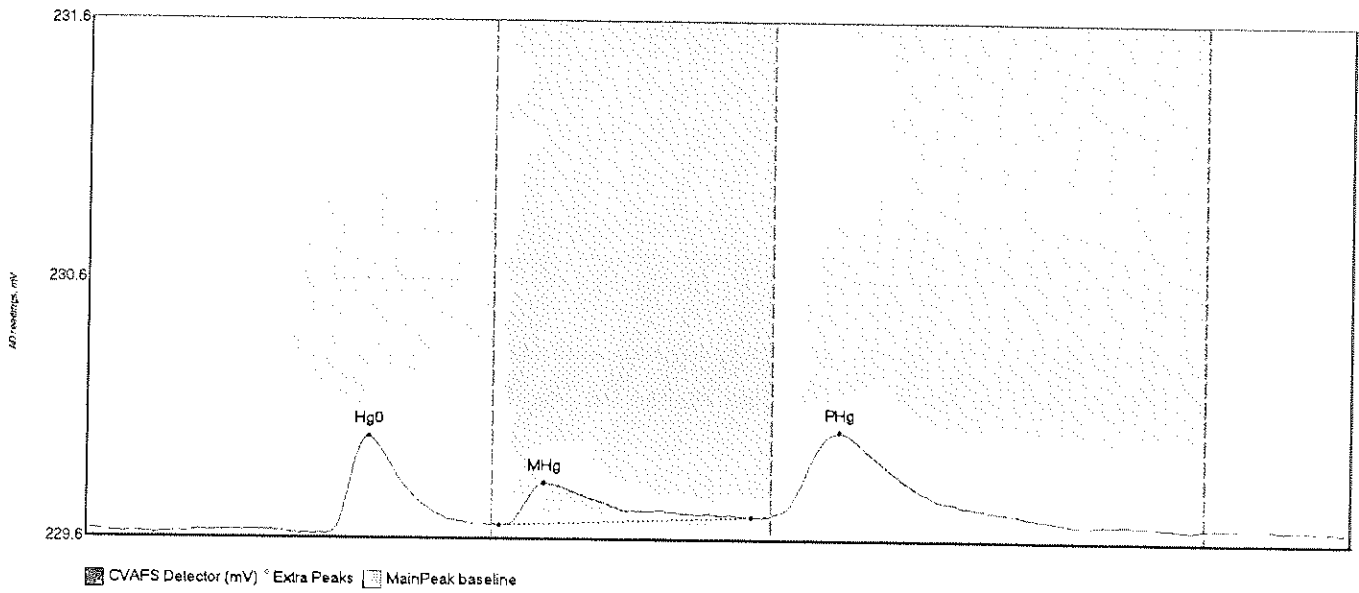
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIdev	BIshift	Comment
SEQ-CCB3 Hg0	39.366	48.9	79.2	229.61	229.62	56.1	0.337	OK	229.6051	0.00	0.00	
SEQ-CCB3 MHg	13.322	82.7	124.5	229.63	229.65	92.6	0.059	OK	229.6051	0.00	0.00	
SEQ-CCB3 PHg	11.457	138.5	169.7	229.66	229.66	148.8	0.071	OK	229.6051	0.00	0.00	

#50: F005268-MSD2



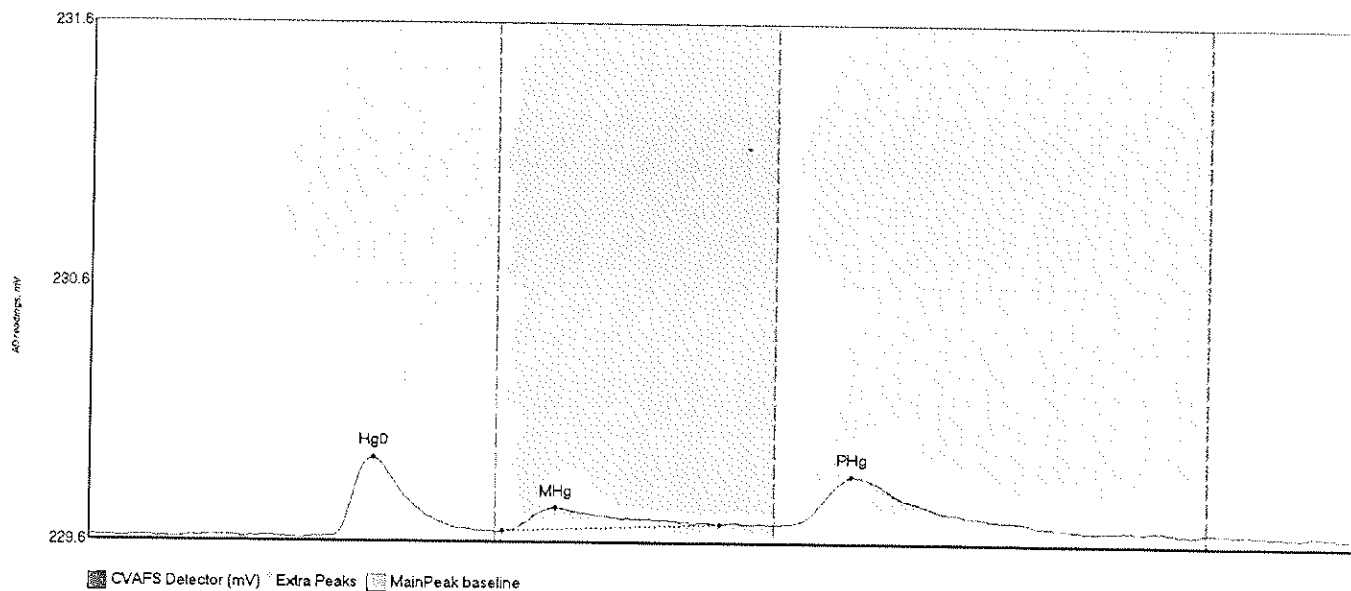
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	RShift	Comment
F005268-MSD2 Hg	41.077	47.6	75.4	229.61	229.63	55.8	0.372	OK	229.6124	0.00	0.02	F005268
F005268-MSD2 MH	216.724	61.5	135.0	229.64	229.67	90.8	1.482	CT	229.6124	0.00	0.02	F005268
F005268-MSD2 PH	37.502	137.2	178.7	229.67	229.67	150.2	0.289	OK	229.6124	0.00	0.02	F005268

#51: 0E00002-01RE1



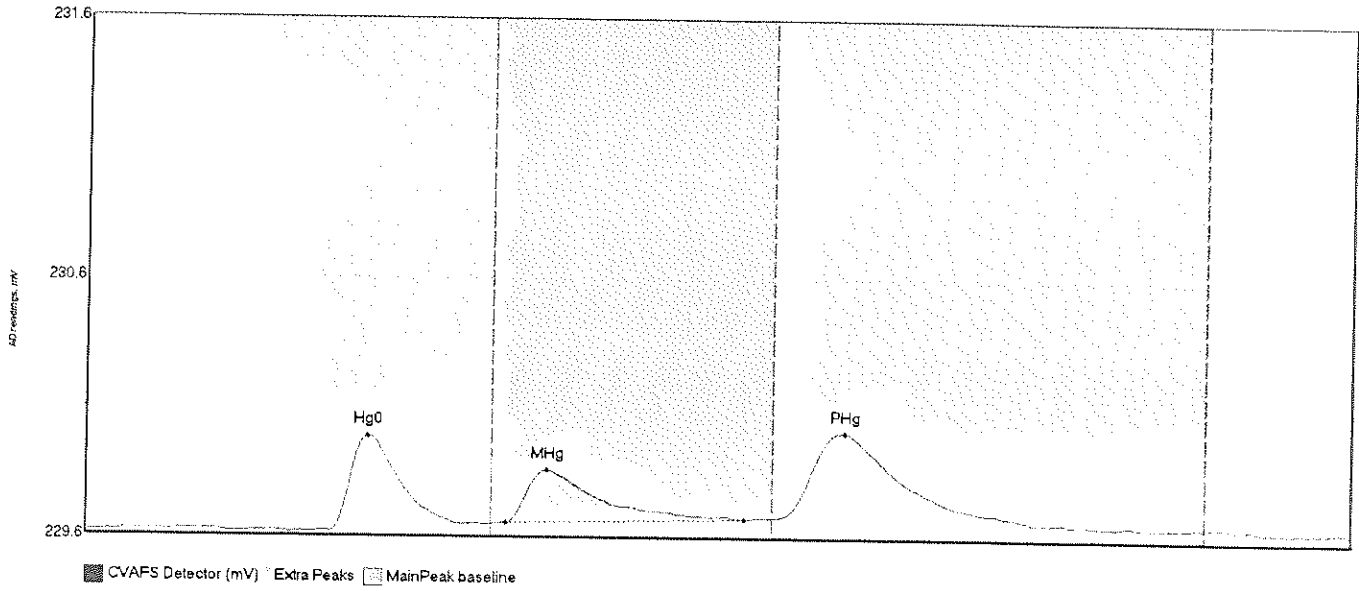
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00002-01RE1 H	42.423	47.5	79.3	229.58	229.62	55.8	0.376	OK	229.5984	0.00	0.01	F005268
0E00002-01RE1 M	28.471	81.5	131.0	229.62	229.65	90.2	0.164	OK	229.5984	0.00	0.01	F005268
0E00002-01RE1 P	59.979	136.6	184.2	229.67	229.66	148.3	0.314	OK	229.5984	0.00	0.01	F005268

#52: 0E00002-02RE1



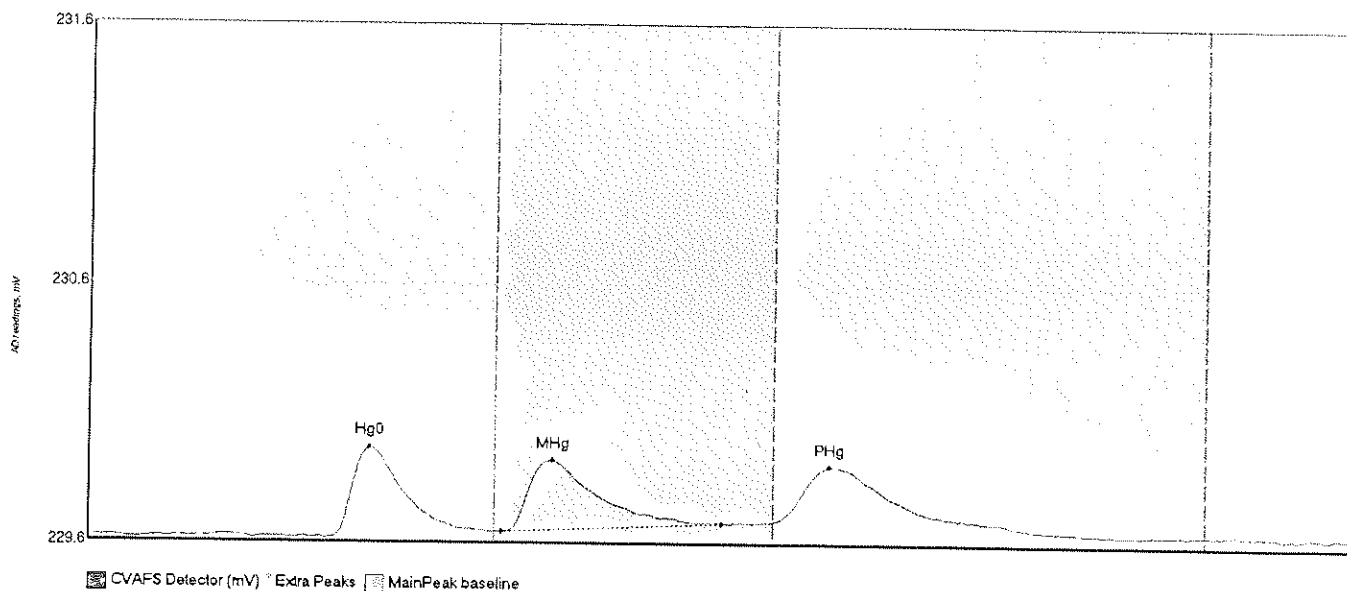
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	lDev	lShift	Comment
0E00002-02RE1 H	33.844	48.5	60.0	229.61	229.62	56.0	0.300	CT	229.6056	0.00	0.01	F005268
0E00002-02RE1 M	15.923	81.5	124.4	229.63	229.66	92.0	0.091	OK	229.6056	0.00	0.01	F005268
0E00002-02RE1 P	36.421	137.9	186.8	229.66	229.65	150.1	0.186	OK	229.6056	0.00	0.01	F005268

#53: 0E00002-03RE1



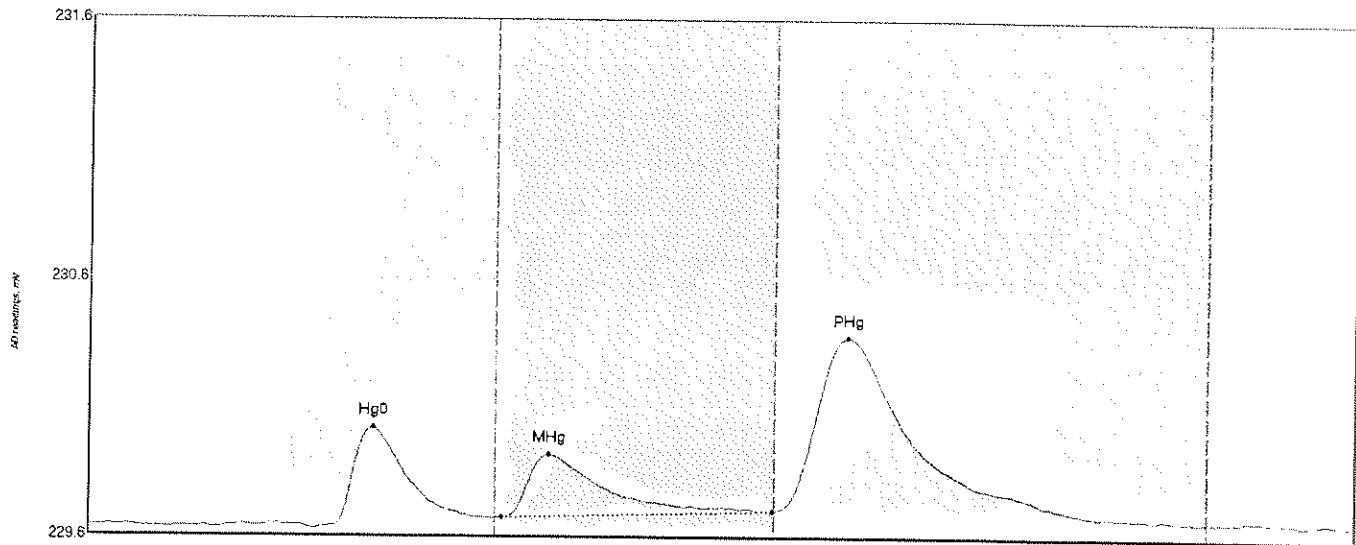
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Bldev	BlShift	Comment
0E00002-03RE1 H	40.111	48.1	79.5	229.59	229.62	55.6	0.368	OK	229.5925	0.00	0.02	F005268
0E00002-03RE1 M	32.752	82.9	129.4	229.63	229.64	90.9	0.203	OK	229.5925	0.00	0.02	F005268
0E00002-03RE1 P	62.988	135.7	184.5	229.65	229.65	149.2	0.330	OK	229.5925	0.00	0.02	F005268

#54: 0E00002-06RE1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	StShift	Comment
0E00002-06RE1 H	38.636	48.3	79.5	229.60	229.62	55.6	0.349	OK	229.6001	0.00	0.01	F005268
0E00002-06RE1 M	41.504	81.3	124.8	229.62	229.65	91.3	0.278	OK	229.6001	0.00	0.01	F005268
0E00002-06RE1 P	36.647	135.0	173.5	229.66	229.67	145.9	0.215	OK	229.6001	0.00	0.01	F005268

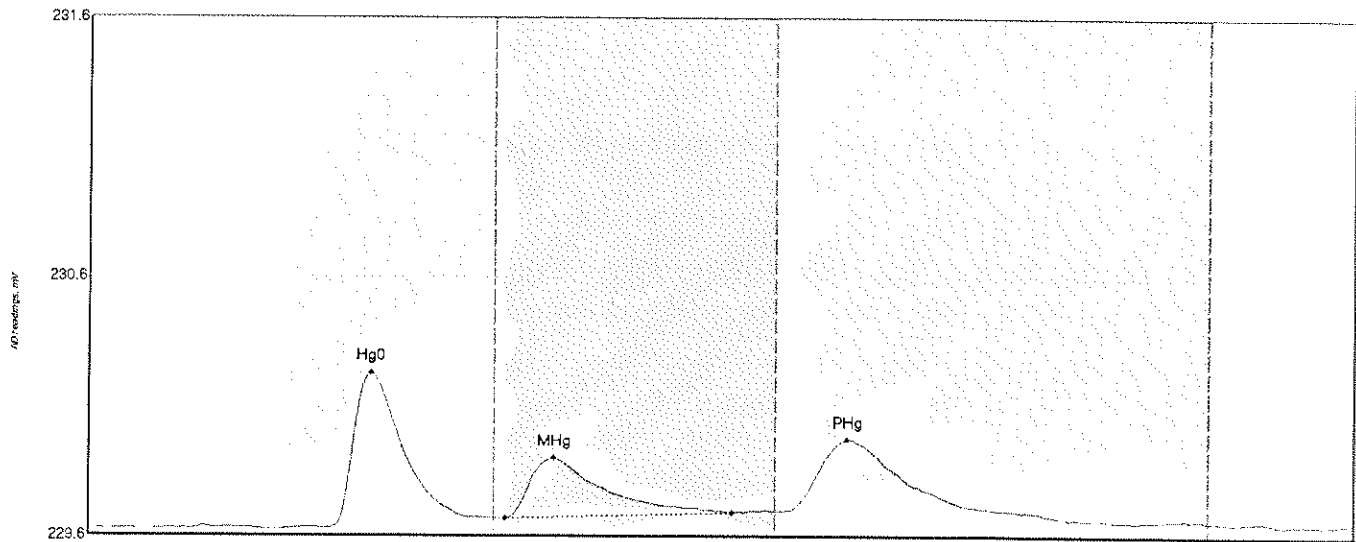
#55: 0E00002-07RE1



■ CVAFS Detector (mV) * Extra Peaks ■ MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00002-07RE1 H	42.514	48.5	79.3	229.59	229.63	56.0	0.380	OK	229.5922	0.00	0.02	F005268
0E00002-07RE1 M	41.473	81.3	134.6	229.63	229.65	90.7	0.244	OK	229.5922	0.00	0.02	F005268
0E00002-07RE1 P	133.680	135.0	190.8	229.65	229.66	149.2	0.677	OK	229.5922	0.00	0.02	F005268

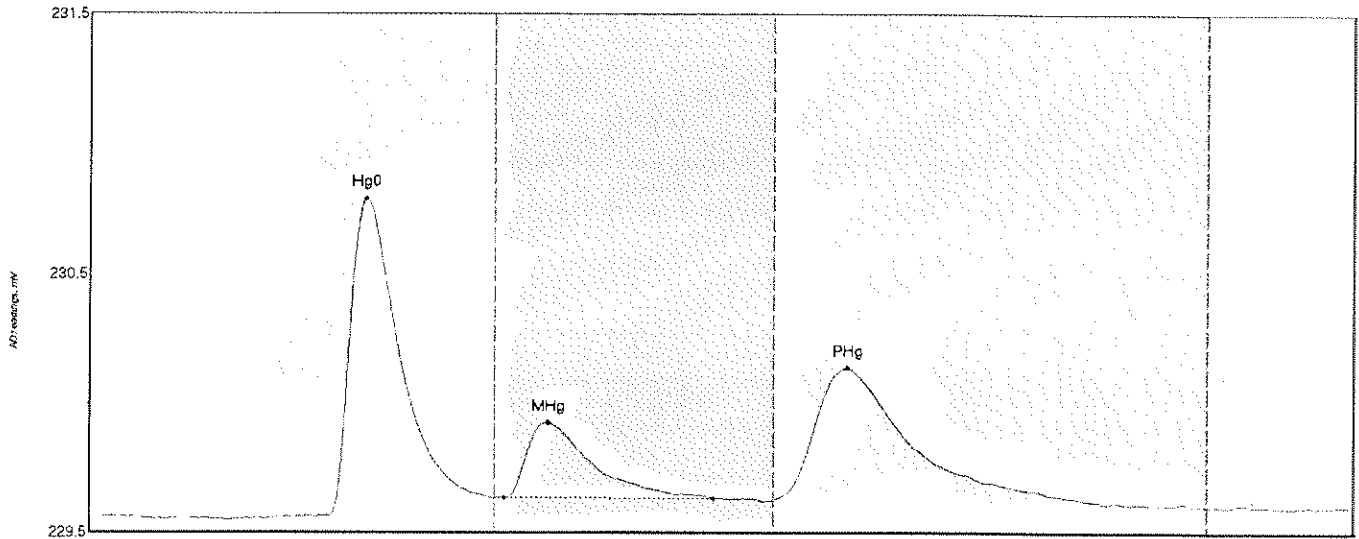
#55: 0E00002-08RE1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0E00002-08RE1 H	64.924	41.2	79.9	229.60	229.63	55.6	0.598	OK	229.5911	0.00	0.02	F005268
0E00002-08RE1 M	37.716	82.3	126.6	229.63	229.66	91.8	0.234	OK	229.5911	0.00	0.02	F005268
0E00002-08RE1 P	47.906	137.3	178.1	229.66	229.67	149.2	0.276	OK	229.5911	0.00	0.02	F005268

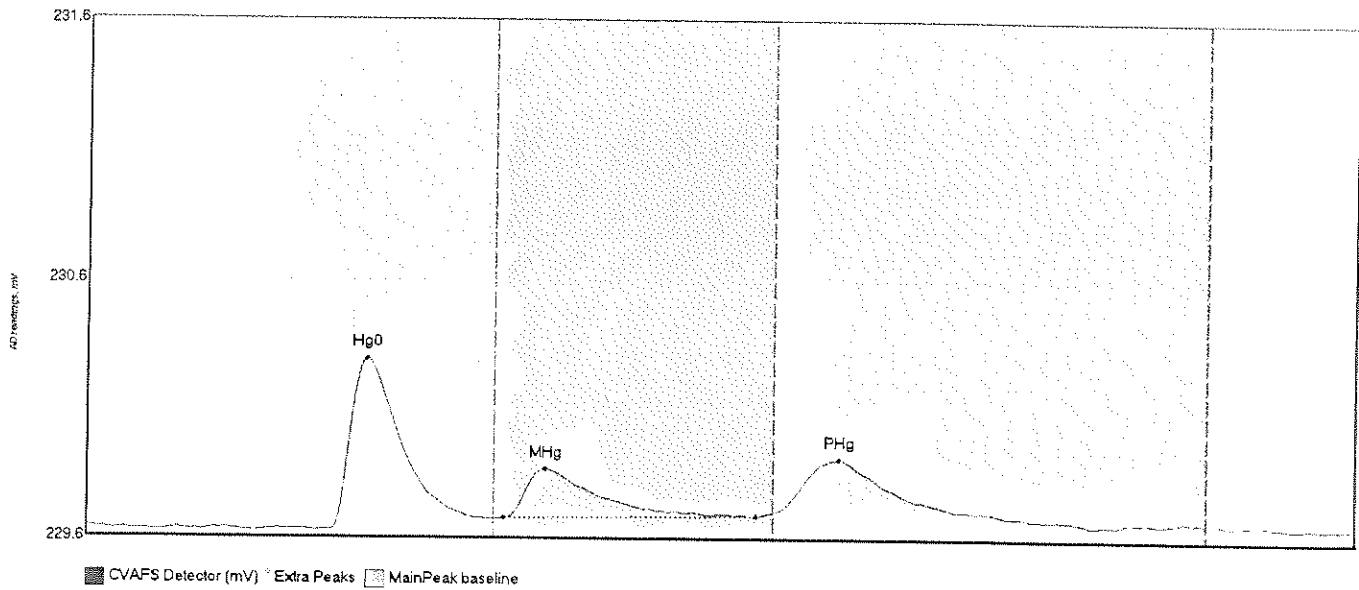
#57: 0E00002-09RE1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

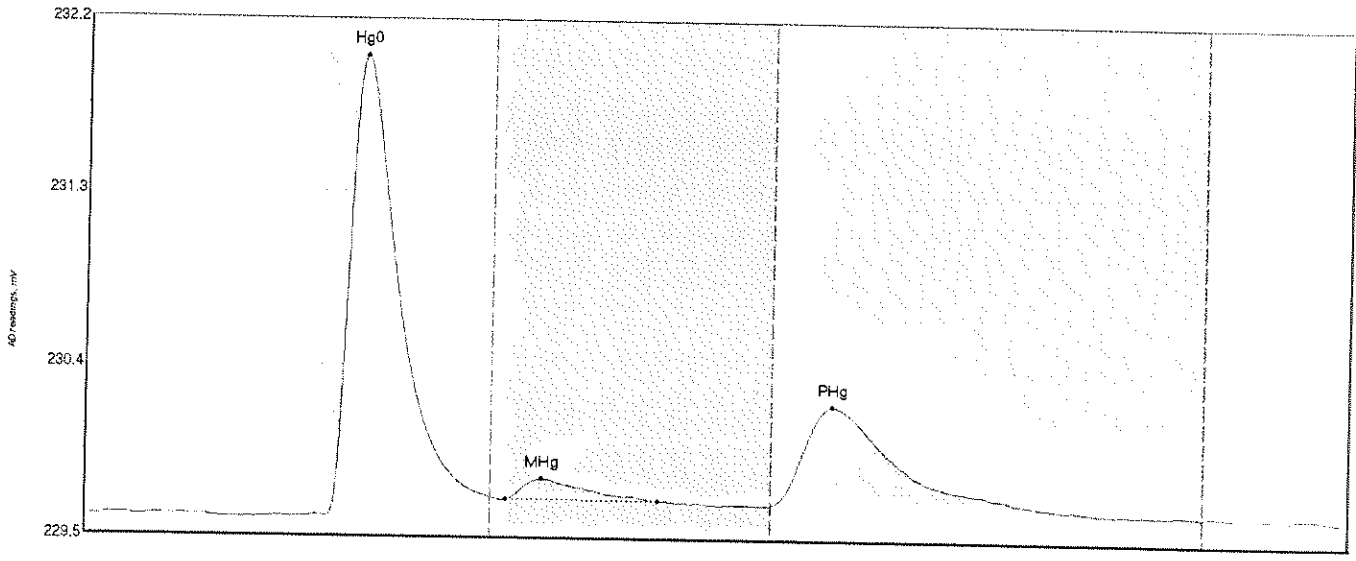
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BShift	Comment
0E00002-09RE1 H	134.729	47.2	79.9	229.59	229.66	54.9	1.222	OK	229.5884	0.00	0.04	F005268
0E00002-09RE1 M	42.762	81.9	123.1	229.66	229.66	90.5	0.291	OK	229.5884	0.00	0.04	F005268
0E00002-09RE1 P	104.453	135.0	192.9	229.65	229.66	149.5	0.512	OK	229.5884	0.00	0.04	F005268

#58: 0E00002-10RE1



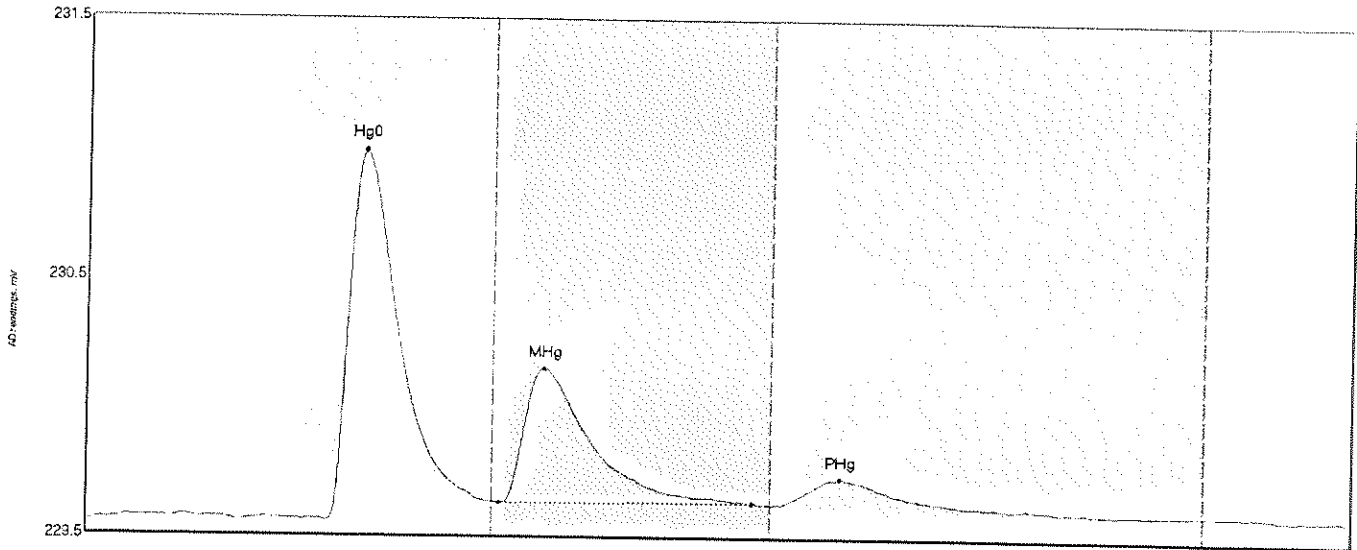
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00002-10RE1 H	72.618	47.8	80.0	229.59	229.63	55.0	0.662	CT	229.6043	0.00	0.01	F005268
0E00002-10RE1 M	30.556	81.9	131.7	229.64	229.65	90.1	0.189	OK	229.6043	0.00	0.01	F005268
0E00002-10RE1 P	33.622	135.0	170.5	229.66	229.67	147.8	0.204	OK	229.6043	0.00	0.01	F005268

#59: 0E00002-11RE1



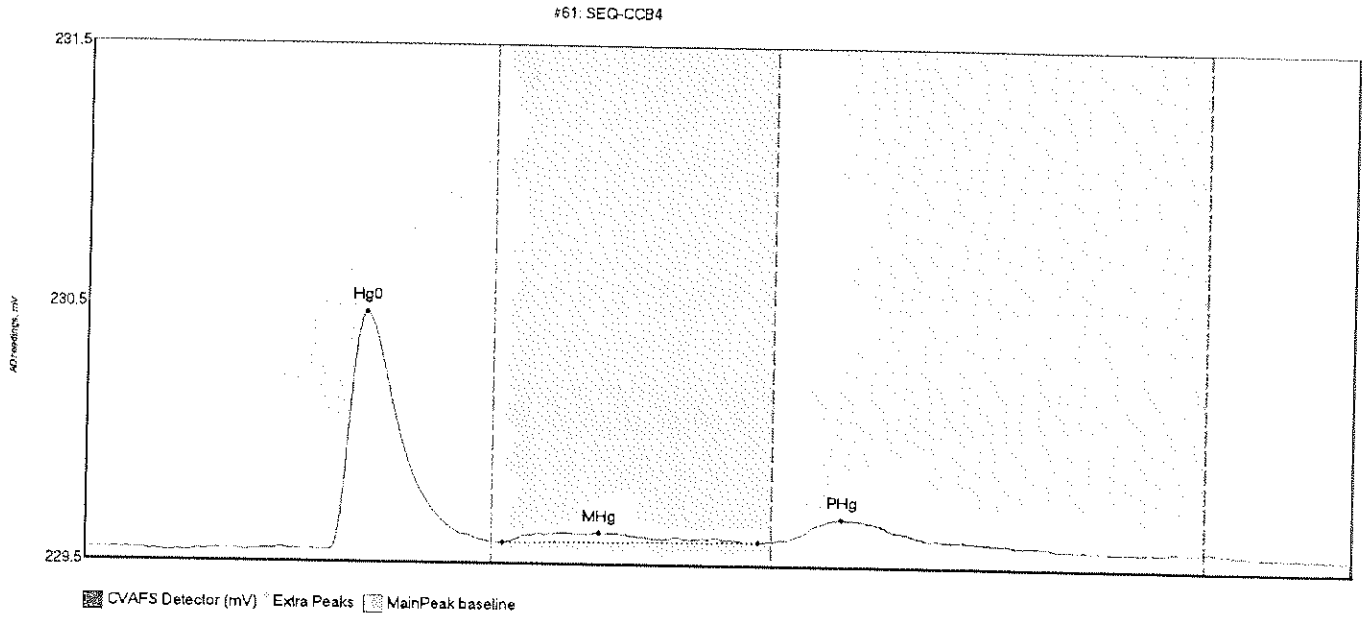
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0E00002-11RE1 H	268.959	47.3	80.0	229.58	229.69	54.8	2.460	CT	229.5829	0.00	0.02	F005268
0E00002-11RE1 M	15.243	83.1	112.7	229.68	229.68	90.1	0.110	OK	229.5829	0.00	0.02	F005268
0E00002-11RE1 P	187.110	135.0	188.7	229.66	229.65	147.0	0.535	OK	229.5829	0.00	0.02	F005268

#60: SEQ-CCV4



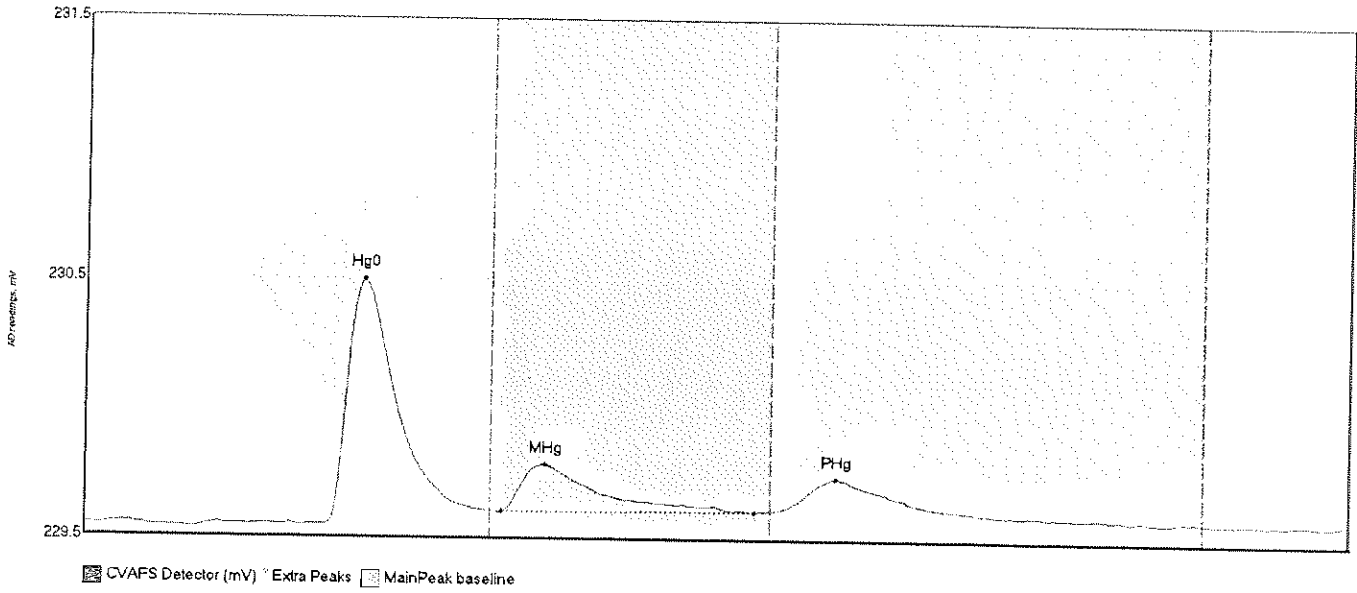
CVAFS Detector (mV) * Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV4 Hg0	156.410	47.5	60.0	229.57	229.65	54.9	1.425	CT	229.5704	0.00	0.03	
SEQ-CCV4 MHg	78.203	81.5	131.4	229.64	229.65	90.2	0.520	OK	229.5704	0.00	0.03	
SEQ-CCV4 PHg	16.381	137.1	170.8	229.64	229.64	148.6	0.101	OK	229.5704	0.00	0.03	



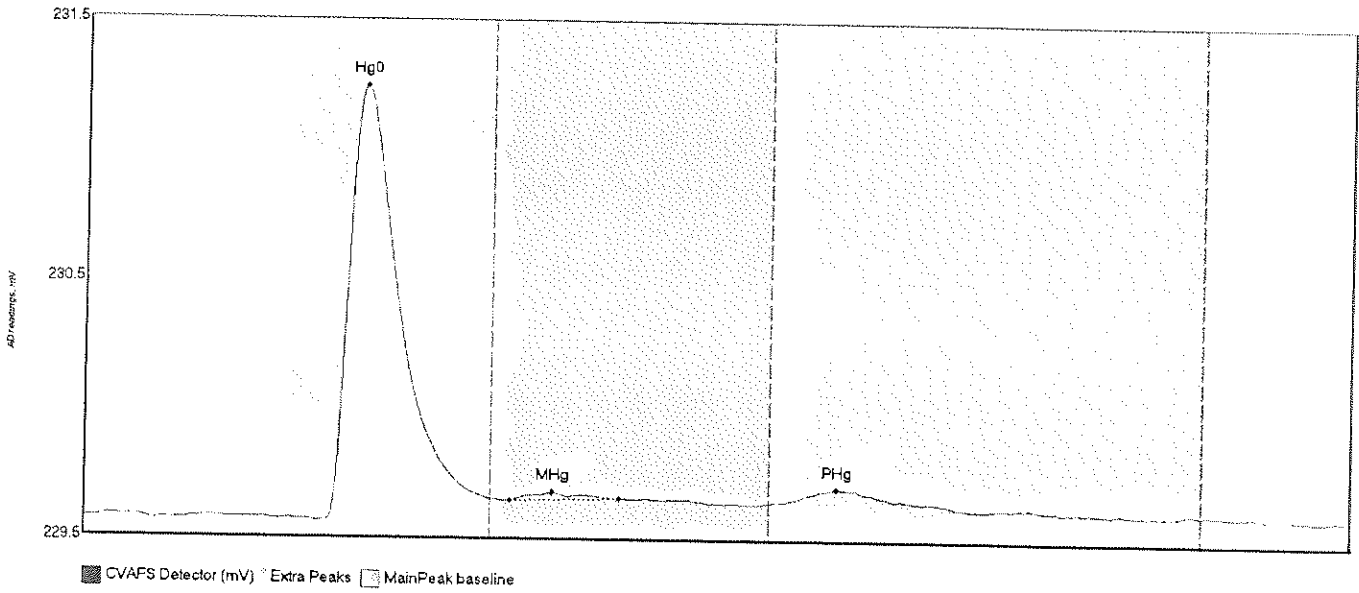
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BlShift	Comment
SEQ-CCB4 Hg0	101.803	46.9	80.8	229.59	229.63	54.9	0.921	CT	229.5960	0.00	0.00	
SEQ-CCB4 MHg	11.200	82.2	132.4	229.63	229.64	101.2	0.041	OK	229.5960	0.00	0.00	
SEQ-CCB4 PHg	13.985	137.2	170.1	229.65	229.65	148.6	0.083	OK	229.5960	0.00	0.00	

#62: 0E00002-12RE1



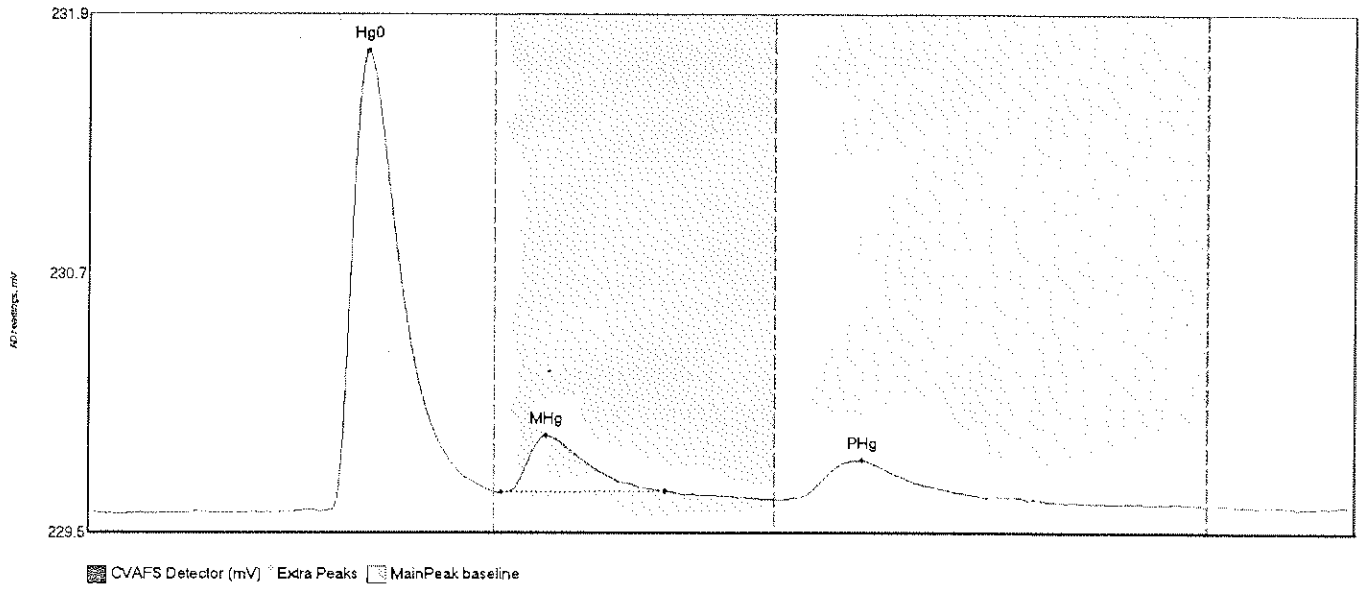
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0E00002-12RE1 H	102.808	47.2	80.0	229.59	229.64	55.0	0.944	CT	229.5879	0.00	0.03	F005268
0E00002-12RE1 M	31.946	82.2	131.8	229.64	229.64	90.6	0.182	OK	229.5879	0.00	0.03	F005268
0E00002-12RE1 P	18.723	136.9	169.9	229.66	229.65	147.9	0.121	OK	229.5879	0.00	0.03	F005268

#83: OE00045-01



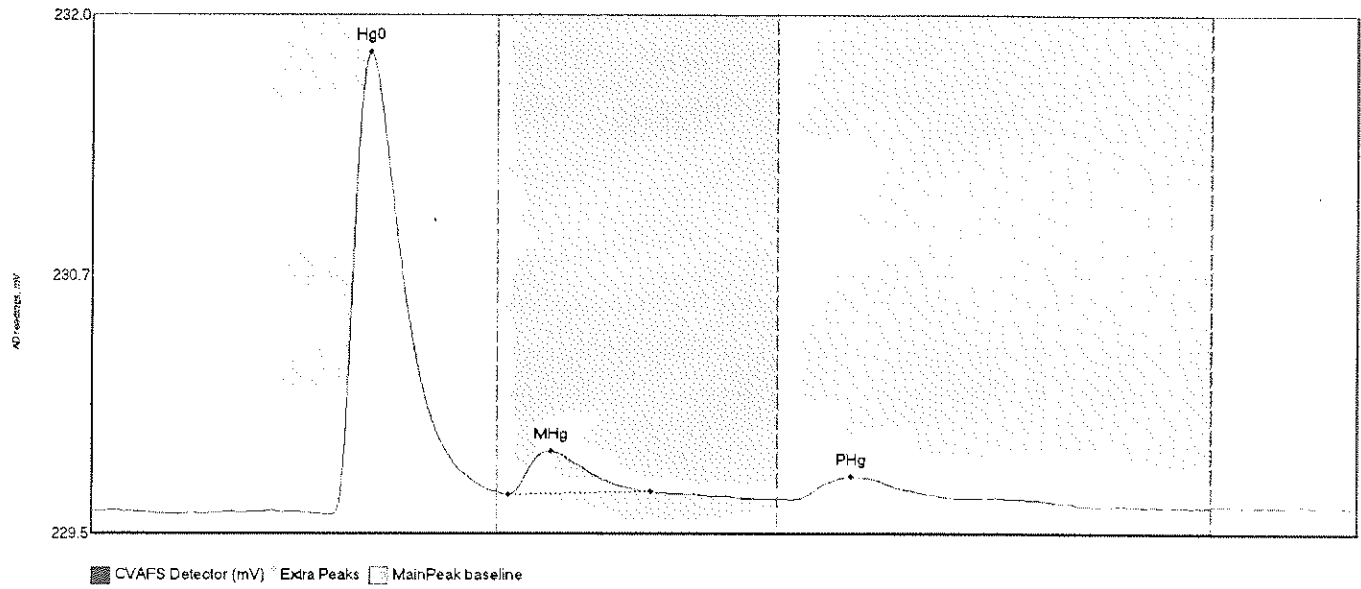
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
OE00045-01 Hg0	184.932	47.7	80.0	229.57	229.66	55.1	1.670	CT	229.5793	0.00	0.02	F005268
OE00045-01 MHg	3.185	83.8	105.4	229.65	229.66	92.2	0.030	OK	229.5793	0.00	0.02	F005268
OE00045-01 PHg	6.521	138.0	162.7	229.65	229.66	148.1	0.050	OK	229.5793	0.00	0.02	F005268

#64: 0E00045-02



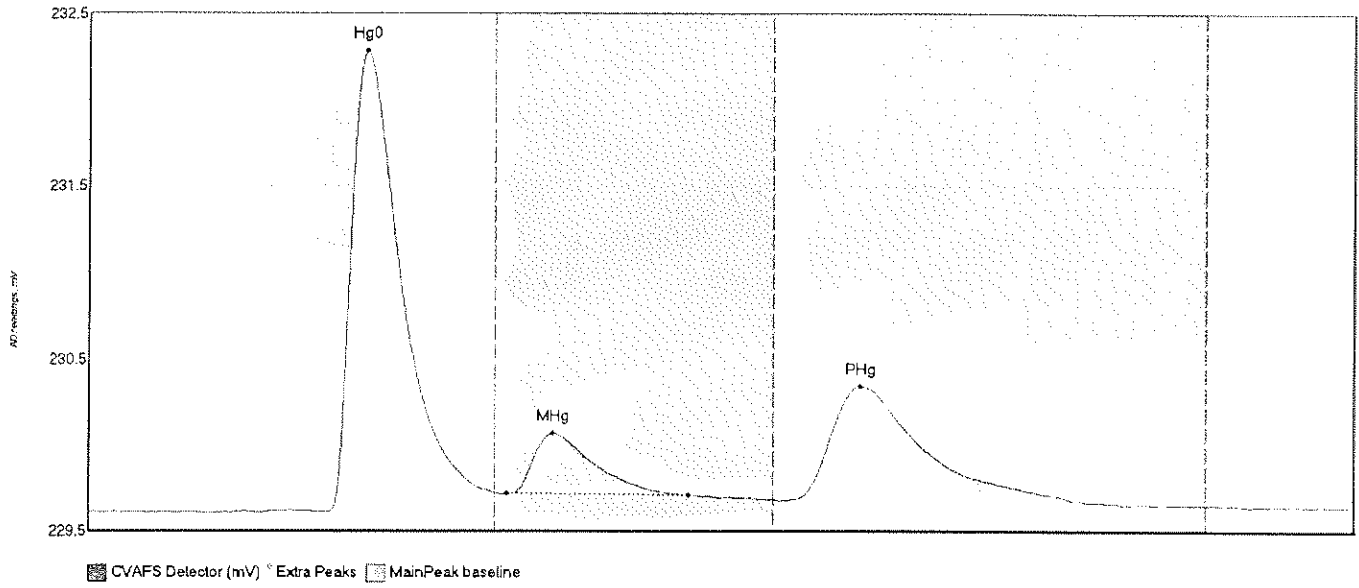
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	HiDev	BiShift	Comment
0E00043-02 Hg0	235.764	46.5	80.0	229.59	229.68	55.0	2.143	CT	229.5900	0.00	0.02	F005268
0E00045-02 MHg	34.697	81.5	113.6	229.68	229.68	90.3	0.265	OK	229.5900	0.00	0.02	F005268
0E00045-02 PHg	36.724	136.2	184.9	229.64	229.64	152.2	0.187	OK	229.5900	0.00	0.02	F005268

#65: 0E00045-03



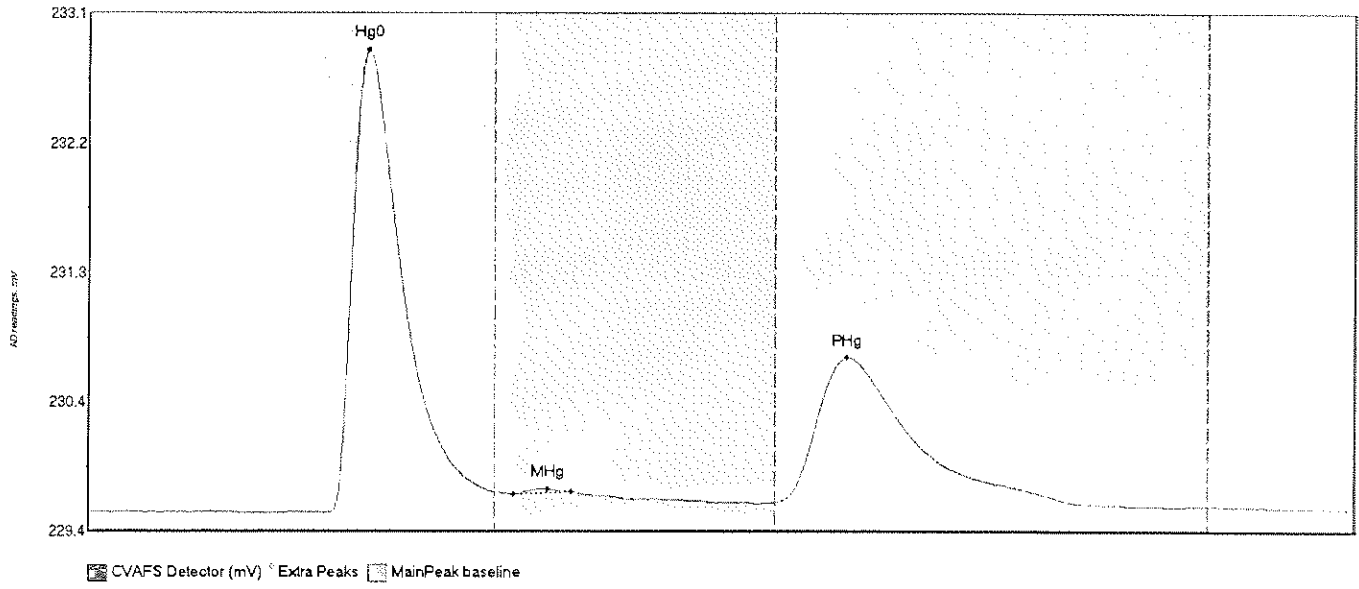
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0E00045-03 Hg0	248.342	46.3	80.0	229.57	229.68	55.1	2.246	OT	229.5881	0.00	0.01	F005268
0E00045-03 MHg	26.443	82.2	109.9	229.67	229.68	90.4	0.210	OK	229.5881	0.00	0.01	F005268
0E00045-03 PHg	17.985	138.5	170.4	229.64	229.65	149.6	0.112	OK	229.5881	0.00	0.01	F005268

#66: 0E00045-04



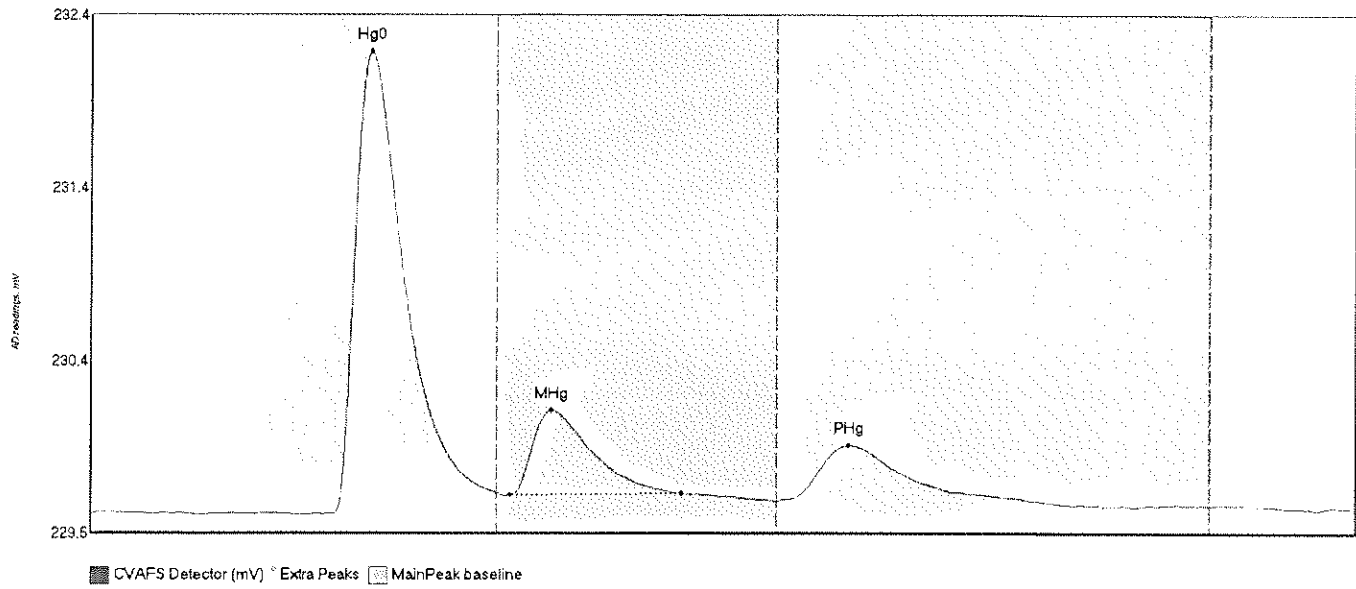
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0E00045-04 Hg0	297.110	47.5	80.0	229.59	229.70	55.1	2.698	CF	229.5836	0.00	0.03	F005268
0E00045-04 MHg	49.357	82.5	118.3	229.69	229.68	91.4	0.356	OK	229.5836	0.00	0.03	F005268
0E00045-04 PHg	137.804	138.5	195.0	229.66	229.65	152.0	0.669	OK	229.5836	0.00	0.03	F005268

#67: 0E00045-05



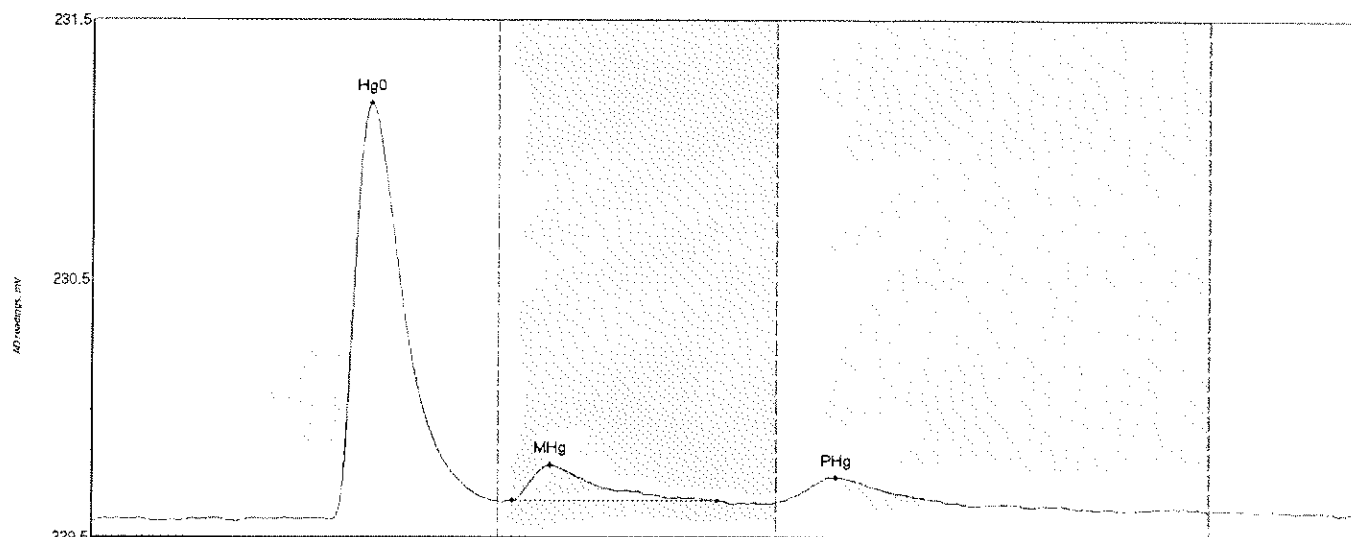
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RDev	BShift	Comment
0E00045-05 Hg0	358.214	46.4	60.0	229.58	229.72	55.1	3.248	CT	229.5820	0.00	0.02	F005268
0E00045-05 MHg	1.731	83.7	95.1	229.71	229.72	90.5	0.035	OK	229.5820	0.00	0.02	F005268
0E00045-05 PHg	217.866	135.2	194.7	229.65	229.64	149.0	1.021	OK	229.5820	0.00	0.02	F005268

#88: DE00045-06



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
DE00045-06 Hg0	290.640	47.4	80.0	229.58	229.70	55.4	2.633	OK	229.5820	0.00	0.02	F005268
DE00045-06 MHg	63.953	82.6	116.1	229.68	229.69	90.7	0.487	OK	229.5820	0.00	0.02	F005268
DE00045-06 PHg	59.993	135.0	185.0	229.65	229.65	149.2	0.319	OK	229.5820	0.00	0.02	F005268

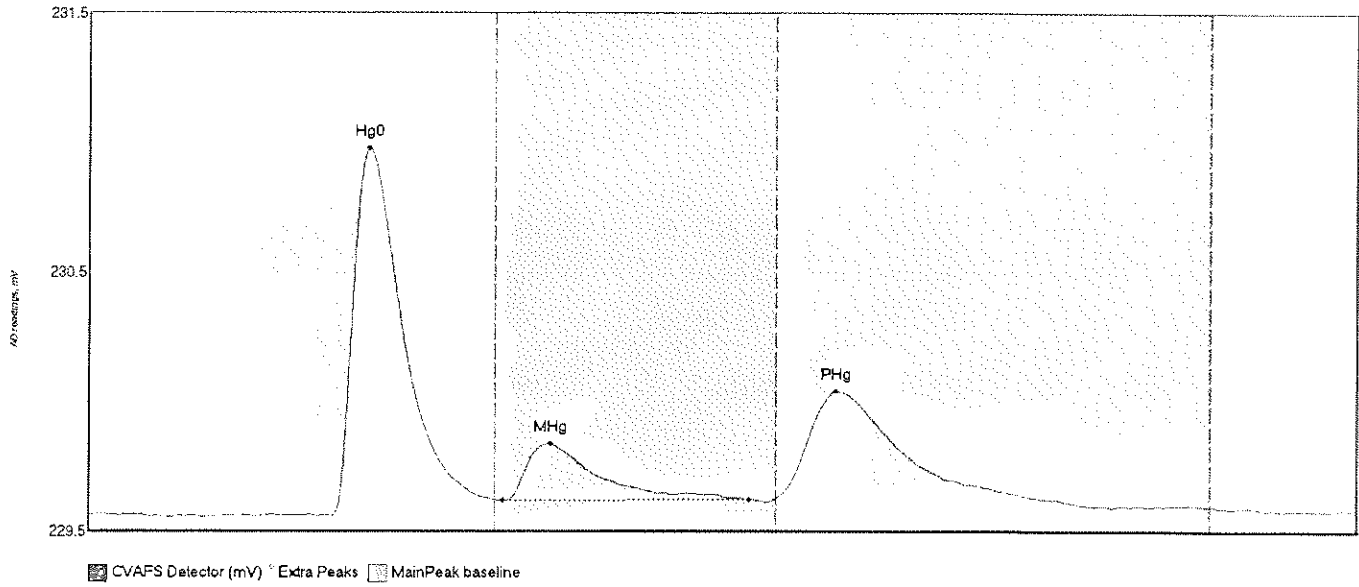
#89: 0E00045-07



CVAFS Detector (mV) Extra Peaks MainPeak baseline

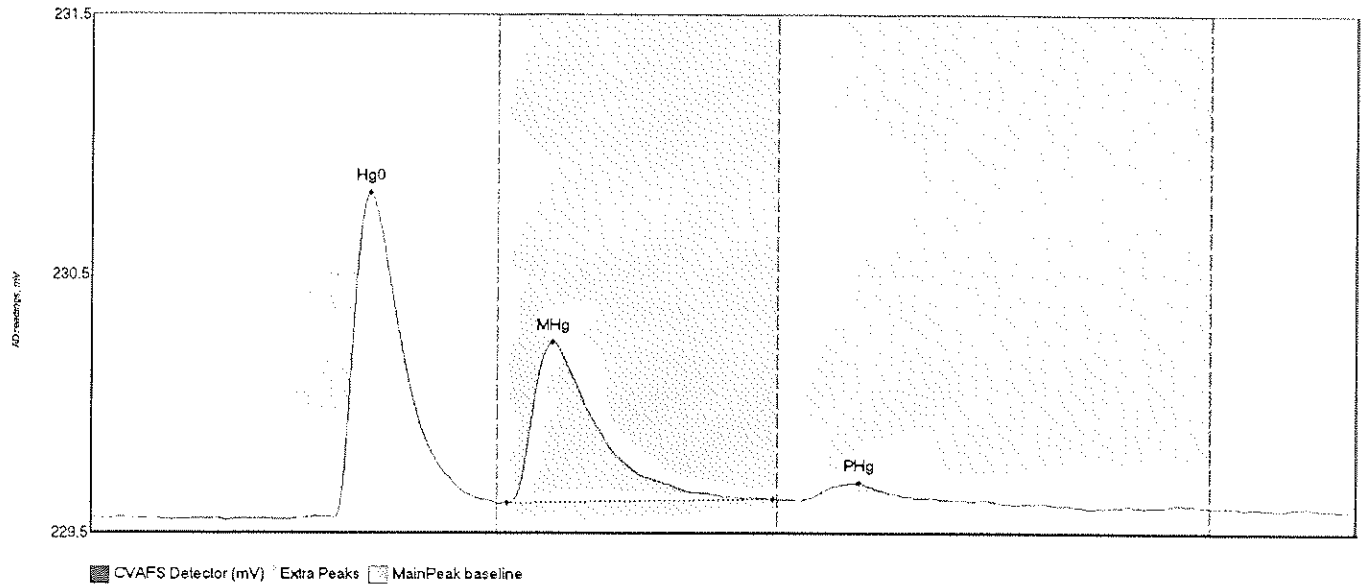
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0E00045-07 Hg0	176.616	47.2	80.0	229.57	229.65	55.2	1.605	CT	229.5705	0.00	0.03	F005268
0E00045-07 MHg	20.987	82.7	123.3	229.65	229.65	90.3	0.138	OK	229.5705	0.00	0.03	F005268
0E00045-07 PHg	15.859	135.0	168.6	229.64	229.64	146.6	0.097	OK	229.5705	0.00	0.03	F005268

#70: 0E00045-08



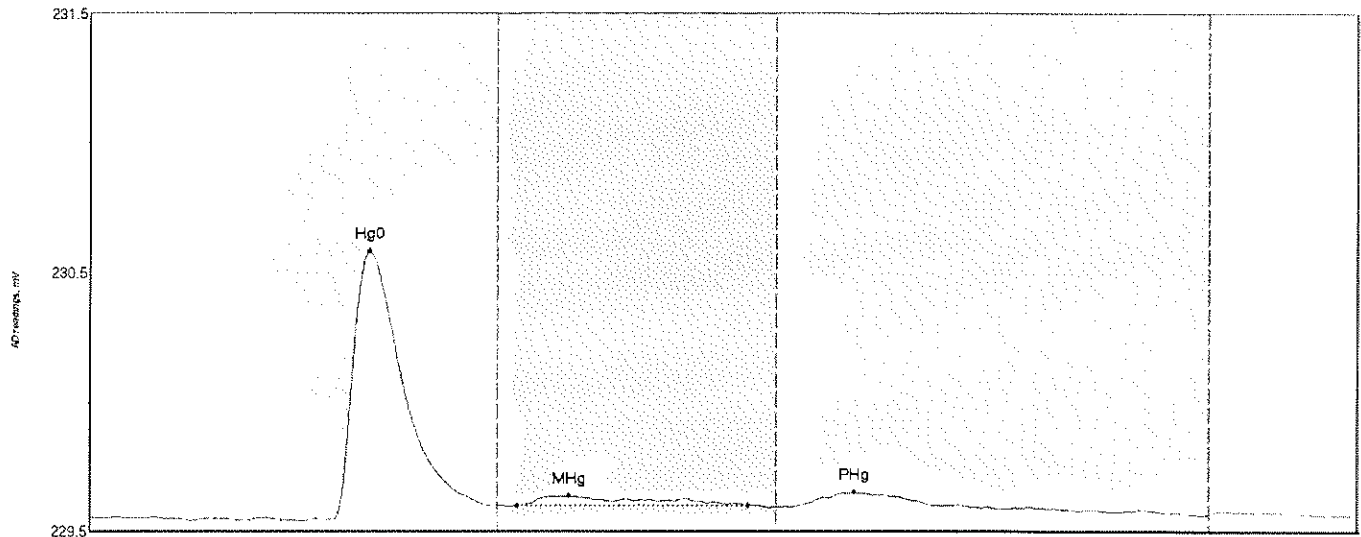
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	Shift	Comment
0E00045-08 Hg0	155.675	47.7	80.0	229.58	229.64	55.1	1.417	CF	229.5858	0.00	0.02	F005268
0E00045-08 MHg	35.766	81.6	129.7	229.64	229.64	90.9	0.220	OK	229.5858	0.00	0.02	F005268
0E00045-08 PHg	80.376	135.0	185.0	229.65	229.65	146.7	0.412	OK	229.5858	0.00	0.02	F005268

#71: SEQ-CCV5



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	WDev	BiShift	Comment
SEQ-CCV5 Hg0	137.718	48.1	80.0	229.57	229.63	55.0	1.251	GT	229.5715	0.00	0.03	
SEQ-CCV5 MHg	90.591	82.0	134.1	229.63	229.64	90.8	0.620	OK	229.5715	0.00	0.03	
SEQ-CCV5 PHg	7.565	139.5	162.3	229.64	229.65	151.1	0.067	OK	229.5715	0.00	0.03	

#72: SEQ-CC85



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Base	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CC85 Hg0	112.556	47.4	78.3	229.57	229.63	55.1	1.034	OK	229.5799	0.00	0.01	
SEQ-CC85 MHg	9.696	83.8	129.4	229.62	229.62	94.2	0.040	OK	229.5799	0.00	0.01	
SEQ-CC85 PHg	9.655	138.3	172.9	229.62	229.62	150.2	0.056	OK	229.5799	0.00	0.01	

Reviewed by: Denise King
Date: 07/21/2020
Wood

ANALYTICAL REPORT

Job Number: 570-27224-1

Job Description: 0E00002

For:

Eurofins Frontier Global Sciences LLC
5755 8th Street E
Tacoma, WA 98424

Attention: Mr. Patrick Garcia-Strickland



Approved for release.
Jimmy Jin
Project Manager I
5/27/2020 9:25 AM

Designee for
Carla Hollowell, Project Manager I
7440 Lincoln Way, Garden Grove, CA, 92841
(714)895-5494
carlahollowell@eurofinsus.com
05/27/2020

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins Calscience LLC

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Tel (714) 895-5494 Fax (714) 894-7501 www.EurofinsUS.com

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Definitions/Glossary

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Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
@	<.61/A!30A/4!1B/!C#C!;Ä-3D0!1Ä!A/6.E091/!1B91!1B/!4/63-Ä/64//A!Ä0!9!A4G!H/.EB1! 96.6
IJ	=/4;/0!1J;/ÄK/4G
,7<	,Ä019.06!74//!<.L3.A
,M7	,Ä019.06!MÄ!74//!<.L3.A
#2J	#3F-./91/!244Ä4!J91.Ä!N0Ä4D9-.O/A!9 6Ä-31/!A.55/4/0;/P
#-!79;	#-31.Ä0!79;1Ä4
#<	#/1;/1.Ä0!<.D.1!N#Ä#?#Q2P
#<R!JSR!J2R!M	"0A.;91/6!9#.-31.Ä0R!J/(909-G6.6R!J/(T149;1.Ä0R!A.1.Ä09-!0.1.9-ID/19-6?90.Ä0!909-G6.6!Ä5!1B/!69DF-/
#<.	#/.6.Ä0!</K!-!Ä0;/01491.Ä0!NJ9A.Ä;B/D.614GP
2#<	261.D91/A!#/1;/1.Ä0!<.D.1!N#ÄT.0P
<Q#	<.D.1!Ä5!#/1;/1.Ä0!N#Ä#?#Q2P
<QU	<.D.1!Ä5!U3901.191.Ä0!N#Ä#?#Q2P
V#S	V.0.D3D!#/1;/19-/!S;1.K.1G!NJ9A.Ä;B/D.614GP
V#.	V.0.D3D!#/1;/19-/!Ä0;/01491.Ä0!NJ9A.Ä;B/D.614GP
V#<	V/1BÄA!#/1;/1.Ä0!<.D.1
V<	V.0.D3D!</K!-!N#ÄT.0P
VU<	V/1BÄA!U3901.191.Ä0!<.D.1
M,	MÄ1!,9;-3-91/A
M#	MÄ1!#/1;/1/A!91!1B/!4/FÄ41.0E!-.D.1!NÄ4!V#<!Ä4!2#<!5!6BÄH0P
=U<	=49;1.;9-IU3901.191.Ä0!<.D.1
U,	U39-.1G!;Ä014Ä-
J2J	J/-91.K/!244Ä4!J91.Ä!NJ9A.Ä;B/D.614GP
J<	J/FÄ41.0E!<.D.1!Ä4!J/L3/61/A!<.D.1!NJ9A.Ä;B/D.614GP
J=#	J/-91.K!/=/4;/01!#.55/4/0;/R!9!D/9634/!Ä5!1B/!4/-91.K/!A.554/0;/! /1H/0!1HÄ!FÄ.016
W27	WÄT.;.1G!2L3.K9-/01!79;1Ä4!N#ÄT.0P
W2U	WÄT.;.1G!2L3.K9-/01!U3Ä1./01!N#ÄT.0P

CASE NARRATIVE

Client: Eurofins Frontier Global Sciences LLC

Project: 0E00002

Report Number: 570-27224-1

ÄÄ !"#!%"&\$"()% !" &(Ä%"+',"+*"#\$%-#%.(+&"%'+(/"0%#&12"(Ä%\$&+,\$1 %!"%1\$(%3"+"(Ä !""'+(/"%Ä+3"!%#*+##\$8#%"

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7\$1#81\$(+&!"\$%#*+',%3%;%*+'%""+8&3 &="(+"\$)+ 3""+8&3C+***%# &#\$1#81\$(%3""%181(!9

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RECEIPT

ÄÄ%!"\$.1%!"0%'%"#%)%3"+&"D4E4EFEF"\$("GGHIF"6JK"(Ä%!"\$)%%!"\$="++3"#+&3 (+&/"'.%12'.!%)%3!"\$&3"0Ä%'%"%B83/"+"&

N+(%H"611!"\$.1%!"0Ä #Ä"%B8Ä%, \$1".!%)\$(+&"\$%"+&! 3%'3"\$##%.\$;1%" *(Ä%"\$")\$1"(%.\$%\$(8%" !"0 (Ä &"E"3%7%#198!"+"*

ASTM D3977B

Ä\$.1%!"U5COVÄWFPEXEFWUWGF"ÄYÄ6>"?DLFCELEEEPCG@/"TACGDWFFPEXEFWUWGF"ÄYÄ6>"?DLFCELEEEPC@7ZWFPEXEFWUWGF"

N+"\$\$12(#1"+"B8\$1 (2" !!8%!"0%'%"&+(%3"/+(Ä%""(Ä&\$"(Ä+!"3%!"# ;%3"\$;+)%"+"" &(Ä%"%"* & (+&I4^1+!!\$2".\$.%9

This report was revised on July 21, 2020, to correctly update the Case Narrative page.

Detection Summary

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=4Ä>;/1?;.1/\$!2"")

ÄÄ !"#\$!%&'(&))**(+)

Client Sample ID: WQ-FPT_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
:/@.A/01!,Ä0;/01491.Ä0!BAC?<D	+*EJ		'EF&	AC?<		+	#KF&&	GÄ19-?HI

Client Sample ID: ES-15_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
:/@.A/01!,Ä0;/01491.Ä0!BAC?<D	+)E'		'EF+L	AC?<		+	#KF&&	GÄ19-?HI

Client Sample ID: WQ-ECH_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
:/@.A/01!,Ä0;/01491.Ä0!BAC?<D	+)EL		'EF)&	AC?<		+	#KF&&	GÄ19-?HI

Client Sample ID: OV-02_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
:/@.A/01!,Ä0;/01491.Ä0!BAC?<D	+EL)		'EF%L	AC?<		+	#KF&&	GÄ19-?HI

Client Sample ID: ADD-02_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
:/@.A/01!,Ä0;/01491.Ä0!BAC?<D	)LE*		+EJ*	AC?<		+	#KF&&	GÄ19-?HI

Client Sample Results

,-./01\$!234Å5.06!74Ä01./4!8-Ä 9-!;./0;/6!<<,
=4Ä>;1?:.1/\$!2''')

ÄÄ !"#\$(%&'(&))**(+)

General Chemistry

Client Sample ID: WQ-FPT_042920_SW_10 TOTAL

Date Collected: 04/29/20 17:50

Date Received: 05/02/20 11:30

Lab Sample ID: 570-27224-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	14.6		'@A'&	BC?<			'%?+D?)!+D\$+D	+

Client Sample ID: ES-15_042920_SW_10 TOTAL

Date Collected: 04/29/20 17:05

Date Received: 05/02/20 11:30

Lab Sample ID: 570-27224-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	12.0		'@A+E	BC?<			'%?+D?)!+D\$+D	+

Client Sample ID: WQ-ECH_042920_SW_10 TOTAL

Date Collected: 04/29/20 16:15

Date Received: 05/02/20 11:30

Lab Sample ID: 570-27224-3

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	12.8		'@A)&	BC?<			'%?+D?)!+D\$+D	+

Client Sample ID: OV-02_042920_SW_10 TOTAL

Date Collected: 04/29/20 12:45

Date Received: 05/02/20 11:30

Lab Sample ID: 570-27224-4

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	1.82		'@A%E	BC?<			'%?+D?)!+D\$+D	+

Client Sample ID: ADD-02_042920_SW_10 TOTAL

Date Collected: 04/29/20 10:14

Date Received: 05/02/20 11:30

Lab Sample ID: 570-27224-5

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	28.4		+@F*	BC?<			'%?+D?)!+D\$+D	+

234Ä5.06!,9-6;./0;/!<<,

Default Detection Limits

ÄÄ !"#\$\$%&'()* +%,() "# !(%-Ä)./Ä%01 !"1!+%22Ä
=()>!1#?0 #!\$%8&8888:

3).%45\$%6789:7::;9

General Chemistry

Analyte	RL	Units
0!A B!"#%Ä"1!"#/#)"%CBD?2E	<@88	<@88 BD?2

QC Sample Results

./01\$!234Ä5.06!74Ä01./4!8-Ä 9-!;./0;/6!<<, =4Ä>/;1?;.1/\$!2"")

ÄÄ !"#!%&'(&))**(+)

Method: D3977 - Sediment Concentration in Water Samples

Lab Sample ID: MB 570-68837/1
Matrix: Water
Analysis Batch: 68837

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
:/@.A/01!,Ä0;/01491.Ä0!BAC?<D	E#		+F"	AC?<			' %?+G?)!+G\$+G	+

Lab Sample ID: LCS 570-68837/2
Matrix: Water
Analysis Batch: 68837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
:/@.A/01!,Ä0;/01491.Ä0!BAC?<D	+"	+GF'		AC?<		+G	H%q +%

Lab Sample ID: LCSD 570-68837/3
Matrix: Water
Analysis Batch: 68837

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
:/@.A/01!,Ä0;/01491.Ä0!BAC?<D	+"	HIF+		AC?<		HI	H%q +%	%)'

234Ä5.06!,9-6;./0;/!<<,)

QC Association Summary

,-./01\$!234Ä5.06!74Ä01./4!8-Ä 9-!;./0;/6!<<,
=4Ä>/;1?:.1/\$!2''')

ÄÄ !"#!%&'(&))**(+)

General Chemistry

Analysis Batch: 68837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
%&'(&))**(+	@C(7=DE*)B)'E:@E+'!DFDG<	DÄ19-?HG	@91/4	#AB&&	
%&'(&))**(	2:(+%E*)B)'E:@E+'!DFDG<	DÄ19-?HG	@91/4	#AB&&	
%&'(&))**(A	@C(2,IE*)B)'E:@E+'!DFDG<	DÄ19-?HG	@91/4	#AB&&	
%&'(&))**(*	FJ(')E*)B)'E:@E+'!DFDG<	DÄ19-?HG	@91/4	#AB&&	
%&'(&))**(%	G##(')E*)B)'E:@E+'!DFDG<	DÄ19-?HG	@91/4	#AB&&	
KL!%&'(MNNA&?+	K/1OÄP!L-90Q	DÄ19-?HG	@91/4	#AB&&	
<.:!%&'(MNNA&?)	<9 !,Ä014Ä-!9RS-/	DÄ19-?HG	@91/4	#AB&&	
<.:#!%&'(MNNA&?A	<9 !,Ä014Ä-!9RS-!/#3S	DÄ19-?HG	@91/4	#AB&&	

234Ä5.06!,9-6;./0;/!<<,

Lab Chronicle

ÄÄ !"#\$\$%&'()* +,(-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\] ^ _ ` a b c d e f g h i j k l m n o p q r s t u v w x y z { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

3).%45\$%6789:7::;9

Client Sample ID: WQ-FPT_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-1

Date Collected: 04/29/20 17:50

Matrix: Water

Date Received: 05/02/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
1)##/Ä?J@	@"/ÄÄ+ +	5BC77		<	<<8:K<G%L	<888%L	GHHB7	86?<B?:8%<B\$<B	BECE	&Ä2%<
4"+#('M'!#"#%45\$J N&OF4=										

Client Sample ID: ES-15_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-2

Date Collected: 04/29/20 17:05

Matrix: Water

Date Received: 05/02/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
1)##/Ä?J@	@"/ÄÄ+ +	5BC77		<	<8HHK76%L	<888%L	GHHB7	86?<B?:8%<B\$<B	BECE	&Ä2%<
4"+#('M'!#"#%45\$J N&OF4=										

Client Sample ID: WQ-ECH_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-3

Date Collected: 04/29/20 16:15

Matrix: Water

Date Received: 05/02/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
1)##/Ä?J@	@"/ÄÄ+ +	5BC77		<	<87HK;7%L	<888%L	GHHB7	86?<B?:8%<B\$<B	BECE	&Ä2%<
4"+#('M'!#"#%45\$J N&OF4=										

Client Sample ID: OV-02_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-4

Date Collected: 04/29/20 12:45

Matrix: Water

Date Received: 05/02/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
1)##/Ä?J@	@"/ÄÄ+ +	5BC77		<	<8;BK66%L	<888%L	GHHB7	86?<B?:8%<B\$<B	BECE	&Ä2%<
4"+#('M'!#"#%45\$J N&OF4=										

Client Sample ID: ADD-02_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-5

Date Collected: 04/29/20 10:14

Matrix: Water

Date Received: 05/02/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
1)##/Ä?J@	@"/ÄÄ+ +	5BC77		<	G8HKB<%L	<888%L	GHHB7	86?<B?:8%<B\$<B	BECE	&Ä2%<
4"+#('M'!#"#%45\$J N&OF4=										

Laboratory References:

&Ä2%<%P%&'()* +,(-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\] ^ _ ` a b c d e f g h i j k l m n o p q r s t u v w x y z { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

&'()* +,(-./:;<=>?@A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\] ^ _ ` a b c d e f g h i j k l m n o p q r s t u v w x y z { | } ~ ¡ ¢ £ ¤ ¥ ¦ § ¨ © ª « ¬ ® ¯ ° ± ² ³ ´ µ ¶ · ¸ ¹ º » ¼ ½ ¾ ¿

Accreditation/Certification Summary

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 =()>!1#?0 #!\$%8&8888:

3).%45\$%6789:7::;9

Laboratory: Eurofins Calscience LLC

@ÄÄ%/11(!A #/#)" +?1!(# * 1/#)" +%B!ÄA%.C%#B +%Ä/.) (#)(Ä) (Ä) #/ÄÄ%/11(!A #/#)" +?1!(# * 1/#)" +%/(!%/FÄ#B.Ä%(#)(#D

Authority	Program	Identification Number	Expiration Date
Ä/Ä *)(" /	2)+%@"H!Ä!+%Ä)"#C%0!" #/#)" % 5 +#(1#+	<8<8G	8G9:G9:8
Ä/Ä *)(" /	0Ä@IJ5%2@=	<72@8G<G	<<9K89:8
Ä/Ä *)(" /	0###	: G;;	8G9:G9:8
-/L	0###	: 8988KM	<89K<9:8
EIN/A/	0###	Ä@88<<<	879K<9:8
O(!H)"	E&2@=	Ä@K8888<	8<9:G9:<
P05@	P0%,!A!(/Ä%=()H(L+	=KK89:89888K;	8:9<89:K
Q/+B "H#)"	0###	ÄG<R9<S	<89<<9:8

&'()* "+%Ä/Ä+1 !"1!%22Ä

Method Summary

,-./01\$!234Ä5.06!74Ä01./4!8-Ä 9-!;./0;/6!<<,
=4Ä>/;1?:.1/\$!2''')

ÄÄ !"#\$!%&'(&))**(+)

Method	Method Description	Protocol	Laboratory
#CD&&	:/E.F/01!,Ä0;/01491.Ä0!.0!G91/4!:9FH-6	@:AB	2,<!+

Protocol References:

@:AB!!@:AB!"01/4091.Ä09-

Laboratory References:

2,<!+!!!234Ä5.06!,9-6;./0;/!<<,!!<.0;Ä-0J!&***!<.0;Ä-0!G9KJ!894 E/0!84ÄL/J!,@!D)M*+J!A2<!N&+*OMD%(%*D*

Sample Summary

,-/01\$!234Ä5.06!74Ä01./4!8-Ä 9-!;./0;/6!<<,
=4Ä>;/1?;.1/\$!2''')

ÄÄ !"#!%&'(&))**(+)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
%&'(&))**(+	@A(7=BC*)D)'C:@C+'!BEBF<	@91/4	**?)D?)'+&\$%'	'%?)?)' !++\$G'	
%&'(&))**(	2:(+%C*)D)'C:@C+'!BEBF<	@91/4	**?)D?)'+&\$%'	'%?)?)' !++\$G'	
%&'(&))**(G	@A(2,HC*)D)'C:@C+'!BEBF<	@91/4	**?)D?)'+I\$+%'	'%?)?)' !++\$G'	
%&'(&))**(*	EJ(')C*)D)'C:@C+'!BEBF<	@91/4	**?)D?)'+)\$*%'	'%?)?)' !++\$G'	
%&'(&))**(%	F##(')C*)D)'C:@C+'!BEBF<	@91/4	**?)D?)'+)\$+*	'%?)?)' !++\$G'	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Calscience Job No.: 570-27224-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WC_TSS STD 00019	09/20/20	03/20/20	DI Water, Lot 112719	2 L	WC_TSS_STK_00002	0.2 g	Sediment Concentration (mg/L)	100 mg/L
.WC_TSS_STK_00002	11/04/21		FISHER, Lot 160676		(Purchased Reagent)		Sediment Concentration (mg/L)	1 g/g

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience _____

Job Number: 570-27224-1 _____

SDG No.: _____

Project: 0E00002 _____

Client Sample ID
WQ-FPT_042920_SW_10 TOTAL
ES-15_042920_SW_10 TOTAL
WQ-ECH_042920_SW_10 TOTAL
OV-02_042920_SW_10 TOTAL
ADD-02_042920_SW_10 TOTAL

Lab Sample ID
570-27224-1
570-27224-2
570-27224-3
570-27224-4
570-27224-5

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ-FPT_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-1

Lab Name: Eurofins Calscience

Job No.: 570-27224-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 17:50

Reporting Basis: WET

Date Received: 05/02/2020 11:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	14.6	0.907	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: ES-15_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-2

Lab Name: Eurofins Calscience

Job No.: 570-27224-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 17:05

Reporting Basis: WET

Date Received: 05/02/2020 11:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	12.0	0.918	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ-ECH_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-3

Lab Name: Eurofins Calscience

Job No.: 570-27224-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 16:15

Reporting Basis: WET

Date Received: 05/02/2020 11:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	12.8	0.927	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OV-02_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-4

Lab Name: Eurofins Calscience

Job No.: 570-27224-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 12:45

Reporting Basis: WET

Date Received: 05/02/2020 11:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	1.82	0.958	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: ADD-02_042920_SW_10 TOTAL

Lab Sample ID: 570-27224-5

Lab Name: Eurofins Calscience

Job No.: 570-27224-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 10:14

Reporting Basis: WET

Date Received: 05/02/2020 11:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	28.4	1.64	mg/L			1	D3977

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job No.: 570-27224-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 68837 Date: 05/13/2020 13:13							
D3977	MB 570-68837/1	Sediment Concentration (mg/L)	ND		mg/L	1.00	1

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-27224-1
 SDG No.: _____
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 68837		Date: 05/13/2020 13:13									
						LCS Source: WC_TSS_STD_00019					
D3977	LCS 570-68837/2	Sediment Concentration (mg/L)	103.0		mg/L	100	103	95-105	5	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-27224-1
 SDG No.: _____
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 68837		Date: 05/13/2020 13:13									
						LCSD Source: WC_TSS_STD_00019					
D3977	LCSD 570-68837/3	Sediment Concentration (mg/L)	98.01		mg/L	100	98	95-105	5	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job Number: 570-27224-1

SDG Number: _____

Matrix: Water

Instrument ID: NOEQUIP

Method: D3977

RL Date: 03/12/2018 16:31

Analyte	Wavelength/ Mass	RL (mg/L)	
Sediment Concentration (mg/L)		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job Number: 570-27224-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: D3977 XMDL Date: 04/02/2017 14:13

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sediment Concentration (mg/L)		1	0.889

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-27224-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: D3977

Start Date: 05/13/2020 13:13 End Date: 05/13/2020 13:15

Lab Sample Id	D/F	T y p e	Time	Analytes																			
				S e d C o n c																			
MB 570-68837/1	1	T	13:13	X																			
LCS 570-68837/2	1	T	13:13	X																			
LCSD 570-68837/3	1	T	13:13	X																			
ZZZZZZ			13:13																				
ZZZZZZ			13:13																				
ZZZZZZ			13:13																				
ZZZZZZ			13:13																				
570-27224-1	1	T	13:13	X																			
570-27224-2	1	T	13:13	X																			
570-27224-3	1	T	13:13	X																			
570-27224-4	1	T	13:13	X																			
570-27224-5	1	T	13:13	X																			
ZZZZZZ			13:13																				
ZZZZZZ			13:13																				
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Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-27224-1

SDG No.:

Batch Number: 68837 Batch Start Date: 05/13/20 13:13 Batch Analyst: Ie, Uyen

Batch Method: D3977 Batch End Date: 05/14/20 08:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	CrucibleID	SampTare	SampGross	InitialAmount	SedTare	SedGross
MB 570-68837/1		D3977		A0975889 0.3693	0 g	1000 g	1000 g	0.3693 g	0.3698 g
LCS 570-68837/2		D3977		A0975888 0.3700	0 g	100 g	100 g	0.3700 g	0.3803 g
LCSD 570-68837/3		D3977		A0975887 0.3687	0 g	100 g	100 g	0.3687 g	0.3785 g
570-27224-A-1	WQ-FPT_042920_SW_10 TOTAL	D3977	T	A0975882 0.3675	97.79 g	1199.95 g	1102.16 g	0.3675 g	0.3836 g
570-27224-A-2	ES-15_042920_SW_10 TOTAL	D3977	T	A0975881 0.3705	103.31 g	1192.06 g	1088.75 g	0.3705 g	0.3836 g
570-27224-A-3	WQ-ECH_042920_SW_10 TOTAL	D3977	T	A0975880 0.3681	139.91 g	1218.38 g	1078.47 g	0.3681 g	0.3819 g
570-27224-A-4	OV-02_042920_SW_10 TOTAL	D3977	T	A0975879 0.3665	151.93 g	1195.48 g	1043.55 g	0.3665 g	0.3684 g
570-27224-A-5	ADD-02_042920_SW_10 TOTAL	D3977	T	A0975878 0.3664	567.07 g	1175.38 g	608.31 g	0.3664 g	0.3837 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	SedNet	CalCMsg	FinalAmount	WC_TSS_STD_00019
MB 570-68837/1		D3977		0.0005 g	OK	1000 g	
LCS 570-68837/2		D3977		0.0103 g	OK	1000 g	100 mL
LCSD 570-68837/3		D3977		0.0098 g	OK	1000 g	100 mL
570-27224-A-1	WQ-FPT_042920_SW_10 TOTAL	D3977	T	0.0161 g	OK	1000 g	
570-27224-A-2	ES-15_042920_SW_10 TOTAL	D3977	T	0.0131 g	OK	1000 g	
570-27224-A-3	WQ-ECH_042920_SW_10 TOTAL	D3977	T	0.0138 g	OK	1000 g	
570-27224-A-4	OV-02_042920_SW_10 TOTAL	D3977	T	0.0019 g	OK	1000 g	
570-27224-A-5	ADD-02_042920_SW_10 TOTAL	D3977	T	0.0173 g	OK	1000 g	

Batch Notes	
Nominal Amount Used	1000 g
Perform Calculation (0=No, 1=Yes)	Yes

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-27224-1

SDG No.:

Batch Number: 68837 Batch Start Date: 05/13/20 13:13 Batch Analyst: Ie, Uyen

Batch Method: D3977 Batch End Date: 05/14/20 08:00

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

BALANCE CALIBRATION CHECK LOG

Eurofins Calscience

Date performed: 05/13/20 Initials: YRJV

ID	Class 2 Weight (g)	Reading (g)	Acceptance Range	Pass? (circle one)	Comment (If not passed, note removal or corrective action)
83	1	1.02	0.98 - 1.02	<input checked="" type="radio"/> Y <input type="radio"/> N	IO Lab
	100	100.01	98.00 - 102.00	<input checked="" type="radio"/> Y <input type="radio"/> N	
62	0.002	0.0017	0.0015 - 0.0025	<input checked="" type="radio"/> Y <input type="radio"/> N	IO Lab
	1	0.9994	0.9990 - 1.0010	<input checked="" type="radio"/> Y <input type="radio"/> N	
	100	99.9920	99.9000 - 100.1000	<input checked="" type="radio"/> Y <input type="radio"/> N	
11	1	1.00	0.98 - 1.02	<input checked="" type="radio"/> Y <input type="radio"/> N	IO Lab
	100	99.99	98.00 - 102.00	<input checked="" type="radio"/> Y <input type="radio"/> N	
55	1	1.01	0.98 - 1.02	<input checked="" type="radio"/> Y <input type="radio"/> N	IO Lab
	100	99.99	98.00 - 102.00	<input checked="" type="radio"/> Y <input type="radio"/> N	
	500	499.96	490.00 - 510.00	<input checked="" type="radio"/> Y <input type="radio"/> N	
86	1	1.01	0.98 - 1.02	<input checked="" type="radio"/> Y <input type="radio"/> N	IO Lab
	100	100.00	98.00 - 102.00	<input checked="" type="radio"/> Y <input type="radio"/> N	
	500	499.99	490.00 - 510.00	<input checked="" type="radio"/> Y <input type="radio"/> N	
71	0.002	0.0018	0.0015 - 0.0025	<input checked="" type="radio"/> Y <input type="radio"/> N	BOD Room
	1	0.9992	0.9990 - 1.0010	<input checked="" type="radio"/> Y <input type="radio"/> N	
	100	99.9918	99.9000 - 100.1000	<input checked="" type="radio"/> Y <input type="radio"/> N	
63	0.1	0.10	0.08 - 0.12	<input type="radio"/> Y <input type="radio"/> N	BOD Room
	100	99.99	98.00 - 102.00	<input type="radio"/> Y <input type="radio"/> N	
73	0.1	0.10	0.08 - 0.12	<input checked="" type="radio"/> Y <input type="radio"/> N	Oil & Grease Room
	1	1.00	0.98 - 1.02	<input checked="" type="radio"/> Y <input type="radio"/> N	
	100	99.99	98.00 - 102.00	<input checked="" type="radio"/> Y <input type="radio"/> N	
87	0.002	0.0019	0.0015 - 0.0025	<input checked="" type="radio"/> Y <input type="radio"/> N	Solids Room
	1	0.9993	0.9990 - 1.0010	<input checked="" type="radio"/> Y <input type="radio"/> N	
	100	99.9917	99.9000 - 100.1000	<input checked="" type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	

Comments:

WT SET ID USED: 2 mg	COMMENT: 10000 118066
WT SET ID USED: 10 mg - 100 g	40000 13239
WT SET ID USED: 500 g	69073

BALANCE CALIBRATION CHECK LOG

Eurofins Calscience

Date performed: 05/14/20 Initials: YR9U

ID	Class 2 Weight (g)	Reading (g)	Acceptance Range	Pass? (circle one)	Comment (If not passed, note removal or corrective action)
83	1	0.99	0.98 - 1.02	<input checked="" type="checkbox"/> N	IO Lab
	100	99.99	98.00 - 102.00	<input checked="" type="checkbox"/> N	
62	0.002	0.0019	0.0015 - 0.0025	<input checked="" type="checkbox"/> N	IO Lab
	1	0.9993	0.9990 - 1.0010	<input checked="" type="checkbox"/> N	
	100	99.9919	99.9000 - 100.1000	<input checked="" type="checkbox"/> N	
11	1	1.00	0.98 - 1.02	<input checked="" type="checkbox"/> N	IO Lab
	100	99.99	98.00 - 102.00	<input checked="" type="checkbox"/> N	
55	1	1.00	0.98 - 1.02	<input checked="" type="checkbox"/> N	IO Lab
	100	99.98	98.00 - 102.00	<input checked="" type="checkbox"/> N	
	500	499.94	490.00 - 510.00	<input checked="" type="checkbox"/> N	
86	1	0.99	0.98 - 1.02	<input checked="" type="checkbox"/> N	IO Lab
	100	99.99	98.00 - 102.00	<input checked="" type="checkbox"/> N	
	500	500.00	490.00 - 510.00	<input checked="" type="checkbox"/> N	
71	0.002	0.0018	0.0015 - 0.0025	<input checked="" type="checkbox"/> N	BOD Room
	1	0.9992	0.9990 - 1.0010	<input checked="" type="checkbox"/> N	
	100	99.9917	99.9000 - 100.1000	<input checked="" type="checkbox"/> N	
63	0.1	0.10	0.08 - 0.12	Y N	BOD Room
	100	99.99	98.00 - 102.00	Y N	
73	0.1	0.10	0.08 - 0.12	<input checked="" type="checkbox"/> N	Oil & Grease Room
	1	1.01	0.98 - 1.02	<input checked="" type="checkbox"/> N	
	100	99.99	98.00 - 102.00	<input checked="" type="checkbox"/> N	
87	0.002	0.0018	0.0015 - 0.0025	<input checked="" type="checkbox"/> N	Solids Room
	1	0.9995	0.9990 - 1.0010	<input checked="" type="checkbox"/> N	
	100	99.9917	99.9000 - 100.1000	<input checked="" type="checkbox"/> N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

Comments:

WT SET ID USED: 2 mg	COMMENT: 10000 118086
WT SET ID USED: 10 mg - 100 g	40000 13239
WT SET ID USED: 500 g	69073

General Chemistry – Gravimetric Methods
Technical Data Review
SOP T020 Current Revision

Instrument / Oven ID: NA Work Order # BATCH 68837

SM 2540 C (M713*) SM 2540 B / ASTM D2216 (M700*) SM 5520 B / EPA 1664A (M730*)
 SM 2540 D (M714*) SM 2540 E / EPA 160.4 (M735*) Other ASTM D3977B

(NOTE: Additional/alternate method(s) may apply for the indicated analysis)

Items for Review	Level I			Level II
	Yes	No	N/A	
1. Reagent Preparation				
a	Were all reagents properly identified in logbook?	X		X
2. Results - Samples and Batch QC				
a	Was the correct analysis performed?	X		X
b	Were project- or QAPP-specific instructions followed, if applicable?	X		X
c	Were all preparation and dilution factors verified?	X		X
d	Was the method blank acceptable per method criteria?		X	X
e	Was the LCS within lab- or project-specific criteria? LCSD? _____ RPD OK? _____		X	X
f	Was the MS/MSD or sample duplicate reviewed?	X		X
3. Reporting				
a	Were correct sample matrix and units reported?	X		X
b	Was correct oven or instrument ID indicated?	X		X
c	Were all support equipment IDs identified? (pipettes, hot plates, ovens, pH meters, etc.)	X		X
d	Were at least two drying/weighing cycles recorded with start/ends times for each?	X		X
e	Were correct initial and final weights / volumes reported?	X		X
f	Were correct Prepared and Analyzed dates reported?	X		X
g	Were correct Batch numbers reported?	X		X
h	Were all applicable data flags/qualifiers reported?	X		X
i	Were correct number of significant figures used in final results?	X		X
j	Were correct reporting limits recorded?	X		X
k	Were all discrepancies / corrective actions noted as comments and/or narratives?		X	X
4. Department of Defense (DoD) Projects				
a	Were all DoD requirements met per QSM 4.2?		X	X

**Or current revision of SOP*

Comments: _____

Level I Reviewer #: YR9U Date: 05/13/2020 Level II Reviewer #: UAPD Date: 05/13/2020

Shipping and Receiving Documents

27224

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
OE00002



570-27224 Chain of Custody

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310
Fax: (000) 000-0000
Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Eurofins Calscience, LLC
7440 Lincoln Way
Garden Grove, CA 92841
Phone :7148955494
Fax: x

Analysis	Due	Expires	Comments
----------	-----	---------	----------

1	Sample ID: WQ-FPT_042920_SW_10 TOTAL		Sampled: 29-Apr-20 17:50
---	--------------------------------------	--	--------------------------

Misc. Subcontract 6	22-May-20 19:00	27-May-20 17:50	ASTM 3977
---------------------	-----------------	-----------------	-----------

Containers Supplied:

2	Sample ID: ES-15_042920_SW_10 TOTAL		Sampled: 29-Apr-20 17:05
---	-------------------------------------	--	--------------------------

Misc. Subcontract 6	22-May-20 19:00	27-May-20 17:05	ASTM 3977
---------------------	-----------------	-----------------	-----------

Containers Supplied:

3	Sample ID: WQ-ECH_042920_SW_10 TOTAL		Sampled: 29-Apr-20 16:15
---	--------------------------------------	--	--------------------------

Misc. Subcontract 6	22-May-20 19:00	27-May-20 16:15	ASTM 3977
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Containers Supplied:

4	Sample ID: OV-02_042920_SW_10 TOTAL		Sampled: 29-Apr-20 12:45
---	-------------------------------------	--	--------------------------

Misc. Subcontract 6	22-May-20 19:00	27-May-20 12:45	ASTM 3977
---------------------	-----------------	-----------------	-----------

Containers Supplied:

5	Sample ID: ADD-02_042920_SW_10 TOTAL		Sampled: 29-Apr-20 10:14
---	--------------------------------------	--	--------------------------

Misc. Subcontract 6	22-May-20 19:00	27-May-20 10:14	ASTM 3977
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Containers Supplied:

Released By	<i>MS</i>	Date	<i>5/11/2020</i>	Received By	<i>Alvin Eri</i>	Date	<i>05/02/2020 11:30</i>
Released By		Date		Received By		Date	

EXAMPLE RECEIVING
TA- SEATTLE
5755 8TH ST E
FIFE, WA 98424
UNITED STATES US

BILL THIRD PARTY



570-27224 Waybill

TO

EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841

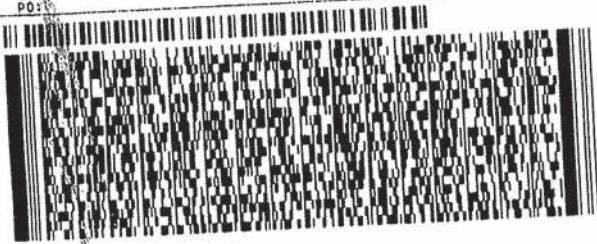
(714) 895-5494

REF:

DEPT:

IN:

PO:



FedEx
Express



J:1912190C2003 04

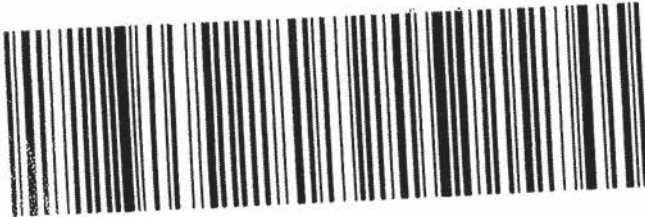
SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 1794 2131 1641
0201

WO APVA

92841
CA-US SNA

Part # 159571-434 FIT EXP 12/20 **



Login Sample Receipt Checklist

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3).%4'5.!((\$%6789:7 ::;9<

Login Number: 27224
List Number: 1
Creator: Ramos, Maribel

List Source: Eurofins Calscience

Question	Answer	Comment
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KE!%1))Ä!(%)(%+/5MÄ!+%@%) "#%/MM!/(%#)%E/A!%!!"%1)5M()5%+!@%)(#/5M!(!@%C #EJ	K(!	
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Frontier Global Sciences

5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310

24 November 2020

Denise King
Wood - MA
271 Mill Road
Chelmsford, MA 01824
RE: Penobscot

Enclosed are the analytical results for samples received by Eurofins Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Patrick Garcia-Strickland". The signature is written in a cursive style with a large initial "P".

Patrick Garcia-Strickland
Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WQ1b-C_102820_SW_10 TOTAL	0J00143-01	Water	28-Oct-20 09:45	29-Oct-20 08:05
WQ1b-C_102820_SW_10 DISSOLVED	0J00143-02	Water	28-Oct-20 09:45	29-Oct-20 08:05
WQ2-C_102820_SW_10 TOTAL	0J00143-03	Water	28-Oct-20 10:35	29-Oct-20 08:05
WQ2-C_102820_SW_10 DISSOLVED	0J00143-04	Water	28-Oct-20 10:35	29-Oct-20 08:05
WQ3-L_102820_SW_10 TOTAL	0J00143-05	Water	28-Oct-20 11:35	29-Oct-20 08:05
WQ3-L_102820_SW_10 DISSOLVED	0J00143-06	Water	28-Oct-20 11:35	29-Oct-20 08:05
WQ-ECH_102820_SW_10 TOTAL	0J00143-07	Water	28-Oct-20 12:35	29-Oct-20 08:05
WQ-ECH_102820_SW_10 DISSOLVED	0J00143-08	Water	28-Oct-20 12:35	29-Oct-20 08:05
ES-15_102820_SW_10 TOTAL	0J00143-09	Water	28-Oct-20 13:30	29-Oct-20 08:05
ES-15_102820_SW_10 DISSOLVED	0J00143-10	Water	28-Oct-20 13:30	29-Oct-20 08:05
WQ-FPT_102820_SW_10 TOTAL	0J00143-11	Water	28-Oct-20 14:20	29-Oct-20 08:05
WQ-FPT_102820_SW_10 DISSOLVED	0J00143-12	Water	28-Oct-20 14:20	29-Oct-20 08:05
WQ1b-C_102820_SW_10_VAL TOTAL	0J00143-13	Water	28-Oct-20 09:50	29-Oct-20 08:05
WQ1b-C_102820_SW_10_VAL DISSOLVED	0J00143-14	Water	28-Oct-20 09:50	29-Oct-20 08:05
WQ2-C_102820_SW_10_VAL TOTAL	0J00143-15	Water	28-Oct-20 10:40	29-Oct-20 08:05
WQ2-C_102820_SW_10_VAL DISSOLVED	0J00143-16	Water	28-Oct-20 10:40	29-Oct-20 08:05

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager

Sample Receipt Checklist

Client: Wood

Date & Time Received: 10/27/20 8:05

Date Labeled: 10/29/20 Labeled By: [Signature]

Matrix: Water

Received By: [Signature]

Label Verified By: [Signature] 10/29/2020

of Coolers Received: 1 Samples Arrived By: X Shipping Service _____ Courier _____ Hand _____ Other (Specify: _____)

Coolant: None/Ambient Loose Ice Gel Ice Dry Ice Coolant Required: Y/N Temp Blank Used Y/N for Cooler(s): _____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y/N

Samples from Wisconsin have special requirements. Shipment received includes samples from Wisconsin: Y/N

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	<u>Y</u>	
Custody Seals are present and intact:	<u>Y</u>	
Custody seals signed:	<u>Y</u>	

20187817 10/27/20

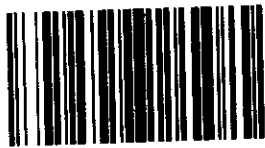
TID:	CF:	Date/time:	By:
<u>3.0</u>	<u>-0.5 °C</u>	<u>10/27/20 8:05</u>	<u>[Signature]</u>
Cooler 1: <u>3.0 °C</u>	w/ CF: <u>2.2 °C</u>	Cooler 4: <u>°C</u>	w/ CF: <u>°C</u>
Cooler 2: <u>°C</u>	w/ CF: <u>°C</u>	Cooler 5: <u>°C</u>	w/ CF: <u>°C</u>
Cooler 3: <u>°C</u>	w/ CF: <u>°C</u>	Cooler 6: <u>°C</u>	w/ CF: <u>°C</u>

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	<u>Y</u>	
Date and time of collection:	<u>Y</u>	
Sampled by:	<u>~</u>	
Preservation type:	<u>~</u>	
Requested analyses:	<u>Y</u>	
Required signatures:	<u>Y</u>	
Internal COC required:	<u>NA</u>	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	<u>Y</u>	
Sample labels are present and legible:	<u>Y</u>	
Sample ID on container/bag matches COC:	<u>Y</u>	
Correct sample containers used:	<u>Y</u>	
Samples received within holding times:	<u>Y</u>	
Sample volume sufficient for requested analyses:	<u>Y</u>	
Correct preservative used for requested analyses:	<u>Y</u>	

Anomalies/Non-conformances (attach additional pages if needed):

0J00143



5755 8th ST EAST
 Address: TALUMA, WA 98424

Chain of Custody Record 435659 eurofins

Environment Testing
 TestAmerica

Regulatory Program: DW NPDES RCRA Other:

TAL-8210

Client Contact Company Name: <u>WOOD ENVIS</u> Address: <u>511 CONGRESS ST</u> City/State/Zip: <u>PORTLAND ME 04101</u> Phone: <u>207 828 5401</u> Fax: Project Name: <u>DEMOBSCOT RIVER STUDY</u> Site: PO # <u>307207486.02</u>		Project Manager: <u>CARRIE GAMBER</u> Tel/Email: <u>CARRIE.GAMBER@EUROFINS.COM</u>		Site Contact: Lab Contact: Date: <u>10/26/20</u> Carrier:		COC No: _____ of _____ COCs Sampler: For Lab Use Only: Walk-in Client: <input type="checkbox"/> Lab Sampling: <input type="checkbox"/> Job / SDG No.:		
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Perform MS/MSD (Y/N) <u>TOTAL Hg 1631</u> <u>DES Hg 1631</u> <u>TOTAL MeHg 1690</u> <u>DES MeHg 1690</u> <u>SSC ASTM 3977</u>						
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Sample Specific Notes:
WQ1b-C-102820-SW-10	10/28/20	0945	G	W	5	-	-	DES / .45 MICRON FIELD FILTERED (Hg & MeHg)
WQ2-C-102820-SW-10	10/28/20	1035	G	W	5	-	-	
WQ3-L-102820-SW-10	10/28/20	1135	G	W	5	-	-	
WQ-ECH-102820-SW-10	10/28/20	1235	G	W	5	-	-	
ES-15-102820-SW-10	10/28/20	1330	G	W	5	-	-	
WQ-FPT-102820-SW-10	10/28/20	1420	G	W	5	-	-	
WQ1b-C-102820-SW-10-VAL	↓	0950	G	W	4	-	-	
WQ2-C-102820-SW-10-VAL	↓	1040	G	W	4	-	-	
<u>OPW</u>								
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other						Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		
Special Instructions/QC Requirements & Comments: <u>ALPHA BOTTLES HAVE NO PRESERVATIVE. EUROFIN BOTTLES (VAL & OS) HCL PRESERVATIVE FOR Hg/ NO PRESERVATIVE MeHg</u>						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		(Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____)				
Relinquished by: <u>G NAY</u>		Company: <u>WOOD</u>		Date/Time: <u>10/26/20</u>		Received by: <u>[Signature]</u>		Company: <u>EFHS</u>
								Date/Time: <u>10/26/20 8:45</u>

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8162 1077 1388



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:06
----------------------------------------------------	----------------------------------------------------------------------------------------------	-------------------------------------

WQ1b-C_102820_SW_10 TOTAL

0J00143-01

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.096	0.026	0.050	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	9.61	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

WQ1b-C_102820_SW_10 DISSOLVED
0J00143-02

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.085	0.025	0.049	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	1.89	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	

Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

WQ2-C_102820_SW_10 TOTAL
0J00143-03

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.089	0.026	0.050	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	5.87	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	





Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

WQ2-C_102820_SW_10 DISSOLVED
0J00143-04

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.049	0.025	0.049	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	2.39	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:06
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WQ3-L_102820_SW_10 TOTAL
0J00143-05

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.037	0.026	0.050	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	J
Sample Preparation: EPA 1631E											
Mercury	2.83	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:06
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WQ3-L_102820_SW_10 DISSOLVED
0J00143-06

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.036	0.026	0.049	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	J
Sample Preparation: EPA 1631E											
Mercury	4.16	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	





Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

WQ-ECH_102820_SW_10 TOTAL
0J00143-07

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.072	0.026	0.050	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	7.81	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

**WQ-ECH_102820_SW_10 DISSOLVED
0J00143-08**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.055	0.025	0.049	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	4.02	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:06
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ES-15_102820_SW_10 TOTAL
0J00143-09

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	4.42	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

**ES-15_102820_SW_10 DISSOLVED
0J00143-10**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	2.75	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

WQ-FPT_102820_SW_10 TOTAL
0J00143-11

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.026	0.049	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	5.36	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

**WQ-FPT_102820_SW_10 DISSOLVED
0J00143-12**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	3.04	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

WQ1b-C_102820_SW_10_VAL TOTAL
0J00143-13

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.080	0.026	0.050	ng/L	1.25	F011323	17-Nov-20	OK18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	5.81	0.08	0.50	ng/L	1	F011307	11-Nov-20	OK12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

WQ1b-C_102820_SW_10_VAL DISSOLVED
0J00143-14

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.025	0.049	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	1.81	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

WQ2-C_102820_SW_10_VAL TOTAL
0J00143-15

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.042	0.025	0.049	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	J
Sample Preparation: EPA 1631E											
Mercury	4.08	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

WQ2-C_102820_SW_10_VAL DISSOLVED
0J00143-16

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	1.67	0.08	0.50	ng/L	1	F011307	11-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:06
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Quality Control Data


Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K12019 - F011307											
Cal Standard (0K12019-CAL1)					Prepared & Analyzed: 11-Nov-20						
Mercury	0.45	-		ng/L	0.50000		90.3				
Cal Standard (0K12019-CAL2)					Prepared & Analyzed: 11-Nov-20						
Mercury	1.01	-		ng/L	1.0000		101				
Cal Standard (0K12019-CAL3)					Prepared & Analyzed: 11-Nov-20						
Mercury	4.99	-		ng/L	5.0000		99.7				
Cal Standard (0K12019-CAL4)					Prepared & Analyzed: 11-Nov-20						
Mercury	20.15	-		ng/L	20.000		101				
Cal Standard (0K12019-CAL5)					Prepared & Analyzed: 11-Nov-20						
Mercury	43.37	-		ng/L	40.000		108				
Calibration Blank (0K12019-CCB1)					Prepared & Analyzed: 11-Nov-20						
Mercury	-0.03	-		ng/L							U
Calibration Blank (0K12019-CCB2)					Prepared & Analyzed: 11-Nov-20						
Mercury	0.05	-		ng/L							
Calibration Blank (0K12019-CCB3)					Prepared & Analyzed: 11-Nov-20						
Mercury	0.11	-		ng/L							
Calibration Blank (0K12019-CCB4)					Prepared & Analyzed: 11-Nov-20						
Mercury	-0.03	-		ng/L							U
Calibration Blank (0K12019-CCB5)					Prepared & Analyzed: 11-Nov-20						
Mercury	0.10	-		ng/L							

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:06
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K12019 - F011307											
Calibration Blank (0K12019-CCB6) Prepared & Analyzed: 11-Nov-20											
Mercury	0.001	-		ng/L							
Calibration Blank (0K12019-CCB7) Prepared & Analyzed: 11-Nov-20											
Mercury	-0.13	-		ng/L							U
Calibration Blank (0K12019-CCB8) Prepared & Analyzed: 11-Nov-20											
Mercury	-0.11	-		ng/L							U
Calibration Check (0K12019-CCV1) Prepared & Analyzed: 11-Nov-20											
Mercury	4.83	-		ng/L	4.9950		96.8	77-123			
Calibration Check (0K12019-CCV2) Prepared & Analyzed: 11-Nov-20											
Mercury	4.98	-		ng/L	4.9950		99.7	77-123			
Calibration Check (0K12019-CCV3) Prepared & Analyzed: 11-Nov-20											
Mercury	5.05	-		ng/L	4.9950		101	77-123			
Calibration Check (0K12019-CCV4) Prepared & Analyzed: 11-Nov-20											
Mercury	4.85	-		ng/L	4.9950		97.1	77-123			
Calibration Check (0K12019-CCV5) Prepared & Analyzed: 11-Nov-20											
Mercury	5.01	-		ng/L	4.9950		100	77-123			
Calibration Check (0K12019-CCV6) Prepared & Analyzed: 11-Nov-20											
Mercury	4.59	-		ng/L	4.9950		92.0	77-123			
Calibration Check (0K12019-CCV7) Prepared & Analyzed: 11-Nov-20											
Mercury	4.64	-		ng/L	4.9950		93.0	77-123			

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Patrick Garcia-Strickland, Business Unit Manager

Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0K12019 - F011307

Calibration Check (0K12019-CCV8)											
						Prepared & Analyzed: 11-Nov-20					
Mercury	4.63	-		ng/L	4.9950		92.6	77-123			
Instrument Blank (0K12019-IBL1)											
						Prepared & Analyzed: 11-Nov-20					
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (0K12019-IBL2)											
						Prepared & Analyzed: 11-Nov-20					
Mercury	ND	0.08	0.50	ng/L							U
Instrument Blank (0K12019-IBL3)											
						Prepared & Analyzed: 11-Nov-20					
Mercury	ND	0.08	0.50	ng/L							U
Initial Cal Blank (0K12019-ICB1)											
						Prepared & Analyzed: 11-Nov-20					
Mercury	0.14	-		ng/L							
Initial Cal Check (0K12019-ICV1)											
						Prepared & Analyzed: 11-Nov-20					
Mercury	5.29	-		ng/L	4.9950		106	79-121			

Batch 0K18010 - F011324

Cal Standard (0K18010-CAL1)											
						Prepared & Analyzed: 17-Nov-20					
Methyl Mercury (as Mercury)	0.046	-		ng/L	0.050000		92.1				
Cal Standard (0K18010-CAL2)											
						Prepared & Analyzed: 17-Nov-20					
Methyl Mercury (as Mercury)	0.200	-		ng/L	0.200000		100				
Cal Standard (0K18010-CAL3)											
						Prepared & Analyzed: 17-Nov-20					
Methyl Mercury (as Mercury)	1.058	-		ng/L	1.0000		106				

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Patrick Garcia-Strickland, Business Unit Manager

Wood - MA
271 Mill Road
Chelmsford MA, 01824


Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K18010 - F011324											
Cal Standard (0K18010-CAL4)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.982	-		ng/L	2.0000		99.1				
Cal Standard (0K18010-CAL5)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	4.116	-		ng/L	4.0000		103				
Calibration Blank (0K18010-CCB1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	-0.005	-		ng/L							U
Calibration Blank (0K18010-CCB2)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.0005	-		ng/L							
Calibration Blank (0K18010-CCB3)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.005	-		ng/L							
Calibration Blank (0K18010-CCB4)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.010	-		ng/L							
Calibration Blank (0K18010-CCB5)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.008	-		ng/L							
Calibration Blank (0K18010-CCB6)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.004	-		ng/L							
Calibration Check (0K18010-CCV1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.510	-		ng/L	0.50368		101	67-133			
Calibration Check (0K18010-CCV2)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.543	-		ng/L	0.50368		108	67-133			

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Patrick Garcia-Strickland, Business Unit Manager

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:06
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K18010 - F011324											
Calibration Check (0K18010-CCV3)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.495	-		ng/L	0.50368		98.3	67-133			
Calibration Check (0K18010-CCV4)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.490	-		ng/L	0.50368		97.3	67-133			
Calibration Check (0K18010-CCV5)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.432	-		ng/L	0.50368		85.7	67-133			
Calibration Check (0K18010-CCV6)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.450	-		ng/L	0.50368		89.4	67-133			
Instrument Blank (0K18010-IBL1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U
Initial Cal Blank (0K18010-ICB1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.008	-		ng/L							
Initial Cal Check (0K18010-ICV1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.516	-		ng/L	0.50368		103	69-131			
Batch F011307 - EFGS SOP2796 EPA 1631 Oxidation											
Blank (F011307-BLK1)					Prepared & Analyzed: 11-Nov-20						
Mercury	ND	0.08	0.50	ng/L							U
Blank (F011307-BLK2)					Prepared & Analyzed: 11-Nov-20						
Mercury	ND	0.08	0.50	ng/L							U



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:06
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F011307 - EFGS SOP2796 EPA 1631 Oxidation

Blank (F011307-BLK3)				Prepared & Analyzed: 11-Nov-20							
Mercury	ND	0.08	0.50	ng/L							U

LCS (F011307-BS1)				Prepared & Analyzed: 11-Nov-20							
Mercury	5.21	0.08	0.50	ng/L	5.0000		104	77-123			

LCS Dup (F011307-BSD1)				Prepared & Analyzed: 11-Nov-20							
Mercury	5.36	0.08	0.50	ng/L	5.0000		107	77-123	2.81	24	

Matrix Spike (F011307-MS1)				Source: 0K00027-01		Prepared & Analyzed: 11-Nov-20					
Mercury	767.3	8.34	50.0	ng/L	505.00	284.9	95.5	71-125			

Matrix Spike (F011307-MS2)				Source: 0J00143-01		Prepared & Analyzed: 11-Nov-20					
Mercury	14.18	0.08	0.50	ng/L	5.0000	9.61	91.4	71-125			

Matrix Spike Dup (F011307-MSD1)				Source: 0K00027-01		Prepared & Analyzed: 11-Nov-20					
Mercury	788.2	8.34	50.0	ng/L	505.00	284.9	99.7	71-125	2.69	24	

Matrix Spike Dup (F011307-MSD2)				Source: 0J00143-01		Prepared & Analyzed: 11-Nov-20					
Mercury	12.52	0.08	0.50	ng/L	5.0000	9.61	58.1	71-125	12.5	24	QM-07

Batch F011323 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F011323-BLK1)				Prepared & Analyzed: 17-Nov-20							
Methyl Mercury (as Mercury)	0.034	0.026	0.050	ng/L							J

Blank (F011323-BLK2)				Prepared & Analyzed: 17-Nov-20							
Methyl Mercury (as Mercury)	0.031	0.026	0.050	ng/L							J



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:06
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F011323 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F011323-BLK3)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.034	0.026	0.050	ng/L							J
Blank (F011323-BLK4)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	ND	0.025	0.049	ng/L							U
LCS (F011323-BS1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.188	0.026	0.050	ng/L	1.1111		107	65-135			
LCS Dup (F011323-BSD1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.078	0.026	0.050	ng/L	1.1111		97.0	65-135	9.71	35	
Matrix Spike (F011323-MS1)					Source: 0J00143-01 Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.324	0.026	0.050	ng/L	1.1101	0.096	111	65-130			
Matrix Spike (F011323-MS2)					Source: 0J00147-02 Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.182	0.025	0.049	ng/L	1.0905	0.135	96.0	65-130			
Matrix Spike Dup (F011323-MSD1)					Source: 0J00143-01 Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.176	0.026	0.049	ng/L	1.0977	0.096	98.4	65-130	11.8	35	
Matrix Spike Dup (F011323-MSD2)					Source: 0J00147-02 Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.505	0.026	0.050	ng/L	1.1042	0.135	33.6	65-130	80.2	35	QM-07



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:06

Notes and Definitions

- U Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
- QB-10 The method blank and/or initial/continuing calibration blank contains analyte at a concentration above the MRL. Only report sample results greater than 10 times the contamination value (QB-01), or samples less than the MRL (QB-02).
- J The result is an estimated concentration.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the method detection limit if reported to the MDL or above the reporting limit if reported to the MRL.
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



ANALYSIS SEQUENCE

OK12019

QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: PGS Analyzed: 11/11/2020

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OK12019-IBL1	QC	1			
OK12019-IBL2	QC	2			
OK12019-IBL3	QC	3			
OK12019-CAL1	QC	4	2002597		
OK12019-CAL2	QC	5	2002598		
OK12019-CAL3	QC	6	2002774		
OK12019-CAL4	QC	7	2002775		
OK12019-CAL5	QC	8	2002776		
OK12019-ICV1	QC	9	2002777		
OK12019-ICB1	QC	10			
F011304-BS1	QC	11			
F011304-BSD1	QC	12			
F011304-BLK1	QC	13			
F011304-BLK2	QC	14			
F011304-BLK3	QC	15			
F011304-BLK4	QC	16			
F011304-BLK5	QC	17			
OK00036-01	Hg-CVAFS-W-1631	18			
F011304-MS2	QC	19			
F011304-MSD2	QC	20			
OK12019-CCV1	QC	21	2002777		
OK12019-CCB1	QC	22			
OK12019-CCV2	QC	23	2002777		
OK12019-CCB2	QC	24			
OJ00147-01	Hg-CVAFS-W-1631	25			
F011304-MS1	QC	26			
F011304-MSD1	QC	27			
OJ00147-02	Hg-CVAFS-W-1631	28			
F011304-MS3	QC	29			
F011304-MSD3	QC	30			
OK00023-01	Hg-CVAFS-W-1631	31			
OK00023-02	Hg-CVAFS-W-1631	32			
OJ00147-05	Hg-CVAFS-W-1631	33			
OJ00147-06	Hg-CVAFS-W-1631	34			
OK12019-CCV3	QC	35	2002777		
OK12019-CCB3	QC	36			

ANALYSIS SEQUENCE

0K12019

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 11/11/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J00147-03	Hg-CVAFS-W-1631	37			
0J00147-04	Hg-CVAFS-W-1631	38			
0J00147-07	Hg-CVAFS-W-1631	39			
0J00147-08	Hg-CVAFS-W-1631	40			
0K00025-01	Hg-CVAFS-W-1631	41			Scan all data for level IV report
0K00025-02	Hg-CVAFS-W-1631	42			Scan all data for level IV report
0K00025-03	Hg-CVAFS-W-1631	43			Scan all data for level IV report
0K00025-04	Hg-CVAFS-W-1631	44			Scan all data for level IV report
0K00025-05	Hg-CVAFS-W-1631	45			Scan all data for level IV report
0K00025-06	Hg-CVAFS-W-1631	46			Scan all data for level IV report
0K12019-CCV4	QC	47	2002777		
0K12019-CCB4	QC	48			
0K00025-07	Hg-CVAFS-W-1631	49			Scan all data for level IV report
0K00035-01	Hg-CVAFS-W-1631	50			
0K00037-01	Hg-CVAFS-W-1631	51			
F011307-BS1	QC	52			
F011307-BSD1	QC	53			
F011307-BLK1	QC	54			
F011307-BLK2	QC	55			
F011307-BLK3	QC	56			
0K00027-01	Hg-CVAFS-W-1631	57			
0J00143-01	Hg-CVAFS-W-1631	58			
0K12019-CCV5	QC	59	2002777		
0K12019-CCB5	QC	60			
F011307-MS1	QC	61			
F011307-MSD1	QC	62			
F011307-MS2	QC	63			
F011307-MSD2	QC	64			
0K00027-02	Hg-CVAFS-W-1631	65			
0K00027-03	Hg-CVAFS-W-1631	66			
0J00143-02	Hg-CVAFS-W-1631	67			
0J00143-03	Hg-CVAFS-W-1631	68			
0J00143-04	Hg-CVAFS-W-1631	69			
0J00143-05	Hg-CVAFS-W-1631	70			
0K12019-CCV6	QC	71	2002777		
0K12019-CCB6	QC	72			

ANALYSIS SEQUENCE

0K12019

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 11/11/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J00143-06	Hg-CVAFS-W-1631	73			
0J00143-07	Hg-CVAFS-W-1631	74			
0J00143-08	Hg-CVAFS-W-1631	75			
0J00143-09	Hg-CVAFS-W-1631	76			
0J00143-10	Hg-CVAFS-W-1631	77			
0J00143-11	Hg-CVAFS-W-1631	78			
0J00143-12	Hg-CVAFS-W-1631	79			
0J00143-13	Hg-CVAFS-W-1631	80			
0J00143-14	Hg-CVAFS-W-1631	81			
0J00143-15	Hg-CVAFS-W-1631	82			
0K12019-CCV7	QC	83	2002777		
0K12019-CCB7	QC	84			
0J00143-16	Hg-CVAFS-W-1631	85			
0K12019-CCV8	QC	86	2002777		
0K12019-CCB8	QC	87			


11/12/20
 Samples Loaded By _____ Date _____

 Data Processed By _____ Date _____

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>MFS</u>	Sequence(s) #: <u>0K12019</u>
Reviewer: _____	Dataset ID(s): <u>THg26002-201111-1</u>
Date: <u>11/12/2020</u>	WO (s) #: <u>Multiple</u>
Batch #(s): <u>F011304, F011307</u>	

• Select the correct preparation method.

Analyte	Prep Method	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2885	FSTM Trap 70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric
<input checked="" type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation
<input type="checkbox"/> Hg0	NA	Water
<input type="checkbox"/> Inorg Hg	NA	Water

Analyst Initials: MFS

Reviewer Initials: PKS

- | | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------|------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | | | |
| (b) Check 5% of transcription from Instrument print-out and Excel file | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | | | |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 50 ml / aliquot = Excel dilution value | | | |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): <u>PARSONS</u> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>MFS</u>	Sequence(s) #: <u>0K12019</u>
Reviewer: _____	Dataset ID(s): <u>THg26002-201111-1</u>
Date: <u>11/12/2020</u>	WO (s) #: <u>Multiple</u>
Batch #(s): <u>F011304, F011307</u>	

Analyst Initials MFS Reviewer Initials PGS

- 5b. Has the B/C section data been uploaded? YES NO N/A
- QA/QC Data Checked**
6. RSD CF (≤ 15%) PASS FAIL
 Comments: _____
7. The calibration curve included a minimum of 5 Standards YES NO
 Comments: _____
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) PASS FAIL
9. ICV and CCV % Recoveries EPA 1631E (77-123%) PASS FAIL
 Comments: _____
10. Do all calibration points pass acceptance criteria? YES NO
 Comments: _____
11. Are qualifiers consistent with the data review flowcharts? YES NO N/A
 Comments: _____
12. Explain any items on the failed data report from Element
 Comments: _____
13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) PASS FAIL
 (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit: _____
- (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? YES NO
- (c) Was a BrCl Blank analyzed for each preservation level? YES NO N/A
- (d) Are Preparation Blanks summarized on QC page? YES NO
14. Filtration Blank Prepared (if yes, use FB qualifier) YES NO
 (a) Filtration Blank prep date same as associated samples' prep date YES NO N/A
 (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI YES NO N/A
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? PASS FAIL
 Comments: _____
16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? PASS FAIL
 Comments: _____
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) YES NO N/A
18. Is the correct 'Source' designated for MD/MS/MSD? YES NO
19. For digested preps: was there a spike witness signature & date on the prep bench sheet? YES NO N/A

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0K12019
Reviewer:		Dataset ID(s):	THg26002-201111-1
Date:	11/12/2020	WO (s) #:	Multiple
Batch #(s):	F011304, F011307		

Analyst Initials MFS

Reviewer Initials PGS

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher)? YES NO
- Comments: _____
21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
- Comments: _____
22. Are the samples run at the correct dilution level for the method? YES NO
- Comments: _____
23. Dissolved < Total (if applicable) YES NO N/A
- Comments: _____
24. Effluent < Influent (visually confirm if needed) YES NO N/A
- Comments: _____
25. Are re-runs noted with reason? YES NO N/A
- Comments: _____
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
- Comments: _____
27. Is the B trap <5% A Traps YES NO N/A
- Comments: _____
28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
- Comments: _____
29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
- Comments: _____
30. Have re-extracts been created for non-reportable samples? YES NO N/A
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
32. Does the data set need scanning? YES NO N/A
33. Does the dataset have an LOQ/LOQ or DOC? YES NO N/A
34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
35. Water samples-is the final volume correct in the sequence? YES NO N/A

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

36. Date of analyst IDOC/CDOC: 3/2/20 IDOC/CDOC within last 12 months? YES NO
37. Date of analyst's SOP reading for method: 11/2/20 Current SOP revision read? YES NO
38. Date of LOD: 12/21/19 LOD within last 3 months? YES NO
39. Date of LOQ: 12/21/19 LOQ within last 3 months? YES NO

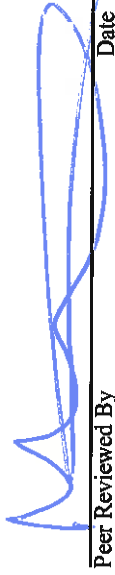
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0K12019

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F011304-BLK4	Hg-CVAFS-W-1631	0.51	0.50				ng/L						PASS-OVER	FAIL-BLK	QB-10
F011307-MSD2	Hg-CVAFS-W-1631	12.52	0.50	14.183939.612834	5.0000		ng/L	58.1	71.00	125.00	12.5	24.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07



 Analyst Reviewed By _____ Date 11/12/20



 Peer Reviewed By _____ Date _____

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

11/11/20
MFS
Batch #1

THg 2002-2011-1

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011304-BLK1	Blank	50	50.5					
F011304-BLK2	Blank	50	50.5					
F011304-BLK3	Blank	50	50.5					
F011304-BS1	LCS	50	50.5	2002757	25			
F011304-BSD1	LCS Dup	50	50.5					
F011304-MS1	Matrix Spike [0J00036-01] MFS 11/11/20	50	50.5					
F011304-MS2	Matrix Spike [0K00036-01] 141-01	50	50.5					
F011304-MSD1	Matrix Spike Dup [0J00036-01] 141-01 MFS 11/11/20	50	50.5					
F011304-MSD2	Matrix Spike Dup [0K00036-01] 141-01 MFS 11/11/20	50	50.5					

Standard ID(S):
- BLK 4 14
- BLK 5
- MSB/MSD 3 14 0100147-02

Expiration:
Samples Removed from Batch

Curves
CAL1 25 µL 2002562
CAL2 50 µL 2002562
CAL3 25 µL 2002567
CAL4 50 µL 2002757
CAL5 200 µL 2002757
Dev/CW 15 µL 2002754

Pipette Calibration
PU18325 11/11/20
PU21751 11/5/20
PU33325 11/5/20

Reagents
2002506
2002606
2002607
2002773
2002757

Curve wit: UAL 11-11-2020
CCW 4 wit: UAL 11/11/2020
CCW 5FC: UAL 11-11-2020
MFS 11/11/20

CCW 1 wit: UAL 11-11-2020
MS/MSD with MFS: UAL 11-11-2020
MS/MSD with ESS: UAL 11-11-2020
CCW 2+3: UAL 11-11-2020
10 µL = 5 mL Sample → 50 µL E.V.

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00151-01	204A_20201029_N_WG 0200147-01 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-02	306A_20201029_FD_WG -02 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-03	306A_20201029_N_WG -03 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-04	803A_20201029_N_WG -04 1+	50	50.5	QC	-	010206	MS/MSD Scan all data - Level IV	
0J00151-05	805A-R_20201029_N_WG -05 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-06	PZ-102A_20201029_N_WG -06 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-07	PZ-104A_20201029_N_WG -07 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0K00023-01	INF20110401	50	50.5	-	-	120303		
0K00023-02	EFF20110402	50	50.5	-	-	120303		
0K00025-01	OL-3584-01 Total	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-02	OL-3584-01 Dissolved	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-03	OL-3584-02	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-04	OL-3584-03	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-05	OL-3584-04	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-06	OL-3584-05	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-07	OL-3584-06	50	50.5	-	-	120302	Scan all data for level IV report	
0K00035-01	Effluent (570-42978-1)	50	50.5	-	-	040301		
0036-01	Effluent Comp B-7 (570-42984-1)	50	50.5	-	-	040301		
0037-01	INF Comp A-7 (570-42983-1)	50	50.5	-	-	040301		

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - ERGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00023	Spokane County Water Reclamation Facility/Jacobs	180418 Metals Wastewater Monitoring
0K00025	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0K00035	Eurofins Calscience, LLC	Total and Methyl Mercury
0K00036	Eurofins Calscience, LLC	Total and Methyl Mercury
0K00037	Eurofins Calscience, LLC	Total and Methyl Mercury

PREPARATION BENCH SHEET

MFS
11/11/20
THg 26002
Batch #2

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation Prepared: 11/11/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011307-BLK1	Blank	50	50.5					
F011307-BLK2	Blank	50	50.5					
F011307-BLK3	Blank	50	50.5					
F011307-BS1	LCS	50	50.5	2002167	25			
F011307-BSD1	LCS Dup	50	50.5					
F011307-MS1	Matrix Spike [0K00027-01]	50	50.5					
F011307-MS2	Matrix Spike [0J00143-01]	50	50.5					
F011307-MSD1	Matrix Spike Dup [0K00027-01]	50	50.5					
F011307-MSD2	Matrix Spike Dup [0J00143-01]	50	50.5					

Standard ID(s): Description: Expiration:

100x = 500 µl Sample → 50 mL V

~~CCW 5 wit: R w/w~~
~~BS/BSD wit: MFS 11/11/20~~ RE-RAN ON DIFFERENT INSTRUMENT
 BS/BSD wit: JAK 11-11-2020 - MFS 11/11/20
 CCW 5 wit: ZKH 11/11/2020
 MS/MSD wit: MFS 11/11/2020
 CCW 6 wit: MFS 11/11/2020
 CCW 7-8 wit: JAK 11-11-2020

Reagents
 2002506
 2002606
 2002607
 2002773

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation Prepared: 11/11/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00143-01	WQ1b-C_102820_SW_10 TOTAL	50	50.5	-	-	020506		
0J00143-02	WQ1b-C_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-03	WQ2-C_102820_SW_10 TOTAL	50	50.5	-	-	020506		
0J00143-04	WQ2-C_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-05	WQ3-L_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-06	WQ3-L_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-07	WQ-ECH_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-08	WQ-ECH_102820_SW_10 DISSOLVED	50	50.5	-	-	040301		
0J00143-09	ES-15_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-10	ES-15_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-11	WQ-FPT_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-12	WQ-FPT_102820_SW_10 DISSOLVED	50	50.5	-	-	040301		
0J00143-13	WQ1b-C_102820_SW_10_VAL TOTAL	50	50.5	-	-	020506		
0J00143-14	WQ1b-C_102820_SW_10_VAL DISSOLVED	50	50.5	-	-	020506		
0J00143-15	WQ2-C_102820_SW_10_VAL TOTAL	50	50.5	-	-	020506		
0J00143-16	WQ2-C_102820_SW_10_VAL DISSOLVED	50	50.5	-	-	020506		
0K00027-01	ARS-20-02890-001-2	50	50.5	QC	-	120303	MS/MSD	
00027-02	ARS-20-02890-002-2	50	50.5	-	-	120303		
00027-03	ARS-20-02890-003-2	50	50.5	-	-	120303		

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/11/2020

Work Order

0J00143
0K00027

Client

Wood - MA
Eurofins Test America - Denver

Project

Penobscot
Mercury

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011304-BLK1	Blank	50	50.5					
F011304-BLK2	Blank	50	50.5					
F011304-BLK3	Blank	50	50.5					
F011304-BLK4	5% Method Blank	50	50.5					Not Needed, 5% samples removed from batch after analysis - MFS 11/12/20
F011304-BLK5	Filter Blank [0K00025-08A]	50	50.5					Added 11/12/2020 by MFS
F011304-BS1	LCS	50	50.5	2002757	25			
F011304-BSD1	LCS Dup	50	50.5	2002757	25			
F011304-MS1	Matrix Spike [0J00147-01]	50	50.5	2002757	25			
F011304-MS2	Matrix Spike [0K00036-01]	50	50.5	2002757	25			
F011304-MS3	Matrix Spike [0J00147-02]	50	50.5	2002757	25			
F011304-MSD1	Matrix Spike Dup [0J00147-01]	50	50.5	2002757	25			
F011304-MSD2	Matrix Spike Dup [0K00036-01]	50	50.5	2002757	25			
F011304-MSD3	Matrix Spike Dup [0J00147-02]	50	50.5	2002757	25			

Standard ID(s):
2002757

Description:
THg 10ng/mL Calibration Standard

Expiration:
04-Feb-21 00:00

Reagent ID(s):
2002506
2002606
2002607
2002773

Description:
THg 2% BrCl
25% Hydroxylamine-HCl working solution
THg Washstation (0.5% BrCl)
3% SnCl2 THg reductant

Expiration:
07-Mar-21 00:00
03-Apr-21 00:00
07-Mar-21 00:00
03-May-21 00:00

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	50	50.5	QC	-	150501	MS/MSD	
0J00147-02	OV-02_102920_SW_10 DISSOLVED	50	50.5	QC	-	150501	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	50	50.5	-	-	150501		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	50	50.5	-	-	150501		
0J00147-05	EQ_BLANK_10290_SW_OC TOTAL	50	50.5	-	-	150501		
0J00147-06	EQ_BLANK_10290_SW_OC DISSOLVED	50	50.5	-	-	150501		
0J00147-07	ADD-02_10290_SW_10 TOTAL	50	50.5	-	-	150501		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	50	50.5	-	-	150501		
0K00023-01	INF20110401	50	50.5	-	-	120303		
0K00023-02	EFF20110402	50	50.5	-	-	120303		
0K00025-01	OL-3584-01 Total	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-02	OL-3584-01 Dissolved	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-03	OL-3584-02	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-04	OL-3584-03	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-05	OL-3584-04	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-06	OL-3584-05	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-07	OL-3584-06	50	50.5	-	-	120302	Scan all data for level IV report	
0035-01	Effluent (570-42978-1)	50	50.5	-	-	040301		
0036-01	Effluent Comp B-7 (570-42984-1)	50	50.5	-	-	040301		

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water	INF Comp A-7 (570-42983-1)	50	50.5	-	040301	Prepared: 11/10/2020
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Work Order	Client	Project
0J00147	Wood - MA	Penobscot
0K00023	Spokane County Water Reclamation Facility/Jacobs	180418 Metals Wastewater Monitoring
0K00025	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0K00035	Eurofins Calscience, LLC	Total and Methyl Mercury
0K00036	Eurofins Calscience, LLC	Total and Methyl Mercury
0K00037	Eurofins Calscience, LLC	Total and Methyl Mercury

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/11/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011307-BLK1	Blank	50	50.5					
F011307-BLK2	Blank	50	50.5					
F011307-BLK3	Blank	50	50.5					
F011307-BS1	LCS	50	50.5	2002757	25			
F011307-BSD1	LCS Dup	50	50.5	2002757	25			
F011307-MS1	Matrix Spike [0K00027-01]	0.4950495	0.5	2002757	25			[Spk] 50mL->50.5mL; 0.5mL->0.5mL; Spiked 0.5mL
F011307-MS2	Matrix Spike [0J00143-01]	50	50.5	2002757	25			
F011307-MSD1	Matrix Spike Dup [0K00027-01]	0.4950495	0.5	2002757	25			
F011307-MSD2	Matrix Spike Dup [0J00143-01]	50	50.5	2002757	25			[Spk] 50mL->50.5mL; 0.5mL->0.5mL; Spiked 0.5mL

Standard ID(s):
2002757

Description:
THg 10ng/mL Calibration Standard

Expiration:
04-Feb-21 00:00

Reagent ID(s):

2002506
2002606
2002607
2002773

Description:

THg 2% BrCl
25% Hydroxylamine-HCl working solution
THg Washstation (0.5% BrCl)
3% SnCl2 THg reductant

Expiration:

07-Mar-21 00:00
03-Apr-21 00:00
07-Mar-21 00:00
03-May-21 00:00

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/11/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00143-01	WQ1b-C_102820_SW_10 TOTAL	50	50.5	-	-	020506		
0J00143-02	WQ1b-C_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-03	WQ2-C_102820_SW_10 TOTAL	50	50.5	-	-	020506		
0J00143-04	WQ2-C_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-05	WQ3-L_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-06	WQ3-L_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-07	WQ-ECH_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-08	WQ-ECH_102820_SW_10 DISSOLVED	50	50.5	-	-	040301		
0J00143-09	ES-15_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-10	ES-15_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-11	WQ-FPT_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-12	WQ-FPT_102820_SW_10 DISSOLVED	50	50.5	-	-	040301		
0J00143-13	WQ1b-C_102820_SW_10_VAL TOTAL	50	50.5	-	-	020506		
0J00143-14	WQ1b-C_102820_SW_10_VAL DISSOLVED	50	50.5	-	-	020506		
0J00143-15	WQ2-C_102820_SW_10_VAL TOTAL	50	50.5	-	-	020506		
0J00143-16	WQ2-C_102820_SW_10_VAL DISSOLVED	50	50.5	-	-	020506		
0K00027-01	ARS-20-02890-001-2	50	50.5	QC	-	120303	MS/MSD	
00027-02	ARS-20-02890-002-2	50	50.5	-	-	120303		
00027-03	ARS-20-02890-003-2	50	50.5	-	-	120303		

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/11/2020

Work Order

0J00143
0K00027

Client

Wood - MA
Eurofins Test America - Denver

Project

Penobscot
Mercury

Analysis Datasheet for Total Mercury

Date of Analysis: November 11, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: UK12019

Analyst: **MPS**
 Units: ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	66.95 units	133.89	31.82 units	63.63	90.3 %Rec
SEQ-CAL2	1	1.00 ng/L	106.14 units	106.14	71.01 units	71.01	100.8 %Rec
SEQ-CAL3	1	5.00 ng/L	386.38 units	77.28	351.25 units	70.25	99.7 %Rec
SEQ-CAL4	1	20.00 ng/L	1454.63 units	72.73	1419.50 units	70.98	100.7 %Rec
SEQ-CAL5	1	40.00 ng/L	3090.77 units	77.27	3055.64 units	76.39	108.4 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 70.45 Corr. St Dev RF +/- 4.54 Corr. RSD CF 6.4% RSD Uncorr. Mean RF 93.46

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-TBL	3	35.13 units	±1.15	0.38 ng/L	±0.01

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	5	0.065 ng/L	±0.274
BLK	2	3	-0.134 ng/L	±0.065
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-BL1	1	11/11/2020 12:43:48	6591-1.RAW	12:43:48 PM	34.51			-0.6	-0.009	-0.009	ng/L	
Hg2600-3	00	CAL	SEQ-BL2	1	11/11/2020 12:47:58	6592-1.RAW	12:47:58 PM	34.42			-0.7	-0.010	-0.010	ng/L	
Hg2600-3	00	CAL	SEQ-BL3	1	11/11/2020 12:52:07	6593-1.RAW	12:52:07 PM	36.46			1.3	0.019	0.019	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	11/11/2020 12:56:16	6594-1.RAW	12:56:16 PM	66.95			31.8	0.452	0.452	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	11/11/2020 13:00:25	6595-1.RAW	1:00:25 PM	106.14			351.2	1.008	1.008	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	11/11/2020 13:04:34	6596-1.RAW	1:04:34 PM	386.38			1419.5	4.986	4.986	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	11/11/2020 13:08:43	6597-1.RAW	1:08:43 PM	1454.63			20.149	20.149	20.149	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	11/11/2020 13:12:52	6598-1.RAW	1:12:52 PM	3090.77			43.372	43.372	43.372	ng/L	
Hg2600-3	00	CAL	SEQ-HCV1	1	11/11/2020 13:17:02	6599-1.RAW	1:17:02 PM	407.57			5.286	5.286	5.286	ng/L	
Hg2600-3	00	CAL	SEQ-HCV2	1	11/11/2020 13:21:11	6600-1.RAW	1:21:11 PM	44.67			0.135	0.135	0.135	ng/L	
Hg2600-3	00	SAM	F011304-BS1	1	11/11/2020 13:25:20	6601-1.RAW	1:25:20 PM	383.61			4.881	4.881	4.881	ng/L	
Hg2600-3	00	SAM	F011304-BS2	1	11/11/2020 13:29:29	6602-1.RAW	1:29:29 PM	400.68			5.123	5.123	5.123	ng/L	
Hg2600-3	00	BLK	F011304-BLK1	1	11/11/2020 13:33:38	6603-1.RAW	1:33:38 PM	30.83			-4.3	-0.061	-0.061	ng/L	
Hg2600-3	00	BLK	F011304-BLK2	1	11/11/2020 13:37:47	6604-1.RAW	1:37:47 PM	27.03			-8.1	-0.115	-0.115	ng/L	
Hg2600-3	00	BLK	F011304-BLK3	1	11/11/2020 13:41:56	6605-1.RAW	1:41:56 PM	70.74			-11.1	-0.158	-0.158	ng/L	
Hg2600-3	00	BLK	F011304-BLK4	1	11/11/2020 13:46:05	6606-1.RAW	1:46:05 PM	70.74			35.6	0.505	0.505	ng/L	
Hg2600-3	00	BLK	F011304-BLK5	1	11/11/2020 13:50:14	6607-1.RAW	1:50:14 PM	46.03			10.9	0.155	0.155	ng/L	
Hg2600-3	00	SAM	0K00036-01	1	11/11/2020 13:54:23	6608-1.RAW	1:54:23 PM	123.63			88.4	1.189	1.189	ng/L	
Hg2600-3	00	SAM	F011304-MS2	1	11/11/2020 14:02:41	6610-1.RAW	2:02:41 PM	428.30			393.2	5.515	5.515	ng/L	
Hg2600-3	00	SAM	ERR	1	11/11/2020 14:06:51	6611-1.RAW	2:06:51 PM	422.05			13.7	Error	#VALUE!	ng/L	WRONG LOCATION
Hg2600-3	00	SAM	ERR	1	11/11/2020 14:11:00	6612-1.RAW	2:11:00 PM	39.03			3.9	Error	#VALUE!	ng/L	WRONG LOCATION
Hg2600-3	00	SAM	WS	1	11/11/2020 14:15:09	6613-1.RAW	2:15:09 PM	21.12			-14.0	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:19:18	6614-1.RAW	2:19:18 PM	18.38			-16.8	Error	#VALUE!	ng/L	
Hg2600-3	00	CAL	SEQ-CCV1	1	11/11/2020 14:23:27	6615-1.RAW	2:23:27 PM	376.61			340.5	4.833	4.833	ng/L	
Hg2600-3	00	CAL	SEQ-CCB1	1	11/11/2020 14:27:36	6616-1.RAW	2:27:36 PM	33.01			-2.1	-0.030	-0.030	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:31:45	6617-1.RAW	2:31:45 PM	22.84			-12.3	Error	#VALUE!	ng/L	FOR SAMPLE LOCATION/PREP
Hg2600-3	00	SAM	WS	1	11/11/2020 14:35:55	6618-1.RAW	2:35:55 PM	23.04			-12.1	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:40:03	6619-1.RAW	2:40:03 PM	23.09			-12.0	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:44:13	6620-1.RAW	2:44:13 PM	21.54			-13.6	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:48:21	6621-1.RAW	2:48:21 PM	19.35			-15.8	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:52:30	6622-1.RAW	2:52:30 PM	24.00			-11.1	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:56:39	6623-1.RAW	2:56:39 PM	22.87			-12.3	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 15:00:48	6624-1.RAW	3:00:48 PM	24.21			-10.9	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 15:04:56	6625-1.RAW	3:04:56 PM	20.31			-14.1	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 15:09:06	6626-1.RAW	3:09:06 PM	20.98			-14.8	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 15:13:14	6627-1.RAW	3:13:14 PM	22.05			-13.1	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	SEQ-CCV2	1	11/11/2020 15:17:24	6628-1.RAW	3:17:24 PM	385.63			350.7	4.978	4.978	ng/L	
Hg2600-3	00	CAL	SEQ-CCB2	1	11/11/2020 15:21:37	6629-1.RAW	3:21:37 PM	36.59			3.5	0.049	0.049	ng/L	
Hg2600-3	00	CAL	SEQ-CCB2	1	11/11/2020 15:25:46	6630-1.RAW	3:25:46 PM	243.63			208.5	2.894	2.894	ng/L	
Hg2600-3	00	SAM	F011304-MS1	1	11/11/2020 15:29:56	6631-1.RAW	3:29:56 PM	565.68			530.5	7.465	7.465	ng/L	
Hg2600-3	00	SAM	F011304-MS1	1	11/11/2020 15:34:05	6632-1.RAW	3:34:05 PM	575.16			540.0	7.600	7.600	ng/L	
Hg2600-3	00	SAM	F011304-MS2	1	11/11/2020 15:38:15	6633-1.RAW	3:38:15 PM	275.85			240.7	3.352	3.352	ng/L	
Hg2600-3	00	SAM	F011304-MS3	1	11/11/2020 15:42:23	6634-1.RAW	3:42:23 PM	563.17			518.0	7.288	7.288	ng/L	
Hg2600-3	00	SAM	F011304-MS3	1	11/11/2020 15:46:33	6635-1.RAW	3:46:33 PM	564.77			529.6	7.453	7.453	ng/L	
Hg2600-3	00	SAM	F011304-MS3	1	11/11/2020 15:50:43	6636-1.RAW	3:50:43 PM	484.94			429.8	6.094	6.094	ng/L	
Hg2600-3	00	SAM	0K00023-01	10	11/11/2020 15:54:53	6637-1.RAW	3:54:53 PM	105.41			71.3	0.946	0.946	ng/L	
Hg2600-3	00	SAM	0K00023-02	1	11/11/2020 15:59:28	6638-1.RAW	3:59:28 PM	105.41			26.5	0.311	0.311	ng/L	
Hg2600-3	00	SAM	0K00147-06	1	11/11/2020 16:03:38	6639-1.RAW	4:03:38 PM	61.63			0.946	0.946	0.946	ng/L	
Hg2600-3	00	CAL	SEQ-CCV3	1	11/11/2020 16:07:48	6640-1.RAW	4:07:48 PM	213.02			177.9	2.460	2.460	ng/L	
Hg2600-3	00	CAL	SEQ-CCB3	1	11/11/2020 16:11:58	6641-1.RAW	4:11:58 PM	390.69			355.6	5.047	5.047	ng/L	
Hg2600-3	00	SAM	0K00147-03	1	11/11/2020 16:16:08	6642-1.RAW	4:16:08 PM	42.60			7.5	0.106	0.106	ng/L	
Hg2600-3	00	SAM	0K00147-04	1	11/11/2020 16:20:17	6643-1.RAW	4:20:17 PM	232.32			197.2	2.734	2.734	ng/L	
Hg2600-3	00	SAM	0K00147-05	1	11/11/2020 16:24:26	6644-1.RAW	4:24:26 PM	252.09			301.4	3.014	3.014	ng/L	
Hg2600-3	00	SAM	0K00147-07	1	11/11/2020 16:28:35	6645-1.RAW	4:28:35 PM	280.12			245.0	3.412	3.412	ng/L	
Hg2600-3	00	SAM	0K00147-08	1	11/11/2020 16:32:43	6646-1.RAW	4:32:43 PM	285.61			250.5	3.490	3.490	ng/L	
Hg2600-3	00	SAM	0K00025-01	1	11/11/2020 16:36:53	6647-1.RAW	4:36:53 PM	189.64			154.5	2.128	2.128	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0K00025-02	1	11/11/2020 18:41:03	6848-1.RAW	4:41:03 PM	96.02	1		60.9	0.799	0.799	ng/L	
Hg2600-3	00	SAM	0K00025-03	1	11/11/2020 16:45:11	6849-1.RAW	4:45:11 PM	139.47	1		104.3	1.416	1.416	ng/L	
Hg2600-3	00	SAM	0K00025-04	1	11/11/2020 16:49:21	6850-1.RAW	4:49:21 PM	141.28	1		106.1	1.441	1.441	ng/L	
Hg2600-3	00	SAM	0K00025-05	1	11/11/2020 16:53:29	6851-1.RAW	4:53:29 PM	164.24	1		129.1	1.767	1.767	ng/L	
Hg2600-3	00	SAM	0K00025-06	1	11/11/2020 16:57:39	6852-1.RAW	4:57:39 PM	46.15	1		46.15	0.091	0.091	ng/L	
Hg2600-3	00	CAL	SEQ-CCV4	1	11/11/2020 17:01:49	6853-1.RAW	5:01:49 PM	376.88			341.7	4.851	4.851	ng/L	
Hg2600-3	00	CAL	SEQ-CCB4	1	11/11/2020 17:05:58	6854-1.RAW	5:05:58 PM	32.72			2.4	-0.034	-0.034	ng/L	
Hg2600-3	00	SAM	0K00025-07	1	11/11/2020 17:10:07	6855-1.RAW	5:10:07 PM	56.13	1		21.0	0.233	0.233	ng/L	
Hg2600-3	00	SAM	0K00037-01	1	11/11/2020 17:14:16	6856-1.RAW	5:14:16 PM	523.81	1		-11.7	-0.231	-0.231	ng/L	
Hg2600-3	00	SAM	F011307-BS1	10	11/11/2020 17:18:26	6857-1.RAW	5:18:26 PM	389.966052			488.7	6.930	6.930	ng/L	
Hg2600-3	00	SAM	F011307-BS01	1	11/11/2020 17:22:36	6858-1.RAW	5:22:36 PM	399.74	2		364.6	5.162	5.162	ng/L	
Hg2600-3	00	BLK	F011307-BLK1	1	11/11/2020 17:26:49	6859-1.RAW	5:26:49 PM	30.98	2		4.1	-0.059	-0.059	ng/L	
Hg2600-3	00	BLK	F011307-BLK2	1	11/11/2020 17:30:58	6860-1.RAW	5:30:58 PM	23.61	2		-11.5	-0.164	-0.164	ng/L	
Hg2600-3	00	BLK	F011307-BLK3	1	11/11/2020 17:35:04	6861-1.RAW	5:35:04 PM	23.61	2		-12.6	-0.178	-0.178	ng/L	
Hg2600-3	00	SAM	0K00027-01	100	11/11/2020 17:39:13	6862-1.RAW	5:39:13 PM	233.73	2		198.6	2.820	2.820	ng/L	
Hg2600-3	00	SAM	0K00027-02	100	11/11/2020 17:43:23	6863-1.RAW	5:43:23 PM	696.25	2		661.1	9.518	9.518	ng/L	
Hg2600-3	00	SAM	0000143-01	1	11/11/2020 17:47:33	6864-1.RAW	5:47:33 PM	388.03			6.8	0.096	0.096	ng/L	
Hg2600-3	00	CAL	SEQ-CCV5	1	11/11/2020 17:51:43	6865-1.RAW	5:51:43 PM	41.92			535.1	7.597	7.597	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	11/11/2020 17:55:52	6866-1.RAW	5:55:52 PM	570.26	2		549.7	7.804	7.804	ng/L	
Hg2600-3	00	SAM	F011307-MS1	100	11/11/2020 18:00:02	6867-1.RAW	6:00:02 PM	594.85	2		980.0	14.043	14.043	ng/L	
Hg2600-3	00	SAM	F011307-MSD1	100	11/11/2020 18:04:11	6868-1.RAW	6:04:11 PM	1015.10	2		863.6	12.392	12.392	ng/L	
Hg2600-3	00	SAM	F011307-MS2	1	11/11/2020 18:08:21	6869-1.RAW	6:08:21 PM	898.75	2		36.8	0.524	0.524	ng/L	
Hg2600-3	00	SAM	F011307-MSD2	100	11/11/2020 18:12:30	6870-1.RAW	6:12:30 PM	71.98	2		42.8	0.608	0.608	ng/L	
Hg2600-3	00	SAM	0K00027-03	100	11/11/2020 18:16:40	6871-1.RAW	6:16:40 PM	157.85	2		122.7	1.876	1.876	ng/L	
Hg2600-3	00	SAM	0000143-02	1	11/11/2020 18:20:50	6872-1.RAW	6:20:50 PM	435.24	2		400.1	5.813	5.813	ng/L	
Hg2600-3	00	SAM	0000143-03	1	11/11/2020 18:25:00	6873-1.RAW	6:25:00 PM	192.33	2		157.2	2.365	2.365	ng/L	
Hg2600-3	00	SAM	0000143-04	1	11/11/2020 18:29:10	6874-1.RAW	6:29:10 PM	223.47	2		188.3	2.807	2.807	ng/L	
Hg2600-3	00	SAM	0000143-05	1	11/11/2020 18:33:20	6875-1.RAW	6:33:20 PM	358.83			323.7	4.595	4.595	ng/L	
Hg2600-3	00	CAL	SEQ-CCV6	1	11/11/2020 18:37:30	6876-1.RAW	6:37:30 PM	35.24			0.1	0.001	0.001	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	11/11/2020 18:41:40	6877-1.RAW	6:41:40 PM	315.64	2		280.5	4.115	4.115	ng/L	
Hg2600-3	00	SAM	0000143-06	1	11/11/2020 18:45:50	6878-1.RAW	6:45:50 PM	570.81	2		535.7	7.737	7.737	ng/L	
Hg2600-3	00	SAM	0000143-07	1	11/11/2020 18:49:58	6879-1.RAW	6:49:58 PM	334.28	2		299.1	4.380	4.380	ng/L	
Hg2600-3	00	SAM	0000143-08	1	11/11/2020 18:54:07	6880-1.RAW	6:54:07 PM	305.93	2		182.5	2.723	2.723	ng/L	
Hg2600-3	00	SAM	0000143-09	1	11/11/2020 18:58:17	6881-1.RAW	7:02:26 PM	334.28	2		364.6	5.309	5.309	ng/L	
Hg2600-3	00	SAM	0000143-10	1	11/11/2020 19:02:26	6882-1.RAW	7:06:35 PM	217.58	2		202.9	3.014	3.014	ng/L	
Hg2600-3	00	SAM	0000143-11	1	11/11/2020 19:06:35	6883-1.RAW	7:10:45 PM	399.77	2		396.0	5.754	5.754	ng/L	
Hg2600-3	00	SAM	0000143-12	1	11/11/2020 19:10:45	6884-1.RAW	7:14:54 PM	431.13	2		116.8	1.791	1.791	ng/L	
Hg2600-3	00	SAM	0000143-13	1	11/11/2020 19:14:54	6885-1.RAW	7:19:37 PM	151.89	2		275.1	4.039	4.039	ng/L	
Hg2600-3	00	SAM	0000143-14	1	11/11/2020 19:19:37	6886-1.RAW	7:23:46 PM	310.25	2		327.2	4.644	4.644	ng/L	
Hg2600-3	00	SAM	0000143-15	1	11/11/2020 19:23:46	6887-1.RAW	7:27:55 PM	362.29			-9.5	-0.135	-0.135	ng/L	
Hg2600-3	00	CAL	SEQ-CCV7	1	11/11/2020 19:27:55	6888-1.RAW	7:32:05 PM	25.65			107.4	1.658	1.658	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	11/11/2020 19:32:05	6889-1.RAW	7:36:14 PM	142.53	2		325.9	4.626	4.626	ng/L	
Hg2600-3	00	SAM	0000143-16	1	11/11/2020 19:36:14	6890-1.RAW	7:40:23 PM	361.07			-7.8	-0.110	-0.110	ng/L	
Hg2600-3	00	CAL	SEQ-CCV8	1	11/11/2020 19:40:23	6891-1.RAW	7:44:33 PM	27.36							
Hg2600-3	00	CAL	SEQ-CCB8	1	11/11/2020 19:44:33	6892-1.RAW	7:48:43 PM								
Hg2600-3	00	CAL	SEQ-CCV9	1	11/11/2020 19:48:43	6893-1.RAW									

Pat

Total Mercury
EPA1631

Operator MFS
Workshop Thg2600
Method # R: 0.9994 R2:
Description Thg26002-201111-1

Blanks 35.131
CalibFa 70.451
Status: 0.9994 R2:
Conc = (Area-35.13 Run Date: 11:35:49
QC Warnings:7/QC E Run Time: 0.9988

Blank SD:
CF RSD%:
CF SD:
CF RSD%:

Sample/ID	Location	Run Date	Blank	Conc (ppb)	MB*	Final Conc	Rec%	QA	Raw Data	Run Date	Peak (Raw)	Control (uS)	Flags	Run Count	Comment
Clean															
FLUSH			35.13	0.00					6576-3.RAW	11:38:41	0.00 Clean	NP	3		
FLUSH			35.13	0.00					6577-4.RAW	11:44:16	27.72 Flush	OK	1		
WS			35.13	0.00					6578-1.RAW	11:49:50	27.16 Flush	OK	1		
WS			35.13	0.00					6579-1.RAW	11:53:59	21.74 Sample	OK	1		
WS			35.13	0.00					6580-1.RAW	11:58:08	23.18 Sample	OK	1		
WS			35.13	0.00					6581-1.RAW	12:02:17	21.04 Sample	OK	1		
WS			35.13	0.00					6582-1.RAW	12:06:25	23.01 Sample	OK	1		
WS			35.13	0.00					6583-1.RAW	12:10:35	21.90 Sample	OK	1		
WS			35.13	0.00					6584-1.RAW	12:14:44	20.94 Sample	OK	1		
WS			35.13	0.00					6585-1.RAW	12:18:52	21.35 Sample	OK	1		
WS			35.13	0.00					6586-1.RAW	12:23:02	22.80 Sample	OK	1		
WS			35.13	0.00					6587-1.RAW	12:27:10	20.36 Sample	OK	1		
WS			35.13	0.00					6588-1.RAW	12:31:20	19.62 Sample	OK	1		
WS			35.13	0.00					6589-1.RAW	12:35:29	17.84 Sample	OK	1		
SEQ-IBL1	A1		0.00	0.49					6590-1.RAW	12:39:39	20.99 Sample	OK	1		
SEQ-IBL2	A2		0.00	0.49					6591-1.RAW	12:43:48	34.51 Sample	OK	1		
SEQ-IBL3	A3		0.00	0.52					6592-1.RAW	12:47:58	34.42 Sample	OK	1		
SEQ-CAL1	A4		35.13	0.45	90.32				6593-1.RAW	12:52:07	36.46 Sample	OK	1		
SEQ-CAL2	A5		35.13	1.01	100.79				6594-1.RAW	12:56:16	66.95 Sample	OK	1		
SEQ-CAL3	A6		35.13	4.99	99.71				6595-1.RAW	13:00:25	106.14 Sample	OK	1		
SEQ-CAL4	A7		35.13	20.15	100.74				6596-1.RAW	13:04:34	386.38 Sample	OK	1		
SEQ-CAL5	A8		35.13	43.37	108.43				6597-1.RAW	13:08:43	1454.63 Sample	OK	1		
SEQ-CV1	A9		35.13	5.29	105.73				6598-1.RAW	13:12:52	3090.77 Sample	OK	1		
SEQ-ICB1	A10		35.13	0.14					6600-1.RAW	13:17:02	407.57 Sample	OK	1		
F011304-BS1	A11		35.13	4.95					6601-1.RAW	13:21:11	44.67 Sample	OK	1		
F011304-BSD1	A12		35.13	5.19					6602-1.RAW	13:25:20	383.61 Sample	OK	1		
F011304-BLK1	A13		35.13	0.00					6603-1.RAW	13:29:29	400.68 Sample	OK	1		
F011304-BLK2	A14		35.13	0.00					6604-1.RAW	13:33:38	30.83 Sample	OK	1		
F011304-BLK3	A15		35.13	0.00					6605-1.RAW	13:37:47	27.03 Sample	OK	1		
F011304-BLK4	A16		35.13	0.51					6606-1.RAW	13:41:56	24.02 Sample	OK	1		
F011304-BLK5	A17		35.13	0.15					6607-1.RAW	13:46:05	70.74 Sample	OK	1		
OK00036-01	A18		35.13	1.25					6608-1.RAW	13:50:14	46.03 Sample	OK	1		
F011304-MS2	A19		35.13	5.58					6609-1.RAW	13:54:23	123.53 Sample	OK	1		
F011304-MSD2	A20		35.13	5.49	171.46				6610-1.RAW	13:58:33	428.30 Sample	OK	1		
ERR			35.13	0.18					6611-1.RAW	14:02:41	422.05 Sample	OK	1		
ERR			35.13	0.06					6612-1.RAW	14:06:51	48.79 Sample	OK	1		
WS			35.13	0.00					6613-1.RAW	14:11:00	39.03 Sample	OK	1		
WS			35.13	0.00					6614-1.RAW	14:15:09	21.12 Sample	OK	1		
SEQ-CCV1	A21		35.13	4.83					6615-1.RAW	14:19:18	18.38 Sample	OK	1		
SEQ-CCB1	B1		35.13	0.00					6616-1.RAW	14:23:27	375.61 Sample	OK	1		
WS			35.13	0.00					6617-1.RAW	14:27:36	33.01 Sample	OK	1		
WS			35.13	0.00					6618-1.RAW	14:31:45	22.84 Sample	OK	1		
WS			35.13	0.00					6619-1.RAW	14:35:55	23.04 Sample	OK	1		
WS			35.13	0.00					6620-1.RAW	14:40:03	23.09 Sample	OK	1		
WS			35.13	0.00					6621-1.RAW	14:44:13	21.54 Sample	OK	1		
WS			35.13	0.00					6622-1.RAW	14:48:21	19.35 Sample	OK	1		
WS			35.13	0.00					6623-1.RAW	14:52:30	24.00 Sample	OK	1		
WS			35.13	0.00					6624-1.RAW	14:56:39	24.00 Sample	OK	1		
WS			35.13	0.00					6625-1.RAW	15:00:48	22.87 Sample	OK	1		
WS			35.13	0.00					6626-1.RAW	15:04:56	24.21 Sample	OK	1		
WS			35.13	0.00					6627-1.RAW	15:09:06	20.98 Sample	OK	1		
WS			35.13	0.00					6628-1.RAW	15:13:14	20.31 Sample	OK	1		
WS			35.13	0.00					6628-1.RAW	15:17:24	22.05 Sample	OK	1		

WRONG LOCATION
WRONG LOCATION

FOR SAMPLE LOCATION PREP

PfZ

SEQ-CCV2	B2	1	35.13	4.98	6629-1.RAW	15:21:37	385.83	Sample	OK	1
SEQ-CCB2	B3	1	35.13	0.05	6630-1.RAW	15:25:46	35.59	Sample	OK	1
0J00147-01	B4	1	35.13	2.96	6631-1.RAW	15:29:55	243.63	Sample	OK	1
F011304-MS1	B5	1	35.13	7.53	6632-1.RAW	15:34:05	585.68	Sample	OK	1
F011304-MSD1	B6	1	35.13	7.67	6633-1.RAW	15:38:15	575.16	Sample	OK	1
0J00147-02	B7	1	35.13	3.42	6634-1.RAW	15:42:23	275.85	Sample	OK	1
F011304-MS3	B8	1	35.13	7.35	6635-1.RAW	15:46:33	553.17	Sample	OK	1
F011304-MSD3	B9	1	35.13	7.52	6636-1.RAW	15:50:43	584.77	Sample	OK	1
0K00023-01	B10	10	35.13	61.01	6637-1.RAW	15:54:53	464.94	Sample	OK	1
0K00023-02	B11	1	35.13	1.01	6638-1.RAW	15:59:28	106.41	Sample	OK	1
0J00147-05	B12	1	35.13	0.38	6639-1.RAW	16:03:38	61.63	Sample	OK	1
0J00147-06	B13	1	35.13	2.52	6640-1.RAW	16:07:48	213.02	Sample	OK	1
SEQ-CCV3	B14	1	35.13	5.05	6641-1.RAW	16:11:58	390.69	Sample	OK	1
SEQ-CCB3	B15	1	35.13	0.11	6642-1.RAW	16:16:08	42.60	Sample	OK	1
0J00147-03	B16	1	35.13	2.80	6643-1.RAW	16:20:17	232.32	Sample	OK	1
0J00147-04	B17	1	35.13	3.08	6644-1.RAW	16:24:26	252.08	Sample	OK	1
0J00147-07	B18	1	35.13	3.48	6645-1.RAW	16:28:35	280.12	Sample	OK	1
0J00147-08	B19	1	35.13	3.56	6646-1.RAW	16:32:43	285.61	Sample	OK	1
0K00025-01	B20	1	35.13	2.19	6647-1.RAW	16:36:53	189.64	Sample	OK	1
0K00025-02	B21	1	35.13	0.86	6648-1.RAW	16:41:03	96.02	Sample	OK	1
0K00025-03	C1	1	35.13	1.48	6649-1.RAW	16:45:11	139.47	Sample	OK	1
0K00025-04	C2	1	35.13	1.51	6650-1.RAW	16:49:21	141.28	Sample	OK	1
0K00025-05	C3	1	35.13	1.83	6651-1.RAW	16:53:29	164.24	Sample	OK	1
0K00025-06	C4	1	35.13	0.16	6652-1.RAW	16:57:39	46.15	Sample	OK	1
SEQ-CCV4	C5	1	35.13	4.85	6653-1.RAW	17:01:49	376.86	Sample	OK	1
SEQ-CCB4	C6	1	35.13	0.00	6654-1.RAW	17:05:58	32.72	Sample	OK	1
0K00025-07	C7	1	35.13	0.00	6655-1.RAW	17:10:07	56.13	Sample	OK	1
0K00035-01	C8	1	35.13	0.30	6656-1.RAW	17:14:16	23.44	Sample	OK	1
0K00037-01	C9	10	35.13	69.36	6657-1.RAW	17:18:26	523.81	Sample	OK	1
F011307-BS1	C10	1	35.13	5.03	6658-1.RAW	17:22:36	389.37	Sample	OK	1
F011307-BSD1	C11	1	35.13	5.18	6659-1.RAW	17:26:45	399.74	Sample	OK	1
F011307-BLK1	C12	1	35.13	0.00	6660-1.RAW	17:30:55	30.98	Sample	OK	1
F011307-BLK2	C13	1	35.13	0.00	6661-1.RAW	17:35:04	23.61	Sample	OK	1
F011307-BLK3	C14	1	35.13	0.00	6662-1.RAW	17:39:13	22.58	Sample	OK	1
0K00027-01	C15	100	35.13	281.90	6663-1.RAW	17:43:23	233.73	Sample	OK	1
0J00143-01	C16	1	35.13	9.38	6664-1.RAW	17:47:33	696.25	Sample	OK	1
SEQ-CCV5	C17	1	35.13	5.01	6665-1.RAW	17:51:43	388.03	Sample	OK	1
SEQ-CCB5	C18	1	35.13	0.10	6666-1.RAW	17:55:52	41.92	Sample	OK	1
F011307-MS1	C19	100	35.13	759.57	6667-1.RAW	18:00:02	570.26	Sample	OK	1
F011307-MSD1	C20	100	35.13	780.28	6668-1.RAW	18:04:11	584.85	Sample	OK	1
F011307-MS2	C21	100	35.13	13.91	6669-1.RAW	18:08:21	1075.10	Sample	OK	1
F011307-MSD2	A1	1	35.13	12.26	6670-1.RAW	18:12:30	898.75	Sample	OK	1
0K00027-02	A2	100	35.13	52.30	6671-1.RAW	18:16:40	71.98	Sample	OK	1
0K00027-03	A3	100	35.13	60.69	6672-1.RAW	18:20:50	77.89	Sample	OK	1
0J00143-02	A4	1	35.13	1.74	6673-1.RAW	18:25:00	157.85	Sample	OK	1
0J00143-03	A5	1	35.13	5.68	6674-1.RAW	18:29:10	435.24	Sample	OK	1
0J00143-04	A6	1	35.13	2.23	6675-1.RAW	18:33:20	192.33	Sample	OK	1
0J00143-05	A7	1	35.13	2.67	6676-1.RAW	18:37:30	223.47	Sample	OK	1
SEQ-CCV6	A8	1	35.13	4.59	6677-1.RAW	18:41:40	358.83	Sample	OK	1
SEQ-CCB6	A9	1	35.13	0.00	6678-1.RAW	18:45:50	35.24	Sample	OK	1
0J00143-06	A10	1	35.13	3.98	6679-1.RAW	18:49:58	315.64	Sample	OK	1
0J00143-07	A11	1	35.13	7.60	6680-1.RAW	18:54:07	570.81	Sample	OK	1
0J00143-08	A12	1	35.13	3.84	6681-1.RAW	18:58:17	306.93	Sample	OK	1
0J00143-09	A13	1	35.13	4.25	6682-1.RAW	19:02:26	334.28	Sample	OK	1
0J00143-10	A14	1	35.13	2.59	6683-1.RAW	19:06:35	217.58	Sample	OK	1
0J00143-11	A15	1	35.13	5.18	6684-1.RAW	19:10:45	399.77	Sample	OK	1
0J00143-12	A16	1	35.13	2.88	6685-1.RAW	19:14:54	238.05	Sample	OK	1
0J00143-13	A17	1	35.13	5.82	6686-1.RAW	19:19:37	431.13	Sample	OK	1

TH826002-201111-1

SEQ-1BL1	A1	F011304-MST1	B5	OK00025-07	C7	SEQ-CCB4	B4	0J00147-01	B4	SEQ-CCB4	C6
SEQ-1BL2	A2	F011304-MSD1	B6	OK00035-01	C8	SEQ-CCV4	B3	SEQ-CCV4	C5	SEQ-CCV4	C5
SEQ-1BL3	A3	0J00147-02	B7	OK00037-01	C9	SEQ-CCV6	B8	0J00143-05	A7	SEQ-CCV6	A8
SEQ-CAL1	A4	F011304-M53	B8	F011307-B51	C10	SEQ-CCB6	A9	0J00143-06	A10	SEQ-CCB6	A9
SEQ-CAL2	A5	F011304-MSD3	B9	F011307-BLK1	C11	SEQ-CAL3	A6	0J00143-07	A11	SEQ-CAL3	A10
SEQ-CAL3	A6	OK00023-01	B10	F011307-BLK2	C12	SEQ-CAL4	A7	0J00143-08	A12	SEQ-CAL4	A11
SEQ-CAL4	A7	OK00023-02	B11	F011307-BLK3	C13	SEQ-CAL5	A8	0J00143-09	A13	SEQ-CAL5	A12
SEQ-CAL5	A8	0J00147-05	B12	OK00027-01	C14	SEQ-1CV1	A9	0J00143-10	A14	SEQ-1CV1	A13
SEQ-1CV1	A9	0J00147-06	B13	F011307-M51	C15	SEQ-1CV2	A10	0J00143-11	A15	SEQ-1CV2	A14
SEQ-1CV2	A10	SEQ-CCV3	B14	0J00143-01	C16	SEQ-1CV3	A11	0J00143-12	A16	SEQ-CCV3	A15
SEQ-1CV3	A11	SEQ-CCB3	B15	SEQ-CCV5	C17	SEQ-1CV4	A12	0J00143-13	A17	SEQ-CCB3	A16
SEQ-1CV4	A12	0J00147-03	B16	SEQ-CCB5	C18	SEQ-1CV5	A13	0J00143-14	A18	0J00147-03	A17
F011304-BLK1	A13	0J00147-04	B17	F011307-MST1	C19	SEQ-1CV6	A14	0J00143-15	A19	0J00147-04	A18
F011304-BLK2	A14	0J00147-07	B18	F011307-MSD1	C20	SEQ-1CV7	A15	0J00143-16	A20	0J00147-07	A19
F011304-BLK3	A15	0J00147-08	B19	F011307-M52	C21	SEQ-CCB7	A16	0J00143-17	A21	0J00147-08	A20
F011304-BLK4	A16	OK00025-01	B20	F011307-MSD2	A1	SEQ-CCV8	A17	0J00143-18	A22	OK00025-01	A21
F011304-BLK5	A17	OK00025-02	B21	OK00027-02	A2	SEQ-CCV9	A18	0J00143-19	A23	OK00025-02	A22
OK00036-01	A18	OK00025-03	C1	OK00027-03	A3	SEQ-CCV10	A19	0J00143-20	A24	OK00025-03	A23
F011304-M52	A19	OK00025-04	C2	0J00143-02	A4	SEQ-CCV11	A20	0J00143-21	A25	OK00025-04	A24
F011304-MSD2	A20	SEQ-CCB1	B1	OK00025-05	C3	SEQ-CCB2	B2	0J00143-22	A26	SEQ-CCB1	A25

Verified by:

ZCA 11/2/2022

ANALYSIS SEQUENCE

QUALITY ASSURANCE

OK18010

PEER-REVIEWED

INITIALS: PGS

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 11/17/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OK18010-IBL1	QC	1			
OK18010-CAL1	QC	2	2002026		
OK18010-CAL2	QC	3	2002027		
OK18010-CAL3	QC	4	2002701		
OK18010-CAL4	QC	5	2002702		
OK18010-CAL5	QC	6	2002703		
OK18010-ICV1	QC	7	2002592		
OK18010-ICB1	QC	8			
OJ00151-03RE1	MHg-CVAFS-W-Dist	9			Added 11/17/2020 by MFS
OJ00151-06RE1	MHg-CVAFS-W-Dist	10			Added 11/17/2020 by MFS
OJ00151-07RE1	MHg-CVAFS-W-Dist	11			Added 11/17/2020 by MFS
OK18010-CCV1	QC	12	2002592		
OK18010-CCB1	QC	13			
F011323-BS1	QC	14			
F011323-BSD1	QC	15			
F011323-BLK1	QC	16			
F011323-BLK2	QC	17			
F011323-BLK3	QC	18			
F011323-BLK4	QC	19			
OK18010-CCV2	QC	20	2002592		
OK18010-CCB2	QC	21			
OJ00143-01	MHg-CVAFS-W-Dist	22			
F011323-MS1	QC	23			
F011323-MSD1	QC	24			
OJ00147-02	MHg-CVAFS-W-Dist	25			
F011323-MS2	QC	26			
F011323-MSD2	QC	27			
OJ00143-02	MHg-CVAFS-W-Dist	28			
OJ00143-03	MHg-CVAFS-W-Dist	29			
OJ00143-04	MHg-CVAFS-W-Dist	30			
OJ00143-05	MHg-CVAFS-W-Dist	31			
OK18010-CCV3	QC	32	2002592		
OK18010-CCB3	QC	33			
OJ00143-06	MHg-CVAFS-W-Dist	34			
OJ00143-07	MHg-CVAFS-W-Dist	35			
OJ00143-08	MHg-CVAFS-W-Dist	36			

ANALYSIS SEQUENCE

OK18010

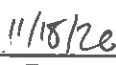
Instrument: Hg2700-1


Calibration ID: UNASSIGNED

Analyzed: 11/17/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OJ00143-09	MHg-CVAFS-W-Dist	37			
OJ00143-10	MHg-CVAFS-W-Dist	38			
OJ00143-11	MHg-CVAFS-W-Dist	39			
OJ00143-12	MHg-CVAFS-W-Dist	40			
OJ00143-13	MHg-CVAFS-W-Dist	41			
OJ00143-14	MHg-CVAFS-W-Dist	42			
OJ00143-15	MHg-CVAFS-W-Dist	43			
OK18010-CCV4	QC	44	2002592		
OK18010-CCB4	QC	45			
OJ00143-16	MHg-CVAFS-W-Dist	46			
OJ00151-05	MHg-CVAFS-W-Dist	47			Scan all data - Level IV
OK00007-01	MHg-CVAFS-W-Dist	48			
OK00007-02	MHg-CVAFS-W-Dist	49			
F011324-BS1	QC	50			
F011324-BSD1	QC	51			
F011324-BLK1	QC	52			
F011324-BLK2	QC	53			
F011324-BLK3	QC	54			
OJ00147-01	MHg-CVAFS-W-Dist	55			
OK18010-CCV5	QC	56	2002592		
OK18010-CCB5	QC	57			
F011324-MS1	QC	58			
F011324-MSD1	QC	59			
OJ00147-03	MHg-CVAFS-W-Dist	60			
OJ00147-04	MHg-CVAFS-W-Dist	61			
OJ00147-07	MHg-CVAFS-W-Dist	62			
OJ00147-08	MHg-CVAFS-W-Dist	63			
OJ00151-02RE1	MHg-CVAFS-W-Dist	64			Redistill, then RR@10x MFS 11/17/20
OK00025-01	MHg-CVAFS-W-Dist	65			Scan all data for level IV report
OK00068-04	MHg-CVAFS-W-Dist	66			
OK18010-CCV6	QC	67	2002592		
OK18010-CCB6	QC	68			


 Samples Loaded By


 Date


 Data Processed By


 Date

Failing Data Report - 0K18010

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F011323-MSD2	MHe-CVAFS-W-Dist	0.505	0.050	1.181698	1.134569	1.1042	ng/L	33.6	65.00	130.00	80.2	35.00	PASS-OVER	FAIL-MSD (Rec. and RPD)	QM-07



 Analyst Reviewed By _____ Date 11/18/20

Peer Reviewed By _____ Date _____

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: MFS	Sequence #: OK18010
Reviewer:	Dataset ID #: MHg27001-201117-1
Date: 11/18/20	WO #: Multiple
Batch #(s): F011306, F011323, F011324	

• Select the correct preparation method.

Additional Comments:

Analyte	Prep Method	Matrix
<input checked="" type="checkbox"/> MHg	SOP2797 MHg Distillation	Water
<input type="checkbox"/> MHg	SOP2986 KOH/MeOH Digest	Tissue
<input type="checkbox"/> MHg	SOP5134 MeCl Extraction	Sed/Soil
<input type="checkbox"/> DMHg	SOP2816 (None Accredited method)	ALL

	Analyst Initials: <i>MFS</i>		Reviewer Initials/Date: <i>PGS</i>
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(a) Reviewer: 100% of peak heights checked	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(b) Are there peak height errors?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/>
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A
(d) Error on a Cal Pt, ICB/CCB, or PB: Has the data been reimported?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A
(e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(f) Check and compare masses (review prep bench sheet)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(g) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(h) Do aliquots and dilutions written on benchsheet match those in Excel?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(i) Is the pH>3.0 for all distilled samples?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> N/A
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(l) Original prep bench sheet added to data package?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
3. High QA? WO#(s)/Client(s): <u>030051</u>	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(a) Have the QC requirements been met for all WO#s?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
5. 20 or fewer samples in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(b) 1 CCV and 1 CCB every 10 analytical runs?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
QA/QC Data Checked			
6. The calibration curve included a minimum of 5 Standards	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> N/A
Comments: _____			
7. 1st Calibration Standard % Recoveries (65-135%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> N/A
Comments: _____			
8. RSD CF (≤ 15%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/>
Comments: _____			

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: MFS	Sequence #: OK18010
Reviewer: 0	Dataset ID #: MHg27001-201117-1
Date:	WO #: Multiple
Batch #(s): F011306, F011323, F011324	

Analyst Initials:

MFS

Reviewer Initials/Date:

IGS

- | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------------------|-----------------------------------------|
| <p>9. ICV % Recoveries 67-133%</p> <p>Comments: _____</p> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| <p>10. CCV % Recoveries 67-133%</p> <p>Comments: _____</p> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| <p>11. Are the absolute value of the ICB and CCBs < PQL?</p> <p>Comments: _____</p> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| <p>12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)</p> <p>Comments: _____</p> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| <p>13. LCS/LCSD or BS/BSD RPD (< 25%)</p> <p>Comments: _____</p> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| <p>14. Water: Average of Preparation Blanks < 0.045 ng/L and standard deviation of 0.015 ng/L?</p> <p>Comments: _____</p> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> N/A |
| <p>15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?</p> <p>Comments: _____</p> | <input type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> N/A |
| <p>16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)</p> | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| <p>17. Is the correct 'Source' designated for MD/MS/MSD?</p> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| <p>18. For digested preps: was there a spike witness signature & date on the prep bench sheet?</p> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| <p>19. MD RPD/MT RSD(< 35%)</p> <p>Comments: _____</p> | <input type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> N/A |
| <p>20. Is there one set of MS/MSD per every 10 samples?</p> <p>Comments: _____</p> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| <p>21. MS/MSD RPD(< 35%)</p> <p>Comments: _____</p> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| <p>22. MS (AS) % Recoveries (65-130%)</p> <p>Comments: _____</p> | <input type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| <p>23. MSD (ASD) % Recoveries (65-130%)</p> <p>Comments: F011323-MSD2</p> | <input type="checkbox"/> PASS | <input checked="" type="checkbox"/> FAIL | <input type="checkbox"/> |
| <p>24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)</p> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| <p>25. Are all samples within instrument calibration range (or at maximum aliquot size)?</p> <p>Comments: _____</p> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| <p>26. For instrumental dilutions, is the dilution factor in excel correct?</p> <p>Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?</p> | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| <p>27. Dissolved < Total metals (if applicable)</p> <p>Comments: _____</p> | <input type="checkbox"/> PASS | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> N/A |
| <p>28. Effluent < Influent metals (visually confirm if needed)</p> <p>Comments: _____</p> | <input type="checkbox"/> PASS | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst:	MFS	Sequence #:	OK18010
Reviewer:	0	Dataset ID #:	MHg27001-201117-1
Date:		WO #:	Multiple
Batch #(s):	F011306, F011323, F011324		

Analyst Initials: MFS
 YES NO **Reviewer Initials/Date:** PGS
 N/A

29. Are re-runs noted with reason?
 Comments: _____
 YES NO N/A

30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):
 Was a bubbler and trap test run before the analytical run continued?
 Comments: _____
 YES NO N/A

31. Do re-run results compare to initial analysis (< 35% RPD)?
 Comments: _____
 YES NO N/A

32. Are qualifiers consistent with the data review flowcharts?
 Comments: _____
 YES NO N/A

33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?
 Comments: _____
 YES NO N/A

34. Have re-extracts been created for non-reportable samples?
 YES NO N/A

35. Narrations in MMO box in LIMS?
 Comments: _____
 YES NO N/A

36. Are there any HIGH QA projects within the data?
 If so, place dataset to the QA office.
 YES NO

37. Does the data set need scanning?
 YES N/A

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

38. Date of analyst IDOC/CDOC: 3/7/20 ^{5 MFS 11/18/20} IDOC/CDOC within last 12 months? YES NO

39. Date of analyst's SOP reading: 10/24/20 Current SOP revision? YES NO

40. Date of LOD: 8/19/20 LOD within last 3 months (within 12 months for MDN)? YES NO N/A

41. Date of LOQ: 8/19/20 LOQ within last 3 months (within 12 months for MDN)? YES NO N/A

42. If MDN samples, date of last MDL study: N/A

43. MDL study within last 12 months? YES NO N/A

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Additional Comments: _____
 YES NO

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

11/17/20
MPS

Batch #1

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011306-BLK1	Blank	45	40					
F011306-BLK2	Blank	45	40					
F011306-BLK3	Blank	45	40					
F011306-BLK4	Blank	45.09	40					
F011306-BS1	LCS	45	40	2002647	50			0J00151-08
F011306-BSD1	LCS Dup	45	40	2002647	50			
F011306-MS1	Matrix Spike [0J00151-04]	45.15	40	2002647	50			
F011306-MS2	Matrix Spike [0J00137-01]	45.45	40	2002647	50			
F011306-MSD1	Matrix Spike Dup [0J00151-04]	45.78	40	2002647	50			
F011306-MSD2	Matrix Spike Dup [0J00137-01]	45.38	40	2002647	50			

Standard ID(s): 2002647

Description: MHg New Primary 1.0 ng/mL CAL

Expiration: 29-Jan-21 00:00

Reagent ID(s): 2002390

Description: 1% APDC Solution

Expiration: 07-Jan-21 00:00

Curve

CAL1: 50 µL 2002647
 CAL2: 100 µL 2002647
 CAL3: 50 µL 2002647
 CAL4: 100 µL 2002647
 CAL5: 200 µL 2002647
 LOW/CCV: 50 µL 2002647

Description: 2002433

Expiration: 29-Jan-21 00:00

Reagent ID(s): 2002433

Description: Acetate Buffer

Expiration: 12-Jan-21 00:00

Description: 2002751

Expiration: 03-May-21 00:00

Description: 2003024

Expiration: 17-Nov-20 00:00

Description: 2003051

Expiration: 23-Nov-20 00:00

Description: Ethylating Agent (For Methyl Mercury Analysis)

Expiration: 03-May-21 00:00

Description: .4% HCl Distillation Dilute (Made Daily)

Expiration: 17-Nov-20 00:00

Description: 2.5% Ascorbic Acid

Expiration: 23-Nov-20 00:00

10x = 5 mL Sample → 50 mL F.U.
 5x = 10 mL Sample → 50 mL F.U.

Pipette Cal Date: Curve 12 CAL1-3 w/it: UFA 11-17-2020
 NUS-1653 11/14/20 Reagent w/it: ZKA 11/16/2020
 PU40588 11/17/20 Ethylation w/it: UFA 11-17-2020
 PU30538 11/17/20 CCV 5-9 w/it: ZKA 11/18/2020

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00137-01	FB-10262020 (410-18348-1)	45.8	40	-	-	150401		
0J00151-01	204A_20201029_N_WG	45.05	40	-	-	150401	Scan all data - Level IV	
0J00151-02	306A_20201029_FD_WG	45.34	40	-	-	150401	Scan all data - Level IV	
0J00151-03	306A_20201029_N_WG	45.03	40	-	-	150401	Scan all data - Level IV	
0J00151-03RE1	306A_20201029_N_WG	45.03	40	-	-	150401	Added 11/17/2020 by MFS	E:01 RR@10x MFS 11/17/20
0J00151-04	803A_20201029_N_WG	45.65	40	QC	-	150401	MS/MSD Scan all data - Level IV	
0J00151-06	PZ-102A_20201029_N_WG	45.28	40	-	-	150401	Scan all data - Level IV	
0J00151-06RE1	PZ-102A_20201029_N_WG	45.28	40	-	-	150401	Added 11/17/2020 by MFS	Undercurve: RR@5x MFS 11/17/20
0J00151-07	PZ-104A_20201029_N_WG	45.81	40	-	-	150401	Scan all data - Level IV	
0J00151-07RE1	PZ-104A_20201029_N_WG	45.81	40	-	-	150401	Added 11/17/2020 by MFS	Undercurve: RR@5x MFS 11/17/20
0K00017-01	FB_11022020 (410-19190-7)	45.26	40	-	-	150401		
0K00018-01	WTS-1 (570-42690-1)	45.07	40	-	-	150401		
0K00025-03	OL-3584-02	45.58	40	-	-	150401	Scan all data for level IV report	
0K00025-04	OL-3584-03	45.54	40	-	-	150401	Scan all data for level IV report	
0K00025-05	OL-3584-04	45.75	40	-	-	150401	Scan all data for level IV report	
0K00025-06	OL-3584-05	45.67	40	-	-	150401	Scan all data for level IV report	
0K00025-07	OL-3584-06	45.31	40	-	-	150401	Scan all data for level IV report	
00042-05	FB_11052020 (410-19653-5)	45.68	40	-	-	150401		
00057-03	FB_11092020 (410-20017-3)	45.46	40	-	-	150401		

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Work Order	Client	Project	45.14	40	-	150401
0K00059-01	ESGV-36-MTD_O-060	Low Level Mercury	45.14	40	-	150401
0K00059-02	ESGV-36-LOW-016	DOW DWR MMHg and THg Waters	45.95	40	-	150401
0K00067-02	FB_11102020 (410-20223-2)	Low Level Mercury Methyl Mercury	45.11	40	-	150401

Work Order

0J00137
0J00151
0K00017
0K00018
0K00025
0K00042
0K00057
0K00059
0K00067

Client

Eurofins Lancaster Environmental, LLC
Eurofins Lancaster Environmental, LLC
Eurofins Lancaster Environmental, LLC
Eurofins Calscience, LLC
Parsons - Syracuse NY
Eurofins Lancaster Environmental, LLC
Eurofins Lancaster Environmental, LLC
Larry Walker Associates Davis
Eurofins Lancaster Environmental, LLC

Project

Low Level Mercury
DOW DWR MMHg and THg Waters
Low Level Mercury
Methyl Mercury
Honeywell 2020 Onondaga Lake
Low Level Mercury
Low Level Mercury
East San Gabriel Valley CIMP
Low Level Mercury

PREPARATION BENCH SHEET

11/17/20
MFS

Batch #2

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011323-BLK1	Blank	45	40					
F011323-BLK2	Blank	45	40					
F011323-BLK3	Blank	45	40					
F011323-BLK4	Blank	45	40					0J00151-09 LEL 11-17-2020
F011323-BS1	LCS	45	40					
F011323-BSD1	LCS Dup	45	40					
F011323-MS1	Matrix Spike [0J00143-01]	45	40					
F011323-MS2	Matrix Spike [0J00147-02]	45	40					
F011323-MSD1	Matrix Spike Dup [0J00143-01]	45	40					
F011323-MSD2	Matrix Spike Dup [0J00147-02]	45	40					

Standard ID(s):
 Reagent wit (1-24): 11-17-2020
 Ethyl-wit (1-24): 11-17-2020
 Reagent wit (25-30): Z14 11/18/2020
 Ethyl wit (25-30): Z14 11/18/2020

Reagent ID(s):
 2002390
 2003024
 2002757
 2002024
 2002483
 MFS 11/17/20
 2002051

Description:
 1% APDC Solution
 .4% HCl Distillation Dilute (Made Daily)

Expiration:
 07-Jan-21 00:00
 17-Nov-20 00:00

50x = 1mL Sample → 50 mL F.V.

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00143-01	WQ1b-C_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-02	WQ1b-C_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-03	WQ2-C_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-04	WQ2-C_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-05	WQ3-L_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-06	WQ3-L_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-07	WQ-ECH_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-08	WQ-ECH_102820_SW_10 DISSOLVED	45	40	-	-	150404		
0J00143-09	ES-15_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-10	ES-15_102820_SW_10 DISSOLVED	45	40	-	-	150404		
0J00143-11	WQ-FPT_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-12	WQ-FPT_102820_SW_10 DISSOLVED	45	40	-	-	150404		
0J00143-13	WQ1b-C_102820_SW_10_VAL TOTAL	45	40	-	-	150404		
0J00143-14	WQ1b-C_102820_SW_10_VAL DISSOLVED	45	40	-	-	150404		
0J00143-15	WQ2-C_102820_SW_10_VAL TOTAL	45	40	-	-	150404		
0J00143-16	WQ2-C_102820_SW_10_VAL DISSOLVED	45	40	-	-	150404		
0J00147-02	OV-02_102920_SW_10 DISSOLVED	45	40	QC	-	010201	MS/MSD	
1151-05	805A-R_20201029_N_WG	45	40	-	-	150404	Scan all data - Level IV	
0007-01	OW-ALB1-D28	45	40	-	-	150404		

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water **Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water** **Prepared: 11/17/2020**

0K00007-02	PW-ALB1-D28	45	40	-	-	140103	
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<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0J00143	Wood - MA	Penobscot
0J00147	Wood - MA	Penobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00007	Physis Labs	Methyl Mercury

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: LEL
Upload/Date: MFS

^{17 MES}
11/18/20
11/16/20

Samples to lab: MIA
Reviewer/Date: ZKH 11/19/2020

Batch #: F011323

EFGS Preparation Method		ICPMS	AFS
<input type="checkbox"/> SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2837	Tissue Nitric Digestion	<input type="checkbox"/>	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2840	Modified Aqua Regia		
<input type="checkbox"/> SOP2820	RP		
<input type="checkbox"/> SOP2821	HF Bomb Digestion	<input type="checkbox"/>	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2825	Nitric Bomb Digestion	<input type="checkbox"/>	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2993	Oven Digestion (As, Se Speciation)		
<input type="checkbox"/> SOP5145	Microwave Digestion (Nutraceuticals)		
<input type="checkbox"/> SOP5145	Microwave Digestion (3051)		
<input checked="" type="checkbox"/>	NA Other: <u>SOP 2836</u>		

Initials	SOP Date	DOC Date
<u>LEL</u>	<u>4-22-2020</u>	<u>4-22-2020</u>
Comments: _____		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: MtHg

- | | ICPMS | AFS | 70:30 | Reviewer Initials | Tertiary Review |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------|--------------------------------|-----------------------------------------|-------------------------------------|
| 1. Is any SOP/DOC expiring within one week of Submission Date?
Data cannot be reported without a current IDOC/CDOC. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| 2. Check prep method | | | | | |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 4. Check for transcription errors from benchsheet | | | | | |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (b) Check and compare mass | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (e) For re-digests, have e-mails been attached and verified? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Samples per Batch? Check QC Requirements | <input checked="" type="checkbox"/> ≤ 20 | <input type="checkbox"/> ≤ 10 | | | |
| (a) PBs per batch? | <input checked="" type="checkbox"/> 3 PBs | <input type="checkbox"/> 2 PBs | <input type="checkbox"/> 1 PBs | | |
| (b) Are pre and post homogenization blanks in batch? | | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (c) BS, BS/BSD or CRM in batch? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (d) MS/MSD in batch? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (e) MD in batch? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (f) Is there at least one duplicate QC source in batch? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (g) Are there any client specific requests, QC requests, etc?
Document: <u>W00JW147-02</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (i) Correct 'source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 6. Special prep requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (c) Spikes added: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: N/A

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>2002647</u>	<u>MtHg Long Int 50</u>				

MFS 11/18/20

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

1142

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011323-BLK1	Blank	45	40					
F011323-BLK2	Blank	45	40					
F011323-BLK3	Blank	45	40					
F011323-BLK4	Filter Blank 0100151-09A	45.72	40					0100151-09 LEL 11-17-2020
F011323-BS1	LCS	45	40	2002647	50			
F011323-BSD1	LCS Dup	45	40	2002647	50			
F011323-MS1	Matrix Spike [0100143-01]	45.04	40	2002647	50			
F011323-MS2	Matrix Spike [0100147-02]	45.85	40	2002647	50			
F011323-MSD1	Matrix Spike Dup [0100143-01]	45.55	40	2002647	50			
F011323-MSD2	Matrix Spike Dup [0100147-02]	45.28	40	2002647	50			

Standard ID(s): 2002647 Description: MHg New Primary 1.0 ng/mL CAL Expiration: 29-Jan-21 00:00

Reagent ID(s): 2002390 Description: 1% APDC Solution Expiration: 07-Jan-21 00:00
 2003059 Description: 4% HCl Distillation Dilute (Made Daily) Expiration: 18-Nov-20 00:00

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100143-01	WQ1b-C_102820_SW_10 TOTAL	45.41	40	-	-	fins Cals		
0100143-02	WQ1b-C_102820_SW_10 DISSOLVED	45.67	40	-	-	241201		
0100143-03	WQ2-C_102820_SW_10 TOTAL	45.01	40	-	-	fins Cals		
0100143-04	WQ2-C_102820_SW_10 DISSOLVED	45.83	40	-	-	241201		
0100143-05	WQ3-L_102820_SW_10 TOTAL	45.43	40	-	-	fins Cals		
0100143-06	WQ3-L_102820_SW_10 DISSOLVED	45.51	40	-	-	241201		
0100143-07	WQ-ECH_102820_SW_10 TOTAL	45.34	40	-	-	fins Cals		
0100143-08	WQ-ECH_102820_SW_10 DISSOLVED	45.78	40	-	-	150404		
0100143-09	ES-15_102820_SW_10 TOTAL	45.13	40	-	-	fins Cals		
0100143-10	ES-15_102820_SW_10 DISSOLVED	45.18	40	-	-	150404		
0100143-11	WQ-FPT_102820_SW_10 TOTAL	45.6	40	-	-	fins Cals		
0100143-12	WQ-FPT_102820_SW_10 DISSOLVED	45.32	40	-	-	150404		
0100143-13	WQ1b-C_102820_SW_10 VAL TOTAL	45.13	40	-	-	150404		
0100143-14	WQ1b-C_102820_SW_10 VAL DISSOLVED	45.86	40	-	-	150404		
0100143-15	WQ2-C_102820_SW_10 VAL TOTAL	45.67	40	-	-	150404		
0100143-16	WQ2-C_102820_SW_10 VAL DISSOLVED	45.1	40	-	-	150404		
0100147-02	OV-02_102920_SW_10 DISSOLVED	45.68	40	QC	-	010201	MS/MSD	
0100151-05	805A-R_20201029_N_WG	45.48	40	-	-	150404	Scan all data - Level IV	
0K00007-01	OW-ALB1-D28	45.25	40	-	-	150404		

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

OK00007-02	✓	PW-ALB1-D28	37.28	40	-	-	010302		
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Work Order	Client	Project
0J00143	Wood - MA	Penobscot
0J00147	Wood - MA	Penobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
OK00007	Physis Labs	Methyl Mercury

Methyl Mercury Distillations (EPA 1630)

Name: VR Date: 11-17-2020 Batch #: F011323 Sample Matrix: Water
 WO#: 0500143, 0500151, 0500147, 0K00007

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (23)	Time first sample distillation completed: <u>1142</u>
1	F011323-BIK1	<2	45.73	3	Spike ID: <u>2002647</u> Spike Amount: <u>50</u> μ l Spike Witness: <u>VR 11/17/20</u> Balance #: <u>2</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>LU21647</u> Cal. Date: <u>11-13-2020</u> Pipette #: <u>P430538</u> Cal. Date: <u>11-13-2020</u> Pipette #: <u>N/A</u> Cal. Date: <u>N/A</u> APDC ID: <u>2602390 (1%, 200ml)</u> HCl ID: <u>2003059 (.4%)</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥ 10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>122</u> Unit 2: <u>123</u> Unit 3: <u>124</u> Unit 4: <u>N/A</u> Unit 5: <u>N/A</u> Unit 6: <u>N/A</u> Comments: F011323-BIK4: 0500151-09A 0500143-01: SRC MS1/MSD1 0500147-02: SRC MS2/MSD2 30: 45.08g
2	F011323-BIK2	<2	45.43	3	
3	F011323-BIK3	<2	45.14	3	
4	F011323-BIK4	<2	45.72	3	
5	F011323-BS1	<2	45.73	3	
6	F011323-BSD1	<2	45.99	3	
7	0500143-01B	<2	45.41	3	
8	F011323-MS1	<2	45.04	3	
9	F011323-MSD1	<2	45.55	3	
10	0500147-02B	<2	45.68	3	
11	F011323-MS2	<2	45.85	3	
12	F011323-MSD2	<2	45.78	3	
13	0500143-02B	<2	45.67	3	
14	0500143-03B	<2	45.01	3	
15	0500143-04B	<2	45.83	3	
16	0500143-05B	<2	45.43	3	
17	0500143-06B	<2	45.51	3	
18	0500143-07B	<2	45.34	3	
19	0500143-08B	<2	45.78	3	
20	0500143-09B	<2	45.13	3	
21	0500143-10B	<2	45.18	3	
22	0500143-11B	<2	45.60	3	
23	0500143-12B	<2	45.32	3	
24	0500143-13B	<2	45.13	3	
25	0500143-14B	<2	45.86	3	
26	0500143-15B	<2	45.67	2	
27	0500143-16B	<2	45.10	1	
28	0500151-05D	<2	45.48	2	
29	0K00007-01A	<2	45.25	2	
30	0K00007-02A	<2	37.28	2	

VR 11/17/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike 1 ID	µl Spike 1	Spike 2 ID	µl Spike 2	Extraction Comments
F011323-BLK1	Blank	45	40					
F011323-BLK2	Blank	45	40					
F011323-BLK3	Blank	45	40					
F011323-BS1	LCS	45	40					
F011323-BSD1	LCS Dup	45	40					
F011323-M\$1	Matrix Spike [0J00143-01]	45	40					
F011323-M\$2	Matrix Spike [0J00147-02]	45	40					
F011323-MSD1	Matrix Spike Dup [0J00143-01]	45	40					
F011323-MSD2	Matrix Spike Dup [0J00147-02]	45	40					

Standard ID(s):

Description:

Expiration:

Reagent ID(s):

Description:

Expiration:

2002390

1% APDC Solution

07-Jan-21 00:00

2003024

.4% HCl Distillation Dilute (Made Daily)

17-Nov-20 00:00

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00143-01	WQ1b-C_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-02	WQ1b-C_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-03	WQ2-C_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-04	WQ2-C_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-05	WQ3-L_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-06	WQ3-L_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-07	WQ-ECH_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-08	WQ-ECH_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-09	ES-15_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-10	ES-15_102820_SW_10 DISSOLVED	45	40	-	-	120202		
0J00143-11	WQ-FPT_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-12	WQ-FPT_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-13	WQ1b-C_102820_SW_10_VAL TOTAL	45	40	-	-	120202		
0J00143-14	WQ1b-C_102820_SW_10_VAL DISSOLVED	45	40	-	-	120202		
0J00143-15	WQ2-C_102820_SW_10_VAL TOTAL	45	40	-	-	241201		
0J00143-16	WQ2-C_102820_SW_10_VAL DISSOLVED	45	40	-	-	120202		
0J00147-02	OV-02_102920_SW_10 DISSOLVED	45	40	QC	-	010201	MS/MSD	
0151-05	805A-R_20201029_N_WG	45	40	-	-	140103	Scan all data - Level IV	
00007-01	OW-ALB1-D28	45	40	-	-	i Refrige		

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

0K00007-02	PW-ALBI-D28	45	40	-	-	140103	
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<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0J00143	Wood - MA	Penobscot
0J00147	Wood - MA	Penobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00007	Physis Labs	Methyl Mercury

Analytical Standard Record
Eurofins Frontier Global Sciences, LLC
2003059

Description:	.4% HCl Distillation Dilute (Made Daily)	Expires:	18-Nov-20
Standard Type:	Reagent	Prepared:	17-Nov-20
Solvent:	NA <i>use 11-17-2020</i>	Prepared By:	Lilly-Anna Lacount
Final Volume (mls):	250.28 <i>80</i>	Department:	Trace Metals
Vials:	2	Last Edit:	17-Nov-20 07:38 by LEL

Ratio of acid to water is not critical. Made new each day prior to a distillation.

Analyte	CAS Number	Concentration	Units
			ug/mL

Parent Standards used in this standard:						
Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2001973	TraceMetal Grade Hydrochloric Ac	13-Aug-20	Lilly-Anna Lacount	17-Jun-23	13-Oct-20 16:10 by DM	1

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

11/17/20
MFS
Batek # 3

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011324-BLK1	Blank	45	40					
F011324-BLK2	Blank	45	40					
F011324-BLK3	Blank	45	40					
F011324-BS1	LCS	45	40					
F011324-BSD1	LCS Dup	45	40					
F011324-MS1	Matrix Spike [0J00147-01]	45	40					
F011324-MSD1	Matrix Spike Dup [0J00147-01]	45	40					

Standard ID(s): Description: Expiration: Reagent ID(s): Description: Expiration:

2002390 1% APDC Solution 07-Jan-21 00:00

2003024 4% HCl Distillation Dilute (Made Daily) 17-Nov-20 00:00

2002767

2002483

2008051

Reagent wit: ZKH 11/17/2020

Ethyl wit: ZKH 11/17/2020

10x = 50ml Sample + 50ml F.U.

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	45	40	QC	-	241201	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	45	40	-	-	241201		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	45	40	-	-	241201		
0J00147-07	ADD-02_10290_SW_10 TOTAL	45	40	-	-	241201		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	45	40	-	-	241201		
0J00151-02REI	306A_20201029_FD_WG	45	40	-	-	S&R	Redistill, then RR@10x MFS 11/17/20	
0K00025-01	OL-3584-01 Total	45	40	-	-	241201	Scan all data for level IV report	
0K00068-04	FB_11112020 (410-20361-4)	45	40	-	-	241201		

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0J00147	Wood - MA	Penobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00025	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0K00068	Eurofins Lancaster Environmental, LLC	Low Level Mercury

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: LEL 11/17/20
Upload/Date: MPS 11/18/20

Samples to lab: N/A
Reviewer/Date: ZKH 11/18/20

Batch #: F011324

EFGS Preparation Method

SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS

SOP2837 Tissue Nitric Digestion ICPMS CVAFS

SOP2840 Modified Aqua Regia

SOP2820 RP

SOP2821 HF Bomb Digestion ICPMS CVAFS

SOP2825 Nitric Bomb Digestion ICPMS CVAFS

SOP2993 Oven Digestion (As, Se Speciation)

SOP5145 Microwave Digestion (Nutraceuticals)

SOP5145 Microwave Digestion (3051)

NA Other: SOP 2797 Distillation

Initials	SOP Date	DOC Date
<u>LEL</u>	<u>4-22-2020</u>	<u>4-22-2020</u>

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: MHg

	Reviewer Initials	Tertiary Review
1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>
If YES, notify supervisor and technician immediately.		
2. Check prep method	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(a) For Ceuticals: Is correct Hg code being used in LIMS? <input type="checkbox"/> ICPMS <input type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> ≤ 20 <input checked="" type="checkbox"/> ≤ 10	<input checked="" type="checkbox"/>
(a) PBs per batch? <input type="checkbox"/> ≤ 20 <input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(c) BS, BS/BSD or CRM in batch? <input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
(d) MS/MSD in batch?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(e) MD in batch?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
Document: <u>WQ 0130147-01</u>		
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
6. Special prep requirements?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>
(c) Spikes added: <input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>

Spike LIMS ID: N/A

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
<u>MHg 1.0mg/mL 2002147 50</u>					

MPS 11/18/20

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - ERGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

1570

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011324-BLK1	Blank	45	40					
F011324-BLK2	Blank	45	40					
F011324-BLK3	Blank	45	40					
F011324-BS1	LCS	45	40	2002647	50			
F011324-BSD1	LCS Dup	45	40	2002647	50			
F011324-MS1	Matrix Spike [0J00147-01]	45.64	40	2002647	50			
F011324-MSD1	Matrix Spike Dup [0J00147-01]	45.01	40	2002647	50			

Standard ID(s): 2002647 Description: MHg New Primary 1.0 ng/mL CAL Expiration: 29-Jan-21 00:00 Reagent ID(s): 2002390 Description: 1% APDC Solution Expiration: 07-Jan-21 00:00

2003059 Description: 4% HCl Distillation Dilute (Made Daily) Expiration: 18-Nov-20 00:00

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	45.32	40	QC	-	241201	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	45.11	40	-	-	241201		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	45.73	40	-	-	241201		
0J00147-07	ADD-02_10290_SW_10 TOTAL	45.72	40	-	-	241201		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	45.68	40	-	-	241201		
0J00151-02REI	306A_20201029_FD_WG	45.12	40	-	-	S&R	Redistill, then RR@10x MFS 11/17/20	
0K00023-01	OL-3584-01 Total	45.3	40	-	-	241201	Scan all data for level IV report	
0K00068-04	FB_11112020 (410-20361-4)	45.32	40	-	-	241201		

Work Order	Client	Project
0J00147	Wood - MA	Perobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00023	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0K00068	Eurofins Lancaster Environmental, LLC	Low Level Mercury

Methyl Mercury Distillations (EPA 1630)

Name: FA Date: 11-17-2020 Batch #: F011324 Sample Matrix: Water
 WO#: 0500147, 0500151, 0100068, 0100025

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (≥3)	Time first sample distillation completed: <u>1510</u>
1	F011324-BIK1	<2	45.10	2	Spike ID: <u>2002647</u> Spike Amount: <u>50</u> µL Spike Witness: <u>MEB 11/17/20</u> Balance #: <u>2</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>L421647</u> Cal. Date: <u>11-13-2020</u> Pipette #: <u>PU20538</u> Cal. Date: <u>11-13-2020</u> Pipette #: <u>N/A</u> Cal. Date: <u>N/A</u> APDC ID: <u>2002390(11, 2020)</u> HCl ID: <u>2003059(4%)</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>122</u> Unit 2: <u>123</u> Unit 3: <u>124</u> Unit 4: <u>N/A</u> Unit 5: <u>N/A</u> Unit 6: <u>N/A</u> Comments: <u>0500147-01: SRC/MSI/MSD</u> MEB 11/17/20
2	F011324-BIK2	<2	45.23	2	
3	F011324-BIK3	<2	45.63	3	
4	F011324-BSI	<2	45.08	3	
5	F011324-BSPI	<2	45.53	3	
6	0500147-01B	<2	45.32	2	
7	F011324-MSI	<2	45.64	2	
8	F011324-MSPI	<2	45.01	2	
9	0500147-03B	<2	45.11	1	
10	0500147-04B	<2	45.73	2	
11	0500147-07B	<2	45.72	2	
12	0500147-08B	<2	45.68	2	
13	0100025-01A	<2	45.30	2	
14	0100068-01A	<2	45.32	1	
15	0500151-02REID	<2	45.12	2	

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011324-BLK1	Blank	45	40					
F011324-BLK2	Blank	45	40					
F011324-BLK3	Blank	45	40					
F011324-BS1	LCS	45	40					
F011324-BSD1	LCS Dup	45	40					
F011324-MS1	Matrix Spike [0J00147-01]	45	40					
F011324-MSD1	Matrix Spike Dup [0J00147-01]	45	40					

Standard ID(s): Description:

Expiration:

Reagent ID(s):

Description:

Expiration:

2002390 1% APDC Solution
2003024 .4% HCl Distillation Dilute (Made Daily)

07-Jan-21 00:00
17-Nov-20 00:00

Due Date: 12/1/2020

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	45	40	QC	-	flns Cals	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	45	40	-	-	flns Cals		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	45	40	-	-	010201		
0J00147-07	ADD-02_10290_SW_10 TOTAL	45	40	-	-	flns Cals		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	45	40	-	-	010201		
OK00025-01	OL-3584-01 Total	45	40	-	-	150401	Scan all data for level IV report	
OK00068-04	FB_11112020 (410-20361-4)	45	40	-	-	150401		

Work Order

0J00147

OK00025

OK00068

Client

Wood - MA

Parsons - Syracuse NY

Eurofins Lancaster Environmental, LLC

Project

Pemobscot

Honeywell 2020 Onondaga Lake

Low Level Mercury

Due Date: 12/1/2020

Sederquist, Michael

From: Sederquist, Michael
Sent: Tuesday, November 17, 2020 1:12 PM
To: US34_EFGS_Lab (US34_EFGS_Lab@eurofins.com); Garcia-Strickland, Patrick; Von Berckefeldt, Michael
Subject: 11/17/2020 Redigest Request

Hi all,

11/17/2020 Submission:
WO: 0J00151-02
Client: Eurofins Lancaster Environmental, LLC
Digestion Type: MHg Distillation
Element(s): MHg
Due Date: ASAP
Reason: Overcurve
Status: new
Comments: Analyze at 10x

If you're interested in learning more about the laboratory services we offer, or have any questions regarding metals analysis or metals speciation, please feel free to contact me directly or check out the links below.

Best Regards,
Michael Sederquist

Scientist I

Eurofins Frontier Global Sciences Inc
5755 8th St E
Tacoma, WA 98424
United States

Main: 1-253-922-2310

Michael.Sederquist@eurofinset.com
www.EurofinsUS.com/Frontier

Please note: In order to continue to provide critical testing services, Eurofins Environment Testing laboratories in the US are maintaining our courier services and continue to sample, analyze and report all test data as usual. The situation around COVID-19 continues to be fluid and we are continuing to follow local and government mandates as applicable. For up-to-date business information, visit our [website](#) and follow us on [Facebook](#) and [LinkedIn](#).

Links to use:

Website: <https://www.eurofinsus.com/environment-testing/>
Facebook: <https://www.facebook.com/EurofinsEnvTesting>
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PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011306-BLK1	Blank	45	40					
F011306-BLK2	Blank	45	40					
F011306-BLK3	Blank	45	40					
F011306-BLK4	Blank	45.09	40					01001 51-08
F011306-BS1	LCS	45	40	2002647	50			
F011306-BSD1	LCS Dup	45	40	2002647	50			
F011306-MS1	Matrix Spike [0J00151-04]	45.15	40	2002647	50			
F011306-MS2	Matrix Spike [0J00137-01]	45.45	40	2002647	50			
F011306-MSD1	Matrix Spike Dup [0J00151-04]	45.78	40	2002647	50			
F011306-MSD2	Matrix Spike Dup [0J00137-01]	45.38	40	2002647	50			

Standard ID(s): 2002647
Description: MHg New Primary 1.0 ng/mL CAL
Expiration: 29-Jan-21 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
2002390	1% APDC Solution	07-Jan-21 00:00
2002433	Acetate Buffer	12-Jan-21 00:00
2002751	Ethylating Agent (For Methyl Mercury Analysis)	03-May-21 00:00
2003024	.4% HCl Distillation Dilute (Made Daily)	17-Nov-20 00:00
2003051	2.5% Ascorbic Acid	23-Nov-20 00:00

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00137-01	FB-10262020 (410-18348-1)	45.8	40	-	-	150401		
0J00151-01	204A_20201029_N_WG	45.05	40	-	-	150401	Scan all data - Level IV	
0J00151-02	306A_20201029_FD_WG	45.34	40	-	-	010302	Scan all data - Level IV	
0J00151-03	306A_20201029_N_WG	45.03	40	-	-	150401	Scan all data - Level IV	
0J00151-03RE1	306A_20201029_N_WG	45.03	40	-	-	150401	Added 11/17/2020 by MFS	E:01 RR@10x MFS 11/17/20
0J00151-04	803A_20201029_N_WG	45.65	40	QC	-	150401	M/S/MSD Scan all data - Level IV	
0J00151-06	PZ-102A_20201029_N_WG	45.28	40	-	-	150401	Scan all data - Level IV	
0J00151-06RE1	PZ-102A_20201029_N_WG	45.28	40	-	-	150401	Added 11/17/2020 by MFS	Undercurve: RR@5x MFS 11/17/20
0J00151-07	PZ-104A_20201029_N_WG	45.81	40	-	-	150401	Scan all data - Level IV	
0J00151-07RE1	PZ-104A_20201029_N_WG	45.81	40	-	-	150401	Added 11/17/2020 by MFS	Undercurve: RR@5x MFS 11/17/20
0K00017-01	FB_11022020 (410-19190-7)	45.26	40	-	-	150401		
0K00018-01	WTS-1 (570-42690-1)	45.07	40	-	-	150401		
0K00025-03	OL-3584-02	45.58	40	-	-	150401	Scan all data for level IV report	
0K00025-04	OL-3584-03	45.54	40	-	-	150401	Scan all data for level IV report	
0K00025-05	OL-3584-04	45.75	40	-	-	150401	Scan all data for level IV report	
0K00025-06	OL-3584-05	45.67	40	-	-	150401	Scan all data for level IV report	
0K00025-07	OL-3584-06	45.31	40	-	-	150401	Scan all data for level IV report	
0K00042-05	FB_11052020 (410-19653-5)	45.68	40	-	-	150401		
0K00057-03	FB_11092020 (410-20017-3)	45.46	40	-	-	150401		

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

OK00059-01	ESGV-36-MTD_O-060	45.14	40	-	-	150401	
OK00059-02	ESGV-36-LOW-016	45.95	40	-	-	150401	
OK00067-02	FB_11102020 (410-20223-2)	45.11	40	-	-	150401	

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0100137	Eurofins Lancaster Environmental, LLC	Low Level Mercury
0100151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
OK00017	Eurofins Lancaster Environmental, LLC	Low Level Mercury
OK00018	Eurofins Calscience, LLC	Methyl Mercury
OK00025	Parsons - Syracuse NY	Homeywell 2020 Onondaga Lake
OK00042	Eurofins Lancaster Environmental, LLC	Low Level Mercury
OK00057	Eurofins Lancaster Environmental, LLC	Low Level Mercury
OK00059	Larry Walker Associates Davis	East San Gabriel Valley CIMP
OK00067	Eurofins Lancaster Environmental, LLC	Low Level Mercury

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011323-BLK1	Blank	45	40					
F011323-BLK2	Blank	45	40					
F011323-BLK3	Blank	45	40					
F011323-BLK4	Filter Blank [0]00151-09A	45.72	40					0]00151-09 LEL 11-17-2020
F011323-BS1	LCS	45	40	2002647	50			
F011323-BSD1	LCS Dup	45	40	2002647	50			
F011323-MS1	Matrix Spike [0]00143-01]	45.04	40	2002647	50			
F011323-MS2	Matrix Spike [0]00147-02]	45.85	40	2002647	50			
F011323-MSD1	Matrix Spike Dup [0]00143-01]	45.55	40	2002647	50			
F011323-MSD2	Matrix Spike Dup [0]00147-02]	45.28	40	2002647	50			

Standard ID(s): 2002647
 Description: MHg New Primary 1.0 ng/mL CAL
 Expiration: 29-Jan-21 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
2002390	1% APDC Solution	07-Jan-21 00:00
2002433	Acetate Buffer	12-Jan-21 00:00
2002751	Ethylating Agent (For Methyl Mercury Analysis)	03-May-21 00:00
2003051	2.5% Ascorbic Acid	23-Nov-20 00:00
2003059	.4% HCl Distillation Dilute (Made Daily)	18-Nov-20 00:00

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00143-01	WQ1b-C_102820_SW_10 TOTAL	45.41	40	-	-	flns Cals		
0J00143-02	WQ1b-C_102820_SW_10 DISSOLVED	45.67	40	-	-	241201		
0J00143-03	WQ2-C_102820_SW_10 TOTAL	45.01	40	-	-	flns Cals		
0J00143-04	WQ2-C_102820_SW_10 DISSOLVED	45.83	40	-	-	241201		
0J00143-05	WQ3-L_102820_SW_10 TOTAL	45.43	40	-	-	flns Cals		
0J00143-06	WQ3-L_102820_SW_10 DISSOLVED	45.51	40	-	-	241201		
0J00143-07	WQ-ECH_102820_SW_10 TOTAL	45.34	40	-	-	flns Cals		
0J00143-08	WQ-ECH_102820_SW_10 DISSOLVED	45.78	40	-	-	150404		
0J00143-09	ES-15_102820_SW_10 TOTAL	45.13	40	-	-	flns Cals		
0J00143-10	ES-15_102820_SW_10 DISSOLVED	45.18	40	-	-	150404		
0J00143-11	WQ-FPT_102820_SW_10 TOTAL	45.6	40	-	-	flns Cals		
0J00143-12	WQ-FPT_102820_SW_10 DISSOLVED	45.32	40	-	-	150404		
0J00143-13	WQ1b-C_102820_SW_10 VAL TOTAL	45.13	40	-	-	150404		
0J00143-14	WQ1b-C_102820_SW_10 VAL DISSOLVED	45.86	40	-	-	150404		
0J00143-15	WQ2-C_102820_SW_10 VAL TOTAL	45.67	40	-	-	150404		
0J00143-16	WQ2-C_102820_SW_10 VAL DISSOLVED	45.1	40	-	-	150404		
0J00147-02	OV-02_102920_SW_10 DISSOLVED	45.68	40	QC	-	010201	MS/MSD	
0J00151-05	805A-R_20201029_N_WG	45.48	40	-	-	150404	Scan all data - Level IV	
0J00151-05	805A-R_20201029_N_WG	45.48	40	-	-	150404	Added 11/18/2020 by MFS	Undercurve: RR(6) x MFS 11/18/20+

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

OK00007-01	OW-ALB1-D28	45.25	40	-	-	150404	
OK00007-02	PW-ALB1-D28	37.28	40	-	-	010302	

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0100143	Wood - MA	Pentobscot
0100147	Wood - MA	Pentobscot
0100151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
OK00007	Physis Labs	Methyl Mercury

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011324-BLK1	Blank	45	40					
F011324-BLK2	Blank	45	40					
F011324-BLK3	Blank	45	40					
F011324-BS1	LCS	45	40	2002647	50			
F011324-BSD1	LCS Dup	45	40	2002647	50			
F011324-MS1	Matrix Spike [0100147-01]	45.64	40	2002647	50			
F011324-MSD1	Matrix Spike Dup [0100147-01]	45.01	40	2002647	50			

Standard ID(s): 2002647
Description: MHg New Primary 1.0 ng/mL CAL
Expiration: 29-Jan-21 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
2002390	1% APDC Solution	07-Jan-21 00:00
2002433	Acetate Buffer	12-Jan-21 00:00
2002751	Ethylating Agent (For Methyl Mercury Analysis)	03-May-21 00:00
2003051	2.5% Ascorbic Acid	23-Nov-20 00:00
2003059	4% HCl Distillation Dilute (Made Daily)	18-Nov-20 00:00

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	45.32	40	QC	-	241201	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	45.11	40	-	-	241201		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	45.73	40	-	-	241201		
0J00147-07	ADD-02_10290_SW_10 TOTAL	45.72	40	-	-	241201		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	45.68	40	-	-	241201		
0J00151-02RE1	306A_20201029_FD_W/G	45.12	40	-	-	S&R	Redistill, then RR@10x MFS 11/17/20	
0K00025-01	OL-3584-01 Total	45.3	40	-	-	241201	Scan all data for level TV report	
0K00068-04	FB_11112020 (410-20361-4)	45.32	40	-	-	241201		

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0100147	Wood - MA	Penobscot
0100151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00025	Parsons - Syracuse NY	Homeywell 2020 Onondaga Lake
0K00068	Eurofins Lancaster Environmental, LLC	Low Level Mercury

Due Date: 11/13/2020

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	8.60 units	172.08	7.13 units	142.60	92.1 %Rec
SEQ-CAL2	1	0.20 ng/L	32.48 units	162.42	31.01 units	155.05	100.1 %Rec
SEQ-CAL3	1	1.00 ng/L	165.24 units	165.24	163.77 units	163.77	105.8 %Rec
SEQ-CAL4	1	2.00 ng/L	308.39 units	154.19	306.91 units	153.46	99.1 %Rec
SEQ-CAL6	0	4.00 ng/L	638.89 units	159.72	637.42 units	159.35	102.9 %Rec
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 154.85 Corr. St Dev RF +/- 7.93 Corr. RSD CF 5.1% RSD Uncorr. Mean RF 162.73

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	1	1.47 units		0.01 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	0	0.000 ng/L	
BLK	2	4	0.034 ng/L	±0.007
BLK	3	3	0.030 ng/L	±0.014
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	EntailsUnits	Comments
Hg2700-1	00	CAL	SEQ-IBL1	1	11/17/20 13:32	3190-1-RAW	13:32:05	1.47			0.0	0.000	0.000	ng/L	
Hg2700-1	00	CAL	SEQ-CAL1	1	11/17/20 13:42	3191-1-RAW	13:42:20	8.60			7.1	0.046	0.046	ng/L	
Hg2700-1	00	CAL	SEQ-CAL2	1	11/17/20 13:52	3192-1-RAW	13:52:36	32.48			31.0	0.200	0.200	ng/L	
Hg2700-1	00	CAL	SEQ-CAL3	1	11/17/20 14:02	3193-1-RAW	14:02:51	165.24			163.8	1.058	1.058	ng/L	
Hg2700-1	00	CAL	SEQ-CAL4	1	11/17/20 14:13	3194-1-RAW	14:13:07	308.39			306.9	1.982	1.982	ng/L	
Hg2700-1	00	CAL	SEQ-CAL5	1	11/17/20 14:23	3195-1-RAW	14:23:23	638.89			637.4	4.116	4.116	ng/L	
Hg2700-1	00	CAL	SEQ-ICV1	1	11/17/20 14:33	3196-1-RAW	14:33:38	81.44			80.0	0.516	0.516	ng/L	
Hg2700-1	00	CAL	SEQ-ICB1	1	11/17/20 14:43	3197-1-RAW	14:43:54	2.64			1.2	0.008	0.008	ng/L	
Hg2700-1	00	SAM	*0K00007-02	100	11/17/20 14:54	3198-1-RAW	14:54:10	0.00			-1.5	Error	#VALUE!	ng/L	FOR SCREENING ONLY
Hg2700-1	00	SAM	WS		11/17/20 15:04	3199-1-RAW	15:04:27	1.77			0.3	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 15:14	3200-1-RAW	15:14:43	47.32			45.8	0.296	0.296	ng/L	
Hg2700-1	00	SAM	0000151-03RE1	10	11/17/20 15:24	3201-1-RAW	15:24:59	66.89			65.4	0.422	0.422	ng/L	F011306
Hg2700-1	00	SAM	0000151-06RE1	5	11/17/20 15:35	3202-1-RAW	15:35:15	90.51			79.0	0.627	0.627	ng/L	F011306
Hg2700-1	00	SAM	0000151-07RE1	5	11/17/20 15:45	3203-1-RAW	15:45:31	86.49			79.0	0.510	0.510	ng/L	F011306
Hg2700-1	00	CAL	SEQ-COV1	1	11/17/20 15:55	3204-1-RAW	15:55:47	90.51			-0.7	-0.005	-0.005	ng/L	
Hg2700-1	00	CAL	SEQ-COB1	1	11/17/20 16:06	3205-1-RAW	16:06:03	0.76			-1.5	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 16:16	3206-1-RAW	16:16:18	1.74			0.3	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 16:26	3207-1-RAW	16:26:33	1.59			0.1	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 16:36	3208-1-RAW	16:36:50	2.28			0.1	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 16:47	3209-1-RAW	16:47:06	171.13			169.7	1.069	1.069	ng/L	F011323
Hg2700-1	00	SAM	F011323-B51	1.25	11/17/20 16:57	3210-1-RAW	16:57:22	155.81			154.3	0.970	0.970	ng/L	F011323
Hg2700-1	00	SAM	F011323-B5D1	1.25	11/17/20 17:07	3211-1-RAW	17:07:38	6.18			4.7	0.030	0.030	ng/L	F011323
Hg2700-1	00	BLK	F011323-BLK1	1.25	11/17/20 17:17	3212-1-RAW	17:17:54	5.83			4.4	0.028	0.028	ng/L	F011323
Hg2700-1	00	BLK	F011323-BLK2	1.25	11/17/20 17:28	3213-1-RAW	17:28:10	6.17			4.7	0.030	0.030	ng/L	F011323
Hg2700-1	00	BLK	F011323-BLK3	1.25	11/17/20 17:38	3214-1-RAW	17:38:26	4.33			2.9	0.018	0.018	ng/L	F011323
Hg2700-1	00	BLK	F011323-BLK4	1.25	11/17/20 17:48	3215-1-RAW	17:48:43	85.54			84.1	0.543	0.543	ng/L	F011323
Hg2700-1	00	CAL	SEQ-COV2	1	11/17/20 17:58	3216-1-RAW	17:58:59	1.55			0.1	0.000	0.000	ng/L	
Hg2700-1	00	CAL	SEQ-COB2	1	11/17/20 18:09	3217-1-RAW	18:09:15	19.18			17.7	0.088	0.088	ng/L	F011323
Hg2700-1	00	SAM	0000149-01	1.25	11/17/20 18:19	3218-1-RAW	18:19:32	190.28			188.8	1.193	1.193	ng/L	F011323
Hg2700-1	00	SAM	F011323-M51	1.25	11/17/20 18:29	3219-1-RAW	18:29:48	171.56			170.1	1.072	1.072	ng/L	F011323
Hg2700-1	00	SAM	F011323-M5D1	1.25	11/17/20 18:40	3220-1-RAW	18:40:04	24.66			23.2	0.123	0.123	ng/L	F011323
Hg2700-1	00	SAM	0000147-02	1.25	11/17/20 18:50	3221-1-RAW	18:50:20	76.48			75.0	0.458	0.458	ng/L	F011323
Hg2700-1	00	SAM	F011323-M52	1.25	11/17/20 19:00	3222-1-RAW	19:00:37	17.67			16.2	0.078	0.078	ng/L	F011323
Hg2700-1	00	SAM	0000149-02	1.25	11/17/20 19:10	3223-1-RAW	19:10:54	10.90			11.1	0.045	0.045	ng/L	F011323
Hg2700-1	00	SAM	0000149-03	1.25	11/17/20 19:21	3224-1-RAW	19:21:10	12.58			9.4	0.034	0.034	ng/L	F011323
Hg2700-1	00	SAM	0000149-04	1.25	11/17/20 19:31	3225-1-RAW	19:31:25	18.06			16.6	0.080	0.080	ng/L	F011323
Hg2700-1	00	SAM	0000149-05	1.25	11/17/20 19:41	3226-1-RAW	19:41:41	10.80			9.4	0.045	0.045	ng/L	F011323
Hg2700-1	00	CAL	SEQ-COV3	1	11/17/20 20:02	3228-1-RAW	20:02:13	78.13			76.7	0.495	0.495	ng/L	F011323
Hg2700-1	00	CAL	SEQ-COB3	1	11/17/20 20:12	3229-1-RAW	20:12:28	2.18			0.7	0.005	0.005	ng/L	
Hg2700-1	00	SAM	0000149-06	1.25	11/17/20 20:22	3230-1-RAW	20:22:44	10.74			9.3	0.033	0.033	ng/L	F011323
Hg2700-1	00	SAM	0000149-07	1.25	11/17/20 20:32	3231-1-RAW	20:32:59	15.67			14.2	0.065	0.065	ng/L	F011323
Hg2700-1	00	SAM	0000149-08	1.25	11/17/20 20:43	3232-1-RAW	20:43:15	13.45			12.0	0.051	0.051	ng/L	F011323
Hg2700-1	00	SAM	0000149-09	1.25	11/17/20 20:53	3233-1-RAW	20:53:30	6.73			7.3	0.020	0.020	ng/L	F011323
Hg2700-1	00	SAM	0000149-10	1.25	11/17/20 21:03	3234-1-RAW	21:03:46	0.00			-1.5	-0.036	-0.036	ng/L	F011323
Hg2700-1	00	SAM	0000149-11	1.25	11/17/20 21:14	3235-1-RAW	21:14:02	3.30			1.8	-0.015	-0.015	ng/L	F011323

Instrument	Analyst	Sample Type	Lablumber	Dilution	Analized	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InftrialResult	FinalResult	Intiallimits	Comments
Hg2700-1	00	SAM	0100143-12	1.25	11/17/20 21:24	3236-1.RAW	21:24:18	3.23	2		1.8	-0.015	-0.019	ng/L	F011323
Hg2700-1	00	SAM	0100143-13	1.25	11/17/20 21:34	3237-1.RAW	21:34:34	16.78	2		15.3	0.072	0.090	ng/L	F011323
Hg2700-1	00	SAM	0100143-14	1.25	11/17/20 21:44	3238-1.RAW	21:44:49	7.84	2		6.4	0.014	0.018	ng/L	F011323
Hg2700-1	00	SAM	0100143-15	1.25	11/17/20 21:55	3239-1.RAW	21:55:05	11.50	2		10.0	0.038	0.047	ng/L	F011323
Hg2700-1	00	CAL	SEQ-CCV4	1	11/17/20 22:05	3240-1.RAW	22:05:21	77.39	2		75.9	0.490	0.490	ng/L	
Hg2700-1	00	CAL	SEQ-CCB4	1	11/17/20 22:15	3241-1.RAW	22:15:36	2.99	2		1.5	0.010	0.010	ng/L	
Hg2700-1	00	SAM	0100143-16	1.25	11/17/20 22:25	3242-1.RAW	22:25:53	5.70	2		4.2	0.000	0.001	ng/L	F011323
Hg2700-1	00	SAM	0100151-05	50	11/17/20 22:36	3243-1.RAW	22:36:08	6.23	2		4.8	0.030	1.501	ng/L	F011323
Hg2700-1	00	SAM	0K00007-01	1.25	11/17/20 22:46	3244-1.RAW	22:46:24	21.69	2		20.2	0.104	0.130	ng/L	F011323
Hg2700-1	00	SAM	0K00007-02	1.25	11/17/20 22:56	3245-1.RAW	22:56:41	122.34	2		120.9	0.754	0.942	ng/L	F011323
Hg2700-1	00	SAM	F011324-BS1	1.25	11/17/20 23:06	3246-1.RAW	23:06:57	135.66	3		134.2	0.843	1.053	ng/L	F011324
Hg2700-1	00	BLK	F011324-BLK1	1.25	11/17/20 23:17	3247-1.RAW	23:17:13	145.16	3		143.7	0.904	1.130	ng/L	F011324
Hg2700-1	00	BLK	F011324-BLK2	1.25	11/17/20 23:27	3248-1.RAW	23:27:29	3.84	3		2.4	0.015	0.019	ng/L	F011324
Hg2700-1	00	BLK	F011324-BLK3	1.25	11/17/20 23:37	3249-1.RAW	23:37:45	4.53	3		3.1	0.020	0.025	ng/L	F011324
Hg2700-1	00	SAM	0100147-01	1.25	11/17/20 23:48	3250-1.RAW	23:48:01	7.22	3		5.7	0.037	0.046	ng/L	F011324
Hg2700-1	00	CAL	SEQ-CCV5	1	11/17/20 0:08	3251-1.RAW	0:08:34	15.00	3		13.5	0.063	0.079	ng/L	F011324
Hg2700-1	00	CAL	SEQ-CCB5	1	11/17/20 0:18	3253-1.RAW	0:18:50	2.68			1.2	0.008	0.008	ng/L	
Hg2700-1	00	SAM	F011324-MS1	1.25	11/17/20 0:29	3254-1.RAW	0:29:06	138.92	3		137.4	1.115	1.080	ng/L	F011324
Hg2700-1	00	SAM	F011324-MSD1	1.25	11/17/20 0:39	3255-1.RAW	0:39:22	177.81	3		176.3	1.115	1.393	ng/L	F011324
Hg2700-1	00	SAM	0100147-03	1.25	11/17/20 0:49	3256-1.RAW	0:49:38	16.61	3		15.1	0.074	0.092	ng/L	F011324
Hg2700-1	00	SAM	0100147-04	1.25	11/17/20 0:59	3257-1.RAW	0:59:56	17.53	3		16.1	0.080	0.100	ng/L	F011324
Hg2700-1	00	SAM	0100147-07	1.25	11/17/20 1:10	3258-1.RAW	1:10:13	4.48	3		3.0	-0.005	-0.006	ng/L	F011324
Hg2700-1	00	SAM	0100147-08	1.25	11/17/20 1:20	3259-1.RAW	1:20:29	5.92	3		4.5	0.005	0.006	ng/L	F011324
Hg2700-1	00	SAM	0100151-02RE1	10	11/17/20 1:30	3260-1.RAW	1:30:45	73.38	3		71.9	0.461	4.614	ng/L	F011324
Hg2700-1	00	SAM	0K00025-01	1.25	11/17/20 1:41	3261-1.RAW	1:41:02	3.51	3		2.0	-0.011	-0.014	ng/L	F011324
Hg2700-1	00	SAM	0K00068-04	1.25	11/17/20 1:51	3262-1.RAW	1:51:19	3.51	3		1.8	-0.011	-0.015	ng/L	F011324
Hg2700-1	00	CAL	SEQ-CCV6	1	11/17/20 2:01	3263-1.RAW	2:01:35	71.23	3		69.8	0.450	0.450	ng/L	F011324
Hg2700-1	00	CAL	SEQ-CCB6	1	11/17/20 2:11	3264-1.RAW	2:11:51	2.13			0.7	0.004	0.004	ng/L	

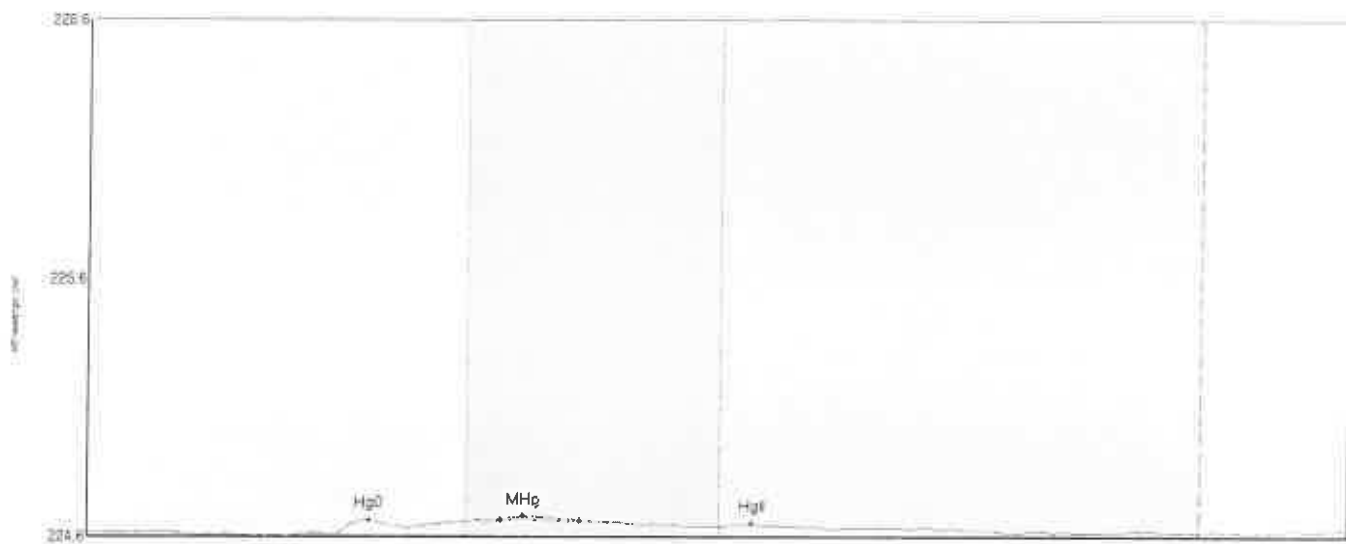
000151-05	A1	50	1.4742	0.922688652	1.534903334	0	3243-1-RAW	23:36:08	4.331665614	6.227631102	0.938396991	0	psample10	OK	1	F011324
0K00007-01	A2	1.25	1.4742	0.031157475	0.163213175	0.1257625	3244-1-RAW	22:46:24	5.333854167	21.69239005	17.05315394	0	psample10	OK	1	F011323
0K00007-02	A3	1.25	1.4742	6.591742714	0.97570058	23.809056	3245-1-RAW	22:56:41	818.0331084	122.3401942	2950.845544	0	psample10	CT	1	F011323
F011324-BS1	A4	1.25	1.4742	0.336966496	1.082395059	0.2268726	3246-1-RAW	23:06:57	43.21626157	135.6615997	29.57826968	0	psample10	CT	1	F011324
F011324-BS01	A5	1.25	1.4742	0.235127272	1.15993635	0	3247-1-RAW	23:17:13	30.6026042	145.1625	1.142274306	0	psample10	OK	1	F011324
F011324-BLK1	A6	1.25	1.4742	0.080822103	0.019073822	0.0102094	3248-1-RAW	23:27:29	11.48611111	3.836970167	2.738888889	0	psample10	OK	1	F011324
F011324-BLK2	A7	1.25	1.4742	0.088980181	0.024688661	0.0003027	3249-1-RAW	23:37:45	12.49670139	4.532523148	1.511689815	0	psample10	OK	1	F011324
F011324-BLK3	A8	1.25	1.4742	0.044550301	0.046344954	0.0075545	3250-1-RAW	23:46:01	6.929290428	7.215219907	2.410011574	0	psample10	OK	1	F011324
000147-01	A9	1.25	1.4742	0.06313202	0.109192014	0.002892	3251-1-RAW	23:58:18	9.294733796	15.00046296	1.832436343	0	psample10	OK	1	F011324
SEQ-CCV5	A10	1	1.4742	0.106106752	0.431850877	0	3252-1-RAW	0:08:34	17.90429384	68.34415509	0	psample10	OK	1	F011324	
SEQ-CCB5	A11	1	1.4742	0.029646666	0.007761643	0	3253-1-RAW	0:18:50	5.417266934	2.676041667	0.845746528	0	psample10	OK	1	F011324
F011324-MS1	A12	1.25	1.4742	0.107627185	1.109294987	110.95	3254-1-RAW	0:29:06	14.806661823	138.9207755	0	psample10	CT	1	F011324	
F011324-MSD1	A13	1.25	1.4742	0.139265669	1.423449781	0	3255-1-RAW	0:39:22	18.72586806	177.8054977	0	psample10	CT	1	F011324	
000147-03	A14	1.25	1.4742	0.056101029	0.122219804	0	3256-1-RAW	0:49:38	8.422762516	16.61439398	0.518981481	0	psample10	OK	1	F011324
000147-04	A15	1.25	1.4742	0.066141955	0.12961734	0.0464321	3257-1-RAW	0:59:56	9.667692593	17.5306713	7.226012731	0	psample10	OK	1	F011324
000147-07	A16	1.25	1.4742	0.147622706	0.024298802	0.1068884	3258-1-RAW	1:10:13	19.76110456	4.494228972	14.71510417	0	psample10	OK	1	F011324
000147-08	A17	1.25	1.4742	0.101393652	0.035024413	0.0671048	3259-1-RAW	1:20:29	14.03443387	5.924363426	9.768665426	0	psample10	OK	1	F011324
000151-02REF1	A18	10	1.4742	0.408547636	4.643838661	0	3260-1-RAW	1:30:45	7.800394722	73.3832746	0	psample10	OK	1	F011324	
0K00025-01	A19	1.25	1.4742	0.078148891	0.01644556	0.0348999	3261-1-RAW	1:41:02	11.15471644	3.511400463	5.797453704	0	psample10	OK	1	F011324
0K00068-04	A20	1.25	1.4742	0.061527378	0.034824502	0.0009656	3262-1-RAW	1:51:19	9.095506226	3.310590278	1.59380787	0	psample10	OK	1	F011324
SEQ-CCV6	A21	1	1.4742	0.102707876	0.450778876	0	3263-1-RAW	2:01:35	17.37799479	71.22829861	0	psample10	CT	1	F011324	
SEQ-CCB6	B1	1	1.4742	0.031800076	0.004635352	0	3264-1-RAW	2:11:51	6.39837963	2.134375	0	psample10	OK	1	F011324	

MHg27001-201117-1

WS	A1	0J00143-01	B18		
WS	A2	F011323-MS1	B19		
WS	A3	F011323-MSD1	B20		
HIGH PRIMER	A4	0J00147-02	B21		
HIGH PRIMER	A5	F011323-MS2	C1		
PRIMER	A6	F011323-MSD2	C2		
PRIMER	A7	0J00143-02	C3		
PRIMER	A8	0J00143-03	C4		
WS	A9	0J00143-04	C5		
WS	A10	0J00143-05	C6		
SEQ-IBL1	A11	SEQ-CCV3	C7		
SEQ-CAL1	A12	SEQ-CCB3	C8		
SEQ-CAL2	A13	0J00143-06	C9		
SEQ-CAL3	A14	0J00143-07	C10		
SEQ-CAL4	A15	0J00143-08	C11		
SEQ-CAL5	A16	0J00143-09	C12		
SEQ-ICV1	A17	0J00143-10	C13		
SEQ-ICB1	A18	0J00143-11	C14		
*OK00007-02	A19	0J00143-12	C15		
WS	A20	0J00143-13	C16		
WS	A21	0J00143-14	C17		
0J00151-03RE1	B1	0J00143-15	C18		
0J00151-06RE1	B2	SEQ-CCV4	C19		
0J00151-07RE1	B3	SEQ-CCB4	C20		
SEQ-CCV1	B4	0J00143-16	C21		
SEQ-CCB1	B5	0J00151-05	A1		
WS	B6	OK00007-01	A2		
WS	B7	OK00007-02	A3		
WS	B8	F011324-BS1	A4		
WS	B9	F011324-BSD1	A5	0J00147-03	A14
F011323-BS1	B10	F011324-BLK1	A6	0J00147-04	A15
F011323-BSD1	B11	F011324-BLK2	A7	0J00147-07	A16
F011323-BLK1	B12	F011324-BLK3	A8	0J00147-08	A17
F011323-BLK2	B13	0J00147-01	A9	0J00151-02RE1	A18
F011323-BLK3	B14	SEQ-CCV5	A10	OK00025-01	A19
F011323-BLK4	B15	SEQ-CCB5	A11	OK00068-04	A20
SEQ-CCV2	B16	F011324-MS1	A12	SEQ-CCV6	A21
SEQ-CCB2	B17	F011324-MSD1	A13	SEQ-CCB6	B1

Verified by: *Mr. V. V. Dada*

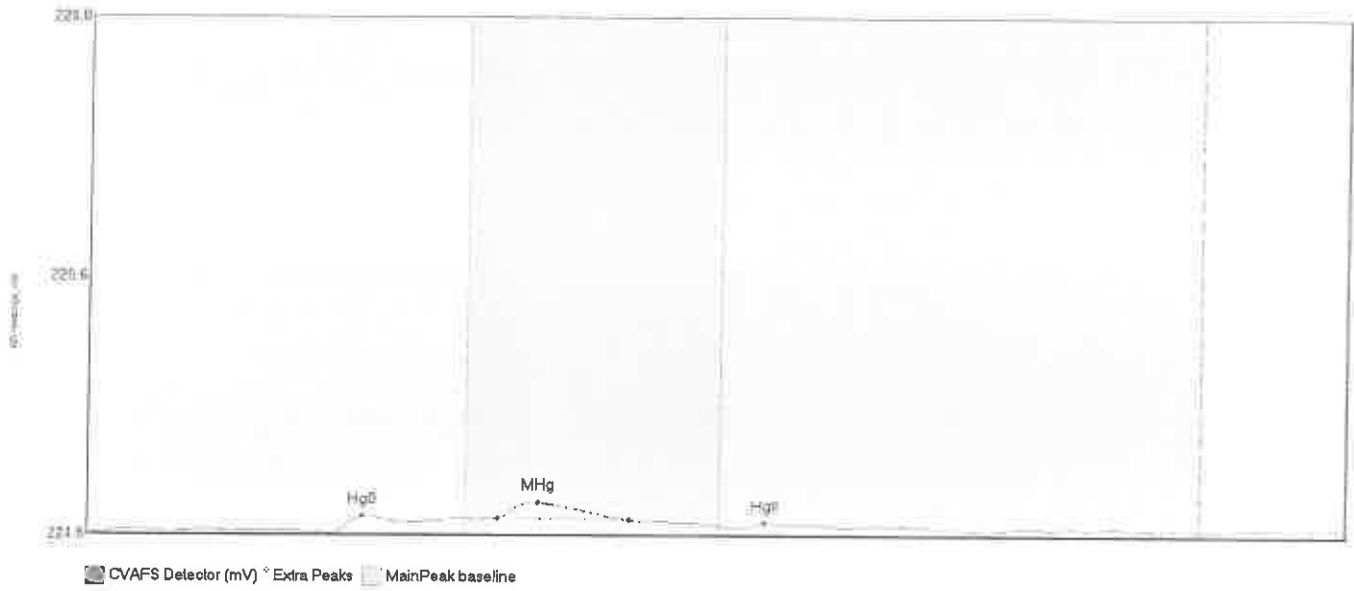
#12: SEQ-IBL1



CVAFS Detector (mV) ° Extra Peaks MainPeak baseline

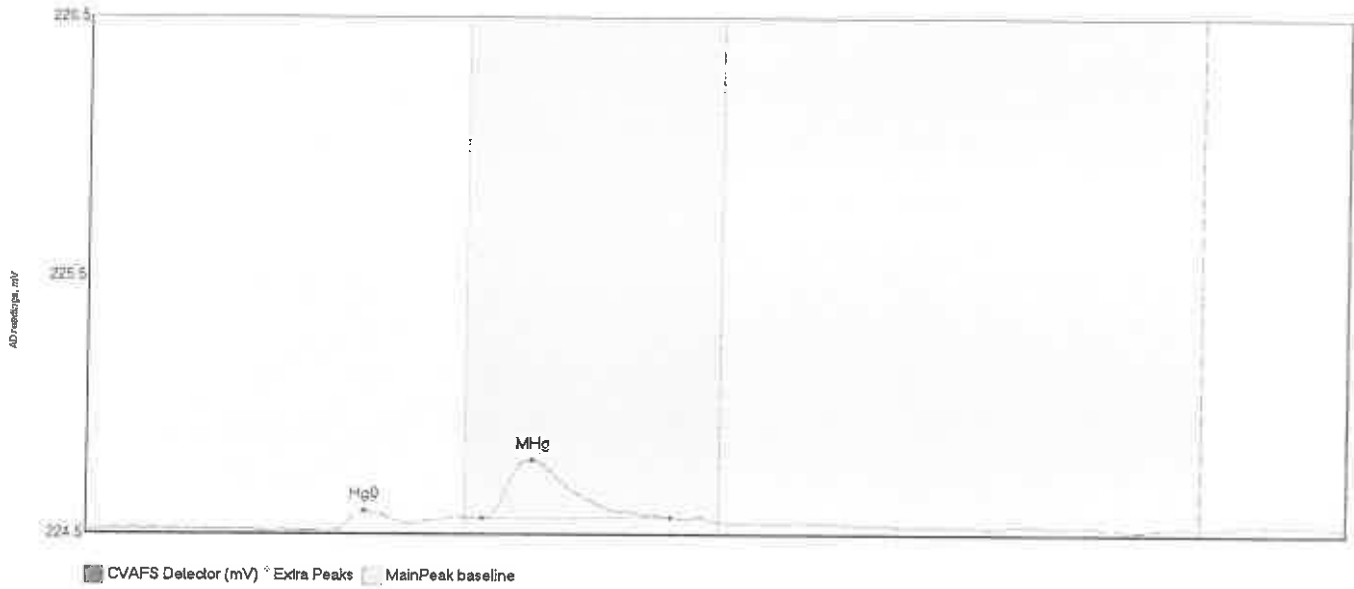
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	3.326	48.6	63.8	224.61	224.63	55.7	0.053	OK	224.6172	0.00	0.01	
SEQ-IBL1 MHg	1.474	81.8	97.4	224.66	224.66	86.1	0.015	OK	224.6172	0.00	0.01	
SEQ-IBL1 HgII	0.468	126.0	134.0	224.64	224.64	131.5	0.013	OK	224.6172	0.00	0.01	

#13: SEQ-CAL1

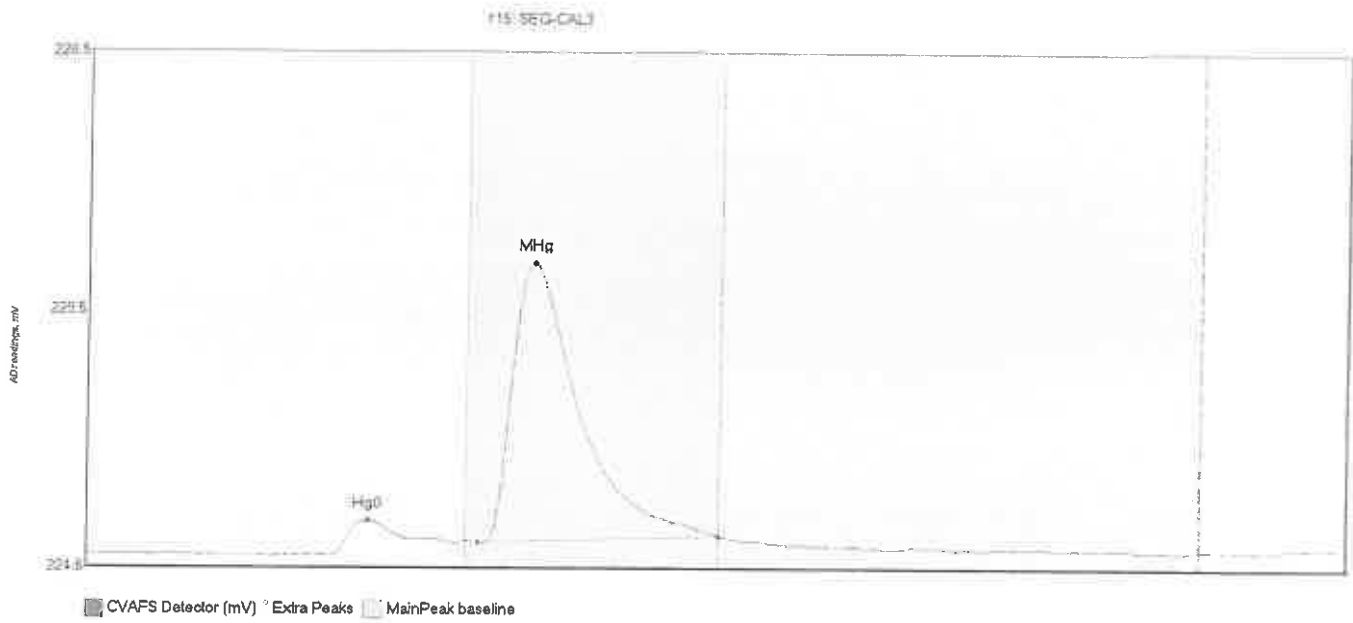


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CAL1 Hg0	3.629	48.3	62.7	224.57	224.61	54.7	0.068	OK	224.5740	0.00	0.01	
SEQ-CAL1 MHg	8.604	81.3	107.2	224.63	224.62	89.2	0.060	OK	224.5740	0.00	0.01	
SEQ-CAL1 HgII	0.606	130.3	138.2	224.59	224.60	134.0	0.020	OK	224.5740	0.00	0.01	

#14: SEQ-CAL2

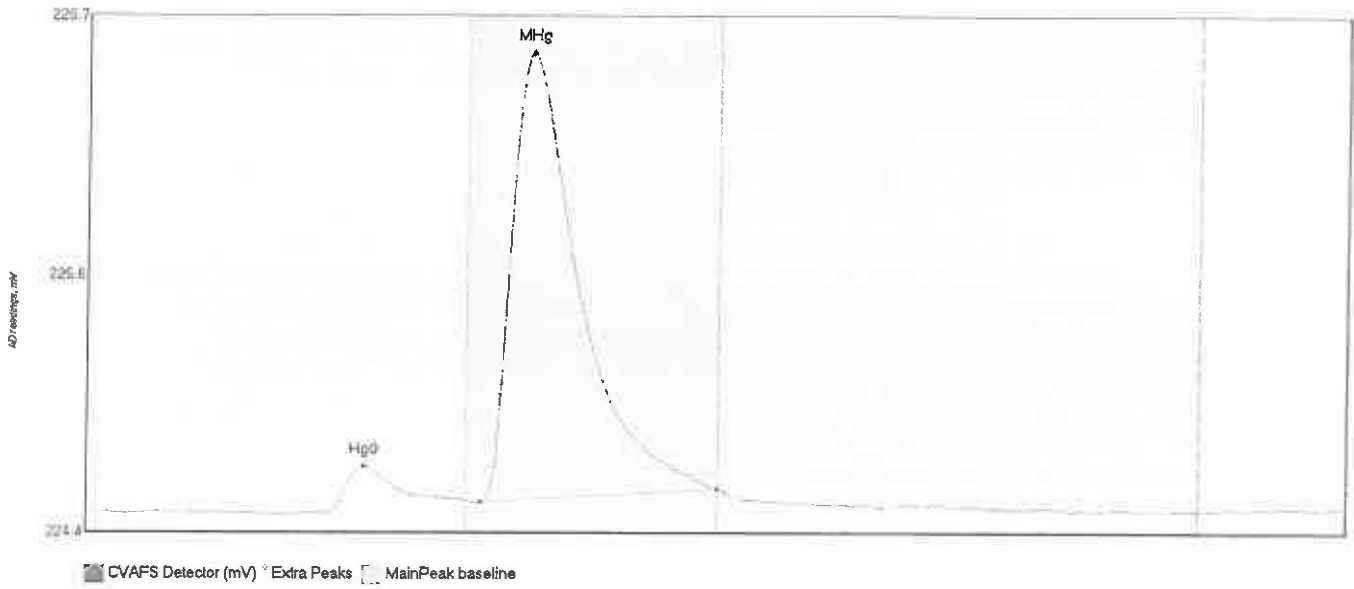


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BIShift	Comment
SEQ-CAL2 Hg0	5.412	48.2	64.7	224.54	224.57	55.0	0.079	OK	224.5415	0.00	0.01	
SEQ-CAL2 MHg	32.484	78.1	115.3	224.58	224.59	88.3	0.228	OK	224.5415	0.00	0.01	



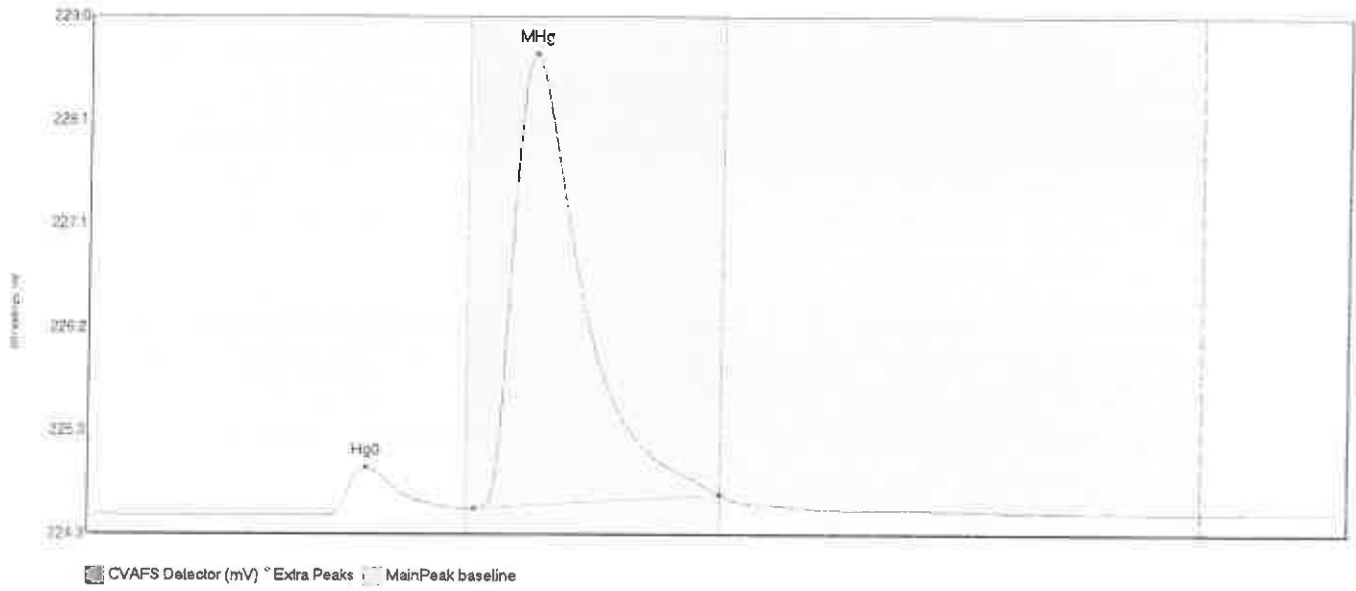
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	RShift	Comment
SEQ-CAL3 Hg0	13.303	48.4	73.4	224.52	224.57	55.5	0.136	OK	224.5197	0.00	0.03	
SEQ-CAL3 MHg	165.327	77.4	125.0	224.57	224.59	88.4	1.081	CT	224.5197	0.00	0.03	

#16: SEQ-CAL4



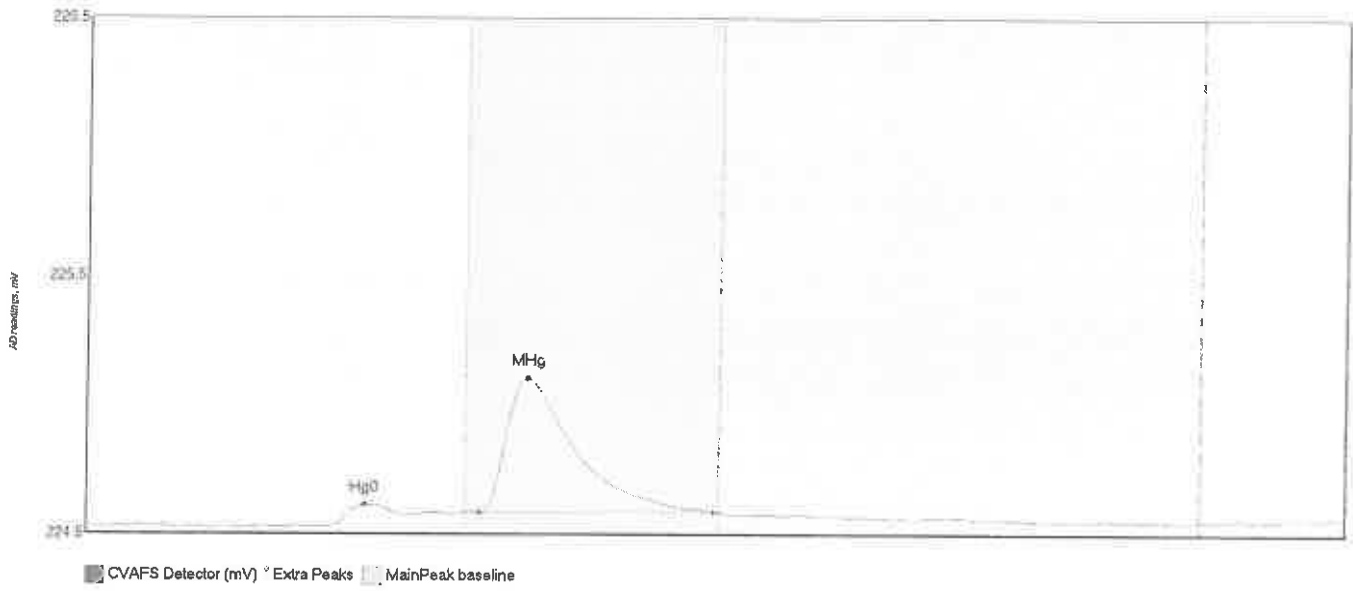
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	20.965	47.7	75.0	224.51	224.57	55.0	0.211	CT	224.5228	0.00	0.02	
SEQ-CAL4 MHg	308.388	77.9	125.0	224.57	224.62	87.8	2.008	CT	224.5228	0.00	0.02	

#17: SEQ-CAL5



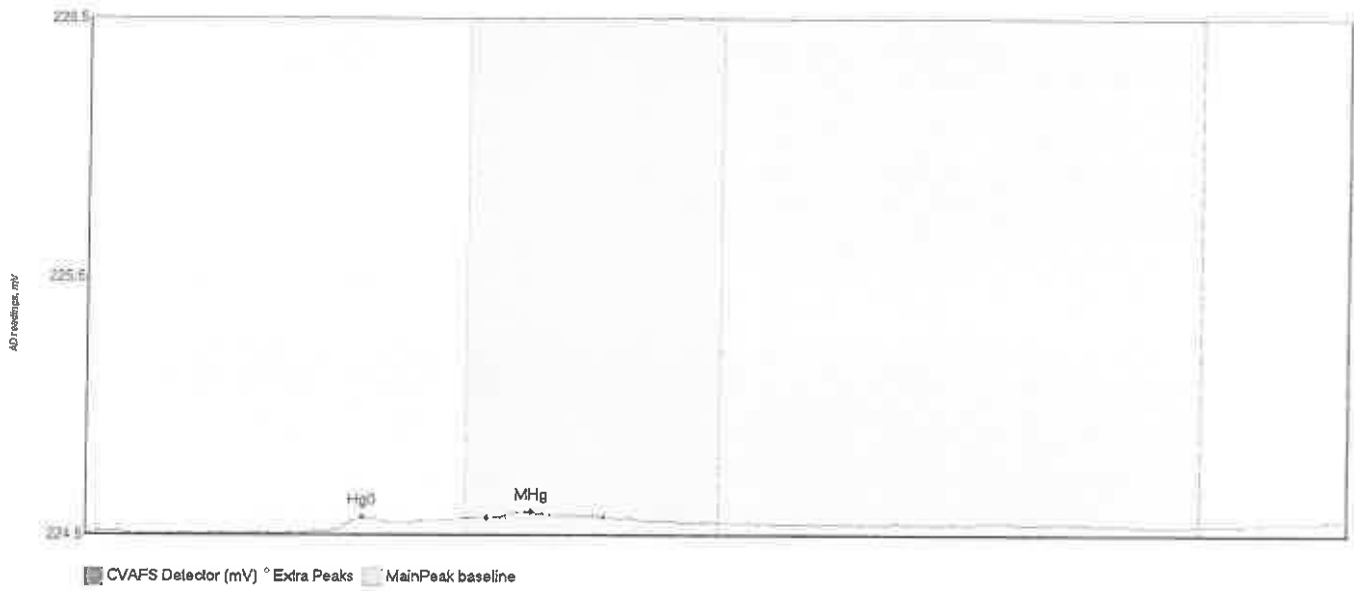
Time	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CAL5 Hg0	44.256	47.8	75.0	224.52	224.58	55.2	0.429	CT	224.5140	0.00	0.02	
SEQ-CAL5 MHg	638.719	76.6	125.0	224.57	224.70	88.0	4.106	CT	224.5140	0.00	0.02	

#18: SEQ-ICV1



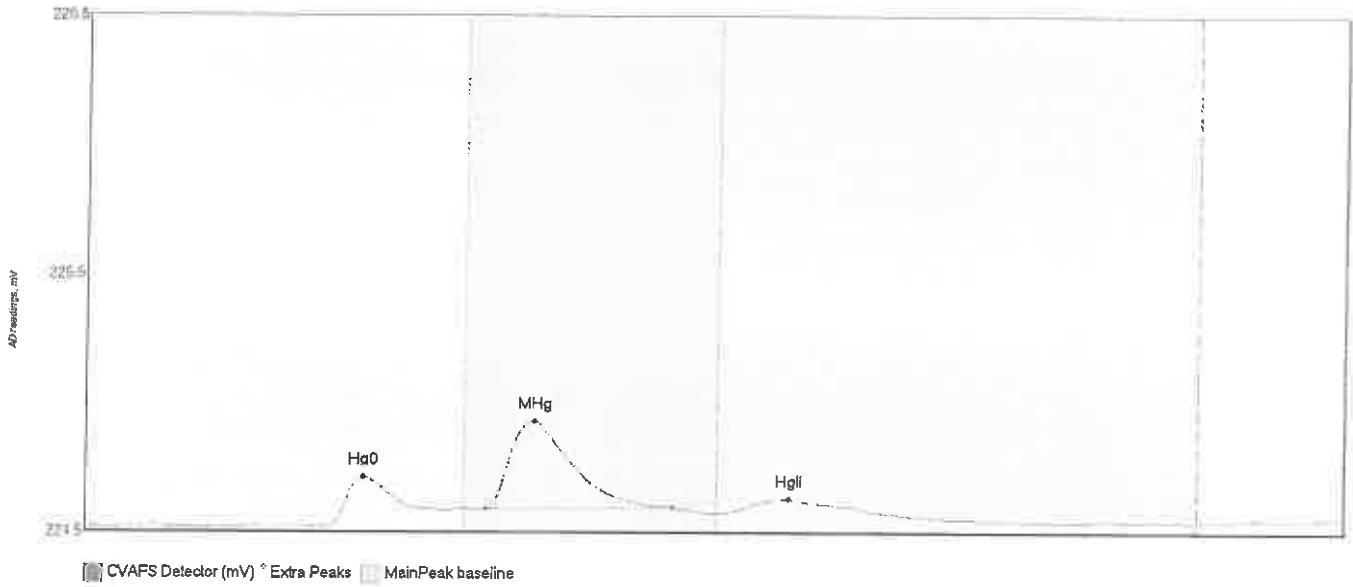
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	5.537	47.9	64.3	224.49	224.53	55.1	0.085	OK	224.4872	0.00	0.03	
SEQ-ICV1 MHg	81.438	77.7	124.0	224.54	224.55	87.2	0.520	OK	224.4872	0.00	0.03	

#19: SEQ-ICB1



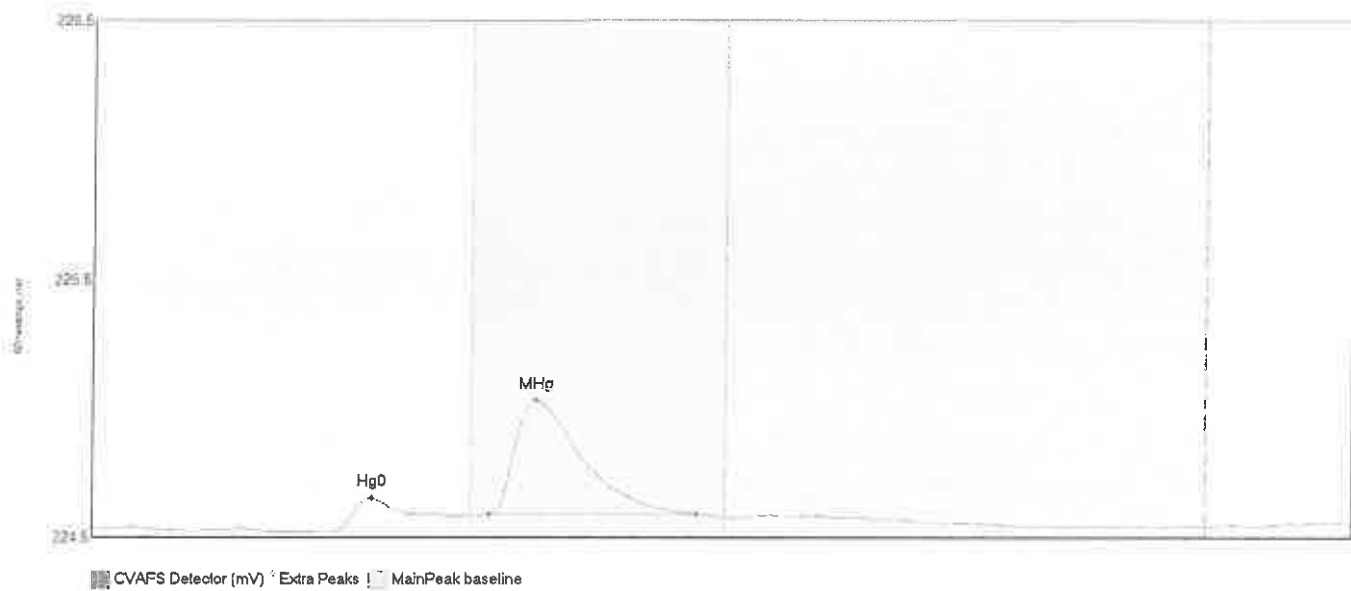
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	2.970	47.8	63.6	224.49	224.52	54.5	0.055	OK	224.4883	0.00	0.04	
SEQ-ICB1 MHg	2.641	79.3	102.4	224.54	224.55	88.0	0.024	OK	224.4883	0.00	0.04	

#23: 0J00151-03RE1



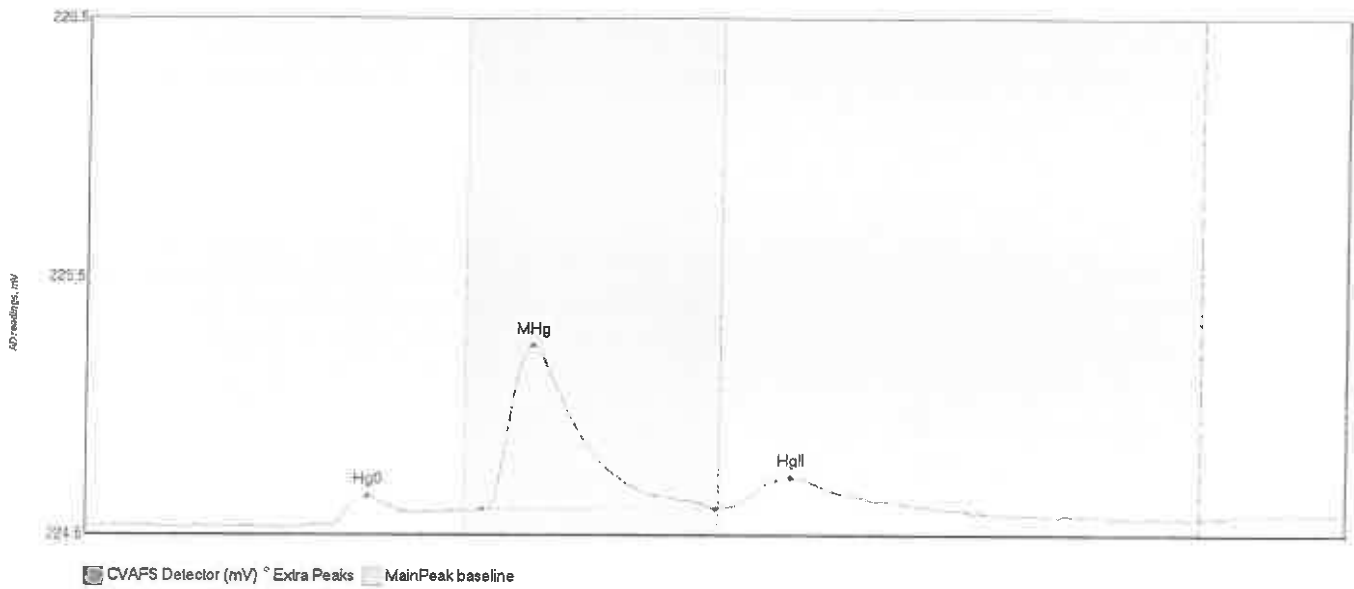
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	R1Dev	B1Shift	Comment
0J00151-03RE1 H	16.685	47.4	72.0	224.50	224.56	55.3	0.193	OK	224.5034	0.00	0.03	F011306
0J00151-03RE1 M	47.324	79.4	116.2	224.57	224.58	89.1	0.338	OK	224.5034	0.00	0.03	F011306
0J00151-03RE1 H	8.429	127.3	155.1	224.56	224.56	139.2	0.054	OK	224.5034	0.00	0.03	F011306

#24: 0J00151-06RE1



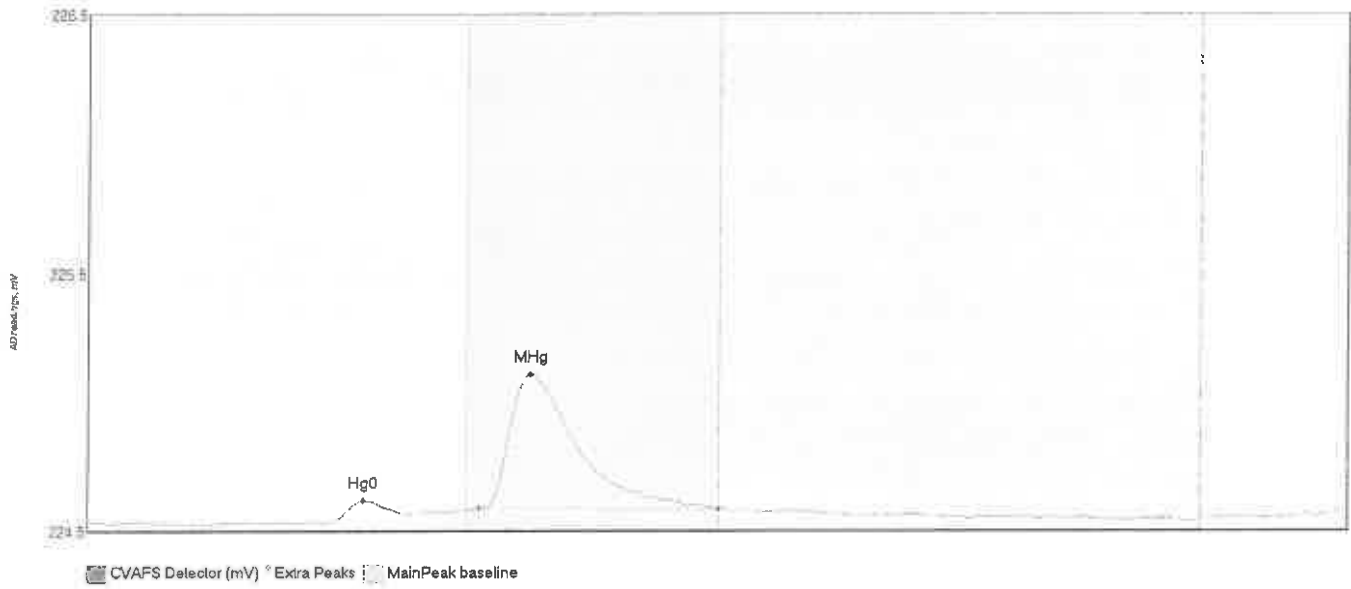
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0J00151-06RE1 H	11.480	49.1	73.3	224.51	224.57	55.6	0.132	OK	224.5258	0.00	0.02	F011306
0J00151-06RE1 M	66.892	78.6	119.4	224.58	224.58	87.6	0.445	OK	224.5258	0.00	0.02	F011306

#25: 0J00151-07RE1



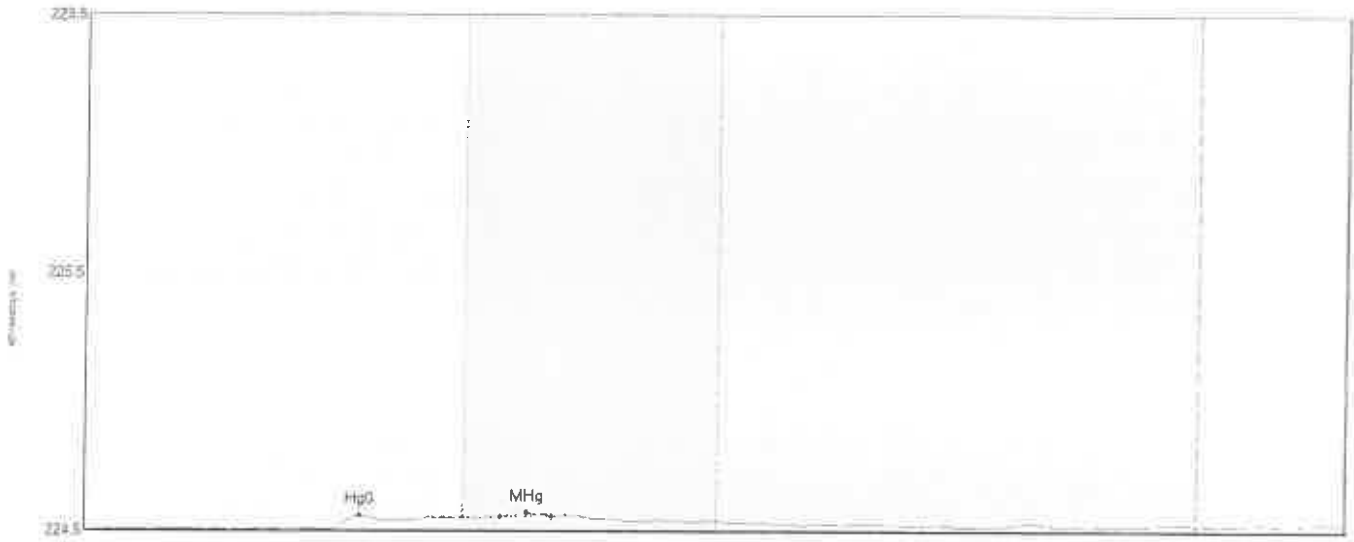
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
0J00151-07RE1	H 7.212	47.7	64.3	224.52	224.57	55.7	0.111	OK	224.5170	0.00	0.04	F011306
0J00151-07RE1	M 98.512	78.6	124.4	224.58	224.59	88.4	0.632	OK	224.5170	0.00	0.04	F011306
0J00151-07RE1	H 21.645	125.8	167.0	224.59	224.59	139.3	0.117	OK	224.5170	0.00	0.04	F011306

#26: SEQ-CCV1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CCV1 Hg0	5.641	47.5	63.7	224.53	224.56	54.7	0.086	OK	224.5234	0.00	0.04	
SEQ-CCV1 MHg	80.490	77.4	125.0	224.58	224.58	87.6	0.522	CT	224.5284	0.00	0.04	

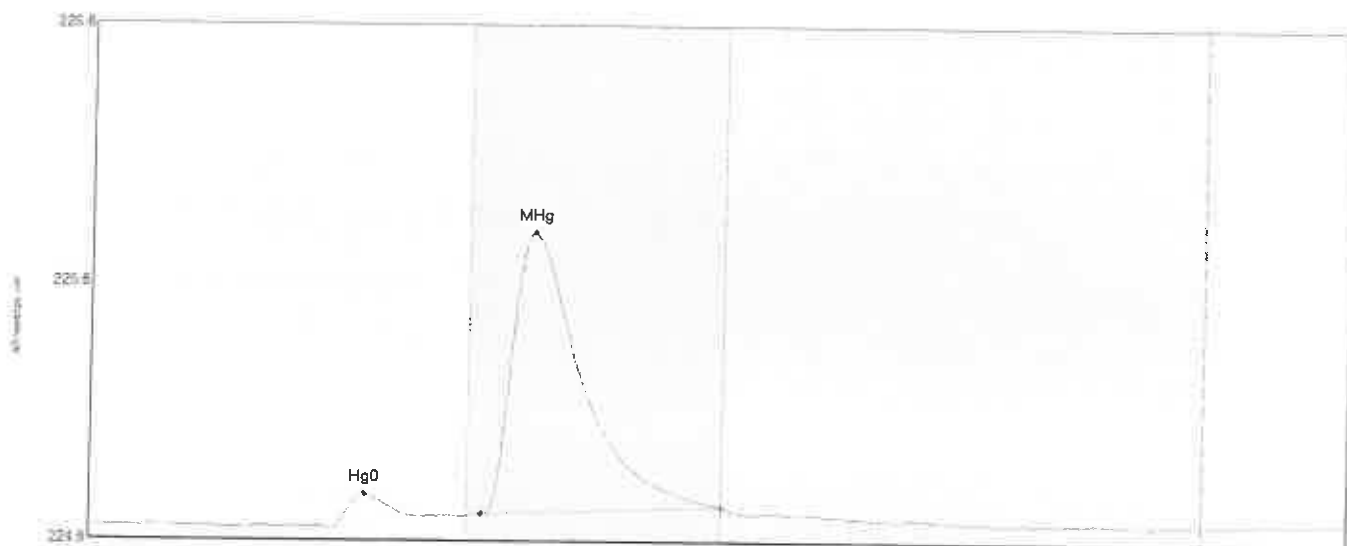
#27: SEQ-CCB1



■ CVAFS Detector (mV) ° Extra Peaks □ MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	2.516	48.3	63.8	224.53	224.56	54.6	0.051	OK	224.5336	0.00	0.02	
SEQ-CCB1 MHg	0.755	82.2	92.3	224.58	224.58	87.4	0.015	OK	224.5336	0.00	0.02	

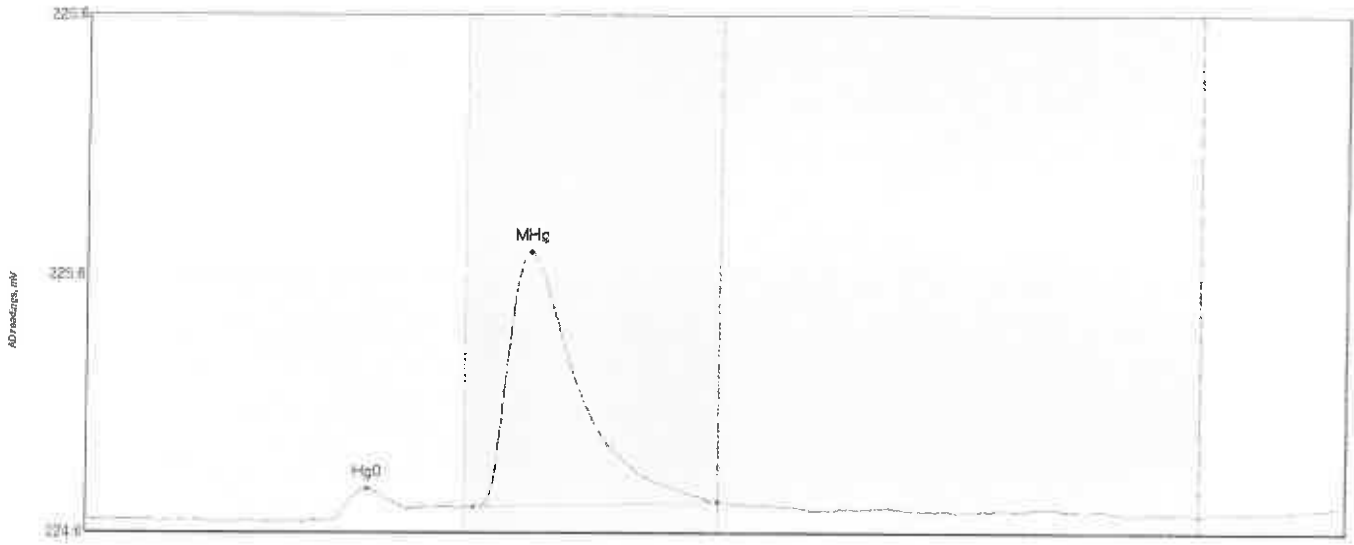
#32: F011323-BS1



CVAFS Detector (mV) Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F011323-BS1 Hg0	12.125	48.3	73.7	224.60	224.65	54.8	0.137	OK	224.6118	0.00	0.03	F011323
F011323-BS1 MHg	171.131	78.0	125.0	224.66	224.69	87.7	1.088	CT	224.6118	0.00	0.03	F011323

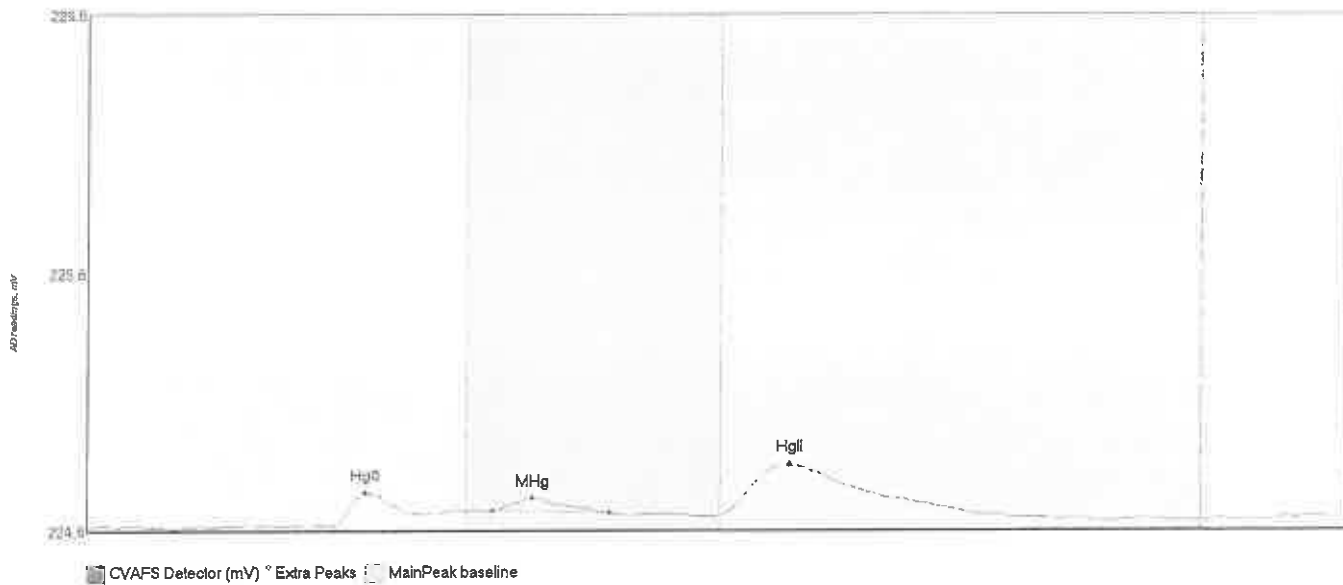
#33: F011323-BSD1



CVAFS Detector (mV) ° Extra Peaks MainPeak baseline

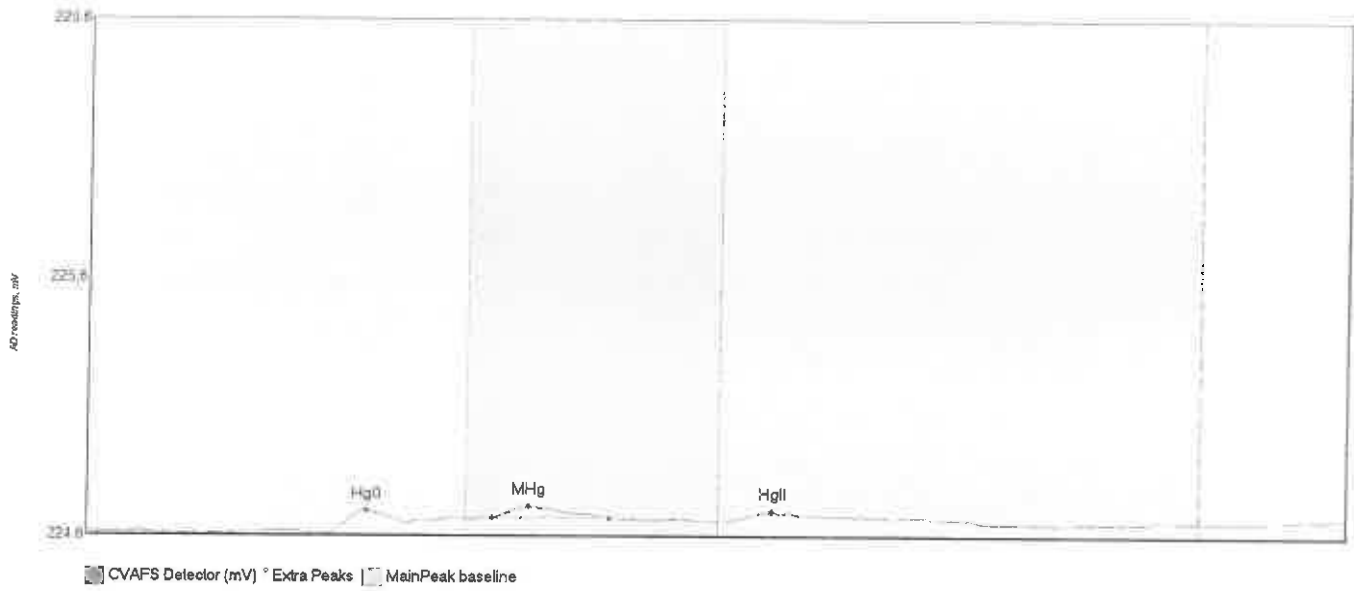
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-BSD1 Hg	8.511	48.3	64.2	224.62	224.67	55.7	0.123	OK	224.6292	0.00	0.04	
F011323-BSD1 MHg	155.812	76.8	125.0	224.68	224.70	87.9	0.986	CT	224.6292	0.00	0.04	

#34: F011323-BLK1



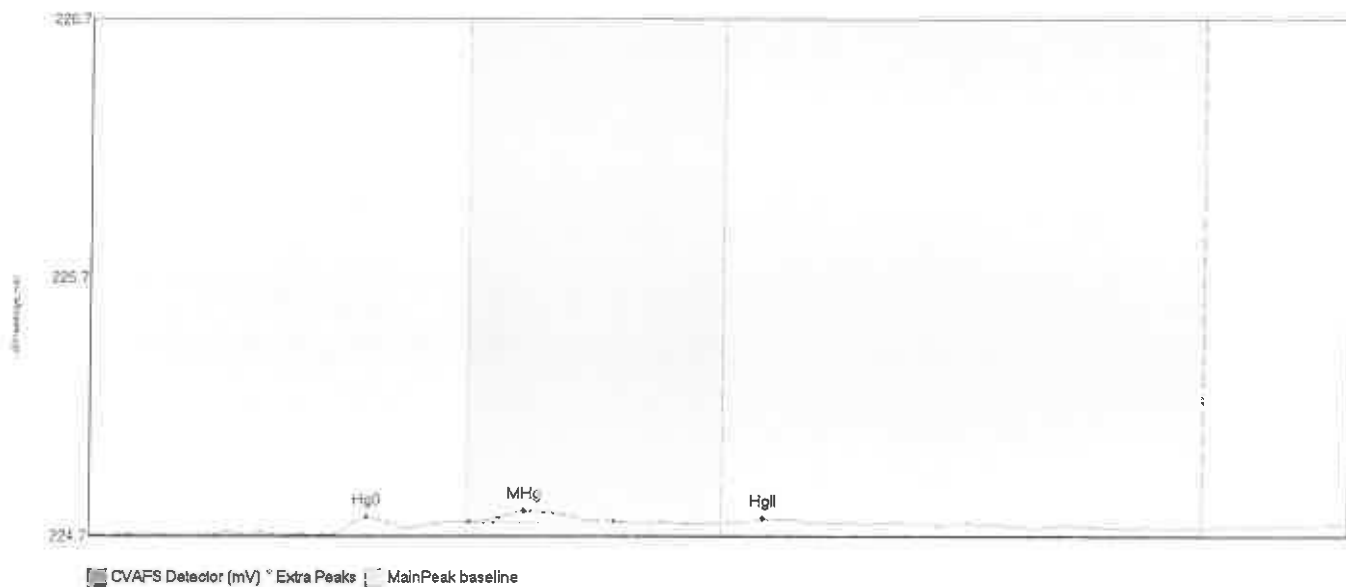
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-BLK1 Hg	9.058	48.5	64.9	224.64	224.69	54.9	0.127	OK	224.6358	0.00	0.04	F011323
F011323-BLK1 MHg	6.176	80.1	103.3	224.70	224.69	88.0	0.049	OK	224.6358	0.00	0.04	F011323
F011323-BLK1 Hg	47.068	125.0	175.9	224.68	224.68	138.7	0.195	OK	224.6358	0.00	0.04	F011323

#35: F011323-BLK2



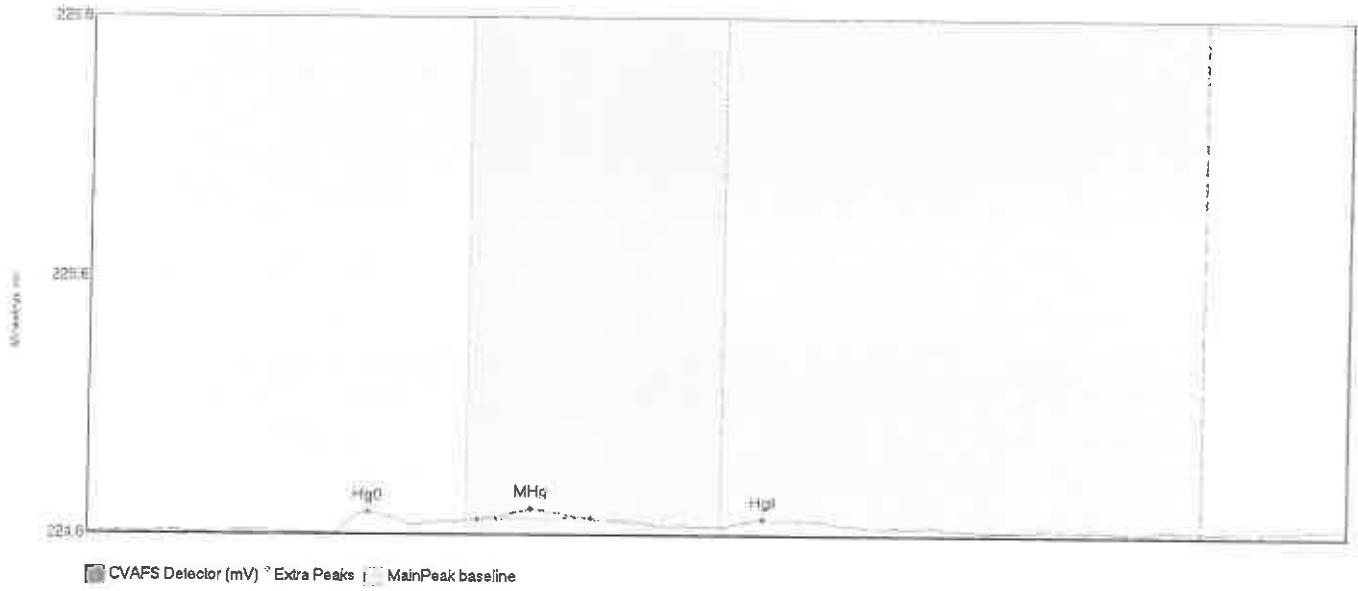
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
F011323-BLK2 Hg	5.600	48.1	63.8	224.64	224.68	55.5	0.090	OK	224.6437	0.00	0.06	F011323
F011323-BLK2 MH	5.831	80.2	103.3	224.70	224.70	87.2	0.044	OK	224.6437	0.00	0.06	F011323
F011323-BLK2 Hg	6.039	127.5	169.3	224.69	224.69	135.7	0.032	OK	224.6437	0.00	0.06	F011323

#36: F011323-BLK3



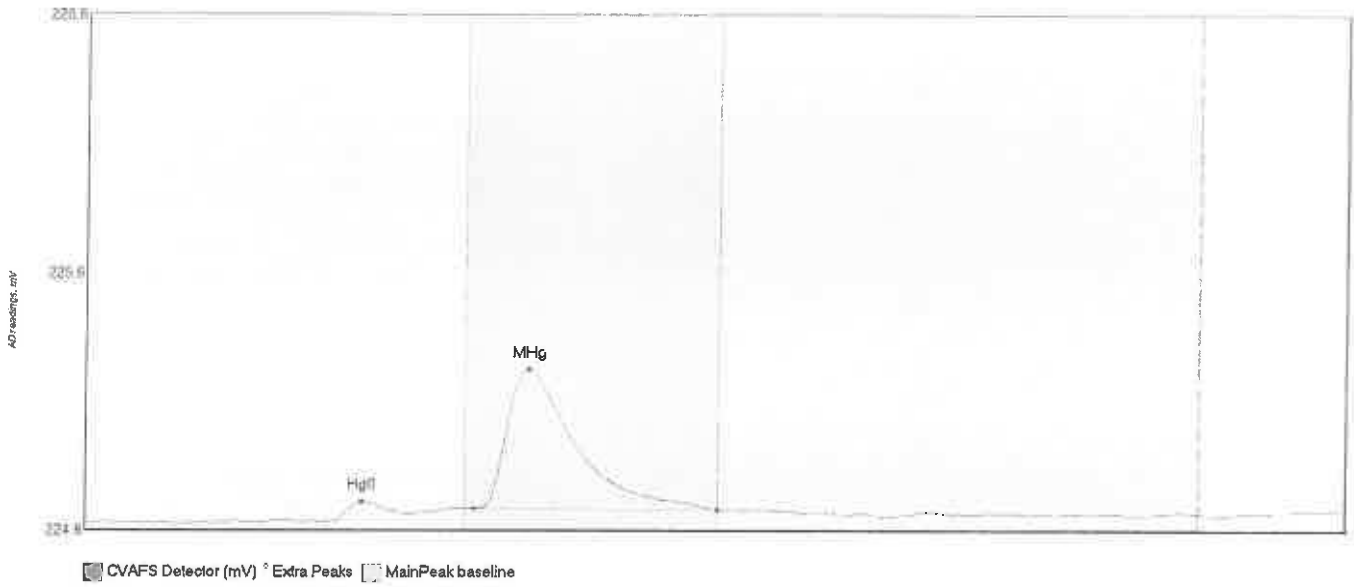
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-BLK3 Hg	4.340	47.2	63.4	224.66	224.69	55.1	0.066	OK	224.6648	0.00	0.04	F011323
F011323-BLK3 MH	6.171	75.5	103.7	224.71	224.71	86.1	0.046	OK	224.6648	0.00	0.04	F011323
F011323-BLK3 Hg	0.898	130.4	142.0	224.71	224.71	133.3	0.013	OK	224.6648	0.00	0.04	F011323

#37: F011323-BLK4



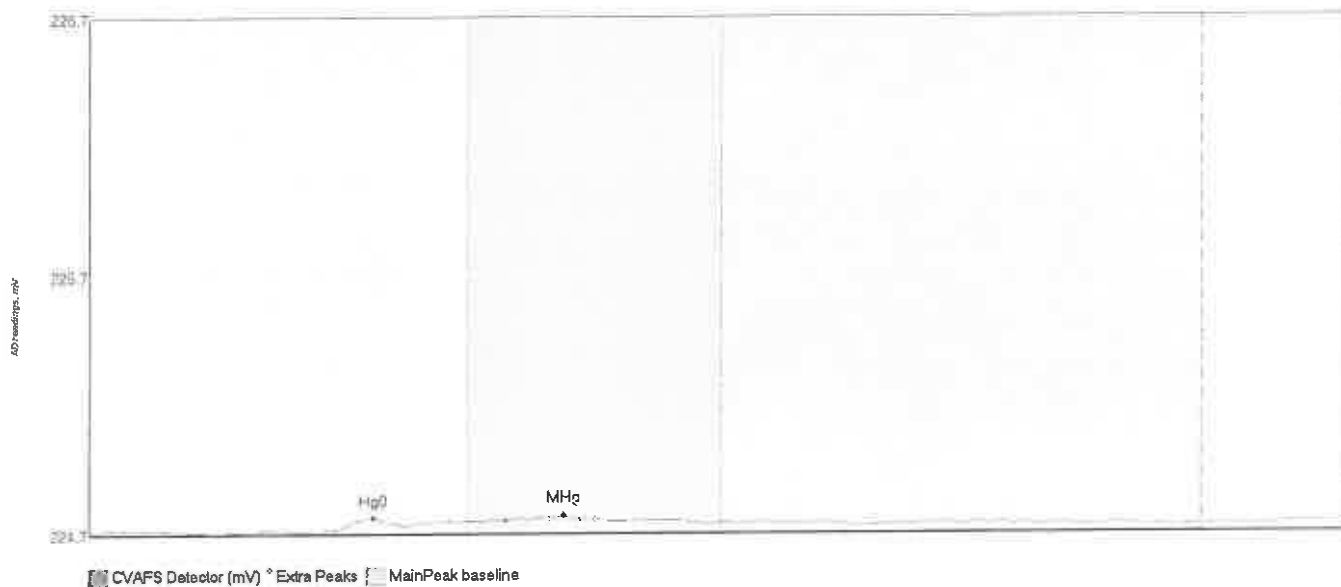
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-BLK4	Hg	48.0	64.6	224.65	224.69	55.4	0.082	OK	224.6564	0.00	0.03	F011323
F011321-BLK4	MHg	77.2	99.6	224.71	224.71	87.9	0.042	OK	224.6564	0.00	0.03	F011323
F011323-BLK4	Hg	126.0	149.4	224.68	224.69	133.3	0.031	OK	224.6564	0.00	0.03	F011323

#38: SEQ-CCV2



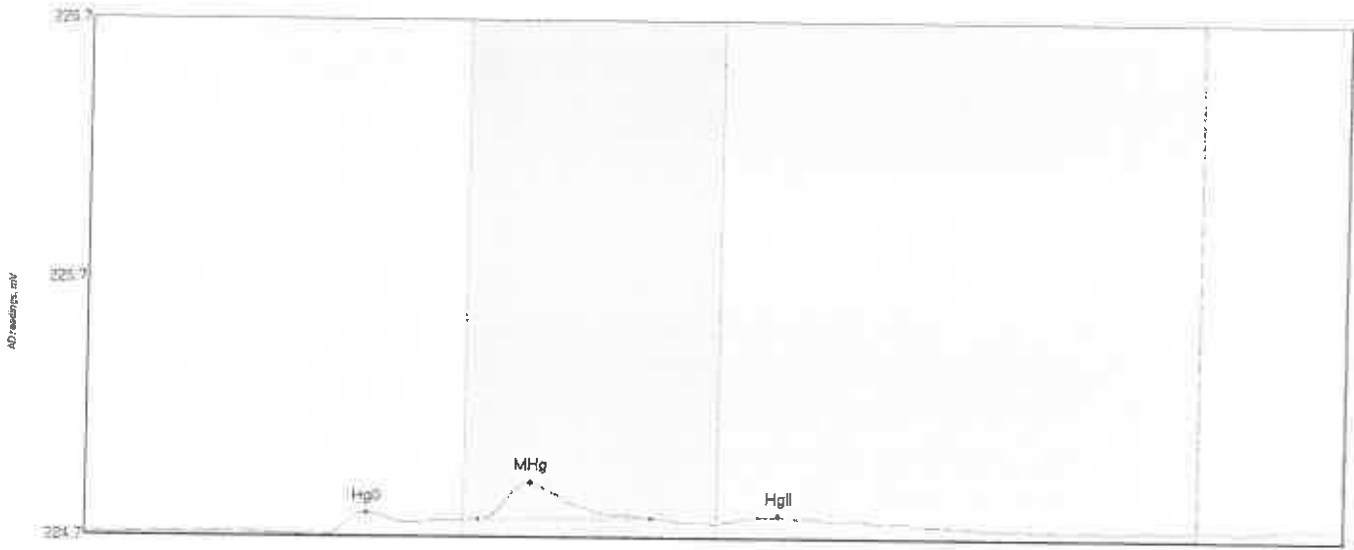
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CCV2 Hg0	4.615	49.2	63.5	224.68	224.70	54.8	0.074	OK	224.6720	0.00	0.04	
SEQ-CCV2 MHg	85.542	77.0	125.0	224.72	224.72	87.6	0.542	CT	224.6720	0.00	0.04	

#39: SEQ-CCB2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CCB2 Hg0	2.890	49.0	62.6	224.68	224.70	56.3	0.048	OK	224.6705	0.00	0.04	
SEQ-CCB2 MHg	1.552	82.4	100.1	224.72	224.72	93.9	0.019	OK	224.6785	0.00	0.04	

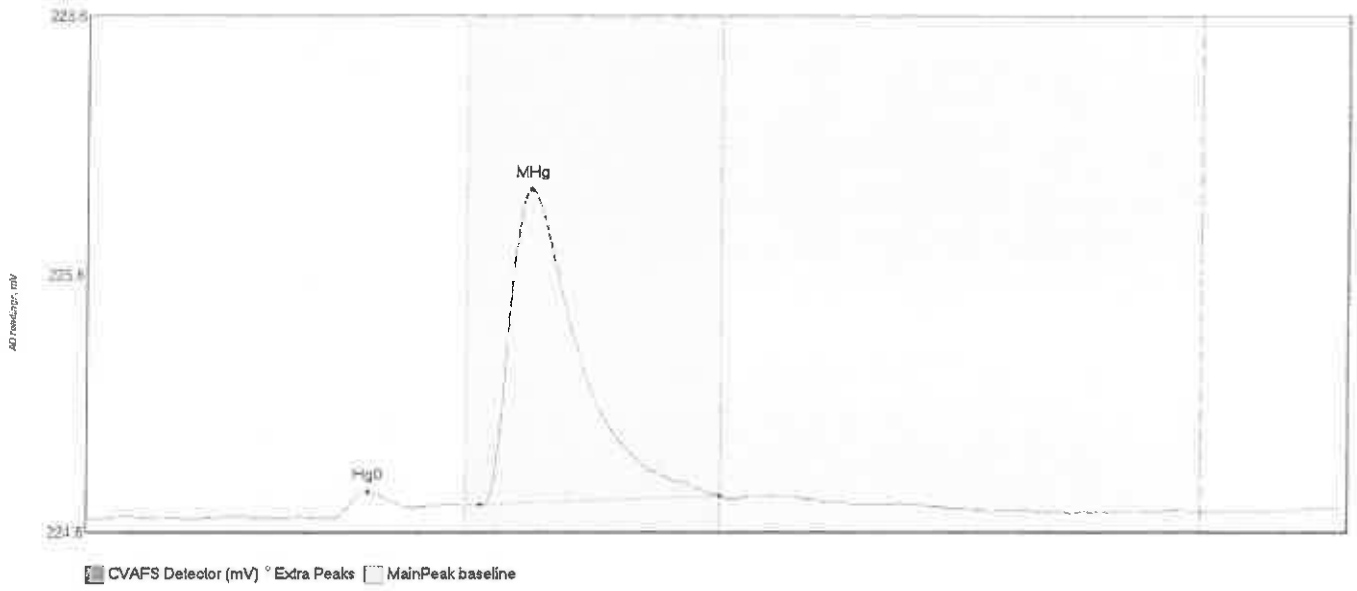
#40: 0J00143-01



CVAFS Detector (mV) Extra Peaks MainPeak baseline

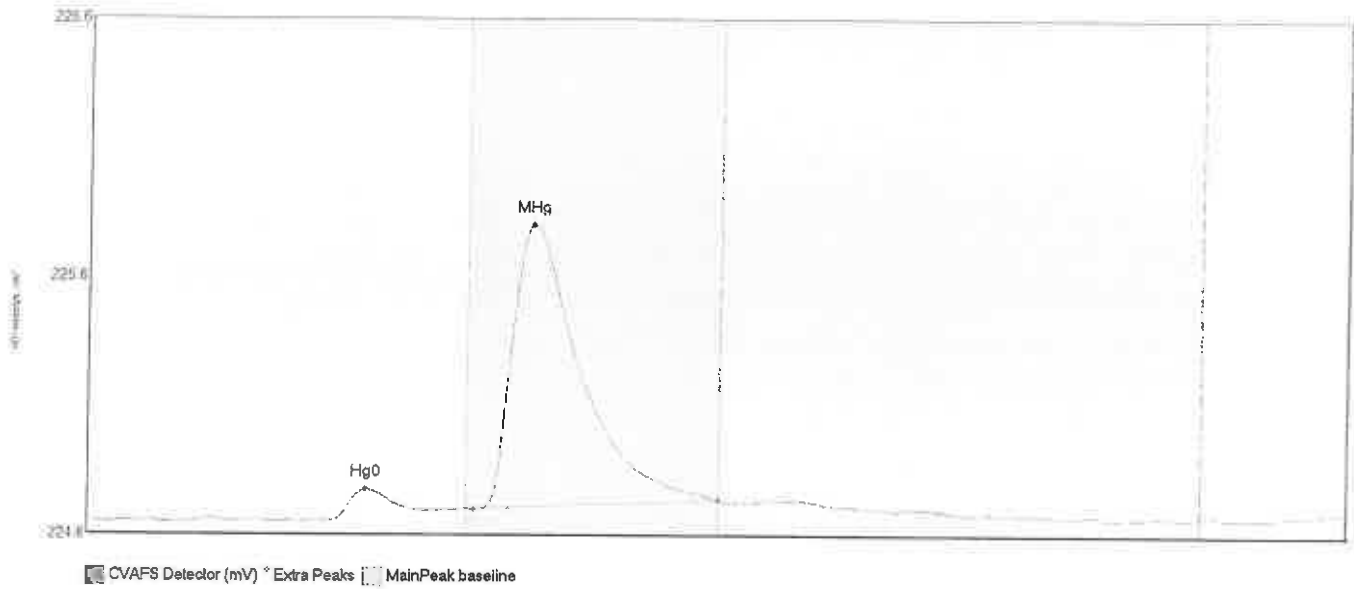
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00143-01 Hg0	5.458	48.4	64.8	224.69	224.73	56.0	0.083	OK	224.6917	0.00	0.04	F011323
0J00143-01 MHg	19.181	78.0	112.1	224.75	224.75	88.1	0.143	OK	224.6917	0.00	0.04	F011323
0J00143-01 HgII	4.535	125.0	156.0	224.74	224.74	137.4	0.032	OK	224.6917	0.00	0.04	F011323

#41: F011323-MS1



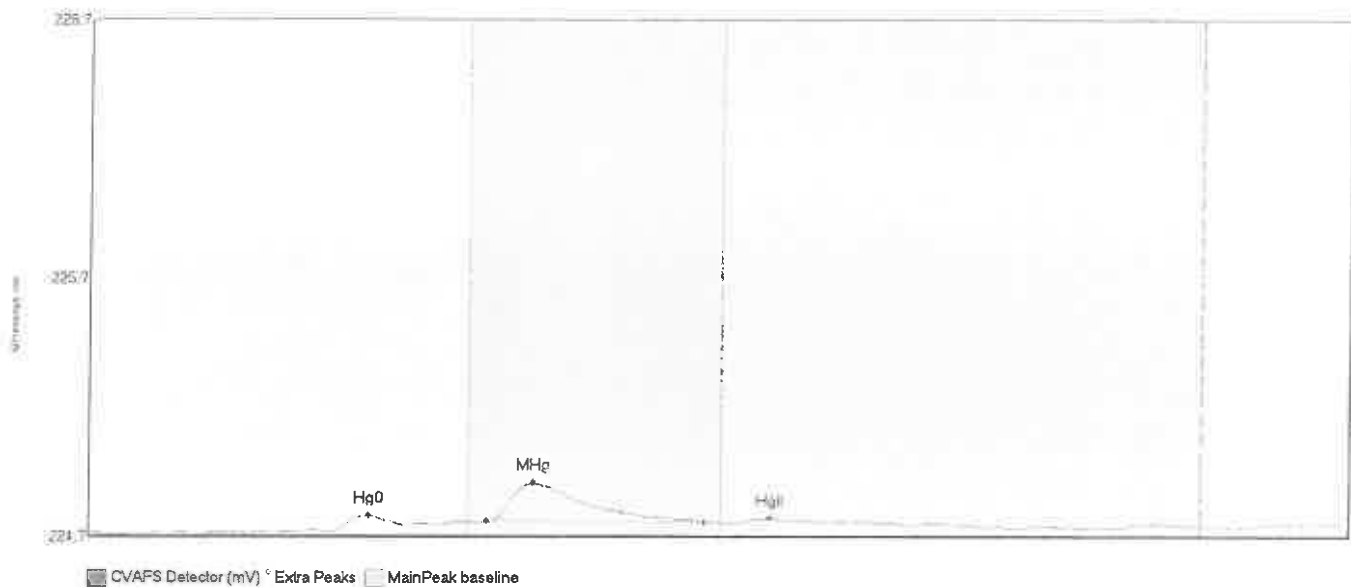
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BlShift	Comment
F011323-MS1 Hg0	6.900	48.5	65.0	224.69	224.73	55.5	0.102	OK	224.6892	0.00	0.04	F011323
F011323-MS1 MHg	190.284	77.8	125.0	224.74	224.78	87.9	1.220	CT	224.6892	0.00	0.04	F011323

#42: F011323-MSD1



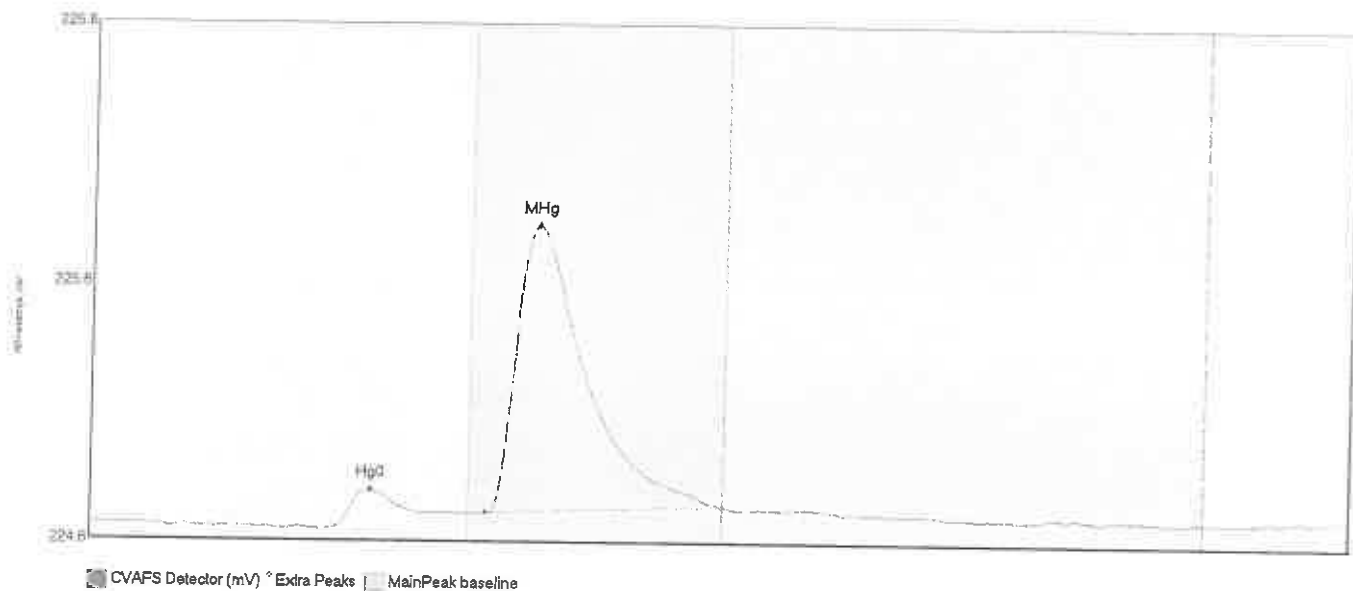
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F011323-MSD1 Hg	8.959	47.3	67.1	224.68	224.73	55.2	0.122	OK	224.6834	0.00	0.03	F011323
F011323-MSD1 MH	171.560	76.5	125.0	224.73	224.77	87.9	1.098	CT	224.6834	0.00	0.03	F011323

#43: 0J00147-02



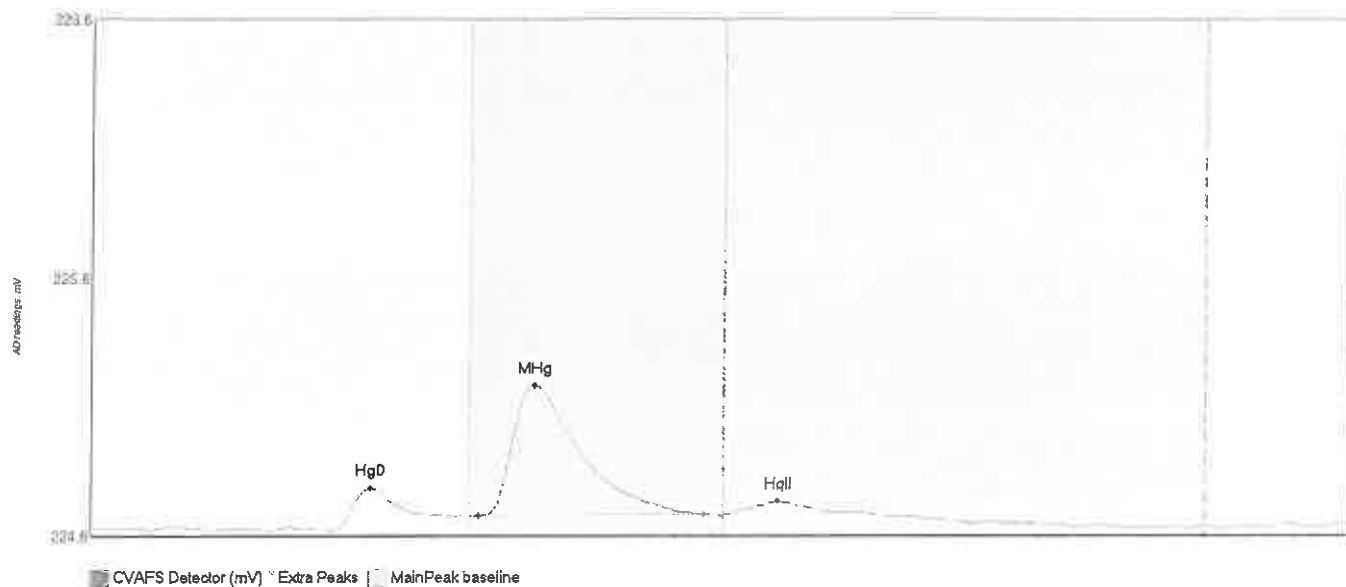
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RfDev	HlShift	Comment
0J00147-02 Hg0	4.327	47.7	63.9	224.69	224.72	55.6	0.067	OK	224.6865	0.00	0.03	F011323
0J00147-02 MHg	24.663	78.7	121.7	224.73	224.73	87.8	0.148	OK	224.6865	0.00	0.03	F011323
0J00147-02 HgII	1.382	128.1	143.7	224.72	224.72	134.7	0.017	OK	224.6865	0.00	0.03	F011323

#44: F011323-MS2



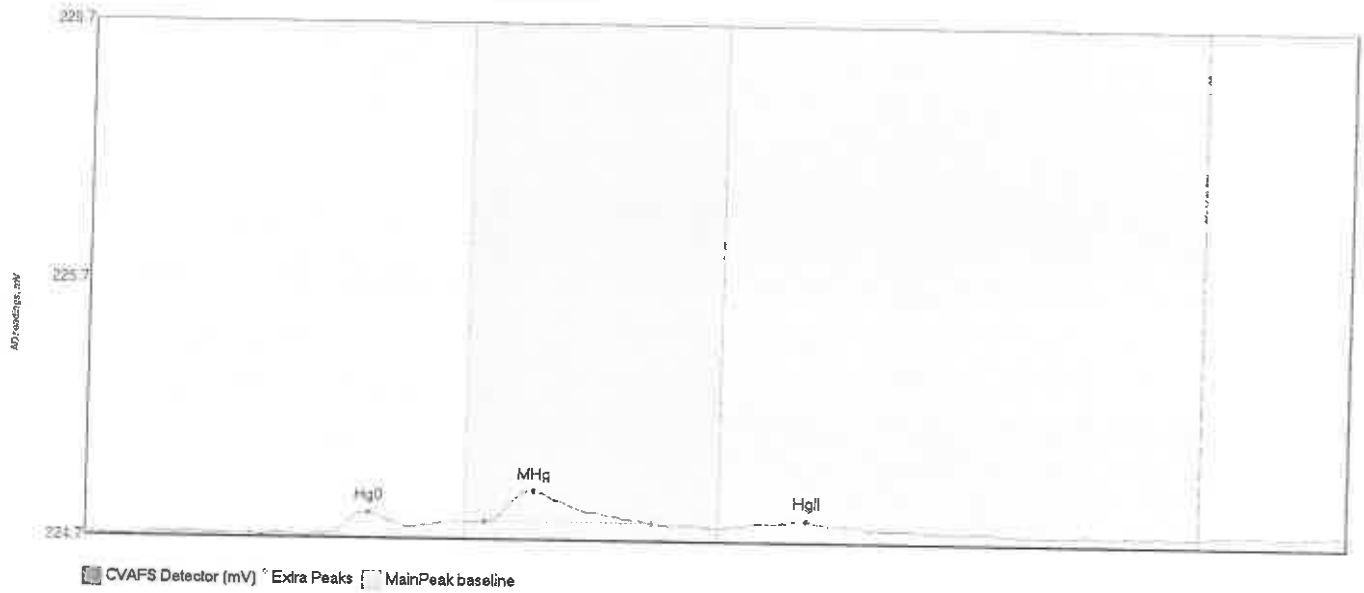
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-MS2 Hg0	12.883	48.0	73.3	224.67	224.73	55.6	0.143	OK	224.6827	0.00	0.04	F011323
F011323-MS2 MHg	173.421	78.3	125.0	224.73	224.76	88.2	1.115	CT	224.6827	0.00	0.04	F011323

#45: F011323-MSD2



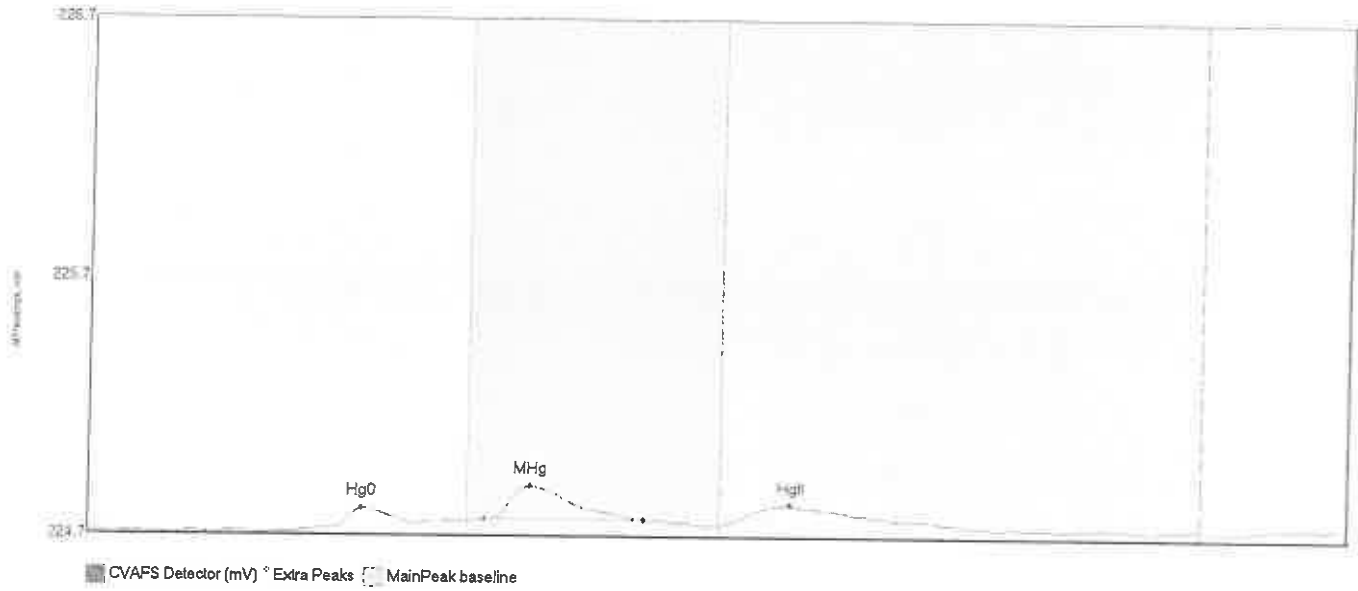
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-MSD2 Hg	13.503	47.8	71.2	224.67	224.73	55.4	0.163	OK	224.6833	0.00	0.01	F011323
F011323-MSD2 MH	76.480	77.0	121.2	224.73	224.73	87.8	0.502	OK	224.6833	0.00	0.01	F011323
F011323-MSD2 Hg	6.496	125.5	154.7	224.73	224.73	135.7	0.051	OK	224.6833	0.00	0.01	F011323

#46: 0J00143-02



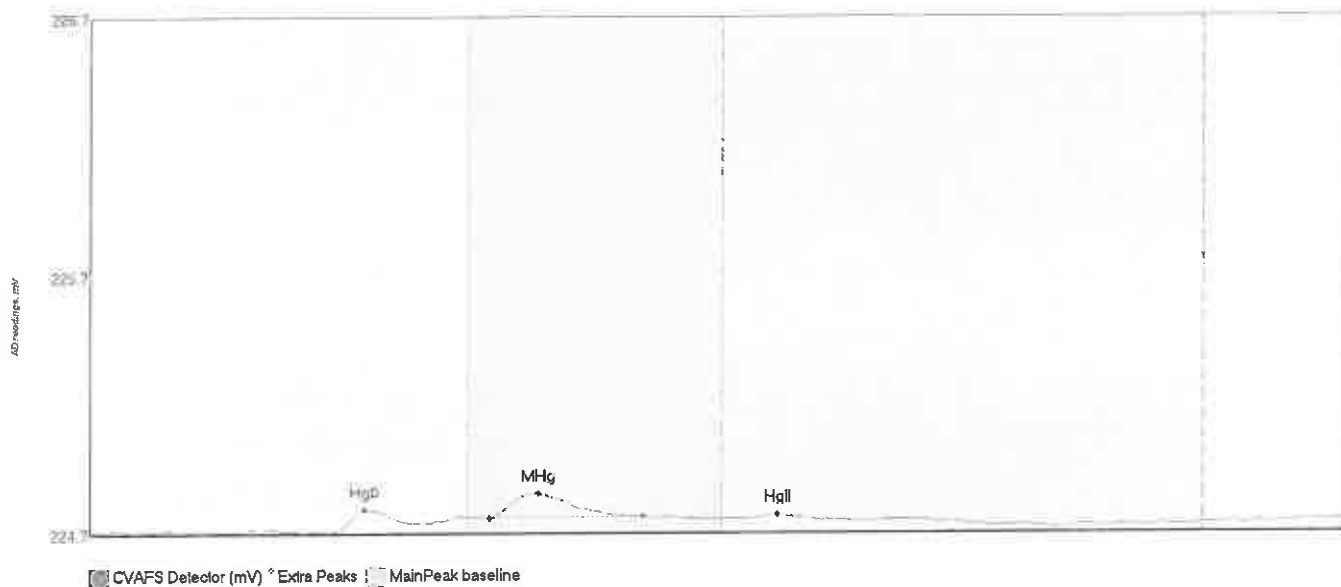
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0J00143-02 Hg0	5.444	47.1	63.8	224.69	224.72	55.9	0.084	OK	224.6833	0.00	0.04	F011323
0J00143-02 MHg	17.672	78.9	111.9	224.74	224.74	88.6	0.123	OK	224.6833	0.00	0.04	F011323
0J00143-02 HgII	4.920	127.3	155.0	224.73	224.72	142.4	0.027	OK	224.6833	0.00	0.04	F011323

#47: 0J00143-03



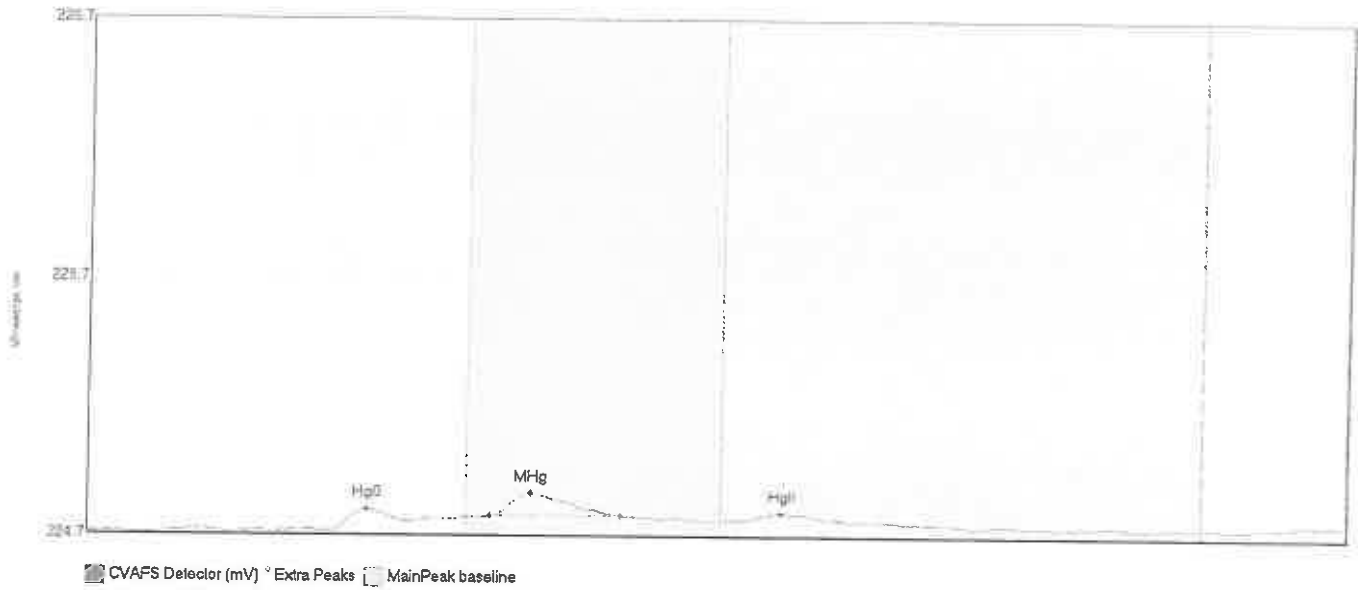
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00143-03 Hg0	6.272	41.5	64.3	224.70	224.73	54.3	0.090	OK	224.6943	0.00	0.04	F011323
0J00143-03 MHg	18.056	78.4	110.0	224.75	224.75	87.4	0.130	OK	224.6943	0.00	0.04	F011323
0J00143-03 HgII	17.334	125.0	169.7	224.73	224.73	138.9	0.081	OK	224.6943	0.00	0.04	F011323

#48: 0J00143-04



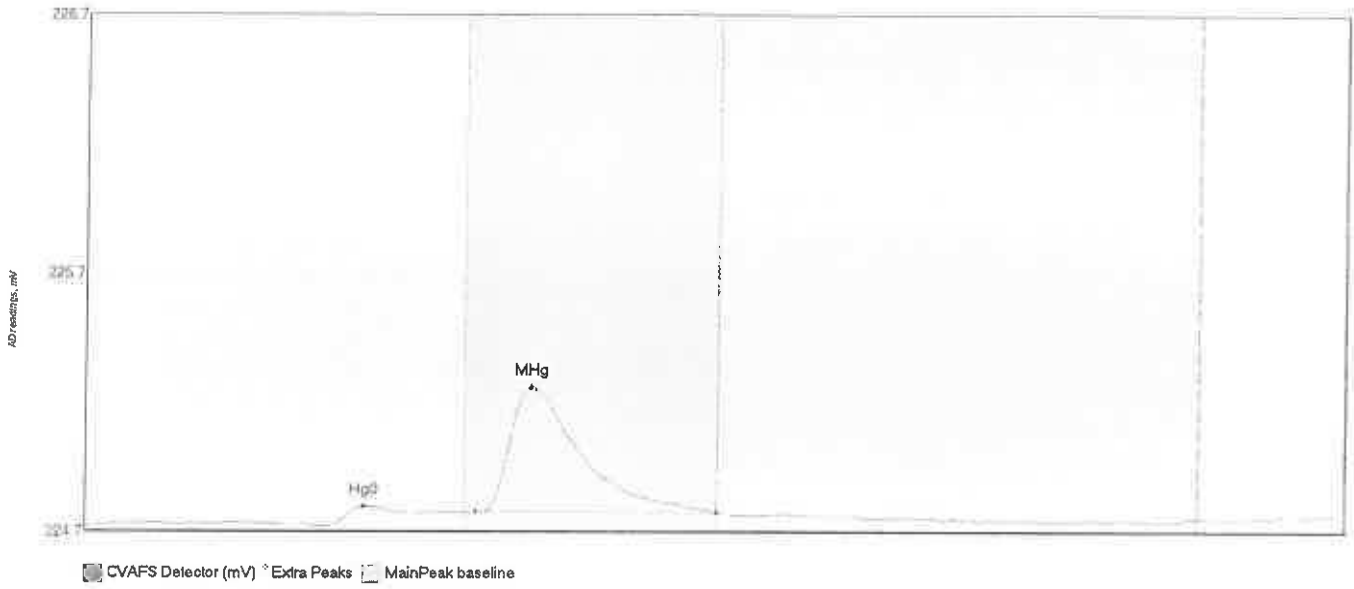
Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
5.437	48.6	63.9	224.69	224.73	54.6	0.081	OK	224.6927	0.00	0.04	F011323
12.581	79.2	109.2	224.75	224.75	88.7	0.092	OK	224.6927	0.00	0.04	F011323
0.539	132.3	141.6	224.75	224.74	136.0	0.011	OK	224.6927	0.00	0.04	F011323

#49: CJ00143-05



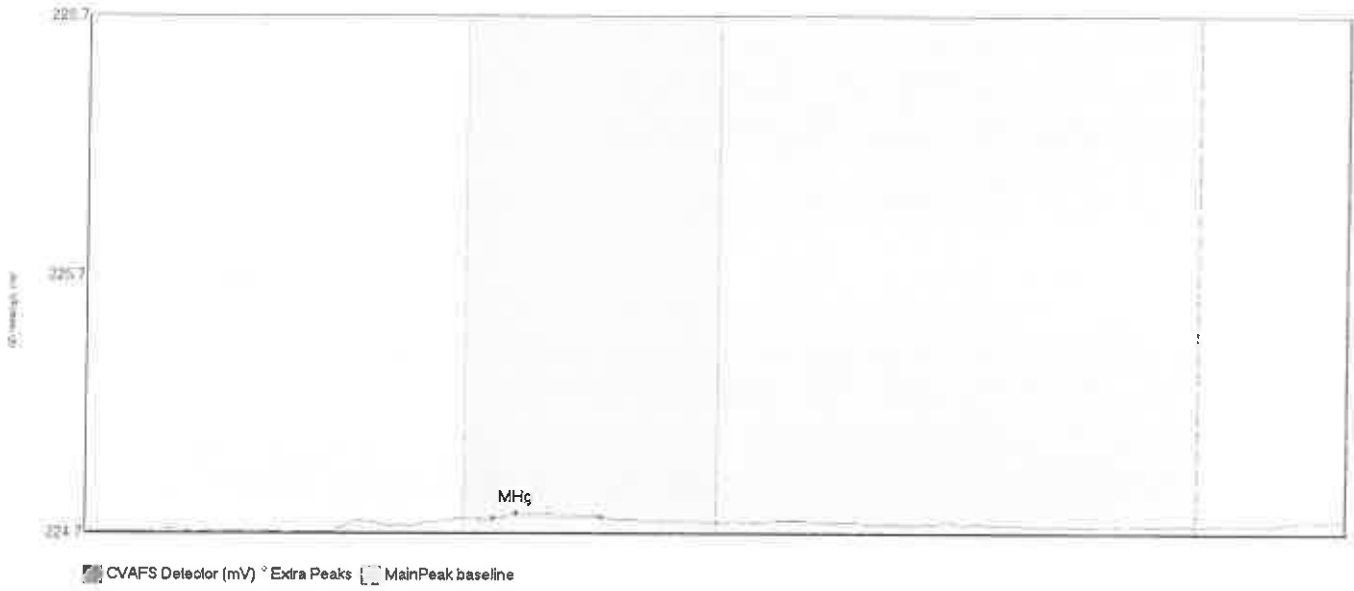
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
CJ00143-05 Hg0	4.998	48.2	63.6	224.71	224.75	55.2	0.082	OK	224.7110	0.00	0.03	F011323
CJ00143-05 MHg	10.896	79.8	105.5	224.77	224.77	87.7	0.087	OK	224.7110	0.00	0.03	F011323
CJ00143-05 HgII	2.777	129.7	148.1	224.76	224.76	137.0	0.030	OK	224.7110	0.00	0.03	F011323

#50: SEQ-CCV3



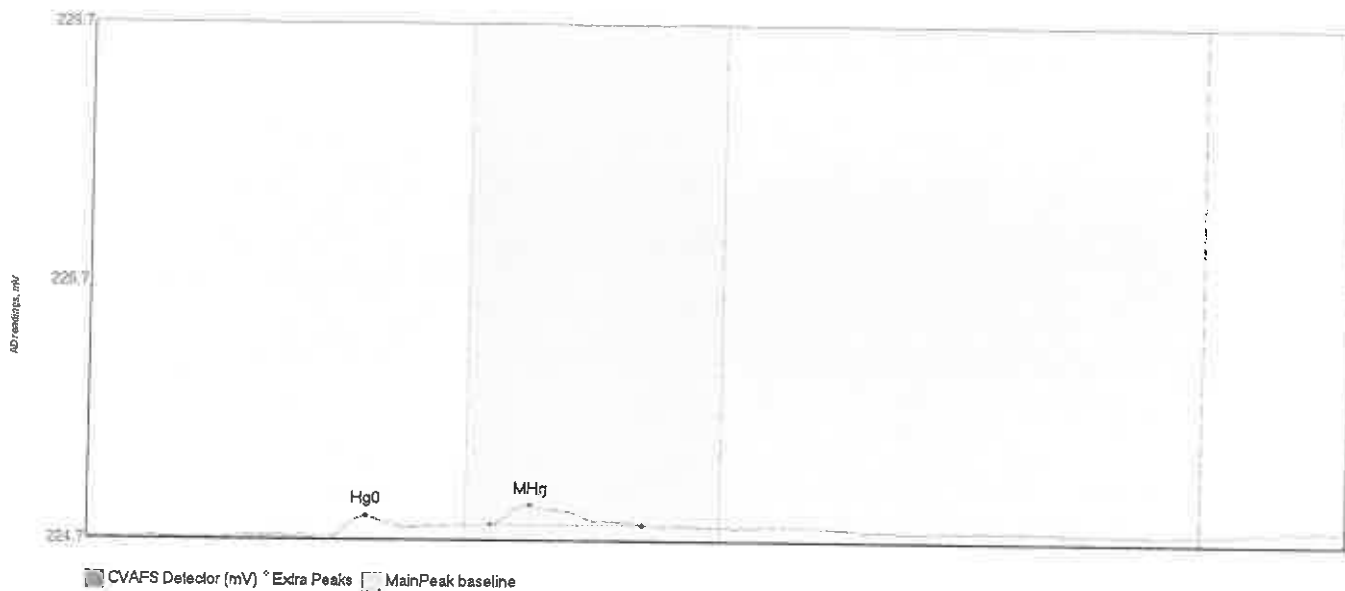
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Display
SEQ-CCV3 Hg0	4.502	47.7	64.6	224.72	224.77	55.3	0.075	OK	224.7217	0.00	0.04	
SEQ-CCV3 MHg	78.135	77.3	125.0	224.78	224.77	88.1	0.481	CT	224.7217	0.00	0.04	

#51: SEQ-CCB3



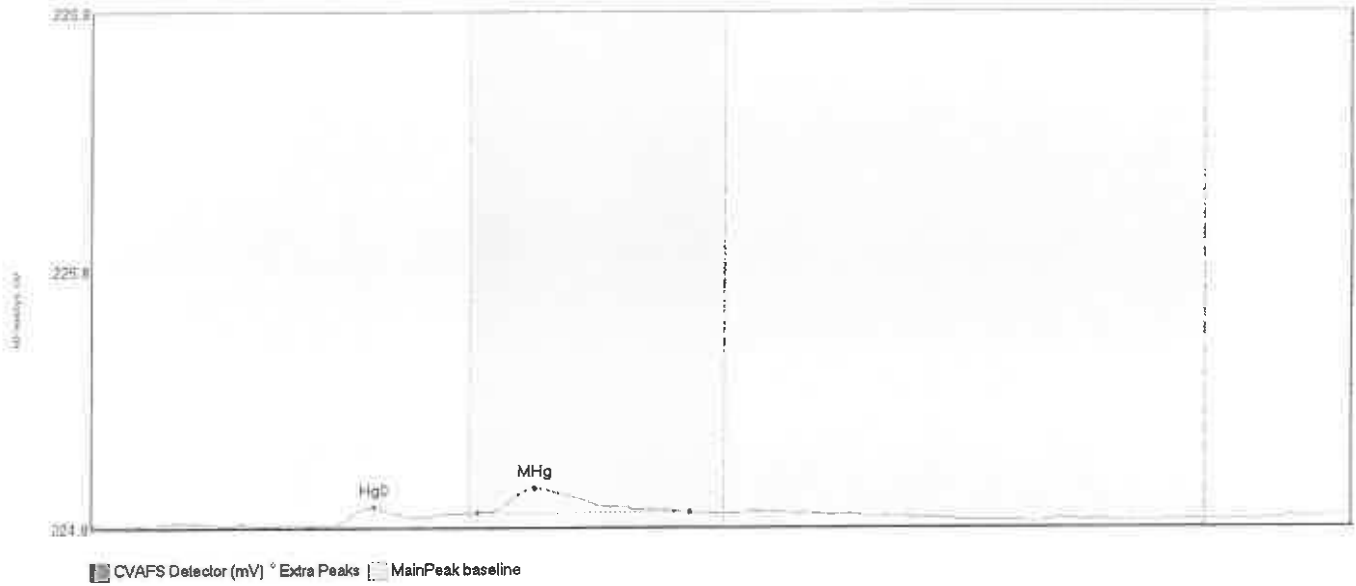
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCB3	2.181	80.8	102.0	224.78	224.79	85.3	0.020	OK	224.7368	0.00	0.03	

#52: 0J00143-06



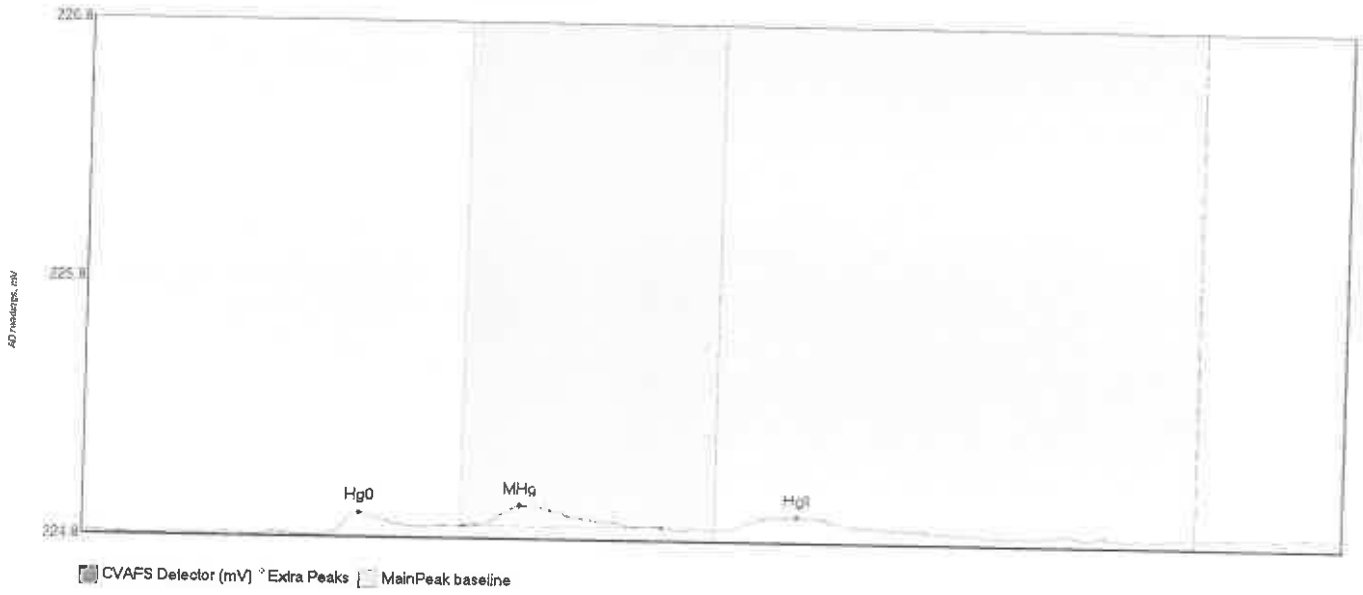
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00143-06 Hg0	4.897	48.3	63.5	224.74	224.78	55.5	0.081	OK	224.7385	0.00	0.04	F011323
0J00143-06 MHg	10.738	79.9	109.9	224.79	224.79	87.6	0.077	OK	224.7385	0.00	0.04	F011323

#53: QJ00143-07



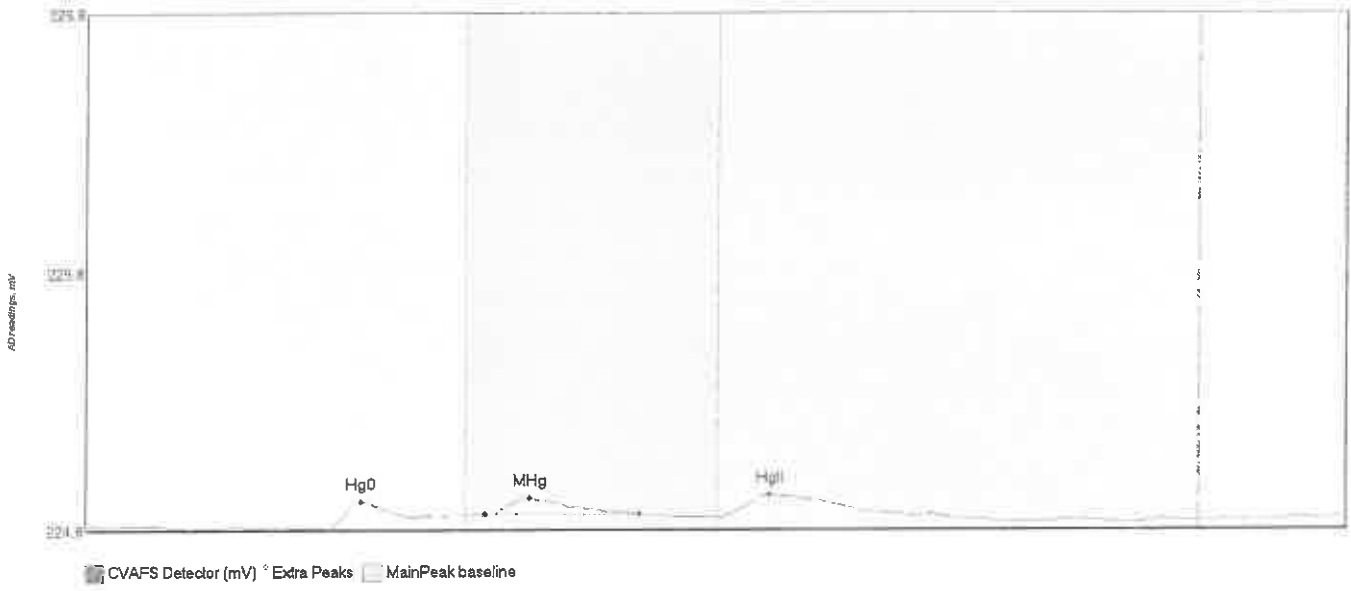
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
QJ00143-07 Hg0	4.392	47.9	63.4	224.77	224.80	56.0	0.070	OK	224.7737	0.00	0.03	F011323
QJ00143-07 MHg	15.671	76.6	118.2	224.82	224.82	87.8	0.096	OK	224.7737	0.00	0.03	P011323

#54: QJ00143-08

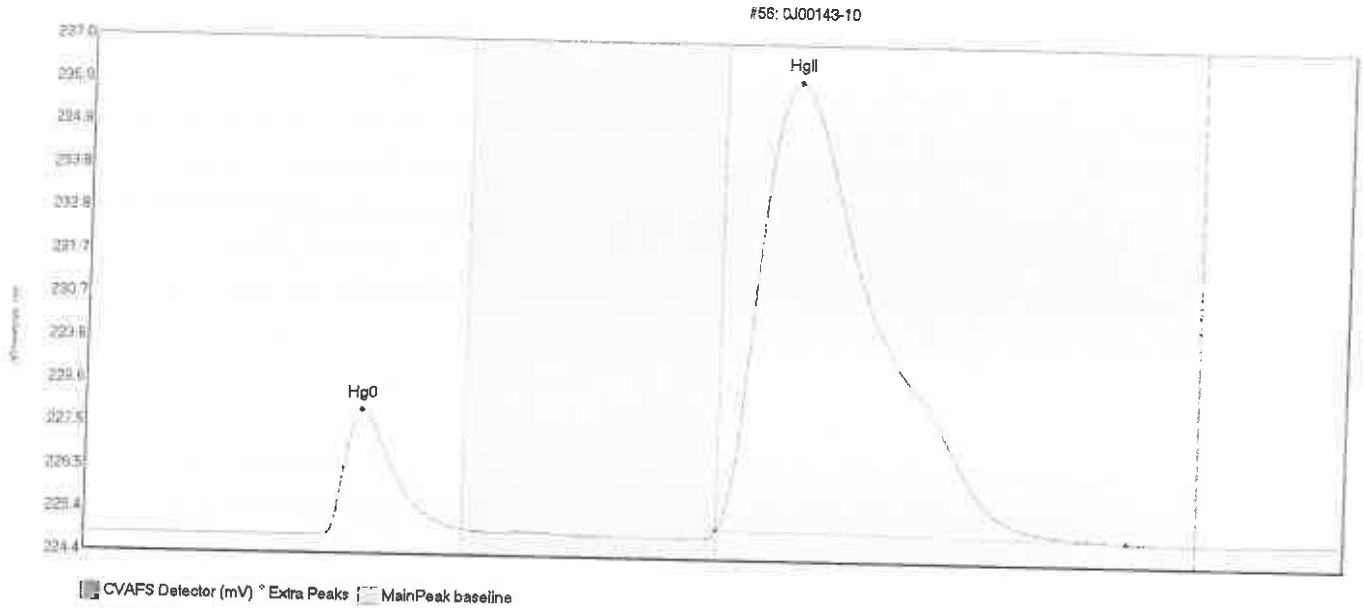


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RTDev	RTDiff	Comment
QJ00143-08 Hg0	5.966	46.8	65.2	224.78	224.81	54.9	0.090	OK	224.7882	0.02	0.02	F011323
QJ00143-08 MHg	13.453	75.6	114.6	224.82	224.82	86.6	0.080	OK	224.7882	0.02	0.02	F011323
QJ00143-08 HgII	10.068	127.7	163.3	224.82	224.82	141.2	0.054	OK	224.7882	0.02	0.02	F011323

#55: OJ00143-09

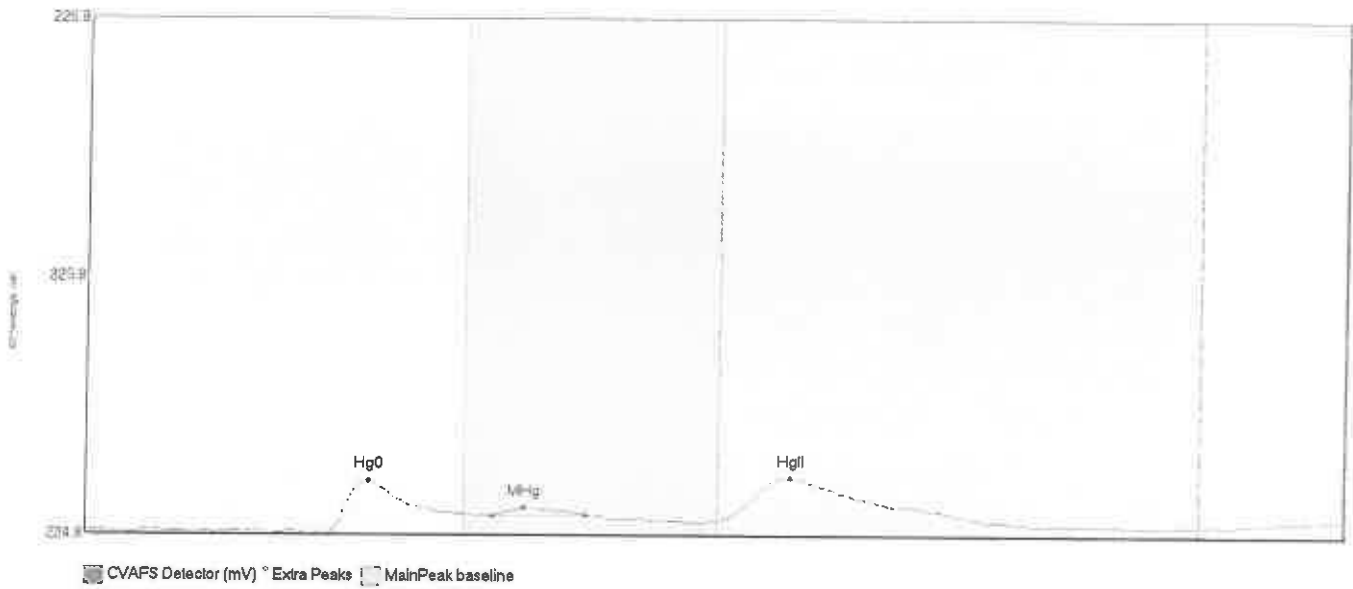


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
OJ00143-09 Hg0	6.672	48.6	64.5	224.80	224.84	54.6	0.099	OK	224.8052	0.00	0.03	F011323
OJ00143-09 MHg	8.728	79.1	109.5	224.85	224.85	87.8	0.060	OK	224.8052	0.00	0.03	F011323
OJ00143-09 HgII	15.425	125.1	163.8	224.84	224.85	135.2	0.083	OK	224.8052	0.00	0.03	F011323



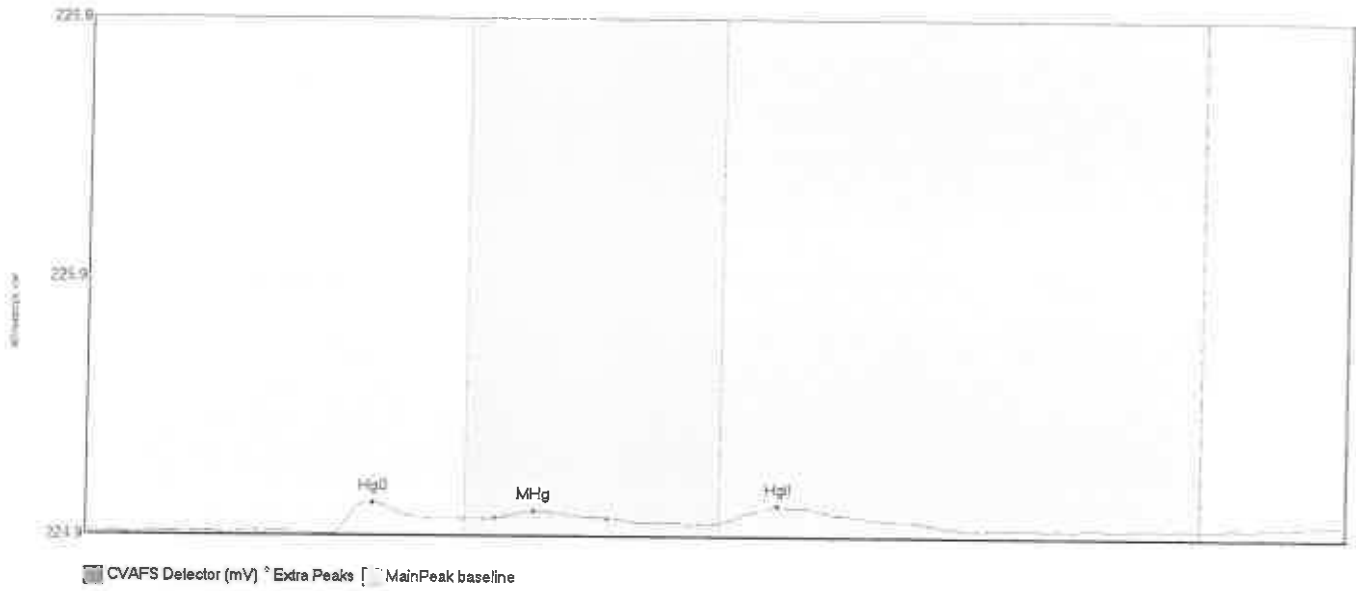
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
QJ00143-10 Hg0	322.219	44.6	75.0	224.82	224.99	54.9	3.075	CT	224.8116	0.00	0.15	F011323
QJ00143-10 HgII	2915.358	125.0	205.9	225.08	224.95	139.7	11.005	OK	224.8116	0.00	0.15	F011323

#57: OJ00143-11



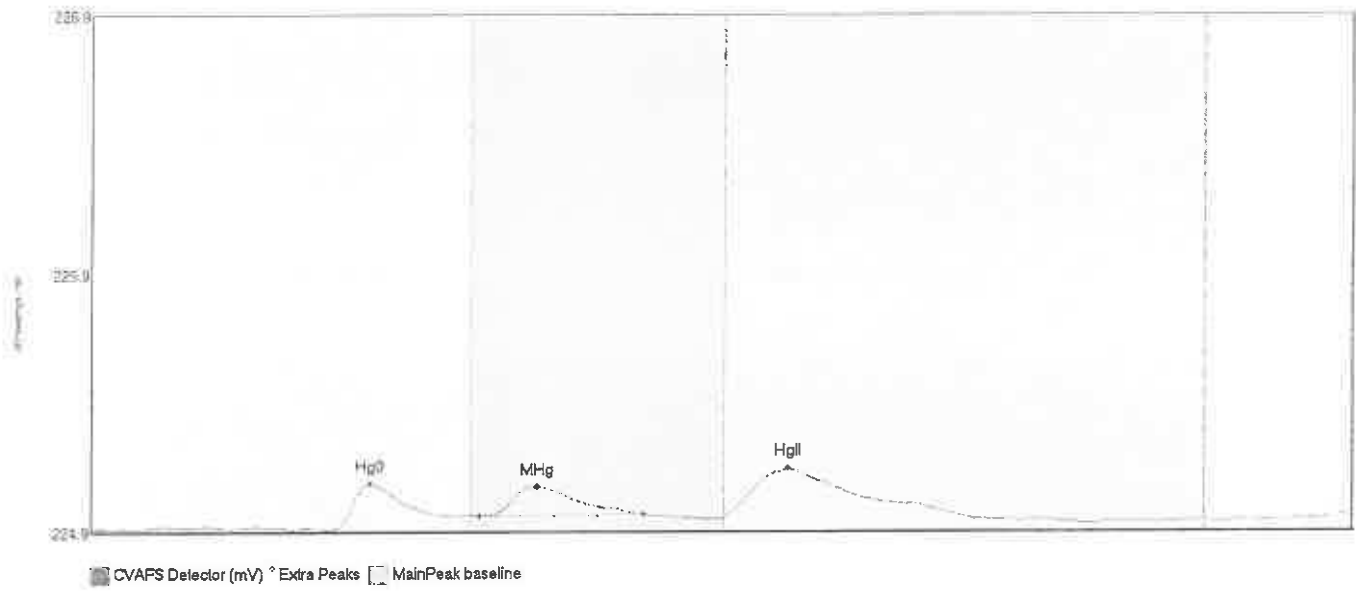
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
OJ00143-11 Hg0	20.851	48.0	75.0	224.84	224.91	56.2	0.199	CT	224.8468	0.00	0.05	F011323
OJ00143-11 MHg	3.299	80.6	98.9	224.91	224.91	86.7	0.032	OK	224.8468	0.00	0.05	F011323
OJ00143-11 HgII	42.322	125.0	177.8	224.89	224.88	139.5	0.164	OK	224.8463	0.00	0.05	F011323

#58: 0J00143-12



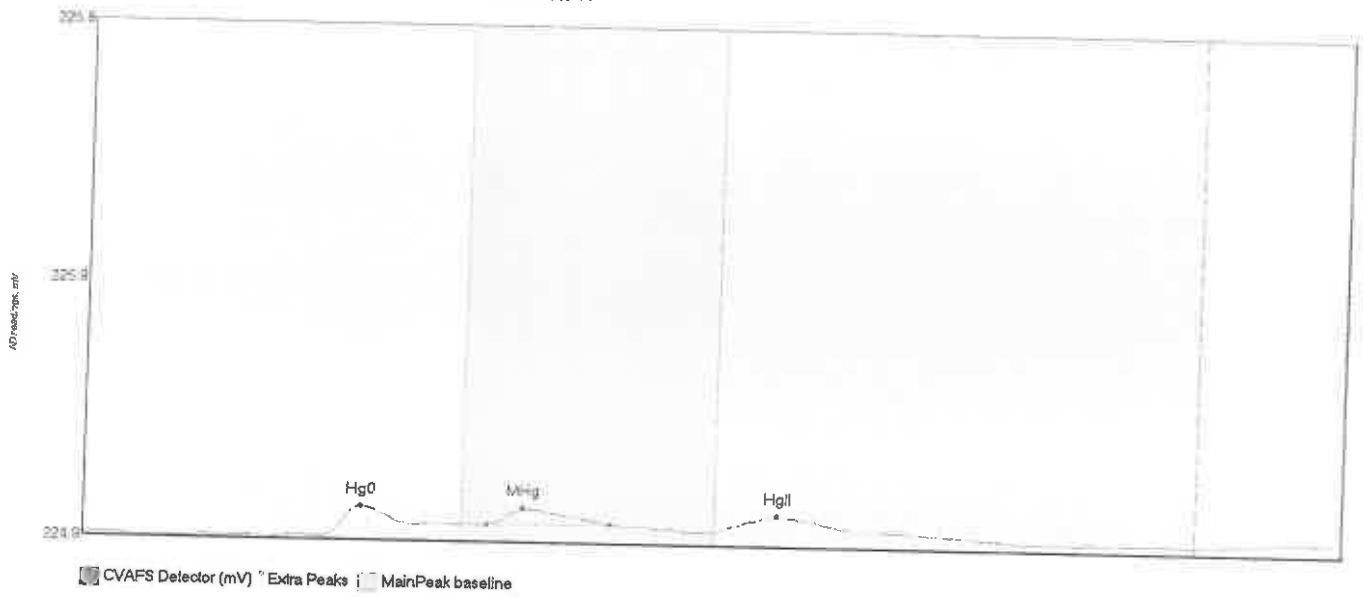
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00143-12 Hg0	11.843	48.2	73.9	224.86	224.92	56.6	0.122	OK	224.8686	0.00	0.03	F011323
0J00143-12 MHg	3.231	80.8	103.0	224.92	224.92	88.5	0.027	OK	224.8686	0.00	0.03	F011323
0J00143-12 HgII	11.753	125.0	162.1	224.90	224.91	136.5	0.066	OK	224.3606	0.00	0.03	F011323

#59: 0J00143-13



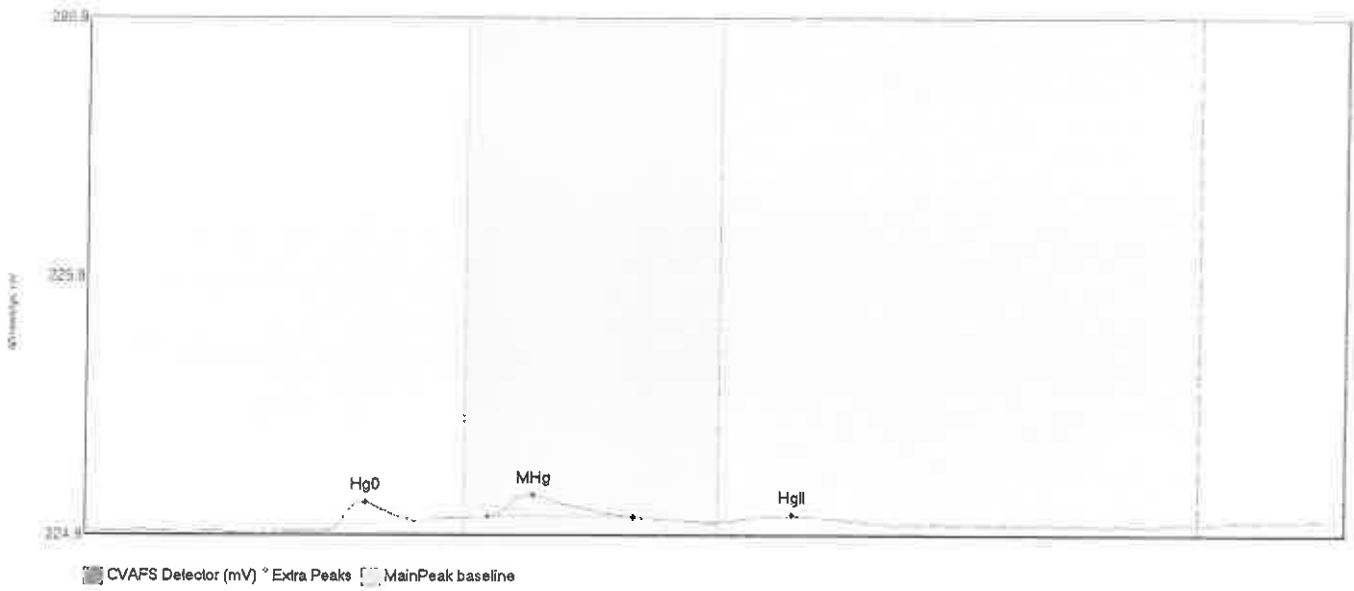
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00143-13 Hg0	17.168	47.3	72.5	224.88	224.93	55.0	0.178	OK	224.8883	0.00	0.05	F011323
0J00143-13 MHg	16.777	76.8	109.2	224.93	224.94	88.3	0.117	OK	224.8883	0.00	0.05	F011323
0J00143-13 HgII	43.110	125.0	174.3	224.93	224.93	137.6	0.186	OK	224.8883	0.00	0.05	F011323

#60: 0J00143-14



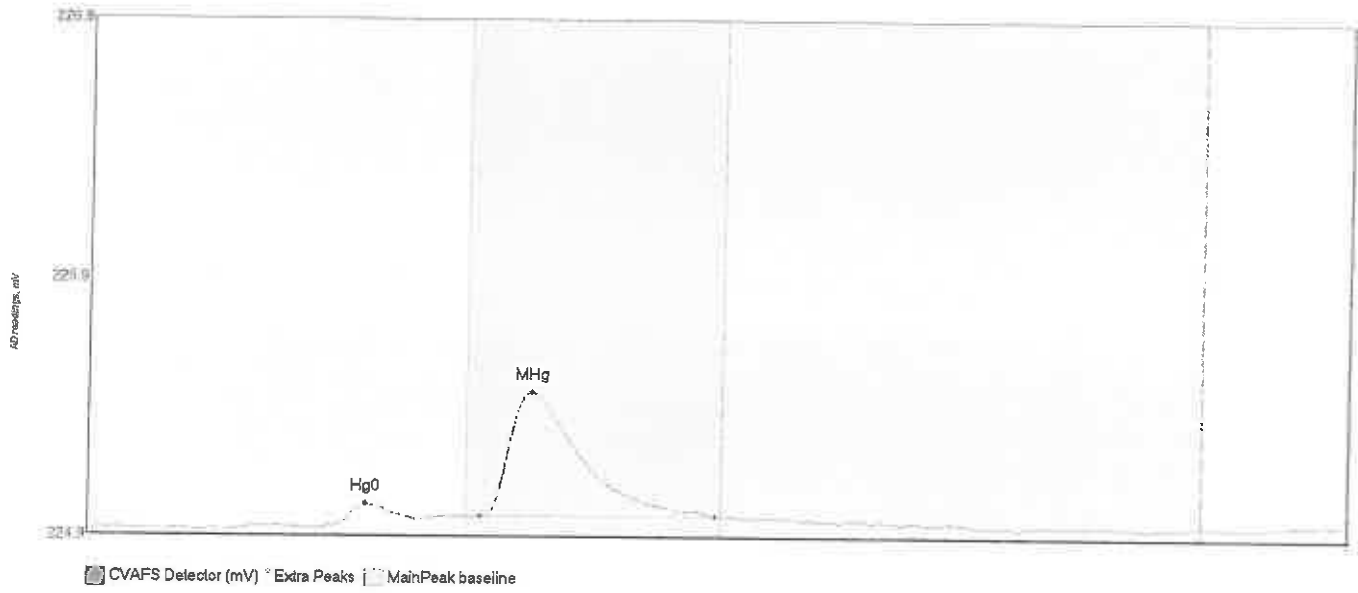
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0J00143-14 Hg0	10.387	47.5	72.9	224.91	224.96	55.3	0.117	OK	224.9099	0.00	0.04	F011323
0J00143-14 MHg	8.015	79.8	104.3	224.96	224.97	86.9	0.063	OK	224.9099	0.00	0.04	F011323
0J00143-14 HgII	10.514	125.0	161.0	224.95	224.96	137.3	0.065	OK	224.9099	0.00	0.04	F011323

#61: 0J00143-15



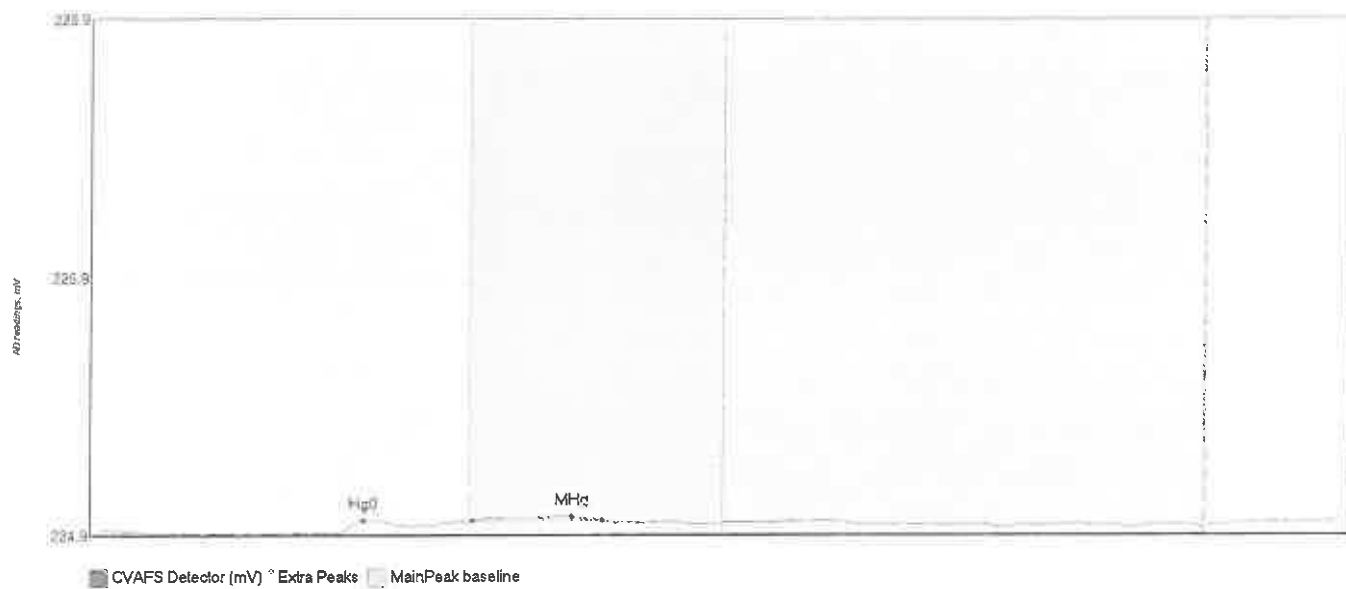
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0J00143-15 Hg0	8.351	48.1	65.3	224.93	224.97	55.7	0.112	OK	224.9308	0.00	0.03	F011323
0J00143-15 MHg	11.504	79.7	108.3	224.98	224.98	88.6	0.085	OK	224.9308	0.00	0.03	F011323
0J00143-15 HgII	2.798	127.9	150.8	224.97	224.97	139.7	0.022	OK	224.9308	0.00	0.03	F011323

#62: SEQ-CCV4



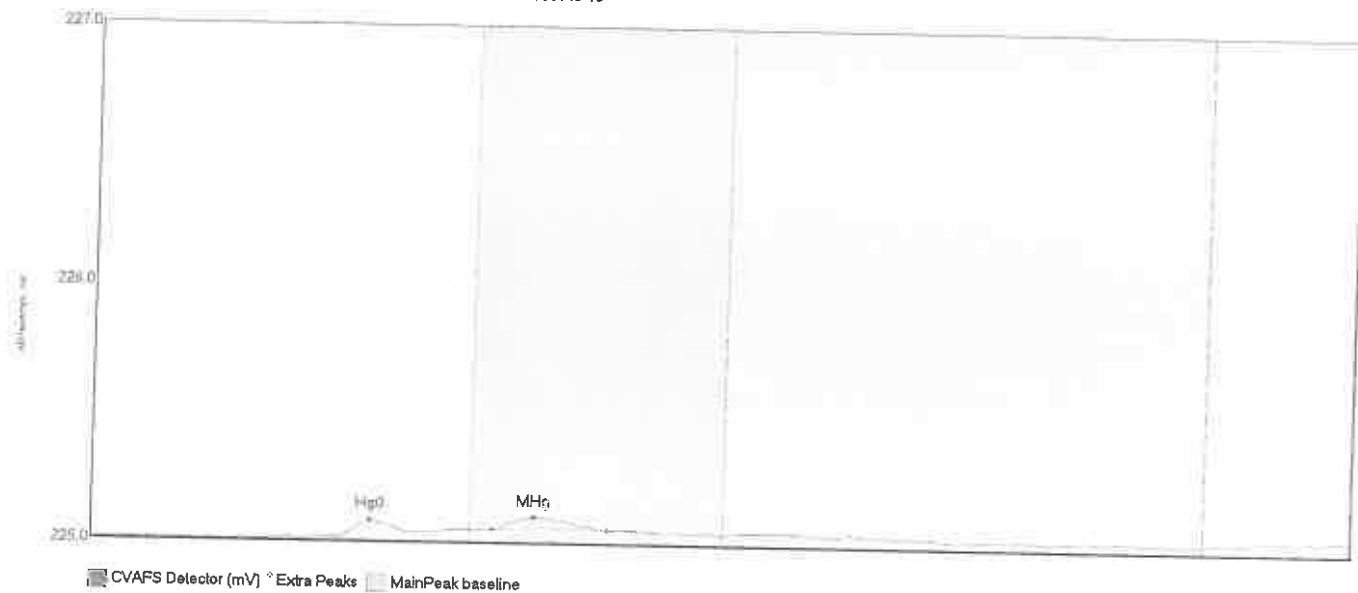
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV4 Hg0	5.635	29.4	65.0	224.95	224.99	54.9	0.096	OK	224.9488	0.00	0.03	
SEQ-CCV4 MHg	77.387	77.8	123.8	225.00	225.01	87.8	0.484	OK	224.9488	0.00	0.03	

#63: SEQ-CCB4



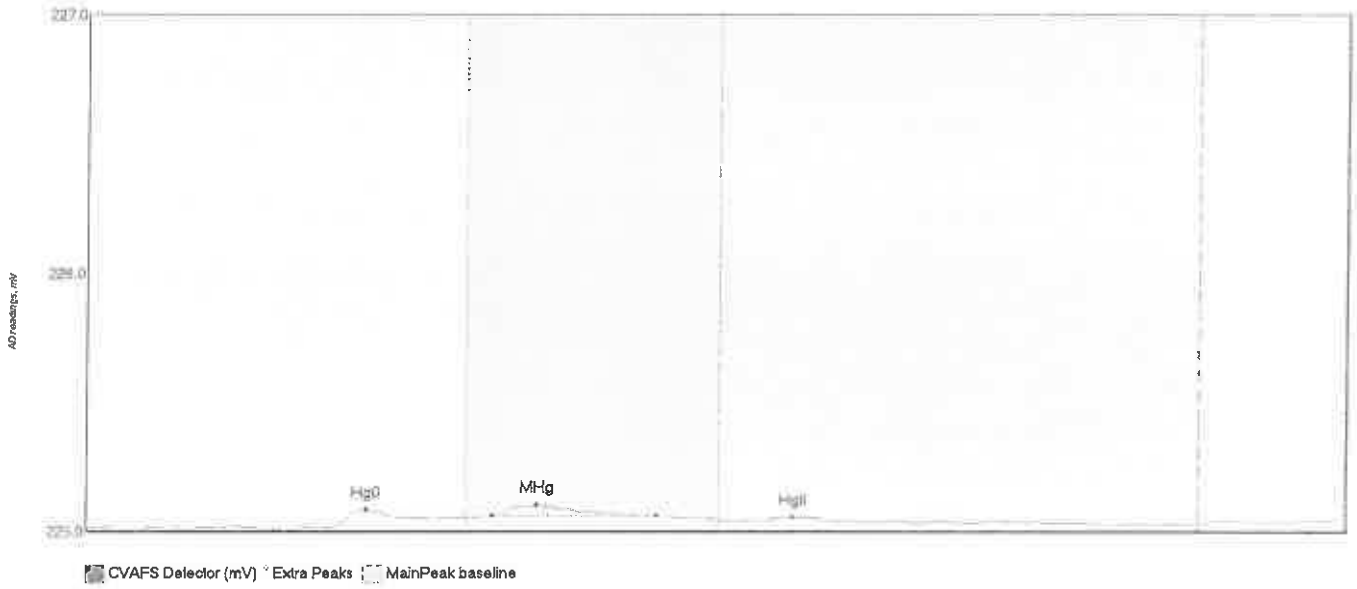
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CCB4 Hg0	3.085	49.1	63.6	224.95	224.97	54.1	0.048	OK	224.9517	0.00	0.06	
SEQ-CCB4 MHg	2.988	75.6	101.5	224.99	225.00	95.4	0.018	OK	224.9517	0.00	0.06	

#54: 0J00143-16



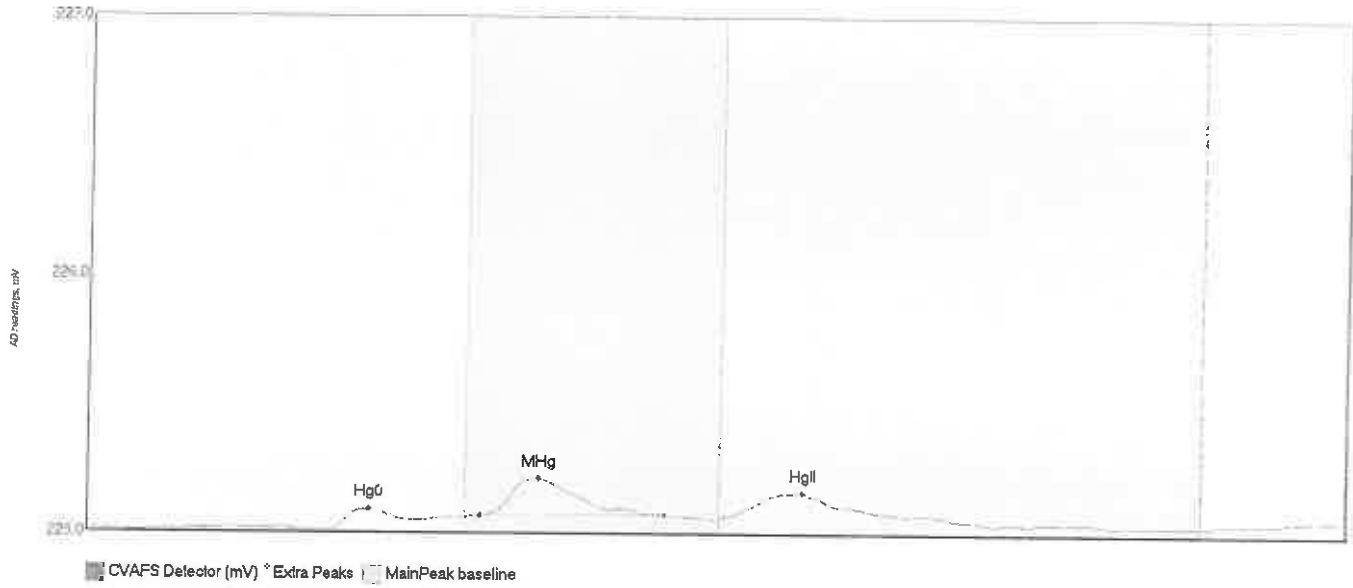
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0J00143-16 Hg0	4.378	48.7	64.3	224.99	225.01	55.3	0.068	OK	224.9834	0.00	0.04	F011323
0J00143-16 MHg	5.699	79.3	102.3	225.03	225.03	87.6	0.048	OK	224.9834	0.00	0.04	F011323

#65: 0J00151-05



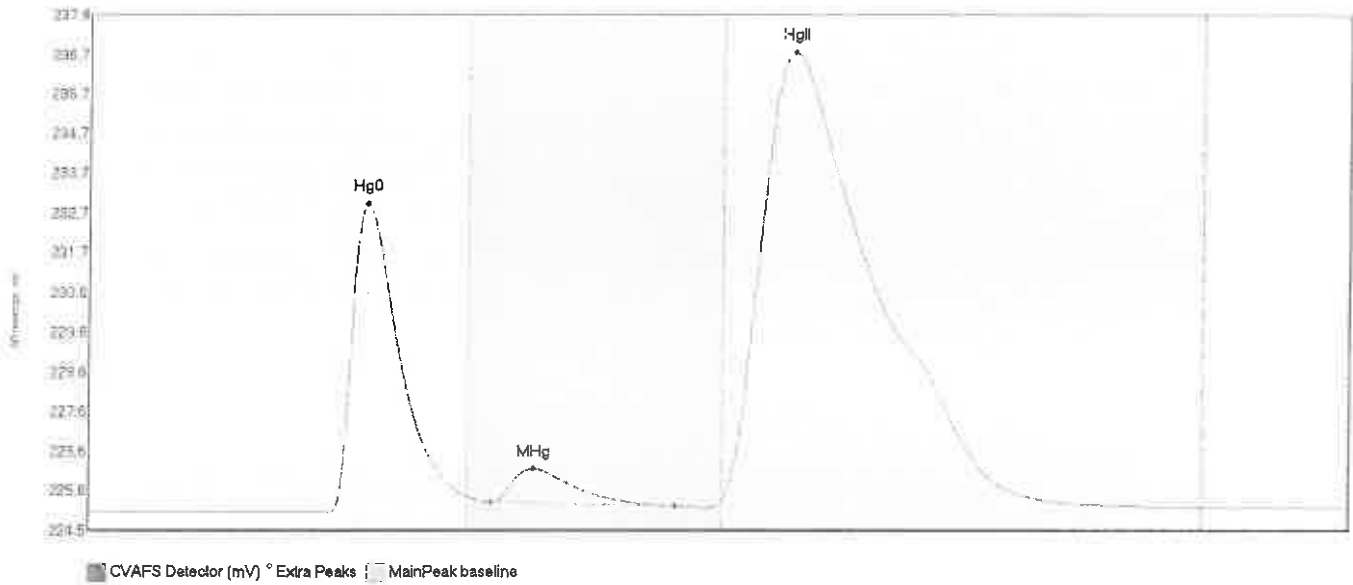
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0J00151-05 Hg0	4.332	48.3	64.9	224.99	225.03	55.5	0.070	OK	224.9924	0.00	0.03	F011323
0J00151-05 MHg	6.228	80.3	112.7	225.04	225.04	89.1	0.042	OK	224.9924	0.00	0.03	F011323
0J00151-05 HgII	0.938	133.9	146.7	225.02	225.02	139.8	0.010	OK	224.9924	0.00	0.03	F011323

#66: DK00007-01



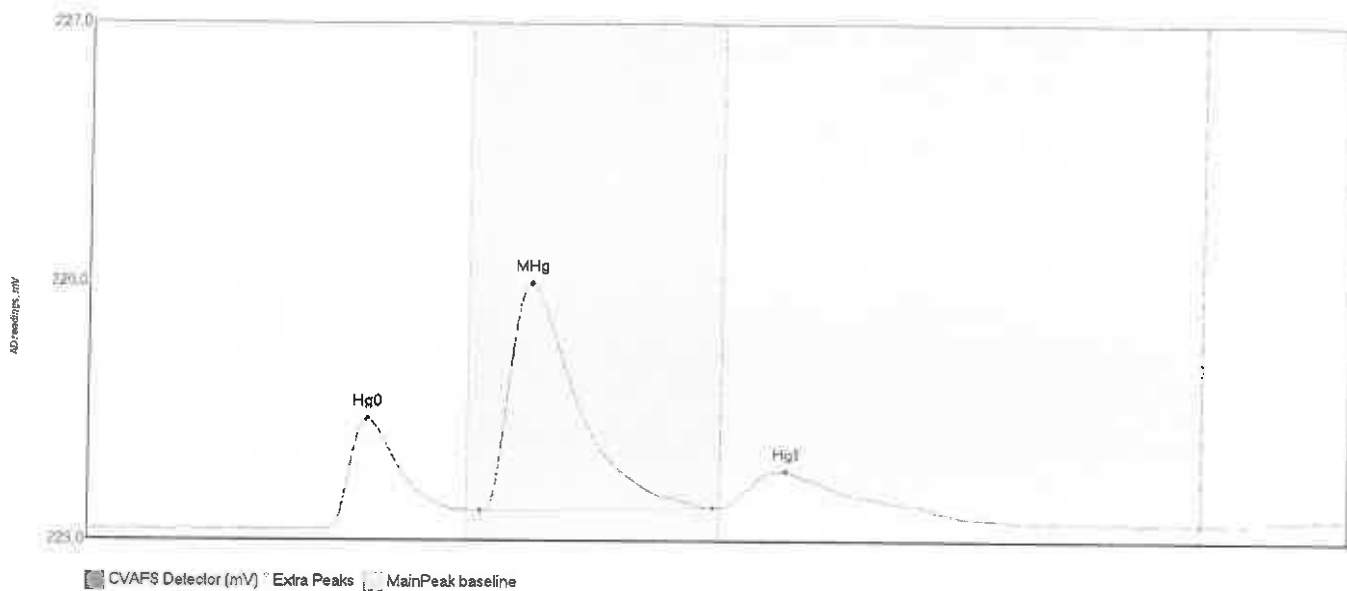
Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Hg0 5.334	47.8	64.7	225.00	225.04	56.0	0.077	OK	225.0057	0.00	0.05	F011323
MHg 21.692	77.9	114.1	225.06	225.06	89.3	0.148	OK	225.0057	0.00	0.05	F011323
HgII 17.054	125.8	161.7	225.06	225.06	141.5	0.097	OK	225.0057	0.00	0.05	F011323

#67: OK00007-02



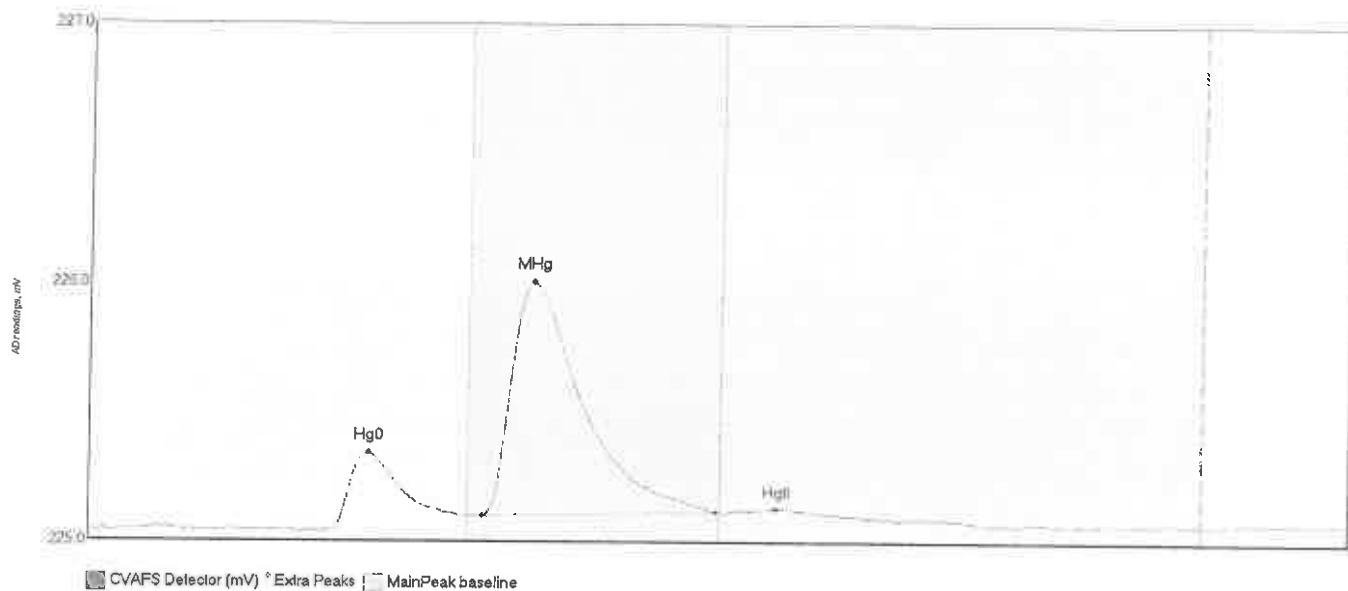
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
OK00007-02 Hg0	818.033	47.0	75.0	225.03	225.42	55.1	7.856	CT	225.0287	0.00	0.12	F011323
OK00007-02 MHg	122.340	79.7	115.8	225.26	225.16	88.2	0.862	OK	225.0287	0.00	0.12	F011323
OK00007-02 HgII	2950.846	125.0	204.6	225.34	225.17	139.1	11.481	OK	225.0287	0.00	0.12	F011323

#66: F011324-BS1



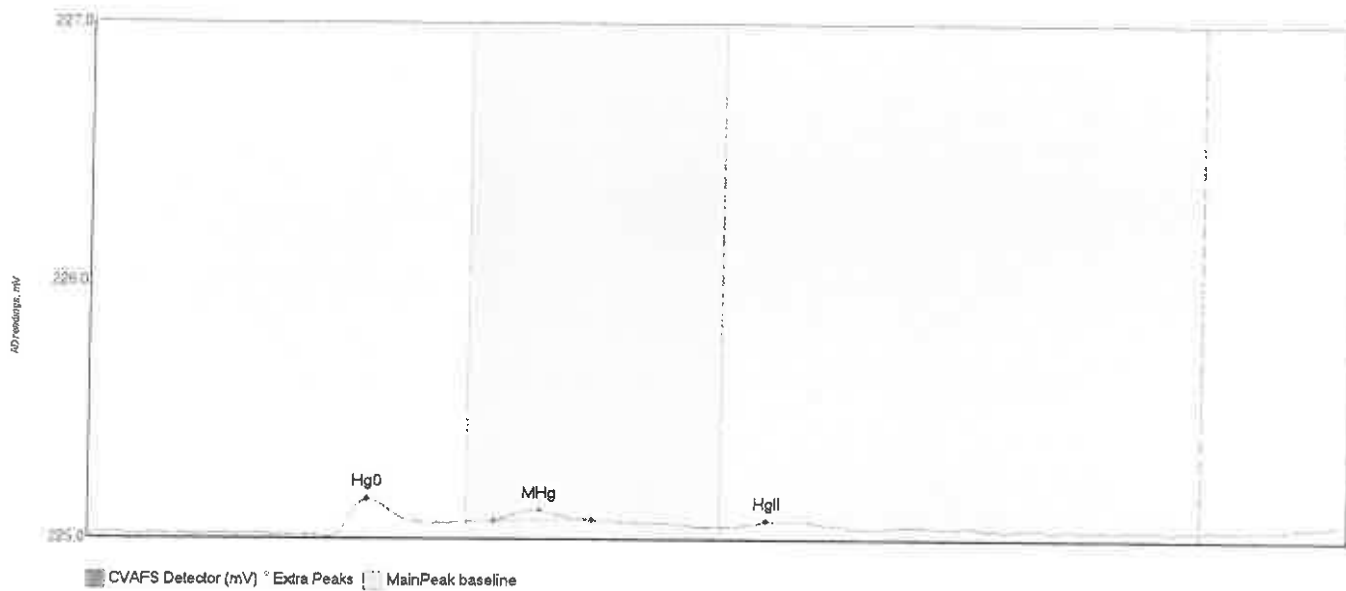
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BjShift	Comment
F011324-BS1 Hg0	43.216	47.5	75.0	225.03	225.11	55.2	0.422	CT	225.0364	0.00	0.04	F011324
F011324-BS1 MHg	135.662	77.6	123.7	225.10	225.12	87.4	0.879	OK	225.0364	0.00	0.04	F011324
F011324-BS1 HgI	29.578	125.1	168.1	225.12	225.10	137.0	0.142	OK	225.0364	0.00	0.04	F011324

#69: F011324-BSD1



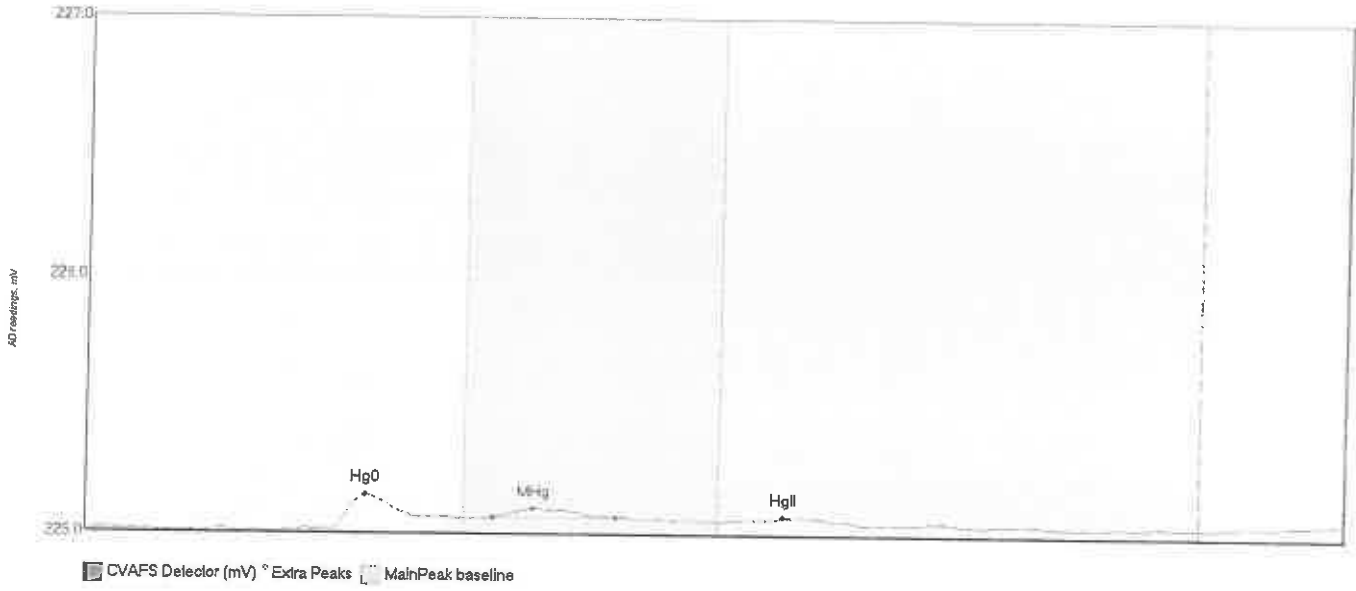
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiShift	Comment
F011324-BSD1 Hg	30.600	47.9	74.9	225.03	225.09	55.5	0.298	OK	225.0306	0.03	F011324
F011324-BSD1 MH	145.163	78.1	124.3	225.09	225.10	87.6	0.906	OK	225.0306	0.03	F011324
F011324-BSD1 Hg	1.142	126.2	140.8	225.10	225.10	136.0	0.016	OK	225.0306	0.93	F011324

#70: F011324-BLK1



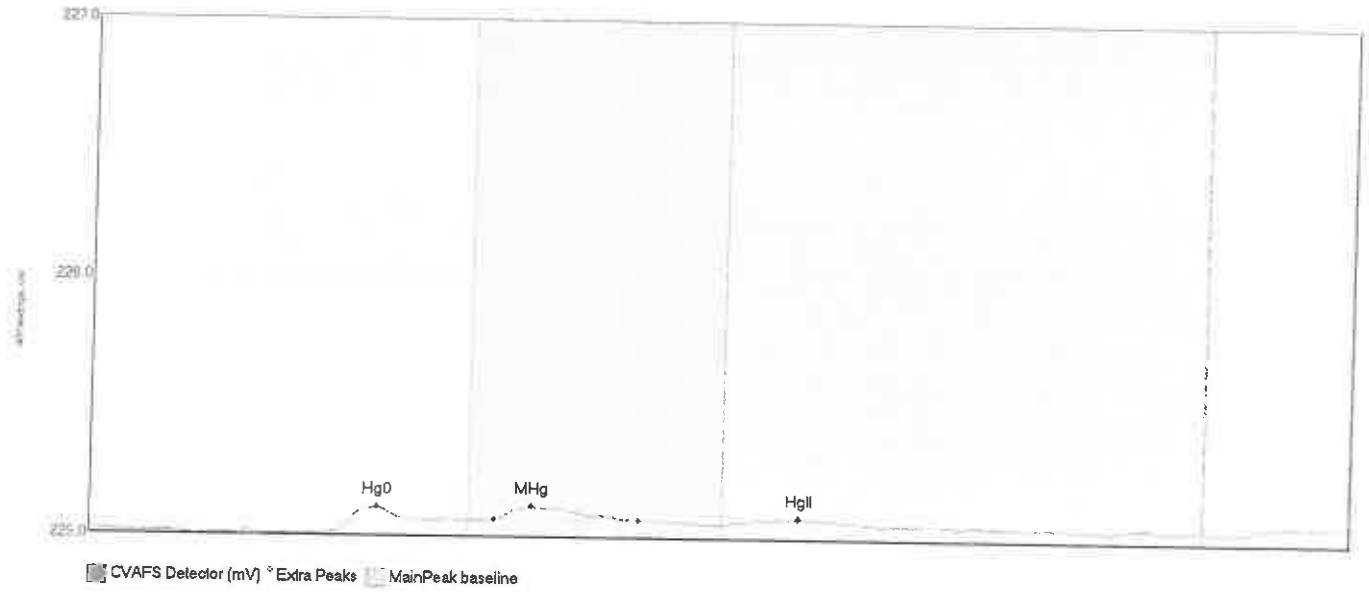
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011324-BLK1 Hg	11.486	48.2	67.3	225.03	225.09	55.5	0.149	OK	225.0433	0.00	0.04	F011324
F011324-BLK1 MH	3.837	80.4	99.6	225.10	225.10	89.4	0.040	OK	225.0433	0.00	0.04	F011324
F011324-BLK1 Hg	2.739	127.6	148.1	225.08	225.08	134.3	0.027	OK	225.0433	0.00	0.04	F011324

#71: F011324-BLK2



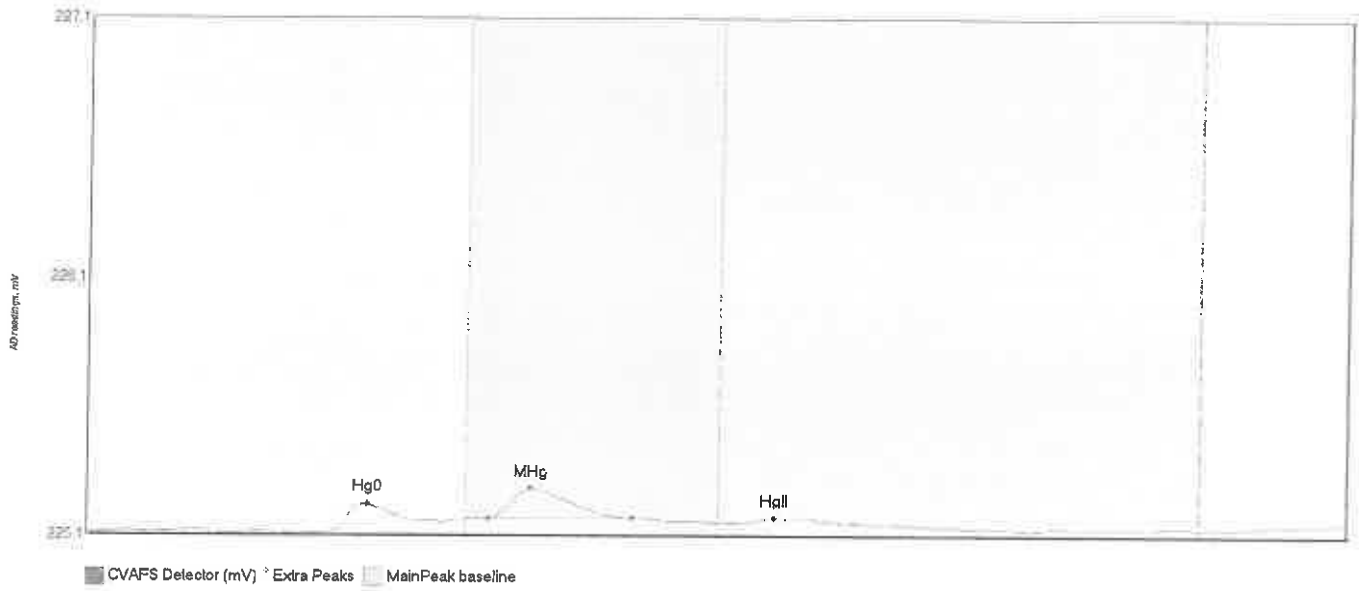
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011324-BLK2 Hg	12.497	49.0	73.9	225.06	225.10	55.5	0.133	OK	225.0505	0.00	0.04	F011324
F011324-BLK2 MH	4.533	80.7	104.8	225.10	225.10	88.5	0.034	OK	225.0505	0.00	0.04	F011324
F011324-BLK2 Hg	1.512	129.0	147.7	225.09	225.09	137.8	0.017	OK	225.0505	0.00	0.04	F011324

#72: F011324-BLK3



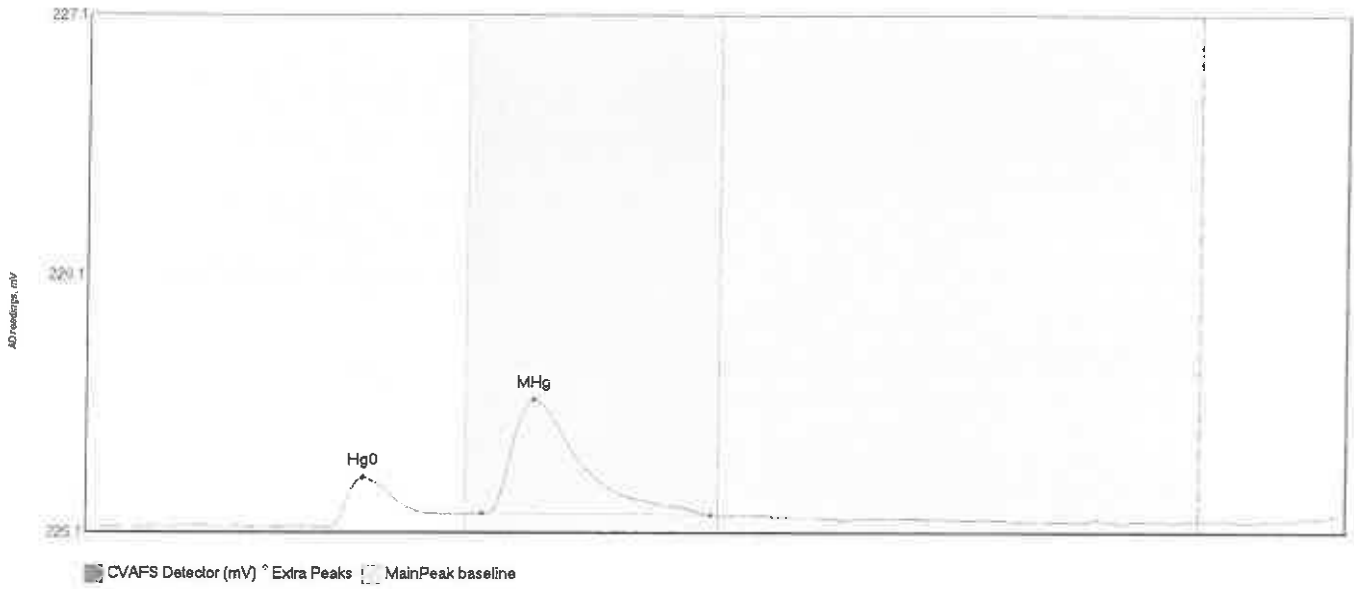
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RTDev	RTMin	Comment
F011324-BLK3 Hg	6.993	48.4	65.6	225.06	225.11	56.8	0.099	OK	225.0685	0.00	0.00	F011324
F011324-BLK3 MH	7.215	80.1	108.6	225.12	225.11	87.4	0.049	OK	225.0685	0.00	0.00	F011324
F011324-BLK3 Hg	2.410	128.5	149.7	225.11	225.11	140.2	0.017	OK	225.0685	0.00	0.00	F011324

#78: QJ00147-01



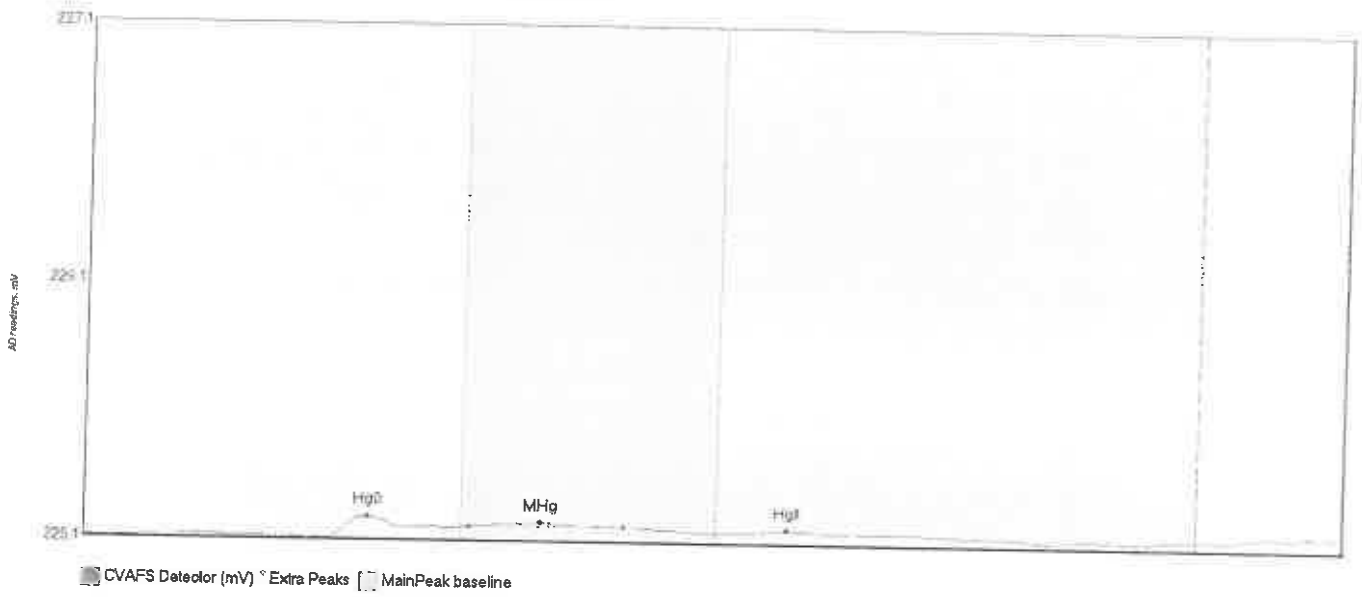
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Width	BiShift	Comment
QJ00147-01 Hg0	9.295	48.0	69.9	225.08	225.12	55.5	0.109	OK	225.0811	0.04	0.04	F011324
QJ00147-01 MHg	15.000	79.5	108.0	225.13	225.14	87.8	0.118	OK	225.0811	0.04	0.04	F011324
QJ00147-01 HgII	1.832	130.5	145.9	225.12	225.12	135.9	0.021	OK	225.0811	0.04	0.04	F011324

#74: SEQ-CCV5



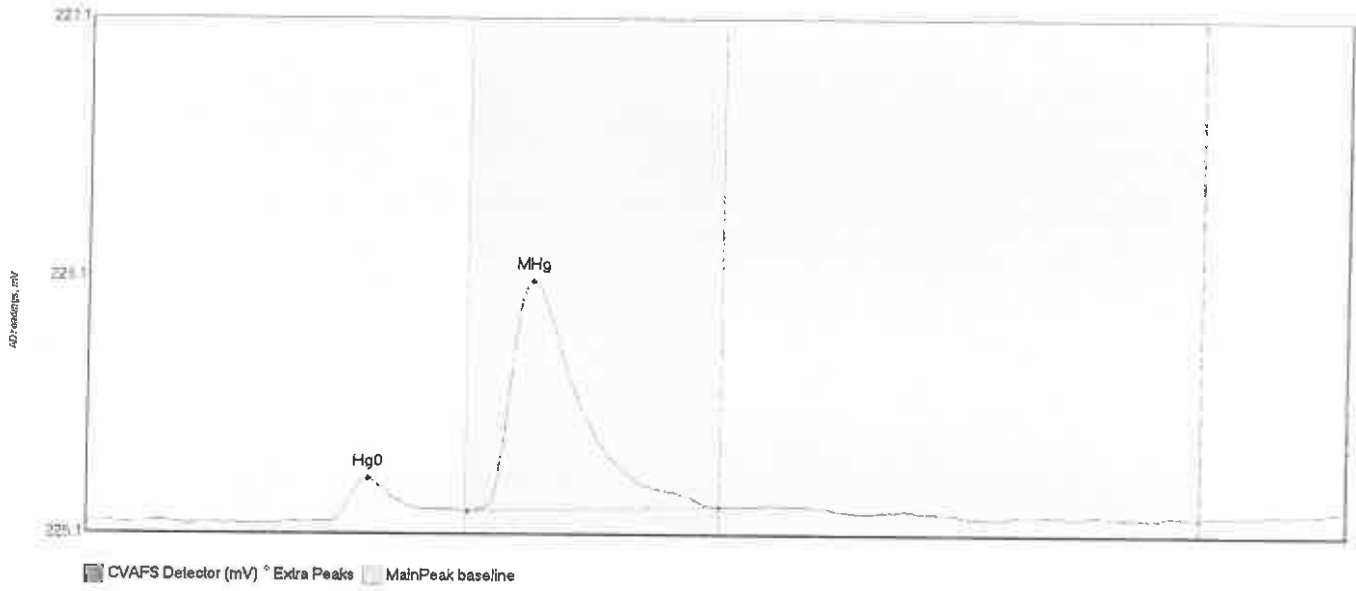
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CCV5 Hg0	17.904	48.4	72.6	225.09	225.14	54.9	0.193	OK	225.0895	0.00	0.05	
SEQ-CCV5 MHg	68.821	78.2	123.6	225.14	225.13	88.2	0.441	OK	225.0895	0.00	0.05	

#75: SEQ-CCBS



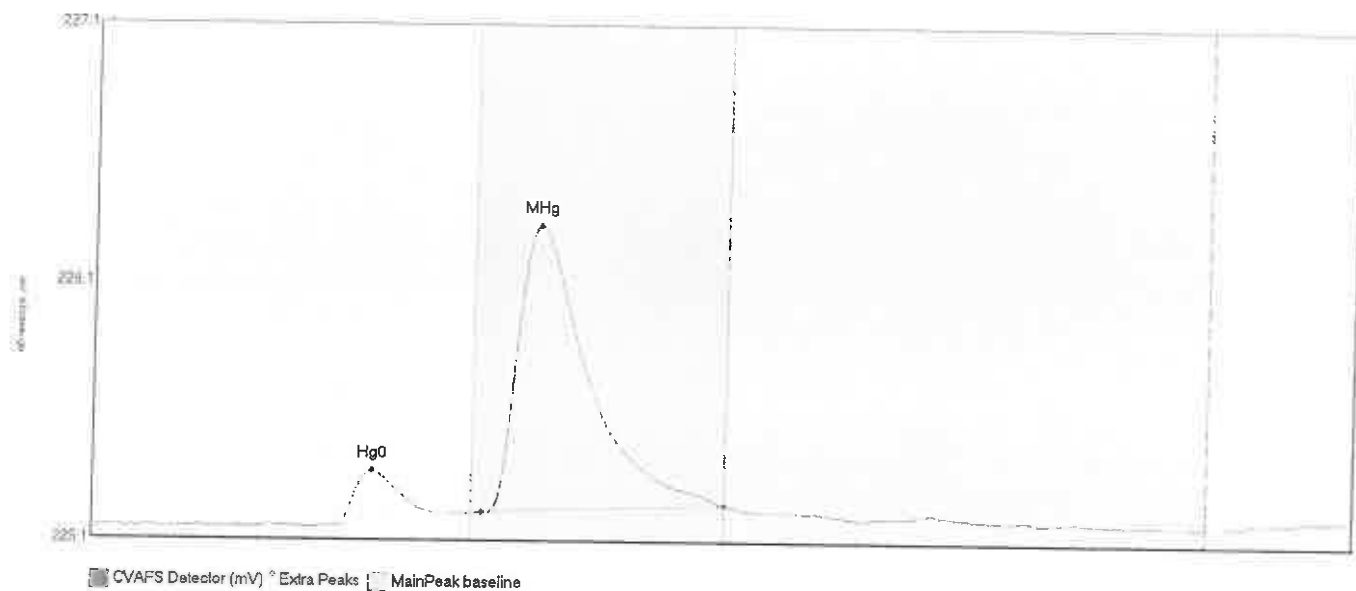
Peak	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	WLevel	BlShift	Comment
Hg0	5.417	48.2	64.0	225.08	225.12	56.3	0.083	OK	225.0840	0.20	0.05	
MHg	2.676	76.4	106.8	225.13	225.14	90.5	0.019	OK	225.0840	0.20	0.05	
HgII	0.846	132.6	145.4	225.12	225.12	139.1	0.011	OK	225.0840	0.20	0.05	

#76: F011324-MS1



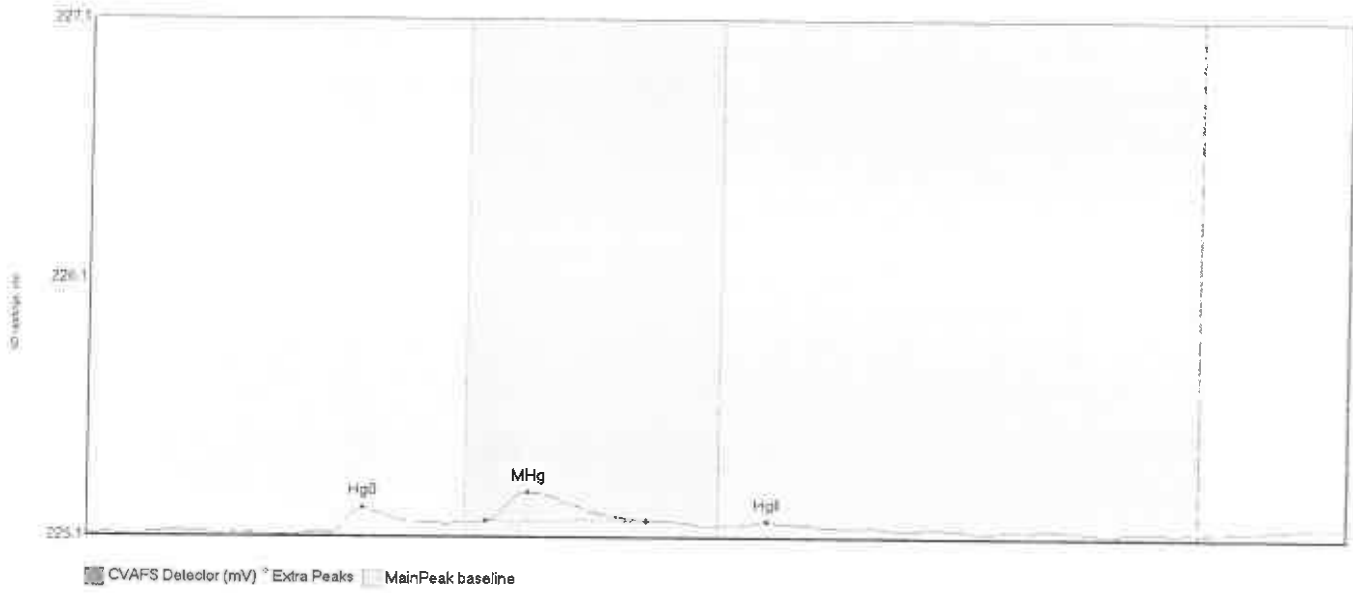
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011324-MS1 Hg0	14.726	44.5	74.5	225.11	225.15	55.7	0.166	OK	225.1079	0.00	0.05	F011324
F011324-MS1 MHg	138.921	75.5	125.0	225.15	225.17	88.1	0.894	CT	225.1079	0.00	0.05	F011324

#77: F011324-MSD1



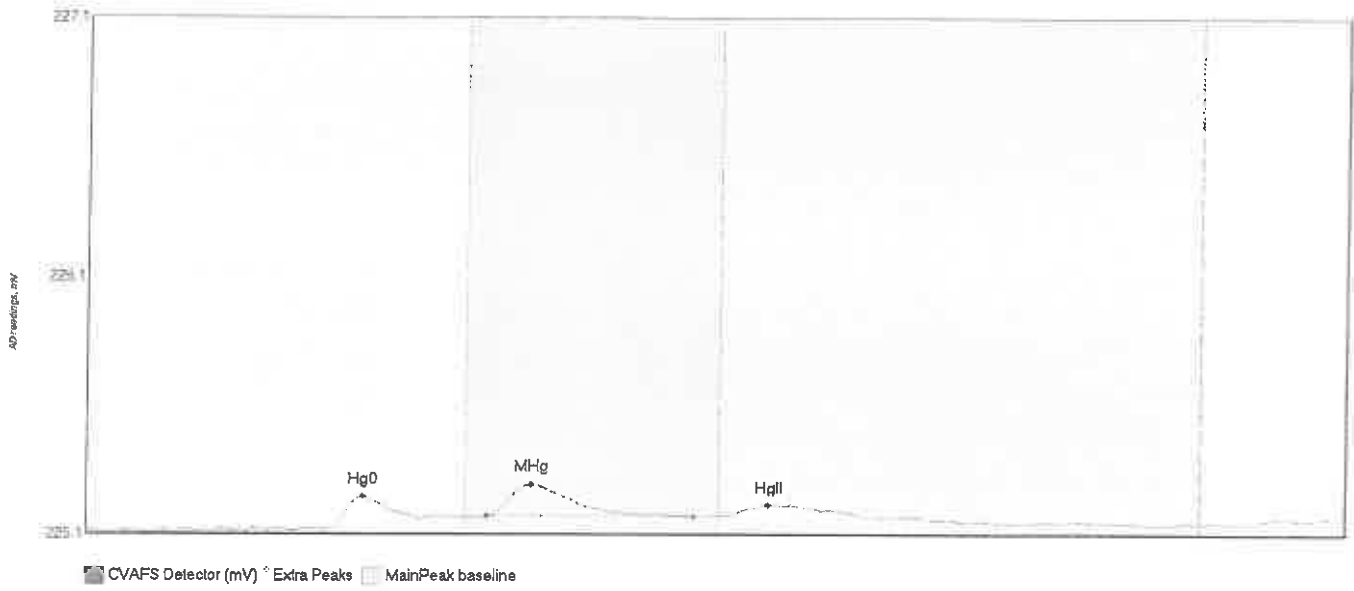
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011324-MSD1 Hg	18.726	48.1	69.1	225.14	225.18	55.3	0.212	OK	225.1332	0.00	0.05	F011324
F011324-MSD1 MH	178.044	77.0	125.0	225.19	225.22	87.9	1.111	CT	225.1332	0.00	0.05	F011324

#78: QJ00147-03



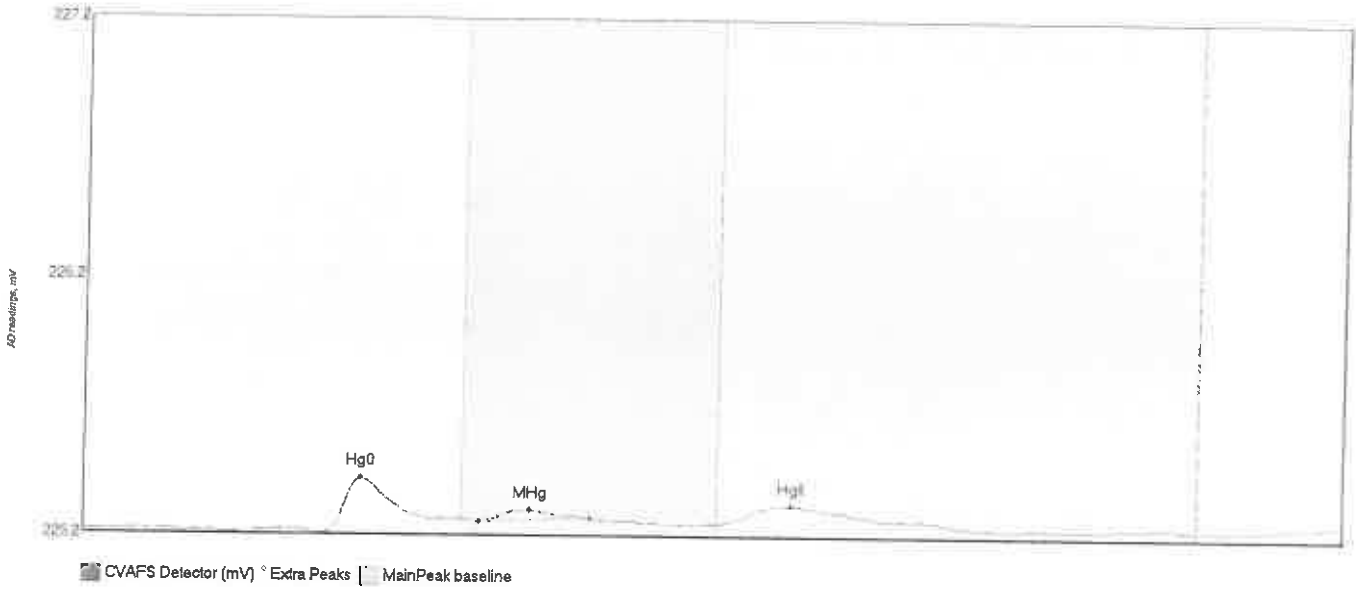
Peak	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
2000147-03 Hg0	8.403	41.1	71.4	225.14	225.19	54.8	0.105	OK	225.1456	0.00	0.04	F011324
2000147-03 MHg	16.614	79.1	111.0	225.20	225.20	87.5	0.111	OK	225.1456	0.00	0.04	F011324
2000147-03 HgI	0.563	130.3	141.1	225.19	225.19	134.8	0.011	OK	225.1456	0.00	0.04	F011324

#79: 0J00147-04



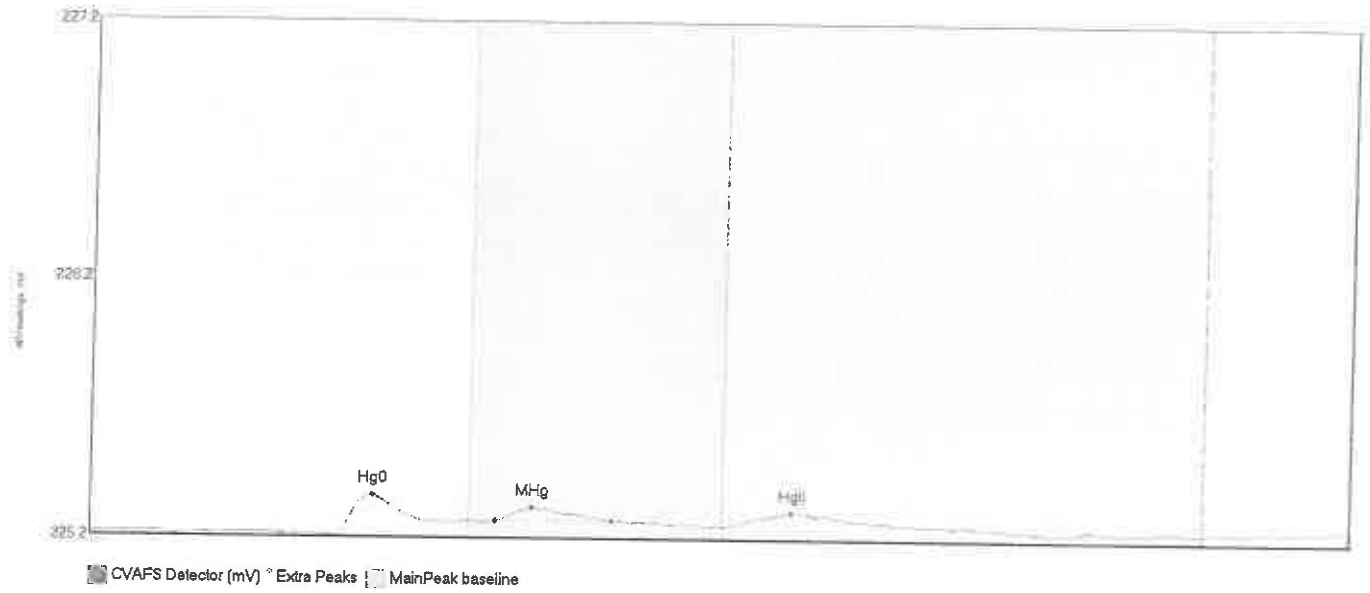
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00147-04 Hg0	9.668	47.0	66.0	225.16	225.20	54.9	0.129	OK	225.1585	0.00	0.05	
0J00147-04 MHg	17.531	79.2	120.1	225.21	225.21	87.9	0.122	OK	225.1585	0.00	0.05	
0J00147-04 HgII	7.226	126.5	153.7	225.22	225.21	134.9	0.042	OK	225.1585	0.00	0.05	

#80: QJ00147-07



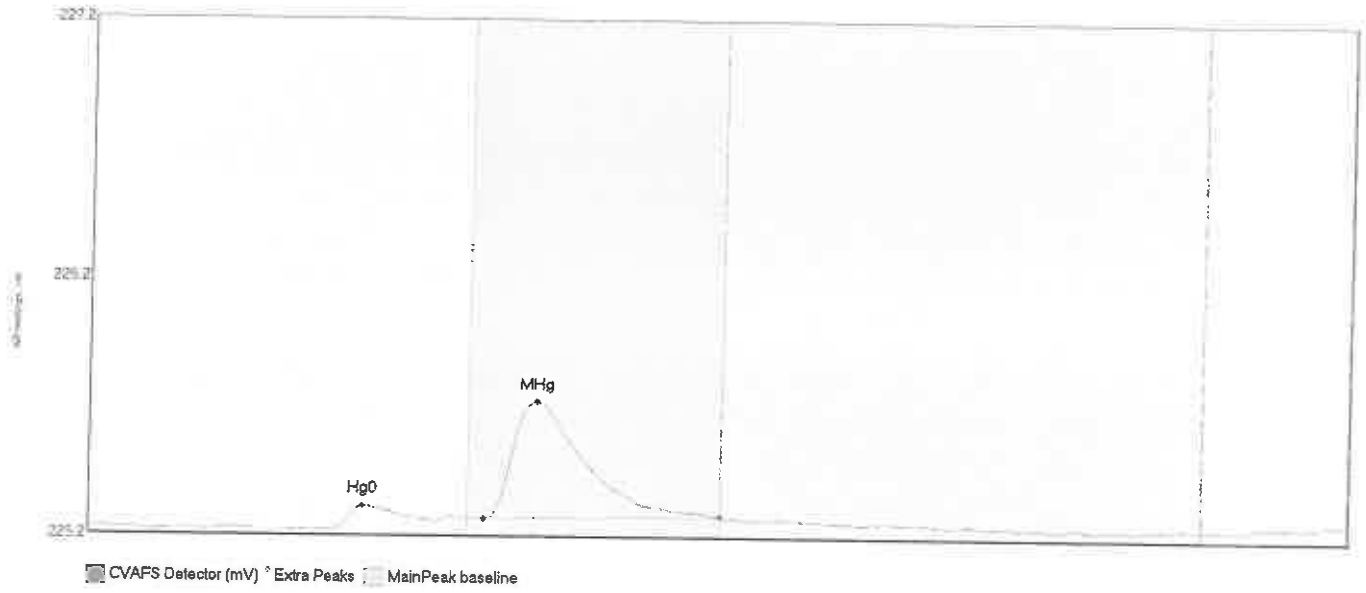
Time	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
47.6	19.761	47.6	73.3	225.18	225.23	54.8	0.214	OK	225.1847	0.00	0.04	F011324
78.6	4.484	78.6	100.1	225.22	225.24	88.4	0.045	OK	225.1847	0.00	0.04	F011324
125.6	14.715	125.6	169.7	225.22	225.22	139.7	0.072	OK	225.1847	0.00	0.04	F011324

#81: 0J00147-08



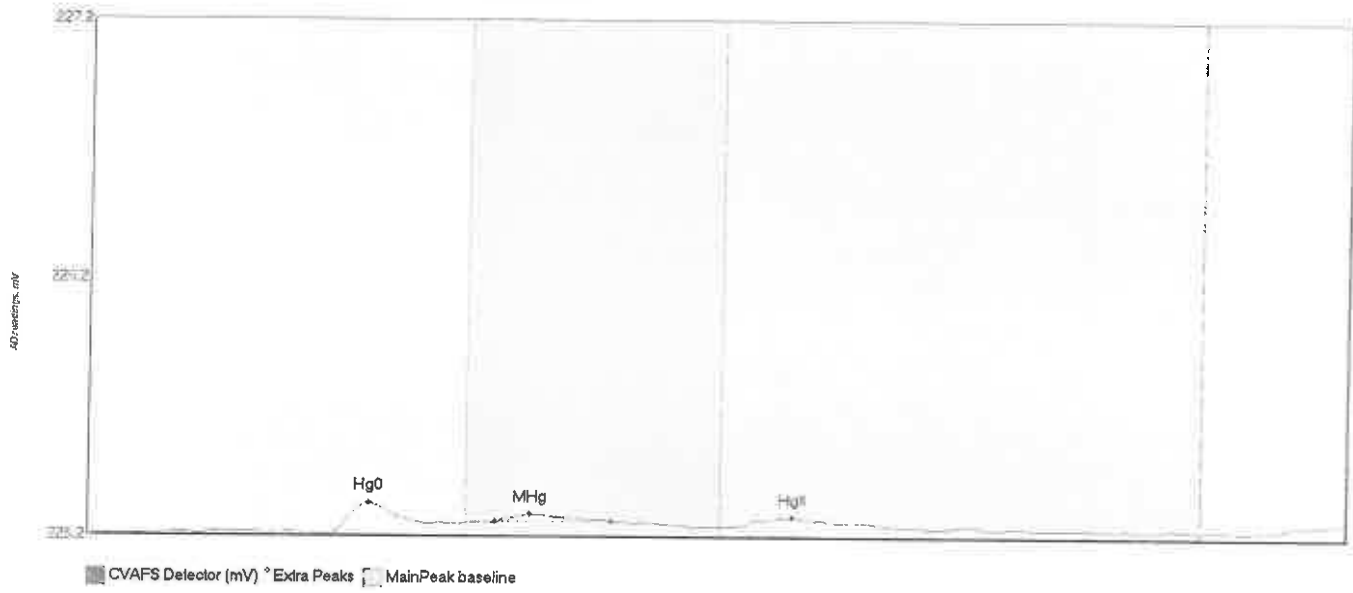
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00147-08 Hg0	14.034	48.2	71.3	225.17	225.23	55.8	0.159	OK	225.1818	0.00	0.04	F011324
0J00147-08 MHg	5.924	80.1	103.3	225.24	225.24	87.4	0.049	OK	225.1818	0.00	0.04	F011324
0J00147-08 HgII	9.787	125.2	163.9	225.22	225.22	138.6	0.054	OK	225.1818	0.00	0.04	F011324

#82: 0J00151-02RE1



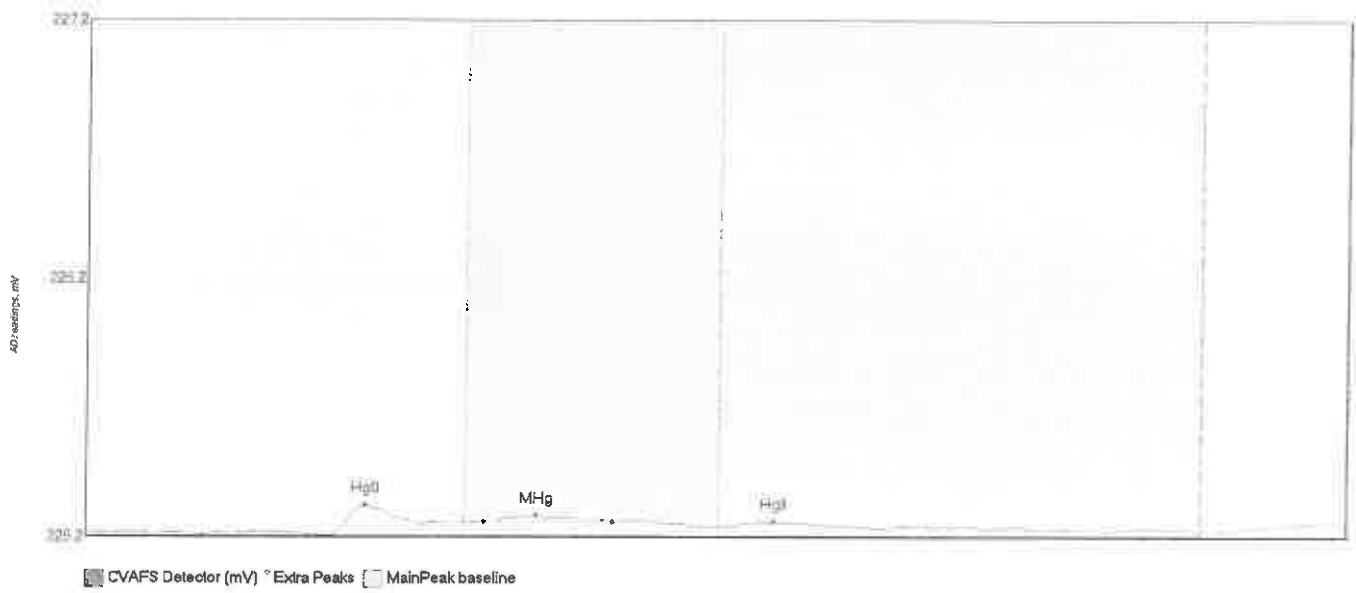
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0J00151-02RE1 H	7.757	47.1	68.8	225.19	225.23	54.3	0.096	OK	225.2020	0.00	0.04	F011324
0J00151-02RE1 H	73.383	78.3	121.9	225.24	225.25	88.4	0.454	OK	225.2020	0.00	0.04	F011324

#83: OK00025-01



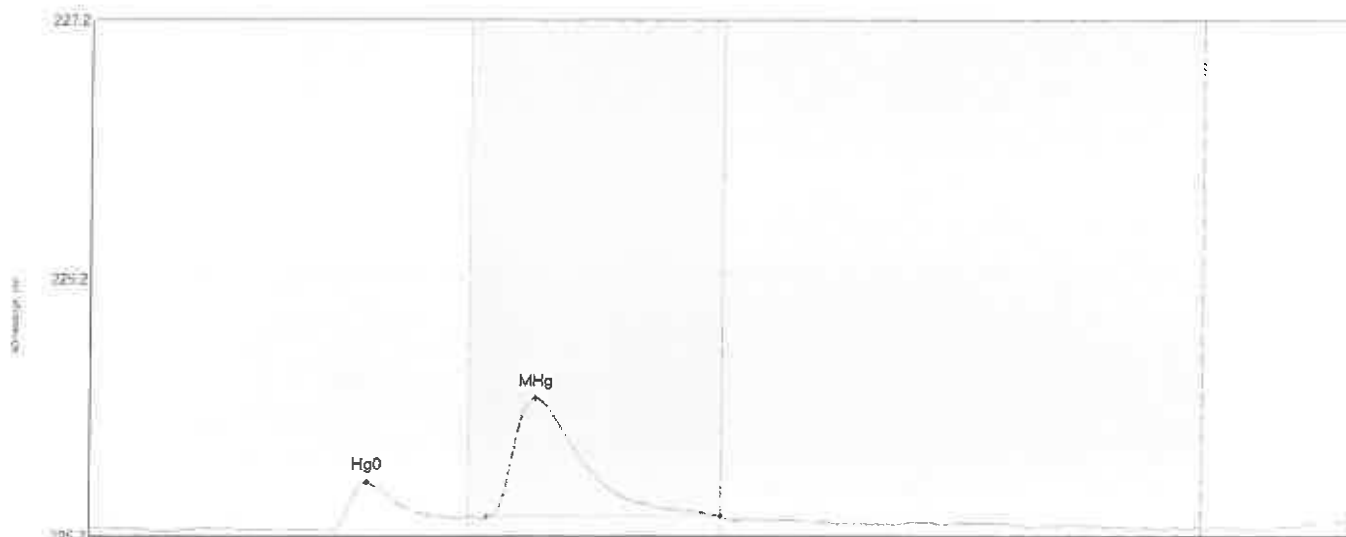
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
OK00025-01 Hg0	11.155	48.1	73.3	225.20	225.24	55.8	0.121	OK	225.2056	0.00	0.04	F011324
OK00025-01 MHg	3.511	80.8	103.7	225.25	225.25	87.6	0.029	OK	225.2056	0.00	0.04	F011324
OK00025-01 HgII	5.797	127.4	157.7	225.24	225.24	139.3	0.035	OK	225.2056	0.00	0.04	F011324

#84: OK00068-04



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
OK00068-04 Hg0	9.096	47.8	66.6	225.21	225.26	55.2	0.116	OK	225.2226	0.00	0.04	F011324
OK00068-04 MHg	3.311	78.8	104.1	225.27	225.27	89.1	0.025	OK	225.2226	0.00	0.04	F011324
OK00068-04 HgII	1.594	127.4	143.8	225.25	225.25	135.9	0.017	OK	225.2226	0.00	0.04	F011324

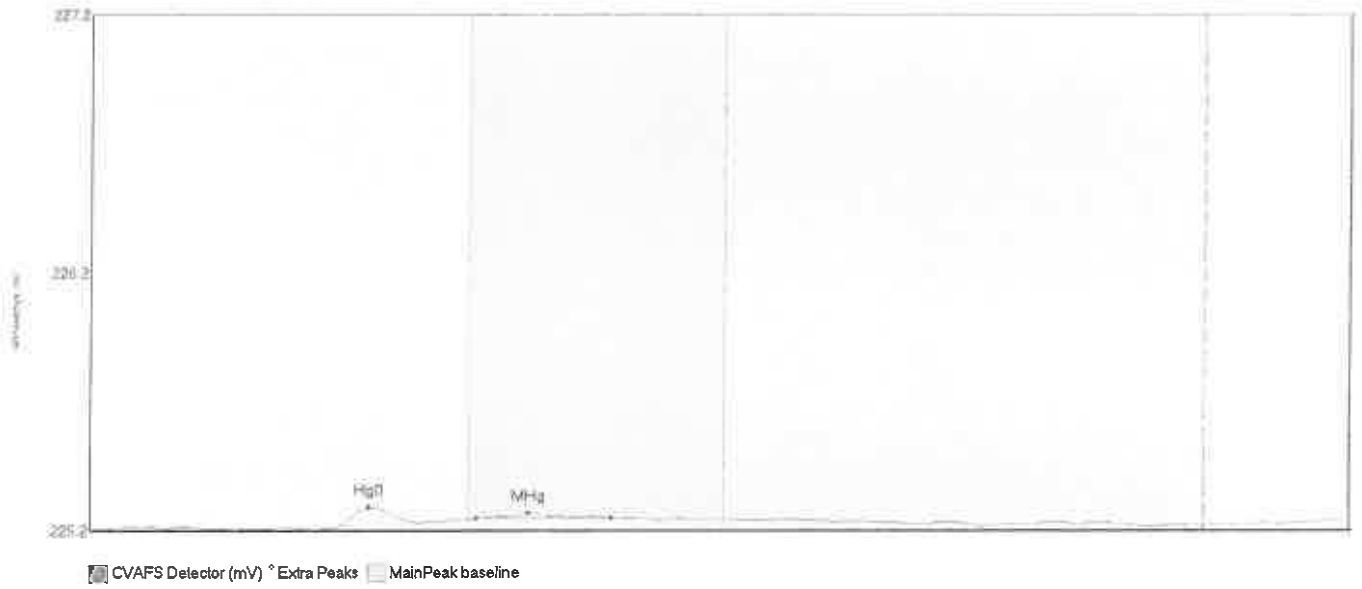
#85: SEQ-CCV6



■ CVAFS Detector (mV) ° Extra Peaks | □ MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CCV6 Hg0	17.378	47.0	73.5	225.19	225.24	55.0	0.190	OK	225.1994	0.00	0.02	
SEQ-CCV6 MHg	71.228	78.5	125.0	225.24	225.25	88.1	0.461	CT	225.1994	0.00	0.02	

#86: SEQ-CC86



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CC86 Hg0	6.398	47.7	65.2	225.18	225.20	55.3	0.082	OK	225.1789	0.00	0.03	
SEQ-CC86 MHg	2.134	76.7	102.9	225.22	225.22	86.7	0.019	OK	225.1789	0.00	0.03	

ANALYTICAL REPORT

Job Number: 570-42546-1

Job Description: 0J00143

For:

Eurofins Frontier Global Sciences LLC
5755 8th Street E
Tacoma, WA 98424

Attention: Mr. Patrick Garcia-Strickland



Approved for release.
Ritu Sedha
Project Manager I
11/9/2020 2:50 PM

Designee for
Carla Hollowell, Project Manager I
7440 Lincoln Way, Garden Grove, CA, 92841
(714)895-5494
Carla.Hollowell@eurofinset.com
11/09/2020

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

/01234ȷ!8139#:7!34127#;0!"<0#=>123>29#?/?/
@7!A2>4B=142&#)).+C

!"#\$%&#'()*+, '+-.*.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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!/?	!34<139#:722#?1P61E
!/:Q	!0!3K#:!7H13!#Q314
!/:R:	!34<139#R!#:722#?1P61E
%5N	%6J01><42#577!7#N<41!#S3!7H<01T2E#<"82723#E1
%10#:<>	%10641!3#:<>4!7
%?	%242>41!3#?1H14#S%!%B%V5U
W#NXW#N5W#SSE	1><429#<#%10641!3W#N2*<3<0K919W#N2*2Y47<>41!3W#!7#<EE141!3<0#\$3141<0#H24<09B<31!3#<3<0K919#!8#4F2#9<HJ02
%?/	%2>191!3#?2O20#/#3>2347<41!3#SN<E1!>F2H1947KU
5%?	5941H<42E#%242>41!3#?1H14#S%1!Y13U
?V%	?1H14#18#%242>41!3#S%!%B%V5U
?VZ	?1H14#18#Z6<3414<41!3#S%!%B%V5U
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[%?	[24F!E#%242>41!3#?1H14
[?	[131H6H#?2O20#S%1!Y13U
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[Z?	[24F!E#Z6<3414<41!3#?1H14
R/	R!4#/#<0>60<42E
R%	R!4#%242>42E#<4#4F2#72J!7413I#01H!#7357#18#9F!L3U
R5;	R2!<41O2#B#X"9234
@V=	@!9141O2#B#@729234
@Z?	@7<>41><0#Z6<3414<41!3#?1H14
@N5=	@7296HJ41O2
Z/	Z6<014K#!347!0
N5N	N20<41O2#577!7#N<41!#SN<E1!>F2H1947KU
N?	N2J!7413I#?1H14#17#N2P62942E#?1H14#SN<E1!>F2H1947KU
N@%	N20<41O2#@27>2347#Z6<3414<41!3#?1H14>2W#<#H2<9672#18#4F2#729604#19#72J!742E#I3#<#E7K#L21F4#"<919
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\RV	\!#R6H27!69 #!#/#634

CASE NARRATIVE

Client: Eurofins Frontier Global Sciences LLC

Project: 0J00143

Report Number: 570-42546-1

!#\$%&#\$(%)&*"+\$"#\$(?!\$,-).\$&(\$!/%'0**(-)\$'0-)*1\$2!)"\$(34\$*!\$&(-.&3**\$)'3&*5\$*-\$*!#"#)'0-)*1\$.*!-5\$#0%" ,"%\$0'),-).&(%\$

<*\$#!-.35\$=\$(-*'5\$*!&*#&.03#\$2**!'3'+&*5\$>'0-)**(?@\$".**#\$A>@#B\$)'#3**(\$,-).&\$5\$'3:***(-\$.&4\$(-*\$=\$&=3'\$*-\$#&*#4,4%#*-.!)\$

9&3%:3&*#-(\$&)'\$0'),-.'5\$=,-)'\$:-.(5"(\$*\$-&+-\$5\$):-.(5E - ,,\$!))-\$#"\$(\$%&3%:3&*5\$)'#3*#

833\$!-35"(\$*\$".'#2)'\$.'*\$&(5\$0-0)'\$0)#'+&*#-(\$(-*'5\$,-)'\$*!.'*!-5#0\$0'),-.'5\$-(\$*!#'\$#&.03#1\$:(3###\$-*!)2"#5*\$&"3'5\$"(\$*!\$

RECEIPT

!#\$&.03#\$2)'\$)'%"'+5\$-(\$FG6HG6IGIG\$&*FGJIK\$8LM\$*!'#\$&.03#\$&))"+5\$"(\$--5%-(-5**-(1\$0-0')34\$0)#'+5\$&(5\$-(\$%';\$\$\$!\$

P-*\$J833\$#&.03#\$2!%"!'D:")'(\$*!).&3\$0)#'+&*#-(\$&)'\$%-("5')5\$&%%'0*&=3'\$,\$*!\$&))"+&3\$*'.0)'&*:)'\$"#2**!"(\$!\$5?)"#9'3#:#\$-\$

SEDIMENT CONCENTRATION

C&.03#\$GWGGFRHEGF\$AKXGERIKRUEFB1\$GWGGFRHEGH\$AKXGERIKRUEIB1\$GWGGFRHEGK\$AKXGERIKRUEHB1\$GWGGFRHEGX

P-\$&(&34**%&3\$-\$D:&3**4\$"#:#2)'\$(-*'51\$-\$*!)\$*!&(\$*!-#5\$#%)"=\$5\$&=-+\$-\$)"(\$*!'Y',"**-(#6[3-##&]4\$0&?';

Detection Summary

/01234ȷ!8139#:7!34127#;0!"<0#=>123>29#??/
@7!A2>4B=142&#)).+C

!"#\$%&#'()*+, '+-.*

Client Sample ID: 0J00143-01

Lab Sample ID: 570-42546-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
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Client Sample ID: 0J00143-03

Lab Sample ID: 570-42546-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
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Client Sample ID: 0J00143-05

Lab Sample ID: 570-42546-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
=2D1E234#/!3>2347<41!3#FEGB?H	.!+		)IN((	EGB?	.		%CJ((	K4<0BLM

Client Sample ID: 0J00143-07

Lab Sample ID: 570-42546-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
=2D1E234#/!3>2347<41!3#FEGB?H	.(IN		)IN('	EGB?	.		%CJ((	K4<0BLM

Client Sample ID: 0J00143-09

Lab Sample ID: 570-42546-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
=2D1E234#/!3>2347<41!3#FEGB?H	.NIC		)IN(+	EGB?	.		%CJ((	K4<0BLM

Client Sample ID: 0J00143-11

Lab Sample ID: 570-42546-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
=2D1E234#/!3>2347<41!3#FEGB?H	.JI'		)IN(.	EGB?	.		%CJ((	K4<0BLM

Client Sample Results

/01234ȷ!8139#:7!34127#;0!"<0#=>123>29#?/?/
@7!A2>4B=142&#)).+C

!"#\$%&#'() * + , ' + - * .

General Chemistry

Client Sample ID: 0J00143-01
Date Collected: 10/28/20 09:45
Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-1
Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	7.58		)DE,	FGB?			..B)+B,)#)H&'H	.

Client Sample ID: 0J00143-03
Date Collected: 10/28/20 10:35
Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-2
Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	10.2		)DHH.	FGB?			..B)+B,)#)H&'H	.

Client Sample ID: 0J00143-05
Date Collected: 10/28/20 11:35
Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-3
Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	15.4		)DH((	FGB?			..B)+B,)#)H&'H	.

Client Sample ID: 0J00143-07
Date Collected: 10/28/20 12:35
Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-4
Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	17.8		)DH('	FGB?			..B)+B,)#)H&'H	.

Client Sample ID: 0J00143-09
Date Collected: 10/28/20 13:30
Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-5
Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	18.3		)DH(+	FGB?			..B)+B,)#)H&'H	.

Client Sample ID: 0J00143-11
Date Collected: 10/28/20 14:20
Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-6
Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	19.5		)DH(.	FGB?			..B)+B,)#)H&'H	.

Default Detection Limits

!"#\$%&'()*+,-./:;@<=>?
@*+A#3%B2"%#&':5::?<C

5+0'67&'89;:<=8<>?</p></div>

General Chemistry

Analyte	RL	Units
2#E"F#\$%' +\$3#\$\$*1%"+'\$GFHB4I	?D::	?D:: FHB4

QC Sample Results

/01234ȷ!8139#:7!34127#;0!"<0#=>123>29#??/
@7!A2>4B=142&#)).+C

!"#\$%&#'()*+, '+-*

Method: D3977 - Sediment Concentration in Water Samples

Lab Sample ID: MB 570-106893/1
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
=2D1E234#/!3>2347<41!3#FEGB?H	ND		1.00	EGB?			1/04/20 08:58	.

Lab Sample ID: LCS 570-106893/2
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
=2D1E234#/!3>2347<41!3#FEGB?H	.))	98.01		EGB?		98	95 *.)'

Lab Sample ID: LCSD 570-106893/3
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
=2D1E234#/!3>2347<41!3#FEGB?H	.))	100.0		EGB?		.))	95 *.)'	,	,)

Lab Sample ID: 570-42632-A-1 DU
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
=2D1E234#/!3>2347<41!3#FEGB?H	1.15		1.157		EGB?		0.5	,)

QC Association Summary

/01234ȷ!8139#:7!34127#;0!"<0#=>123>29#?/?/
@7!A2>4B=142&#)).+C

!"#\$%&#'()*+, '-.*

General Chemistry

Analysis Batch: 106893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
'()*+, '-.*	)))+C*).	F4<0BGH	D <427	%CE((
'()*+, '-.*	)))+C*)C	F4<0BGH	D <427	%CE((
'()*+, '-.*C	)))+C*)'	F4<0BGH	D <427	%CE((
'()*+, '-.*+	)))+C*)('	F4<0BGH	D <427	%CE((
'()*+, '-.*'	)))+C*)E	F4<0BGH	D <427	%CE((
'()*+, '-.*-	)))+C* ..	F4<0BGH	D <427	%CE((
IJ#()*-).KECB.	I24L!M#J0<3N	F4<0BGH	D <427	%CE((
?/=#()*-).KECB,	?<"#!347!0#=<OP02	F4<0BGH	D <427	%CE((
?/=%#()*-).KECBC	?<"#!347!0#=<OP02#%6P	F4<0BGH	D <427	%CE((
'()*+, -C, *H*.#%Q	%6P01><42	F4<0BGH	D <427	%CE((

Lab Chronicle

!#\$%&'()*+,-.*/:;<=>?@A#3%B2"%#&'!5:~?<C

5+0'67&'89;:<=8<>?;

Client Sample ID: 0J00143-01

Lab Sample ID: 570-42546-1

Date Collected: 10/28/20 09:45

Matrix: Water

Date Received: 10/30/20 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
J+%1!BHD	D\$1!E~	7CF99		?	??!K?8'L	?::L	?:>IFC	??B:<B=:!&8I	G46H	(4'?
6\$-%*)M#\$\$%'678N(OG6@										

Client Sample ID: 0J00143-03

Lab Sample ID: 570-42546-2

Date Collected: 10/28/20 10:35

Matrix: Water

Date Received: 10/30/20 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
J+%1!BHD	D\$1!E~	7CF99		?	??C8K?9'L	?::L	?:>IFC	??B:<B=:!&8I	G46H	(4'?
6\$-%*)M#\$\$%'678N(OG6@										

Client Sample ID: 0J00143-05

Lab Sample ID: 570-42546-3

Date Collected: 10/28/20 11:35

Matrix: Water

Date Received: 10/30/20 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
J+%1!BHD	D\$1!E~	7CF99		?	??<K<<'L	?::L	?:>IFC	??B:<B=:!&8I	G46H	(4'?
6\$-%*)M#\$\$%'678N(OG6@										

Client Sample ID: 0J00143-07

Lab Sample ID: 570-42546-4

Date Collected: 10/28/20 12:35

Matrix: Water

Date Received: 10/30/20 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
J+%1!BHD	D\$1!E~	7CF99		?	??<K<<'L	?::L	?:>IFC	??B:<B=:!&8I	G46H	(4'?
6\$-%*)M#\$\$%'678N(OG6@										

Client Sample ID: 0J00143-09

Lab Sample ID: 570-42546-5

Date Collected: 10/28/20 13:30

Matrix: Water

Date Received: 10/30/20 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
J+%1!BHD	D\$1!E~	7CF99		?	??<K=L	?::L	?:>IFC	??B:<B=:!&8I	G46H	(4'?
6\$-%*)M#\$\$%'678N(OG6@										

Client Sample ID: 0J00143-11

Lab Sample ID: 570-42546-6

Date Collected: 10/28/20 14:20

Matrix: Water

Date Received: 10/30/20 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
J+%1!BHD	D\$1!E~	7CF99		?	??<9K<'L	?::L	?:>IFC	??B:<B=:!&8I	G46H	(4'?
6\$-%*)M#\$\$%'678N(OG6@										

Laboratory References:

(4'?'P'()*+,-.*/:;<=>?@A#3%B2"%#&'!5:~?<C R 1EQ/1*S\$/'*+T#Q' DF=I<?Q'J(4'U9?<VIF8;8<F<

)*+,-.*/:;<=>?@A#3%B2"%#&'!5:~?<C

Accreditation/Certification Summary

!#\$%&'()*+,-.*/:;<=>?@
 @*+A#3%B2"%#&':5:?:<C

5+0'67&'89:;<=8<>?;

Laboratory: Eurofins Calscience LLC

D!!'133*#E"%1%"+"\$-B3#*%"", "31%"+"\$-F#E'0G'%F"-!10+*1%+*G'1*#!"-.%#EH"i+%1!!'133*#E"%1%"+"\$-B3#*%"", "31%"+"\$-1*#1JJ!"310!#%+%F"-*#J+*%H

Authority	Program	Identification Number	Expiration Date
1!"+*"\$1	4+-'D\$L#/#- +)\$%G'21\$"%1%"+"\$' 7"-.%**3%-	??:K	:K;C;=?
1!"+*"\$1	2 DMN7'4D@	?94D:K?K	??;C;=:
1!"+*"\$1	2%1%#	=K<<	:K;C;=?
I#O1E1	2%1%#	D:: ???	:9;C?;=?
P*#L+\$	I(4D@	DC:::?	:?;=K;=?
Q27D	Q2'.#E#*1!'@*+L*1R-	@CC;=;:::C<	:;?;=C
S 1-F"\$L%+\$	2%1%#	K?>?T	?; ??;=?

Method Summary

/01234ȷ!8139#:7!34127#;0!"<0#=>123>29#??/
@7!A2>4B=142&#)).+C

!"#\$%&#'()*+, '+-.*

Method	Method Description	Protocol	Laboratory
%CG((	=2H11234#/13>2347<41!3#13#427#=<IK029	D=EF	5/ ?#.

Protocol References:

D=EF#L#D=EF#\$34273<41!3<0

Laboratory References:

5/ ?#.#L#567!8139#/<09>123>2#??/##?13>!03M#(+)#313N108#-7H23#;7!O2N#G,P+.M#E5#Q(.+RPG'+G+

Sample Summary

/01234ȷ!8139#:7!34127#;0!"<0#=>123>29#?/?/
 @7!A2>4B=142&#)).+C

!"#\$%&#'()*+, '-.*

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
'()*+, '-.*	)))+C*).	D <427	.)B,EB,)#)F&+'	.)BC)B,)#.)&,'	
'()*+, '-.*,	)))+C*)C	D <427	.)B,EB,)#.)&C'	.)BC)B,)#.)&,'	
'()*+, '-.*C	)))+C*)'	D <427	.)B,EB,)# . &C'	.)BC)B,)#.)&,'	
'()*+, '-.*+	)))+C*)('	D <427	.)B,EB,)# .&C'	.)BC)B,)#.)&,'	
'()*+, '-.*'	)))+C*)F	D <427	.)B,EB,)# .C&C)	.)BC)B,)#.)&,'	
'()*+, '-.*-	)))+C* ..	D <427	.)B,EB,)# .+&,))	.)BC)B,)#.)&,'	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Calscience Job No.: 570-42546-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WC_TSS_STD_00020	02/08/21	08/08/20	DI Water, Lot 112719	10 L	WC_TSS_STK_00002	1 g	Sediment Concentration (mg/L)	100 mg/L
.WC_TSS_STK_00002	11/04/21		FISHER, Lot 160676		(Purchased Reagent)		Sediment Concentration (mg/L)	1 g/g

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience _____

Job Number: 570-42546-1 _____

SDG No.: _____

Project: 0J00143 _____

Client Sample ID

Lab Sample ID

0J00143-01 _____

570-42546-1 _____

0J00143-03 _____

570-42546-2 _____

0J00143-05 _____

570-42546-3 _____

0J00143-07 _____

570-42546-4 _____

0J00143-09 _____

570-42546-5 _____

0J00143-11 _____

570-42546-6 _____

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: 0J00143-01

Lab Sample ID: 570-42546-1

Lab Name: Eurofins Calscience

Job No.: 570-42546-1

SDG ID.:

Matrix: Water

Date Sampled: 10/28/2020 09:45

Reporting Basis: WET

Date Received: 10/30/2020 10:25

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	7.58	0.902	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: 0J00143-03

Lab Sample ID: 570-42546-2

Lab Name: Eurofins Calscience

Job No.: 570-42546-1

SDG ID.:

Matrix: Water

Date Sampled: 10/28/2020 10:35

Reporting Basis: WET

Date Received: 10/30/2020 10:25

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	10.2	0.881	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: 0J00143-05

Lab Sample ID: 570-42546-3

Lab Name: Eurofins Calscience

Job No.: 570-42546-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 11:35

Reporting Basis: WET

Date Received: 10/30/2020 10:25

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	15.4	0.877	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: 0J00143-07

Lab Sample ID: 570-42546-4

Lab Name: Eurofins Calscience

Job No.: 570-42546-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 12:35

Reporting Basis: WET

Date Received: 10/30/2020 10:25

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	17.8	0.875	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: 0J00143-09

Lab Sample ID: 570-42546-5

Lab Name: Eurofins Calscience

Job No.: 570-42546-1

SDG ID.:

Matrix: Water

Date Sampled: 10/28/2020 13:30

Reporting Basis: WET

Date Received: 10/30/2020 10:25

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	18.3	0.874	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: 0J00143-11

Lab Sample ID: 570-42546-6

Lab Name: Eurofins Calscience

Job No.: 570-42546-1

SDG ID.:

Matrix: Water

Date Sampled: 10/28/2020 14:20

Reporting Basis: WET

Date Received: 10/30/2020 10:25

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	19.5	0.871	mg/L			1	D3977

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience _____

Job No.: 570-42546-1 _____

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 106893 Date: 11/04/2020 08:58							
D3977	MB 570-106893/1	Sediment Concentration (mg/L)	ND		mg/L	1.00	1

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-42546-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 106893 Date: 11/04/2020 08:58								
D3977		570-42632-A-1	Sediment Concentration (mg/L)	1.15	mg/L			
D3977		570-42632-A-1 DU	Sediment Concentration (mg/L)	1.157	mg/L	0.5	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-42546-1
 SDG No.: _____
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 106893 Date: 11/04/2020 08:58											
						LCS Source: WC_TSS_STD_00020					
D3977	LCS 570-106893/2	Sediment Concentration (mg/L)	98.01		mg/L	100	98	95-105	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-42546-1
 SDG No.: _____
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 106893			Date: 11/04/2020 08:58			LCSD Source: WC_TSS_STD_00020					
D3977	LCSD 570-106893/3	Sediment Concentration (mg/L)	100.0		mg/L	100	100	95-105	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job Number: 570-42546-1

SDG Number: _____

Matrix: Water

Instrument ID: NOEQUIP

Method: D3977

RL Date: 03/12/2018 16:31

Analyte	Wavelength/ Mass	RL (mg/L)	
Sediment Concentration (mg/L)		1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job Number: 570-42546-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: D3977 XMDL Date: 04/02/2017 14:13

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sediment Concentration (mg/L)		1	0.889

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-42546-1

SDG No.: _____

Batch Number: 106893 Batch Start Date: 11/04/20 08:58 Batch Analyst: Ng, Lisa

Batch Method: D3977 Batch End Date: 11/05/20 08:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	CrucibleID	SampTare	SampGross	InitialAmount	SedTare	SedGross
MB 570-106893/1		D3977		A1114714	0.0000 g	1000 g	1000 g	0.4112 g	0.4113 g
LCS 570-106893/2		D3977		A1114713	0.0000 g	100 g	100 g	0.4087 g	0.4186 g
LCSD 570-106893/3		D3977		A1114712	0.0000 g	100 g	100 g	0.4118 g	0.4219 g
570-42632-A-1 DU		D3977	T	A1114710	71.25 g	1194.66 g	1123.41 g	0.4105 g	0.4118 g
570-42546-A-1	OJ00143-01	D3977	T	A1114707	69.61 g	1177.76 g	1108.15 g	0.4115 g	0.4200 g
570-42546-A-2	OJ00143-03	D3977	T	A1114706	70.14 g	1205.31 g	1135.17 g	0.4083 g	0.4199 g
570-42546-A-3	OJ00143-05	D3977	T	A1114705	69.52 g	1209.96 g	1140.44 g	0.4128 g	0.4305 g
570-42546-A-4	OJ00143-07	D3977	T	A1114704	69.60 g	1212.04 g	1142.44 g	0.4111 g	0.4315 g
570-42546-A-5	OJ00143-09	D3977	T	A1114703	69.28 g	1213.48 g	1144.2 g	0.4103 g	0.4313 g
570-42546-A-6	OJ00143-11	D3977	T	A1114700	70.04 g	1217.53 g	1147.49 g	0.4112 g	0.4338 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	SedNet	SedGross2	Weight2OK	SedNet2	CalcMsg	FinalAmount
MB 570-106893/1		D3977		0.0001 g	0.4112 g	Pass	0 g	OK	1000 g
LCS 570-106893/2		D3977		0.0099 g	0.4185 g	Pass	0.0098 g	OK	1000 g
LCSD 570-106893/3		D3977		0.0101 g	0.4218 g	Pass	0.01 g	OK	1000 g
570-42632-A-1 DU		D3977	T	0.0013 g	0.4118 g	Pass	0.0013 g	OK	1000 g
570-42546-A-1	OJ00143-01	D3977	T	0.0085 g	0.4199 g	Pass	0.0084 g	OK	1000 g
570-42546-A-2	OJ00143-03	D3977	T	0.0116 g	0.4199 g	Pass	0.0116 g	OK	1000 g
570-42546-A-3	OJ00143-05	D3977	T	0.0177 g	0.4304 g	Pass	0.0176 g	OK	1000 g
570-42546-A-4	OJ00143-07	D3977	T	0.0204 g	0.4314 g	Pass	0.0203 g	OK	1000 g
570-42546-A-5	OJ00143-09	D3977	T	0.021 g	0.4312 g	Pass	0.0209 g	OK	1000 g
570-42546-A-6	OJ00143-11	D3977	T	0.0226 g	0.4336 g	Pass	0.0224 g	OK	1000 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC_TSS_STD 00020					
MB 570-106893/1		D3977							
LCS 570-106893/2		D3977		100 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-42546-1

SDG No.: _____

Batch Number: 106893 Batch Start Date: 11/04/20 08:58 Batch Analyst: Ng, Lisa

Batch Method: D3977 Batch End Date: 11/05/20 08:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC_TSS_STD 00020					
LCSD 570-106893/3		D3977		100 mL					
570-42632-A-1 DU		D3977	T						
570-42546-A-1	0J00143-01	D3977	T						
570-42546-A-2	0J00143-03	D3977	T						
570-42546-A-3	0J00143-05	D3977	T						
570-42546-A-4	0J00143-07	D3977	T						
570-42546-A-5	0J00143-09	D3977	T						
570-42546-A-6	0J00143-11	D3977	T						

Batch Notes	
Nominal Amount Used	1000 g
Perform Calculation (0=No, 1=Yes)	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

General Chemistry Raw Data Report

!"#\$%&#'() * + , ' + - * .

Batch: 106893
Method: D3977
Building :ECL1 (Lincoln)

Analyst Initials: ULIN
Instrument: NONE

Lab Sample ID: MB 570-106893/1

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	)	3;<=	.)))###;	.)))###;

Lab Sample ID: LCS 570-106893/2

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	@AB))'@(+)','+.	3;<=	.)###;	.)))###;

Lab Sample ID: LCSD 570-106893/3

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	.)A)))-,CB-@)B	3;<=	.)###;	.)))###;

Lab Sample ID: 570-42632-A-1 DU

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	.AC)))@C'()'C(	3;<=	..CA+ .##;	.)))###;

Lab Sample ID: 570-42546-A-1

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	BA)))C@-'',...B	3;<=	.)BA'.##;	.)))###;

Lab Sample ID: 570-42546-A-2

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	..A-)))(C(C)-(+	3;<=	..C'A.(##;	.)))###;

Lab Sample ID: 570-42546-A-3

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	.(A-))-B@+'B.B(	3;<=	..+)A++###;	.)))###;

Lab Sample ID: 570-42546-A-4

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	.)AC)),,+C-+C'++	3;<=	..+,A++###;	.)))###;

Lab Sample ID: 570-42546-A-5

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	.)A@)),C+'('C.	3;<=	..++A,##;	.)))###;

Lab Sample ID: 570-42546-A-6

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
/0123045#6!470458952!4#:#3;<=>	?!40	.	.,A+)),.(@BC-+,.	3;<=	..+(A+@##;	.)))###;

BALANCE CALIBRATION CHECK LOG

Eurofins Calscience

Date performed: 1/15/20 Initials: SLC

ID	Class 2 Weight (g)	Reading (g)	Acceptance Range	Pass? (circle one)	Comment (If not passed, note removal or corrective action)
83	1	1.00	0.98 - 1.02	<input checked="" type="radio"/> N	IO Lab
	100	99.98	98.00 - 102.00	<input checked="" type="radio"/> N	
62	0.002	0.0019	0.0015 - 0.0025	<input checked="" type="radio"/> N	IO Lab
	1	0.9995	0.9990 - 1.0010	<input checked="" type="radio"/> N	
	100	100.0076	99.9000 - 100.1000	<input checked="" type="radio"/> N	
11	1	0.99	0.98 - 1.02	<input checked="" type="radio"/> N	IO Lab
	100	99.99	98.00 - 102.00	<input checked="" type="radio"/> N	
55	1	1.00	0.98 - 1.02	<input checked="" type="radio"/> N	IO Lab
	100	99.99	98.00 - 102.00	<input checked="" type="radio"/> N	
	500	499.95	490.00 - 510.00	<input checked="" type="radio"/> N	
86	1	1.00	0.98 - 1.02	<input checked="" type="radio"/> N	IO Lab
	100	100.00	98.00 - 102.00	<input checked="" type="radio"/> N	
	500	499.99	490.00 - 510.00	<input checked="" type="radio"/> N	
71	0.002	0.0019	0.0015 - 0.0025	<input checked="" type="radio"/> N	BOD Room
	1	0.9991	0.9990 - 1.0010	<input checked="" type="radio"/> N	
	100	99.9910	99.9000 - 100.1000	<input checked="" type="radio"/> N	
63	0.1	/	0.08 - 0.12	Y N	BOD Room
	100	/	98.00 - 102.00	Y N	
73	0.1	0.10	0.08 - 0.12	<input checked="" type="radio"/> N	Oil & Grease Room
	1	0.99	0.98 - 1.02	<input checked="" type="radio"/> N	
	100	99.99	98.00 - 102.00	<input checked="" type="radio"/> N	
87	0.002	0.0020	0.0015 - 0.0025	<input checked="" type="radio"/> N	Solids Room
	1	0.9997	0.9990 - 1.0010	<input checked="" type="radio"/> N	
	100	99.9902	99.9000 - 100.1000	<input checked="" type="radio"/> N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

Comments:

WT SET ID USED: 2 mg <u>1000151861</u>	COMMENT:
WT SET ID USED: 10 mg - 100 g <u>4000013239</u>	
WT SET ID USED: 500 g <u>69073</u>	

Shipping and Receiving Documents

42546

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
OJ00143

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310
Fax: (000) 000-0000
Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Eurofins Calscience, LLC
7440 Lincoln Way
Garden Grove, CA 92841
Phone :7148955494
Fax: x



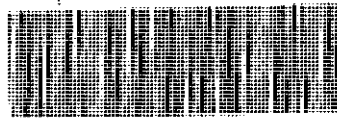
570-42546 Chain of Custody

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: OJ00143-01	Water	Sampled:28-Oct-20 09:45		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 06:45		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-03	Water	Sampled:28-Oct-20 10:35		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 07:35		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-05	Water	Sampled:28-Oct-20 11:35		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 08:35		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-07	Water	Sampled:28-Oct-20 12:35		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 09:35		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-09	Water	Sampled:28-Oct-20 13:30		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 10:30		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-11	Water	Sampled:28-Oct-20 14:20		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 11:20		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				

Released By: Date: 10/29/2020
 Received By: Date: 10/30/2020 10:25

Released By _____ Date _____ Received By _____ Date _____

45546



570-42546 Waybill



eurofins

Environment Testing
TestAmerica

ORIGIN ID:TCMA (253) 922-2910
SAMPLE RECEIVING
TA- SEATTLE
5755 8TH ST E

SHIP DATE: 29OCT20
ACTWTG: 51.10 LB
CAD: 989746/CAFE3406

FIFE, WA 98424
UNITED STATES US

BILL THIRD PARTY

TO CARLA LEE HOLLOWELL
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

500P/027T/025P

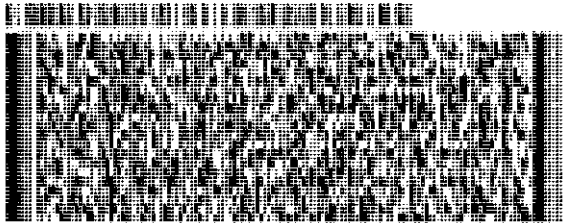
GARDEN GROVE CA 92841

(714) 896-5494

REF:

INU:

DEPT:



FedEx
EXD1836



420-01-0110801 0V

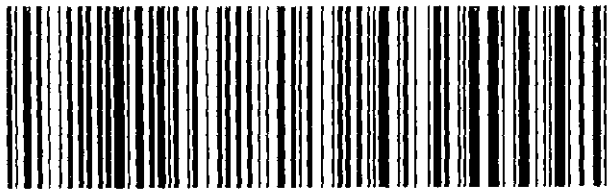
FRI - 30 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 9269 4592 9888
0201

92 APVA

92841
CA-US SNA

Part # 150471-434 R112 EXP 06/21 0e



ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-42546-1
Client Project/Site: 0J00143
Revision: 1

For:
Eurofins Frontier Global Sciences LLC
5755 8th Street E
Tacoma, Washington 98424

Attn: Mr. Patrick Garcia-Strickland



Authorized for release by:
12/8/2020 12:24:50 PM

Carla Hollowell, Project Manager I
(714)895-5494
Carla.Hollowell@eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0J00143

Job ID: 570-42546-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0J00143

Job ID: 570-42546-1

Job ID: 570-42546-1

Laboratory: Eurofins Calscience LLC

Narrative

CASE NARRATIVE

Client: Eurofins Frontier Global Sciences LLC

Project: 0J00143

Report Number: 570-42546-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/30/2020 at 10:25 AM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2 degrees Celsius of the required temperature or method specified range. For samples with a specified temperature of 4 degrees Celsius, samples with a temperature ranging from just above freezing temperature of water to 6 degrees Celsius shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

SEDIMENT CONCENTRATION

Samples 0J00143-01 (570-42546-1), 0J00143-03 (570-42546-2), 0J00143-05 (570-42546-3), 0J00143-07 (570-42546-4), 0J00143-09 (570-42546-5) and 0J00143-11 (570-42546-6) were analyzed for Sediment Concentration in accordance with ASTM D3977B. The samples were analyzed on 11/04/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Eurofins Frontier Global Sciences LLC
 Project/Site: 0J00143

Job ID: 570-42546-1

General Chemistry

Client Sample ID: WQ1b-C_102820_SW_10 TOTAL

Date Collected: 10/28/20 09:45

Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	7.58		0.902	mg/L			11/04/20 08:58	1

Client Sample ID: WQ2-C_102820_SW_10 TOTAL

Date Collected: 10/28/20 10:35

Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	10.2		0.881	mg/L			11/04/20 08:58	1

Client Sample ID: WQ3-L_102820_SW_10 TOTAL

Date Collected: 10/28/20 11:35

Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-3

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	15.4		0.877	mg/L			11/04/20 08:58	1

Client Sample ID: WQ-ECH_102820_SW_10 TOTAL

Date Collected: 10/28/20 12:35

Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-4

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	17.8		0.875	mg/L			11/04/20 08:58	1

Client Sample ID: ES-15_102820_SW_10 TOTAL

Date Collected: 10/28/20 13:30

Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-5

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	18.3		0.874	mg/L			11/04/20 08:58	1

Client Sample ID: WQ-FPT_102820_SW_10 TOTAL

Date Collected: 10/28/20 14:20

Date Received: 10/30/20 10:25

Lab Sample ID: 570-42546-6

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	19.5		0.871	mg/L			11/04/20 08:58	1

QC Sample Results

Client: Eurofins Frontier Global Sciences LLC
 Project/Site: 0J00143

Job ID: 570-42546-1

Method: D3977 - Sediment Concentration in Water Samples

Lab Sample ID: MB 570-106893/1
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	ND		1.00	mg/L			11/04/20 08:58	1

Lab Sample ID: LCS 570-106893/2
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sediment Concentration (mg/L)	100	98.01		mg/L		98	95 - 105

Lab Sample ID: LCSD 570-106893/3
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sediment Concentration (mg/L)	100	100.0		mg/L		100	95 - 105	2	20

Lab Sample ID: 570-42632-A-1 DU
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sediment Concentration (mg/L)	1.15		1.157		mg/L		0.5	10

Accreditation/Certification Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0J00143

Job ID: 570-42546-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-30-21
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

Method Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0J00143

Job ID: 570-42546-1

Method	Method Description	Protocol	Laboratory
D3977	Sediment Concentration in Water Samples	ASTM	ECL 1

Protocol References:

ASTM = ASTM International

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



Sample Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0J00143

Job ID: 570-42546-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-42546-1	WQ1b-C_102820_SW_10 TOTAL	Water	10/28/20 09:45	10/30/20 10:25	
570-42546-2	WQ2-C_102820_SW_10 TOTAL	Water	10/28/20 10:35	10/30/20 10:25	
570-42546-3	WQ3-L_102820_SW_10 TOTAL	Water	10/28/20 11:35	10/30/20 10:25	
570-42546-4	WQ-ECH_102820_SW_10 TOTAL	Water	10/28/20 12:35	10/30/20 10:25	
570-42546-5	ES-15_102820_SW_10 TOTAL	Water	10/28/20 13:30	10/30/20 10:25	
570-42546-6	WQ-FPT_102820_SW_10 TOTAL	Water	10/28/20 14:20	10/30/20 10:25	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

42546

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
OJ00143

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310
Fax: (000) 000-0000
Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Eurofins Calscience, LLC
7440 Lincoln Way
Garden Grove, CA 92841
Phone :7148955494
Fax: x



570-42546 Chain of Custody

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: OJ00143-01	Water	Sampled:28-Oct-20 09:45		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 06:45		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-03	Water	Sampled:28-Oct-20 10:35		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 07:35		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-05	Water	Sampled:28-Oct-20 11:35		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 08:35		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-07	Water	Sampled:28-Oct-20 12:35		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 09:35		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-09	Water	Sampled:28-Oct-20 13:30		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 10:30		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-11	Water	Sampled:28-Oct-20 14:20		
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 11:20		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				

Released By: Date: 10/28/2020
 Received By: Date: 10/30/2020 10:25

Released By _____ Date _____ Received By _____ Date _____

3-7/2-9 566 Page 1 of 1

42546

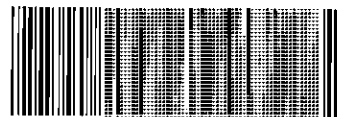
SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
OJ00143

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310
Fax: (000) 000-0000
Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Eurofins Calscience, LLC
7440 Lincoln Way
Garden Grove, CA 92841
Phone :7148955494
Fax: x



570-42546 Chain of Custody

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: OJ00143-01	Water	Sampled:28-Oct-20 09:45	1	
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 06:45		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-03	Water	Sampled:28-Oct-20 10:35	2	
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 07:35		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-05	Water	Sampled:28-Oct-20 11:35	3	
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 08:35		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-07	Water	Sampled:28-Oct-20 12:35	4	
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 09:35		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-09	Water	Sampled:28-Oct-20 13:30	5	
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 10:30		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				
Sample ID: OJ00143-11	Water	Sampled:28-Oct-20 14:20	6	
Misc. Subcontract 6	30-Nov-20 19:00	25-Nov-20 11:20		ASTM 3977
<i>Containers Supplied:</i> 1000 mL PP Jar (C)				

Released By

10/29/2020
Date

Received By

10/30/2020 10:25
Date

Released By

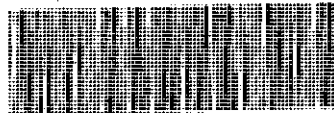
Date

Received By

Date

3-7/2-9 544

42546



570-42546 Waybill



Environment Testing
TestAmerica

ORIGIN ID:TCMA (253) 922-2310
SAMPLE RECEIVING
TA- SEATTLE
5755 8TH ST E

SHIP DATE: 29OCT20
ACTWGT: 51.10 LB
CAD: 989746/CAFE3406

FIFE, WA 98424
UNITED STATES US

BILL THIRD PARTY

TO **CARLA LEE HOLLOWELL**
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

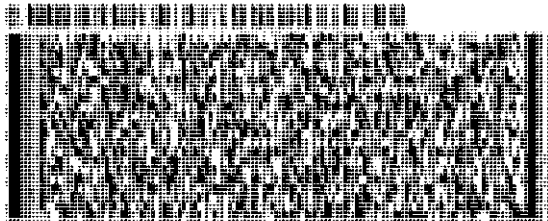
GARDEN GROVE CA 92841

(714) 896-6404

REF:

INU:

DEPT:



FedEx
Express



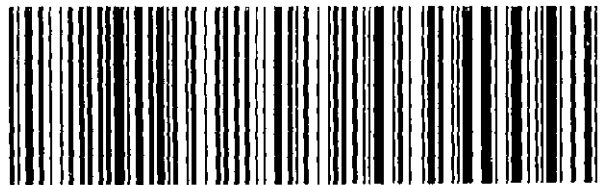
TRK# 9269 4592 9888
0201

FRI - 30 OCT 10:30A
PRIORITY OVERNIGHT

92 APVA

92841
CA-US SNA

Part # 159471-434 R172 EXP 05/21



- 1
- 2
- 3
- 4
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- 6
- 7
- 8
- 9
- 10
- 11

Login Sample Receipt Checklist

Client: Eurofins Frontier Global Sciences LLC

Job Number: 570-42546-1

Login Number: 42546

List Number: 1

Creator: Patel, Jayesh

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Frontier Global Sciences

5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310

24 November 2020

Denise King
Wood - MA
271 Mill Road
Chelmsford, MA 01824
RE: Penobscot

Enclosed are the analytical results for samples received by Eurofins Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Patrick Garcia-Strickland". The signature is written in a cursive style with a large initial "P".

Patrick Garcia-Strickland
Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OV-02_102920_SW_10_TOTAL	0J00147-01	Water	29-Oct-20 08:30	30-Oct-20 08:15
OV-02_102920_SW_10 DISSOLVED	0J00147-02	Water	29-Oct-20 08:30	30-Oct-20 08:15
OV-02_102920_SW_10_DUP TOTAL	0J00147-03	Water	29-Oct-20 08:30	30-Oct-20 08:15
OV-02_102920_SW_10_DUP DISSOLVED	0J00147-04	Water	29-Oct-20 08:30	30-Oct-20 08:15
EQ_BLANK_10290_SW_OC TOTAL	0J00147-05	Water	29-Oct-20 17:45	30-Oct-20 08:15
EQ_BLANK_10290_SW_OC DISSOLVED	0J00147-06	Water	29-Oct-20 17:45	30-Oct-20 08:15
ADD-02_10290_SW_10 TOTAL	0J00147-07	Water	29-Oct-20 11:30	30-Oct-20 08:15
ADD-02_10290_SW_10 DISSOLVED	0J00147-08	Water	29-Oct-20 11:30	30-Oct-20 08:15

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager

Sample Receipt Checklist

Client: Wood Date & Time Received: 10/30/20 8:15 Date Labeled: 10/30/20 Labeled By: rs

Matrix: wtv Received By: rs Label Verified By: me 10/30/20

of Coolers Received: 1 Samples Arrived By: 7 Shipping Service _____ Courier _____ Hand _____ Other (Specify: _____)

Coolant: None/Ambient Loose Ice Gel Ice Dry Ice Coolant Required: Y/N Temp Blank Used: Y/N for Cooler(s): _____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y/N

Samples from Wisconsin have special requirements. Shipment received includes samples from Wisconsin: Y(N)

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	<u>Y</u>	
Custody Seals are present and intact:	<u>Y</u>	
Custody seals signed:	<u>Y</u>	


TID: <u>5143122</u>	CF: <u>-0.3 °C</u>	Date/time: <u>10/30/20 8:15</u>	By: <u>rs</u>
Cooler 1: <u>-0.5 °C</u>	w/ CF: <u>-0.8 °C</u>	Cooler 4: _____ °C	w/ CF: _____ °C
Cooler 2: _____ °C	w/ CF: _____ °C	Cooler 5: _____ °C	w/ CF: _____ °C
Cooler 3: _____ °C	w/ CF: _____ °C	Cooler 6: _____ °C	w/ CF: _____ °C

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	<u>Y</u>	
Date and time of collection:	<u>Y</u>	
Sampled by:	<u>N</u>	
Preservation type:	<u>N</u>	
Requested analyses:	<u>Y</u>	
Required signatures:	<u>Y</u>	
Internal COC required:	<u>NA</u>	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	<u>Y</u>	
Sample labels are present and legible:	<u>Y</u>	
Sample ID on container/bag matches COC:	<u>Y</u>	
Correct sample containers used:	<u>Y</u>	
Samples received within holding times:	<u>Y</u>	
Sample volume sufficient for requested analyses:	<u>Y</u>	
Correct preservative used for requested analyses:	<u>NA</u>	

Anomalies/Non-conformances (attach additional pages if needed):

0J00147





Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:04

OV-02_102920_SW_10_TOTAL
0J00147-01

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.070	0.026	0.050	ng/L	1.25	F011324	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	2.92	0.08	0.50	ng/L	1	F011304	10-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:04

**OV-02_102920_SW_10 DISSOLVED
0J00147-02**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.135	0.025	0.049	ng/L	1.25	F011323	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	3.39	0.08	0.50	ng/L	1	F011304	10-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:04

OV-02_102920_SW_10_DUP TOTAL
0J00147-03

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.082	0.026	0.050	ng/L	1.25	F011324	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	2.76	0.08	0.50	ng/L	1	F011304	10-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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**OV-02_102920_SW_10_DUP DISSOLVED
0J00147-04**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	0.087	0.025	0.049	ng/L	1.25	F011324	17-Nov-20	0K18010	17-Nov-20	EPA 1630	
Sample Preparation: EPA 1631E											
Mercury	3.04	0.08	0.50	ng/L	1	F011304	10-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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EQ_BLANK_10290_SW_OC TOTAL
0J00147-05

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631E											
Mercury	0.31	0.08	0.50	ng/L	1	F011304	10-Nov-20	0K12019	11-Nov-20	EPA 1631E	J



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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EQ_BLANK_10290_SW_OC DISSOLVED
0J00147-06

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631E											
Mercury	2.48	0.08	0.50	ng/L	1	F011304	10-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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ADD-02_10290_SW_10 TOTAL
0J00147-07

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.025	0.049	ng/L	1.25	F011324	17-Nov-20	0K18010	17-Nov-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	3.45	0.08	0.50	ng/L	1	F011304	10-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:04

**ADD-02_10290_SW_10 DISSOLVED
0J00147-08**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1630											
Methyl Mercury (as Mercury)	ND	0.025	0.049	ng/L	1.25	F011324	17-Nov-20	0K18010	17-Nov-20	EPA 1630	U
Sample Preparation: EPA 1631E											
Mercury	3.52	0.08	0.50	ng/L	1	F011304	10-Nov-20	0K12019	11-Nov-20	EPA 1631E	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K12019 - F011307											
Cal Standard (0K12019-CAL1)					Prepared & Analyzed: 11-Nov-20						
Mercury	0.45	-		ng/L	0.50000		90.3				
Cal Standard (0K12019-CAL2)					Prepared & Analyzed: 11-Nov-20						
Mercury	1.01	-		ng/L	1.0000		101				
Cal Standard (0K12019-CAL3)					Prepared & Analyzed: 11-Nov-20						
Mercury	4.99	-		ng/L	5.0000		99.7				
Cal Standard (0K12019-CAL4)					Prepared & Analyzed: 11-Nov-20						
Mercury	20.15	-		ng/L	20.000		101				
Cal Standard (0K12019-CAL5)					Prepared & Analyzed: 11-Nov-20						
Mercury	43.37	-		ng/L	40.000		108				
Calibration Blank (0K12019-CCB1)					Prepared & Analyzed: 11-Nov-20						
Mercury	-0.03	-		ng/L							U
Calibration Blank (0K12019-CCB2)					Prepared & Analyzed: 11-Nov-20						
Mercury	0.05	-		ng/L							
Calibration Blank (0K12019-CCB3)					Prepared & Analyzed: 11-Nov-20						
Mercury	0.11	-		ng/L							
Calibration Blank (0K12019-CCB4)					Prepared & Analyzed: 11-Nov-20						
Mercury	-0.03	-		ng/L							U
Calibration Blank (0K12019-CCB5)					Prepared & Analyzed: 11-Nov-20						
Mercury	0.10	-		ng/L							

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K12019 - F011307											
Calibration Blank (0K12019-CCB6) Prepared & Analyzed: 11-Nov-20											
Mercury	0.001	-		ng/L							
Calibration Blank (0K12019-CCB7) Prepared & Analyzed: 11-Nov-20											
Mercury	-0.13	-		ng/L							U
Calibration Blank (0K12019-CCB8) Prepared & Analyzed: 11-Nov-20											
Mercury	-0.11	-		ng/L							U
Calibration Check (0K12019-CCV1) Prepared & Analyzed: 11-Nov-20											
Mercury	4.83	-		ng/L	4.9950		96.8	77-123			
Calibration Check (0K12019-CCV2) Prepared & Analyzed: 11-Nov-20											
Mercury	4.98	-		ng/L	4.9950		99.7	77-123			
Calibration Check (0K12019-CCV3) Prepared & Analyzed: 11-Nov-20											
Mercury	5.05	-		ng/L	4.9950		101	77-123			
Calibration Check (0K12019-CCV4) Prepared & Analyzed: 11-Nov-20											
Mercury	4.85	-		ng/L	4.9950		97.1	77-123			
Calibration Check (0K12019-CCV5) Prepared & Analyzed: 11-Nov-20											
Mercury	5.01	-		ng/L	4.9950		100	77-123			
Calibration Check (0K12019-CCV6) Prepared & Analyzed: 11-Nov-20											
Mercury	4.59	-		ng/L	4.9950		92.0	77-123			
Calibration Check (0K12019-CCV7) Prepared & Analyzed: 11-Nov-20											
Mercury	4.64	-		ng/L	4.9950		93.0	77-123			

Eurofins Frontier Global Sciences, LLC



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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0K12019 - F011307

Calibration Check (0K12019-CCV8) Prepared & Analyzed: 11-Nov-20

Mercury	4.63	-		ng/L	4.9950		92.6	77-123			
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Instrument Blank (0K12019-IBL1) Prepared & Analyzed: 11-Nov-20

Mercury	ND	0.08	0.50	ng/L							U
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Instrument Blank (0K12019-IBL2) Prepared & Analyzed: 11-Nov-20

Mercury	ND	0.08	0.50	ng/L							U
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Instrument Blank (0K12019-IBL3) Prepared & Analyzed: 11-Nov-20

Mercury	ND	0.08	0.50	ng/L							U
---------	----	------	------	------	--	--	--	--	--	--	---

Initial Cal Blank (0K12019-ICB1) Prepared & Analyzed: 11-Nov-20

Mercury	0.14	-		ng/L							
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Initial Cal Check (0K12019-ICV1) Prepared & Analyzed: 11-Nov-20

Mercury	5.29	-		ng/L	4.9950		106	79-121			
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Batch 0K18010 - F011324

Cal Standard (0K18010-CAL1) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	0.046	-		ng/L	0.050000		92.1				
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Cal Standard (0K18010-CAL2) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	0.200	-		ng/L	0.200000		100				
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Cal Standard (0K18010-CAL3) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	1.058	-		ng/L	1.0000		106				
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Eurofins Frontier Global Sciences, LLC

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Patrick Garcia-Strickland, Business Unit Manager

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K18010 - F011324											
Cal Standard (0K18010-CAL4)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.982	-		ng/L	2.0000		99.1				
Cal Standard (0K18010-CAL5)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	4.116	-		ng/L	4.0000		103				
Calibration Blank (0K18010-CCB1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	-0.005	-		ng/L							U
Calibration Blank (0K18010-CCB2)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.0005	-		ng/L							
Calibration Blank (0K18010-CCB3)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.005	-		ng/L							
Calibration Blank (0K18010-CCB4)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.010	-		ng/L							
Calibration Blank (0K18010-CCB5)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.008	-		ng/L							
Calibration Blank (0K18010-CCB6)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.004	-		ng/L							
Calibration Check (0K18010-CCV1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.510	-		ng/L	0.50368		101	67-133			
Calibration Check (0K18010-CCV2)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.543	-		ng/L	0.50368		108	67-133			

Eurofins Frontier Global Sciences, LLC



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Patrick Garcia-Strickland, Business Unit Manager

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0K18010 - F011324

Calibration Check (0K18010-CCV3) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	0.495	-		ng/L	0.50368		98.3	67-133			
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Calibration Check (0K18010-CCV4) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	0.490	-		ng/L	0.50368		97.3	67-133			
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Calibration Check (0K18010-CCV5) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	0.432	-		ng/L	0.50368		85.7	67-133			
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Calibration Check (0K18010-CCV6) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	0.450	-		ng/L	0.50368		89.4	67-133			
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Instrument Blank (0K18010-IBL1) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	ND	0.021	0.040	ng/L							U
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Initial Cal Blank (0K18010-ICB1) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	0.008	-		ng/L							
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Initial Cal Check (0K18010-ICV1) Prepared & Analyzed: 17-Nov-20

Methyl Mercury (as Mercury)	0.516	-		ng/L	0.50368		103	69-131			
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Batch F011304 - EFGS SOP2796 EPA 1631 Oxidation

Blank (F011304-BLK1) Prepared: 10-Nov-20 Analyzed: 11-Nov-20

Mercury	ND	0.08	0.50	ng/L							U
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Blank (F011304-BLK2) Prepared: 10-Nov-20 Analyzed: 11-Nov-20

Mercury	ND	0.08	0.50	ng/L							U
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F011304 - EFGS SOP2796 EPA 1631 Oxidation

Blank (F011304-BLK3)					Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	ND	0.08	0.50	ng/L							U
Blank (F011304-BLK4)					Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	0.51	0.08	0.50	ng/L							QB-10
Blank (F011304-BLK5)					Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	0.16	0.08	0.50	ng/L							J
LCS (F011304-BS1)					Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	4.93	0.08	0.50	ng/L	5.0000		98.6	77-123			
LCS Dup (F011304-BSD1)					Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	5.17	0.08	0.50	ng/L	5.0000		103	77-123	4.84	24	
Matrix Spike (F011304-MS1)					Source: 0J00147-01 Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	7.54	0.08	0.50	ng/L	5.0000	2.92	92.3	71-125			
Matrix Spike (F011304-MS2)					Source: 0K00036-01 Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	5.57	0.08	0.50	ng/L	5.0000	1.20	87.4	71-125			
Matrix Spike (F011304-MS3)					Source: 0J00147-02 Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	7.36	0.08	0.50	ng/L	5.0000	3.39	79.5	71-125			
Matrix Spike Dup (F011304-MSD1)					Source: 0J00147-01 Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	7.68	0.08	0.50	ng/L	5.0000	2.92	95.1	71-125	1.79	24	
Matrix Spike Dup (F011304-MSD2)					Source: 0K00036-01 Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	5.48	0.08	0.50	ng/L	5.0000	1.20	85.6	71-125	1.62	24	

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F011304 - EFGS SOP2796 EPA 1631 Oxidation

Matrix Spike Dup (F011304-MSD3)		Source: 0J00147-02			Prepared: 10-Nov-20 Analyzed: 11-Nov-20						
Mercury	7.53	0.08	0.50	ng/L	5.0000	3.39	82.8	71-125	2.24	24	

Batch F011323 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F011323-BLK1)		Prepared & Analyzed: 17-Nov-20									
Methyl Mercury (as Mercury)	0.034	0.026	0.050	ng/L							J

Blank (F011323-BLK2)		Prepared & Analyzed: 17-Nov-20									
Methyl Mercury (as Mercury)	0.031	0.026	0.050	ng/L							J

Blank (F011323-BLK3)		Prepared & Analyzed: 17-Nov-20									
Methyl Mercury (as Mercury)	0.034	0.026	0.050	ng/L							J

Blank (F011323-BLK4)		Prepared & Analyzed: 17-Nov-20									
Methyl Mercury (as Mercury)	ND	0.025	0.049	ng/L							U

LCS (F011323-BS1)		Prepared & Analyzed: 17-Nov-20									
Methyl Mercury (as Mercury)	1.188	0.026	0.050	ng/L	1.1111		107	65-135			

LCS Dup (F011323-BSD1)		Prepared & Analyzed: 17-Nov-20									
Methyl Mercury (as Mercury)	1.078	0.026	0.050	ng/L	1.1111		97.0	65-135	9.71	35	

Matrix Spike (F011323-MS1)		Source: 0J00143-01			Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.324	0.026	0.050	ng/L	1.1101	0.096	111	65-130			

Matrix Spike (F011323-MS2)		Source: 0J00147-02			Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.182	0.025	0.049	ng/L	1.0905	0.135	96.0	65-130			

Eurofins Frontier Global Sciences, LLC



The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 16:04
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F011323 - EFGS SOP2797 Methyl Hg Distillation for Water

Matrix Spike Dup (F011323-MSD1)		Source: 0J00143-01			Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.176	0.026	0.049	ng/L	1.0977	0.096	98.4	65-130	11.8	35	
Matrix Spike Dup (F011323-MSD2)		Source: 0J00147-02			Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.505	0.026	0.050	ng/L	1.1042	0.135	33.6	65-130	80.2	35	QM-07

Batch F011324 - EFGS SOP2797 Methyl Hg Distillation for Water

Blank (F011324-BLK1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F011324-BLK2)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	ND	0.026	0.050	ng/L							U
Blank (F011324-BLK3)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.041	0.026	0.050	ng/L							J
LCS (F011324-BS1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.936	0.026	0.050	ng/L	1.1111		84.3	65-135			
LCS Dup (F011324-BSD1)					Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.004	0.026	0.050	ng/L	1.1111		90.4	65-135	7.03	35	
Matrix Spike (F011324-MS1)		Source: 0J00147-01			Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	0.946	0.025	0.049	ng/L	1.0955	0.070	80.0	65-130			
Matrix Spike Dup (F011324-MSD1)		Source: 0J00147-01			Prepared & Analyzed: 17-Nov-20						
Methyl Mercury (as Mercury)	1.238	0.026	0.050	ng/L	1.1109	0.070	105	65-130	26.8	35	

Eurofins Frontier Global Sciences, LLC



Patrick Garcia-Strickland, Business Unit Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 16:04

Notes and Definitions

- U Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
- QB-10 The method blank and/or initial/continuing calibration blank contains analyte at a concentration above the MRL. Only report sample results greater than 10 times the contamination value (QB-01), or samples less than the MRL (QB-02).
- J The result is an estimated concentration.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the method detection limit if reported to the MDL or above the reporting limit if reported to the MRL.
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



ANALYSIS SEQUENCE

OK12019

QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: PGS Analyzed: 11/11/2020

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OK12019-IBL1	QC	1			
OK12019-IBL2	QC	2			
OK12019-IBL3	QC	3			
OK12019-CAL1	QC	4	2002597		
OK12019-CAL2	QC	5	2002598		
OK12019-CAL3	QC	6	2002774		
OK12019-CAL4	QC	7	2002775		
OK12019-CAL5	QC	8	2002776		
OK12019-ICV1	QC	9	2002777		
OK12019-ICB1	QC	10			
F011304-BS1	QC	11			
F011304-BSD1	QC	12			
F011304-BLK1	QC	13			
F011304-BLK2	QC	14			
F011304-BLK3	QC	15			
F011304-BLK4	QC	16			
F011304-BLK5	QC	17			
OK00036-01	Hg-CVAFS-W-1631	18			
F011304-MS2	QC	19			
F011304-MSD2	QC	20			
OK12019-CCV1	QC	21	2002777		
OK12019-CCB1	QC	22			
OK12019-CCV2	QC	23	2002777		
OK12019-CCB2	QC	24			
OJ00147-01	Hg-CVAFS-W-1631	25			
F011304-MS1	QC	26			
F011304-MSD1	QC	27			
OJ00147-02	Hg-CVAFS-W-1631	28			
F011304-MS3	QC	29			
F011304-MSD3	QC	30			
OK00023-01	Hg-CVAFS-W-1631	31			
OK00023-02	Hg-CVAFS-W-1631	32			
OJ00147-05	Hg-CVAFS-W-1631	33			
OJ00147-06	Hg-CVAFS-W-1631	34			
OK12019-CCV3	QC	35	2002777		
OK12019-CCB3	QC	36			

ANALYSIS SEQUENCE

0K12019

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 11/11/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J00147-03	Hg-CVAFS-W-1631	37			
0J00147-04	Hg-CVAFS-W-1631	38			
0J00147-07	Hg-CVAFS-W-1631	39			
0J00147-08	Hg-CVAFS-W-1631	40			
0K00025-01	Hg-CVAFS-W-1631	41			Scan all data for level IV report
0K00025-02	Hg-CVAFS-W-1631	42			Scan all data for level IV report
0K00025-03	Hg-CVAFS-W-1631	43			Scan all data for level IV report
0K00025-04	Hg-CVAFS-W-1631	44			Scan all data for level IV report
0K00025-05	Hg-CVAFS-W-1631	45			Scan all data for level IV report
0K00025-06	Hg-CVAFS-W-1631	46			Scan all data for level IV report
0K12019-CCV4	QC	47	2002777		
0K12019-CCB4	QC	48			
0K00025-07	Hg-CVAFS-W-1631	49			Scan all data for level IV report
0K00035-01	Hg-CVAFS-W-1631	50			
0K00037-01	Hg-CVAFS-W-1631	51			
F011307-BS1	QC	52			
F011307-BSD1	QC	53			
F011307-BLK1	QC	54			
F011307-BLK2	QC	55			
F011307-BLK3	QC	56			
0K00027-01	Hg-CVAFS-W-1631	57			
0J00143-01	Hg-CVAFS-W-1631	58			
0K12019-CCV5	QC	59	2002777		
0K12019-CCB5	QC	60			
F011307-MS1	QC	61			
F011307-MSD1	QC	62			
F011307-MS2	QC	63			
F011307-MSD2	QC	64			
0K00027-02	Hg-CVAFS-W-1631	65			
0K00027-03	Hg-CVAFS-W-1631	66			
0J00143-02	Hg-CVAFS-W-1631	67			
0J00143-03	Hg-CVAFS-W-1631	68			
0J00143-04	Hg-CVAFS-W-1631	69			
0J00143-05	Hg-CVAFS-W-1631	70			
0K12019-CCV6	QC	71	2002777		
0K12019-CCB6	QC	72			

ANALYSIS SEQUENCE

0K12019

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 11/11/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OJ00143-06	Hg-CVAFS-W-1631	73			
OJ00143-07	Hg-CVAFS-W-1631	74			
OJ00143-08	Hg-CVAFS-W-1631	75			
OJ00143-09	Hg-CVAFS-W-1631	76			
OJ00143-10	Hg-CVAFS-W-1631	77			
OJ00143-11	Hg-CVAFS-W-1631	78			
OJ00143-12	Hg-CVAFS-W-1631	79			
OJ00143-13	Hg-CVAFS-W-1631	80			
OJ00143-14	Hg-CVAFS-W-1631	81			
OJ00143-15	Hg-CVAFS-W-1631	82			
OK12019-CCV7	QC	83	2002777		
OK12019-CCB7	QC	84			
OJ00143-16	Hg-CVAFS-W-1631	85			
OK12019-CCV8	QC	86	2002777		
OK12019-CCB8	QC	87			


11/12/20
 Samples Loaded By _____ Date _____

 Data Processed By _____ Date _____

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: MFS	Sequence(s) #: 0K12019
Reviewer:	Dataset ID(s): THg26002-201111-1
Date: 11/12/2020	WO (s) #: Multiple
Batch #(s): F011304, F011307	

• Select the correct preparation method.

Analyte	Prep Method	Matrix	
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2885	FSTM Trap 70:30 Digest	Air/Gas
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia	Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest	Sed/Soil
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb	Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest	Tissue
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation	Air/Gas
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric	Tissue
<input checked="" type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation	Water
<input type="checkbox"/> Hg0	NA	NA	Water
<input type="checkbox"/> Inorg Hg	NA	NA	Water

Analyst Initials: MFS

Reviewer Initials: PKS

- | | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------|------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | | | |
| (b) Check 5% of transcription from Instrument print-out and Excel file | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | | | |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 50 ml / aliquot = Excel dilution value | | | |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| 3. High QA? WO#(s)/Client(s): <u>PARSONS</u> | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>MFS</u>	Sequence(s) #: <u>0K12019</u>
Reviewer: _____	Dataset ID(s): <u>THg26002-201111-1</u>
Date: <u>11/12/2020</u>	WO (s) #: <u>Multiple</u>
Batch #(s): <u>F011304, F011307</u>	

Analyst Initials MFS Reviewer Initials PGS

- | | | | | |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|-----------------------------------------|--------------------------|
| 5b. Has the B/C section data been uploaded? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| QA/QC Data Checked | | | | |
| 6. RSD CF (≤ 15%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 7. The calibration curve included a minimum of 5 Standards | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| 9. ICV and CCV % Recoveries EPA 1631E (77-123%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 10. Do all calibration points pass acceptance criteria? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 11. Are qualifiers consistent with the data review flowcharts? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 12. Explain any items on the failed data report from Element | | | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit: | | | | |
| (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (c) Was a BrCl Blank analyzed for each preservation level? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (d) Are Preparation Blanks summarized on QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 14. Filtration Blank Prepared (if yes, use FB qualifier) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (a) Filtration Blank prep date same as associated samples' prep date | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 18. Is the correct 'Source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 19. For digested preps: was there a spike witness signature & date on the prep bench sheet? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>MFS</u>	Sequence(s) #: <u>0K12019</u>	
Reviewer: _____	Dataset ID(s): <u>THg26002-201111-1</u>	
Date: <u>11/12/2020</u>	WO (s) #: <u>Multiple</u>	
Batch #(s): <u>F011304, F011307</u>		

Analyst Initials MFS

Reviewer Initials PGS

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher)? YES NO
- Comments: _____
21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
- Comments: _____
22. Are the samples run at the correct dilution level for the method? YES NO
- Comments: _____
23. Dissolved < Total (if applicable) YES NO N/A
- Comments: _____
24. Effluent < Influent (visually confirm if needed) YES NO N/A
- Comments: _____
25. Are re-runs noted with reason? YES NO N/A
- Comments: _____
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
- Comments: _____
27. Is the B trap <5% A Traps YES NO N/A
- Comments: _____
28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
- Comments: _____
29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
- Comments: _____
30. Have re-extracts been created for non-reportable samples? YES NO N/A
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
32. Does the data set need scanning? YES NO N/A
33. Does the dataset have an LOQ/LOQ or DOC? YES NO N/A
34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
35. Water samples-is the final volume correct in the sequence? YES NO N/A

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

36. Date of analyst IDOC/CDOC: 3/2/20 IDOC/CDOC within last 12 months? YES NO
37. Date of analyst's SOP reading for method: 11/2/20 Current SOP revision read? YES NO
38. Date of LOD: 12/21/19 LOD within last 3 months? YES NO
39. Date of LOQ: 12/21/19 LOQ within last 3 months? YES NO

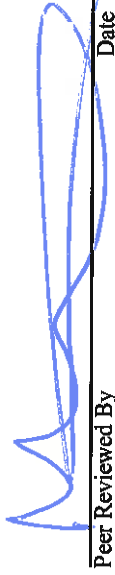
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0K12019

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	Time Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F011304-BLK4	Hg-CVAFS-W-1631	0.51	0.50				ng/L						PASS-OVER	FAIL-BLK	QB-10
F011307-MSD2	Hg-CVAFS-W-1631	12.52	0.50	14.183939.612834	5.0000		ng/L	58.1	71.00	125.00	12.5	24.00	PASS-OVER	FAIL-MSD (Rec.)	QM-07



 Analyst Reviewed By _____ Date 11/12/20



 Peer Reviewed By _____ Date _____

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

11/11/20
MFS
THg 2002-2011-1
Batch #1

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike ID	µl Spike1	Spike ID	µl Spike2	Extraction Comments
F011304-BLK1	Blank	50	50.5					
F011304-BLK2	Blank	50	50.5					
F011304-BLK3	Blank	50	50.5					
F011304-BS1	LCS	50	50.5	2002757	25			
F011304-BSD1	LCS Dup	50	50.5					
F011304-MS1	Matrix Spike [0J00454-04] 141-01	50	50.5					
F011304-MS2	Matrix Spike [0K00036-01]	50	50.5					
F011304-MSD1	Matrix Spike Dup [0J00454-04]	50	50.5					
F011304-MSD2	Matrix Spike Dup [0K00036-01]	50	50.5					

Standard ID(S):
- BLK4 1x
- BLK5 1x
- MS3/MSD3 1x 0J00147-02

Expiration:
MFS 11/11/20
MFS 11/11/20
MFS 11/11/20
MFS 11/11/20

Curves
CAL1 25µL 2002562
CAL2 50µL 2002562
CAL3 25µL 2002567
CAL4 50µL 2002757
CAL5 200µL 2002757
Dev/CW 15µL 2002754

Pipette Calibration
PU18325 11/11/20
PU21751 11/5/20
PU33325 11/5/20

Reagents
2002506
2002606
2002607
2002773
200MFS 11/11/20

Curve wit: UAL 11-11-2020
CCW 4 wit: UAL 11/11/2020
CCW 5FC: UAL 11-11-2020
MFS 11/11/20
10µL = 5ML Sample → 50ML F.V.

CCW 1 wit: UAL 11-11-2020
MS/MSD with MFS: UAL 11-11-2020
CCW 2+3: UAL 11-11-2020

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00151-01	204A_20201029_N_WG 0200147-01 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-02	306A_20201029_FD_WG -02 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-03	306A_20201029_N_WG -03 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-04	803A_20201029_N_WG -04 1+	50	50.5	QC	-	010206	MS/MSD Scan all data - Level IV	
0J00151-05	805A-R_20201029_N_WG -05 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-06	PZ-102A_20201029_N_WG -06 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0J00151-07	PZ-104A_20201029_N_WG -07 1+	50	50.5	-	-	010206	Scan all data - Level IV	
0K00023-01	INF20110401 -08 1+	50	50.5	-	-	120303		
0K00023-02	EFF20110402 1+	50	50.5	-	-	120303		
0K00025-01	OL-3584-01 Total 1+	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-02	OL-3584-01 Dissolved 1+	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-03	OL-3584-02 1+	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-04	OL-3584-03 1+	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-05	OL-3584-04 1+	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-06	OL-3584-05 1+	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-07	OL-3584-06 1+	50	50.5	-	-	120302	Scan all data for level IV report	
0K00035-01	Effluent (570-42978-1) 1+	50	50.5	-	-	040301		
0036-01	Effluent Comp B-7 (570-42984-1) 1+	50	50.5	-	-	040301		
0037-01	INF Comp A-7 (570-42983-1) 1+	50	50.5	-	-	040301		

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - ERGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00023	Spokane County Water Reclamation Facility/Jacobs	180418 Metals Wastewater Monitoring
0K00025	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0K00035	Eurofins Calscience, LLC	Total and Methyl Mercury
0K00036	Eurofins Calscience, LLC	Total and Methyl Mercury
0K00037	Eurofins Calscience, LLC	Total and Methyl Mercury

PREPARATION BENCH SHEET

MFS
11/11/20
THg 26002
Batch #2

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation Prepared: 11/11/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011307-BLK1	Blank	50	50.5					
F011307-BLK2	Blank	50	50.5					
F011307-BLK3	Blank	50	50.5					
F011307-BS1	LCS	50	50.5	2002167	25			
F011307-BSD1	LCS Dup	50	50.5					
F011307-MS1	Matrix Spike [0K00027-01]	50	50.5					
F011307-MS2	Matrix Spike [0J00143-01]	50	50.5					
F011307-MSD1	Matrix Spike Dup [0K00027-01]	50	50.5					
F011307-MSD2	Matrix Spike Dup [0J00143-01]	50	50.5					

Standard ID(s): Description: Expiration:

100x = 500 µl Sample → 50 mL V

Reagents
2002506
2002606
2002607
2002773

CCW 5 wit: RE w/w
BS/MSD wit: w/w
BS/MSD wit: VFA 11-11-2020 REAN ON DIFFERENT INSTRUMENT MFS 11/11/20
CCW 5 wit: ZKH 11/11/2020
MS/MSD wit: MFS 11/11/2020
CCW 6 wit: MFS 11/11/2020
CCW 7-8 wit: VFA 11-11-2020

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation Prepared: 11/11/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00143-01	WQ1b-C_102820_SW_10 TOTAL	50	50.5	-	-	020506		
0J00143-02	WQ1b-C_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-03	WQ2-C_102820_SW_10 TOTAL	50	50.5	-	-	020506		
0J00143-04	WQ2-C_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-05	WQ3-L_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-06	WQ3-L_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-07	WQ-ECH_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-08	WQ-ECH_102820_SW_10 DISSOLVED	50	50.5	-	-	040301		
0J00143-09	ES-15_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-10	ES-15_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-11	WQ-FPT_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-12	WQ-FPT_102820_SW_10 DISSOLVED	50	50.5	-	-	040301		
0J00143-13	WQ1b-C_102820_SW_10_VAL TOTAL	50	50.5	-	-	020506		
0J00143-14	WQ1b-C_102820_SW_10_VAL DISSOLVED	50	50.5	-	-	020506		
0J00143-15	WQ2-C_102820_SW_10_VAL TOTAL	50	50.5	-	-	020506		
0J00143-16	WQ2-C_102820_SW_10_VAL DISSOLVED	50	50.5	-	-	020506		
0K00027-01	ARS-20-02890-001-2	50	50.5	QC	-	120303	MS/MSD	
00027-02	ARS-20-02890-002-2	50	50.5	-	-	120303		
00027-03	ARS-20-02890-003-2	50	50.5	-	-	120303		

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/11/2020

Work Order

0J00143
0K00027

Client

Wood - MA
Eurofins Test America - Denver

Project

Penobscot
Mercury

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011304-BLK1	Blank	50	50.5					
F011304-BLK2	Blank	50	50.5					
F011304-BLK3	Blank	50	50.5					
F011304-BLK4	5% Method Blank	50	50.5					Not Needed, 5% samples removed from batch after analysis - MFS 11/12/20
F011304-BLK5	Filter Blank [0K00025-08A]	50	50.5					Added 11/12/2020 by MFS
F011304-BS1	LCS	50	50.5	2002757	25			
F011304-BSD1	LCS Dup	50	50.5	2002757	25			
F011304-MS1	Matrix Spike [0J00147-01]	50	50.5	2002757	25			
F011304-MS2	Matrix Spike [0K00036-01]	50	50.5	2002757	25			
F011304-MS3	Matrix Spike [0J00147-02]	50	50.5	2002757	25			
F011304-MSD1	Matrix Spike Dup [0J00147-01]	50	50.5	2002757	25			
F011304-MSD2	Matrix Spike Dup [0K00036-01]	50	50.5	2002757	25			
F011304-MSD3	Matrix Spike Dup [0J00147-02]	50	50.5	2002757	25			

Standard ID(s):
2002757

Description:
THg 10ng/mL Calibration Standard

Expiration:
04-Feb-21 00:00

Reagent ID(s):
2002506
2002606
2002607
2002773

Description:
THg 2% BrCl
25% Hydroxylamine-HCl working solution
THg Washstation (0.5% BrCl)
3% SnCl2 THg reductant

Expiration:
07-Mar-21 00:00
03-Apr-21 00:00
07-Mar-21 00:00
03-May-21 00:00

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/10/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	50	50.5	QC	-	150501	MS/MSD	
0J00147-02	OV-02_102920_SW_10 DISSOLVED	50	50.5	QC	-	150501	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	50	50.5	-	-	150501		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	50	50.5	-	-	150501		
0J00147-05	EQ_BLANK_10290_SW_OC TOTAL	50	50.5	-	-	150501		
0J00147-06	EQ_BLANK_10290_SW_OC DISSOLVED	50	50.5	-	-	150501		
0J00147-07	ADD-02_10290_SW_10 TOTAL	50	50.5	-	-	150501		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	50	50.5	-	-	150501		
0K00023-01	INF20110401	50	50.5	-	-	120303		
0K00023-02	EFF20110402	50	50.5	-	-	120303		
0K00025-01	OL-3584-01 Total	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-02	OL-3584-01 Dissolved	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-03	OL-3584-02	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-04	OL-3584-03	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-05	OL-3584-04	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-06	OL-3584-05	50	50.5	-	-	120302	Scan all data for level IV report	
0K00025-07	OL-3584-06	50	50.5	-	-	120302	Scan all data for level IV report	
0035-01	Effluent (570-42978-1)	50	50.5	-	-	040301		
0036-01	Effluent Comp B-7 (570-42984-1)	50	50.5	-	-	040301		

PREPARATION BENCH SHEET

F011304

Eurofins Frontier Global Sciences, LLC

Matrix: Water	INF Comp A-7 (570-42983-1)	50	50.5	-	040301	Prepared: 11/10/2020
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Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Work Order	Client	Project
0J00147	Wood - MA	Penobscot
0K00023	Spokane County Water Reclamation Facility/Jacobs	180418 Metals Wastewater Monitoring
0K00025	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0K00035	Eurofins Calscience, LLC	Total and Methyl Mercury
0K00036	Eurofins Calscience, LLC	Total and Methyl Mercury
0K00037	Eurofins Calscience, LLC	Total and Methyl Mercury

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/11/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011307-BLK1	Blank	50	50.5					
F011307-BLK2	Blank	50	50.5					
F011307-BLK3	Blank	50	50.5					
F011307-BS1	LCS	50	50.5	2002757	25			
F011307-BSD1	LCS Dup	50	50.5	2002757	25			
F011307-MS1	Matrix Spike [0K00027-01]	0.4950495	0.5	2002757	25			[Spk] 50mL->50.5mL; 0.5mL->0.5mL; Spiked 0.5mL
F011307-MS2	Matrix Spike [0J00143-01]	50	50.5	2002757	25			
F011307-MSD1	Matrix Spike Dup [0K00027-01]	0.4950495	0.5	2002757	25			
F011307-MSD2	Matrix Spike Dup [0J00143-01]	50	50.5	2002757	25			[Spk] 50mL->50.5mL; 0.5mL->0.5mL; Spiked 0.5mL

Standard ID(s):
2002757

Description:
THg 10ng/mL Calibration Standard

Expiration:
04-Feb-21 00:00

Reagent ID(s):

2002506
2002606
2002607
2002773

Description:

THg 2% BrCl
25% Hydroxylamine-HCl working solution
THg Washstation (0.5% BrCl)
3% SnCl2 THg reductant

Expiration:

07-Mar-21 00:00
03-Apr-21 00:00
07-Mar-21 00:00
03-May-21 00:00

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/11/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00143-01	WQ1b-C_102820_SW_10 TOTAL	50	50.5	-	-	020506		
0J00143-02	WQ1b-C_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-03	WQ2-C_102820_SW_10 TOTAL	50	50.5	-	-	020506		
0J00143-04	WQ2-C_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-05	WQ3-L_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-06	WQ3-L_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-07	WQ-ECH_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-08	WQ-ECH_102820_SW_10 DISSOLVED	50	50.5	-	-	040301		
0J00143-09	ES-15_102820_SW_10 TOTAL	50	50.5	-	-	020506		
0J00143-10	ES-15_102820_SW_10 DISSOLVED	50	50.5	-	-	020506		
0J00143-11	WQ-FPT_102820_SW_10 TOTAL	50	50.5	-	-	040301		
0J00143-12	WQ-FPT_102820_SW_10 DISSOLVED	50	50.5	-	-	040301		
0J00143-13	WQ1b-C_102820_SW_10_VAL TOTAL	50	50.5	-	-	020506		
0J00143-14	WQ1b-C_102820_SW_10_VAL DISSOLVED	50	50.5	-	-	020506		
0J00143-15	WQ2-C_102820_SW_10_VAL TOTAL	50	50.5	-	-	020506		
0J00143-16	WQ2-C_102820_SW_10_VAL DISSOLVED	50	50.5	-	-	020506		
0K00027-01	ARS-20-02890-001-2	50	50.5	QC	-	120303	MS/MSD	
00027-02	ARS-20-02890-002-2	50	50.5	-	-	120303		
00027-03	ARS-20-02890-003-2	50	50.5	-	-	120303		

PREPARATION BENCH SHEET

F011307

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2796 EPA 1631 Oxidation

Prepared: 11/11/2020

Work Order

0J00143
0K00027

Client

Wood - MA
Eurofins Test America - Denver

Project

Penobscot
Mercury

Analysis Datasheet for Total Mercury

Date of Analysis: November 11, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: UK12019

Analyst: **MPS**
 Units: ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	66.95 units	133.89	31.82 units	63.63	90.3 %Rec
SEQ-CAL2	1	1.00 ng/L	106.14 units	106.14	71.01 units	71.01	100.8 %Rec
SEQ-CAL3	1	5.00 ng/L	386.38 units	77.28	351.25 units	70.25	99.7 %Rec
SEQ-CAL4	1	20.00 ng/L	1454.63 units	72.73	1419.50 units	70.98	100.7 %Rec
SEQ-CAL5	1	40.00 ng/L	3090.77 units	77.27	3055.64 units	76.39	108.4 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 70.45 Corr. St Dev RF +/- 4.54 Corr. RSD CF 6.4% RSD Uncorr. Mean RF 93.46

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-TBL	3	35.13 units	±1.15	0.38 ng/L	±0.01

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	5	0.065 ng/L	±0.274
BLK	2	3	-0.134 ng/L	±0.065
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-BL1	1	11/11/2020 12:43:48	6591-1.RAW	12:43:48 PM	34.51			-0.6	-0.009	-0.009	ng/L	
Hg2600-3	00	CAL	SEQ-BL2	1	11/11/2020 12:47:58	6592-1.RAW	12:47:58 PM	34.42			-0.7	-0.010	-0.010	ng/L	
Hg2600-3	00	CAL	SEQ-BL3	1	11/11/2020 12:52:07	6593-1.RAW	12:52:07 PM	36.46			1.3	0.019	0.019	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	11/11/2020 12:56:16	6594-1.RAW	12:56:16 PM	66.95			31.8	0.452	0.452	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	11/11/2020 13:00:25	6595-1.RAW	1:00:25 PM	106.14			351.2	1.008	1.008	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	11/11/2020 13:04:34	6596-1.RAW	1:04:34 PM	386.38			1419.5	4.986	4.986	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	11/11/2020 13:08:43	6597-1.RAW	1:08:43 PM	1454.63			20.149	20.149	20.149	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	11/11/2020 13:12:52	6598-1.RAW	1:12:52 PM	3090.77			43.372	43.372	43.372	ng/L	
Hg2600-3	00	CAL	SEQ-HCV1	1	11/11/2020 13:17:02	6599-1.RAW	1:17:02 PM	407.57			5.286	5.286	5.286	ng/L	
Hg2600-3	00	CAL	SEQ-HCV2	1	11/11/2020 13:21:11	6600-1.RAW	1:21:11 PM	44.67			9.5	0.135	0.135	ng/L	
Hg2600-3	00	SAM	F011304-BS1	1	11/11/2020 13:25:20	6601-1.RAW	1:25:20 PM	383.61			348.5	4.881	4.881	ng/L	
Hg2600-3	00	SAM	F011304-BS2	1	11/11/2020 13:29:29	6602-1.RAW	1:29:29 PM	400.68			365.6	5.123	5.123	ng/L	
Hg2600-3	00	BLK	F011304-BLK1	1	11/11/2020 13:33:38	6603-1.RAW	1:33:38 PM	30.83			-4.3	-0.061	-0.061	ng/L	
Hg2600-3	00	BLK	F011304-BLK2	1	11/11/2020 13:37:47	6604-1.RAW	1:37:47 PM	27.03			-8.1	-0.115	-0.115	ng/L	
Hg2600-3	00	BLK	F011304-BLK3	1	11/11/2020 13:41:56	6605-1.RAW	1:41:56 PM	70.74			-11.1	-0.158	-0.158	ng/L	
Hg2600-3	00	BLK	F011304-BLK4	1	11/11/2020 13:46:05	6606-1.RAW	1:46:05 PM	70.74			35.6	0.505	0.505	ng/L	
Hg2600-3	00	BLK	F011304-BLK5	1	11/11/2020 13:50:14	6607-1.RAW	1:50:14 PM	46.03			10.9	0.155	0.155	ng/L	
Hg2600-3	00	SAM	0K00036-01	1	11/11/2020 13:54:23	6608-1.RAW	1:54:23 PM	123.63			88.4	1.189	1.189	ng/L	
Hg2600-3	00	SAM	F011304-MS2	1	11/11/2020 14:02:41	6610-1.RAW	2:02:41 PM	428.30			393.2	5.515	5.515	ng/L	
Hg2600-3	00	SAM	ERR	1	11/11/2020 14:06:51	6611-1.RAW	2:06:51 PM	42.05			13.7	Error	#VALUE!	ng/L	WRONG LOCATION
Hg2600-3	00	SAM	ERR	1	11/11/2020 14:11:00	6612-1.RAW	2:11:00 PM	39.03			3.9	Error	#VALUE!	ng/L	WRONG LOCATION
Hg2600-3	00	SAM	WS	1	11/11/2020 14:15:09	6613-1.RAW	2:15:09 PM	21.12			-14.0	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:19:18	6614-1.RAW	2:19:18 PM	18.38			-16.8	Error	#VALUE!	ng/L	
Hg2600-3	00	CAL	SEQ-CCV1	1	11/11/2020 14:23:27	6615-1.RAW	2:23:27 PM	376.61			340.5	4.833	4.833	ng/L	
Hg2600-3	00	CAL	SEQ-CCB1	1	11/11/2020 14:27:36	6616-1.RAW	2:27:36 PM	33.01			-2.1	-0.030	-0.030	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:31:45	6617-1.RAW	2:31:45 PM	22.84			-12.3	Error	#VALUE!	ng/L	FOR SAMPLE LOCATION/PREP
Hg2600-3	00	SAM	WS	1	11/11/2020 14:35:55	6618-1.RAW	2:35:55 PM	23.04			-12.1	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:40:03	6619-1.RAW	2:40:03 PM	23.09			-12.0	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:44:13	6620-1.RAW	2:44:13 PM	21.54			-13.6	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:48:21	6621-1.RAW	2:48:21 PM	19.35			-15.8	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:52:30	6622-1.RAW	2:52:30 PM	24.00			-11.1	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 14:56:39	6623-1.RAW	2:56:39 PM	22.87			-12.3	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 15:00:48	6624-1.RAW	3:00:48 PM	24.21			-10.9	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 15:04:56	6625-1.RAW	3:04:56 PM	20.31			-14.1	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 15:09:06	6626-1.RAW	3:09:06 PM	20.98			-14.8	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	WS	1	11/11/2020 15:13:14	6627-1.RAW	3:13:14 PM	20.31			-13.1	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	SEQ-CCV2	1	11/11/2020 15:17:24	6628-1.RAW	3:17:24 PM	22.05			350.7	4.978	4.978	ng/L	
Hg2600-3	00	CAL	SEQ-CCB2	1	11/11/2020 15:21:37	6629-1.RAW	3:21:37 PM	385.63			3.5	0.049	0.049	ng/L	
Hg2600-3	00	CAL	SEQ-CCB2	1	11/11/2020 15:25:46	6630-1.RAW	3:25:46 PM	36.59			208.5	2.894	2.894	ng/L	
Hg2600-3	00	SAM	F011304-MS1	1	11/11/2020 15:29:56	6631-1.RAW	3:29:56 PM	243.63			530.5	7.465	7.465	ng/L	
Hg2600-3	00	SAM	0J00147-01	1	11/11/2020 15:34:05	6632-1.RAW	3:34:05 PM	565.68			540.0	7.600	7.600	ng/L	
Hg2600-3	00	SAM	F011304-MS2	1	11/11/2020 15:38:15	6633-1.RAW	3:38:15 PM	575.16			240.7	3.352	3.352	ng/L	
Hg2600-3	00	SAM	0J00147-02	1	11/11/2020 15:42:23	6634-1.RAW	3:42:23 PM	275.85			518.0	7.288	7.288	ng/L	
Hg2600-3	00	SAM	F011304-MS3	1	11/11/2020 15:46:33	6635-1.RAW	3:46:33 PM	563.17			529.6	7.453	7.453	ng/L	
Hg2600-3	00	SAM	F011304-MS3	1	11/11/2020 15:50:43	6636-1.RAW	3:50:43 PM	584.77			429.8	6.094	6.094	ng/L	
Hg2600-3	00	SAM	0K00023-01	10	11/11/2020 15:54:53	6637-1.RAW	3:54:53 PM	484.94			71.3	0.946	0.946	ng/L	
Hg2600-3	00	SAM	0K00023-02	1	11/11/2020 15:59:28	6638-1.RAW	3:59:28 PM	105.41			26.5	0.311	0.311	ng/L	
Hg2600-3	00	SAM	0J00147-06	1	11/11/2020 16:03:38	6639-1.RAW	4:03:38 PM	61.63			0.946	2.460	2.460	ng/L	
Hg2600-3	00	CAL	SEQ-CCV3	1	11/11/2020 16:07:48	6640-1.RAW	4:07:48 PM	213.02			177.9	5.047	5.047	ng/L	
Hg2600-3	00	CAL	SEQ-CCB3	1	11/11/2020 16:11:58	6641-1.RAW	4:11:58 PM	390.69			7.5	0.106	0.106	ng/L	
Hg2600-3	00	SAM	0J00147-03	1	11/11/2020 16:16:08	6642-1.RAW	4:16:08 PM	42.60			197.2	2.734	2.734	ng/L	
Hg2600-3	00	SAM	0J00147-04	1	11/11/2020 16:20:17	6643-1.RAW	4:20:17 PM	232.32			3.014	3.014	3.014	ng/L	
Hg2600-3	00	SAM	0J00147-07	1	11/11/2020 16:24:26	6644-1.RAW	4:24:26 PM	252.09			245.0	3.412	3.412	ng/L	
Hg2600-3	00	SAM	0J00147-08	1	11/11/2020 16:28:35	6645-1.RAW	4:28:35 PM	280.12			250.5	3.490	3.490	ng/L	
Hg2600-3	00	SAM	0K00025-01	1	11/11/2020 16:32:43	6646-1.RAW	4:32:43 PM	285.61			154.5	2.128	2.128	ng/L	
Hg2600-3	00	SAM	0K00025-01	1	11/11/2020 16:36:53	6647-1.RAW	4:36:53 PM	189.64			154.5	2.128	2.128	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0K00025-02	1	11/11/2020 18:41:03	6848-1.RAW	4:41:03 PM	96.02	1		60.9	0.799	0.799	ng/L	
Hg2600-3	00	SAM	0K00025-03	1	11/11/2020 16:45:11	6849-1.RAW	4:45:11 PM	139.47	1		104.3	1.416	1.416	ng/L	
Hg2600-3	00	SAM	0K00025-04	1	11/11/2020 16:48:21	6850-1.RAW	4:48:21 PM	141.28	1		106.1	1.441	1.441	ng/L	
Hg2600-3	00	SAM	0K00025-05	1	11/11/2020 16:53:29	6851-1.RAW	4:53:29 PM	164.24	1		129.1	1.767	1.767	ng/L	
Hg2600-3	00	SAM	0K00025-06	1	11/11/2020 16:57:39	6852-1.RAW	4:57:39 PM	46.15	1		341.7	0.091	0.091	ng/L	
Hg2600-3	00	CAL	SEQ-CCV4	1	11/11/2020 17:01:49	6853-1.RAW	5:01:49 PM	376.88			4.851	4.851	4.851	ng/L	
Hg2600-3	00	CAL	SEQ-CCB4	1	11/11/2020 17:05:58	6854-1.RAW	5:05:58 PM	32.72			2.4	-0.034	-0.034	ng/L	
Hg2600-3	00	SAM	0K00025-07	1	11/11/2020 17:10:07	6855-1.RAW	5:10:07 PM	56.13	1		21.0	0.233	0.233	ng/L	
Hg2600-3	00	SAM	0K00037-01	1	11/11/2020 17:14:16	6856-1.RAW	5:14:16 PM	23.44	1		-11.7	-0.231	-0.231	ng/L	
Hg2600-3	00	SAM	F011307-BS1	10	11/11/2020 17:18:26	6857-1.RAW	5:18:26 PM	523.81	1		488.7	6.930	6.930	ng/L	
Hg2600-3	00	SAM	F011307-BS01	1	11/11/2020 17:22:36	6858-1.RAW	5:22:36 PM	389.966052	2		364.6	5.162	5.162	ng/L	
Hg2600-3	00	BLK	F011307-BLK1	1	11/11/2020 17:26:49	6859-1.RAW	5:26:45 PM	399.74	2		4.1	5.309	5.309	ng/L	
Hg2600-3	00	BLK	F011307-BLK2	1	11/11/2020 17:30:58	6860-1.RAW	5:30:55 PM	30.98	2		-0.059	-0.059	-0.059	ng/L	
Hg2600-3	00	BLK	F011307-BLK3	1	11/11/2020 17:35:04	6861-1.RAW	5:35:04 PM	23.61	2		-11.5	-0.164	-0.164	ng/L	
Hg2600-3	00	SAM	0K00027-01	100	11/11/2020 17:39:13	6862-1.RAW	5:39:13 PM	22.58	2		198.6	2.820	2.820	ng/L	
Hg2600-3	00	SAM	0K00027-02	100	11/11/2020 17:43:23	6863-1.RAW	5:43:23 PM	233.73	2		661.1	9.518	9.518	ng/L	
Hg2600-3	00	SAM	0K00143-01	1	11/11/2020 17:47:33	6864-1.RAW	5:47:33 PM	696.25	2		352.9	5.009	5.009	ng/L	
Hg2600-3	00	CAL	SEQ-CCV5	1	11/11/2020 17:51:43	6865-1.RAW	5:51:43 PM	388.03			6.8	0.096	0.096	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	11/11/2020 17:55:52	6866-1.RAW	5:55:52 PM	41.92			535.1	7.597	7.597	ng/L	
Hg2600-3	00	SAM	F011307-MS1	100	11/11/2020 18:00:02	6867-1.RAW	6:00:02 PM	570.26	2		780.417	14.043	14.043	ng/L	
Hg2600-3	00	SAM	F011307-MSD1	100	11/11/2020 18:04:11	6868-1.RAW	6:04:11 PM	594.85	2		863.6	12.392	12.392	ng/L	
Hg2600-3	00	SAM	F011307-MS2	1	11/11/2020 18:08:21	6869-1.RAW	6:08:21 PM	1015.10	2		36.8	0.524	0.524	ng/L	
Hg2600-3	00	SAM	F011307-MSD2	1	11/11/2020 18:12:30	6870-1.RAW	6:12:30 PM	898.75	2		42.8	0.608	0.608	ng/L	
Hg2600-3	00	SAM	0K00027-03	100	11/11/2020 18:16:40	6871-1.RAW	6:16:40 PM	77.89	2		122.7	1.876	1.876	ng/L	
Hg2600-3	00	SAM	0K00143-02	1	11/11/2020 18:20:50	6872-1.RAW	6:20:50 PM	157.85	2		400.1	5.813	5.813	ng/L	
Hg2600-3	00	SAM	0K00143-03	1	11/11/2020 18:25:00	6873-1.RAW	6:25:00 PM	435.24	2		2.365	2.365	2.365	ng/L	
Hg2600-3	00	SAM	0K00143-04	1	11/11/2020 18:29:10	6874-1.RAW	6:29:10 PM	192.33	2		188.3	2.807	2.807	ng/L	
Hg2600-3	00	SAM	0K00143-05	1	11/11/2020 18:33:20	6875-1.RAW	6:33:20 PM	223.47	2		323.7	4.595	4.595	ng/L	
Hg2600-3	00	CAL	SEQ-CCV6	1	11/11/2020 18:37:30	6876-1.RAW	6:37:30 PM	358.83			0.1	0.001	0.001	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	11/11/2020 18:41:40	6877-1.RAW	6:41:40 PM	35.24			280.5	4.115	4.115	ng/L	
Hg2600-3	00	SAM	0K00143-06	1	11/11/2020 18:45:50	6878-1.RAW	6:45:50 PM	315.64	2		535.7	7.737	7.737	ng/L	
Hg2600-3	00	SAM	0K00143-07	1	11/11/2020 18:49:58	6879-1.RAW	6:49:58 PM	570.81	2		299.1	4.380	4.380	ng/L	
Hg2600-3	00	SAM	0K00143-08	1	11/11/2020 18:54:07	6880-1.RAW	6:54:07 PM	334.28	2		182.5	2.723	2.723	ng/L	
Hg2600-3	00	SAM	0K00143-09	1	11/11/2020 18:58:17	6881-1.RAW	7:02:26 PM	399.77	2		364.6	5.309	5.309	ng/L	
Hg2600-3	00	SAM	0K00143-10	1	11/11/2020 19:02:26	6882-1.RAW	7:06:35 PM	217.58	2		202.9	3.014	3.014	ng/L	
Hg2600-3	00	SAM	0K00143-11	1	11/11/2020 19:06:35	6883-1.RAW	7:10:45 PM	399.77	2		396.0	5.754	5.754	ng/L	
Hg2600-3	00	SAM	0K00143-12	1	11/11/2020 19:10:45	6884-1.RAW	7:14:54 PM	399.77	2		116.8	1.791	1.791	ng/L	
Hg2600-3	00	SAM	0K00143-13	1	11/11/2020 19:14:54	6885-1.RAW	7:19:37 PM	431.13	2		4.039	4.039	4.039	ng/L	
Hg2600-3	00	SAM	0K00143-14	1	11/11/2020 19:19:37	6886-1.RAW	7:23:46 PM	151.89	2		327.2	4.644	4.644	ng/L	
Hg2600-3	00	SAM	0K00143-15	1	11/11/2020 19:23:46	6887-1.RAW	7:27:55 PM	310.25	2		-9.5	-0.135	-0.135	ng/L	
Hg2600-3	00	CAL	SEQ-CCV7	1	11/11/2020 19:27:55	6888-1.RAW	7:32:05 PM	362.29			107.4	1.658	1.658	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	11/11/2020 19:32:05	6889-1.RAW	7:36:14 PM	25.65			325.9	4.626	4.626	ng/L	
Hg2600-3	00	SAM	0K00143-16	1	11/11/2020 19:36:14	6890-1.RAW	7:40:23 PM	142.53	2		-7.8	-0.110	-0.110	ng/L	
Hg2600-3	00	CAL	SEQ-CCV8	1	11/11/2020 19:40:23	6891-1.RAW	7:44:33 PM	361.07							
Hg2600-3	00	CAL	SEQ-CCB8	1	11/11/2020 19:44:33	6892-1.RAW	7:48:43 PM	27.36							

Pat

Total Mercury
EPA1631

Operator MFS
Workshop Thg2600
Method # R: 0.9994 R2:
Description Thg2600-201111-1
BlankS 35.131
CalibFa 70.451
Status: 0.9994 R2:
Conc = (Area-35.13 Run Date: 11:35:49
QC Warnings:7/QC E Run Time: 0.9988
Blank SD:
CF SD:
CF RSD%:

Sample/ID	Location	Run Date	Blank	Conc (ppb)	MB*	Final Conc	Rec%	QA	Raw Data	Run Date	Peak (Raw)	Control (uS)	Flags	Run Count	Comment
Clean															
FLUSH			35.13	0.00					6576-3.RAW	11:38:41	0.00 Clean	NP	3		
FLUSH			35.13	0.00					6577-4.RAW	11:44:16	27.72 Flush	OK	1		
WS			35.13	0.00					6578-1.RAW	11:49:50	27.16 Flush	OK	1		
WS			35.13	0.00					6579-1.RAW	11:53:59	21.74 Sample	OK	1		
WS			35.13	0.00					6580-1.RAW	11:58:08	23.18 Sample	OK	1		
WS			35.13	0.00					6581-1.RAW	12:02:17	21.04 Sample	OK	1		
WS			35.13	0.00					6582-1.RAW	12:06:25	23.01 Sample	OK	1		
WS			35.13	0.00					6583-1.RAW	12:10:35	21.90 Sample	OK	1		
WS			35.13	0.00					6584-1.RAW	12:14:44	20.94 Sample	OK	1		
WS			35.13	0.00					6585-1.RAW	12:18:52	21.35 Sample	OK	1		
WS			35.13	0.00					6586-1.RAW	12:23:02	22.80 Sample	OK	1		
WS			35.13	0.00					6587-1.RAW	12:27:10	20.36 Sample	OK	1		
WS			35.13	0.00					6588-1.RAW	12:31:20	19.62 Sample	OK	1		
WS			35.13	0.00					6589-1.RAW	12:35:29	17.84 Sample	OK	1		
SEQ-IBL1	A1		1	0.00	0.49				6590-1.RAW	12:39:39	20.99 Sample	OK	1		
SEQ-IBL2	A2		1	0.00	0.49				6591-1.RAW	12:43:48	34.51 Sample	OK	1		
SEQ-IBL3	A3		1	0.00	0.52				6592-1.RAW	12:47:58	34.42 Sample	OK	1		
SEQ-CAL1	A4		1	35.13	0.45	90.32			6593-1.RAW	12:52:07	36.46 Sample	OK	1		
SEQ-CAL2	A5		1	35.13	1.01	100.79			6594-1.RAW	12:56:16	66.95 Sample	OK	1		
SEQ-CAL3	A6		1	35.13	4.99	99.71			6595-1.RAW	13:00:25	106.14 Sample	OK	1		
SEQ-CAL4	A7		1	35.13	20.15	100.74			6596-1.RAW	13:04:34	386.38 Sample	OK	1		
SEQ-CAL5	A8		1	35.13	43.37	108.43			6597-1.RAW	13:08:43	1454.63 Sample	OK	1		
SEQ-CV1	A9		1	35.13	5.29	105.73			6598-1.RAW	13:12:52	3090.77 Sample	OK	1		
SEQ-ICB1	A10		1	35.13	0.14				6600-1.RAW	13:17:02	407.57 Sample	OK	1		
F011304-BS1	A11		1	35.13	4.95				6601-1.RAW	13:21:11	44.67 Sample	OK	1		
F011304-BSD1	A12		1	35.13	5.19				6602-1.RAW	13:25:20	383.61 Sample	OK	1		
F011304-BLK1	A13		1	35.13	0.00				6603-1.RAW	13:29:29	400.68 Sample	OK	1		
F011304-BLK2	A14		1	35.13	0.00				6604-1.RAW	13:33:38	30.83 Sample	OK	1		
F011304-BLK3	A15		1	35.13	0.00				6605-1.RAW	13:37:47	27.03 Sample	OK	1		
F011304-BLK4	A16		1	35.13	0.51				6606-1.RAW	13:41:56	24.02 Sample	OK	1		
F011304-BLK5	A17		1	35.13	0.15				6607-1.RAW	13:46:05	70.74 Sample	OK	1		
OK00036-01	A18		1	35.13	1.25				6608-1.RAW	13:50:14	46.03 Sample	OK	1		
F011304-MS2	A19		1	35.13	5.58				6609-1.RAW	13:54:23	123.53 Sample	OK	1		
F011304-MSD2	A20		1	35.13	5.49	171.46			6610-1.RAW	13:58:33	428.30 Sample	OK	1		
ERR			1	35.13	0.18				6611-1.RAW	14:02:41	422.05 Sample	OK	1		
ERR			1	35.13	0.06				6612-1.RAW	14:06:51	48.79 Sample	OK	1		
WS			35.13	0.00					6613-1.RAW	14:11:00	39.03 Sample	OK	1		
WS			35.13	0.00					6614-1.RAW	14:15:09	21.12 Sample	OK	1		
SEQ-CCV1	A21		1	35.13	4.83	96.66			6615-1.RAW	14:19:18	18.38 Sample	OK	1		
SEQ-CCB1	B1		1	35.13	0.00				6616-1.RAW	14:23:27	375.61 Sample	OK	1		
WS			35.13	0.00					6617-1.RAW	14:27:36	33.01 Sample	OK	1		
WS			35.13	0.00					6618-1.RAW	14:31:45	22.84 Sample	OK	1		
WS			35.13	0.00					6619-1.RAW	14:35:55	23.04 Sample	OK	1		
WS			35.13	0.00					6620-1.RAW	14:40:03	23.09 Sample	OK	1		
WS			35.13	0.00					6621-1.RAW	14:44:13	21.54 Sample	OK	1		
WS			35.13	0.00					6622-1.RAW	14:48:21	19.35 Sample	OK	1		
WS			35.13	0.00					6623-1.RAW	14:52:30	24.00 Sample	OK	1		
WS			35.13	0.00					6624-1.RAW	14:56:39	24.00 Sample	OK	1		
WS			35.13	0.00					6625-1.RAW	15:00:48	22.87 Sample	OK	1		
WS			35.13	0.00					6626-1.RAW	15:04:56	24.21 Sample	OK	1		
WS			35.13	0.00					6627-1.RAW	15:09:06	20.98 Sample	OK	1		
WS			35.13	0.00					6628-1.RAW	15:13:14	20.31 Sample	OK	1		
WS			35.13	0.00					6628-1.RAW	15:17:24	22.05 Sample	OK	1		

WRONG LOCATION
WRONG LOCATION

FOR SAMPLE LOCATION PREP

PfZ

SEQ-CCV2	B2	1	35.13	4.98	6629-1.RAW	15:21:37	385.83	Sample	OK	1
SEQ-CCB2	B3	1	35.13	0.05	6630-1.RAW	15:25:46	35.59	Sample	OK	1
0J00147-01	B4	1	35.13	2.96	6631-1.RAW	15:29:55	243.63	Sample	OK	1
F011304-MS1	B5	1	35.13	7.53	6632-1.RAW	15:34:05	585.68	Sample	OK	1
F011304-MSD1	B6	1	35.13	7.67	6633-1.RAW	15:38:15	575.16	Sample	OK	1
0J00147-02	B7	1	35.13	3.42	6634-1.RAW	15:42:23	275.85	Sample	OK	1
F011304-MS3	B8	1	35.13	7.35	6635-1.RAW	15:46:33	553.17	Sample	OK	1
F011304-MSD3	B9	1	35.13	7.52	6636-1.RAW	15:50:43	584.77	Sample	OK	1
0K00023-01	B10	10	35.13	61.01	6637-1.RAW	15:54:53	464.94	Sample	OK	1
0K00023-02	B11	1	35.13	1.01	6638-1.RAW	15:59:28	106.41	Sample	OK	1
0J00147-05	B12	1	35.13	0.38	6639-1.RAW	16:03:38	61.63	Sample	OK	1
0J00147-06	B13	1	35.13	2.52	6640-1.RAW	16:07:48	213.02	Sample	OK	1
SEQ-CCV3	B14	1	35.13	5.05	6641-1.RAW	16:11:58	390.69	Sample	OK	1
SEQ-CCB3	B15	1	35.13	0.11	6642-1.RAW	16:16:08	42.60	Sample	OK	1
0J00147-03	B16	1	35.13	2.80	6643-1.RAW	16:20:17	232.32	Sample	OK	1
0J00147-04	B17	1	35.13	3.08	6644-1.RAW	16:24:26	252.08	Sample	OK	1
0J00147-07	B18	1	35.13	3.48	6645-1.RAW	16:28:35	280.12	Sample	OK	1
0J00147-08	B19	1	35.13	3.56	6646-1.RAW	16:32:43	285.61	Sample	OK	1
0K00025-01	B20	1	35.13	2.19	6647-1.RAW	16:36:53	189.64	Sample	OK	1
0K00025-02	B21	1	35.13	0.86	6648-1.RAW	16:41:03	96.02	Sample	OK	1
0K00025-03	C1	1	35.13	1.48	6649-1.RAW	16:45:11	139.47	Sample	OK	1
0K00025-04	C2	1	35.13	1.51	6650-1.RAW	16:49:21	141.28	Sample	OK	1
0K00025-05	C3	1	35.13	1.83	6651-1.RAW	16:53:29	164.24	Sample	OK	1
0K00025-06	C4	1	35.13	0.16	6652-1.RAW	16:57:39	46.15	Sample	OK	1
SEQ-CCV4	C5	1	35.13	4.85	6653-1.RAW	17:01:49	376.86	Sample	OK	1
SEQ-CCB4	C6	1	35.13	0.00	6654-1.RAW	17:05:58	32.72	Sample	OK	1
0K00025-07	C7	1	35.13	0.00	6655-1.RAW	17:10:07	56.13	Sample	OK	1
0K00035-01	C8	1	35.13	0.30	6656-1.RAW	17:14:16	23.44	Sample	OK	1
0K00037-01	C9	10	35.13	69.36	6657-1.RAW	17:18:26	523.81	Sample	OK	1
F011307-BS1	C10	1	35.13	5.03	6658-1.RAW	17:22:36	389.37	Sample	OK	1
F011307-BSD1	C11	1	35.13	5.18	6659-1.RAW	17:26:45	399.74	Sample	OK	1
F011307-BLK1	C12	1	35.13	0.00	6660-1.RAW	17:30:55	30.98	Sample	OK	1
F011307-BLK2	C13	1	35.13	0.00	6661-1.RAW	17:35:04	23.61	Sample	OK	1
F011307-BLK3	C14	1	35.13	0.00	6662-1.RAW	17:39:13	22.58	Sample	OK	1
0K00027-01	C15	100	35.13	281.90	6663-1.RAW	17:43:23	233.73	Sample	OK	1
0J00143-01	C16	1	35.13	9.38	6664-1.RAW	17:47:33	696.25	Sample	OK	1
SEQ-CCV5	C17	1	35.13	5.01	6665-1.RAW	17:51:43	388.03	Sample	OK	1
SEQ-CCB5	C18	1	35.13	0.10	6666-1.RAW	17:55:52	41.92	Sample	OK	1
F011307-MS1	C19	100	35.13	759.57	6667-1.RAW	18:00:02	570.26	Sample	OK	1
F011307-MSD1	C20	100	35.13	780.28	6668-1.RAW	18:04:11	584.85	Sample	OK	1
F011307-MS2	C21	100	35.13	13.91	6669-1.RAW	18:08:21	1075.10	Sample	OK	1
F011307-MSD2	A1	1	35.13	12.26	6670-1.RAW	18:12:30	898.75	Sample	OK	1
0K00027-02	A2	100	35.13	52.30	6671-1.RAW	18:16:40	71.98	Sample	OK	1
0K00027-03	A3	100	35.13	60.69	6672-1.RAW	18:20:50	77.89	Sample	OK	1
0J00143-02	A4	1	35.13	1.74	6673-1.RAW	18:25:00	157.85	Sample	OK	1
0J00143-03	A5	1	35.13	5.68	6674-1.RAW	18:29:10	435.24	Sample	OK	1
0J00143-04	A6	1	35.13	2.23	6675-1.RAW	18:33:20	192.33	Sample	OK	1
0J00143-05	A7	1	35.13	2.67	6676-1.RAW	18:37:30	223.47	Sample	OK	1
SEQ-CCV6	A8	1	35.13	4.59	6677-1.RAW	18:41:40	358.83	Sample	OK	1
SEQ-CCB6	A9	1	35.13	0.00	6678-1.RAW	18:45:50	35.24	Sample	OK	1
0J00143-06	A10	1	35.13	3.98	6679-1.RAW	18:49:58	315.64	Sample	OK	1
0J00143-07	A11	1	35.13	7.60	6680-1.RAW	18:54:07	570.81	Sample	OK	1
0J00143-08	A12	1	35.13	3.84	6681-1.RAW	18:58:17	306.93	Sample	OK	1
0J00143-09	A13	1	35.13	4.25	6682-1.RAW	19:02:26	334.28	Sample	OK	1
0J00143-10	A14	1	35.13	2.59	6683-1.RAW	19:06:35	217.58	Sample	OK	1
0J00143-11	A15	1	35.13	5.18	6684-1.RAW	19:10:45	399.77	Sample	OK	1
0J00143-12	A16	1	35.13	2.88	6685-1.RAW	19:14:54	238.05	Sample	OK	1
0J00143-13	A17	1	35.13	5.82	6686-1.RAW	19:19:37	431.13	Sample	OK	1

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SEQ-1BL1	A1	F011304-MST1	B5	OK00025-07	C7	000143-04	A6
SEQ-1BL2	A2	F011304-MSD1	B6	OK00035-01	C8	000143-05	A7
SEQ-1BL3	A3	000147-02	B7	OK00037-01	C9	000143-06	A8
SEQ-CAL1	A4	F011304-M3	B8	F011307-B51	C10	000143-07	A9
SEQ-CAL2	A5	F011304-MSD3	B9	F011307-BSD1	C11	000143-08	A10
SEQ-CAL3	A6	OK00023-01	B10	F011307-BLK1	C12	000143-09	A11
SEQ-CAL4	A7	OK00023-02	B11	F011307-BLK2	C13	000143-10	A12
SEQ-CAL5	A8	000147-05	B12	F011307-BLK3	C14	000143-11	A13
SEQ-1CV1	A9	000147-06	B13	OK00027-01	C15	000143-12	A14
SEQ-1CV1	A10	SEQ-CCV3	B14	000143-01	C16	000143-13	A15
F011304-B51	A11	SEQ-CCB3	B15	SEQ-CCV5	C17	000143-14	A16
F011304-BSD1	A12	000147-03	B16	SEQ-CCB5	C18	000143-15	A17
F011304-BLK1	A13	000147-04	B17	F011307-M51	C19	000143-16	A18
F011304-BLK2	A14	000147-07	B18	F011307-MSD1	C20	000143-17	A19
F011304-BLK3	A15	000147-08	B19	F011307-M52	C21	000143-18	A20
F011304-BLK4	A16	OK00025-01	B20	F011307-MSD2	A1	000143-19	A21
F011304-BLK5	A17	OK00025-02	B21	OK00027-02	A2	000143-20	A22
OK00036-01	A18	OK00025-03	C1	OK00027-03	A3	000143-21	A23
F011304-M52	A19	OK00025-04	C2	000143-02	A4	000143-22	A24
F011304-MSD2	A20	SEQ-CCB1	B1	000143-03	A5	000143-23	A25

Verified by: ZCA 11/2/2022

ANALYSIS SEQUENCE

QUALITY ASSURANCE

OK18010

PEER-REVIEWED

INITIALS: PGS

Instrument: Hg2700-1

Calibration ID: UNASSIGNED

Analyzed: 11/17/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OK18010-IBL1	QC	1			
OK18010-CAL1	QC	2	2002026		
OK18010-CAL2	QC	3	2002027		
OK18010-CAL3	QC	4	2002701		
OK18010-CAL4	QC	5	2002702		
OK18010-CAL5	QC	6	2002703		
OK18010-ICV1	QC	7	2002592		
OK18010-ICB1	QC	8			
OJ00151-03RE1	MHg-CVAFS-W-Dist	9			Added 11/17/2020 by MFS
OJ00151-06RE1	MHg-CVAFS-W-Dist	10			Added 11/17/2020 by MFS
OJ00151-07RE1	MHg-CVAFS-W-Dist	11			Added 11/17/2020 by MFS
OK18010-CCV1	QC	12	2002592		
OK18010-CCB1	QC	13			
F011323-BS1	QC	14			
F011323-BSD1	QC	15			
F011323-BLK1	QC	16			
F011323-BLK2	QC	17			
F011323-BLK3	QC	18			
F011323-BLK4	QC	19			
OK18010-CCV2	QC	20	2002592		
OK18010-CCB2	QC	21			
OJ00143-01	MHg-CVAFS-W-Dist	22			
F011323-MS1	QC	23			
F011323-MSD1	QC	24			
OJ00147-02	MHg-CVAFS-W-Dist	25			
F011323-MS2	QC	26			
F011323-MSD2	QC	27			
OJ00143-02	MHg-CVAFS-W-Dist	28			
OJ00143-03	MHg-CVAFS-W-Dist	29			
OJ00143-04	MHg-CVAFS-W-Dist	30			
OJ00143-05	MHg-CVAFS-W-Dist	31			
OK18010-CCV3	QC	32	2002592		
OK18010-CCB3	QC	33			
OJ00143-06	MHg-CVAFS-W-Dist	34			
OJ00143-07	MHg-CVAFS-W-Dist	35			
OJ00143-08	MHg-CVAFS-W-Dist	36			

ANALYSIS SEQUENCE

OK18010

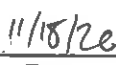
Instrument: Hg2700-1


Calibration ID: UNASSIGNED


Analyzed: 11/17/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OJ00143-09	MHg-CVAFS-W-Dist	37			
OJ00143-10	MHg-CVAFS-W-Dist	38			
OJ00143-11	MHg-CVAFS-W-Dist	39			
OJ00143-12	MHg-CVAFS-W-Dist	40			
OJ00143-13	MHg-CVAFS-W-Dist	41			
OJ00143-14	MHg-CVAFS-W-Dist	42			
OJ00143-15	MHg-CVAFS-W-Dist	43			
OK18010-CCV4	QC	44	2002592		
OK18010-CCB4	QC	45			
OJ00143-16	MHg-CVAFS-W-Dist	46			
OJ00151-05	MHg-CVAFS-W-Dist	47			Scan all data - Level IV
OK00007-01	MHg-CVAFS-W-Dist	48			
OK00007-02	MHg-CVAFS-W-Dist	49			
F011324-BS1	QC	50			
F011324-BSD1	QC	51			
F011324-BLK1	QC	52			
F011324-BLK2	QC	53			
F011324-BLK3	QC	54			
OJ00147-01	MHg-CVAFS-W-Dist	55			
OK18010-CCV5	QC	56	2002592		
OK18010-CCB5	QC	57			
F011324-MS1	QC	58			
F011324-MSD1	QC	59			
OJ00147-03	MHg-CVAFS-W-Dist	60			
OJ00147-04	MHg-CVAFS-W-Dist	61			
OJ00147-07	MHg-CVAFS-W-Dist	62			
OJ00147-08	MHg-CVAFS-W-Dist	63			
OJ00151-02RE1	MHg-CVAFS-W-Dist	64			Redistill, then RR@10x MFS 11/17/20
OK00025-01	MHg-CVAFS-W-Dist	65			Scan all data for level IV report
OK00068-04	MHg-CVAFS-W-Dist	66			
OK18010-CCV6	QC	67	2002592		
OK18010-CCB6	QC	68			


 Samples Loaded By


 Date


 Data Processed By


 Date

Failing Data Report - 0K18010

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F011323-MSD2	MHe-CVAFS-W-Dist	0.505	0.050	1.181698	1.134569	1.1042	ng/L	33.6	65.00	130.00	80.2	35.00	PASS-OVER	FAIL-MSD (Rec. and RPD)	QM-07


 Analyst Reviewed By _____ Date 11/18/20

Peer Reviewed By _____ Date _____

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: MFS	Sequence #: OK18010
Reviewer:	Dataset ID #: MHg27001-201117-1
Date: 11/18/20	WO #: Multiple
Batch #(s): F011306, F011323, F011324	

• Select the correct preparation method.

Additional Comments:

Analyte	Prep Method	Matrix
<input checked="" type="checkbox"/> MHg	SOP2797 MHg Distillation	Water
<input type="checkbox"/> MHg	SOP2986 KOH/MeOH Digest	Tissue
<input type="checkbox"/> MHg	SOP5134 MeCl Extraction	Sed/Soil
<input type="checkbox"/> DMHg	SOP2816 (None Accredited method)	ALL

	Analyst Initials: <i>MFS</i>		Reviewer Initials/Date: <i>PGS</i>
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(a) Reviewer: 100% of peak heights checked	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(b) Are there peak height errors?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/>
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A
(d) Error on a Cal Pt, ICB/CCB, or PB: Has the data been reimported?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A
(e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(f) Check and compare masses (review prep bench sheet)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(g) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(h) Do aliquots and dilutions written on benchsheet match those in Excel?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A
(i) Is the pH>3.0 for all distilled samples?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/> N/A
(j) Is the sequence #, analyst, date, and instrument # on the QC page?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(k) Is the analysis status correct? (analyzed/initial review/reviewed)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(l) Original prep bench sheet added to data package?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(m) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
3. High QA? WO#(s)/Client(s): <u>030051</u>	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(a) Have the QC requirements been met for all WO#s?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
5. 20 or fewer samples in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 2 MS/MSD/MD per batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
(b) 1 CCV and 1 CCB every 10 analytical runs?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/>
QA/QC Data Checked			
6. The calibration curve included a minimum of 5 Standards	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> N/A
Comments: _____			
7. 1st Calibration Standard % Recoveries (65-135%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> N/A
Comments: _____			
8. RSD CF (≤ 15%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/>
Comments: _____			

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: MFS	Sequence #: OK18010
Reviewer: 0	Dataset ID #: MHg27001-201117-1
Date:	WO #: Multiple
Batch #(s): F011306, F011323, F011324	

Analyst Initials: MFS **Reviewer Initials/Date:** IGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------|--------------------------|
| 9. ICV % Recoveries 67-133%
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. CCV % Recoveries 67-133%
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Are the absolute value of the ICB and CCBs < PQL?
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. LCS/LCSD or BS/BSD RPD (< 25%)
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Water: Average of Preparation Blanks < 0.045 ng/L and standard deviation of 0.015 ng/L?
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 15. Sediment/Tissue: Individually, are the Preparation Blanks < PQL for the matrix?
Comments: _____ | <input type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)
Comments: _____ | <input type="checkbox"/> YES <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 17. Is the correct 'Source' designated for MD/MS/MSD?
Comments: _____ | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. For digested preps: was there a spike witness signature & date on the prep bench sheet?
Comments: _____ | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 19. MD RPD/MT RSD(< 35%)
Comments: _____ | <input type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 20. Is there one set of MS/MSD per every 10 samples?
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. MS/MSD RPD(< 35%)
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. MS (AS) % Recoveries (65-130%)
Comments: _____ | <input type="checkbox"/> PASS <input type="checkbox"/> FAIL | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. MSD (ASD) % Recoveries (65-130%)
Comments: <u>F011323-MSD2</u> | <input type="checkbox"/> PASS <input checked="" type="checkbox"/> FAIL | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)
Comments: _____ | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. Are all samples within instrument calibration range (or at maximum aliquot size)?
Comments: _____ | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. For instrumental dilutions, is the dilution factor in excel correct?
Is the sample volume, diluents, and final volume of the dilution noted on benchsheet?
Comments: _____ | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 27. Dissolved < Total metals (if applicable)
Comments: _____ | <input type="checkbox"/> PASS <input checked="" type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 28. Effluent < Influent metals (visually confirm if needed)
Comments: _____ | <input type="checkbox"/> PASS <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |

Peer Review Check List for MHg for CV-GC-AFS (SOP2808) 2018 Rev 7 (8/2/18)

Analyst: MFS	Sequence #: OK18010
Reviewer: 0	Dataset ID #: MHg27001-201117-1
Date:	WO #: Multiple
Batch #(s): F011306, F011323, F011324	

Analyst Initials: <u>MFS</u>	Reviewer Initials/Date: <u>PGS</u>
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> N/A <input type="checkbox"/>

29. Are re-runs noted with reason?
 Comments: _____

30. For failing QC (CCV, CCB, PB, BS/BSD, CAL):
 Was a bubbler and trap test run before the analytical run continued?
 Comments: _____

31. Do re-run results compare to initial analysis (< 35% RPD)?
 Comments: _____

32. Are qualifiers consistent with the data review flowcharts?
 Comments: _____

33. Have non-reportable samples been imported into LIMS and clicked to non-reportable?
 Comments: _____

34. Have re-extracts been created for non-reportable samples?
 35. Narrations in MMO box in LIMS?
 Comments: _____

36. Are there any HIGH QA projects within the data?
 If so, place dataset to the QA office.

37. Does the data set need scanning?

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

38. Date of analyst IDOC/CDOC: 3/7/20 ^{5 MFS 11/18/20} IDOC/CDOC within last 12 months? YES NO

39. Date of analyst's SOP reading: 10/24/20 Current SOP revision? YES NO

40. Date of LOD: 8/19/20 LOD within last 3 months (within 12 months for MDN)? YES NO N/A

41. Date of LOQ: 8/19/20 LOQ within last 3 months (within 12 months for MDN)? YES NO N/A

42. If MDN samples, date of last MDL study: N/A

43. MDL study within last 12 months? YES NO N/A

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.
 Additional Comments: _____ YES NO

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

11/17/20
MPS

Batch #1

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011306-BLK1	Blank	45	40					
F011306-BLK2	Blank	45	40					
F011306-BLK3	Blank	45	40					
F011306-BLK4	Blank	45.09	40					
F011306-BS1	LCS	45	40	2002647	50			0J00151-08
F011306-BSD1	LCS Dup	45	40	2002647	50			
F011306-MS1	Matrix Spike [0J00151-04]	45.15	40	2002647	50			
F011306-MS2	Matrix Spike [0J00137-01]	45.45	40	2002647	50			
F011306-MSD1	Matrix Spike Dup [0J00151-04]	45.78	40	2002647	50			
F011306-MSD2	Matrix Spike Dup [0J00137-01]	45.38	40	2002647	50			

Standard ID(s): 2002647

Description: MHg New Primary 1.0 ng/mL CAL

Expiration: 29-Jan-21 00:00

Reagent ID(s): 2002390

Description: 1% APDC Solution

Expiration: 07-Jan-21 00:00

Curve

CAL1: 50 µL 2002647
 CAL2: 100 µL 2002647
 CAL3: 50 µL 2002647
 CAL4: 100 µL 2002647
 CAL5: 200 µL 2002647
 LOW/CCV: 50 µL 2002647

Reagent ID(s): 2002433, 2002751, 2003024, 2003051
 Description: Acetate Buffer, Ethylating Agent (For Methyl Mercury Analysis), .4% HCl Distillation Dilute (Made Daily), 2.5% Ascorbic Acid

Expiration: 12-Jan-21 00:00, 03-May-21 00:00, 17-Nov-20 00:00, 23-Nov-20 00:00

10x = 5 mL Sample → 50 mL F.U.
 5x = 10 mL Sample → 50 mL F.U.

Pipette Cal Date: Curve 1,2 CCV-3 w/it: VFA 11-17-2020
 NUS-9653 11/14/20 Reagent w/it: ZFA 11/16/2020
 PU40588 11/17/20 Ethylation w/it: VFA 11-17-2020
 PU30538 11/17/20 CCV 5-9 w/it: ZFA 11/18/2020

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00137-01	FB-10262020 (410-18348-1)	45.8	40	-	-	150401		
0J00151-01	204A_20201029_N_WG	45.05	40	-	-	150401	Scan all data - Level IV	
0J00151-02	306A_20201029_FD_WG	45.34	40	-	-	150401	Scan all data - Level IV	
0J00151-03	306A_20201029_N_WG	45.03	40	-	-	150401	Scan all data - Level IV	
0J00151-03RE1	306A_20201029_N_WG	45.03	40	-	-	150401	Added 11/17/2020 by MFS	E:01 RR@10x MFS 11/17/20
0J00151-04	803A_20201029_N_WG	45.65	40	QC	-	150401	MS/MSD Scan all data - Level IV	
0J00151-06	PZ-102A_20201029_N_WG	45.28	40	-	-	150401	Scan all data - Level IV	
0J00151-06RE1	PZ-102A_20201029_N_WG	45.28	40	-	-	150401	Added 11/17/2020 by MFS	Undercurve: RR@5x MFS 11/17/20
0J00151-07	PZ-104A_20201029_N_WG	45.81	40	-	-	150401	Scan all data - Level IV	
0J00151-07RE1	PZ-104A_20201029_N_WG	45.81	40	-	-	150401	Added 11/17/2020 by MFS	Undercurve: RR@5x MFS 11/17/20
0K00017-01	FB_11022020 (410-19190-7)	45.26	40	-	-	150401		
0K00018-01	WTS-1 (570-42690-1)	45.07	40	-	-	150401		
0K00025-03	OL-3584-02	45.58	40	-	-	150401	Scan all data for level IV report	
0K00025-04	OL-3584-03	45.54	40	-	-	150401	Scan all data for level IV report	
0K00025-05	OL-3584-04	45.75	40	-	-	150401	Scan all data for level IV report	
0K00025-06	OL-3584-05	45.67	40	-	-	150401	Scan all data for level IV report	
0K00025-07	OL-3584-06	45.31	40	-	-	150401	Scan all data for level IV report	
00042-05	FB_11052020 (410-19653-5)	45.68	40	-	-	150401		
00057-03	FB_11092020 (410-20017-3)	45.46	40	-	-	150401		

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Work Order	Client	Project	45.14	40	-	150401
0K00059-01	ESGV-36-MTD_O-060	Low Level Mercury	45.14	40	-	150401
0K00059-02	ESGV-36-LOW-016	DOW DWR MMHg and THg Waters	45.95	40	-	150401
0K00067-02	FB_11102020 (410-20223-2)	Low Level Mercury Methyl Mercury	45.11	40	-	150401

Work Order

0J00137
0J00151
0K00017
0K00018
0K00025
0K00042
0K00057
0K00059
0K00067

Client

Eurofins Lancaster Environmental, LLC
Eurofins Lancaster Environmental, LLC
Eurofins Lancaster Environmental, LLC
Eurofins Calscience, LLC
Parsons - Syracuse NY
Eurofins Lancaster Environmental, LLC
Eurofins Lancaster Environmental, LLC
Larry Walker Associates Davis
Eurofins Lancaster Environmental, LLC

Project

Low Level Mercury
DOW DWR MMHg and THg Waters
Low Level Mercury
Methyl Mercury
Honeywell 2020 Onondaga Lake
Low Level Mercury
Low Level Mercury
East San Gabriel Valley CIMP
Low Level Mercury

PREPARATION BENCH SHEET

11/17/20
MFS

Batch #2

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011323-BLK1	Blank	45	40					
F011323-BLK2	Blank	45	40					
F011323-BLK3	Blank	45	40					
F011323-BLK4	Blank	45	40					0J00151-09 LEL 11-17-2020
F011323-BS1	LCS	45	40					
F011323-BSD1	LCS Dup	45	40					
F011323-MS1	Matrix Spike [0J00143-01]	45	40					
F011323-MS2	Matrix Spike [0J00147-02]	45	40					
F011323-MSD1	Matrix Spike Dup [0J00143-01]	45	40					
F011323-MSD2	Matrix Spike Dup [0J00147-02]	45	40					

Standard ID(s):

Description:

Expiration:

Reagent ID(s):

Description:

Expiration:

Reagent wit (1-24): 154 11-17-2020
Ethyl-wit (1-24): 154 11/17/2020

2002390 1% APDC Solution
2003024 .4% HCl Distillation Dilute (Made Daily)
2002757
2002024 2002433
MFS 11/17/20
2002051

07-Jan-21 00:00
17-Nov-20 00:00

Reagent wit (25-30): 214 11/18/2020
Ethyl wit (25-30): 214 11/18/2020

50x = 1mL Sample → 50 mL F.V.

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00143-01	WQ1b-C_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-02	WQ1b-C_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-03	WQ2-C_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-04	WQ2-C_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-05	WQ3-L_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-06	WQ3-L_102820_SW_10 DISSOLVED	45	40	-	-	241201		
0J00143-07	WQ-ECH_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-08	WQ-ECH_102820_SW_10 DISSOLVED	45	40	-	-	150404		
0J00143-09	ES-15_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-10	ES-15_102820_SW_10 DISSOLVED	45	40	-	-	150404		
0J00143-11	WQ-FPT_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
0J00143-12	WQ-FPT_102820_SW_10 DISSOLVED	45	40	-	-	150404		
0J00143-13	WQ1b-C_102820_SW_10_VAL TOTAL	45	40	-	-	150404		
0J00143-14	WQ1b-C_102820_SW_10_VAL DISSOLVED	45	40	-	-	150404		
0J00143-15	WQ2-C_102820_SW_10_VAL TOTAL	45	40	-	-	150404		
0J00143-16	WQ2-C_102820_SW_10_VAL DISSOLVED	45	40	-	-	150404		
0J00147-02	OV-02_102920_SW_10 DISSOLVED	45	40	QC	-	010201	MS/MSD	
1151-05	805A-R_20201029_N_WG	45	40	-	-	150404	Scan all data - Level IV	
0007-01	OW-ALB1-D28	45	40	-	-	150404		

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water **Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water** **Prepared: 11/17/2020**

0K00007-02	PW-ALB1-D28	45	40	-	-	140103	
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<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0J00143	Wood - MA	Penobscot
0J00147	Wood - MA	Penobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00007	Physis Labs	Methyl Mercury

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: LEL
Upload/Date: MFS

^{17 MES}
11/18/20
11/16/20

Samples to lab: MIA
Reviewer/Date: ZKH 11/19/2020

Batch #: F011323

EFGS Preparation Method		ICPMS	AFS
<input type="checkbox"/> SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2837	Tissue Nitric Digestion	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2840	Modified Aqua Regia		
<input type="checkbox"/> SOP2820	RP		
<input type="checkbox"/> SOP2821	HF Bomb Digestion	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2825	Nitric Bomb Digestion	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2993	Oven Digestion (As, Se Speciation)		
<input type="checkbox"/> SOP5145	Microwave Digestion (Nutraceuticals)		
<input type="checkbox"/> SOP5145	Microwave Digestion (3051)		
<input checked="" type="checkbox"/>	NA Other: <u>SOP 2836</u>		

Initials	SOP Date	DOC Date
<u>LEL</u>	<u>4-22-2020</u>	<u>4-22-2020</u>

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: MtHg

- | | | Reviewer Initials | Tertiary Review |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------|
| 1. Is any SOP/DOC expiring within one week of Submission Date? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input checked="" type="checkbox"/> |
| Data cannot be reported without a current IDOC/CDOC. | | | |
| 2. Check prep method | <input checked="" type="checkbox"/> YES | | <input checked="" type="checkbox"/> |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> ICPMS <input type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30 | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 4. Check for transcription errors from benchsheet | <input checked="" type="checkbox"/> YES | | <input checked="" type="checkbox"/> |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (b) Check and compare mass | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (e) For re-digests, have e-mails been attached and verified? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> YES | | <input checked="" type="checkbox"/> |
| 5. Samples per Batch? Check QC Requirements | <input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10 | | <input checked="" type="checkbox"/> |
| (a) PBs per batch? | <input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs | | <input checked="" type="checkbox"/> |
| (b) Are pre and post homogenization blanks in batch? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (c) BS, BS/BSD or CRM in batch? | <input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM | | <input checked="" type="checkbox"/> |
| (d) MS/MSD in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (e) MD in batch? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (f) Is there at least one duplicate QC source in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (g) Are there any client specific requests, QC requests, etc? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| Document: <u>W00JW147-02</u> | | | |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (i) Correct 'source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 6. Special prep requirements? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (b) For all spiking was there a witness? (Initials must be in logbook) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> |
| (c) Spikes added: | <input checked="" type="checkbox"/> YES | | <input checked="" type="checkbox"/> |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: N/A

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
<u>2002647</u>	<u>MtHg Long Int 50</u>				

MFS 11/16/20

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

1142

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011323-BLK1	Blank	45	40					
F011323-BLK2	Blank	45	40					
F011323-BLK3	Blank	45	40					
F011323-BLK4	Filter Blank 0100151-09A	45.72	40					0100151-09 LEL 11-17-2020
F011323-BS1	LCS	45	40	2002647	50			
F011323-BSD1	LCS Dup	45	40	2002647	50			
F011323-MS1	Matrix Spike [0100143-01]	45.04	40	2002647	50			
F011323-MS2	Matrix Spike [0100147-02]	45.85	40	2002647	50			
F011323-MSD1	Matrix Spike Dup [0100143-01]	45.55	40	2002647	50			
F011323-MSD2	Matrix Spike Dup [0100147-02]	45.28	40	2002647	50			

Standard ID(s): 2002647
 Description: MHg New Primary 1.0 ng/mL CAL
 Expiration: 29-Jan-21 00:00

Reagent ID(s): 2002390, 2003059
 Description: 1% APDC Solution, 4% HCl Distillation Dilute (Made Daily)
 Expiration: 07-Jan-21 00:00, 18-Nov-20 00:00

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Matrix: Water

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100143-01	WQ1b-C_102820_SW_10 TOTAL	45.41	40	-	-	fins Cals		
0100143-02	WQ1b-C_102820_SW_10 DISSOLVED	45.67	40	-	-	241201		
0100143-03	WQ2-C_102820_SW_10 TOTAL	45.01	40	-	-	fins Cals		
0100143-04	WQ2-C_102820_SW_10 DISSOLVED	45.83	40	-	-	241201		
0100143-05	WQ3-L_102820_SW_10 TOTAL	45.43	40	-	-	fins Cals		
0100143-06	WQ3-L_102820_SW_10 DISSOLVED	45.51	40	-	-	241201		
0100143-07	WQ-ECH_102820_SW_10 TOTAL	45.34	40	-	-	fins Cals		
0100143-08	WQ-ECH_102820_SW_10 DISSOLVED	45.78	40	-	-	150404		
0100143-09	ES-15_102820_SW_10 TOTAL	45.13	40	-	-	fins Cals		
0100143-10	ES-15_102820_SW_10 DISSOLVED	45.18	40	-	-	150404		
0100143-11	WQ-FPT_102820_SW_10 TOTAL	45.6	40	-	-	fins Cals		
0100143-12	WQ-FPT_102820_SW_10 DISSOLVED	45.32	40	-	-	150404		
0100143-13	WQ1b-C_102820_SW_10 VAL TOTAL	45.13	40	-	-	150404		
0100143-14	WQ1b-C_102820_SW_10 VAL DISSOLVED	45.86	40	-	-	150404		
0100143-15	WQ2-C_102820_SW_10 VAL TOTAL	45.67	40	-	-	150404		
0100143-16	WQ2-C_102820_SW_10 VAL DISSOLVED	45.1	40	-	-	150404		
0100147-02	OV-02_1029920_SW_10 DISSOLVED	45.68	40	QC	-	010201	MS/MSD	
0100151-05	805A-R_20201029_N_WG	45.48	40	-	-	150404	Scan all data - Level IV	
0K00007-01	OW-ALB1-D28	45.25	40	-	-	150404		

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

OK00007-02	<input checked="" type="checkbox"/>	PW-ALB1-D28	37.28	<input checked="" type="checkbox"/>	40	-	-	010302		
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Work Order	Client	Project
0J00143	Wood - MA	Penobscot
0J00147	Wood - MA	Penobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
OK00007	Physis Labs	Methyl Mercury

Methyl Mercury Distillations (EPA 1630)

Name: VR

Date: 11-17-2020

Batch #: F011323

Sample Matrix: Water

WO#: 0500143, 0500151, 0500147, 0K00007

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (23)	Time first sample distillation completed: <u>1142</u>
1	F011323-BIK1	<2	45.73	3	Spike ID: <u>2002647</u> Spike Amount: <u>50</u> μ l Spike Witness: <u>VR 11/17/20</u> Balance #: <u>2</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>LU21647</u> Cal. Date: <u>11-13-2020</u> Pipette #: <u>P430538</u> Cal. Date: <u>11-13-2020</u> Pipette #: <u>N/A</u> Cal. Date: <u>N/A</u> APDC ID: <u>2602390 (1%, 200ml)</u> HCl ID: <u>2003059 (.4%)</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥ 10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>122</u> Unit 2: <u>123</u> Unit 3: <u>124</u> Unit 4: <u>N/A</u> Unit 5: <u>N/A</u> Unit 6: <u>N/A</u> Comments: F011323-BIK4: 0500151-09A 0500143-01: SRC MS1/MSD1 0500147-02: SRC MS2/MSD2 30: 45.08g
2	F011323-BIK2	<2	45.43	3	
3	F011323-BIK3	<2	45.14	3	
4	F011323-BIK4	<2	45.72	3	
5	F011323-BS1	<2	45.73	3	
6	F011323-BSD1	<2	45.99	3	
7	0500143-01B	<2	45.41	3	
8	F011323-MS1	<2	45.04	3	
9	F011323-MSD1	<2	45.55	3	
10	0500147-02B	<2	45.68	3	
11	F011323-MS2	<2	45.85	3	
12	F011323-MSD2	<2	45.78	3	
13	0500143-02B	<2	45.67	3	
14	0500143-03B	<2	45.01	3	
15	0500143-04B	<2	45.83	3	
16	0500143-05B	<2	45.43	3	
17	0500143-06B	<2	45.51	3	
18	0500143-07B	<2	45.34	3	
19	0500143-08B	<2	45.78	3	
20	0500143-09B	<2	45.13	3	
21	0500143-10B	<2	45.18	3	
22	0500143-11B	<2	45.60	3	
23	0500143-12B	<2	45.32	3	
24	0500143-13B	<2	45.13	3	
25	0500143-14B	<2	45.86	3	
26	0500143-15B	<2	45.67	2	
27	0500143-16B	<2	45.10	1	
28	0500151-05D	<2	45.48	2	
29	0K00007-01A	<2	45.25	2	
30	0K00007-02A	<2	37.28	2	

VR 11/17/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike 1 ID	µl Spike1	Spike 2 ID	µl Spike2	Extraction Comments
F011323-BLK1	Blank	45	40					
F011323-BLK2	Blank	45	40					
F011323-BLK3	Blank	45	40					
F011323-BS1	LCS	45	40					
F011323-BSD1	LCS Dup	45	40					
F011323-M\$1	Matrix Spike [0J00143-01]	45	40					
F011323-M\$2	Matrix Spike [0J00147-02]	45	40					
F011323-MSD1	Matrix Spike Dup [0J00143-01]	45	40					
F011323-MSD2	Matrix Spike Dup [0J00147-02]	45	40					

Standard ID(s):

Description:

Expiration:

Reagent ID(s):

Description:

Expiration:

2002390

1% APDC Solution

07-Jan-21 00:00

2003024

.4% HCl Distillation Dilute (Made Daily)

17-Nov-20 00:00

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
X J000143-01	WQ1b-C_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
X J000143-02	WQ1b-C_102820_SW_10 DISSOLVED	45	40	-	-	241201		
X J000143-03	WQ2-C_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
X J000143-04	WQ2-C_102820_SW_10 DISSOLVED	45	40	-	-	241201		
X J000143-05	WQ3-L_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
X J000143-06	WQ3-L_102820_SW_10 DISSOLVED	45	40	-	-	241201		
X J000143-07	WQ-ECH_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
X J000143-08	WQ-ECH_102820_SW_10 DISSOLVED	45	40	-	-	241201		
X J000143-09	ES-15_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
X J000143-10	ES-15_102820_SW_10 DISSOLVED	45	40	-	-	120202		
X J000143-11	WQ-FPT_102820_SW_10 TOTAL	45	40	-	-	fins Cals		
X J000143-12	WQ-FPT_102820_SW_10 DISSOLVED	45	40	-	-	241201		
X J000143-13	WQ1b-C_102820_SW_10_VAL TOTAL	45	40	-	-	120202		
X J000143-14	WQ1b-C_102820_SW_10_VAL DISSOLVED	45	40	-	-	120202		
X J000143-15	WQ2-C_102820_SW_10_VAL TOTAL	45	40	-	-	241201		
X J000143-16	WQ2-C_102820_SW_10_VAL DISSOLVED	45	40	-	-	120202		
X J000147-02	OV-02_102920_SW_10 DISSOLVED	45	40	QC	-	010201	MS/MSD	
X 00151-05	805A-R_20201029_N_WG	45	40	-	-	140103	Scan all data - Level IV	
X 00007-01	OW-ALB1-D28	45	40	-	-	i Refrige		

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

0K00007-02	PW-ALBI-D28	45	40	-	-	140103	
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<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0J00143	Wood - MA	Penobscot
0J00147	Wood - MA	Penobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00007	Physis Labs	Methyl Mercury

Analytical Standard Record
Eurofins Frontier Global Sciences, LLC
2003059

Description:	.4% HCl Distillation Dilute (Made Daily)	Expires:	18-Nov-20
Standard Type:	Reagent	Prepared:	17-Nov-20
Solvent:	NA <i>use 11-17-2020</i>	Prepared By:	Lilly-Anna Lacount
Final Volume (mls):	250.28 <i>80</i>	Department:	Trace Metals
Vials:	2	Last Edit:	17-Nov-20 07:38 by LEL

Ratio of acid to water is not critical. Made new each day prior to a distillation.

Analyte	CAS Number	Concentration	Units
			ug/mL

Parent Standards used in this standard:						
Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2001973	TraceMetal Grade Hydrochloric Ac	13-Aug-20	Lilly-Anna Lacount	17-Jun-23	13-Oct-20 16:10 by DM	1

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

11/17/20
MFS
Batek # 3

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011324-BLK1	Blank	45	40					
F011324-BLK2	Blank	45	40					
F011324-BLK3	Blank	45	40					
F011324-BS1	LCS	45	40					
F011324-BSD1	LCS Dup	45	40					
F011324-MS1	Matrix Spike [0J00147-01]	45	40					
F011324-MSD1	Matrix Spike Dup [0J00147-01]	45	40					

Standard ID(s): Description: Expiration: Reagent ID(s): Description: Expiration:

2002390 1% APDC Solution 07-Jan-21 00:00

2003024 4% HCl Distillation Dilute (Made Daily) 17-Nov-20 00:00

2002767

2002483

2008051

Reagent wit: ZKH 11/17/2020

Ethyl wit: ZKH 11/17/2020

10x = 50ml Sample + 50ml F.U.

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	45	40	QC	-	241201	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	45	40	-	-	241201		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	45	40	-	-	241201		
0J00147-07	ADD-02_10290_SW_10 TOTAL	45	40	-	-	241201		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	45	40	-	-	241201		
0J00151-02REI	306A_20201029_FD_WG	45	40	-	-	S&R	Redistill, then RR@10x MFS 11/17/20	
0K00025-01	OL-3584-01 Total	45	40	-	-	241201	Scan all data for level IV report	
0K00068-04	FB_11112020 (410-20361-4)	45	40	-	-	241201		

Work Order	Client	Project
0J00147	Wood - MA	Penobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00025	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0K00068	Eurofins Lancaster Environmental, LLC	Low Level Mercury

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: LEL 11/17/20
Upload/Date: MPS 11/18/20

Samples to lab: N/A
Reviewer/Date: ZKH 11/18/20

Batch #: F011324

EFGS Preparation Method		ICPMS	AFS	CVAFS
<input type="checkbox"/> SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2837	Tissue Nitric Digestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2840	Modified Aqua Regia			
<input type="checkbox"/> SOP2820	RP			
<input type="checkbox"/> SOP2821	HF Bomb Digestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2825	Nitric Bomb Digestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2993	Oven Digestion (As, Se Speciation)			
<input type="checkbox"/> SOP5145	Microwave Digestion (Nutraceuticals)			
<input type="checkbox"/> SOP5145	Microwave Digestion (3051)			
<input checked="" type="checkbox"/> NA	Other: <u>SOP 2797 Distillation</u>			

Initials	SOP Date	DOC Date
<u>LEL</u>	<u>4-22-2020</u>	<u>4-22-2020</u>

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: MHg

- | | ICPMS | CV-AFS | 70:30 | 70:30 | Reviewer Initials | Tertiary Review |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------|--------------------------------|-----------------------------------------|-------------------------------------|-------------------------------------|
| 1. Is any SOP/DOC expiring within one week of Submission Date?
Data cannot be reported without a current IDOC/CDOC. | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | | <u>ZKH</u> | <u>LEL</u> |
| If YES, notify supervisor and technician immediately. | | | | | | |
| 2. Check prep method | <input checked="" type="checkbox"/> YES | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> ICPMS | <input type="checkbox"/> CV-AFS | <input type="checkbox"/> 70:30 | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | <input checked="" type="checkbox"/> YES | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Check for transcription errors from benchsheet | <input checked="" type="checkbox"/> YES | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (b) Check and compare mass | <input checked="" type="checkbox"/> YES | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (e) For re-digests, have e-mails been attached and verified? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> YES | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Samples per Batch? Check QC Requirements | <input type="checkbox"/> ≤ 20 | <input checked="" type="checkbox"/> ≤ 10 | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) PBs per batch? | <input checked="" type="checkbox"/> 3 PBs | <input type="checkbox"/> 2 PBs | <input type="checkbox"/> 1 PBs | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (b) Are pre and post homogenization blanks in batch? | | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (c) BS, BS/BSD or CRM in batch? | <input type="checkbox"/> BS | <input checked="" type="checkbox"/> BS/BSD | <input type="checkbox"/> CRM | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (d) MS/MSD in batch? | | <input checked="" type="checkbox"/> YES | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (e) MD in batch? | | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (f) Is there at least one duplicate QC source in batch? | | <input checked="" type="checkbox"/> YES | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (g) Are there any client specific requests, QC requests, etc? | | <input checked="" type="checkbox"/> YES | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Document: <u>WQ 0130147-01</u> | | | | | | |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input checked="" type="checkbox"/> YES | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (i) Correct 'source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Special prep requirements? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> YES | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> YES | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook) | <input checked="" type="checkbox"/> YES | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (c) Spikes added: | <input checked="" type="checkbox"/> YES | | | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: N/A

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
<u>MHg 1.0mg/mL 2002147 50</u>					

MPS 11/18/20

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - ERGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011324-BLK1	Blank	45	40					
F011324-BLK2	Blank	45	40					
F011324-BLK3	Blank	45	40					
F011324-BS1	LCS	45	40	2002647	50			
F011324-BSD1	LCS Dup	45	40	2002647	50			
F011324-MS1	Matrix Spike [0J00147-01]	45.64	40	2002647	50			
F011324-MSD1	Matrix Spike Dup [0J00147-01]	45.01	40	2002647	50			

Standard ID(s):

Description:

Expiration:

Reagent ID(s):

Description:

Expiration:

2002647

MHg New Primary 1.0 ng/mL CAL

29-Jan-21 00:00

2002390

1% APDC Solution

07-Jan-21 00:00

2003059

4% HCl Distillation Dilute (Made Daily)

18-Nov-20 00:00

Due Date: 11/13/2020

1570

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	45.32	40	QC	-	241201	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	45.11	40	-	-	241201		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	45.73	40	-	-	241201		
0J00147-07	ADD-02_10290_SW_10 TOTAL	45.72	40	-	-	241201		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	45.68	40	-	-	241201		
0J00151-02REI	306A_20201029_FD_WG	45.12	40	-	-	S&R	Redistill, then RR@10x MFS 11/17/20	
0K00023-01	OL-3584-01 Total	45.3	40	-	-	241201	Scan all data for level IV report	
0K00068-04	FB_11112020 (410-20361-4)	45.32	40	-	-	241201		

Work Order	Client	Project
0J00147	Wood - MA	Perobscot
0J00151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00023	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0K00068	Eurofins Lancaster Environmental, LLC	Low Level Mercury

Methyl Mercury Distillations (EPA 1630)

Name: FA Date: 11-17-2020 Batch #: F011324 Sample Matrix: Water
 WO#: 0500147, 0500151, 0100068, 0100025

The pH of the preserved sample must be documented before an aliquot is removed for preparation.

Digest #	Sample ID Number	Preserved pH	Sample Size (mL)	Final pH (≥3)	Time first sample distillation completed: <u>1510</u>
1	F011324-BIK1	<2	45.10	2	Spike ID: <u>2002647</u> Spike Amount: <u>50</u> µL Spike Witness: <u>MEB 11/17/20</u> Balance #: <u>2</u> Calibrated? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pipette #: <u>L421647</u> Cal. Date: <u>11-13-2020</u> Pipette #: <u>PU 20538</u> Cal. Date: <u>11-13-2020</u> Pipette #: <u>N/A</u> Cal. Date: <u>N/A</u> APDC ID: <u>2002390(11, 2020)</u> HCl ID: <u>2003059(4%)</u> Temperature: No set range as the temp. may be changed to keep flow rate of ≥10 mL per hour. Temperature is recorded for informational purposes only. Unit 1: <u>122</u> Unit 2: <u>123</u> Unit 3: <u>124</u> Unit 4: <u>N/A</u> Unit 5: <u>N/A</u> Unit 6: <u>N/A</u> Comments: <u>0500147-01: SRC/MSI/MSD</u> MEB 11/17/20
2	F011324-BIK2	<2	45.23	2	
3	F011324-BIK3	<2	45.63	3	
4	F011324-BSI	<2	45.08	3	
5	F011324-BSPI	<2	45.53	3	
6	0500147-01B	<2	45.32	2	
7	F011324-MSI	<2	45.64	2	
8	F011324-MSPI	<2	45.01	2	
9	0500147-03B	<2	45.11	1	
10	0500147-04B	<2	45.73	2	
11	0500147-07B	<2	45.72	2	
12	0500147-08B	<2	45.68	2	
13	0100025-01A	<2	45.30	2	
14	0100068-01A	<2	45.32	1	
15	0500151-02REID	<2	45.12	2	

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011324-BLK1	Blank	45	40					
F011324-BLK2	Blank	45	40					
F011324-BLK3	Blank	45	40					
F011324-BS1	LCS	45	40					
F011324-BSD1	LCS Dup	45	40					
F011324-MS1	Matrix Spike [0J00147-01]	45	40					
F011324-MSD1	Matrix Spike Dup [0J00147-01]	45	40					

Standard ID(s): Description:

Expiration:

Reagent ID(s):

Description:

Expiration:

2002390

1% APDC Solution

07-Jan-21 00:00

2003024

.4% HCl Distillation Dilute (Made Daily)

17-Nov-20 00:00

Due Date: 12/1/2020

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (ml)	Final (ml)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	45	40	QC	-	flns Cals	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	45	40	-	-	flns Cals		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	45	40	-	-	010201		
0J00147-07	ADD-02_10290_SW_10 TOTAL	45	40	-	-	flns Cals		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	45	40	-	-	010201		
OK00025-01	OL-3584-01 Total	45	40	-	-	150401	Scan all data for level IV report	
OK00068-04	FB_11112020 (410-20361-4)	45	40	-	-	150401		

Work Order	Client	Project
0J00147	Wood - MA	Pemobscot
OK00025	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
OK00068	Eurofins Lancaster Environmental, LLC	Low Level Mercury

Due Date: 12/1/2020

Sederquist, Michael

From: Sederquist, Michael
Sent: Tuesday, November 17, 2020 1:12 PM
To: US34_EFGS_Lab (US34_EFGS_Lab@eurofins.com); Garcia-Strickland, Patrick; Von Berckefeldt, Michael
Subject: 11/17/2020 Redigest Request

Hi all,

11/17/2020 Submission:
WO: 0J00151-02
Client: Eurofins Lancaster Environmental, LLC
Digestion Type: MHg Distillation
Element(s): MHg
Due Date: ASAP
Reason: Overcurve
Status: new
Comments: Analyze at 10x

If you're interested in learning more about the laboratory services we offer, or have any questions regarding metals analysis or metals speciation, please feel free to contact me directly or check out the links below.

Best Regards,
Michael Sederquist

Scientist I

Eurofins Frontier Global Sciences Inc
5755 8th St E
Tacoma, WA 98424
United States

Main: 1-253-922-2310

Michael.Sederquist@eurofinset.com
www.EurofinsUS.com/Frontier

Please note: In order to continue to provide critical testing services, Eurofins Environment Testing laboratories in the US are maintaining our courier services and continue to sample, analyze and report all test data as usual. The situation around COVID-19 continues to be fluid and we are continuing to follow local and government mandates as applicable. For up-to-date business information, visit our [website](#) and follow us on [Facebook](#) and [LinkedIn](#).

Links to use:

Website: <https://www.eurofinsus.com/environment-testing/>
Facebook: <https://www.facebook.com/EurofinsEnvTesting>
LinkedIn: <https://www.linkedin.com/company/eurofins-env-testing-america/>

Click [here](#) to report this email as spam.

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011306-BLK1	Blank	45	40					
F011306-BLK2	Blank	45	40					
F011306-BLK3	Blank	45	40					
F011306-BLK4	Blank	45.09	40					01001 51-08
F011306-BS1	LCS	45	40	2002647	50			
F011306-BSD1	LCS Dup	45	40	2002647	50			
F011306-MS1	Matrix Spike [0J00151-04]	45.15	40	2002647	50			
F011306-MS2	Matrix Spike [0J00137-01]	45.45	40	2002647	50			
F011306-MSD1	Matrix Spike Dup [0J00151-04]	45.78	40	2002647	50			
F011306-MSD2	Matrix Spike Dup [0J00137-01]	45.38	40	2002647	50			

Standard ID(s): 2002647
Description: MHg New Primary 1.0 ng/mL CAL
Expiration: 29-Jan-21 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
2002390	1% APDC Solution	07-Jan-21 00:00
2002433	Acetate Buffer	12-Jan-21 00:00
2002751	Ethylating Agent (For Methyl Mercury Analysis)	03-May-21 00:00
2003024	.4% HCl Distillation Dilute (Made Daily)	17-Nov-20 00:00
2003051	2.5% Ascorbic Acid	23-Nov-20 00:00

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00137-01	FB-10262020 (410-18348-1)	45.8	40	-	-	150401		
0J00151-01	204A_20201029_N_WG	45.05	40	-	-	150401	Scan all data - Level IV	
0J00151-02	306A_20201029_FD_WG	45.34	40	-	-	010302	Scan all data - Level IV	
0J00151-03	306A_20201029_N_WG	45.03	40	-	-	150401	Scan all data - Level IV	
0J00151-03RE1	306A_20201029_N_WG	45.03	40	-	-	150401	Added 11/17/2020 by MFS	E:01 RR@10x MFS 11/17/20
0J00151-04	803A_20201029_N_WG	45.65	40	QC	-	150401	M/S/MSD Scan all data - Level IV	
0J00151-06	PZ-102A_20201029_N_WG	45.28	40	-	-	150401	Scan all data - Level IV	
0J00151-06RE1	PZ-102A_20201029_N_WG	45.28	40	-	-	150401	Added 11/17/2020 by MFS	Undercurve: RR@5x MFS 11/17/20
0J00151-07	PZ-104A_20201029_N_WG	45.81	40	-	-	150401	Scan all data - Level IV	
0J00151-07RE1	PZ-104A_20201029_N_WG	45.81	40	-	-	150401	Added 11/17/2020 by MFS	Undercurve: RR@5x MFS 11/17/20
0K00017-01	FB_11022020 (410-19190-7)	45.26	40	-	-	150401		
0K00018-01	WTS-1 (570-42690-1)	45.07	40	-	-	150401		
0K00025-03	OL-3584-02	45.58	40	-	-	150401	Scan all data for level IV report	
0K00025-04	OL-3584-03	45.54	40	-	-	150401	Scan all data for level IV report	
0K00025-05	OL-3584-04	45.75	40	-	-	150401	Scan all data for level IV report	
0K00025-06	OL-3584-05	45.67	40	-	-	150401	Scan all data for level IV report	
0K00025-07	OL-3584-06	45.31	40	-	-	150401	Scan all data for level IV report	
0K00042-05	FB_11052020 (410-19653-5)	45.68	40	-	-	150401		
0K00057-03	FB_11092020 (410-20017-3)	45.46	40	-	-	150401		

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011306

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/16/2020

OK00059-01	ESGV-36-MTD_O-060	45.14	40	-	-	150401	
OK00059-02	ESGV-36-LOW-016	45.95	40	-	-	150401	
OK00067-02	FB_11102020 (410-20223-2)	45.11	40	-	-	150401	

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0100137	Eurofins Lancaster Environmental, LLC	Low Level Mercury
0100151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
OK00017	Eurofins Lancaster Environmental, LLC	Low Level Mercury
OK00018	Eurofins Calscience, LLC	Methyl Mercury
OK00025	Parsons - Syracuse NY	Homeywell 2020 Onondaga Lake
OK00042	Eurofins Lancaster Environmental, LLC	Low Level Mercury
OK00057	Eurofins Lancaster Environmental, LLC	Low Level Mercury
OK00059	Larry Walker Associates Davis	East San Gabriel Valley CIMP
OK00067	Eurofins Lancaster Environmental, LLC	Low Level Mercury

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011323-BLK1	Blank	45	40					
F011323-BLK2	Blank	45	40					
F011323-BLK3	Blank	45	40					
F011323-BLK4	Filter Blank 0J00151-09A	45.72	40					0J00151-09 LEL 11-17-2020
F011323-BS1	LCS	45	40	2002647	50			
F011323-BSD1	LCS Dup	45	40	2002647	50			
F011323-MS1	Matrix Spike [0J00143-01]	45.04	40	2002647	50			
F011323-MS2	Matrix Spike [0J00147-02]	45.85	40	2002647	50			
F011323-MSD1	Matrix Spike Dup [0J00143-01]	45.55	40	2002647	50			
F011323-MSD2	Matrix Spike Dup [0J00147-02]	45.28	40	2002647	50			

Standard ID(s): 2002647
Description: MHg New Primary 1.0 ng/mL CAL
Expiration: 29-Jan-21 00:00

Reagent ID(s):	Description:	Expiration:
2002390	1% APDC Solution	07-Jan-21 00:00
2002433	Acetate Buffer	12-Jan-21 00:00
2002751	Ethylating Agent (For Methyl Mercury Analysis)	03-May-21 00:00
2003051	2.5% Ascorbic Acid	23-Nov-20 00:00
2003059	.4% HCl Distillation Dilute (Made Daily)	18-Nov-20 00:00

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00143-01	WQ1b-C_102820_SW_10 TOTAL	45.41	40	-	-	flns Cals		
0J00143-02	WQ1b-C_102820_SW_10 DISSOLVED	45.67	40	-	-	241201		
0J00143-03	WQ2-C_102820_SW_10 TOTAL	45.01	40	-	-	flns Cals		
0J00143-04	WQ2-C_102820_SW_10 DISSOLVED	45.83	40	-	-	241201		
0J00143-05	WQ3-L_102820_SW_10 TOTAL	45.43	40	-	-	flns Cals		
0J00143-06	WQ3-L_102820_SW_10 DISSOLVED	45.51	40	-	-	241201		
0J00143-07	WQ-ECH_102820_SW_10 TOTAL	45.34	40	-	-	flns Cals		
0J00143-08	WQ-ECH_102820_SW_10 DISSOLVED	45.78	40	-	-	150404		
0J00143-09	ES-15_102820_SW_10 TOTAL	45.13	40	-	-	flns Cals		
0J00143-10	ES-15_102820_SW_10 DISSOLVED	45.18	40	-	-	150404		
0J00143-11	WQ-FPT_102820_SW_10 TOTAL	45.6	40	-	-	flns Cals		
0J00143-12	WQ-FPT_102820_SW_10 DISSOLVED	45.32	40	-	-	150404		
0J00143-13	WQ1b-C_102820_SW_10 VAL TOTAL	45.13	40	-	-	150404		
0J00143-14	WQ1b-C_102820_SW_10_VAL DISSOLVED	45.86	40	-	-	150404		
0J00143-15	WQ2-C_102820_SW_10_VAL TOTAL	45.67	40	-	-	150404		
0J00143-16	WQ2-C_102820_SW_10_VAL DISSOLVED	45.1	40	-	-	150404		
0J00147-02	OV-02_102920_SW_10 DISSOLVED	45.68	40	QC	-	010201	MS/MSD	
0J00151-05	805A-R_20201029_N_WG	45.48	40	-	-	150404	Scan all data - Level IV	
0J00151-05	805A-R_20201029_N_WG	45.48	40	-	-	150404	Added 11/18/2020 by MFS	Undercurve: RR(6) x MFS 11/18/20+

Due Date: 11/13/2020

PREPARATION BENCH SHEET

F011323

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

OK00007-01	OW-ALB1-D28	45.25	40	-	-	150404	
OK00007-02	PW-ALB1-D28	37.28	40	-	-	010302	

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0100143	Wood - MA	Pentobscot
0100147	Wood - MA	Pentobscot
0100151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
OK00007	Physis Labs	Methyl Mercury

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011324-BLK1	Blank	45	40					
F011324-BLK2	Blank	45	40					
F011324-BLK3	Blank	45	40					
F011324-BS1	LCS	45	40	2002647	50			
F011324-BSD1	LCS Dup	45	40	2002647	50			
F011324-MS1	Matrix Spike [0J00147-01]	45.64	40	2002647	50			
F011324-MSD1	Matrix Spike Dup [0J00147-01]	45.01	40	2002647	50			

Standard ID(s): 2002647
Description: MHg New Primary 1.0 ng/mL CAL

Expiration: 29-Jan-21 00:00

<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
2002390	1% APDC Solution	07-Jan-21 00:00
2002433	Acetate Buffer	12-Jan-21 00:00
2002751	Ethylating Agent (For Methyl Mercury Analysis)	03-May-21 00:00
2003051	2.5% Ascorbic Acid	23-Nov-20 00:00
2003059	4% HCl Distillation Dilute (Made Daily)	18-Nov-20 00:00

PREPARATION BENCH SHEET

F011324

Eurofins Frontier Global Sciences, LLC

Matrix: Water

Prepared using: Trace Metals - EFGS SOP2797 Methyl Hg Distillation for Water

Prepared: 11/17/2020

Lab Number	Sample ID	Initial (mL)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0J00147-01	OV-02_102920_SW_10_TOTAL	45.32	40	QC	-	241201	MS/MSD	
0J00147-03	OV-02_102920_SW_10_DUP TOTAL	45.11	40	-	-	241201		
0J00147-04	OV-02_102920_SW_10_DUP DISSOLVED	45.73	40	-	-	241201		
0J00147-07	ADD-02_10290_SW_10 TOTAL	45.72	40	-	-	241201		
0J00147-08	ADD-02_10290_SW_10 DISSOLVED	45.68	40	-	-	241201		
0J00151-02RE1	306A_20201029_FD_W/G	45.12	40	-	-	S&R	Redistill, then RR@10x MFS 11/17/20	
0K00025-01	OL-3584-01 Total	45.3	40	-	-	241201	Scan all data for level TV report	
0K00068-04	FB_11112020 (410-20361-4)	45.32	40	-	-	241201		

<u>Work Order</u>	<u>Client</u>	<u>Project</u>
0100147	Wood - MA	Penobscot
0100151	Eurofins Lancaster Environmental, LLC	DOW DWR MMHg and THg Waters
0K00025	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0K00068	Eurofins Lancaster Environmental, LLC	Low Level Mercury

Due Date: 11/13/2020

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	8.60 units	172.08	7.13 units	142.60	92.1 %Rec
SEQ-CAL2	1	0.20 ng/L	32.48 units	162.42	31.01 units	155.05	100.1 %Rec
SEQ-CAL3	1	1.00 ng/L	165.24 units	165.24	163.77 units	163.77	105.8 %Rec
SEQ-CAL4	1	2.00 ng/L	308.39 units	154.19	306.91 units	153.46	99.1 %Rec
SEQ-CAL6	0	4.00 ng/L	638.89 units	159.72	637.42 units	159.35	102.9 %Rec
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 154.85 Corr. St Dev RF +/- 7.93 Corr. RSD CF 5.1% RSD Uncorr. Mean RF 162.73

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	1	1.47 units		0.01 ng/L	#VALUE!

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	0	0.000 ng/L	
BLK	2	4	0.034 ng/L	±0.007
BLK	3	3	0.030 ng/L	±0.014
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	EntailsUnits	Comments
Hg2700-1	00	CAL	SEQ-IBL1	1	11/17/20 13:32	3190-1-RAW	13:32:05	1.47			0.0	0.000	0.000	ng/L	
Hg2700-1	00	CAL	SEQ-CAL1	1	11/17/20 13:42	3191-1-RAW	13:42:20	8.60			7.1	0.046	0.046	ng/L	
Hg2700-1	00	CAL	SEQ-CAL2	1	11/17/20 13:52	3192-1-RAW	13:52:36	32.48			31.0	0.200	0.200	ng/L	
Hg2700-1	00	CAL	SEQ-CAL3	1	11/17/20 14:02	3193-1-RAW	14:02:51	165.24			163.8	1.058	1.058	ng/L	
Hg2700-1	00	CAL	SEQ-CAL4	1	11/17/20 14:13	3194-1-RAW	14:13:07	308.39			306.9	1.982	1.982	ng/L	
Hg2700-1	00	CAL	SEQ-CAL5	1	11/17/20 14:23	3195-1-RAW	14:23:23	638.89			637.4	4.116	4.116	ng/L	
Hg2700-1	00	CAL	SEQ-ICV1	1	11/17/20 14:33	3196-1-RAW	14:33:38	81.44			80.0	0.516	0.516	ng/L	
Hg2700-1	00	CAL	SEQ-ICB1	1	11/17/20 14:43	3197-1-RAW	14:43:54	2.64			1.2	0.008	0.008	ng/L	
Hg2700-1	00	SAM	*0K00007-02	100	11/17/20 14:54	3198-1-RAW	14:54:10	0.00			-1.5	Error	#VALUE!	ng/L	FOR SCREENING ONLY
Hg2700-1	00	SAM	WS		11/17/20 15:04	3199-1-RAW	15:04:27	1.77			0.3	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 15:14	3200-1-RAW	15:14:43	47.32			45.8	0.296	0.296	ng/L	
Hg2700-1	00	SAM	0000151-03RE1	10	11/17/20 15:24	3201-1-RAW	15:24:59	66.89			65.4	0.422	0.422	ng/L	F011306
Hg2700-1	00	SAM	0000151-06RE1	5	11/17/20 15:35	3202-1-RAW	15:35:15	90.51			79.0	0.627	0.627	ng/L	F011306
Hg2700-1	00	SAM	0000151-07RE1	5	11/17/20 15:45	3203-1-RAW	15:45:31	86.49			79.0	0.510	0.510	ng/L	F011306
Hg2700-1	00	CAL	SEQ-COV1	1	11/17/20 15:55	3204-1-RAW	15:55:47	90.51			-0.7	-0.005	-0.005	ng/L	
Hg2700-1	00	CAL	SEQ-COB1	1	11/17/20 16:06	3205-1-RAW	16:06:03	0.76			-1.5	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 16:16	3206-1-RAW	16:16:18	1.74			0.3	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 16:26	3207-1-RAW	16:26:33	1.59			0.1	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 16:36	3208-1-RAW	16:36:50	2.28			0.1	Error	#VALUE!	ng/L	
Hg2700-1	00	SAM	WS		11/17/20 16:47	3209-1-RAW	16:47:06	171.13			169.7	1.069	1.069	ng/L	F011323
Hg2700-1	00	SAM	F011323-B51	1.25	11/17/20 16:57	3210-1-RAW	16:57:22	155.81			154.3	0.970	0.970	ng/L	F011323
Hg2700-1	00	SAM	F011323-B5D1	1.25	11/17/20 17:07	3211-1-RAW	17:07:38	6.18			4.7	0.030	0.030	ng/L	F011323
Hg2700-1	00	BLK	F011323-BLK1	1.25	11/17/20 17:17	3212-1-RAW	17:17:54	5.83			4.4	0.028	0.028	ng/L	F011323
Hg2700-1	00	BLK	F011323-BLK2	1.25	11/17/20 17:28	3213-1-RAW	17:28:10	4.33			4.7	0.030	0.030	ng/L	F011323
Hg2700-1	00	BLK	F011323-BLK3	1.25	11/17/20 17:38	3214-1-RAW	17:38:26	85.54			84.1	0.543	0.543	ng/L	F011323
Hg2700-1	00	BLK	F011323-BLK4	1.25	11/17/20 17:48	3215-1-RAW	17:48:43	1.55			0.1	0.000	0.000	ng/L	
Hg2700-1	00	CAL	SEQ-COV2	1	11/17/20 17:58	3216-1-RAW	17:58:59	19.18			17.7	0.088	0.088	ng/L	F011323
Hg2700-1	00	CAL	SEQ-COB2	1	11/17/20 18:09	3217-1-RAW	18:09:15	180.28			188.8	1.193	1.193	ng/L	F011323
Hg2700-1	00	SAM	0000143-01	1.25	11/17/20 18:19	3218-1-RAW	18:19:32	171.56			23.2	0.123	0.123	ng/L	F011323
Hg2700-1	00	SAM	F011323-M51	1.25	11/17/20 18:29	3219-1-RAW	18:29:48	24.66			23.2	0.123	0.123	ng/L	F011323
Hg2700-1	00	SAM	F011323-M5D1	1.25	11/17/20 18:40	3220-1-RAW	18:40:04	76.48			75.0	0.458	0.458	ng/L	F011323
Hg2700-1	00	SAM	0000143-02	1.25	11/17/20 18:50	3221-1-RAW	18:50:20	17.67			16.2	0.078	0.078	ng/L	F011323
Hg2700-1	00	SAM	F011323-M52	1.25	11/17/20 19:00	3222-1-RAW	19:00:37	10.90			11.1	0.045	0.045	ng/L	F011323
Hg2700-1	00	SAM	0000143-03	1.25	11/17/20 19:10	3223-1-RAW	19:10:54	2.18			9.4	0.034	0.034	ng/L	F011323
Hg2700-1	00	SAM	0000143-04	1.25	11/17/20 19:21	3224-1-RAW	19:21:10	12.58			76.7	0.495	0.495	ng/L	F011323
Hg2700-1	00	SAM	0000143-05	1.25	11/17/20 19:31	3225-1-RAW	19:31:25	18.06			0.7	0.005	0.005	ng/L	
Hg2700-1	00	CAL	SEQ-COV3	1	11/17/20 20:02	3226-1-RAW	20:02:13	10.74			9.3	0.033	0.033	ng/L	F011323
Hg2700-1	00	CAL	SEQ-COB3	1	11/17/20 20:12	3227-1-RAW	20:12:28	15.67			14.2	0.065	0.065	ng/L	F011323
Hg2700-1	00	SAM	0000143-06	1.25	11/17/20 20:22	3228-1-RAW	20:22:44	13.45			12.0	0.051	0.051	ng/L	F011323
Hg2700-1	00	SAM	0000143-07	1.25	11/17/20 20:32	3229-1-RAW	20:32:59	8.73			7.3	0.020	0.020	ng/L	F011323
Hg2700-1	00	SAM	0000143-08	1.25	11/17/20 20:43	3230-1-RAW	20:43:15	0.00			-1.5	-0.036	-0.036	ng/L	F011323
Hg2700-1	00	SAM	0000143-09	1.25	11/17/20 20:53	3231-1-RAW	20:53:30	3.30			1.8	-0.015	-0.015	ng/L	F011323
Hg2700-1	00	SAM	0000143-10	1.25	11/17/20 21:03	3232-1-RAW	21:03:46							ng/L	
Hg2700-1	00	SAM	0000143-11	1.25	11/17/20 21:14	3233-1-RAW	21:14:02							ng/L	

Instrument	Analyst	Sample Type	Lablumber	Dilution	Analized	FileID	Run End	Uncorrected Response	Batch ID	No PB Correction?	RESP	InftrialResult	FinalResult	Intiallimits	Comments
Hg2700-1	00	SAM	000143-12	1.25	11/17/20 21:24	3236-1.RAW	21:24:18	3.23	2		1.8	-0.015	-0.019	ng/L	F011323
Hg2700-1	00	SAM	000143-13	1.25	11/17/20 21:34	3237-1.RAW	21:34:34	16.78	2		15.3	0.072	0.090	ng/L	F011323
Hg2700-1	00	SAM	000143-14	1.25	11/17/20 21:44	3238-1.RAW	21:44:49	7.84	2		6.4	0.014	0.018	ng/L	F011323
Hg2700-1	00	SAM	000143-15	1.25	11/17/20 21:55	3239-1.RAW	21:55:05	11.50	2		10.0	0.038	0.047	ng/L	F011323
Hg2700-1	00	CAL	SEQ-CCV4	1	11/17/20 22:05	3240-1.RAW	22:05:21	77.39	2		75.9	0.490	0.490	ng/L	
Hg2700-1	00	CAL	SEQ-CCB4	1	11/17/20 22:15	3241-1.RAW	22:15:36	2.99	2		1.5	0.010	0.010	ng/L	
Hg2700-1	00	SAM	000143-16	1.25	11/17/20 22:25	3242-1.RAW	22:25:53	5.70	2		4.2	0.000	0.001	ng/L	F011323
Hg2700-1	00	SAM	000151-05	50	11/17/20 22:36	3243-1.RAW	22:36:08	6.23	2		4.8	0.030	1.501	ng/L	F011323
Hg2700-1	00	SAM	0K00007-01	1.25	11/17/20 22:46	3244-1.RAW	22:46:24	21.69	2		20.2	0.104	0.130	ng/L	F011323
Hg2700-1	00	SAM	0K00007-02	1.25	11/17/20 22:56	3245-1.RAW	22:56:41	122.34	2		120.9	0.754	0.942	ng/L	F011323
Hg2700-1	00	SAM	F011324-BSD1	1.25	11/17/20 23:06	3246-1.RAW	23:06:57	135.66	3		134.2	0.843	1.053	ng/L	F011324
Hg2700-1	00	BLK	F011324-BLK1	1.25	11/17/20 23:17	3247-1.RAW	23:17:13	145.16	3		143.7	0.904	1.130	ng/L	F011324
Hg2700-1	00	BLK	F011324-BLK2	1.25	11/17/20 23:27	3248-1.RAW	23:27:29	3.84	3		2.4	0.015	0.019	ng/L	F011324
Hg2700-1	00	BLK	F011324-BLK3	1.25	11/17/20 23:37	3249-1.RAW	23:37:45	4.53	3		3.1	0.020	0.025	ng/L	F011324
Hg2700-1	00	SAM	000147-01	1.25	11/17/20 23:48	3250-1.RAW	23:48:01	7.22	3		5.7	0.037	0.046	ng/L	F011324
Hg2700-1	00	CAL	SEQ-CCV5	1	11/17/20 0:08	3251-1.RAW	0:08:34	15.00	3		13.5	0.063	0.079	ng/L	F011324
Hg2700-1	00	CAL	SEQ-CCB5	1	11/17/20 0:18	3252-1.RAW	0:18:50	2.68	3		1.2	0.008	0.008	ng/L	
Hg2700-1	00	SAM	F011324-MS1	1.25	11/17/20 0:29	3253-1.RAW	0:29:06	138.92	3		137.4	1.115	1.393	ng/L	F011324
Hg2700-1	00	SAM	F011324-MSD1	1.25	11/17/20 0:39	3254-1.RAW	0:39:22	177.81	3		176.3	1.115	1.393	ng/L	F011324
Hg2700-1	00	SAM	000147-03	1.25	11/17/20 0:49	3255-1.RAW	0:49:38	16.61	3		15.1	0.074	0.092	ng/L	F011324
Hg2700-1	00	SAM	000147-04	1.25	11/17/20 0:59	3256-1.RAW	0:59:56	17.53	3		16.1	0.080	0.100	ng/L	F011324
Hg2700-1	00	SAM	000147-07	1.25	11/17/20 1:10	3257-1.RAW	1:10:13	4.48	3		3.0	-0.005	-0.006	ng/L	F011324
Hg2700-1	00	SAM	000147-08	1.25	11/17/20 1:20	3258-1.RAW	1:20:29	5.92	3		4.5	0.005	0.006	ng/L	F011324
Hg2700-1	00	SAM	000151-02RE1	10	11/17/20 1:30	3259-1.RAW	1:30:45	73.38	3		71.9	0.461	4.614	ng/L	F011324
Hg2700-1	00	SAM	0K00025-01	1.25	11/17/20 1:41	3260-1.RAW	1:41:02	3.51	3		2.0	-0.011	-0.014	ng/L	F011324
Hg2700-1	00	SAM	0K00068-04	1.25	11/17/20 1:51	3261-1.RAW	1:51:19	3.31	3		1.8	-0.011	-0.015	ng/L	F011324
Hg2700-1	00	CAL	SEQ-CCV6	1	11/17/20 2:01	3262-1.RAW	2:01:35	71.23	3		69.8	0.450	0.450	ng/L	F011324
Hg2700-1	00	CAL	SEQ-CCB6	1	11/17/20 2:11	3263-1.RAW	2:11:51	2.13	3		0.7	0.004	0.004	ng/L	

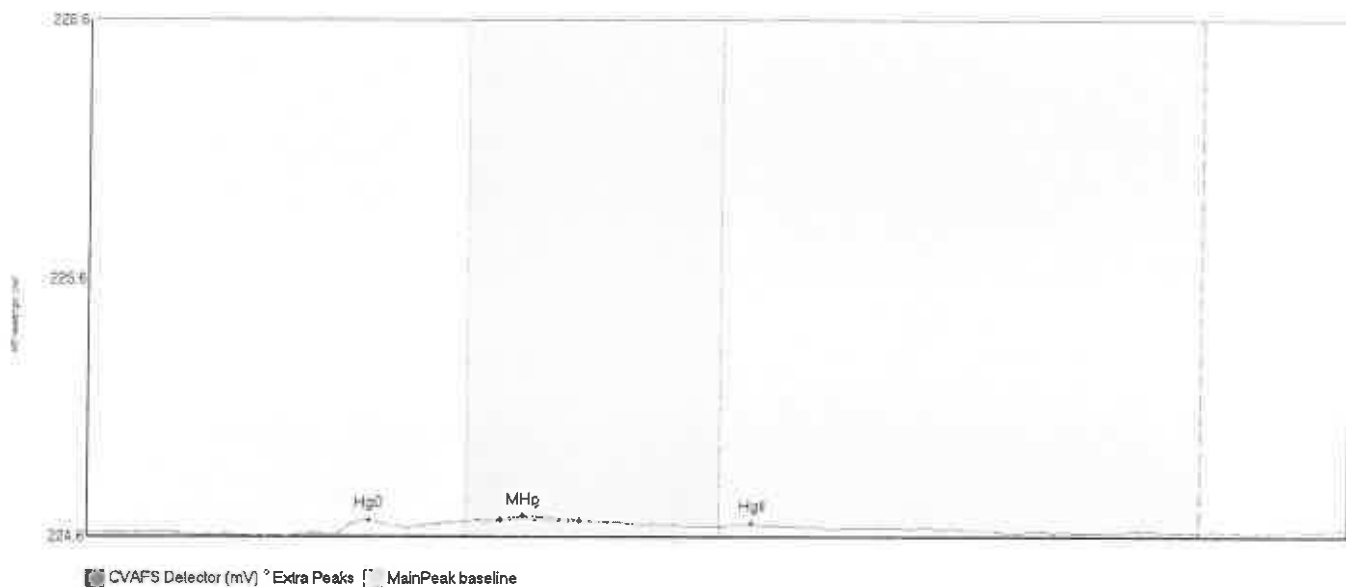
000151-05	A1	50	1.4742	0.922268852	1.534903334	0	3243-1-RAW	23:36:08	4.331665614	6.227631102	0.938396991	0	psample10	OK	1	F011324
0K00007-01	A2	1.25	1.4742	0.031157475	0.163213175	0.1257625	3244-1-RAW	22:46:24	5.333854167	21.69239005	17.05315394	0	psample10	OK	1	F011323
0K00007-02	A3	1.25	1.4742	6.591742714	0.97370058	23.809056	3245-1-RAW	22:56:41	818.0331084	122.3401942	2950.845544	0	psample10	CT	1	F011323
F011324-BS1	A4	1.25	1.4742	0.336966496	1.083295909	0.2268726	3246-1-RAW	23:06:57	43.21626157	135.6615997	29.57826968	0	psample10	CT	1	F011324
F011324-BS01	A5	1.25	1.4742	0.235127272	1.15993635	0	3247-1-RAW	23:17:13	30.6026042	145.1625	1.142274306	0	psample10	OK	1	F011324
F011324-BLK1	A6	1.25	1.4742	0.080822103	0.019073822	0.0102094	3248-1-RAW	23:27:29	11.48611111	3.836970167	2.738888889	0	psample10	OK	1	F011324
F011324-BLK2	A7	1.25	1.4742	0.08890181	0.024686661	0.0003027	3249-1-RAW	23:37:45	12.49670139	4.532523148	1.511689815	0	psample10	OK	1	F011324
F011324-BLK3	A8	1.25	1.4742	0.044550301	0.046344964	0.0075545	3250-1-RAW	23:46:01	6.929290428	7.215219907	2.410011574	0	psample10	OK	1	F011324
000147-01	A9	1.25	1.4742	0.06313202	0.109192014	0.002892	3251-1-RAW	23:58:18	9.294733796	15.00046296	1.832436343	0	psample10	OK	1	F011324
SEQ-CCV5	A10	1	1.4742	0.106106752	0.431850877	0	3252-1-RAW	0:08:34	17.90429384	68.34415509	0	0	psample10	OK	1	F011324
SEQ-CCB5	A11	1	1.4742	0.029646666	0.007761643	0	3253-1-RAW	0:18:50	5.417216934	2.676041667	0.845746528	0	psample10	OK	1	F011324
F011324-MS1	A12	1.25	1.4742	0.107627185	1.109294987	0	3254-1-RAW	0:29:06	14.806661823	138.9207755	0	0	psample10	CT	1	F011324
F011324-MSD1	A13	1.25	1.4742	0.139265669	1.423449781	0	3255-1-RAW	0:39:22	18.72586806	177.8054977	0	0	psample10	CT	1	F011324
000147-03	A14	1.25	1.4742	0.056101029	0.122219804	0	3256-1-RAW	0:49:38	8.422762516	16.61439398	0.518981481	0	psample10	OK	1	F011324
000147-04	A15	1.25	1.4742	0.066141955	0.12961734	0.0464321	3257-1-RAW	0:59:56	9.667692593	17.5306713	7.226012731	0	psample10	OK	1	F011324
000147-07	A16	1.25	1.4742	0.147622706	0.024296802	0.1068884	3258-1-RAW	1:10:13	19.76110456	4.494228972	14.71510417	0	psample10	OK	1	F011324
000147-08	A17	1.25	1.4742	0.101393652	0.035024413	0.0671048	3259-1-RAW	1:20:29	14.03443387	5.924363426	9.766865426	0	psample10	OK	1	F011324
000151-02REF1	A18	10	1.4742	0.08547636	4.643938661	0	3260-1-RAW	1:30:45	7.800347222	73.3832746	0	0	psample10	OK	1	F011324
0K00025-01	A19	1.25	1.4742	0.078148891	0.01644556	0.0348999	3261-1-RAW	1:41:02	11.15471644	3.511400463	5.797453704	0	psample10	OK	1	F011324
0K00068-04	A20	1.25	1.4742	0.061527378	0.034824502	0.0009656	3262-1-RAW	1:51:19	9.095506226	3.310590278	1.59380787	0	psample10	OK	1	F011324
SEQ-CCV6	A21	1	1.4742	0.102707876	0.450478876	0	3263-1-RAW	2:01:35	17.37799479	71.22829861	0	0	psample10	CT	1	F011324
SEQ-CCB6	B1	1	1.4742	0.031800076	0.004635322	0	3264-1-RAW	2:11:51	6.39837963	2.134375	0	0	psample10	OK	1	F011324

MHg27001-201117-1

WS	A1	0J00143-01	B18		
WS	A2	F011323-MS1	B19		
WS	A3	F011323-MSD1	B20		
HIGH PRIMER	A4	0J00147-02	B21		
HIGH PRIMER	A5	F011323-MS2	C1		
PRIMER	A6	F011323-MSD2	C2		
PRIMER	A7	0J00143-02	C3		
PRIMER	A8	0J00143-03	C4		
WS	A9	0J00143-04	C5		
WS	A10	0J00143-05	C6		
SEQ-IBL1	A11	SEQ-CCV3	C7		
SEQ-CAL1	A12	SEQ-CCB3	C8		
SEQ-CAL2	A13	0J00143-06	C9		
SEQ-CAL3	A14	0J00143-07	C10		
SEQ-CAL4	A15	0J00143-08	C11		
SEQ-CAL5	A16	0J00143-09	C12		
SEQ-ICV1	A17	0J00143-10	C13		
SEQ-ICB1	A18	0J00143-11	C14		
*OK00007-02	A19	0J00143-12	C15		
WS	A20	0J00143-13	C16		
WS	A21	0J00143-14	C17		
0J00151-03RE1	B1	0J00143-15	C18		
0J00151-06RE1	B2	SEQ-CCV4	C19		
0J00151-07RE1	B3	SEQ-CCB4	C20		
SEQ-CCV1	B4	0J00143-16	C21		
SEQ-CCB1	B5	0J00151-05	A1		
WS	B6	OK00007-01	A2		
WS	B7	OK00007-02	A3		
WS	B8	F011324-BS1	A4		
WS	B9	F011324-BSD1	A5	0J00147-03	A14
F011323-BS1	B10	F011324-BLK1	A6	0J00147-04	A15
F011323-BSD1	B11	F011324-BLK2	A7	0J00147-07	A16
F011323-BLK1	B12	F011324-BLK3	A8	0J00147-08	A17
F011323-BLK2	B13	0J00147-01	A9	0J00151-02RE1	A18
F011323-BLK3	B14	SEQ-CCV5	A10	OK00025-01	A19
F011323-BLK4	B15	SEQ-CCB5	A11	OK00068-04	A20
SEQ-CCV2	B16	F011324-MS1	A12	SEQ-CCV6	A21
SEQ-CCB2	B17	F011324-MSD1	A13	SEQ-CCB6	B1

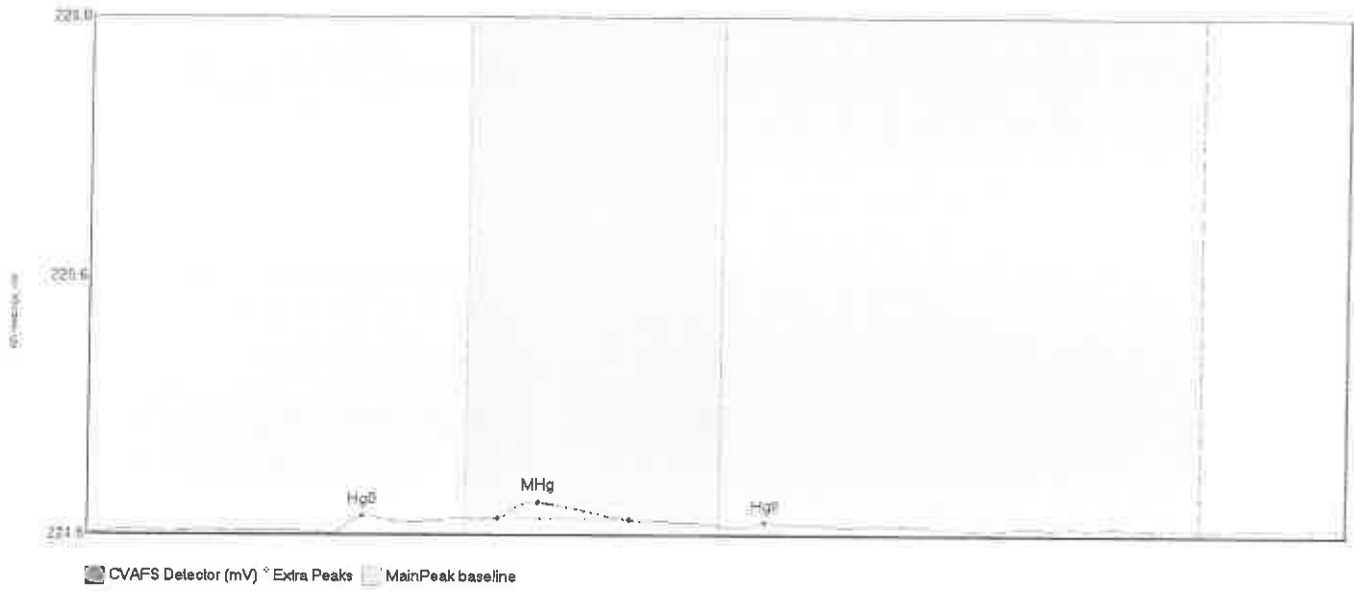
Verified by: *Mr. Vll 7/2020*

#12: SEQ-IBL1



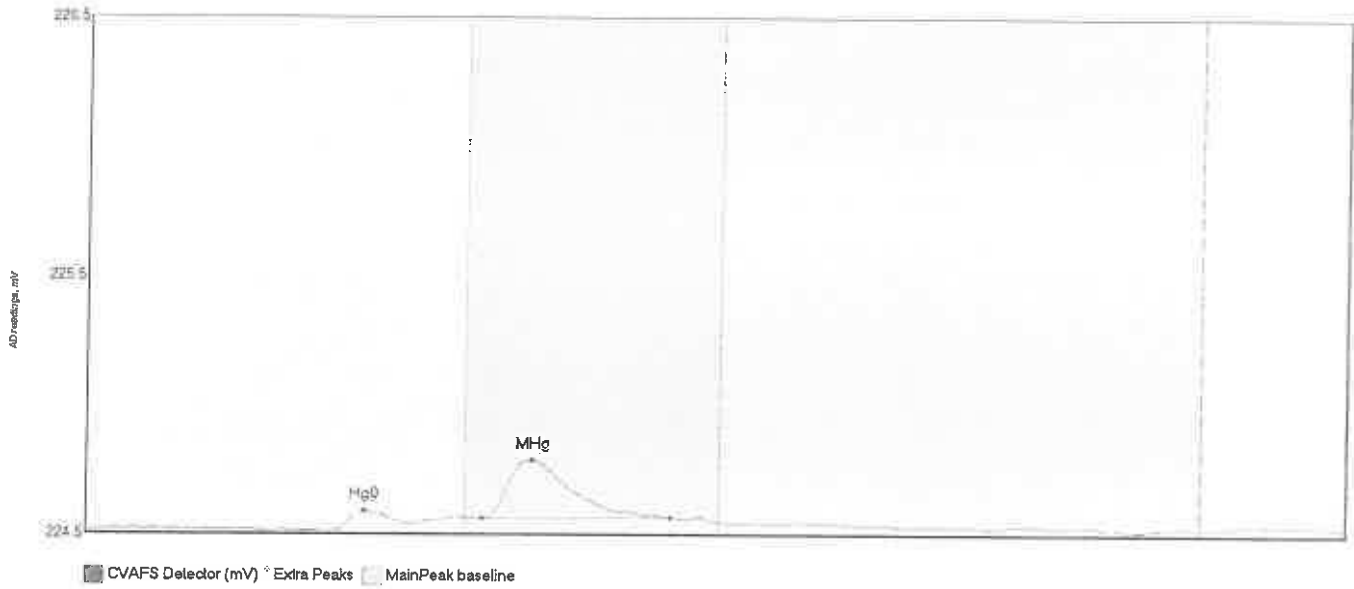
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-IBL1 Hg0	3.326	48.6	63.8	224.61	224.63	55.7	0.053	OK	224.6172	0.00	0.01	
SEQ-IBL1 MHg	1.474	81.8	97.4	224.66	224.66	86.1	0.015	OK	224.6172	0.00	0.01	
SEQ-IBL1 HgII	0.468	126.0	134.0	224.64	224.64	131.5	0.013	OK	224.6172	0.00	0.01	

#13: SEQ-CAL1

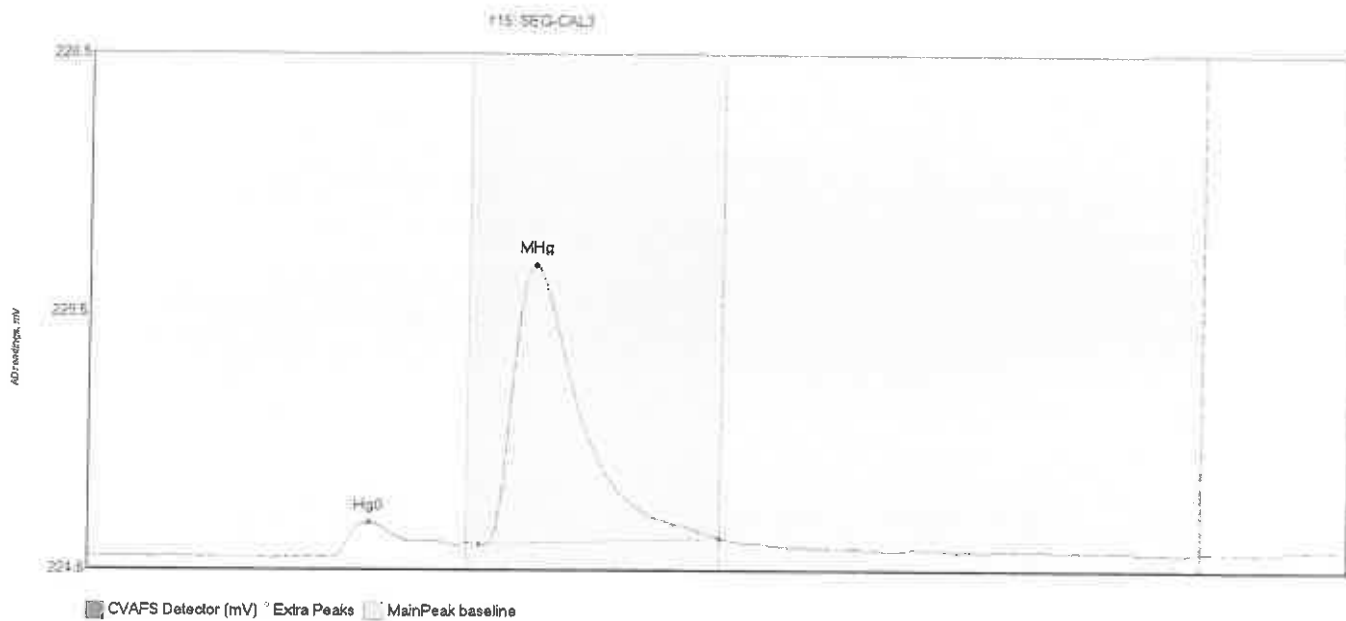


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CAL1 Hg0	3.629	48.3	62.7	224.57	224.61	54.7	0.068	OK	224.5740	0.00	0.01	
SEQ-CAL1 MHg	8.604	81.3	107.2	224.63	224.62	89.2	0.060	OK	224.5740	0.00	0.01	
SEQ-CAL1 HgII	0.606	130.3	138.2	224.59	224.60	134.0	0.020	OK	224.5740	0.00	0.01	

#14: SEQ-CAL2

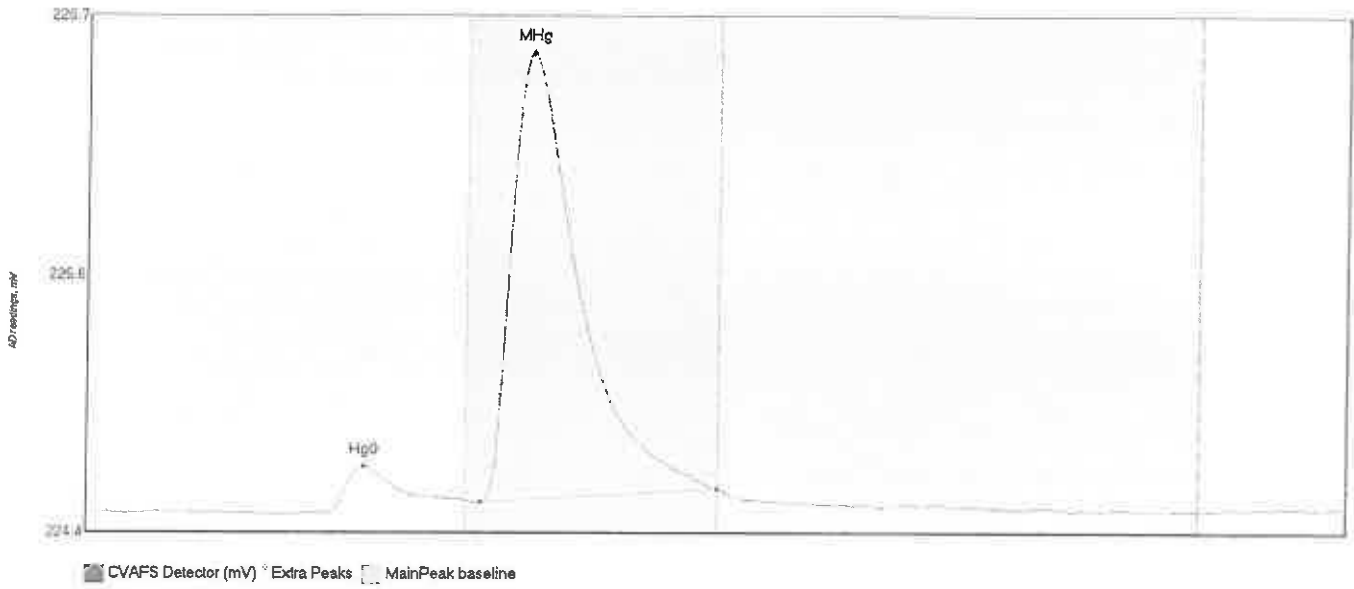


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StdDev	BIShift	Comment
SEQ-CAL2 Hg0	5.412	48.2	64.7	224.54	224.57	55.0	0.079	OK	224.5415	0.00	0.01	
SEQ-CAL2 MHg	32.484	78.1	115.3	224.58	224.59	88.3	0.228	OK	224.5415	0.00	0.01	



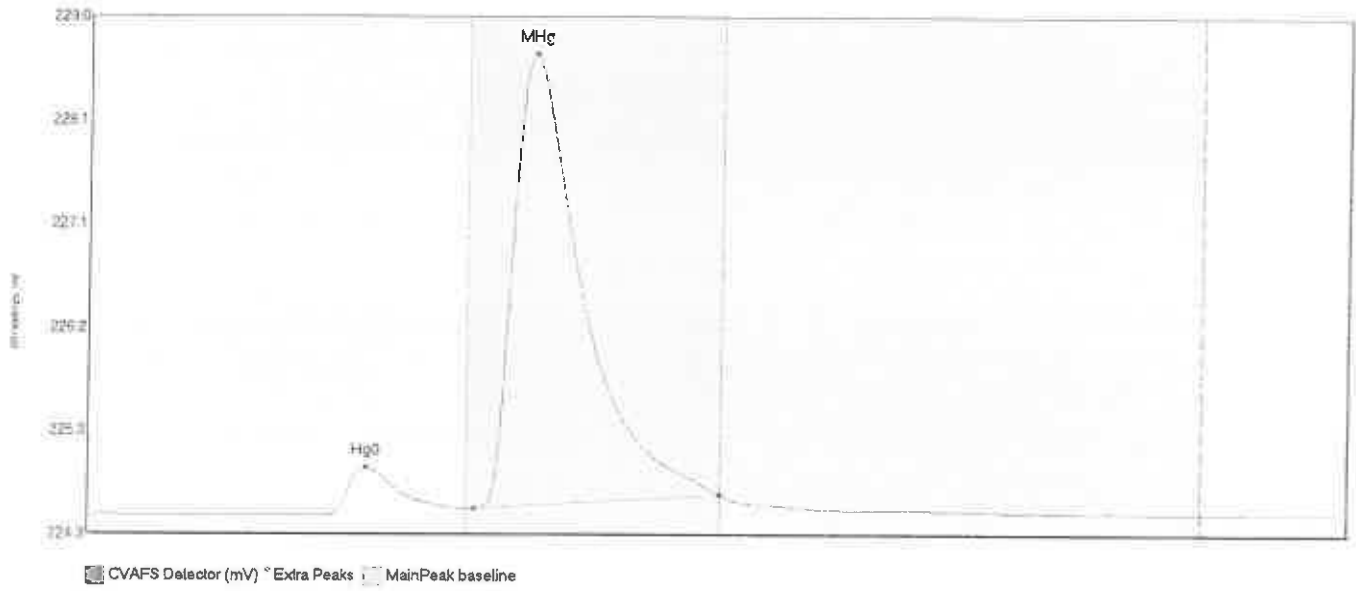
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	RShift	Comment
SEQ-CAL3 Hg0	13.303	48.4	73.4	224.52	224.57	55.5	0.136	OK	224.5197	0.00	0.03	
SEQ-CAL3 MHg	165.327	77.4	125.0	224.57	224.59	88.4	1.081	CT	224.5197	0.00	0.03	

#16: SEQ-CAL4



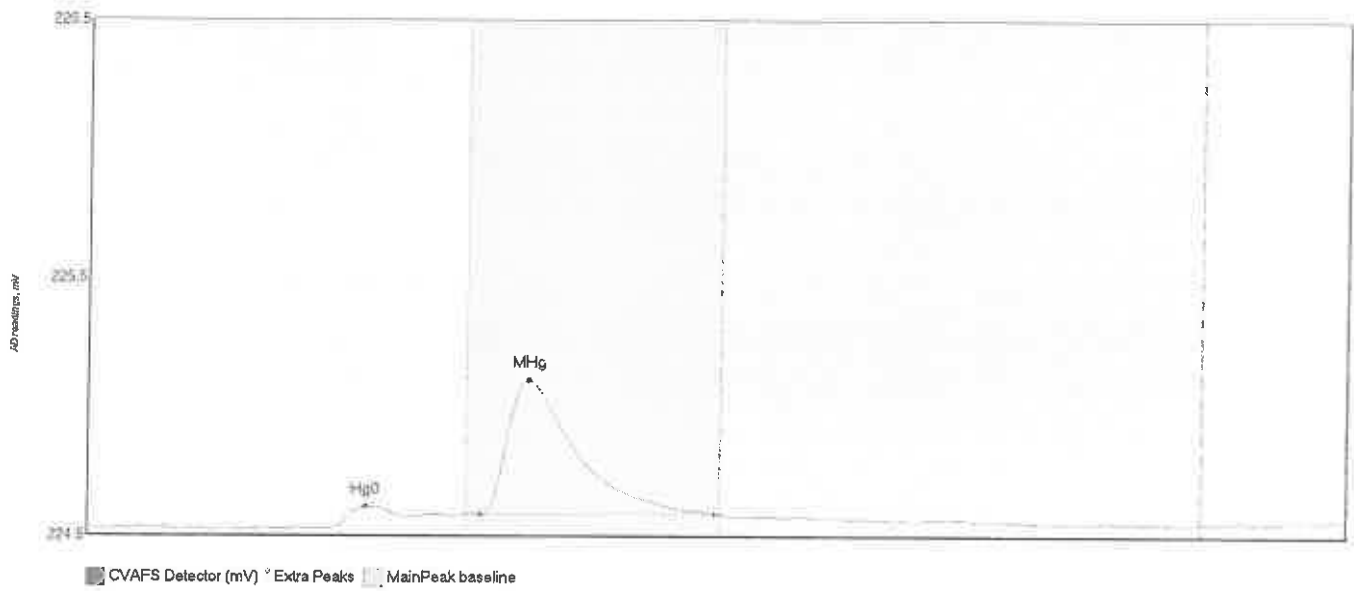
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CAL4 Hg0	20.965	47.7	75.0	224.51	224.57	55.0	0.211	CT	224.5228	0.00	0.02	
SEQ-CAL4 MHg	308.388	77.9	125.0	224.57	224.62	87.8	2.008	CT	224.5228	0.00	0.02	

#17: SEQ-CAL5



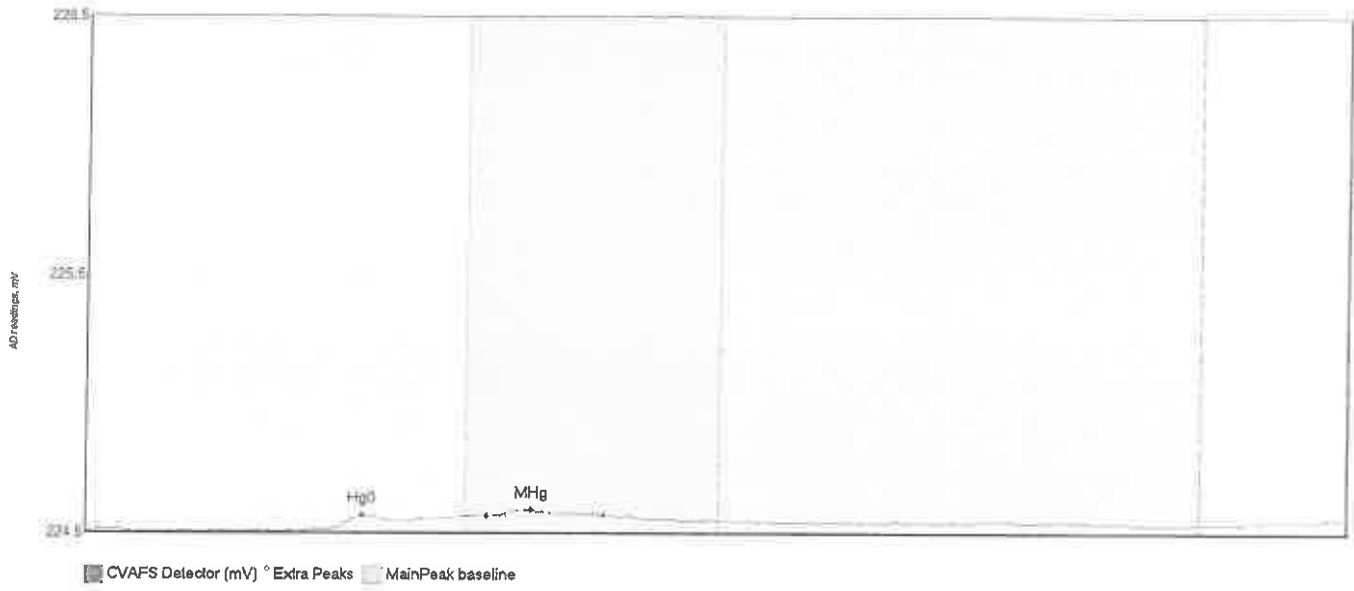
Time	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
75.0	44.256	47.8	75.0	224.52	224.58	55.2	0.429	CT	224.5140	0.00	0.02	
125.0	638.719	76.6	125.0	224.57	224.70	88.0	4.106	CT	224.5140	0.00	0.02	

#18: SEQ-ICV1



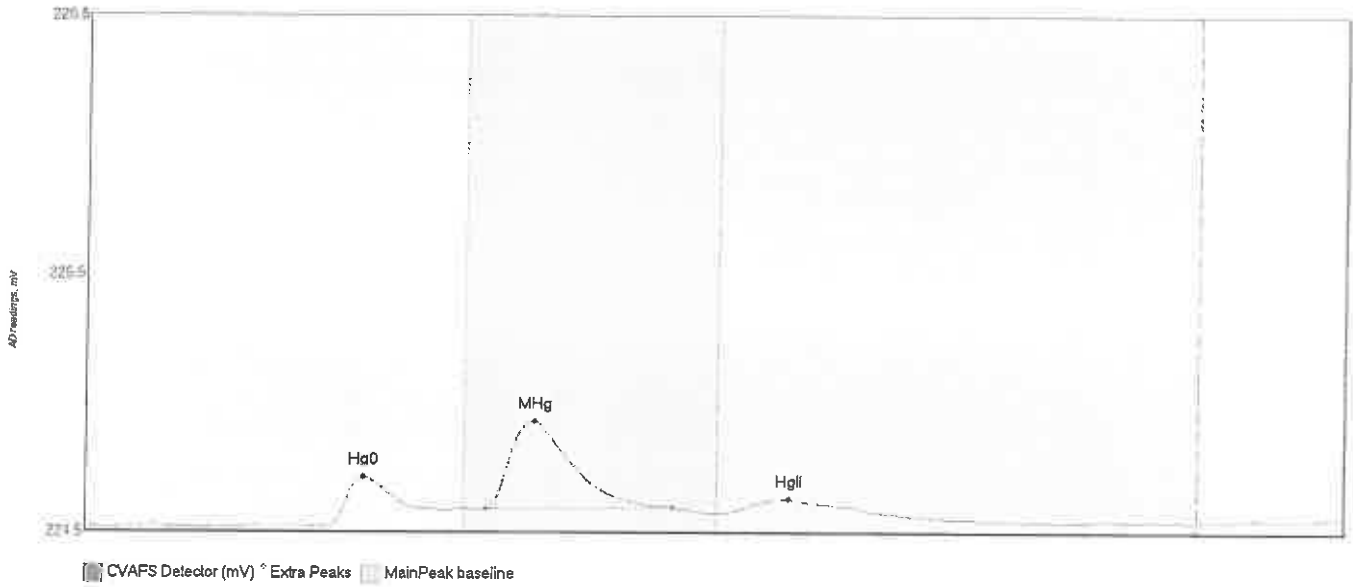
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICV1 Hg0	5.537	47.9	64.3	224.49	224.53	55.1	0.085	OK	224.4872	0.00	0.03	
SEQ-ICV1 MHg	81.438	77.7	124.0	224.54	224.55	87.2	0.520	OK	224.4872	0.00	0.03	

#19: SEQ-ICB1



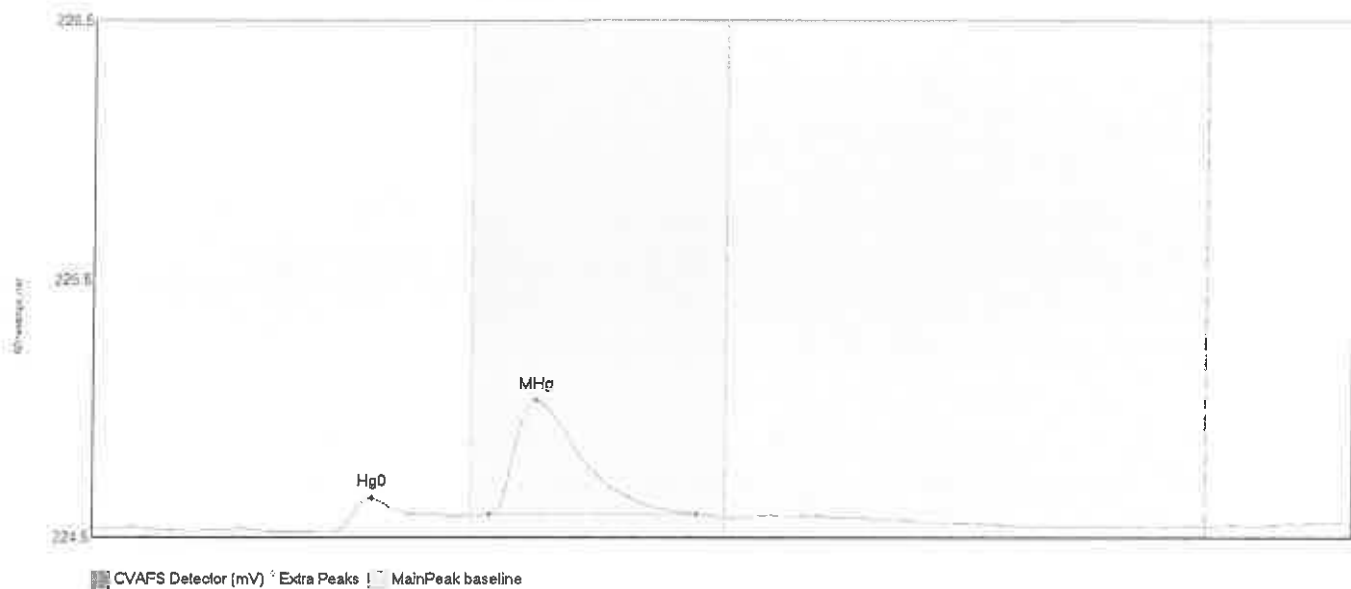
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-ICB1 Hg0	2.970	47.8	63.6	224.49	224.52	54.5	0.055	OK	224.4883	0.00	0.04	
SEQ-ICB1 MHg	2.641	79.3	102.4	224.54	224.55	88.0	0.024	OK	224.4883	0.00	0.04	

#23: 0J00151-03RE1



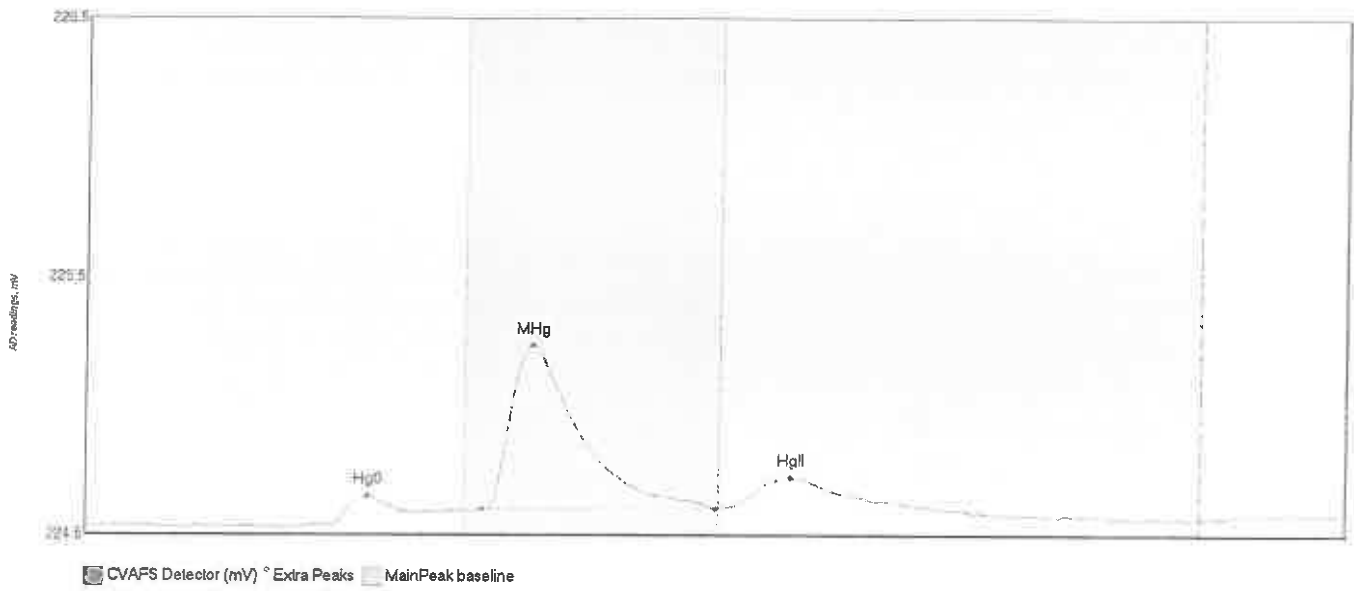
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	R1Dev	B1Shift	Comment
0J00151-03RE1 H	16.685	47.4	72.0	224.50	224.56	55.3	0.193	OK	224.5034	0.00	0.03	F011306
0J00151-03RE1 M	47.324	79.4	116.2	224.57	224.58	89.1	0.338	OK	224.5034	0.00	0.03	F011306
0J00151-03RE1 H	8.429	127.3	155.1	224.56	224.56	139.2	0.054	OK	224.5034	0.00	0.03	F011306

#24: 0J00151-06RE1



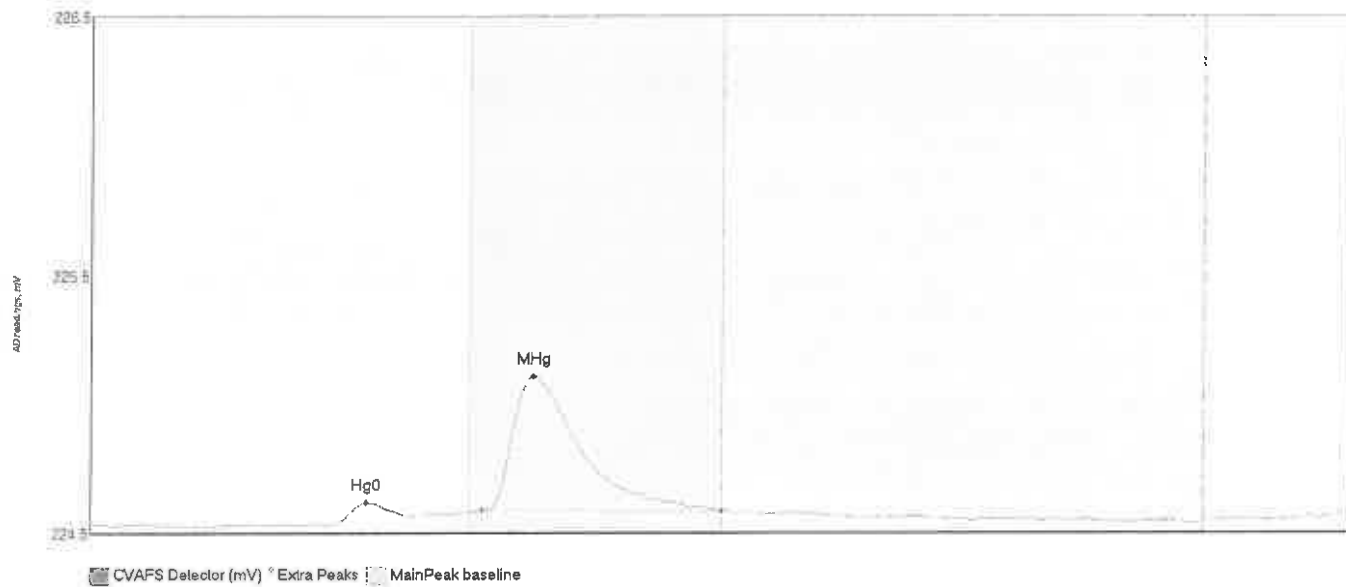
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0J00151-06RE1 H	11.480	49.1	73.3	224.51	224.57	55.6	0.132	OK	224.5258	0.00	0.02	F011306
0J00151-06RE1 M	66.892	78.6	119.4	224.58	224.58	87.6	0.445	OK	224.5258	0.00	0.02	F011306

#25: 0J00151-07RE1



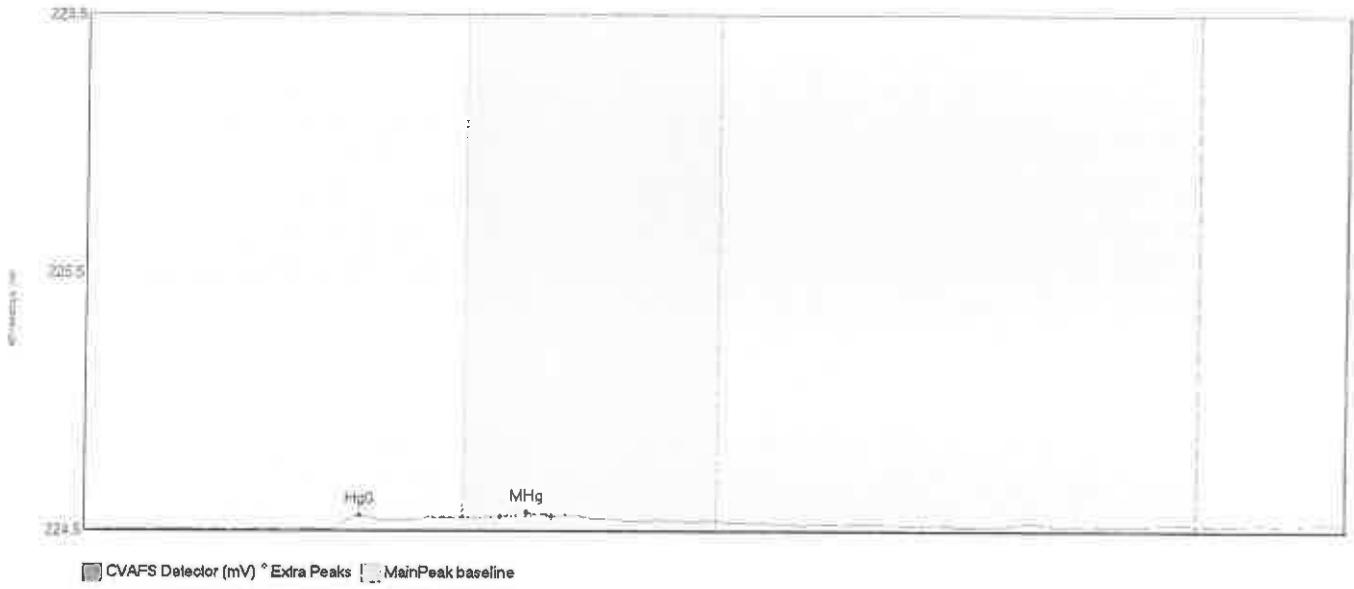
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	BiShift	Comment
0J00151-07RE1	H 7.212	47.7	64.3	224.52	224.57	55.7	0.111	OK	224.5170	0.00	0.04	F011306
0J00151-07RE1	M 98.512	78.6	124.4	224.58	224.59	88.4	0.632	OK	224.5170	0.00	0.04	F011306
0J00151-07RE1	H 21.645	125.8	167.0	224.59	224.59	139.3	0.117	OK	224.5170	0.00	0.04	F011306

#26: SEQ-CCV1



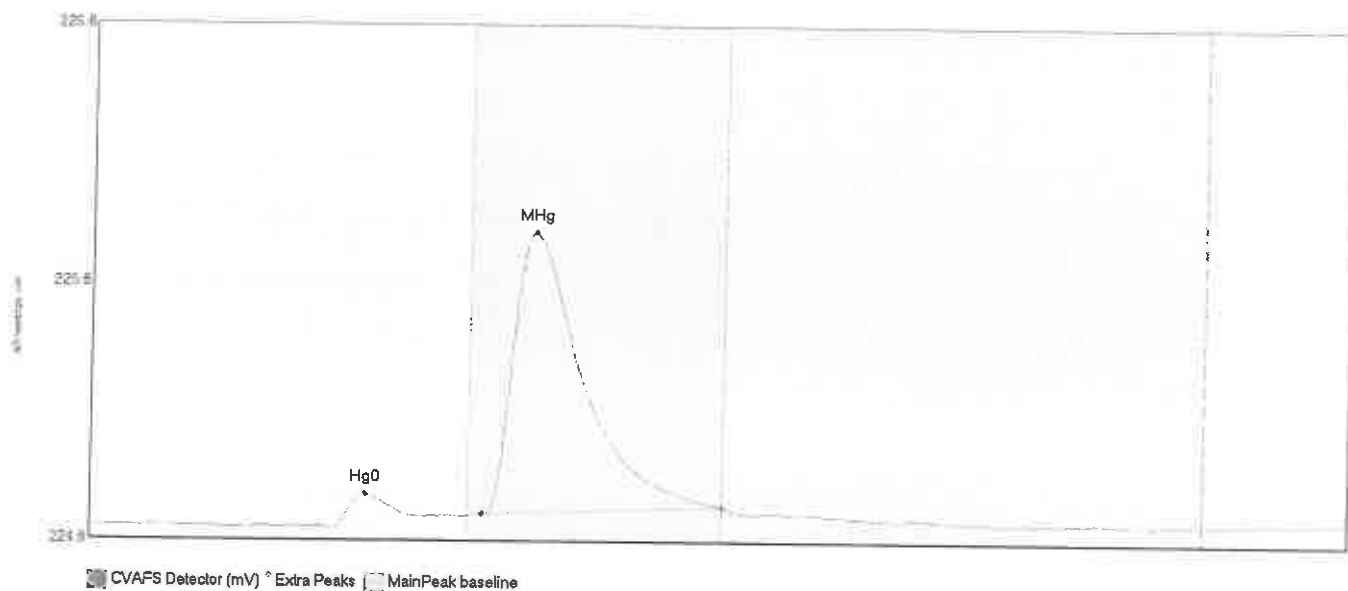
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CCV1 Hg0	5.641	47.5	63.7	224.53	224.56	54.7	0.086	OK	224.5234	0.00	0.04	
SEQ-CCV1 MHg	80.490	77.4	125.0	224.58	224.58	87.6	0.522	CT	224.5284	0.00	0.04	

#27: SEQ-CCB1



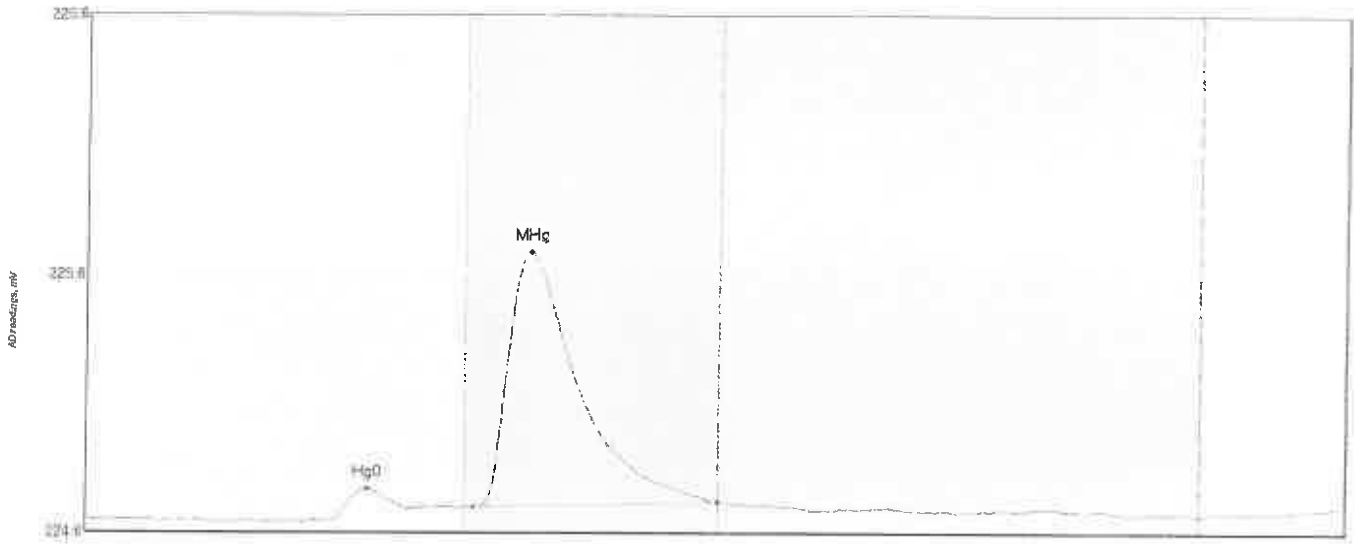
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCB1 Hg0	2.516	48.3	63.8	224.53	224.56	54.6	0.051	OK	224.5336	0.00	0.02	
SEQ-CCB1 MHg	0.755	82.2	92.3	224.58	224.58	87.4	0.015	OK	224.5336	0.00	0.02	

#32: F011323-BS1



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F011323-BS1 Hg0	12.125	48.3	73.7	224.60	224.65	54.8	0.137	OK	224.6118	0.00	0.03	F011323
F011323-BS1 MHg	171.131	78.0	125.0	224.66	224.69	87.7	1.088	CT	224.6118	0.00	0.03	F011323

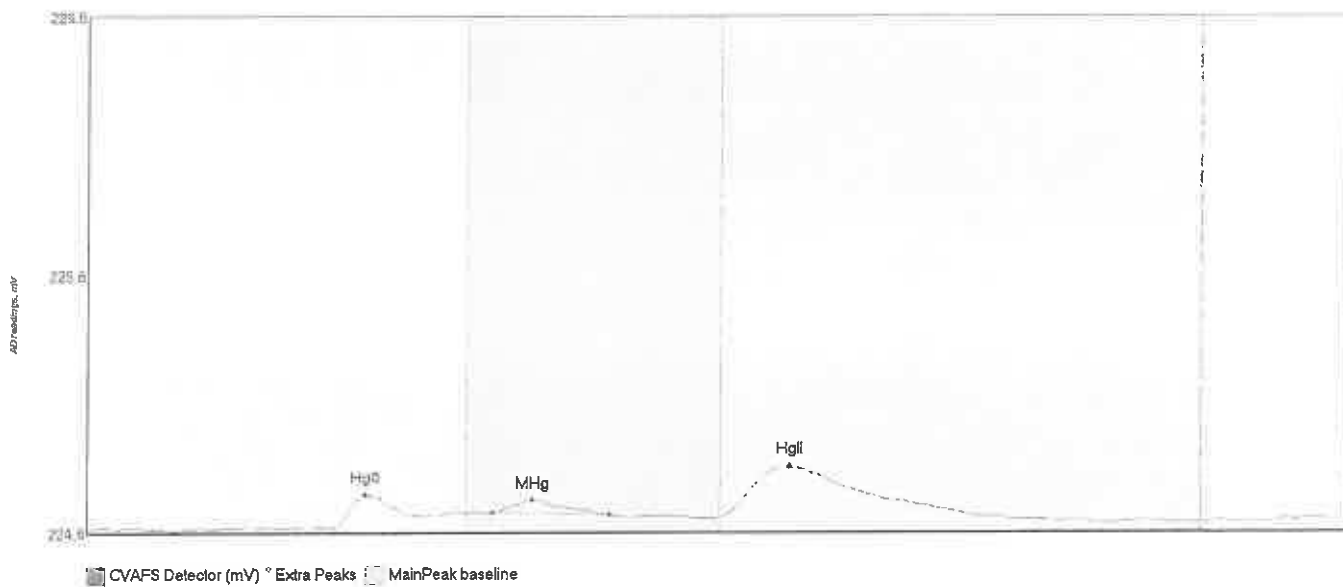
#33: F011323-BSD1



CVAFS Detector (mV) ° Extra Peaks MainPeak baseline

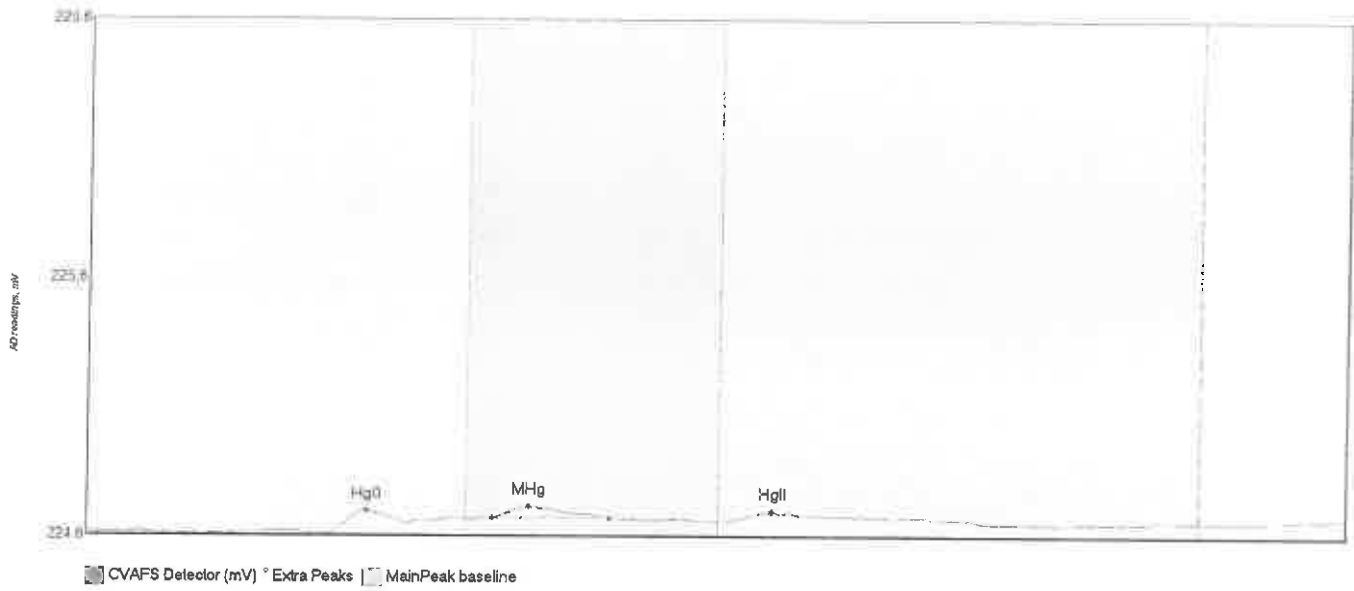
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-BSD1 Hg	8.511	48.3	64.2	224.62	224.67	55.7	0.123	OK	224.6292	0.00	0.04	
F011323-BSD1 MHg	155.812	76.8	125.0	224.68	224.70	87.9	0.986	CT	224.6292	0.00	0.04	

#34: F011323-BLK1



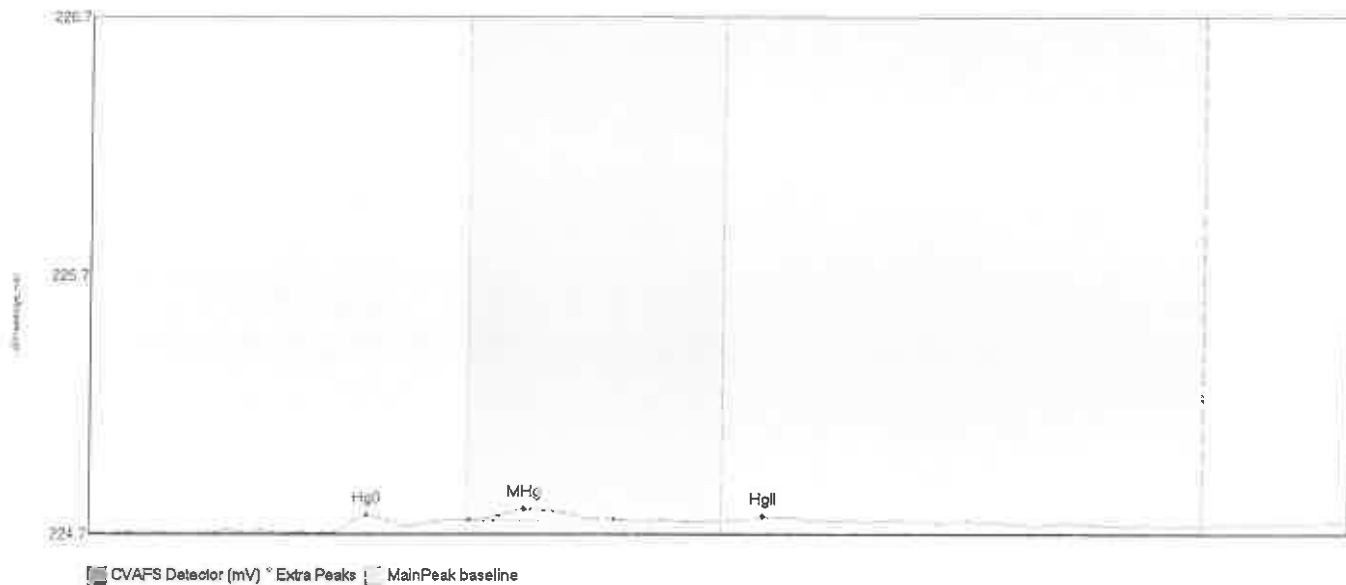
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-BLK1 Hg	9.058	48.5	64.9	224.64	224.69	54.9	0.127	OK	224.6358	0.00	0.04	F011323
F011323-BLK1 MHg	6.176	80.1	103.3	224.70	224.69	88.0	0.049	OK	224.6358	0.00	0.04	F011323
F011323-BLK1 Hg	47.068	125.0	175.9	224.68	224.68	138.7	0.195	OK	224.6358	0.00	0.04	F011323

#35: F011323-BLK2



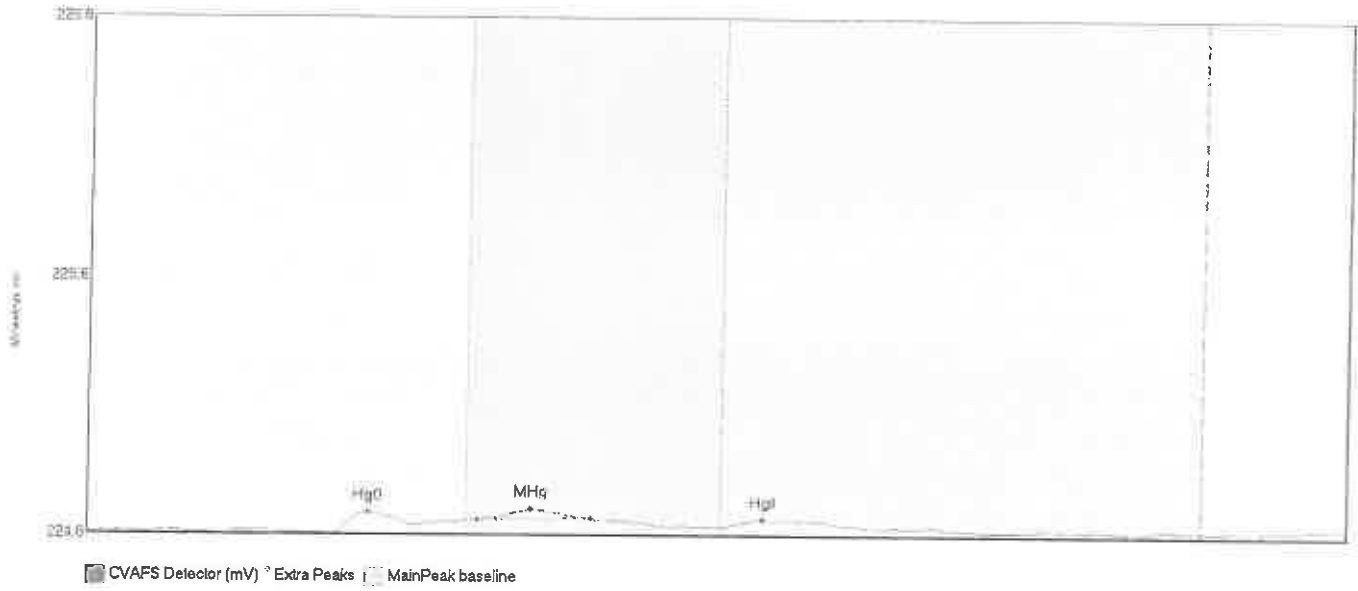
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
F011323-BLK2 Hg	5.600	48.1	63.8	224.64	224.68	55.5	0.090	OK	224.6437	0.00	0.06	F011323
F011323-BLK2 MH	5.831	80.2	103.3	224.70	224.70	87.2	0.044	OK	224.6437	0.00	0.06	F011323
F011323-BLK2 Hg	6.039	127.5	169.3	224.69	224.69	135.7	0.032	OK	224.6437	0.00	0.06	F011323

#36: F011323-BLK3



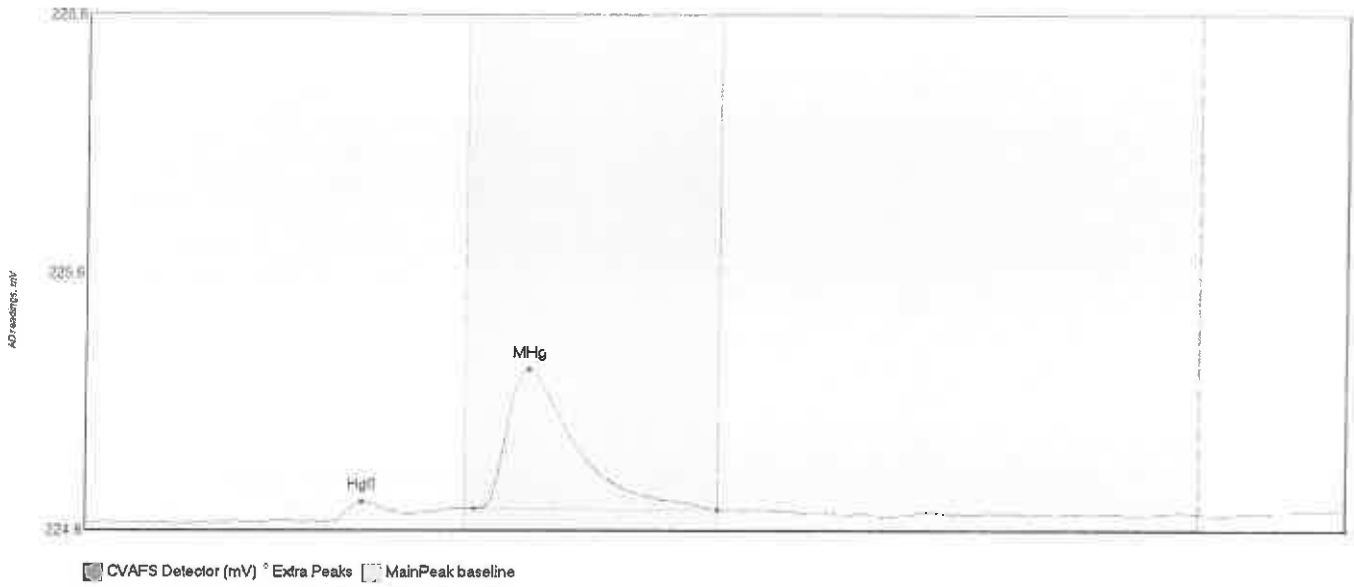
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-BLK3 Hg	4.340	47.2	63.4	224.66	224.69	55.1	0.066	OK	224.6648	0.00	0.04	F011323
F011323-BLK3 MH	6.171	75.5	103.7	224.71	224.71	86.1	0.046	OK	224.6648	0.00	0.04	F011323
F011323-BLK3 Hg	0.898	130.4	142.0	224.71	224.71	133.3	0.013	OK	224.6648	0.00	0.04	F011323

#37: F011323-BLK4



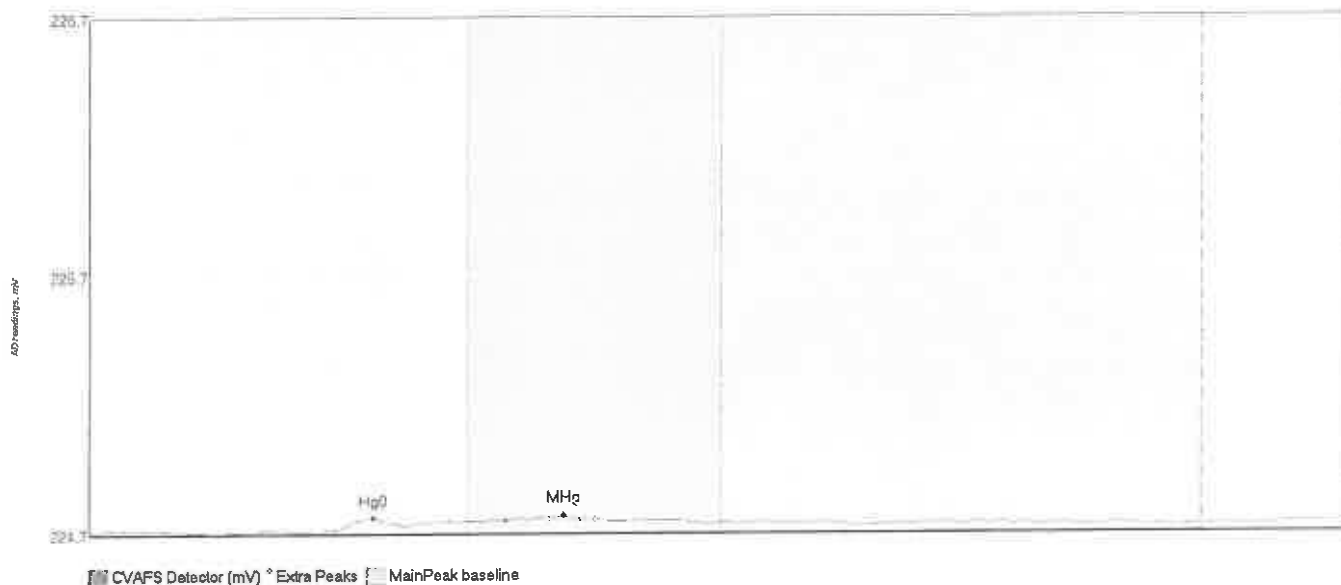
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment	
F011323-BLK4	Hg	5.956	48.0	64.6	224.65	224.69	55.4	0.082	OK	224.6564	0.00	0.03	F011323
F011321-BLK4	MHg	4.333	77.2	99.6	224.71	224.71	87.9	0.042	OK	224.6564	0.00	0.03	F011323
F011323-BLK4	Hg	4.403	126.0	149.4	224.68	224.69	133.3	0.031	OK	224.6564	0.00	0.03	F011323

#38: SEQ-CCV2



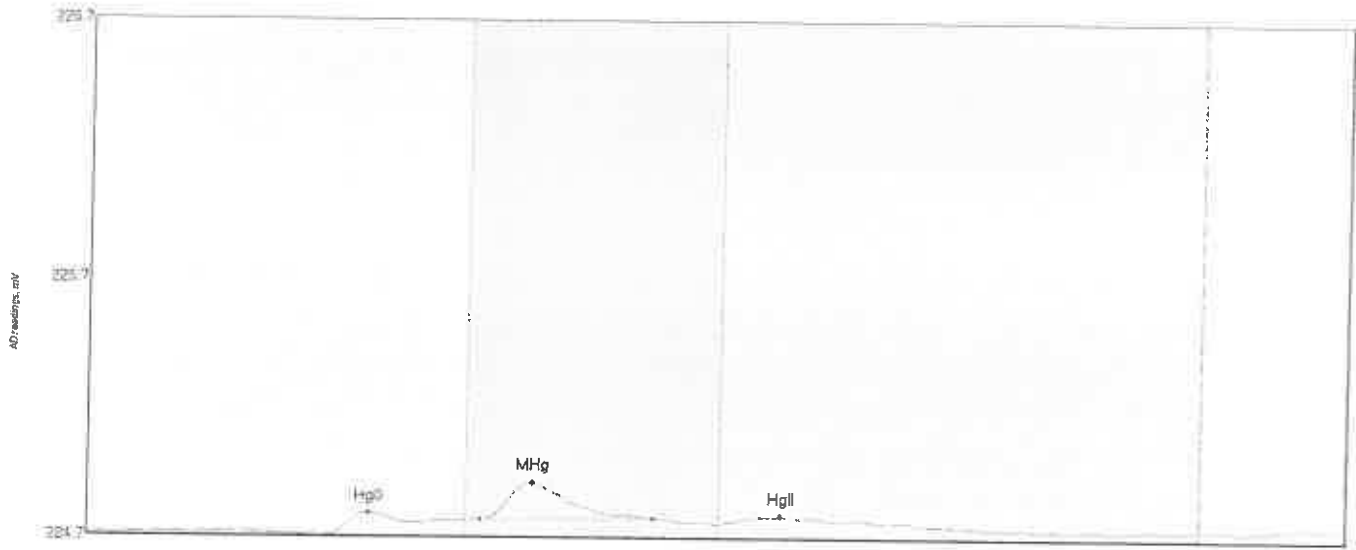
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CCV2 Hg0	4.615	49.2	63.5	224.68	224.70	54.8	0.074	OK	224.6720	0.00	0.04	
SEQ-CCV2 MHg	85.542	77.0	125.0	224.72	224.72	87.6	0.542	CT	224.6720	0.00	0.04	

#39: SEQ-CCB2



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCB2 Hg0	2.890	49.0	62.6	224.68	224.70	56.3	0.048	OK	224.6705	0.00	0.04	
SEQ-CCB2 MHg	1.552	82.4	100.1	224.72	224.72	93.9	0.019	OK	224.6785	0.00	0.04	

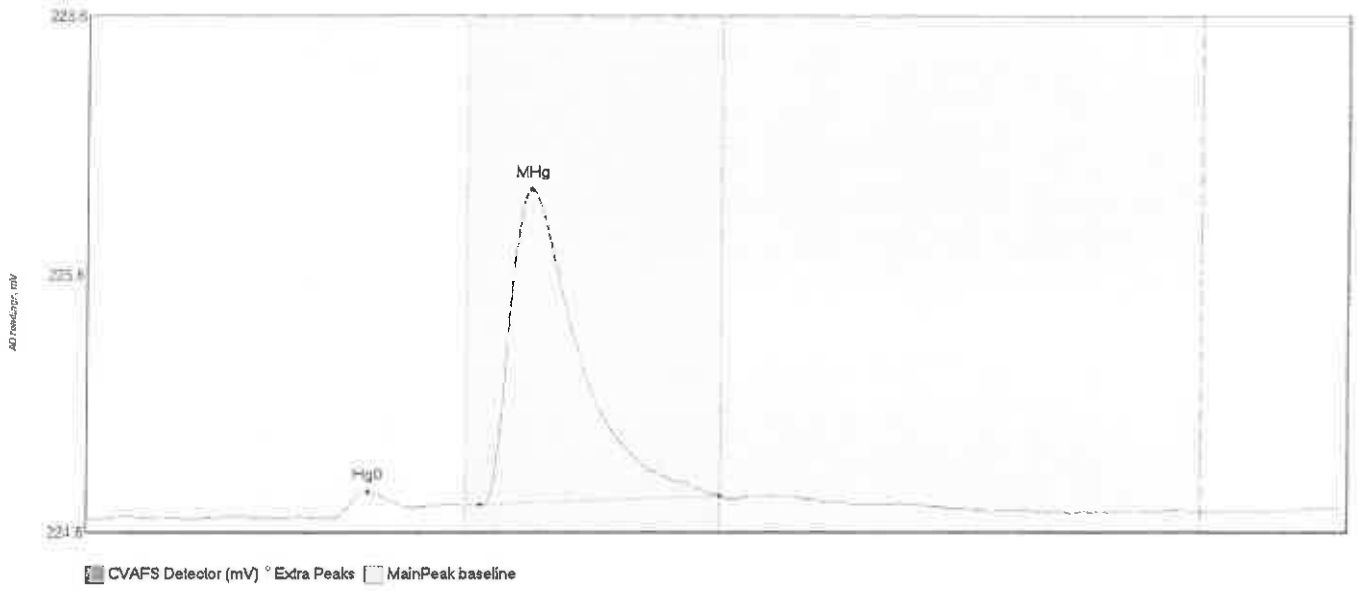
#40: 0J00143-01



CVAFS Detector (mV) Extra Peaks MainPeak baseline

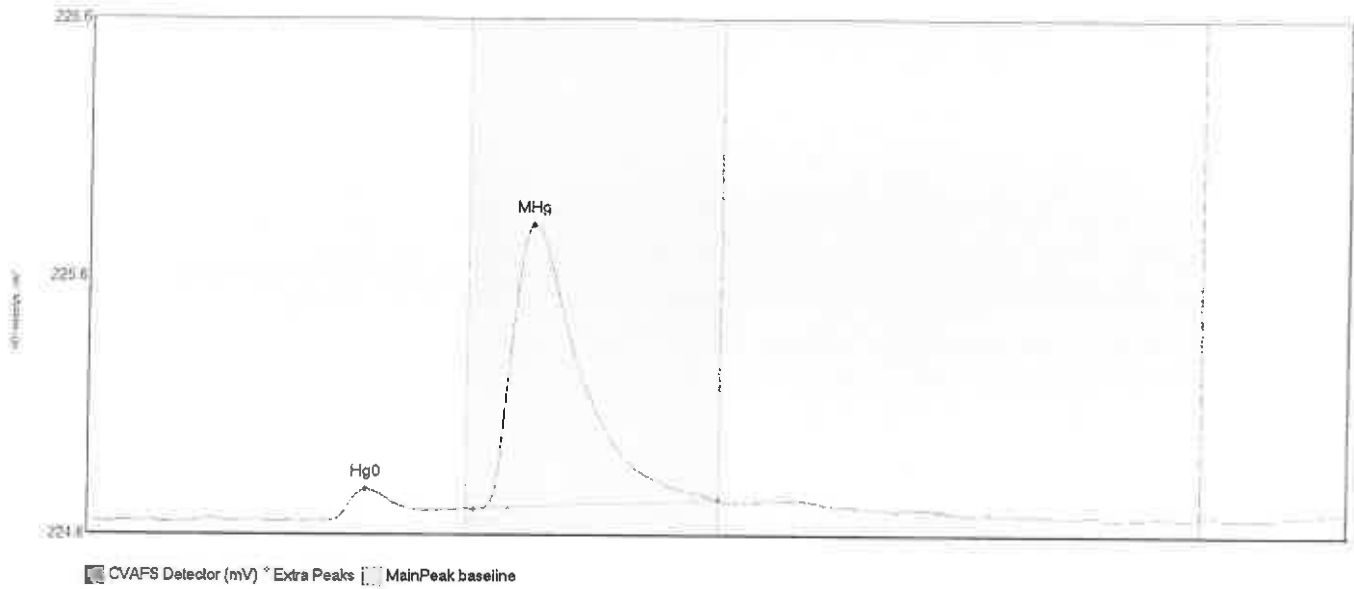
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00143-01 Hg0	5.458	48.4	64.8	224.69	224.73	56.0	0.083	OK	224.6917	0.00	0.04	F011323
0J00143-01 MHg	19.181	78.0	112.1	224.75	224.75	88.1	0.143	OK	224.6917	0.00	0.04	F011323
0J00143-01 HgII	4.535	125.0	156.0	224.74	224.74	137.4	0.032	OK	224.6917	0.00	0.04	F011323

#41: F011323-MS1



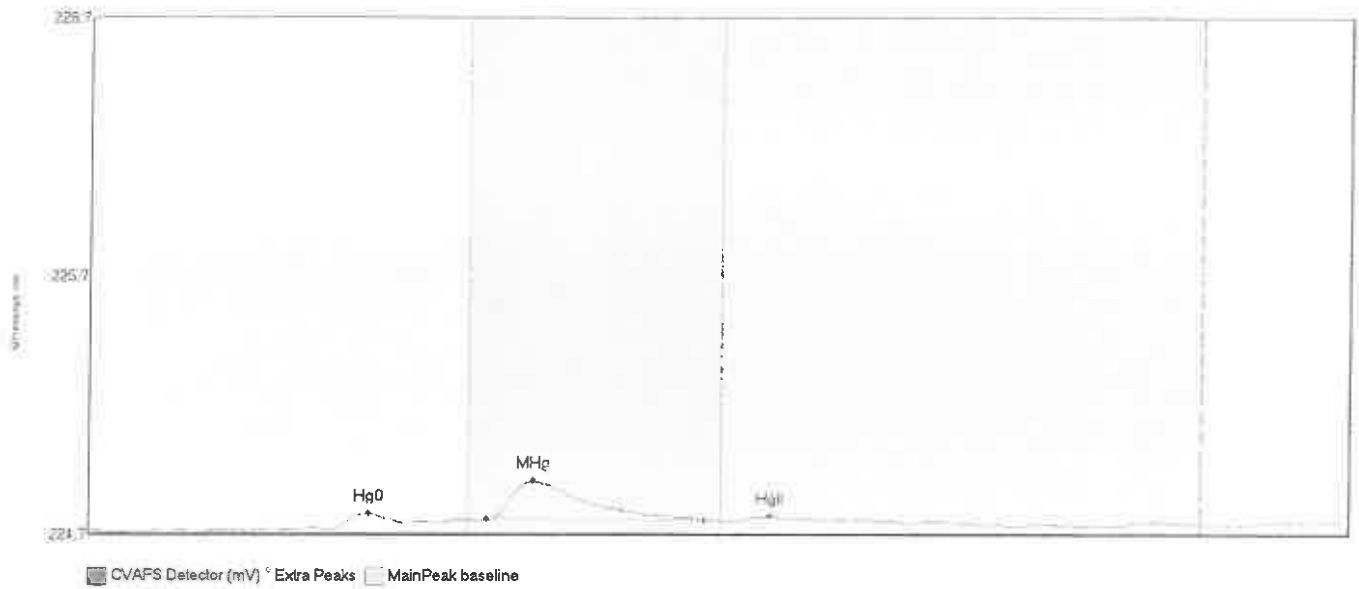
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-MS1 Hg0	6.900	48.5	65.0	224.69	224.73	55.5	0.102	OK	224.6892	0.00	0.04	F011323
F011323-MS1 MHg	190.284	77.8	125.0	224.74	224.78	87.9	1.220	CT	224.6892	0.00	0.04	F011323

#42: F011323-MSD1



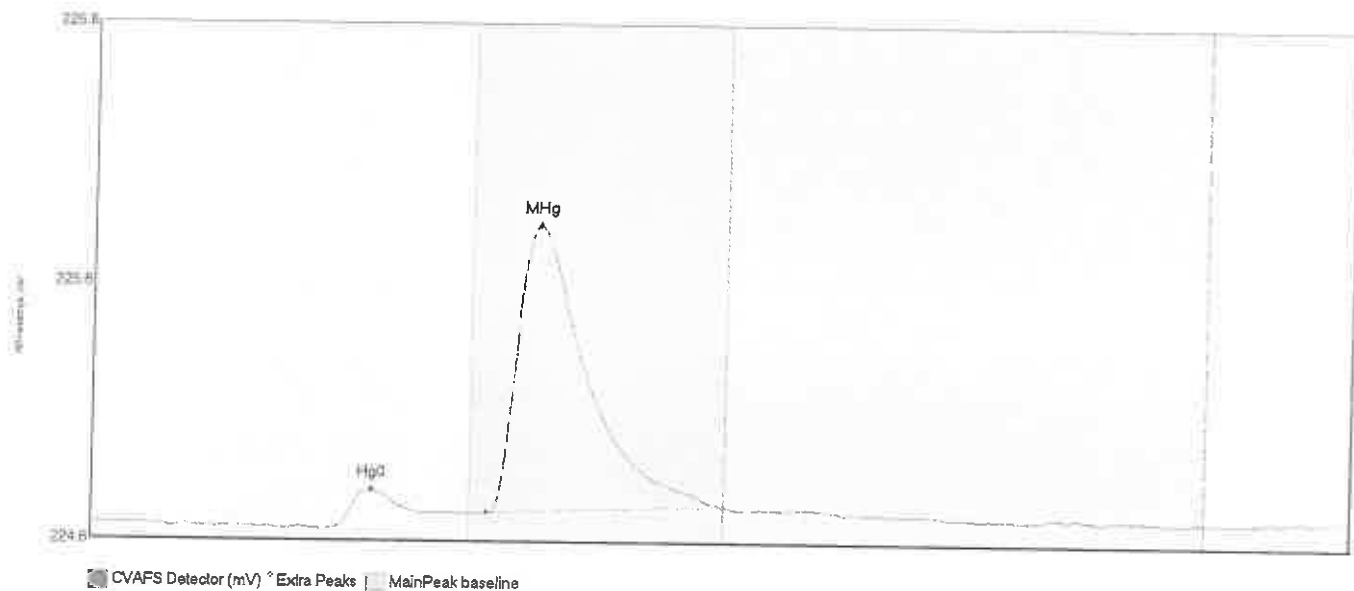
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F011323-MSD1 Hg	8.959	47.3	67.1	224.68	224.73	55.2	0.122	OK	224.6834	0.00	0.03	F011323
F011323-MSD1 MH	171.560	76.5	125.0	224.73	224.77	87.9	1.098	CT	224.6834	0.00	0.03	F011323

#43: 0J00147-02



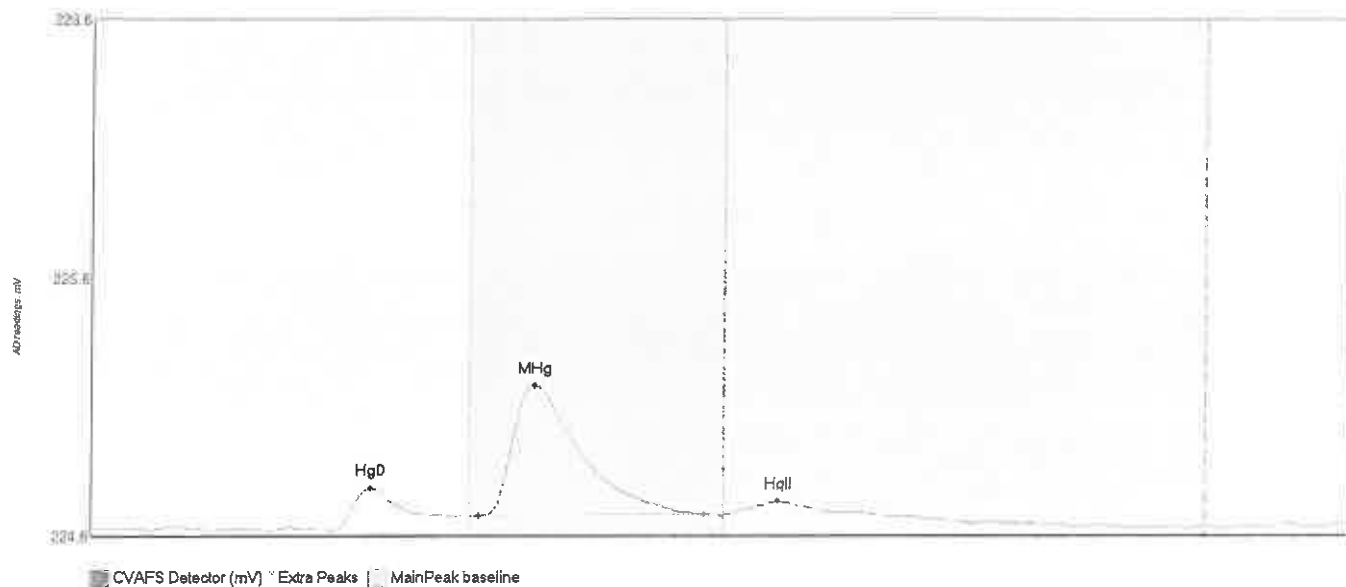
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	R1Dev	R1Shift	Comment
0J00147-02 Hg0	4.327	47.7	63.9	224.69	224.72	55.6	0.067	OK	224.6865	0.00	0.03	F011323
0J00147-02 MHg	24.663	78.7	121.7	224.73	224.73	87.8	0.148	OK	224.6865	0.00	0.03	F011323
0J00147-02 HgII	1.382	128.1	143.7	224.72	224.72	134.7	0.017	OK	224.6865	0.00	0.03	F011323

#44: F011323-MS2



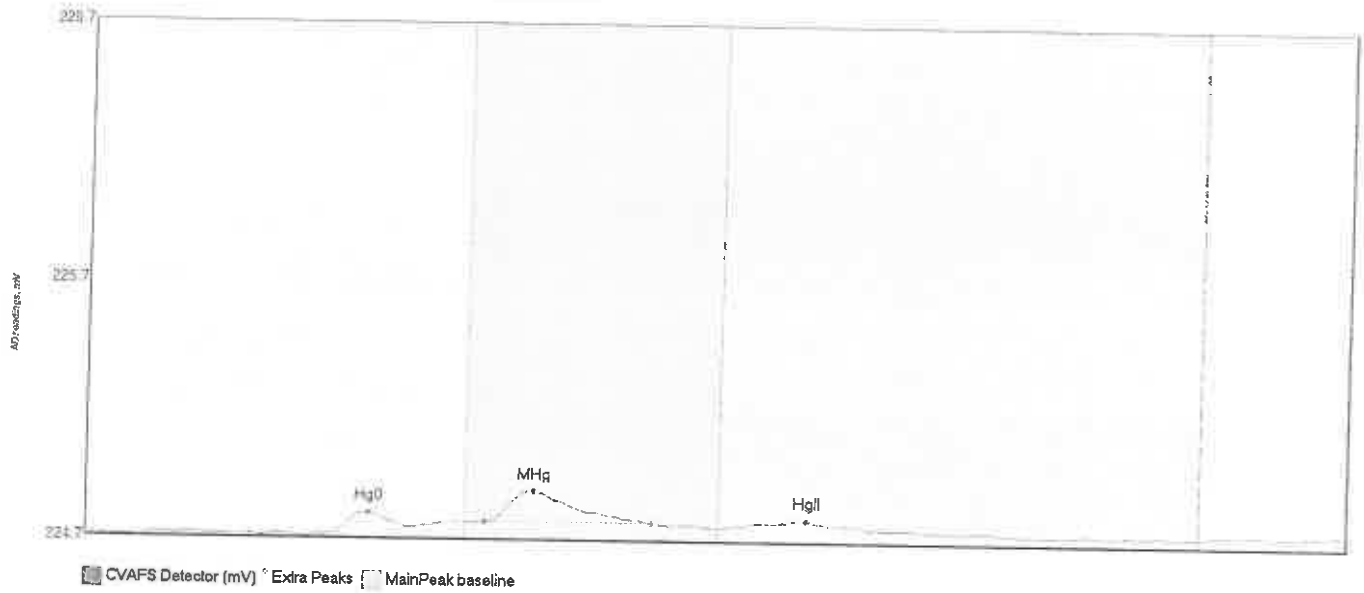
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-MS2 Hg0	12.883	48.0	73.3	224.67	224.73	55.6	0.143	OK	224.6827	0.00	0.04	F011323
F011323-MS2 MHg	173.421	78.3	125.0	224.73	224.76	88.2	1.115	CT	224.6827	0.00	0.04	F011323

#45: F011323-MSD2



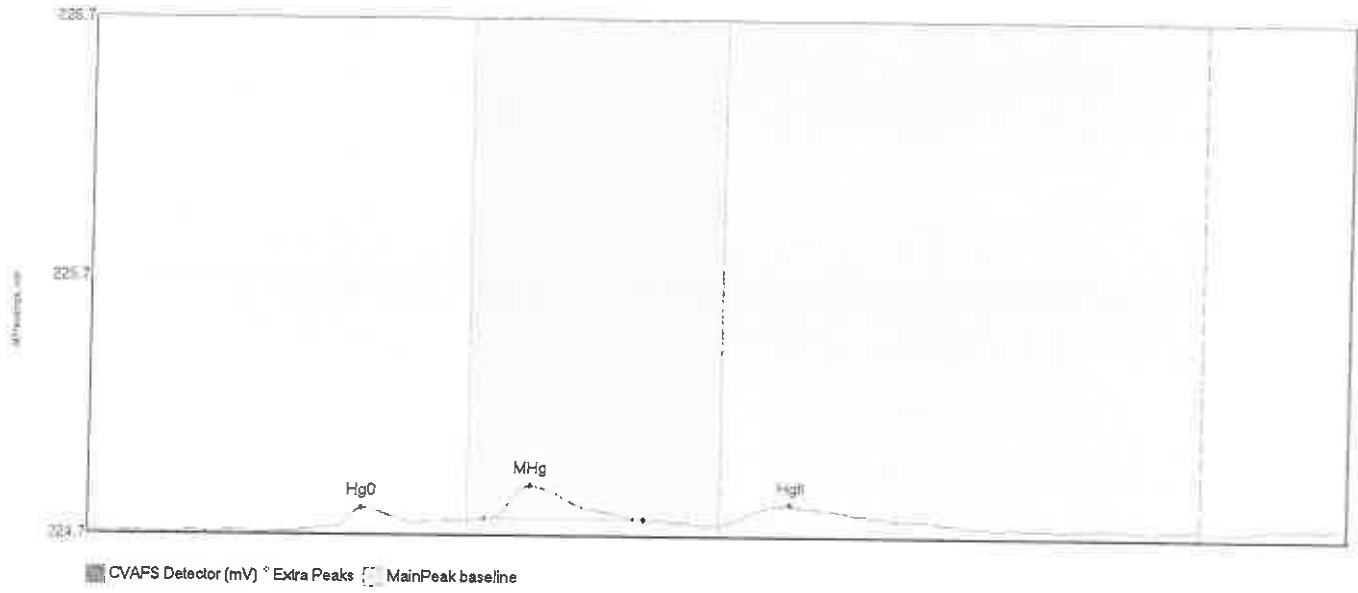
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011323-MSD2 Hg	13.503	47.8	71.2	224.67	224.73	55.4	0.163	OK	224.6833	0.00	0.01	F011323
F011323-MSD2 MH	76.480	77.0	121.2	224.73	224.73	87.8	0.502	OK	224.6833	0.00	0.01	F011323
F011323-MSD2 Hg	6.496	125.5	154.7	224.73	224.73	135.7	0.051	OK	224.6833	0.00	0.01	F011323

#46: 0J00143-02



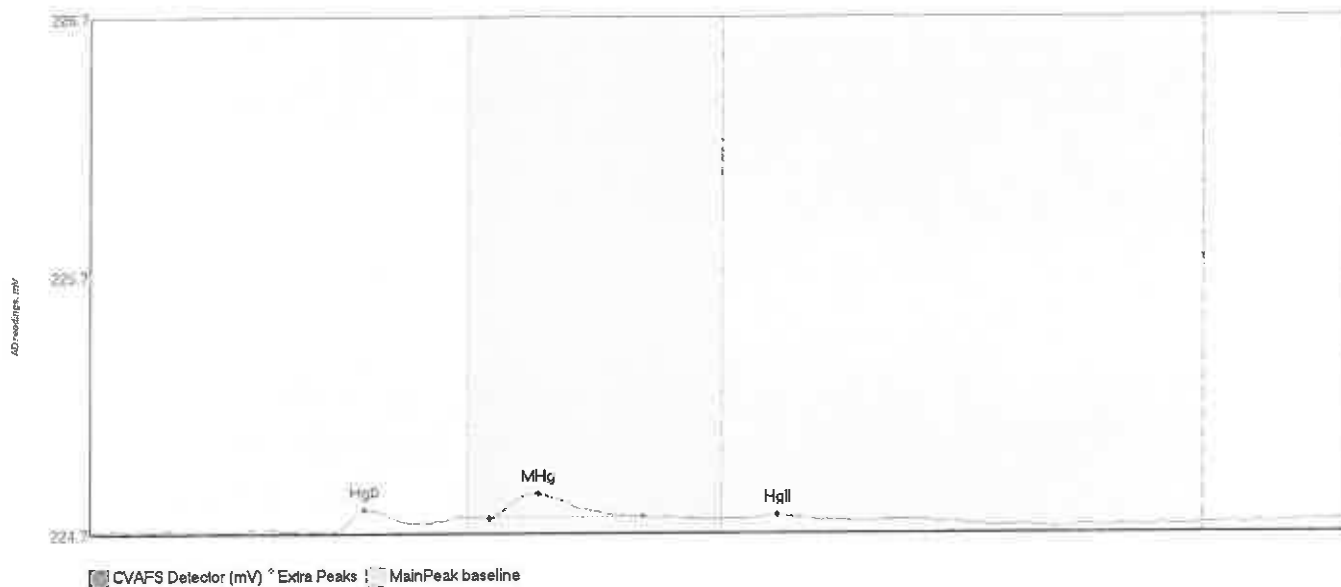
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
0J00143-02 Hg0	5.444	47.1	63.8	224.69	224.72	55.9	0.084	OK	224.6833	0.00	0.04	F011323
0J00143-02 MHg	17.672	78.9	111.9	224.74	224.74	88.6	0.123	OK	224.6833	0.00	0.04	F011323
0J00143-02 HgII	4.920	127.3	155.0	224.73	224.72	142.4	0.027	OK	224.6833	0.00	0.04	F011323

#47: 0J00143-03



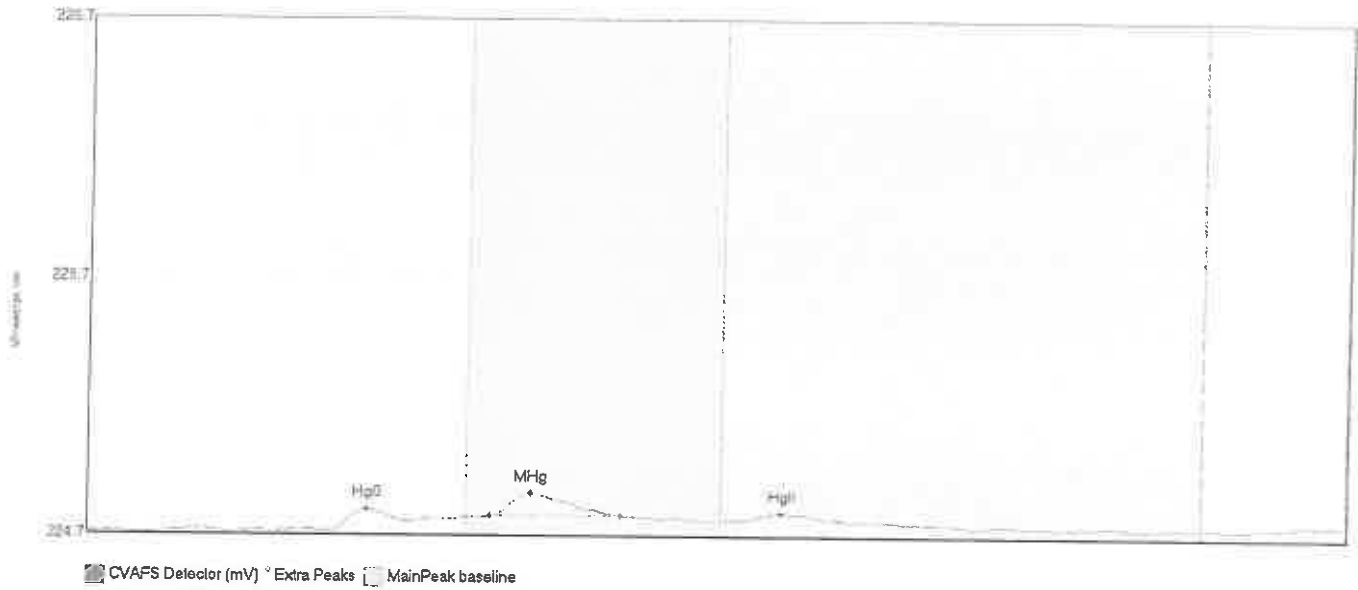
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00143-03 Hg0	6.272	41.5	64.3	224.70	224.73	54.3	0.090	OK	224.6943	0.00	0.04	F011323
0J00143-03 MHg	18.056	78.4	110.0	224.75	224.75	87.4	0.130	OK	224.6943	0.00	0.04	F011323
0J00143-03 HgII	17.334	125.0	169.7	224.73	224.73	138.9	0.081	OK	224.6943	0.00	0.04	F011323

#48: 0J00143-04



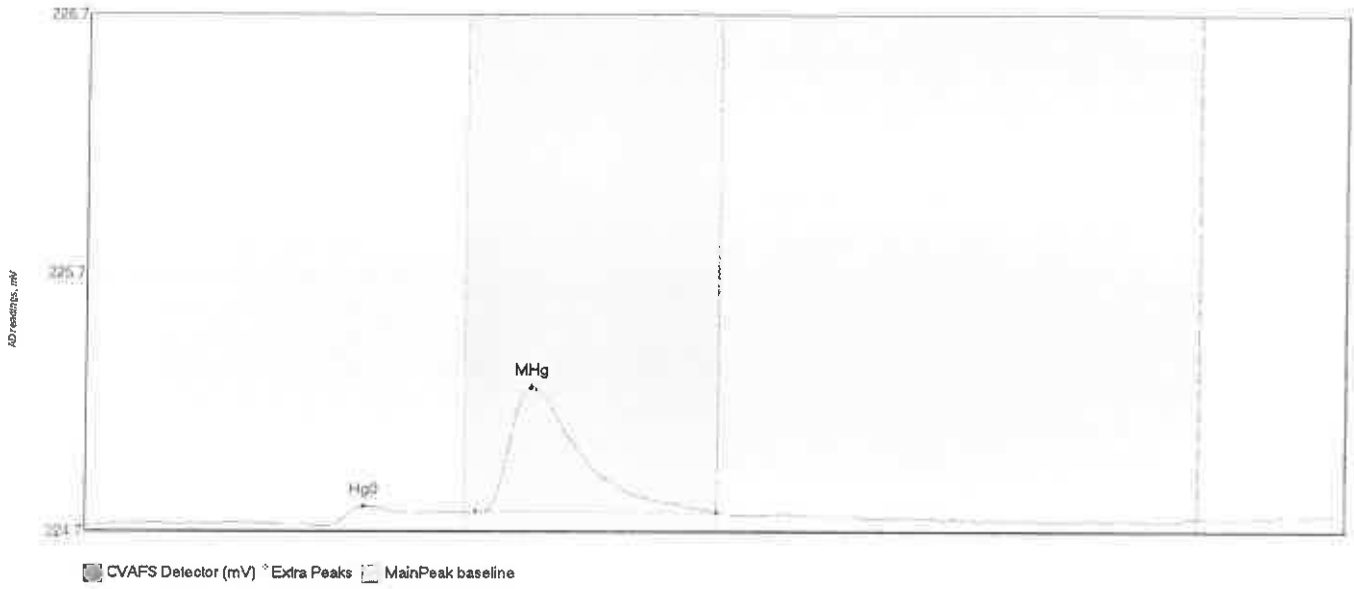
Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
5.437	48.6	63.9	224.69	224.73	54.6	0.081	OK	224.6927	0.00	0.04	F011323
12.581	79.2	109.2	224.75	224.75	88.7	0.092	OK	224.6927	0.00	0.04	F011323
0.539	132.3	141.6	224.75	224.74	136.0	0.011	OK	224.6927	0.00	0.04	F011323

#49: CJ00143-05



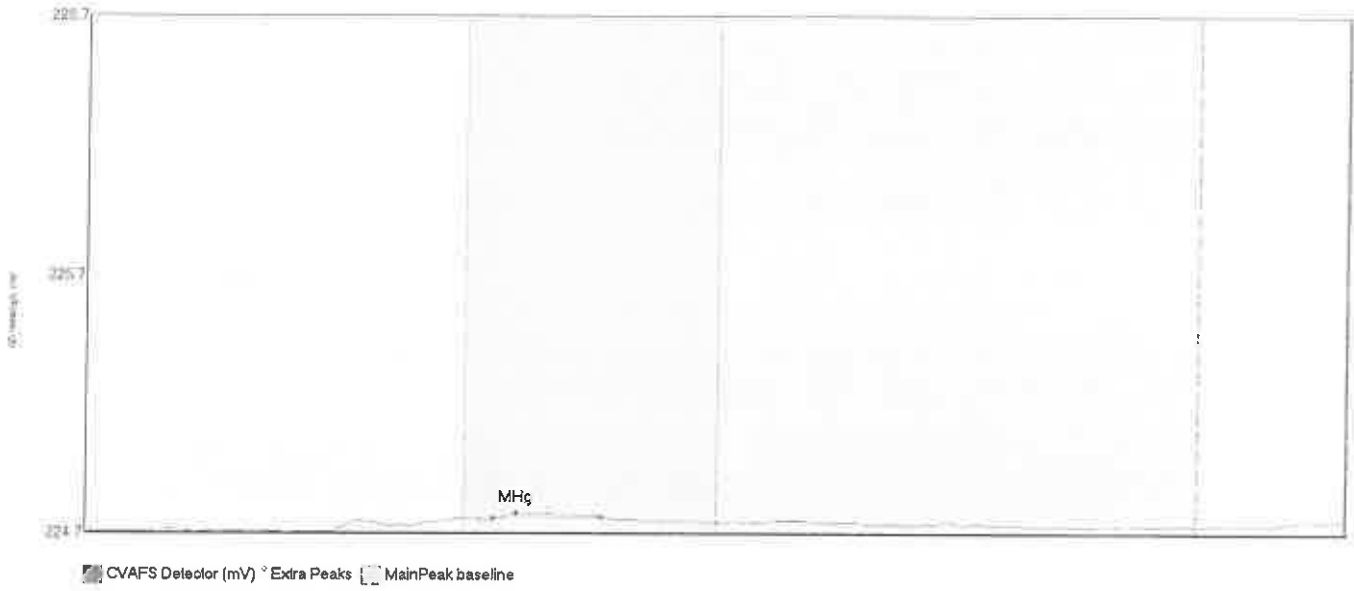
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
CJ00143-05 Hg0	4.998	48.2	63.6	224.71	224.75	55.2	0.082	OK	224.7110	0.00	0.03	F011323
CJ00143-05 MHg	10.896	79.8	105.5	224.77	224.77	87.7	0.087	OK	224.7110	0.00	0.03	F011323
CJ00143-05 HgII	2.777	129.7	148.1	224.76	224.76	137.0	0.030	OK	224.7110	0.00	0.03	F011323

#50: SEQ-CCV3



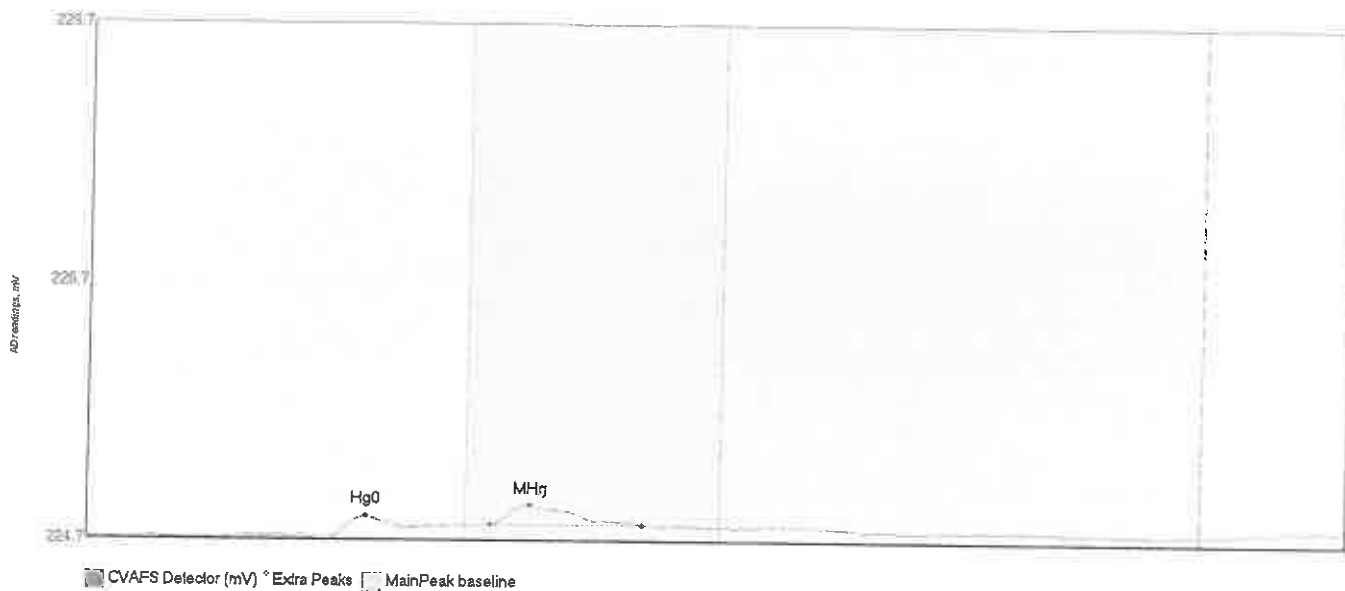
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Display
SEQ-CCV3 Hg0	4.502	47.7	64.6	224.72	224.77	55.3	0.075	OK	224.7217	0.00	0.04	
SEQ-CCV3 MHg	78.135	77.3	125.0	224.78	224.77	88.1	0.481	CT	224.7217	0.00	0.04	

#51: SEQ-CCB3



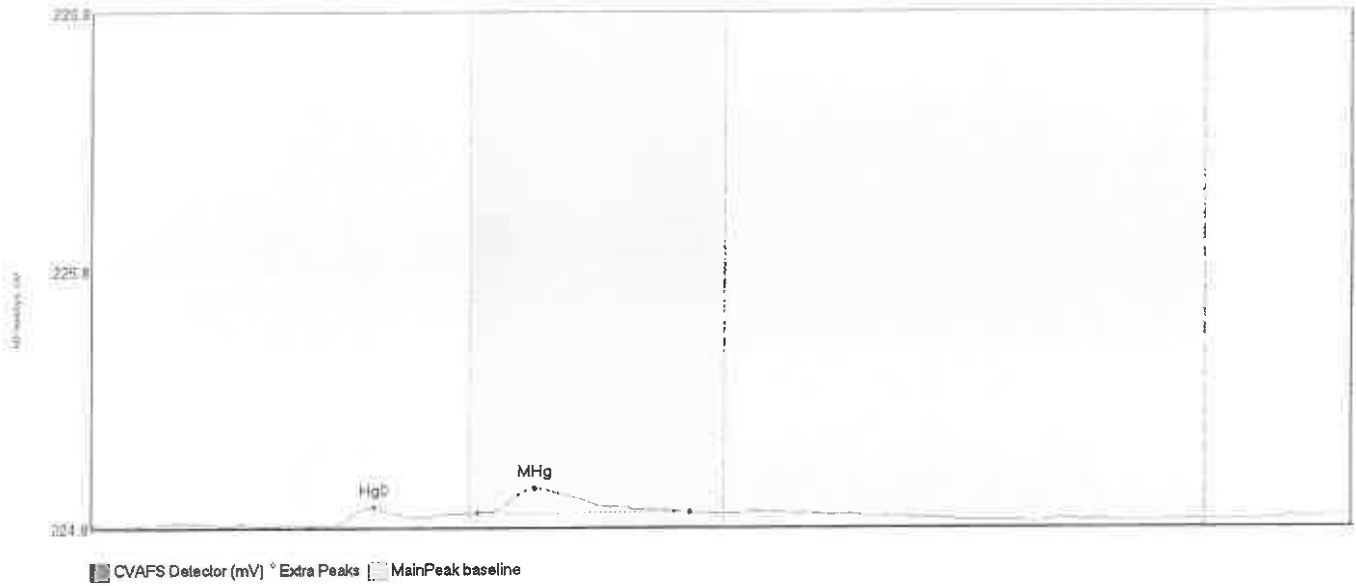
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
SEQ-CCB3	2.181	80.8	102.0	224.78	224.79	85.3	0.020	OK	224.7368	0.00	0.03	

#52: 0J00143-06



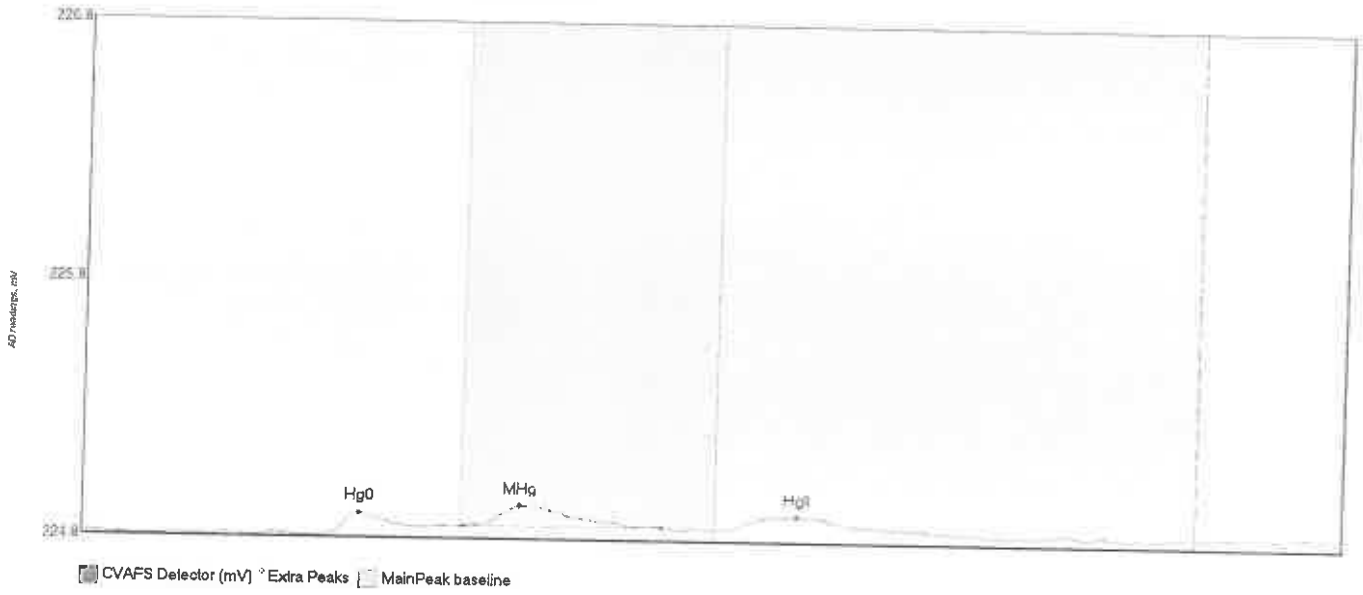
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00143-06 Hg0	4.897	48.3	63.5	224.74	224.78	55.5	0.081	OK	224.7385	0.00	0.04	F011323
0J00143-06 MHg	10.738	79.9	109.9	224.79	224.79	87.6	0.077	OK	224.7385	0.00	0.04	F011323

#53: QJ00143-07



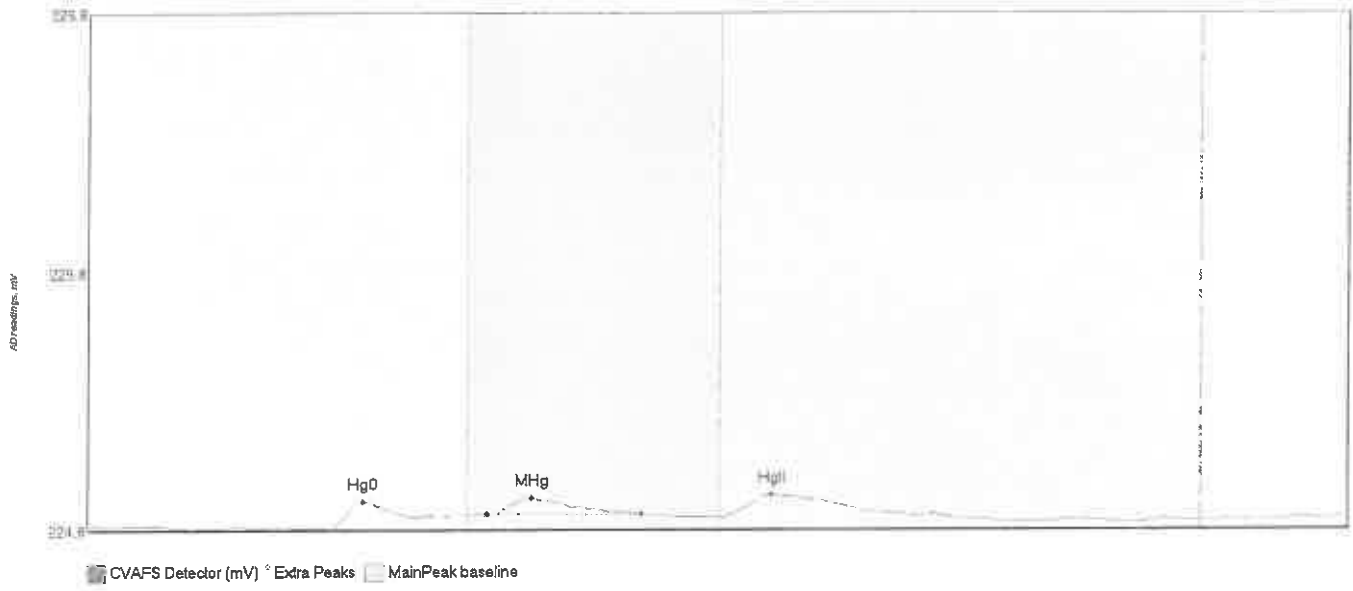
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
QJ00143-07 Hg0	4.392	47.9	63.4	224.77	224.80	56.0	0.070	OK	224.7737	0.00	0.03	F011323
QJ00143-07 MHg	15.671	76.6	118.2	224.82	224.82	87.8	0.096	OK	224.7737	0.00	0.03	P011323

#54: QJ00143-08

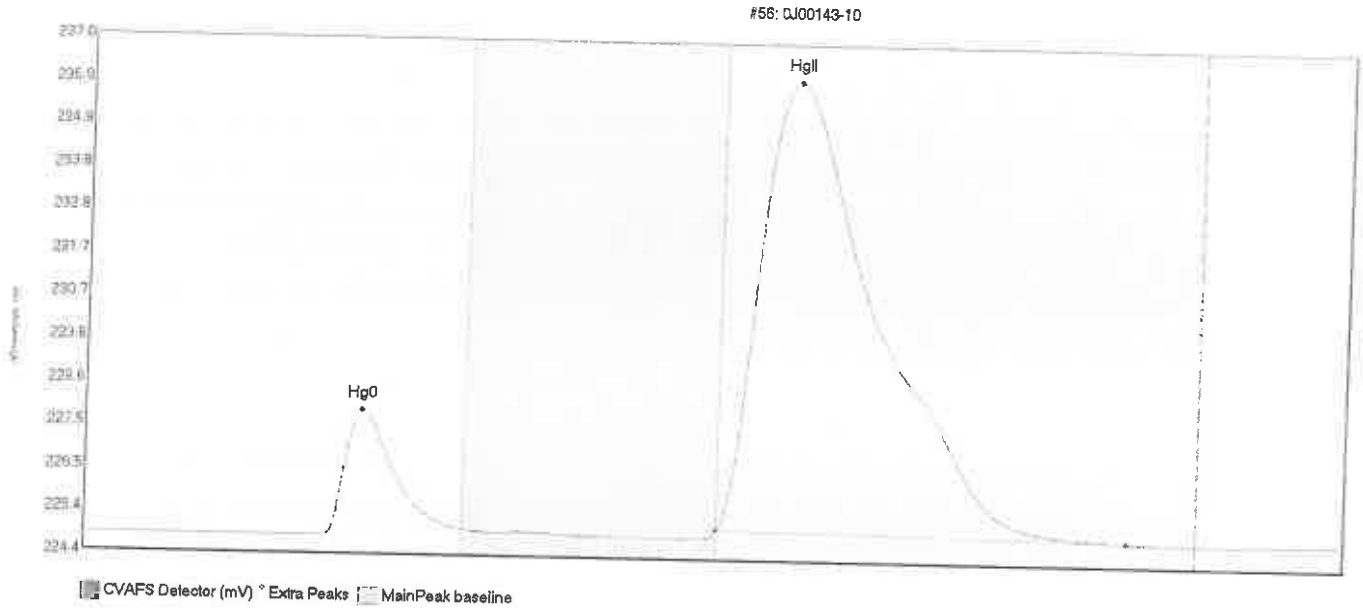


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RTDev	RTMin	RTMax	Comment
QJ00143-08 Hg0	5.966	46.8	65.2	224.78	224.81	54.9	0.090	OK	224.7882	0.00	0.00	0.00	F011323
QJ00143-08 MHg	13.453	75.6	114.6	224.82	224.82	86.6	0.080	OK	224.7882	0.00	0.00	0.00	F011323
QJ00143-08 HgII	10.068	127.7	163.3	224.82	224.82	141.2	0.054	OK	224.7882	0.00	0.00	0.00	F011323

#55: OJ00143-09

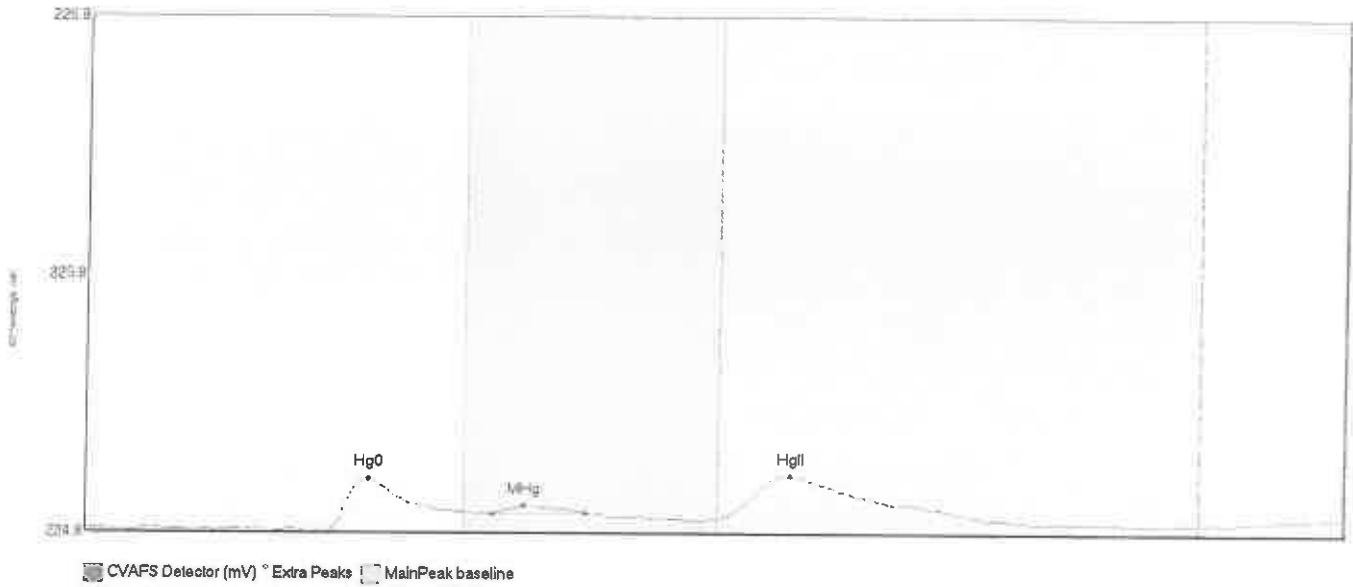


Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
OJ00143-09 Hg0	6.672	48.6	64.5	224.80	224.84	54.6	0.099	OK	224.8052	0.00	0.03	F011323
OJ00143-09 MHg	8.728	79.1	109.5	224.85	224.85	87.8	0.060	OK	224.8052	0.00	0.03	F011323
OJ00143-09 HgII	15.425	125.1	163.8	224.84	224.85	135.2	0.083	OK	224.8052	0.00	0.03	F011323



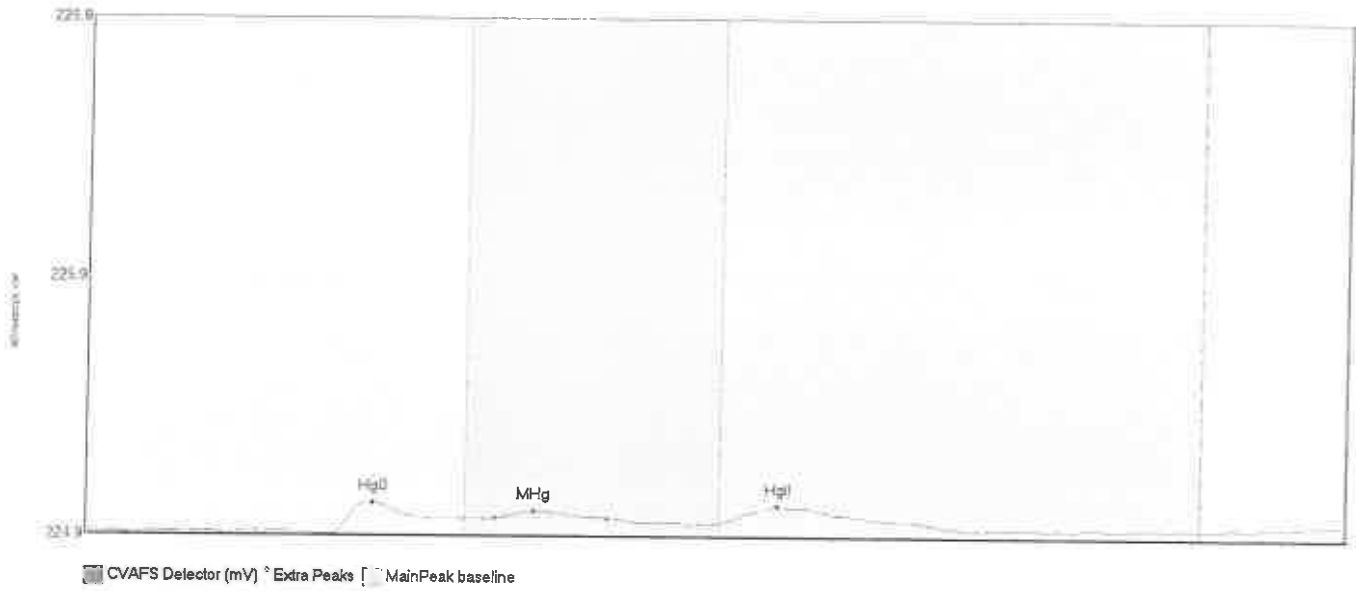
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
QJ00143-10 Hg0	322.219	44.6	75.0	224.82	224.99	54.9	3.075	CT	224.8116	0.00	0.15	F011323
QJ00143-10 HgII	2915.358	125.0	205.9	225.08	224.95	139.7	11.005	OK	224.8116	0.00	0.15	F011323

#57: OJ00143-11



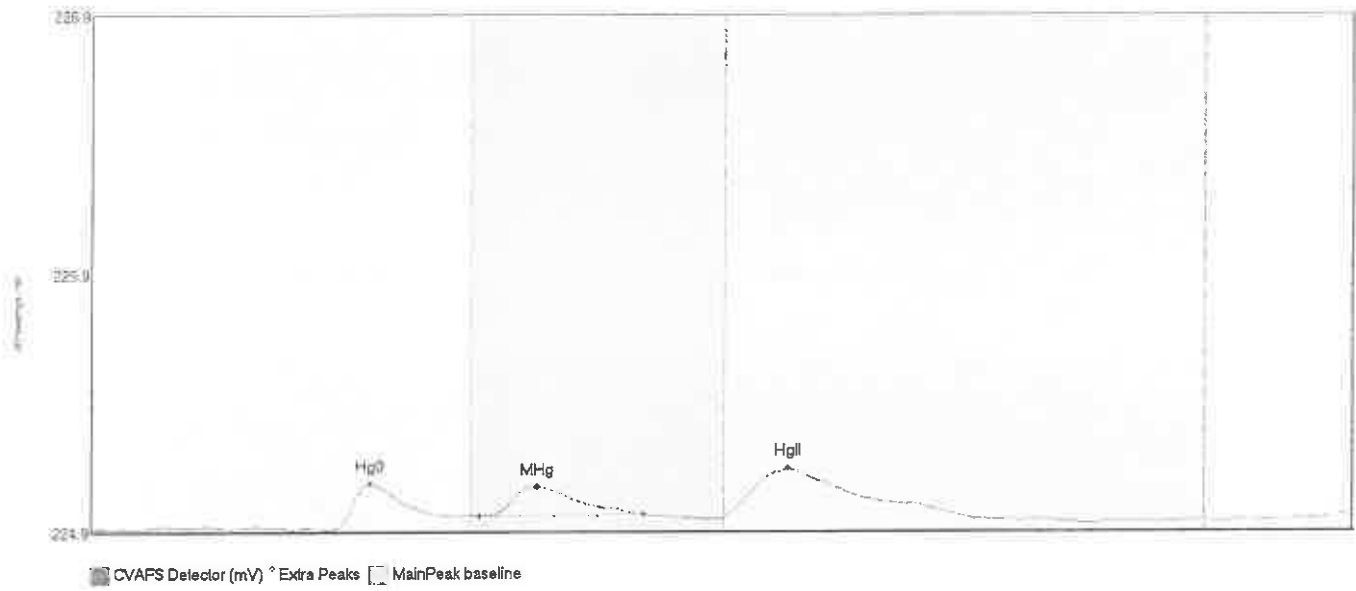
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
OJ00143-11 Hg0	20.851	48.0	75.0	224.84	224.91	56.2	0.199	CT	224.8468	0.00	0.05	F011323
OJ00143-11 MHg	3.299	80.6	98.9	224.91	224.91	86.7	0.032	OK	224.8468	0.00	0.05	F011323
OJ00143-11 HgII	42.322	125.0	177.8	224.89	224.88	139.5	0.164	OK	224.8463	0.00	0.05	F011323

#58: 0J00143-12



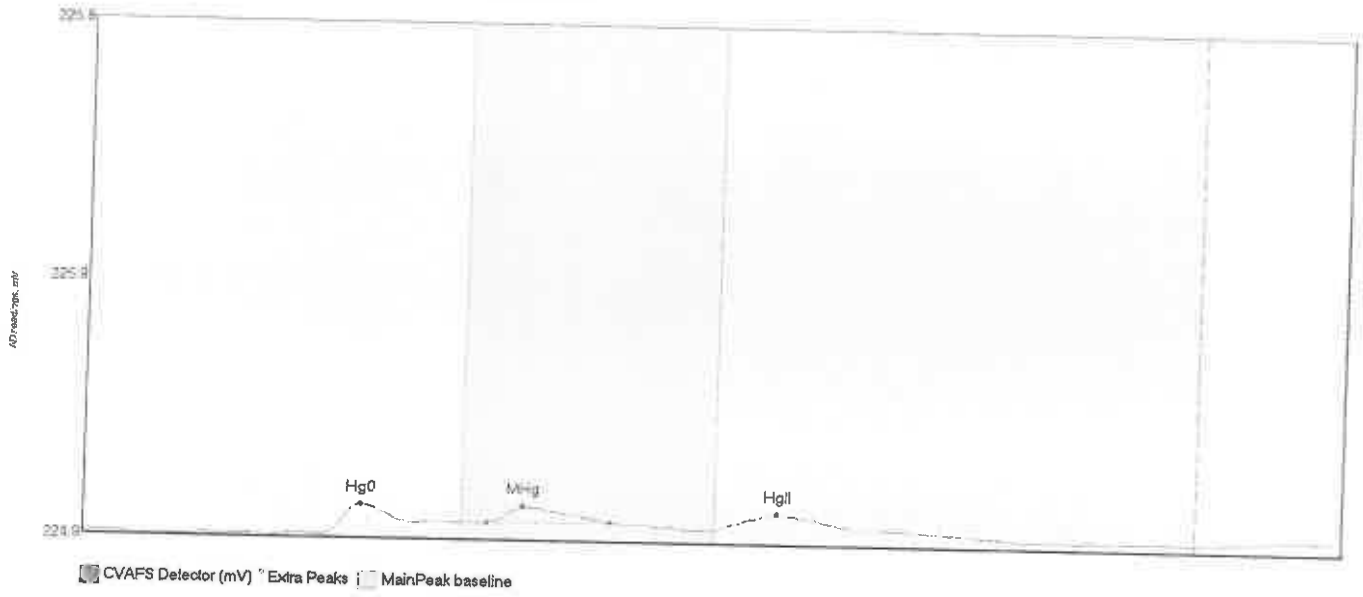
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BIDev	BIShift	Comment
0J00143-12 Hg0	11.843	48.2	73.9	224.86	224.92	56.6	0.122	OK	224.8686	0.00	0.03	F011323
0J00143-12 MHg	3.231	80.8	103.0	224.92	224.92	88.5	0.027	OK	224.8686	0.00	0.03	F011323
0J00143-12 HgII	11.753	125.0	162.1	224.90	224.91	136.5	0.066	OK	224.3606	0.00	0.03	F011323

#59: 0J00143-13



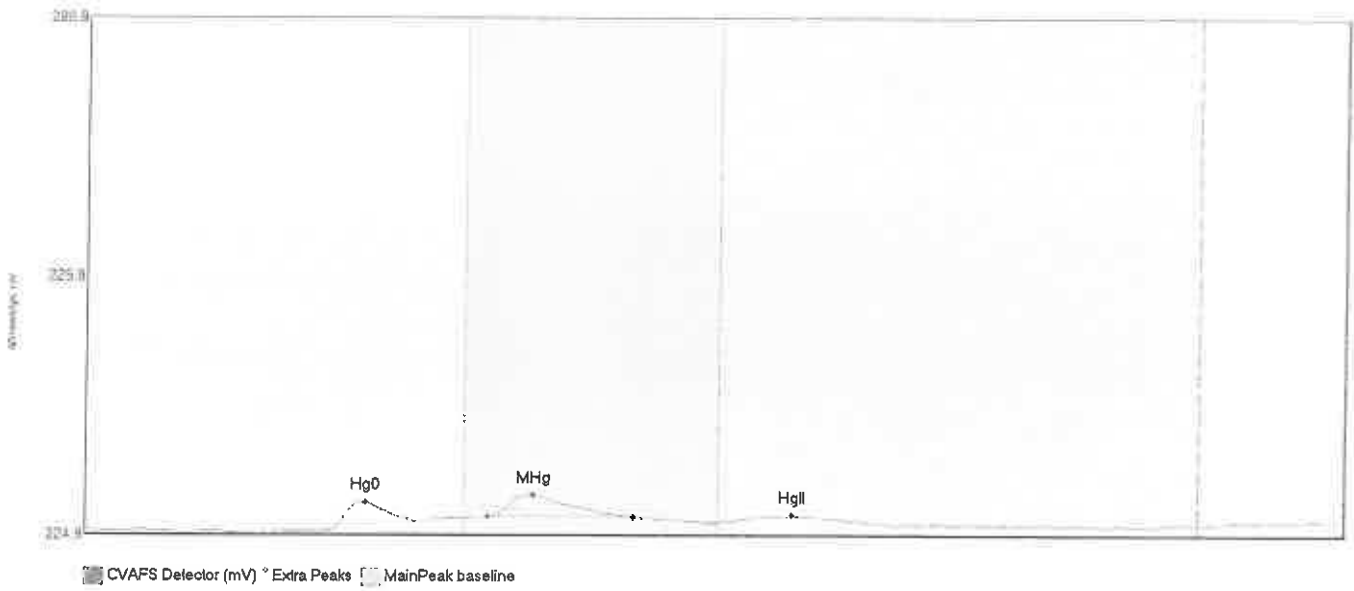
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00143-13 Hg0	17.168	47.3	72.5	224.88	224.93	55.0	0.178	OK	224.8883	0.00	0.05	F011323
0J00143-13 MHg	16.777	76.8	109.2	224.93	224.94	88.3	0.117	OK	224.8883	0.00	0.05	F011323
0J00143-13 HgII	43.110	125.0	174.3	224.93	224.93	137.6	0.186	OK	224.8883	0.00	0.05	F011323

#60: QJ00143-14



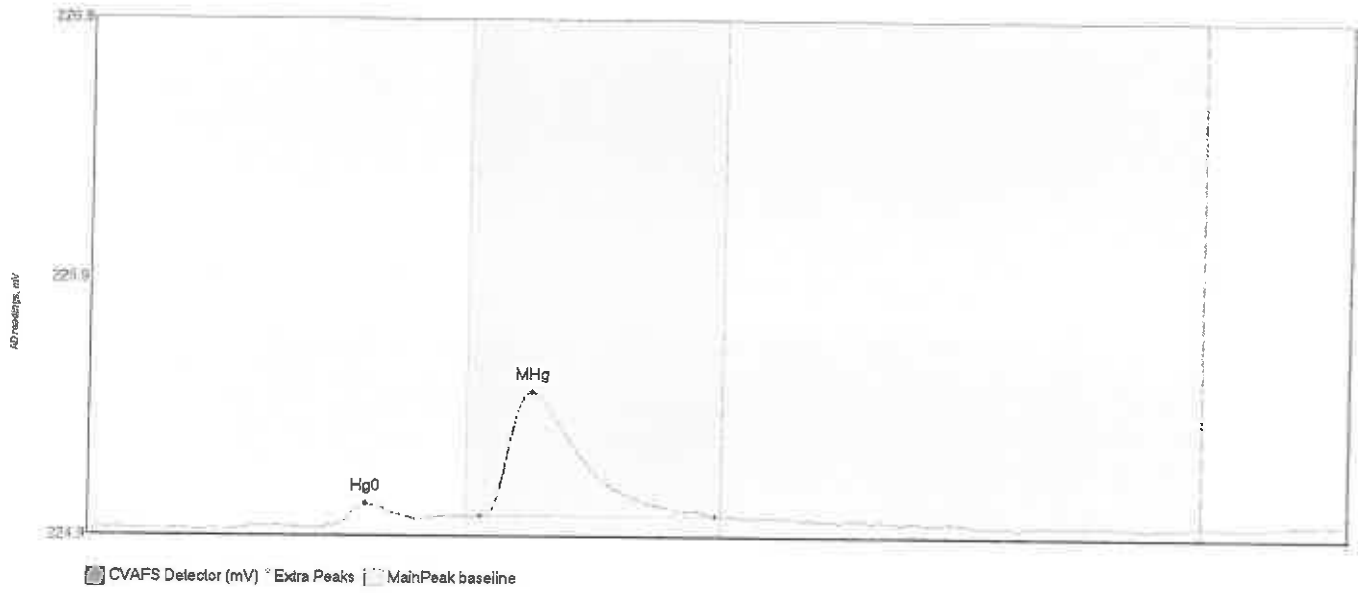
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
QJ00143-14 Hg0	10.387	47.5	72.9	224.91	224.96	55.3	0.117	OK	224.9099	0.00	0.04	F011323
QJ00143-14 MHg	8.015	79.8	104.3	224.96	224.97	86.9	0.063	OK	224.9099	0.00	0.04	F011323
QJ00143-14 HgII	10.514	125.0	161.0	224.95	224.96	137.3	0.065	OK	224.9099	0.00	0.04	F011323

#61: 0J00143-15



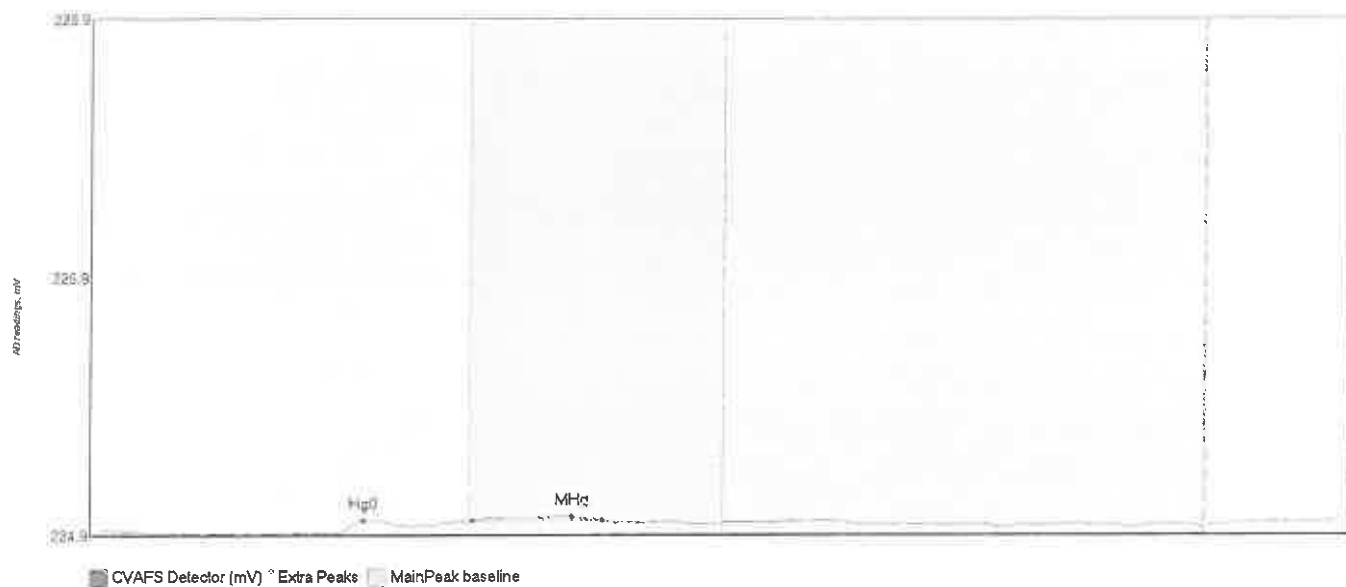
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0J00143-15 Hg0	8.351	48.1	65.3	224.93	224.97	55.7	0.112	OK	224.9308	0.00	0.03	F011323
0J00143-15 MHg	11.504	79.7	108.3	224.98	224.98	88.6	0.085	OK	224.9308	0.00	0.03	F011323
0J00143-15 HgII	2.798	127.9	150.8	224.97	224.97	139.7	0.022	OK	224.9308	0.00	0.03	F011323

#62: SEQ-CCV4



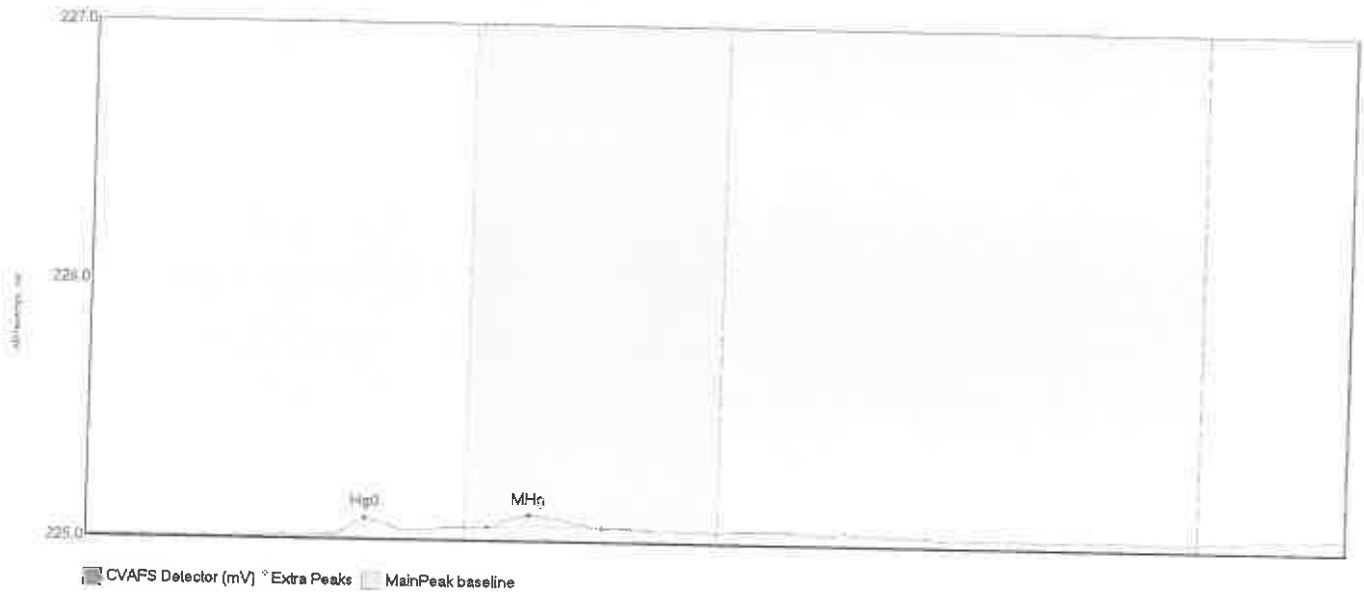
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
SEQ-CCV4 Hg0	5.635	29.4	65.0	224.95	224.99	54.9	0.096	OK	224.9488	0.00	0.03	
SEQ-CCV4 MHg	77.387	77.8	123.8	225.00	225.01	87.8	0.484	OK	224.9488	0.00	0.03	

#63: SEQ-CCB4



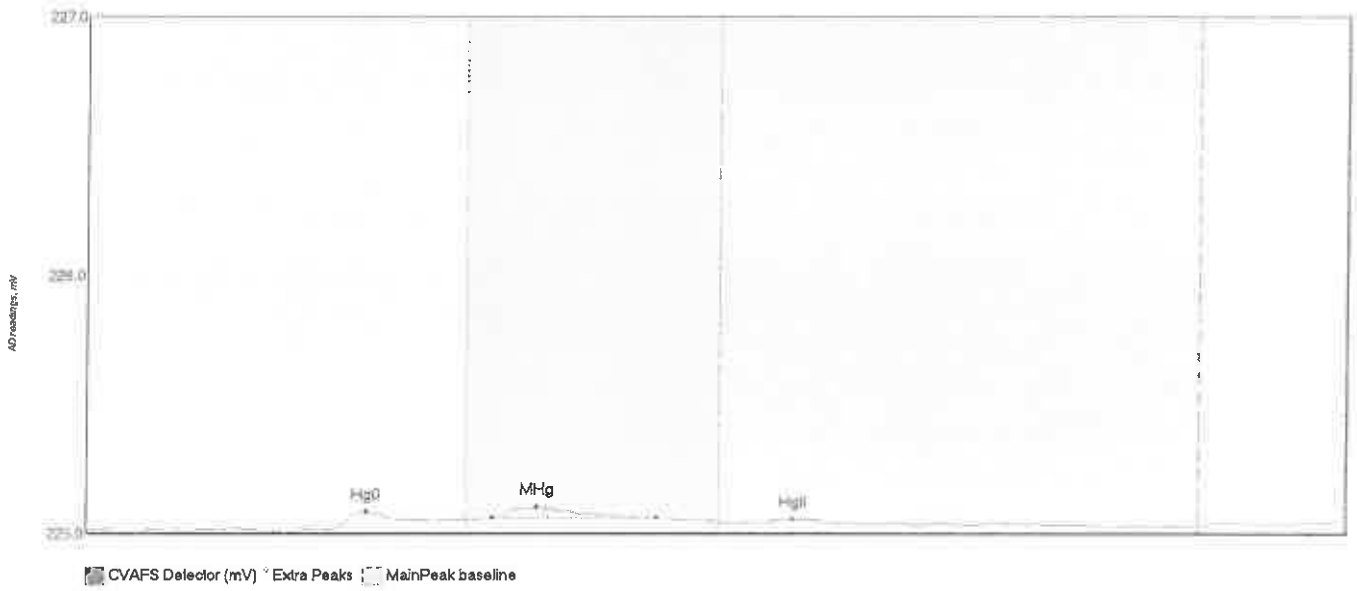
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CCB4 Hg0	3.085	49.1	63.6	224.95	224.97	54.1	0.048	OK	224.9517	0.00	0.06	
SEQ-CCB4 MHg	2.988	75.6	101.5	224.99	225.00	95.4	0.018	OK	224.9517	0.00	0.06	

#54: 0J00143-16



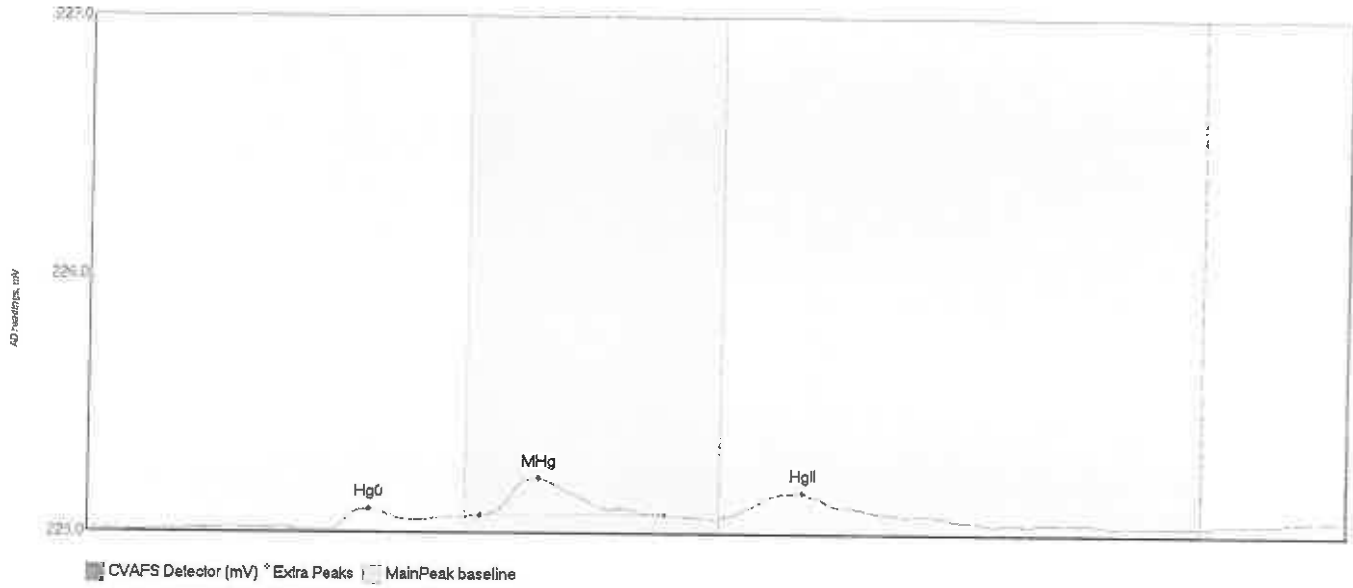
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
0J00143-16 Hg0	4.378	48.7	64.3	224.99	225.01	55.3	0.068	OK	224.9834	0.00	0.04	F011323
0J00143-16 MHg	5.699	79.3	102.3	225.03	225.03	87.6	0.048	OK	224.9834	0.00	0.04	F011323

#65: 0J00151-05



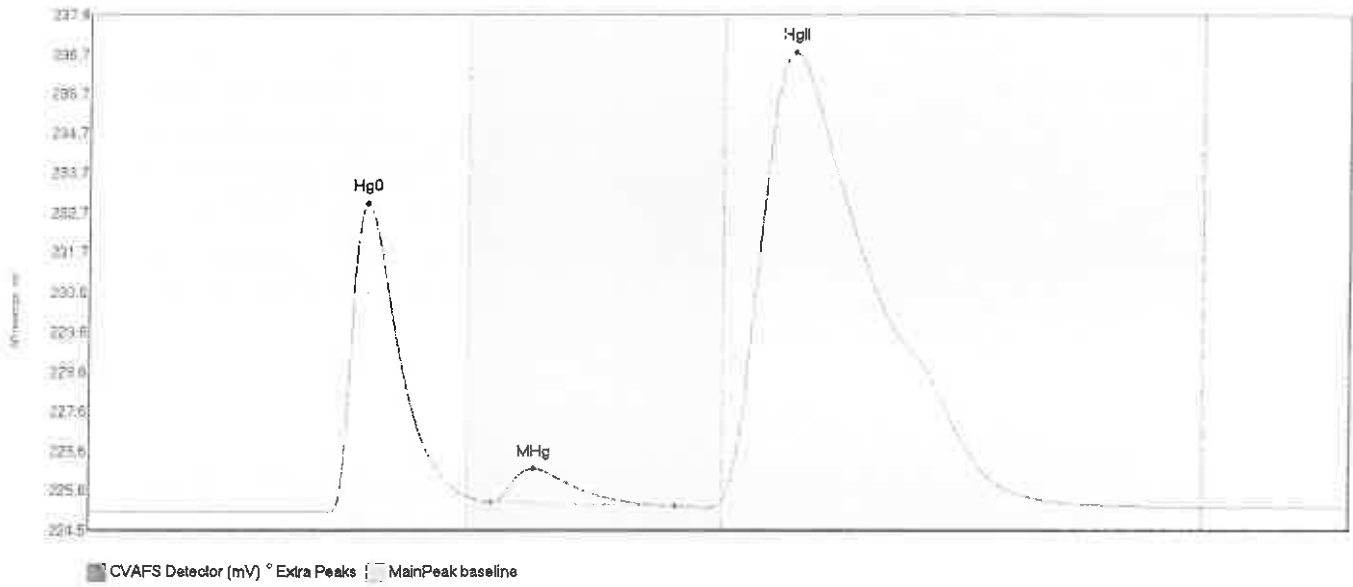
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
0J00151-05 Hg0	4.332	48.3	64.9	224.99	225.03	55.5	0.070	OK	224.9924	0.00	0.03	F011323
0J00151-05 MHg	6.228	80.3	112.7	225.04	225.04	89.1	0.042	OK	224.9924	0.00	0.03	F011323
0J00151-05 HgII	0.938	133.9	146.7	225.02	225.02	139.8	0.010	OK	224.9924	0.00	0.03	F011323

#66: DK00007-01



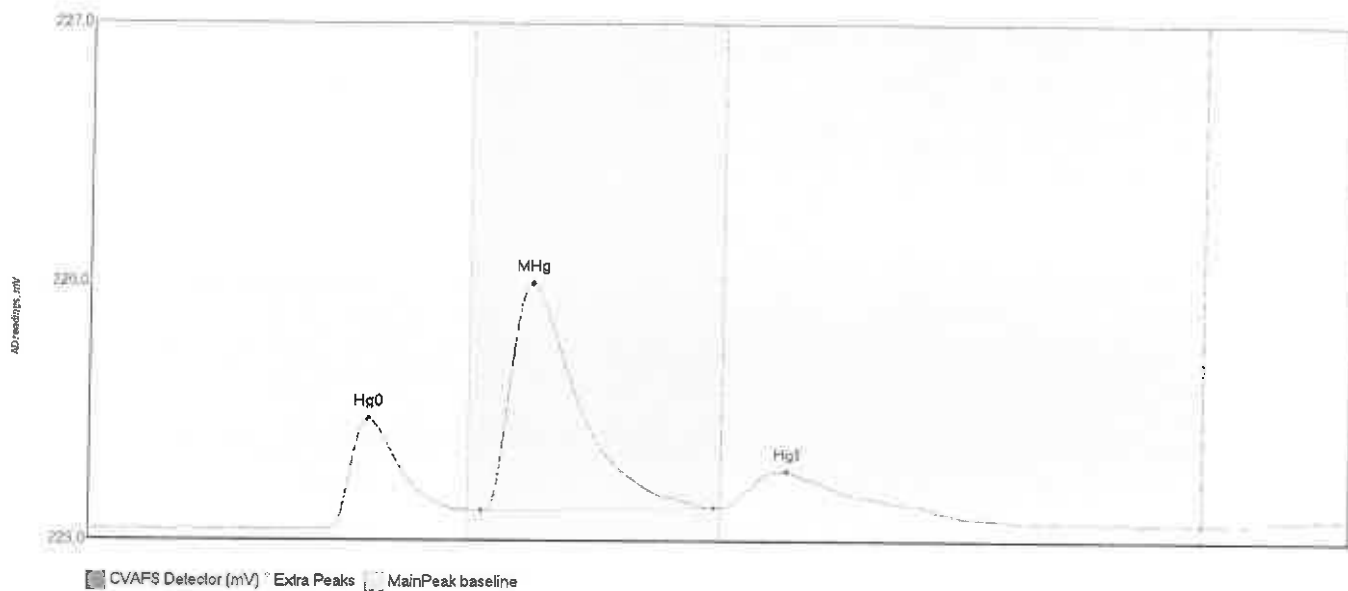
Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
Hg0 5.334	47.8	64.7	225.00	225.04	56.0	0.077	OK	225.0057	0.00	0.05	F011323
MHg 21.692	77.9	114.1	225.06	225.06	89.3	0.148	OK	225.0057	0.00	0.05	F011323
HgII 17.054	125.8	161.7	225.06	225.06	141.5	0.097	OK	225.0057	0.00	0.05	F011323

#67: OK00007-02



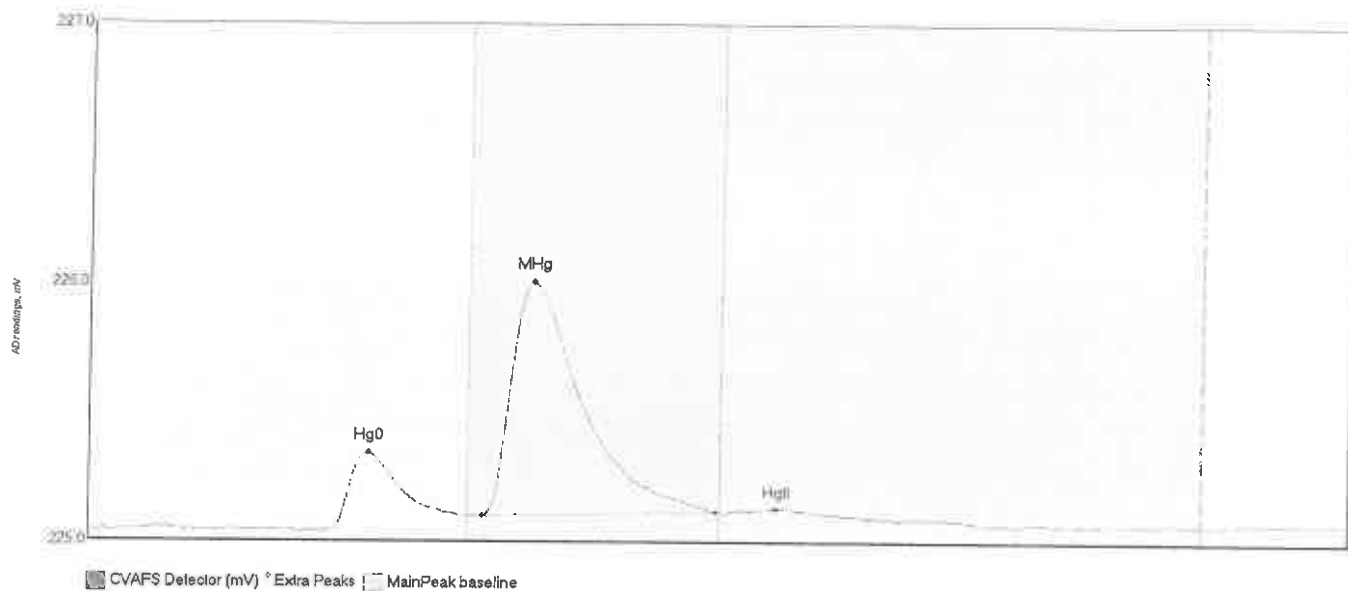
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
OK00007-02 Hg0	818.033	47.0	75.0	225.03	225.42	55.1	7.856	CT	225.0287	0.00	0.12	F011323
OK00007-02 MHg	122.340	79.7	115.8	225.26	225.16	88.2	0.862	OK	225.0287	0.00	0.12	F011323
OK00007-02 HgII	2950.846	125.0	204.6	225.34	225.17	139.1	11.481	OK	225.0287	0.00	0.12	F011323

#66: F011324-BS1



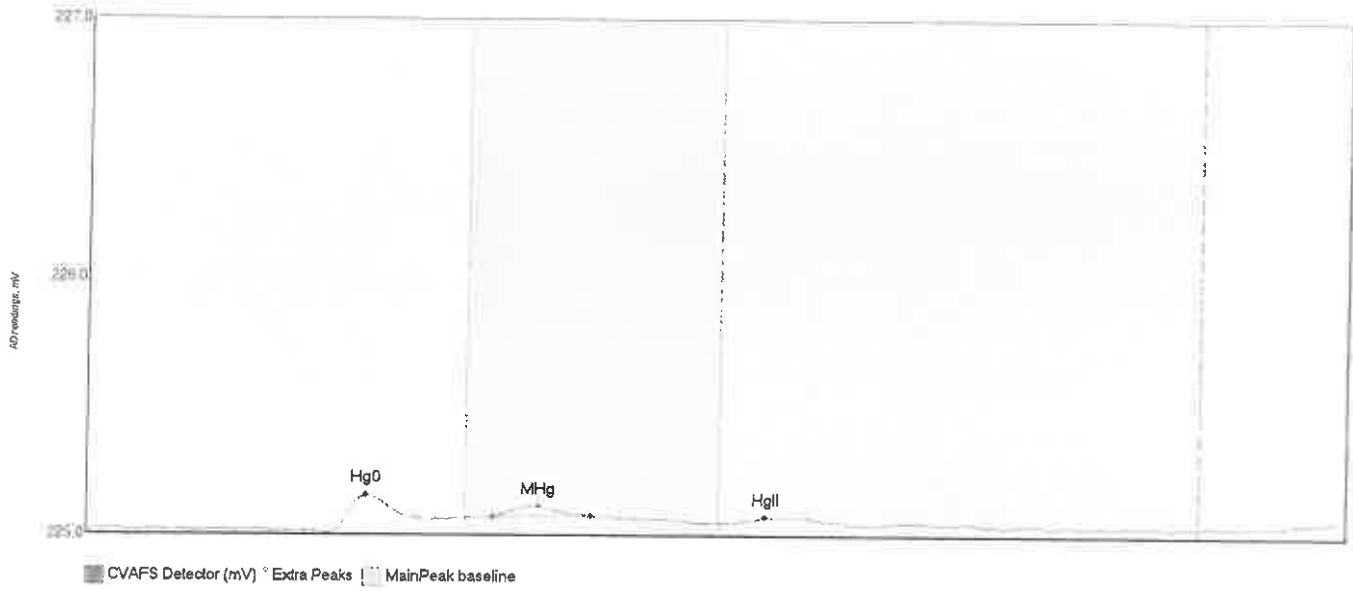
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
F011324-BS1 Hg0	43.216	47.5	75.0	225.03	225.11	55.2	0.422	CT	225.0364	0.00	0.04	F011324
F011324-BS1 MHg	135.662	77.6	123.7	225.10	225.12	87.4	0.879	OK	225.0364	0.00	0.04	F011324
F011324-BS1 HgI	29.578	125.1	168.1	225.12	225.10	137.0	0.142	OK	225.0364	0.00	0.04	F011324

#69: F011324-BSD1



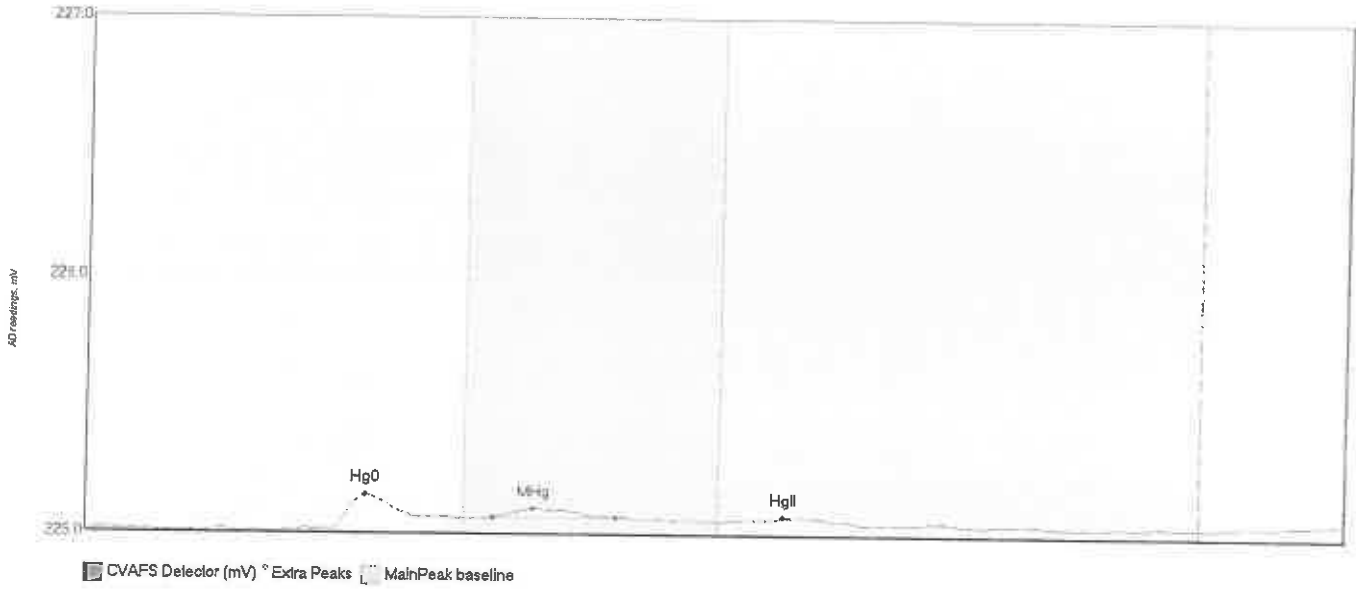
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiShift	Comment
F011324-BSD1 Hg	30.600	47.9	74.9	225.03	225.09	55.5	0.298	OK	225.0306	0.03	F011324
F011324-BSD1 MH	145.163	78.1	124.3	225.09	225.10	87.6	0.906	OK	225.0306	0.03	F011324
F011324-BSD1 Hg	1.142	126.2	140.8	225.10	225.10	136.0	0.016	OK	225.0306	0.93	F011324

#70: F011324-BLK1



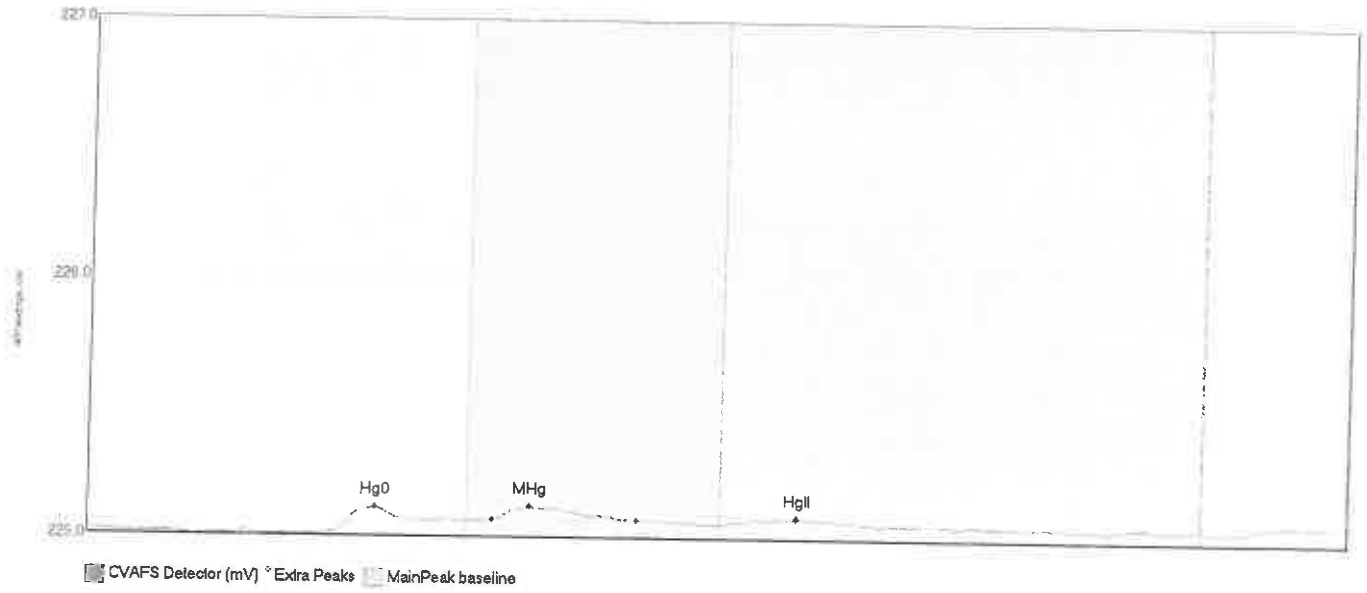
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011324-BLK1 Hg	11.486	48.2	67.3	225.03	225.09	55.5	0.149	OK	225.0433	0.00	0.04	F011324
F011324-BLK1 MH	3.837	80.4	99.6	225.10	225.10	89.4	0.040	OK	225.0433	0.00	0.04	F011324
F011324-BLK1 Hg	2.739	127.6	148.1	225.08	225.08	134.3	0.027	OK	225.0433	0.00	0.04	F011324

#71: F011324-BLK2



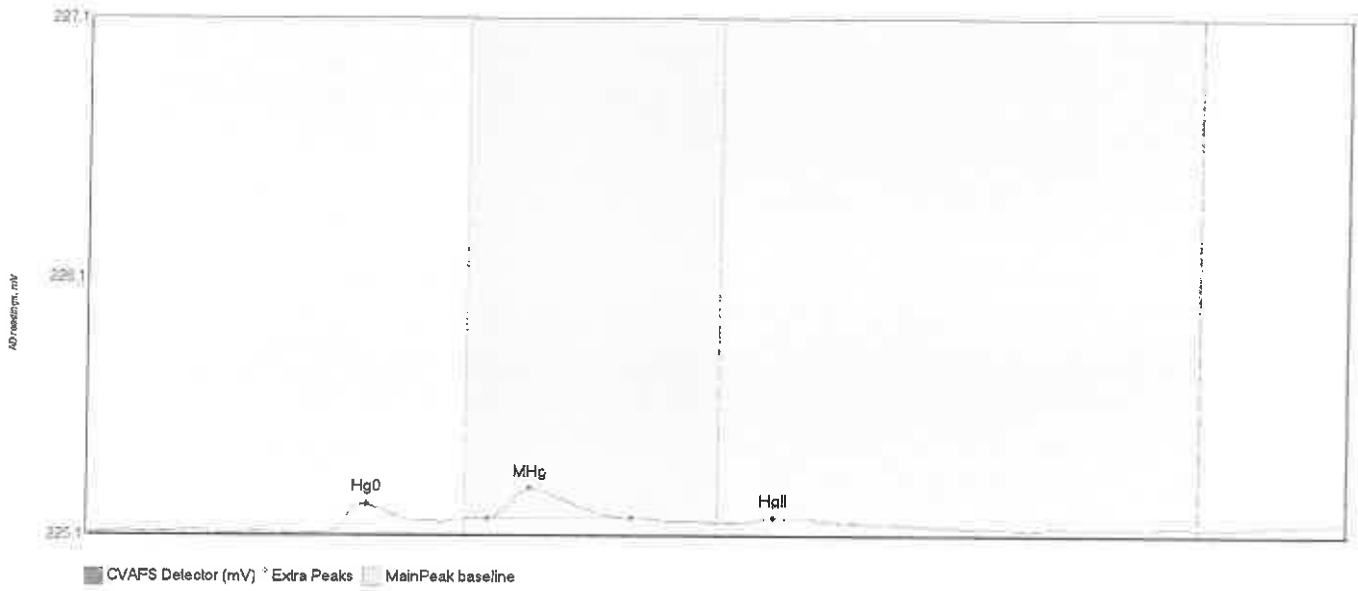
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011324-BLK2 Hg	12.497	49.0	73.9	225.06	225.10	55.5	0.133	OK	225.0505	0.00	0.04	F011324
F011324-BLK2 MH	4.533	80.7	104.8	225.10	225.10	88.5	0.034	OK	225.0505	0.00	0.04	F011324
F011324-BLK2 Hg	1.512	129.0	147.7	225.09	225.09	137.8	0.017	OK	225.0505	0.00	0.04	F011324

#72: F011324-BLK3



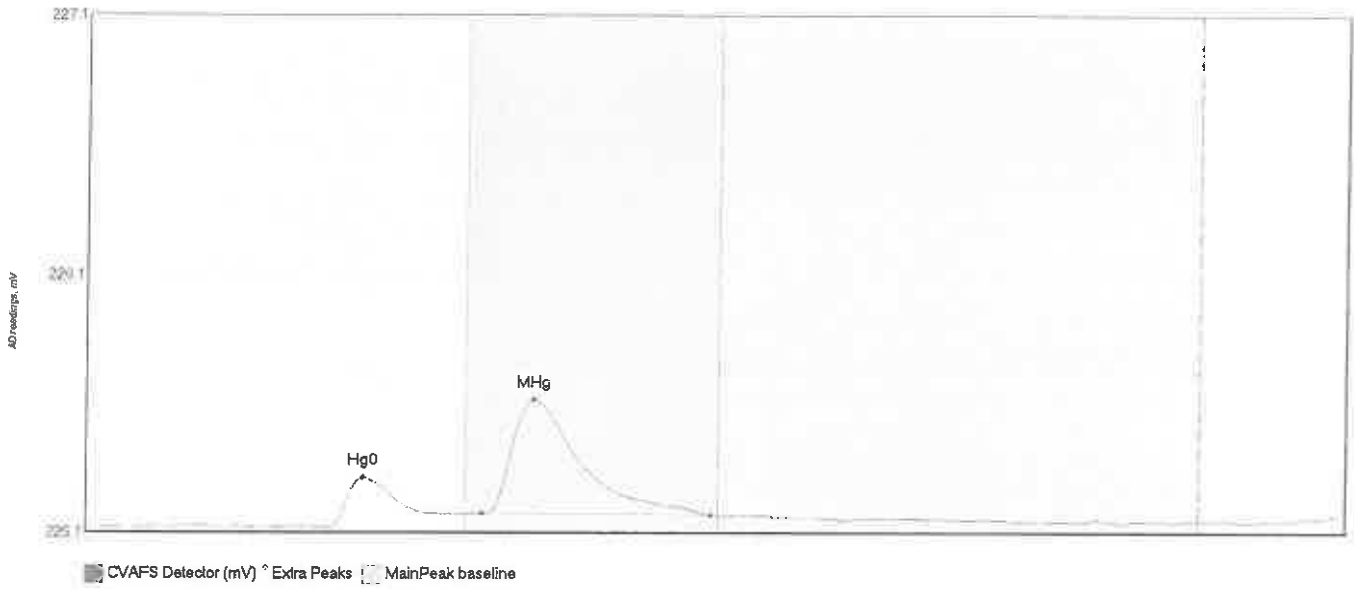
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	RTDev	RTMin	Comment
F011324-BLK3 Hg	6.993	48.4	65.6	225.06	225.11	56.8	0.099	OK	225.0685	0.00	0.00	F011324
F011324-BLK3 MH	7.215	80.1	108.6	225.12	225.11	87.4	0.049	OK	225.0685	0.00	0.00	F011324
F011324-BLK3 Hg	2.410	128.5	149.7	225.11	225.11	140.2	0.017	OK	225.0685	0.00	0.00	F011324

#78: QJ00147-01



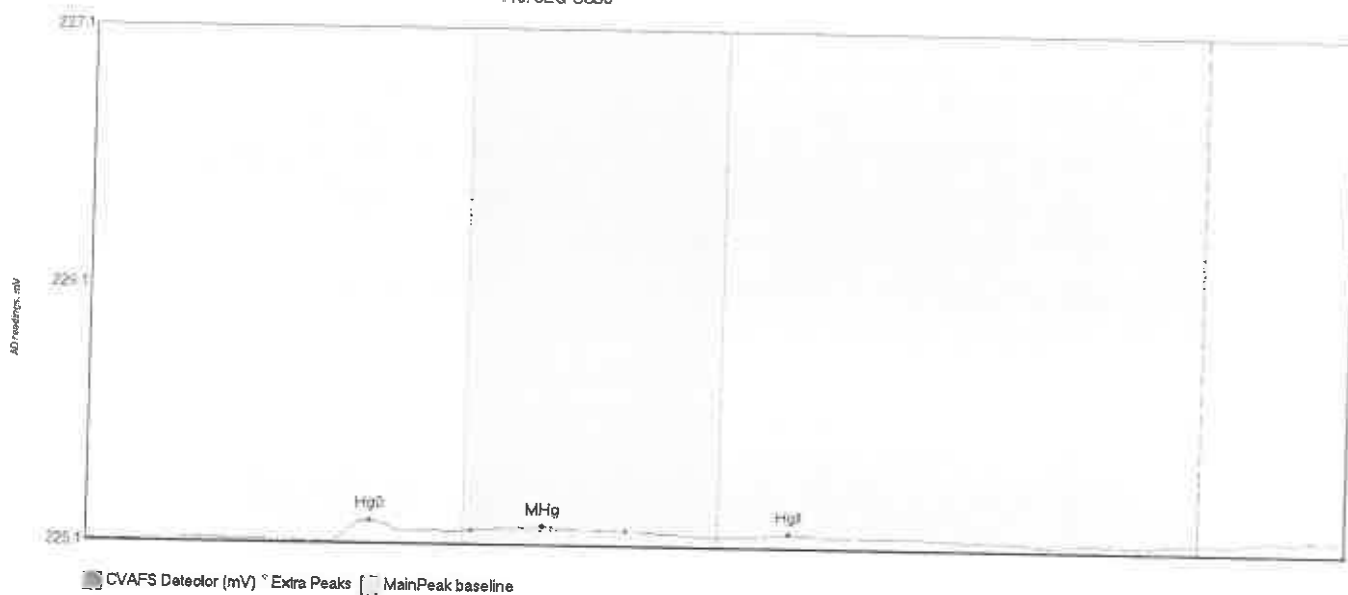
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	Width	BiShift	Comment
QJ00147-01 Hg0	9.295	48.0	69.9	225.08	225.12	55.5	0.109	OK	225.0811	0.04	0.04	F011324
QJ00147-01 MHg	15.000	79.5	108.0	225.13	225.14	87.8	0.118	OK	225.0811	0.04	0.04	F011324
QJ00147-01 HgII	1.832	130.5	145.9	225.12	225.12	135.9	0.021	OK	225.0811	0.04	0.04	F011324

#74: SEQ-CCV5



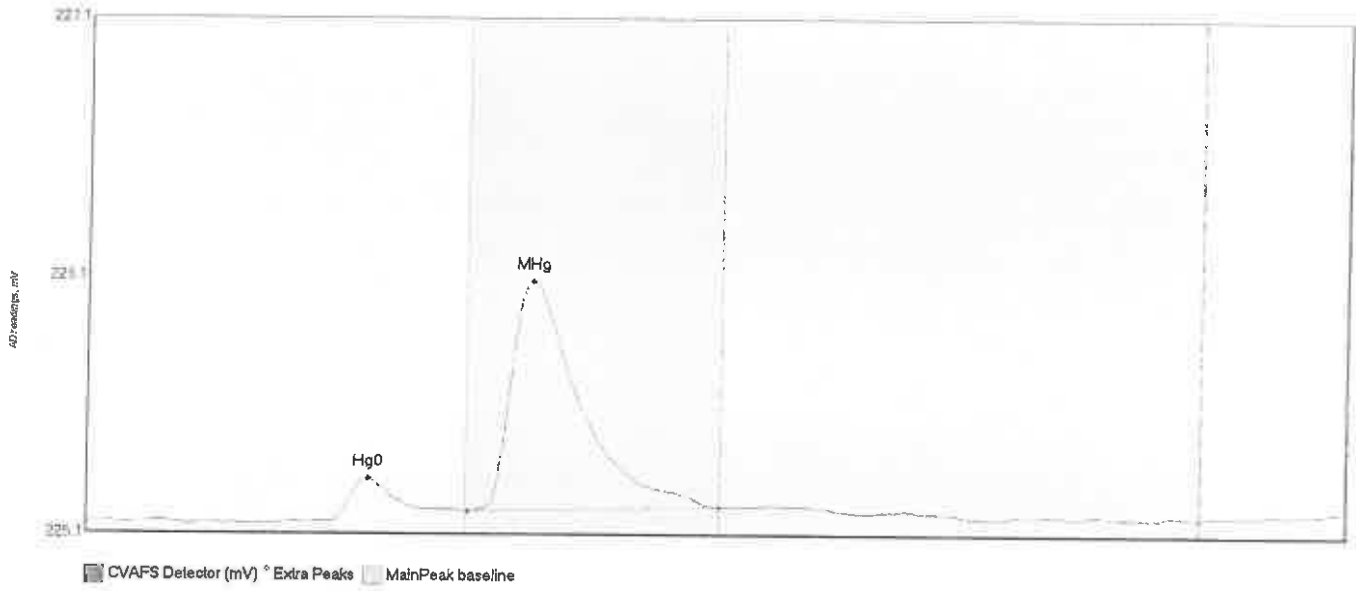
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
SEQ-CCV5 Hg0	17.904	48.4	72.6	225.09	225.14	54.9	0.193	OK	225.0895	0.00	0.05	
SEQ-CCV5 MHg	68.821	78.2	123.6	225.14	225.13	88.2	0.441	OK	225.0895	0.00	0.05	

#75: SEQ-CCBS



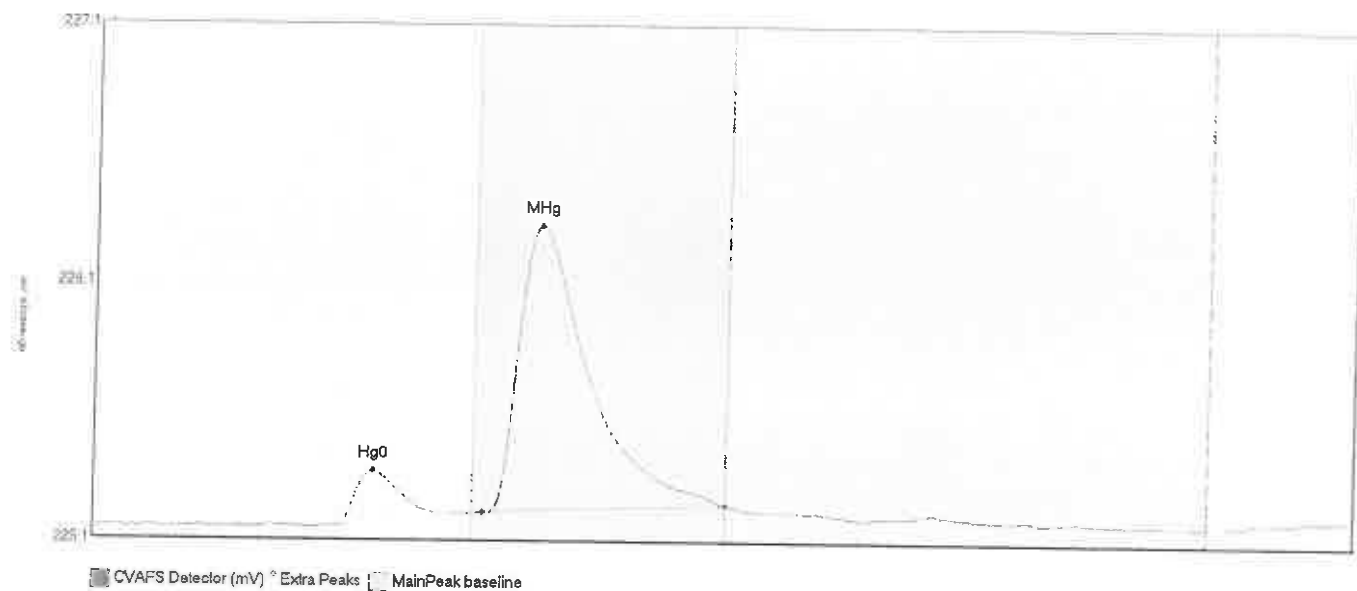
Peak	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	WLevel	BlShift	Comment
Hg0	5.417	48.2	64.0	225.08	225.12	56.3	0.083	OK	225.0840	0.20	0.05	
MHg	2.676	76.4	106.8	225.13	225.14	90.5	0.019	OK	225.0840	0.20	0.05	
HgII	0.846	132.6	145.4	225.12	225.12	139.1	0.011	OK	225.0840	0.20	0.05	

#76: F011324-MS1



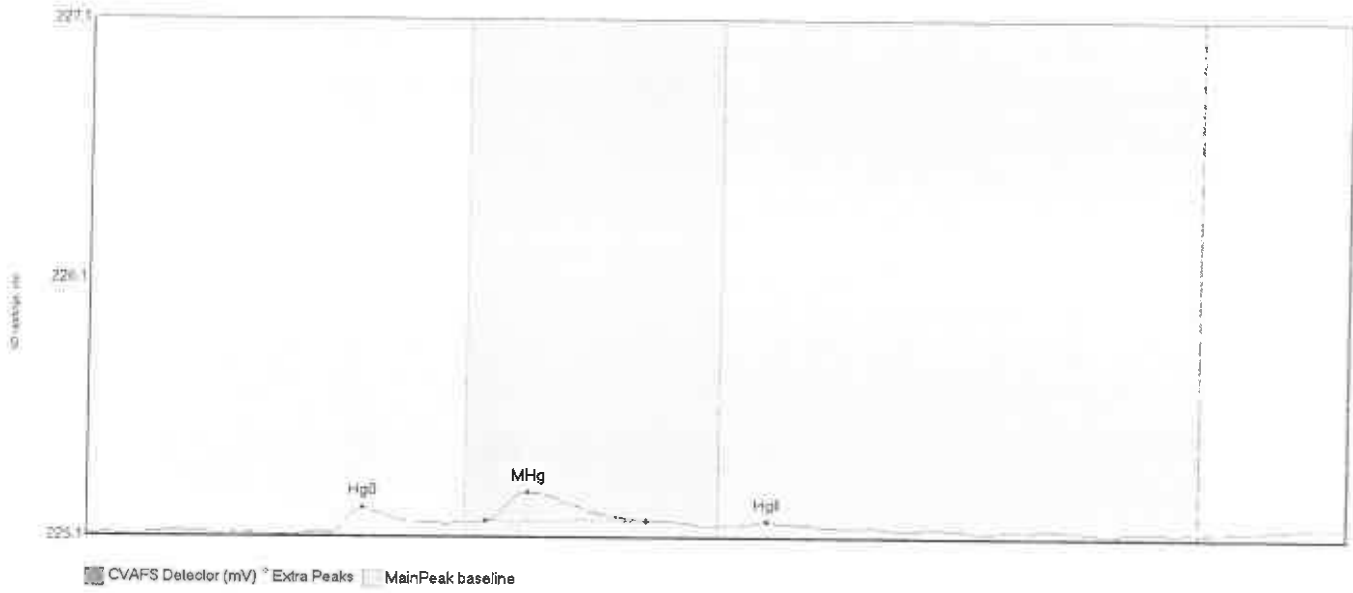
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011324-MS1 Hg0	14.726	44.5	74.5	225.11	225.15	55.7	0.166	OK	225.1079	0.00	0.05	F011324
F011324-MS1 MHg	138.921	75.5	125.0	225.15	225.17	88.1	0.894	CT	225.1079	0.00	0.05	F011324

#77: F011324-MSD1



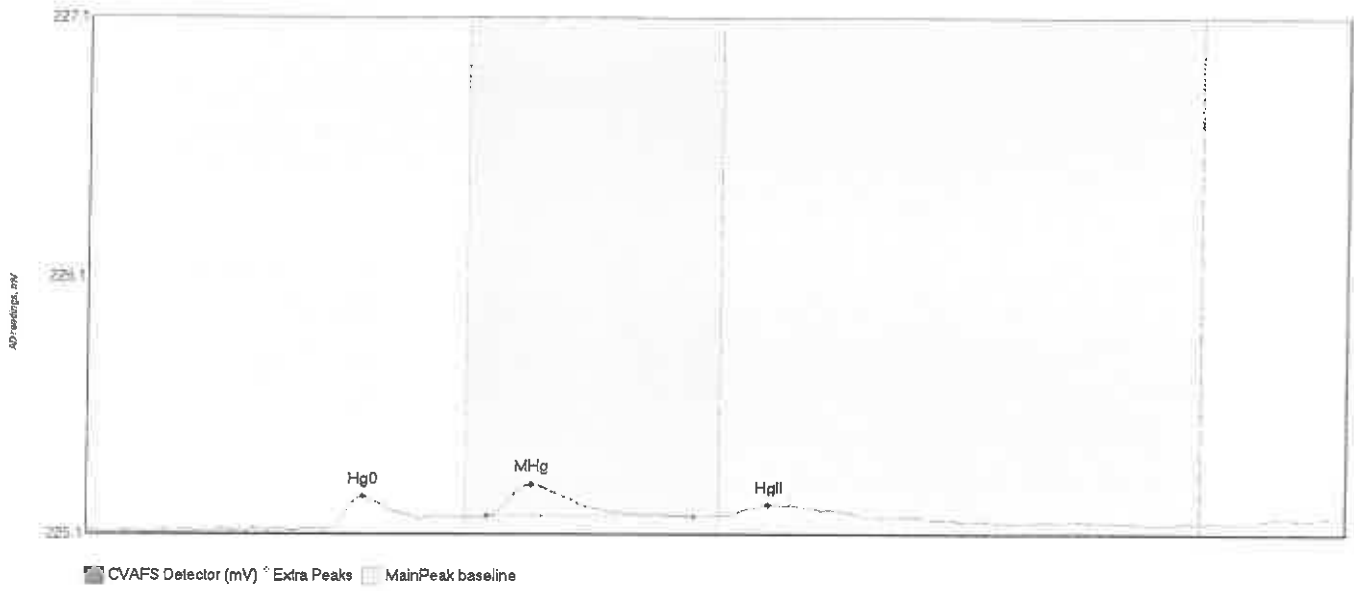
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
F011324-MSD1 Hg	18.726	48.1	69.1	225.14	225.18	55.3	0.212	OK	225.1332	0.00	0.05	F011324
F011324-MSD1 MH	178.044	77.0	125.0	225.19	225.22	87.9	1.111	CT	225.1332	0.00	0.05	F011324

#78: QJ00147-03



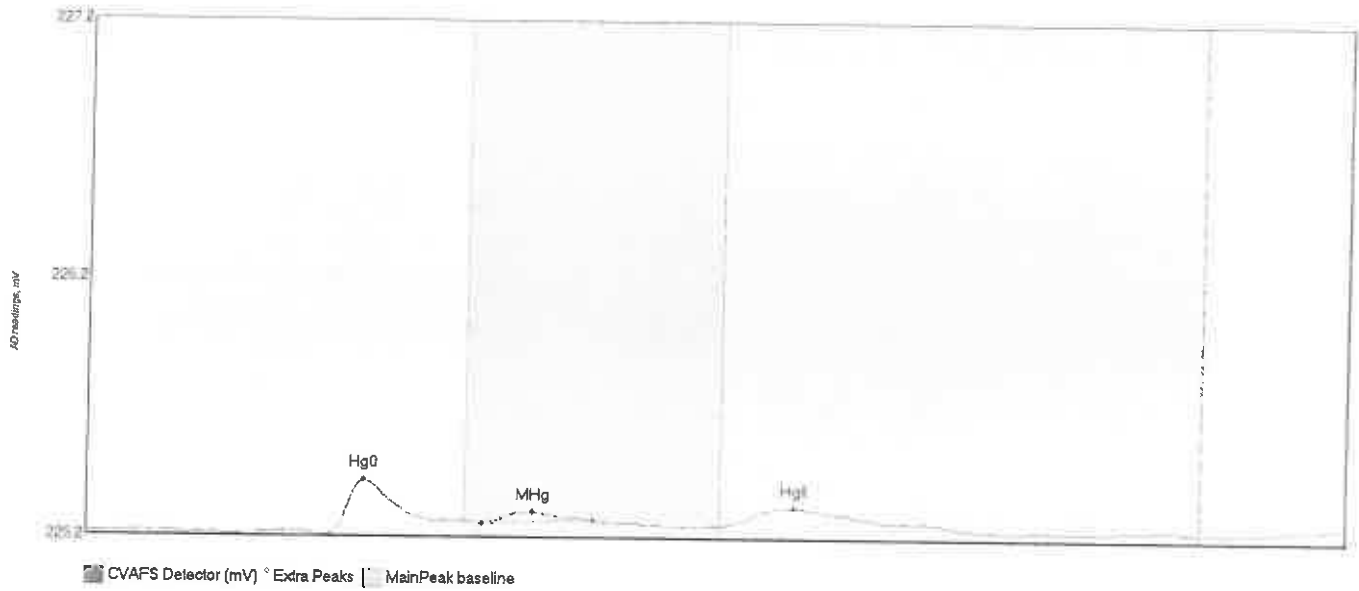
Peak	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0000147-03 Hg0	8.403	41.1	71.4	225.14	225.19	54.8	0.105	OK	225.1456	0.00	0.04	F011324
0000147-03 MHg	16.614	79.1	111.0	225.20	225.20	87.5	0.111	OK	225.1456	0.00	0.04	F011324
0000147-03 HgI1	0.563	130.3	141.1	225.19	225.19	134.8	0.011	OK	225.1456	0.00	0.04	F011324

#79: 0J00147-04



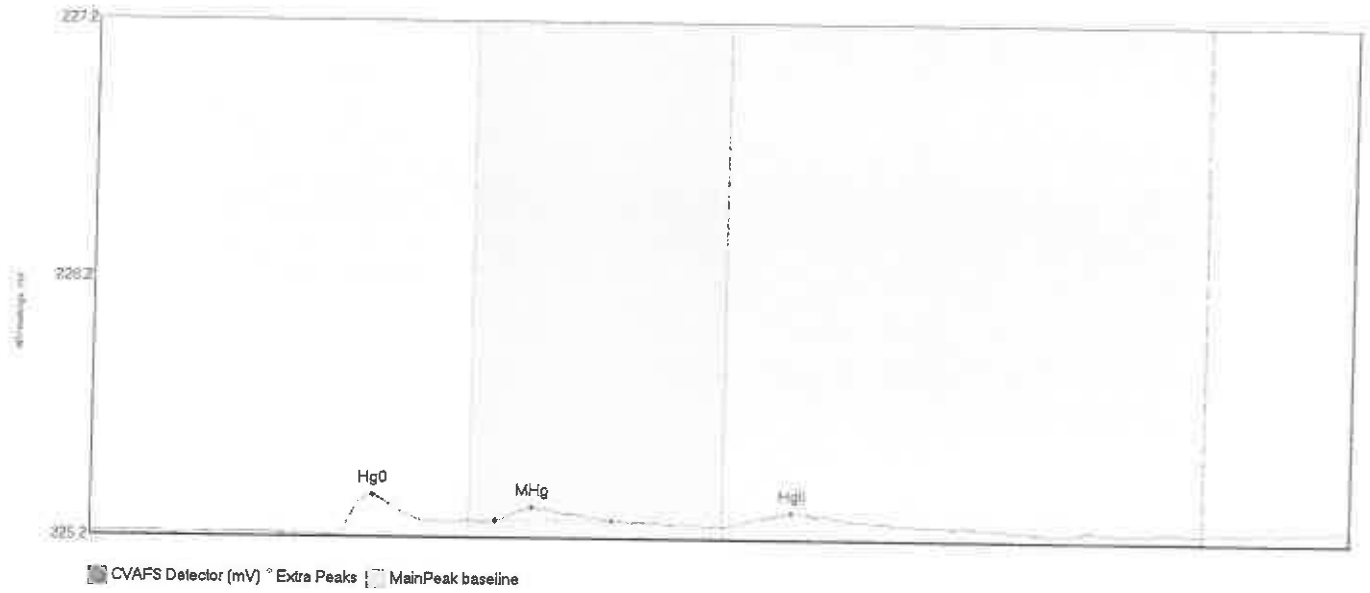
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00147-04 Hg0	9.668	47.0	66.0	225.16	225.20	54.9	0.129	OK	225.1585	0.00	0.05	
0J00147-04 MHg	17.531	79.2	120.1	225.21	225.21	87.9	0.122	OK	225.1585	0.00	0.05	
0J00147-04 HgII	7.226	126.5	153.7	225.22	225.21	134.9	0.042	OK	225.1585	0.00	0.05	

#80: QJ00147-07



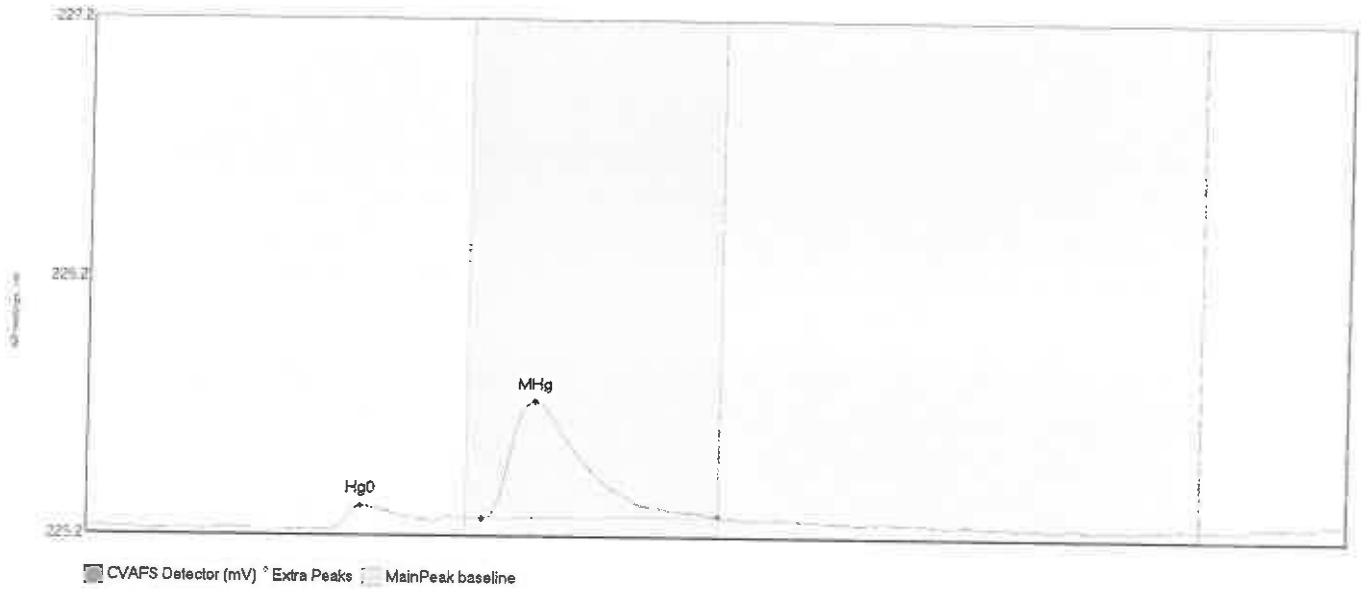
Time	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
47.6	19.761	47.6	73.3	225.18	225.23	54.8	0.214	OK	225.1847	0.00	0.04	F011324
78.6	4.484	78.6	100.1	225.22	225.24	88.4	0.045	OK	225.1847	0.00	0.04	F011324
125.6	14.715	125.6	169.7	225.22	225.22	139.7	0.072	OK	225.1847	0.00	0.04	F011324

#81: 0J00147-08



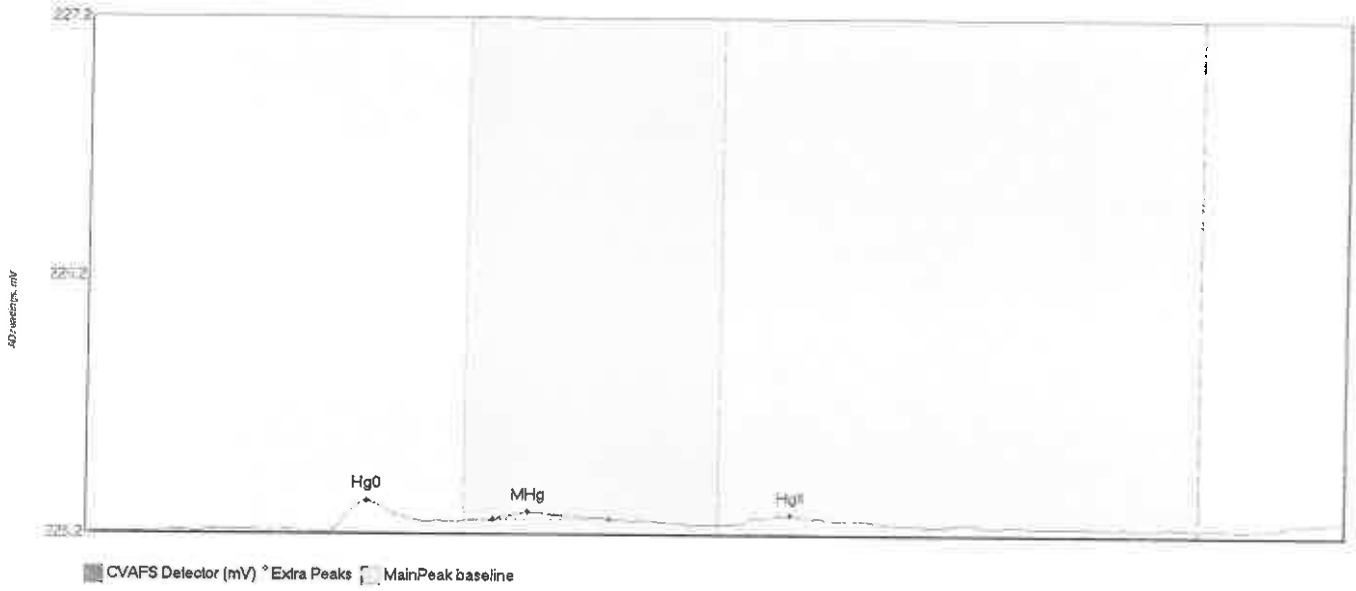
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
0J00147-08 Hg0	14.034	48.2	71.3	225.17	225.23	55.8	0.159	OK	225.1818	0.00	0.04	F011324
0J00147-08 MHg	5.924	80.1	103.3	225.24	225.24	87.4	0.049	OK	225.1818	0.00	0.04	F011324
0J00147-08 HgII	9.787	125.2	163.9	225.22	225.22	138.6	0.054	OK	225.1818	0.00	0.04	F011324

#82: OJ00151-02RE1



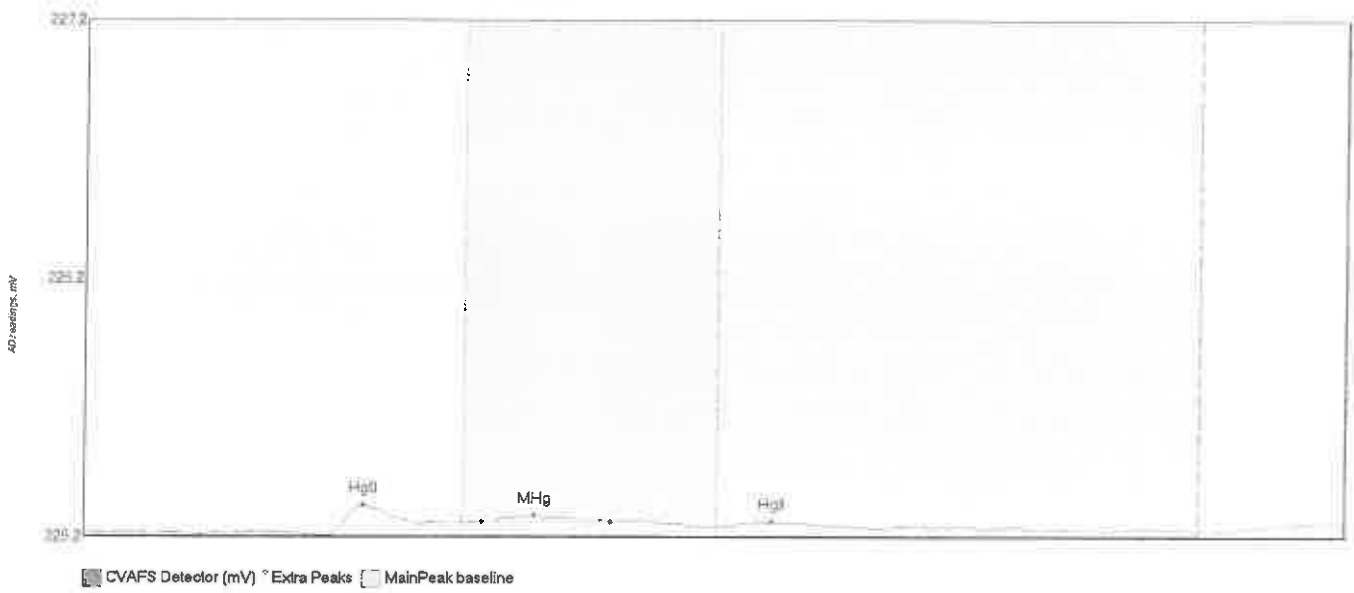
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BiDev	BiShift	Comment
OJ00151-02RE1 H	7.757	47.1	68.8	225.19	225.23	54.3	0.096	OK	225.2020	0.00	0.04	F011324
OJ00151-02RE1 H	73.383	78.3	121.9	225.24	225.25	88.4	0.454	OK	225.2020	0.00	0.04	F011324

#83: OK00025-01



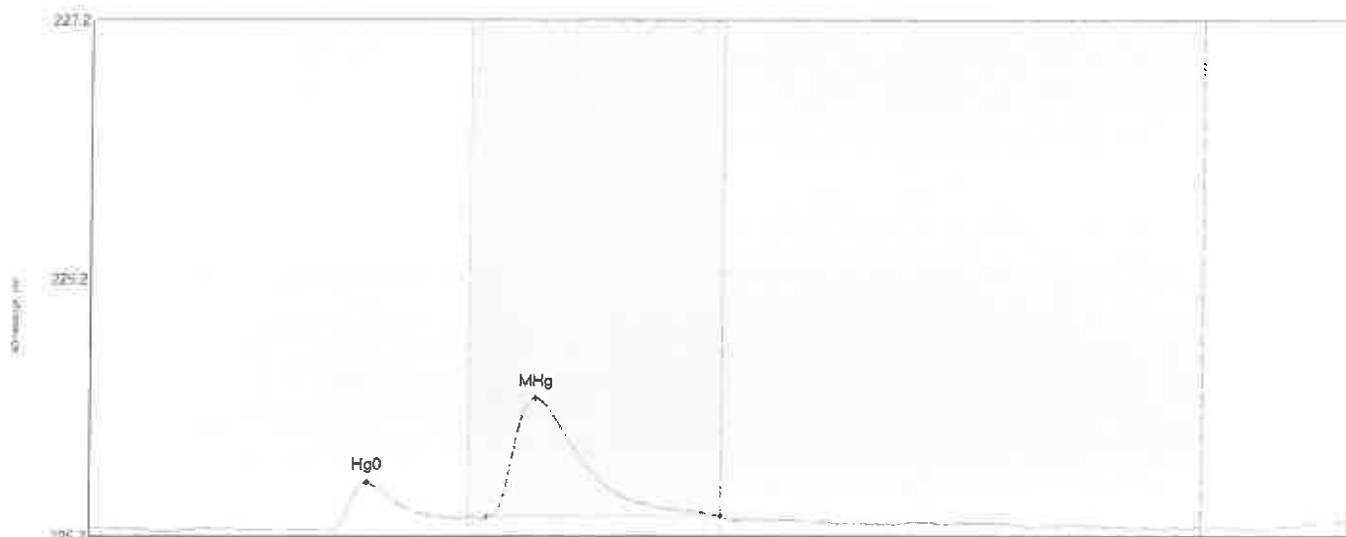
Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BlDev	BlShift	Comment
OK00025-01 Hg0	11.155	48.1	73.3	225.20	225.24	55.8	0.121	OK	225.2056	0.00	0.04	F011324
OK00025-01 MHg	3.511	80.8	103.7	225.25	225.25	87.6	0.029	OK	225.2056	0.00	0.04	F011324
OK00025-01 HgII	5.797	127.4	157.7	225.24	225.24	139.3	0.035	OK	225.2056	0.00	0.04	F011324

#84: OK00068-04



Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	StDev	Shift	Comment
OK00068-04 Hg0	9.096	47.8	66.6	225.21	225.26	55.2	0.116	OK	225.2226	0.00	0.04	F011324
OK00068-04 MHg	3.311	78.8	104.1	225.27	225.27	89.1	0.025	OK	225.2226	0.00	0.04	F011324
OK00068-04 HgII	1.594	127.4	143.8	225.25	225.25	135.9	0.017	OK	225.2226	0.00	0.04	F011324

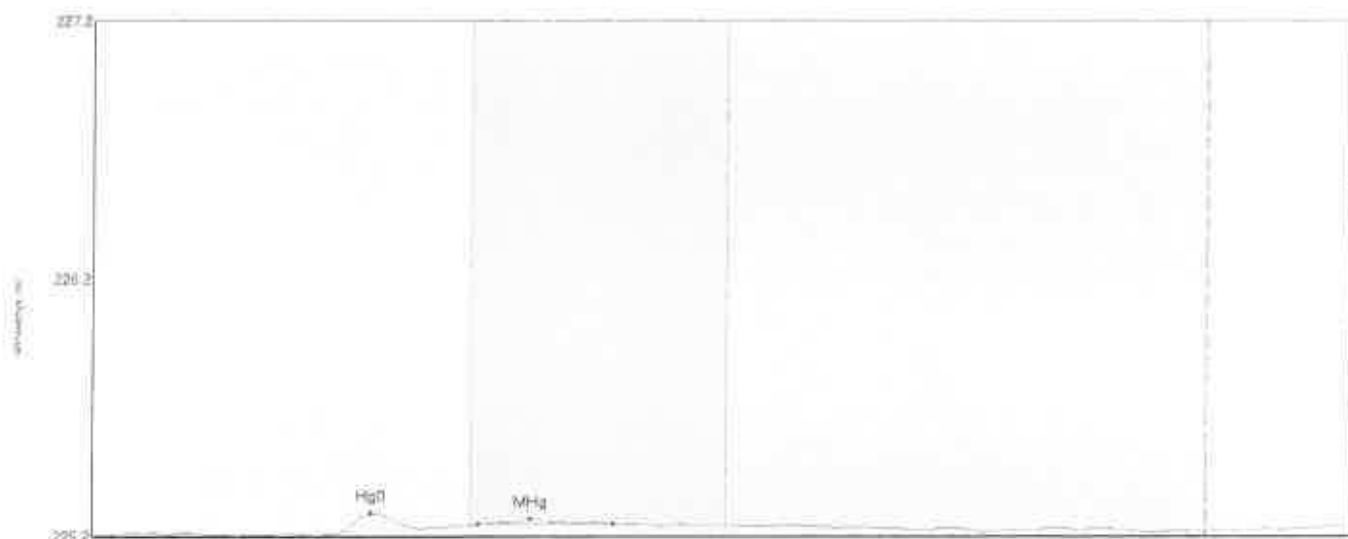
#85: SEQ-CCV6



■ CVAFS Detector (mV) ° Extra Peaks | □ MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	B1Dev	B1Shift	Comment
SEQ-CCV6 Hg0	17.378	47.0	73.5	225.19	225.24	55.0	0.190	OK	225.1994	0.00	0.02	
SEQ-CCV6 MHg	71.228	78.5	125.0	225.24	225.25	88.1	0.461	CT	225.1994	0.00	0.02	

#86: SEQ-CC86



CVAFS Detector (mV) ° Extra Peaks MainPeak baseline

Name	Area	Start Time	EndTime	StartValue	EndValue	Peak Max	PeakHeight	Flags	Baseline	BDev	BShift	Comment
SEQ-CC86 Hg0	6.398	47.7	65.2	225.18	225.20	55.3	0.082	OK	225.1789	0.00	0.03	
SEQ-CC86 MHg	2.134	76.7	102.9	225.22	225.22	86.7	0.019	OK	225.1789	0.00	0.03	

ANALYTICAL REPORT


Job Number: 570-42632-1

Job Description: 0J00147

For:

Eurofins Frontier Global Sciences LLC
5755 8th Street E
Tacoma, WA 98424

Attention: Mr. Patrick Garcia-Strickland



Approved for release.
Ritu Sedha
Project Manager I
11/9/2020 3:20 PM

Designee for
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Carla.Hollowell@eurofinset.com
11/09/2020

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

012345ʦ!924:;#8!45238#<1!"=1#>?234?3:#@@0
A8!B3?5C>253&#)))+(

!"#\$%&#'()*+,-./

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	@2:53E#74E38#5F3#G%G#?!17H4#5!#E3:2!4=53#5F=5#5F3#83:715#2:#83J!853E#!4#=#E8K#L32!F5#="=:2:
MN	A38?345#N3?!O38K
0;@	0!45=24:;#833#@2P72E
0;Q	0!1!4K#;18H24!#Q425
0R;	0!45=24:;#R!#;833#@2P72E
%6N	%7J12?=53#688!8#N=52!#S4!8H=12T3E#="9853#832
%21#;=?	%21752!4#;=?5!8
%@	%353?52!4#@2H25#S%!%C%V6U
%@W#NXW#N6W#4E?	%3?2:2!4#@3O31#0!4?3458=52!4#SN=E2!F3H2:58KU
%@0	%3?2:2!4#@3O31#0!4?3458=52!4#SN=E2!F3H2:58KU
6%@	6:52H=53E#%353?52!4#@2H25#S%2!Y24U
@V%	@2H25#!9#%353?52!4#S%!%C%V6U
@VZ	@2H25#!9#Z7=4525=52!4#S%!%C%V6U
[0@	6AX#83?!HH34E3E#G[=Y2H7H#0!45=H24=45#@3O31G
[%X	[242H7H#%353?5="43?52O25K#SN=E2!F3H2:58KU
[%0	[242H7H#%353?5="13#0!4?3458=52!4#SN=E2!F3H2:58KU
[%@	[35F!E#%353?52!4#@2H25
[@	[242H7H#@3O31#S%2!Y24U
[AR	[!:#A8!="#13#R7H"38
[Z@	[35F!E#Z7=4525=52!4#@2H25
R0	R!5#0=1?71=53E
R%	R!5#%353?53E#5#5F3#83J!8524!#12H@#83B#829#:F!L4U
R6<	R3!52O3#C#X":345
AV>	A!:252O3#C#A83:345
AZ@	A8=?52?=1#Z7=4525=52!4#@2H25
AN6>	A83:7HJ52O3
Z0	Z7=125K#0!458!1
N6N	N31=52O3#688!8#N=52!#SN=E2!F3H2:58KU
N@	N3J!8524!#@2H25#!8#N3P73:53E#@2H25#SN=E2!F3H2:58KU
NA%	N31=52O3#A38?345832?3W#=#H3=:783#!9#5F3#83195280782235L334#5L!#J!245:
\6;	\!Y2?25K#6P72O=1345#;=?5!8#S%2!Y24U
\6Z	\!Y2?25K#6P72O=1345#Z7!52345#S%2!Y24U
\R!0	\!#R7H38!7: #!#0!745

CASE NARRATIVE

Client: Eurofins Frontier Global Sciences LLC

Project: 0J00147

Report Number: 570-42632-1

!#%&#\$(&)*"+\$#"(\$!*\$,)-.\$,&(\$!/'0**-(')0-)*1\$2!)"\$-(34\$*!\$&(-.&3**\$)'3&*5\$*-)\$*!#"#)'0-)*1\$.!*-5\$#0%" ,"%\$0'),-).&(%\$

<*\$#!-.35\$=\$(-*'5\$*!&*#&.03'\$2**!'3'+&*5\$>'0-)**"?\$@-."*#\$A>@#B\$)#:3**(\$,)-.&\$5\$'3:*(-.\$&4\$(-*\$=\$&=3'\$*-#&*#.#4\$%:#*-.)\$

9&3%:3&*#-(#&)'\$0'),-.5\$=',-)'\$)-:(5"(\$*\$-&+-\$5\$)-:(5E - ,,\$)))-#"\$(\$%&3%:3&*5\$)#:3*#

833\$!-35"(\$*\$'.'#\$2)'\$.*\$&(5\$0-0)'\$0)#'+&*#-(\$(-*'5\$,-)\$*!\$.*!-5#0\$),-.5\$-(\$*!#'\$&.03'#1\$:(3'##\$-*!)2"#5*\$&'3'5\$"(\$*!\$

RECEIPT

!#&.03'\$2)'\$)'%"+5\$-\$ FF6GH6HGHG\$*\$FGIJG\$8KL\$*!#&.03'\$&))"+5\$"(\$?-5\$%-5**-(1\$0-0)'34\$0)#'+5\$&(5\$-(\$%';,\$\$!\$

N-*\$!\$833\$##.03'\$2!%"!\$)D:)"\$*!).&3\$0)#'+&*#-(\$&)'\$%-(#"5)'5\$&%%'0*&=3'\$,\$*!\$&))"+&3\$*'.0')&*.:'\$"#2**!"(\$H\$5'?)#\$9'3#:#\$-,\$

SEDIMENT CONCENTRATION

C&.03'\$SUVFEGHWFGHXHGWGCYWF@AZ[GEPHSJHEFB1\$SUVFEGHWFGHXHGWGCYWF@AZ[GEPHSJHEHB&(5\$

N-\$&(&34**%&3\$-\$)D:&3**4\$###:#\$2)'\$(-*'51\$-\$*!\$&(\$*!#'\$5#%)'=5\$&=-+-\$-\$)"(\$*!\$!',"(-#6`3-##&)4\$0&?';

Detection Summary

012345ʦ!924:.;8!45238#<1!"=1#>?234?3:##@@0
A8!B3?5C>253&#))/+(

!"#\$%&#'()*+,-,*/

Client Sample ID: OV-02_102920_SW_10_TOTAL

Lab Sample ID: 570-42632-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
>3D2E345#0!4?3458=52!4#FEGC@H	/I'		)IJJ'	EGC@	/		%N((	K5=1CLM

Client Sample ID: OV-02_102920_SW_10_DUP TOTAL

Lab Sample ID: 570-42632-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
>3D2E345#0!4?3458=52!4#FEGC@H	/I)-		)IJJ(	EGC@	/		%N((	K5=1CLM

Client Sample ID: ADD-02_102920_SW_10 TOTAL

Lab Sample ID: 570-42632-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
>3D2E345#0!4?3458=52!4#FEGC@H	,)IN		)IJJ)	EGC@	/		%N((	K5=1CLM

Client Sample Results

012345ʦ!924:#!8!45238#<1!"=1#>?234?3:#@@@0
 A8!B3?5C>253&#))/+(

!"#\$%&#'()*+,-,*/

General Chemistry

Client Sample ID: OV-02_102920_SW_10_TOTAL

Date Collected: 10/29/20 08:30

Date Received: 11/02/20 10:30

Lab Sample ID: 570-42632-1

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	1.15		)DEE'	FGC@			//C)+C,(#)E&'E	/

Client Sample ID: OV-02_102920_SW_10_DUP TOTAL

Date Collected: 10/29/20 08:30

Date Received: 11/02/20 10:30

Lab Sample ID: 570-42632-2

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	1.06		)DEE(	FGC@			//C)+C,(#)E&'E	/

Client Sample ID: ADD-02_102920_SW_10 TOTAL

Date Collected: 10/29/20 11:30

Date Received: 11/02/20 10:30

Lab Sample ID: 570-42632-3

Matrix: Water

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sediment Concentration (mg/L)	20.9		)DEE)	FGC@			//C)+C,(#)E&'E	/

Default Detection Limits

!"#\$%&'()*+,-./:;=>?@
A*B#3%C2"%#&':5::@<9

5+0'67&'89;:<=>?=@

General Chemistry

Analyte	RL	Units
2#E"F#\$%' +\$3#\$\$*1%"+'\$GFHC4I	@D::	@D:: FHC4

QC Sample Results

012345ʦ!924:;8!45238#<1!"=1#>?234?3:#@@@0
A8!B3?5C>253&#))/+(

!"#\$%&#'()*+,-./

Method: D3977 - Sediment Concentration in Water Samples

Lab Sample ID: MB 570-106893/1
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
>3D2E345#0!4?3458=52!4#FEGC@H	ND		1.00	EGC@			/ 1/04/20 08:58	/

Lab Sample ID: LCS 570-106893/2
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
>3D2E345#0!4?3458=52!4#FEGC@H	/))	98.01		EGC@		98	95 * /)'

Lab Sample ID: LCSD 570-106893/3
Matrix: Water
Analysis Batch: 106893

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
>3D2E345#0!4?3458=52!4#FEGC@H	/))	100.0		EGC@		/))	95 * /)'	,	,)

Lab Sample ID: 570-42632-1 DU
Matrix: Water
Analysis Batch: 106893

Client Sample ID: OV-02_102920_SW_10_TOTAL
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
>3D2E345#0!4?3458=52!4#FEGC@H	1.15		1.157		EGC@		0.5	/)

QC Association Summary

012345ʦ!924:.;8!45238#<1!"=1#>?234?3:##@@0
 A8!B3?5C>253&#))/+(

!"#\$%&#'()*+,-,*/

General Chemistry

Analysis Batch: 106893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
'()*+,-,*/	FG*(,H/),E,)H>DH/)H I F I J@	!5=1CKJ	D=538	%E((
'()*+,-,*/	FG*(,H/),E,)H>DH/)H%L A# F I J@	!5=1CKJ	D=538	%E((
'()*+,-,*/	J%*(,H/),E,)H>DH/)# I F I J@	!5=1CKJ	D=538	%E((
MN#(*)-OE.C/	M35P!Q#N1=4R	!5=1CKJ	D=538	%E((
@0>#(*)-OE.C.	@="#0!458!1#>=ST13	!5=1CKJ	D=538	%E((
@0>%#(*)-OE.C.	@="#0!458!1#>=ST13#%7T	!5=1CKJ	D=538	%E((
'()*+,-,*/#%L	FG*(,H/),E,)H>DH/)H I F I J@	!5=1CKJ	D=538	%E((

Lab Chronicle

!"#\$%&'()*+,-.:/:;<=>?@
A*B#3%C2"%#&'5::@<9

5+0'67&'89;:<=>?=@

Client Sample ID: OV-02_102920_SW_10_TOTAL

Lab Sample ID: 570-42632-1

Date Collected: 10/29/20 08:30

Matrix: Water

Date Received: 11/02/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
J+%1!CHD	D\$1!E-"	7?F99		@	@?=FK<='L	@::'L	@:>IF?	@@C:<C=:':I&8I	G46H	(4'@
	6\$-%*)M#\$\$%678N(OG6A									

Client Sample ID: OV-02_102920_SW_10_DUP TOTAL

Lab Sample ID: 570-42632-2

Date Collected: 10/29/20 08:30

Matrix: Water

Date Received: 11/02/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
J+%1!CHD	D\$1!E-"	7?F99		@	@?=9K9F'L	@::'L	@:>IF?	@@C:<C=:':I&8I	G46H	(4'@
	6\$-%*)M#\$\$%678N(OG6A									

Client Sample ID: ADD-02_102920_SW_10 TOTAL

Lab Sample ID: 570-42632-3

Date Collected: 10/29/20 11:30

Matrix: Water

Date Received: 11/02/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
J+%1!CHD	D\$1!E-"	7?F99		@	@?>K9<'L	@::'L	@:>IF?	@@C:<C=:':I&8I	G46H	(4'@
	6\$-%*)M#\$\$%678N(OG6A									

Laboratory References:

(4'@'P'()*+,-.:/:;<=>?@ "1-3"#\$3#44 "4"\$3+!\$Q'9<<:'4"\$3+!\$' R 1EQ/1*\$#\$/'*+T#Q' DF=I<@Q'J4'U9@<VIF8;8<F<

Accreditation/Certification Summary

!"#\$%&'()*+,-./:;?@<=>?=:@
 A*B#3%C2"%#&':5::@<9

5+0'67&'89;:<=>?=:@

Laboratory: Eurofins Calscience LLC

D!!'133*#E"%1%"+"\$-C3#*%", "31%"+"\$-F#!E'0G'F"-!10*1%+*G'1*#!"-%#EH"l+% '1!!'133*#E"%1%"+"\$-C3#*%", "31%"+"\$-1*#1JJ!"310!#%+'%F"-*#J+*%H

Authority	Program	Identification Number	Expiration Date
1!",+*\$"1	4+-'D\$L#l#- +)\$%G'21\$"%1%"+"\$' 7"-%"**3%-	@: @:K	:K;?;=@
1!",+*\$"1	2 DMN7'4DA	@94D:K@K	@;?;=:
1!",+*\$"1	2%1%#	=K<<	:K;?;=@
I#O1E1	2%1%#	D:: @@@	:9;?@;=@
P*#L+\$	I(4DA	D?::: @	:@;=K;=@
Q27D	Q2'.#E#*1!A*+L*1R-	A??;=:;::?<	:;@;=?
S 1-F"\$L%+\$	2%1%#	K@>;@T	@: @;=@

Method Summary

012345ʦ!924:.;8!45238#<1!"=1#>?234?3:##@@0
A8!B3?5C>253&#))/+(

!"#\$%&#'()*+,-./

Method	Method Description	Protocol	Laboratory
%G((	>3H2!345#0!4?3458=52!4#24#538#>=IK13:	D>EF	60 @/

Protocol References:

D>EF#L#D>EF#\$45384=52!4=1

Laboratory References:

60 @##L#678!924:#0=1:?234?3#@@0##@24?!14M#(+u)#@M#?+8#34#<8!O3#P+/M#E@Q(/+RPG'*'+G+

Sample Summary

012345ʦ!924:##;8!45238#<1!"=1#>?234?3:##@@0
A8!B3?5C>253&#))/+(

!"#\$%&#()*+,-,*/

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
'()*+,-,*/	DE*),F/),G,)F>HF/)F I DI J@	H=538	/)C,GC,##)K&.)	//C),C,)#/)&.)	
'()*+,-,*,	DE*),F/),G,)F>HF/)F%L A# DI J@	H=538	/)C,GC,##)K&.)	//C),C,)#/)&.)	
'()*+,-,*.	J%)*),F/),G,)F>HF/)# I DI J@	H=538	/)C,GC,##/ &.)	//C),C,)#/)&.)	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Calscience Job No.: 570-42632-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WC TSS STD_00020	02/08/21	08/08/20	DI Water, Lot 112719	10 L	WC_TSS_STK_00002	1 g	Sediment Concentration (mg/L)	100 mg/L
.WC TSS_STK_00002	11/04/21		FISHER, Lot 160676		(Purchased Reagent)		Sediment Concentration (mg/L)	1 g/g

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience _____ Job Number: 570-42632-1 _____

SDG No.: _____

Project: 0J00147 _____

Client Sample ID	Lab Sample ID
OV-02_102920_SW_10_TOTAL	570-42632-1
OV-02_102920_SW_10_DUP TOTAL	570-42632-2
ADD-02_102920_SW_10 TOTAL	570-42632-3

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OV-02_102920_SW_10_TOTAL

Lab Sample ID: 570-42632-1

Lab Name: Eurofins Calscience

Job No.: 570-42632-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/29/2020 08:30

Reporting Basis: WET

Date Received: 11/02/2020 10:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	1.15	0.885	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OV-02_102920_SW_10_DUP TOTAL

Lab Sample ID: 570-42632-2

Lab Name: Eurofins Calscience

Job No.: 570-42632-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/29/2020 08:30

Reporting Basis: WET

Date Received: 11/02/2020 10:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	1.06	0.887	mg/L			1	D3977

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: ADD-02_102920_SW_10 TOTAL

Lab Sample ID: 570-42632-3

Lab Name: Eurofins Calscience

Job No.: 570-42632-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/29/2020 11:30

Reporting Basis: WET

Date Received: 11/02/2020 10:30

CAS No.	Analyte	Result	RL	Units	C	Q	DIL	Method
	Sediment Concentration (mg/L)	20.9	0.880	mg/L			1	D3977

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience _____

Job No.: 570-42632-1 _____

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 106893 Date: 11/04/2020 08:58							
D3977	MB 570-106893/1	Sediment Concentration (mg/L)	ND		mg/L	1.00	1

6-IN
 DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-42632-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 106893 Date: 11/04/2020 08:58								
D3977	OV-02_102920_SW_10 TOTAL	570-42632-1	Sediment Concentration (mg/L)	1.15	mg/L			
D3977	OV-02_102920_SW_10 TOTAL	570-42632-1 DU	Sediment Concentration (mg/L)	1.157	mg/L	0.5	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-42632-1
 SDG No.: _____
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 106893			Date: 11/04/2020 08:58			LCS Source: WC_TSS_STD_00020					
D3977	LCS 570-106893/2	Sediment Concentration (mg/L)	98.01		mg/L	100	98	95-105	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-42632-1
 SDG No.: _____
 Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 106893 Date: 11/04/2020 08:58			LCSD Source: WC_TSS_STD_00020								
D3977	LCSD 570-106893/3	Sediment Concentration (mg/L)	100.0		mg/L	100	100	95-105	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job Number: 570-42632-1

SDG Number: _____

Matrix: Water

Instrument ID: NOEQUIP

Method: D3977

RL Date: 03/12/2018 16:31

Analyte	Wavelength/ Mass	RL (mg/L)	
Sediment Concentration (mg/L)		1	

9-IN
 CALIBRATION BLANK DETECTION LIMITS
 GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job Number: 570-42632-1
 SDG Number: _____
 Matrix: Water Instrument ID: NOEQUIP
 Method: D3977 XMDL Date: 04/02/2017 14:13

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sediment Concentration (mg/L)		1	0.889

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-42632-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: D3977

Start Date: 11/04/2020 08:58 End Date: 11/04/2020 08:58

Lab Sample Id	D/F	T y p e	Time	Analytes																			
				S e d C o n c																			
MB 570-106893/1	1	T	08:58	X																			
LCS 570-106893/2	1	T	08:58	X																			
LCSD 570-106893/3	1	T	08:58	X																			
570-42632-1	1	T	08:58	X																			
570-42632-1 DU	1	T	08:58	X																			
570-42632-2	1	T	08:58	X																			
570-42632-3	1	T	08:58	X																			
ZZZZZZ			08:58																				
ZZZZZZ			08:58																				
ZZZZZZ			08:58																				
ZZZZZZ			08:58																				
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ZZZZZZ			08:58																				
ZZZZZZ			08:58																				
ZZZZZZ			08:58																				
ZZZZZZ			08:58																				

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-42632-1

SDG No.: _____

Batch Number: 106893 Batch Start Date: 11/04/20 08:58 Batch Analyst: Ng, Lisa

Batch Method: D3977 Batch End Date: 11/05/20 08:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	CrucibleID	SampTare	SampGross	InitialAmount	SedTare	SedGross
MB 570-106893/1		D3977		A1114714	0.0000 g	1000 g	1000 g	0.4112 g	0.4113 g
LCS 570-106893/2		D3977		A1114713	0.0000 g	100 g	100 g	0.4087 g	0.4186 g
LCSD 570-106893/3		D3977		A1114712	0.0000 g	100 g	100 g	0.4118 g	0.4219 g
570-42632-A-1	OV-02_102920_SW_10 TOTAL	D3977	T	A1114711	70.09 g	1199.51 g	1129.42 g	0.4127 g	0.4141 g
570-42632-A-1 DU	OV-02_102920_SW_10 TOTAL	D3977	T	A1114710	71.25 g	1194.66 g	1123.41 g	0.4105 g	0.4118 g
570-42632-A-2	OV-02_102920_SW_10 DUP TOTAL	D3977	T	A1114709	71.07 g	1198.86 g	1127.79 g	0.4090 g	0.4102 g
570-42632-A-3	ADD-02_102920_SW_10 TOTAL	D3977	T	A1114708	71.04 g	1207.78 g	1136.74 g	0.4117 g	0.4356 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	SedNet	SedGross2	Weight20K	SedNet2	CalcMsg	FinalAmount
MB 570-106893/1		D3977		0.0001 g	0.4112 g	Pass	0 g	OK	1000 g
LCS 570-106893/2		D3977		0.0099 g	0.4185 g	Pass	0.0098 g	OK	1000 g
LCSD 570-106893/3		D3977		0.0101 g	0.4218 g	Pass	0.01 g	OK	1000 g
570-42632-A-1	OV-02_102920_SW_10 TOTAL	D3977	T	0.0014 g	0.4140 g	Pass	0.0013 g	OK	1000 g
570-42632-A-1 DU	OV-02_102920_SW_10 TOTAL	D3977	T	0.0013 g	0.4118 g	Pass	0.0013 g	OK	1000 g
570-42632-A-2	OV-02_102920_SW_10 DUP TOTAL	D3977	T	0.0012 g	0.4102 g	Pass	0.0012 g	OK	1000 g
570-42632-A-3	ADD-02_102920_SW_10 TOTAL	D3977	T	0.0239 g	0.4355 g	Pass	0.0238 g	OK	1000 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC_TSS_STD 00020					
MB 570-106893/1		D3977							
LCS 570-106893/2		D3977		100 mL					
LCSD 570-106893/3		D3977		100 mL					
570-42632-A-1	OV-02_102920_SW_10 TOTAL	D3977	T						
570-42632-A-1 DU	OV-02_102920_SW_10 TOTAL	D3977	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-42632-1

SDG No.: _____

Batch Number: 106893 Batch Start Date: 11/04/20 08:58 Batch Analyst: Ng, Lisa

Batch Method: D3977 Batch End Date: 11/05/20 08:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC_TSS_STD 00020					
570-42632-A-2	OV-02_102920_SW_10 DUP TOTAL	D3977	T						
570-42632-A-3	ADD-02_102920_SW_10 TOTAL	D3977	T						

Batch Notes	
Nominal Amount Used	1000 g
Perform Calculation (0=No, 1=Yes)	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

General Chemistry Raw Data Report

!"#\$%&#'()*+,-./

Batch: 106893
Method: D3977
Building :ECL1 (Lincoln)

Analyst Initials: ULIN
Instrument: NONE

Lab Sample ID: MB 570-106893/1

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
01234156#7!581569:63!5#;4<=>?	@!51	/	)	4<=>	/)))##<	/)))##<

Lab Sample ID: LCS 570-106893/2

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
01234156#7!581569:63!5#;4<=>?	@!51	/	ABC))'A(+),'!'+/	4<=>	/)))##<	/)))##<

Lab Sample ID: LCSD 570-106893/3

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
01234156#7!581569:63!5#;4<=>?	@!51	/	/)B)))-,.)C-A)C	4<=>	/)))##<	/)))##<

Lab Sample ID: 570-42632-A-1

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
01234156#7!581569:63!5#;4<=>?	@!51	/	/B.)))))A.(',-/	4<=>	//,AB+,##<	/)))##<

Lab Sample ID: 570-42632-A-1 DU

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
01234156#7!581569:63!5#;4<=>?	@!51	/	/B.)))))A.'('.(	4<=>	//,B+##<	/)))##<

Lab Sample ID: 570-42632-A-2

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
01234156#7!581569:63!5#;4<=>?	@!51	/	/B.)))))A+/A)A(	4<=>	//,(B(A##<	/)))##<

Lab Sample ID: 570-42632-A-3

Analysis Date: Nov 04, 2020 08:58

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
01234156#7!581569:63!5#;4<=>?	@!51	/	,BC)).AA+(AC/+	4<=>	//,-B(+##<	/)))##<

BALANCE CALIBRATION CHECK LOG

Eurofins Calscience

Date performed: 1/15/20 Initials: SLC

ID	Class 2 Weight (g)	Reading (g)	Acceptance Range	Pass? (circle one)	Comment (If not passed, note removal or corrective action)
83	1	1.00	0.98 - 1.02	<input checked="" type="radio"/> N	IO Lab
	100	99.98	98.00 - 102.00	<input checked="" type="radio"/> N	
62	0.002	0.0019	0.0015 - 0.0025	<input checked="" type="radio"/> N	IO Lab
	1	0.9995	0.9990 - 1.0010	<input checked="" type="radio"/> N	
	100	100.0076	99.9000 - 100.1000	<input checked="" type="radio"/> N	
11	1	0.99	0.98 - 1.02	<input checked="" type="radio"/> N	IO Lab
	100	99.99	98.00 - 102.00	<input checked="" type="radio"/> N	
55	1	1.00	0.98 - 1.02	<input checked="" type="radio"/> N	IO Lab
	100	99.99	98.00 - 102.00	<input checked="" type="radio"/> N	
	500	499.95	490.00 - 510.00	<input checked="" type="radio"/> N	
86	1	1.00	0.98 - 1.02	<input checked="" type="radio"/> N	IO Lab
	100	100.00	98.00 - 102.00	<input checked="" type="radio"/> N	
	500	499.99	490.00 - 510.00	<input checked="" type="radio"/> N	
71	0.002	0.0019	0.0015 - 0.0025	<input checked="" type="radio"/> N	BOD Room
	1	0.9991	0.9990 - 1.0010	<input checked="" type="radio"/> N	
	100	99.9910	99.9000 - 100.1000	<input checked="" type="radio"/> N	
63	0.1	/	0.08 - 0.12	Y N	BOD Room
	100	/	98.00 - 102.00	Y N	
73	0.1	0.10	0.08 - 0.12	<input checked="" type="radio"/> N	Oil & Grease Room
	1	0.99	0.98 - 1.02	<input checked="" type="radio"/> N	
	100	99.99	98.00 - 102.00	<input checked="" type="radio"/> N	
87	0.002	0.0020	0.0015 - 0.0025	<input checked="" type="radio"/> N	Solids Room
	1	0.9997	0.9990 - 1.0010	<input checked="" type="radio"/> N	
	100	99.9902	99.9000 - 100.1000	<input checked="" type="radio"/> N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

Comments:

WT SET ID USED: 2 mg <u>1000151861</u>	COMMENT:
WT SET ID USED: 10 mg - 100 g <u>4000013239</u>	
WT SET ID USED: 500 g <u>69073</u>	

Shipping and Receiving Documents

42632

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0J00147

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310
Fax: (000) 000-0000
Project Manager: Patrick Garcia-Strickland

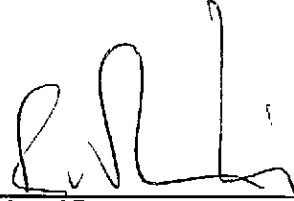
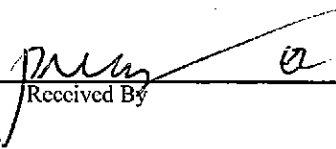
RECEIVING LABORATORY:

Eurofins Calscience, LLC
7440 Lincoln Way
Garden Grove, CA 92841
Phone :7148955494
Fax: x

Analysis	Due	Expires	Comments
Sample ID: OV-02_102920_SW_10_TOTAL		Sampled: 29-Oct-20 08:30	MS/MSD
Misc. Subcontract 6	01-Dec-20 19:00	26-Nov-20 05:30	ASTM 3977
<i>Containers Supplied:</i>			
1000 mL PP Jar (G)	1000 mL PP Jar (H)	1000 mL PP Jar (I)	
Sample ID: OV-02_102920_SW_10_DUP TOTAL		Sampled: 29-Oct-20 08:30	
Misc. Subcontract 6	01-Dec-20 19:00	26-Nov-20 05:30	ASTM 3977
<i>Containers Supplied:</i>			
1000 mL PP Jar (C)			
Sample ID: ADD-02_10290_SW_10 TOTAL		Sampled: 29-Oct-20 11:30	
Misc. Subcontract 6	01-Dec-20 19:00	26-Nov-20 08:30	ASTM 3977
<i>Containers Supplied:</i>			
1000 mL PP Jar (C)			



570-42632 Chain of Custody

Released By:  Date: 10/30/20
 Received By:  Date: 11/02/20 10:30

Released By: _____ Date: _____ Received By: _____ Date: _____

3-9/3-1 506

42632



Environment Testing
TestAmerica

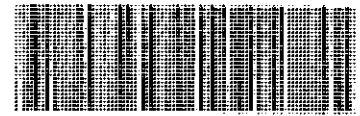
ORIGIN ID:TCMA (253) 922-2310
SAMPLE RECEIVING
TA- SEATTLE
5755 8TH ST E
FIFE, WA 98424
UNITED STATES US

SHIP DATE: 30OCT20
ACTWGT: 33.55 LB
CAD: 989746/CAFE9406
BILL THIRD PARTY

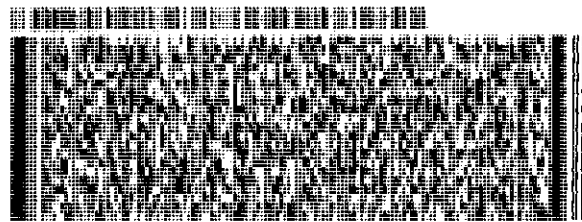
TO **CARLA LEE HOLLOWELL**
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

GARDEN GROVE CA 92841

(714) 895-6494 REF: DEPT:
TRK# PO:



570-42632 Waybill

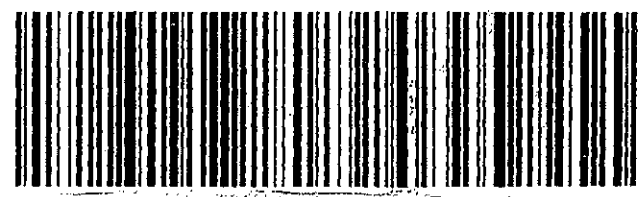


MON - 02 NOV 10:30A
PRIORITY OVERNIGHT

TRK# **9269 4593 0013**
0201

92 APVA

92841
CA-US **SNA**



159471-404 RIT2 EXP 08/21

Login Sample Receipt Checklist

!#\$%&'()*+,-.*/:;<=>?@

5+0'6)70#*&'89:;<=>?=@

Login Number: 42632
List Number: 1
Creator: Patel, Jayesh

List Source: Eurofins Calscience

Question	Answer	Comment
C1D"+13%"E"%"F'G1-\$H%'3!#3J#D'+*"-KAL'013JM*+)\$D'1-'7#1-)*#D'0F'1'-)*#B	6AB	
7#%#*N		
O!#3++!#*H-'3)-%+DF'-#1!P"'Q*#-#P'"-"\$%13%N	0)#	
217Q!#3)-%+DF'-#1!P"'Q*#-#P'1*#"13%N	0)#	
O!#3++!#*+*-17Q!#-'D+'\$+%1Q!Q#1*%+'I1E#0##\$'3+7Q*+7"-#D'+* %17Q#*#D'G"%IN	0)#	
217Q!#-'G#*#*#3#"E#D'+\$"#3#N	0)#	
+!#* 'G#7Q#*1%)#*"-'133#Q%10!#N	0)#	
+!#* 'G#7Q#*1%)#*"-'*3+*D#DN	0)#	
R "'-Q*#-#P%N	0)#	
R "'-'!#D'+)%"\$J'1\$D'!#M'0!#N	0)#	
R "'-'!#D'+)%'G%!'1!!'Q#*%"\$#P%"+*71%"+\$N	0)#	
S-'%l#'.#D'217Q!#*H-'\$17#Q*#-#P%'+\$ R T	.!|#	C#3#"E#D'Q*+U#3%'1-'1'-)03+\$%*13%N
O!#*#*1*\$+'D'-3*#Q1\$3#"0#%G##\$%l#3+\$%1"\$#*-'*3#"E#D'1\$D%l# R N	0)#	
217Q!#-'1*#*#3#"E#D'G"%l"\$V+!D"\$M7# W#X3!)D"\$M%#-%-G"%l"77#D"1%G#	0)#	
VG Y		
217Q!#3+\$%1"\$#*-'I1E#!#M'0!#!10#!-N	0)#	
+\$%1"\$#*-'1*\$+'%0*+J#+'*!#1J"\$MN	0)#	
217Q!#3+!#3%"+'D'1%#A%"7#-'1*#Q*+E"D#DN	0)#	
BQQ*+Q**1%#'-17Q!#3+\$%1"\$#*-'1*#)-#DN	0)#	
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O!#*#*-'-) ,,"3"\$#%EN!+*1!!*#)#-%#D'1\$1F-#P"\$3!N'1\$F*#)#-%#D']2A]2^	0)#	
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]!%"QI1-'3'-17Q!#-'1*#+'%Q*#-#P%N	0)#	
217Q!#-'D+'\$+%*#)"*#-Q!"%%"\$M'+*3+7Q+-%"\$MN	0)#	
C#-"D)1! l!+*"#\$' l#3J#DN	6AB	

ANALYTICAL REPORT

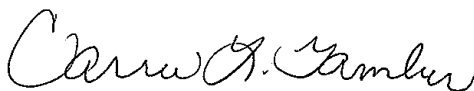
Job Number: 180-105175-1

Job Description: Wood Penobscot River

For:

Wood E&I Solutions Inc
271 Mill Road
Chelmsford, MA 01824

Attention: Ms. Denise King



Approved for release.
Carrie L Gamber
Senior Project Manager
5/20/2020 11:27 AM

Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
carrie.gamber@testamericainc.com
05/20/2020

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238

Tel (412) 963-7058 Fax (412) 963-2468 www.testamericainc.com

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Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Wood E&I Solutions Inc

Project: Wood Penobscot River

Report Number: 180-105175-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 04/30/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.8 C.

A revised chain-of-custody (COC) was emailed and has been included in this report.

GENERAL CHEMSITRY

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL

Lab Sample ID: 180-105175-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	7.0		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	2.2		1.0	1.0	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WQ1b-C_042720_SW_10 DISSOLVED

Lab Sample ID: 180-105175-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	6.1		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: WQ2-C_042720_SW_10 TOTAL

Lab Sample ID: 180-105175-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	6.0		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	6.6		0.50	0.50	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WQ2-C_042720_SW_10 DISSOLVED

Lab Sample ID: 180-105175-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	5.4		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: WQ3-L_042720_SW_10 TOTAL

Lab Sample ID: 180-105175-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	3.6		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	6.0		0.50	0.50	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WQ3-L_042720_SW_10 DISSOLVED

Lab Sample ID: 180-105175-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	3.4		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: WQ1b-C_042720_SW_10_DUP TOTAL

Lab Sample ID: 180-105175-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	7.0		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	5.0		0.50	0.50	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WQ1b-C_042720_SW_10_DUP DISSOLVED

Lab Sample ID: 180-105175-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	6.2		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pittsburgh

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL

Date Collected: 04/27/20 14:25

Date Received: 04/30/20 08:15

Lab Sample ID: 180-105175-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	7.0		1.0	0.51	mg/L			05/08/20 20:01	1
Total Suspended Solids	2.2		1.0	1.0	mg/L			05/01/20 15:16	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry

Client Sample ID: WQ2-C_042720_SW_10 TOTAL

Date Collected: 04/27/20 15:45

Date Received: 04/30/20 08:15

Lab Sample ID: 180-105175-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	6.0		1.0	0.51	mg/L			05/08/20 21:22	1
Total Suspended Solids	6.6		0.50	0.50	mg/L			05/01/20 15:16	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry

Client Sample ID: WQ3-L_042720_SW_10 TOTAL

Date Collected: 04/27/20 17:00

Date Received: 04/30/20 08:15

Lab Sample ID: 180-105175-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	3.6		1.0	0.51	mg/L			05/08/20 21:49	1
Total Suspended Solids	6.0		0.50	0.50	mg/L			05/01/20 15:16	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry

Client Sample ID: WQ1b-C_042720_SW_10_DUP TOTAL

Date Collected: 04/27/20 14:25

Date Received: 04/30/20 08:15

Lab Sample ID: 180-105175-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	7.0		1.0	0.51	mg/L			05/08/20 23:10	1
Total Suspended Solids	5.0		0.50	0.50	mg/L			05/01/20 15:16	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry - Dissolved

Client Sample ID: WQ1b-C_042720_SW_10 DISSOLVED

Date Collected: 04/27/20 14:25

Date Received: 04/30/20 08:15

Lab Sample ID: 180-105175-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	6.1		1.0	0.51	mg/L			05/18/20 21:13	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry - Dissolved

Client Sample ID: WQ2-C_042720_SW_10 DISSOLVED

Date Collected: 04/27/20 15:45

Date Received: 04/30/20 08:15

Lab Sample ID: 180-105175-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	5.4		1.0	0.51	mg/L			05/18/20 22:34	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry - Dissolved

Client Sample ID: WQ3-L_042720_SW_10 DISSOLVED

Date Collected: 04/27/20 17:00

Date Received: 04/30/20 08:15

Lab Sample ID: 180-105175-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	3.4		1.0	0.51	mg/L			05/18/20 23:02	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry - Dissolved

Client Sample ID: WQ1b-C_042720_SW_10_DUP DISSOLVED

Lab Sample ID: 180-105175-8

Date Collected: 04/27/20 14:25

Matrix: Water

Date Received: 04/30/20 08:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	6.2		1.0	0.51	mg/L			05/18/20 23:28	1

Default Detection Limits

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry

Analyte	RL	MDL	Units
Total Organic Carbon - Quad	1.0	0.51	mg/L
Total Suspended Solids	0.50	0.50	mg/L

General Chemistry - Dissolved

Analyte	RL	MDL	Units
Dissolved Organic Carbon - Quad	1.0	0.51	mg/L

QC Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

Method: EPA 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 180-315105/6
Matrix: Water
Analysis Batch: 315105

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	ND		1.0	0.51	mg/L			05/08/20 18:40	1

Lab Sample ID: LCS 180-315105/4
Matrix: Water
Analysis Batch: 315105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Quad	20.0	21.0		mg/L		105	85 - 115

Lab Sample ID: LCSD 180-315105/5
Matrix: Water
Analysis Batch: 315105

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Quad	20.0	20.1		mg/L		100	85 - 115	4	20

Lab Sample ID: 180-105175-1 MS
Matrix: Water
Analysis Batch: 315105

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Quad	7.0		10.0	17.8		mg/L		108	75 - 125

Lab Sample ID: 180-105175-1 MSD
Matrix: Water
Analysis Batch: 315105

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Quad	7.0		10.0	17.7		mg/L		107	75 - 125	0	20

Method: EPA 9060A - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 180-315890/6
Matrix: Water
Analysis Batch: 315890

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	ND		1.0	0.51	mg/L			05/18/20 20:47	1

Lab Sample ID: LCS 180-315890/4
Matrix: Water
Analysis Batch: 315890

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	20.0	19.1		mg/L		96	85 - 115

QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River

Job ID: 180-105175-1

Method: EPA 9060A - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: LCSD 180-315890/5
Matrix: Water
Analysis Batch: 315890

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	20.0	19.8		mg/L		99	85 - 115	4	20

Lab Sample ID: 180-105175-2 MS
Matrix: Water
Analysis Batch: 315890

Client Sample ID: WQ1b-C_042720_SW_10 DISSOLVED
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	6.1		10.0	15.9		mg/L		98	75 - 125

Lab Sample ID: 180-105175-2 MSD
Matrix: Water
Analysis Batch: 315890

Client Sample ID: WQ1b-C_042720_SW_10 DISSOLVED
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	6.1		10.0	16.1		mg/L		100	75 - 125	1	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 180-314392/2
Matrix: Water
Analysis Batch: 314392

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		0.50	0.50	mg/L			05/01/20 15:16	1

Lab Sample ID: LCS 180-314392/1
Matrix: Water
Analysis Batch: 314392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	83.0	80.0		mg/L		96	80 - 120

Lab Sample ID: 180-105175-1 DU
Matrix: Water
Analysis Batch: 314392

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	2.2		2.20		mg/L		0	10

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

General Chemistry

Analysis Batch: 314392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105175-1	WQ1b-C_042720_SW_10 TOTAL	Total/NA	Water	SM 2540D	
180-105175-3	WQ2-C_042720_SW_10 TOTAL	Total/NA	Water	SM 2540D	
180-105175-5	WQ3-L_042720_SW_10 TOTAL	Total/NA	Water	SM 2540D	
180-105175-7	WQ1b-C_042720_SW_10_DUP TOTAL	Total/NA	Water	SM 2540D	
MB 180-314392/2	Method Blank	Total/NA	Water	SM 2540D	
LCS 180-314392/1	Lab Control Sample	Total/NA	Water	SM 2540D	
180-105175-1 DU	WQ1b-C_042720_SW_10 TOTAL	Total/NA	Water	SM 2540D	

Analysis Batch: 315105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105175-1	WQ1b-C_042720_SW_10 TOTAL	Total/NA	Water	EPA 9060A	
180-105175-3	WQ2-C_042720_SW_10 TOTAL	Total/NA	Water	EPA 9060A	
180-105175-5	WQ3-L_042720_SW_10 TOTAL	Total/NA	Water	EPA 9060A	
180-105175-7	WQ1b-C_042720_SW_10_DUP TOTAL	Total/NA	Water	EPA 9060A	
MB 180-315105/6	Method Blank	Total/NA	Water	EPA 9060A	
LCS 180-315105/4	Lab Control Sample	Total/NA	Water	EPA 9060A	
LCSD 180-315105/5	Lab Control Sample Dup	Total/NA	Water	EPA 9060A	
180-105175-1 MS	WQ1b-C_042720_SW_10 TOTAL	Total/NA	Water	EPA 9060A	
180-105175-1 MSD	WQ1b-C_042720_SW_10 TOTAL	Total/NA	Water	EPA 9060A	

Analysis Batch: 315890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105175-2	WQ1b-C_042720_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	
180-105175-4	WQ2-C_042720_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	
180-105175-6	WQ3-L_042720_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	
180-105175-8	WQ1b-C_042720_SW_10_DUP DISSOLVED	Dissolved	Water	EPA 9060A	
MB 180-315890/6	Method Blank	Dissolved	Water	EPA 9060A	
LCS 180-315890/4	Lab Control Sample	Dissolved	Water	EPA 9060A	
LCSD 180-315890/5	Lab Control Sample Dup	Dissolved	Water	EPA 9060A	
180-105175-2 MS	WQ1b-C_042720_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	
180-105175-2 MSD	WQ1b-C_042720_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL

Lab Sample ID: 180-105175-1

Date Collected: 04/27/20 14:25

Matrix: Water

Date Received: 04/30/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			315105	05/08/20 20:01	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	500 mL	1000 mL	314392	05/01/20 15:16	AGP	TAL PIT

Client Sample ID: WQ1b-C_042720_SW_10 DISSOLVED

Lab Sample ID: 180-105175-2

Date Collected: 04/27/20 14:25

Matrix: Water

Date Received: 04/30/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			315890	05/18/20 21:13	TAM	TAL PIT

Client Sample ID: WQ2-C_042720_SW_10 TOTAL

Lab Sample ID: 180-105175-3

Date Collected: 04/27/20 15:45

Matrix: Water

Date Received: 04/30/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			315105	05/08/20 21:22	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	314392	05/01/20 15:16	AGP	TAL PIT

Client Sample ID: WQ2-C_042720_SW_10 DISSOLVED

Lab Sample ID: 180-105175-4

Date Collected: 04/27/20 15:45

Matrix: Water

Date Received: 04/30/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			315890	05/18/20 22:34	TAM	TAL PIT

Client Sample ID: WQ3-L_042720_SW_10 TOTAL

Lab Sample ID: 180-105175-5

Date Collected: 04/27/20 17:00

Matrix: Water

Date Received: 04/30/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			315105	05/08/20 21:49	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	314392	05/01/20 15:16	AGP	TAL PIT

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

Client Sample ID: WQ3-L_042720_SW_10 DISSOLVED

Lab Sample ID: 180-105175-6

Date Collected: 04/27/20 17:00

Matrix: Water

Date Received: 04/30/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A		1			315890	05/18/20 23:02	TAM	TAL PIT
Instrument ID: TOC1030										

Client Sample ID: WQ1b-C_042720_SW_10_DUP TOTAL

Lab Sample ID: 180-105175-7

Date Collected: 04/27/20 14:25

Matrix: Water

Date Received: 04/30/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9060A		1			315105	05/08/20 23:10	TAM	TAL PIT
Instrument ID: TOC1030										
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	314392	05/01/20 15:16	AGP	TAL PIT
Instrument ID: NOEQUIP										

Client Sample ID: WQ1b-C_042720_SW_10_DUP DISSOLVED

Lab Sample ID: 180-105175-8

Date Collected: 04/27/20 14:25

Matrix: Water

Date Received: 04/30/20 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A		1			315890	05/18/20 23:28	TAM	TAL PIT
Instrument ID: TOC1030										

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

AGP = Angela Partridge

TAM = Tessa Mastalski

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Maine	State	PA00164	03-06-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 9060A		Water	Dissolved Organic Carbon - Quad

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

Method	Method Description	Protocol	Laboratory
EPA 9060A	Organic Carbon, Dissolved (DOC)	SW846	TAL PIT
EPA 9060A	Organic Carbon, Total (TOC)	SW846	TAL PIT
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River

Job ID: 180-105175-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-105175-1	WQ1b-C_042720_SW_10 TOTAL	Water	04/27/20 14:25	04/30/20 08:15	
180-105175-2	WQ1b-C_042720_SW_10 DISSOLVED	Water	04/27/20 14:25	04/30/20 08:15	
180-105175-3	WQ2-C_042720_SW_10 TOTAL	Water	04/27/20 15:45	04/30/20 08:15	
180-105175-4	WQ2-C_042720_SW_10 DISSOLVED	Water	04/27/20 15:45	04/30/20 08:15	
180-105175-5	WQ3-L_042720_SW_10 TOTAL	Water	04/27/20 17:00	04/30/20 08:15	
180-105175-6	WQ3-L_042720_SW_10 DISSOLVED	Water	04/27/20 17:00	04/30/20 08:15	
180-105175-7	WQ1b-C_042720_SW_10_DUP TOTAL	Water	04/27/20 14:25	04/30/20 08:15	
180-105175-8	WQ1b-C_042720_SW_10_DUP DISSOLVED	Water	04/27/20 14:25	04/30/20 08:15	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
10 PPM TOC/CC_01416	05/09/20	05/08/20	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00030	2 mL	Total Organic Carbon - Quad	10 mg/L
.WTOC1000SP_00030	10/31/20		Ricca Chemical Co, Lot 2910D79		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
10 PPM TOC/CC_01420	05/19/20	05/18/20	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00030	2 mL	Dissolved Organic Carbon - Quad	10 mg/L
.WTOC1000SP_00030	10/31/20		Ricca Chemical Co, Lot 2910D79		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
ICV 40 PPM 01554	05/09/20	05/08/20	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00030	4 mL	Total Organic Carbon - Quad	40 mg/L
.WTOC1000SP_00030	10/31/20		Ricca Chemical Co, Lot 2910D79		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
ICV 40 PPM_01558	05/19/20	05/18/20	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00030	4 mL	Dissolved Organic Carbon - Quad	40 mg/L
.WTOC1000SP_00030	10/31/20		Ricca Chemical Co, Lot 2910D79		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
LCS 20 PPM 01549	05/09/20	05/08/20	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00047	4 mL	Total Organic Carbon - Quad	20 mg/L
.WTOC1000P_00047	08/09/21		Lab Chem, Lot J220-01		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
LCS 20 PPM_01553	05/19/20	05/18/20	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00047	4 mL	Dissolved Organic Carbon - Quad	20 mg/L
.WTOC1000P_00047	08/09/21		Lab Chem, Lot J220-01		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
WResPSP 00067	12/31/22		Phenova, Lot 8207-09B		(Purchased Reagent)		Total Suspended Solids	83 mg/L
WTOC1000SP_00030	10/31/20		Ricca Chemical Co, Lot 2910D79		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
							Total Organic Carbon - Quad	1000 mg/L

Reagent

WResPSP_00067

WP Solids		Lot #8207-09B		
TNI Analyte Code	Analyte	Certified Value mg/L	Acceptance Limits mg/L	%
1955	Total Dissolved Solids at 180° (TFR)	192	147 - 237	76.6 - 123
1960	Non-Filterable Residue (TSS)	83.0	67.9 - 92.4	81.8 - 111
1950	Total Solids	275	230 - 320	83.6 - 116

Certified Values = "100% true concentration" of each analyte as determined from gravimetric and volumetric measurements made during standard manufacture.

Acceptance Limits = Generated based on the criteria established by The NELAC Institute (TNI) Fields of Proficiency Testing tables using regression equations and/or fixed percentage limits, historical data and other criteria distributed by accrediting agencies as applicable. Please note that regression based acceptance criteria are based on the Assigned Value and may have different criteria at different concentrations.

Solvent = Deionized Water

Store at 20-25°C.

Expiration Date: 12/22


Catalog #QC-SOL-WP

Preparation Instructions: The WP Solids standard is provided as a ready-to-use standard that does not require dilution prior to use. Shake adequately to homogenize the standard before removing an aliquot for analysis. Analyze by your normal procedures.

Note: It is strongly recommended that you analyze for TSS prior to removing aliquots for other analyses from the Solids bottle.

Approved by: BJW

Date: 03/20



3266569
ID: WResPSP_03067
Exp: 12/31/22 Prod: RSP
Phenova Residue - TSS

Reviewed by: AMB

Date: 03/20

Reagent

WTOC1000P_00047



3407498
 ID: WT0C1000P_00047
 Exp: 08/09/21 Prod: TAM Opn: 10/07/19
 1000 ppm TOC standard

CERTIFICATE OF ANALYSIS

Description: CARBON STANDARD, 1000ppm ORGANIC (1mL = 1mg C)

Mfg. Date: 08/09/2019

Catalog Number: LC12910

Exp. Date: 08/09/2021

Lot Number: J220-01

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm C	1000ppm +/- 10ppm	1009 ppm
Concentration mg C/mL	1.000 +/- 0.010 mg C/mL	1.009 mg C/mL
Traceable to NIST	Potassium Hydrogen Phthalate	84L

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

Reagent

WTOC1000SP_00030

Certificate of Analysis


 3463729
 ID: WTOC1000SP_00030
 Exp:10/31/20 Prod:TAM Opn:11/11/19
 1000 ppm TOC standard

Organic Carbon Standard, 1000 ppm C
Lot Number: 2910D79
Product Number: 1847
Manufacture Date: OCT 21, 2019
Expiration Date: OCT 2020

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/lit	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months
1847-4	120 mL amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Chris Collins (10/21/2019)
Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh

Job Number: 180-105175-1

SDG No.: _____

Project: Wood Penobscot River

Client Sample ID

WQ1b-C_042720_SW_10 TOTAL

WQ1b-C_042720_SW_10 DISSOLVED

WQ2-C_042720_SW_10 TOTAL

WQ2-C_042720_SW_10 DISSOLVED

WQ3-L_042720_SW_10 TOTAL

WQ3-L_042720_SW_10 DISSOLVED

WQ1b-C_042720_SW_10_DUP TOTAL

WQ1b-C_042720_SW_10_DUP DISSOLVED

Lab Sample ID

180-105175-1

180-105175-2

180-105175-3

180-105175-4

180-105175-5

180-105175-6

180-105175-7

180-105175-8

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ1b-C_042720_SW_10 TOTAL

Lab Sample ID: 180-105175-1

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105175-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 14:25

Reporting Basis: WET

Date Received: 04/30/2020 08:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	7.0	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	2.2	1.0	1.0	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ1b-C_042720_SW_10 DISSOLVED

Lab Sample ID: 180-105175-2

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105175-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 14:25

Reporting Basis: WET

Date Received: 04/30/2020 08:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	6.1	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ2-C_042720_SW_10 TOTAL

Lab Sample ID: 180-105175-3

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105175-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 15:45

Reporting Basis: WET

Date Received: 04/30/2020 08:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	6.0	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	6.6	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ2-C_042720_SW_10 DISSOLVED

Lab Sample ID: 180-105175-4

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105175-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 15:45

Reporting Basis: WET

Date Received: 04/30/2020 08:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	5.4	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ3-L_042720_SW_10 TOTAL

Lab Sample ID: 180-105175-5

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105175-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 17:00

Reporting Basis: WET

Date Received: 04/30/2020 08:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	3.6	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	6.0	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ3-L_042720_SW_10 DISSOLVED

Lab Sample ID: 180-105175-6

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105175-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 17:00

Reporting Basis: WET

Date Received: 04/30/2020 08:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	3.4	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ1b-C_042720_SW_10_DUP TOTAL

Lab Sample ID: 180-105175-7

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105175-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 14:25

Reporting Basis: WET

Date Received: 04/30/2020 08:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	7.0	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	5.0	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ1b-C_042720_SW_10_DUP DISSOLVED

Lab Sample ID: 180-105175-8

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105175-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/27/2020 14:25

Reporting Basis: WET

Date Received: 04/30/2020 08:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	6.2	1.0	0.51	mg/L			1	EPA 9060A

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1
 SDG No.: _____
 Analyst: TAM Batch Start Date: 05/08/2020
 Reporting Units: mg/L Analytical Batch No.: 315105

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	16:52	Total Organic Carbon - Quad	40.4	40.0	101	90-110		ICV 40 PPM_01554
3	ICB	17:19	Total Organic Carbon - Quad	ND					
14	CCV	22:16	Total Organic Carbon - Quad	10.6	10.0	106	90-110		10 PPM TOC/CC 01416
15	CCB	22:43	Total Organic Carbon - Quad	ND					
26	CCV	03:40	Total Organic Carbon - Quad	10.1	10.0	101	90-110		10 PPM TOC/CC 01416
27	CCB	04:07	Total Organic Carbon - Quad	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1
 SDG No.: _____
 Analyst: TAM Batch Start Date: 05/18/2020
 Reporting Units: mg/L Analytical Batch No.: 315890

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	19:00	Dissolved Organic Carbon - Quad	39.1	40.0	98	90-110		ICV 40 PPM_01558
3	ICB	19:27	Dissolved Organic Carbon - Quad	ND					
14	CCV	00:21	Dissolved Organic Carbon - Quad	9.80	10.0	98	90-110		10 PPM TOC/CC_01420
15	CCB	00:48	Dissolved Organic Carbon - Quad	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 315105 Date: 05/08/2020 18:40							
EPA 9060A	MB 180-315105/6	Total Organic Carbon - Quad	ND		mg/L	1.0	1
Batch ID: 315890 Date: 05/18/2020 20:47							
EPA 9060A	MB 180-315890/6	Dissolved Organic Carbon - Quad	ND		mg/L	1.0	1
Batch ID: 314392 Date: 05/01/2020 15:16							
SM 2540D	MB 180-314392/2	Total Suspended Solids	ND		mg/L	0.50	1

5-IN
 MATRIX SPIKE SAMPLE RECOVERY
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 315105 Date: 05/08/2020 20:28											
EPA 9060A	180-105175-1	Total Organic Carbon - Quad	7.0		mg/L						
EPA 9060A	180-105175-1	Total Organic Carbon - Quad	17.8		mg/L	10.0	108	75-125			
Batch ID: 315890 Date: 05/18/2020 21:40											
EPA 9060A	180-105175-2	Dissolved Organic Carbon - Quad	6.1		mg/L						
EPA 9060A	180-105175-2	Dissolved Organic Carbon - Quad	15.9		mg/L	10.0	98	75-125			

Calculations are performed before rounding to avoid round-off errors in calculated results.

5-IN
 MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 315105 Date: 05/08/2020 20:55											
EPA 9060A	180-105175-1	Total Organic Carbon - Quad	17.7		mg/L	10.0	107	75-125	0	20	
Batch ID: 315890 Date: 05/18/2020 22:07											
EPA 9060A	180-105175-2	Dissolved Organic Carbon - Quad	16.1		mg/L	10.0	100	75-125	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 314392 Date: 05/01/2020 15:16								
SM 2540D	WQ1b-C_042720_SW_1 0 TOTAL	180-105175-1	Total Suspended Solids	2.2	mg/L			
SM 2540D	WQ1b-C_042720_SW_1 0 TOTAL	180-105175-1 DU	Total Suspended Solids	2.20	mg/L	0	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 315105 Date: 05/08/2020 17:46											
						LCS Source: LCS 20 PPM_01549					
EPA 9060A	LCS 180-315105/4	Total Organic Carbon - Quad	21.0		mg/L	20.0	105	85-115	4	20	
Batch ID: 315890 Date: 05/18/2020 19:53											
						LCS Source: LCS 20 PPM_01553					
EPA 9060A	LCS 180-315890/4	Dissolved Organic Carbon - Quad	19.1		mg/L	20.0	96	85-115	4	20	
Batch ID: 314392 Date: 05/01/2020 15:16											
						LCS Source: WResPSP_00067					
SM 2540D	LCS 180-314392/1	Total Suspended Solids	80.0		mg/L	83.0	96	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 315105 Date: 05/08/2020 18:13			LCS D Source: LCS 20 PPM_01549								
EPA 9060A	LCSD 180-315105/5	Total Organic Carbon - Quad	20.1		mg/L	20.0	100	85-115	4	20	
Batch ID: 315890 Date: 05/18/2020 20:20			LCS D Source: LCS 20 PPM_01553								
EPA 9060A	LCSD 180-315890/5	Dissolved Organic Carbon - Quad	19.8		mg/L	20.0	99	85-115	4	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105175-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A MDL Date: 03/21/2017 16:51

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Organic Carbon - Quad		1	0.5084

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105175-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A XMDL Date: 03/21/2017 16:52

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Organic Carbon - Quad		1	0.5084

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105175-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A MDL Date: 03/21/2017 16:51

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.5084

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105175-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A XMDL Date: 03/21/2017 16:52

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.5084

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105175-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540D MDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Suspended Solids		0.5	0.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105175-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540D XMDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Suspended Solids		0.5	0.5

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Instrument ID: TOC1030 Analysis Method: EPA 9060A

Start Date: 05/08/2020 16:25 End Date: 05/09/2020 18:05

Lab Sample Id	D/F	Type	Time	Analytes																											
				TOC	Q																										
ZZZZZZ			16:25																												
ICV 180-315105/2	1		16:52	X																											
ICB 180-315105/3	1		17:19	X																											
LCS 180-315105/4	1	T	17:46	X																											
LCSD 180-315105/5	1	T	18:13	X																											
MB 180-315105/6	1	T	18:40	X																											
ZZZZZZ			19:07																												
ZZZZZZ			19:34																												
180-105175-1	1	T	20:01	X																											
180-105175-1 MS	1	T	20:28	X																											
180-105175-1 MSD	1	T	20:55	X																											
180-105175-3	1	T	21:22	X																											
180-105175-5	1	T	21:49	X																											
CCV 180-315105/14	1		22:16	X																											
CCB 180-315105/15	1		22:43	X																											
180-105175-7	1	T	23:10	X																											
ZZZZZZ			23:37																												
ZZZZZZ			00:04																												
ZZZZZZ			00:31																												
ZZZZZZ			00:58																												
ZZZZZZ			01:25																												
ZZZZZZ			01:52																												
ZZZZZZ			02:19																												
ZZZZZZ			02:46																												
ZZZZZZ			03:13																												
CCV 180-315105/26	1		03:40	X																											
CCB 180-315105/27	1		04:07	X																											
ZZZZZZ			04:35																												
ZZZZZZ			05:02																												
ZZZZZZ			05:29																												
ZZZZZZ			05:56																												
ZZZZZZ			06:23																												
ZZZZZZ			06:50																												
ZZZZZZ			07:17																												
ZZZZZZ			07:44																												
ZZZZZZ			08:11																												
ZZZZZZ			08:38																												
CCV 180-315105/38			09:06																												
CCB 180-315105/39			09:31																												
ZZZZZZ			09:59																												

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Instrument ID: TOC1030 Analysis Method: EPA 9060A

Start Date: 05/08/2020 16:25 End Date: 05/09/2020 18:05

Lab Sample Id	D/F	Type	Time	Analytes																											
				TOC	Q																										
ZZZZZZ			10:26																												
ZZZZZZ			10:53																												
ZZZZZZ			11:20																												
ZZZZZZ			11:47																												
ZZZZZZ			12:14																												
ZZZZZZ			12:41																												
ZZZZZZ			13:09																												
ZZZZZZ			13:36																												
ZZZZZZ			14:03																												
CCV 180-315105/50			14:30																												
CCB 180-315105/51			14:56																												
ZZZZZZ			15:23																												
ZZZZZZ			15:51																												
ZZZZZZ			16:18																												
ZZZZZZ			16:45																												
ZZZZZZ			17:12																												
CCV 180-315105/57			17:39																												
CCB 180-315105/58			18:05																												

Prep Types: _____
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105175-1

SDG No.: _____

Instrument ID: TOC1030 Analysis Method: EPA 9060A

Start Date: 05/18/2020 18:34 End Date: 05/19/2020 03:28

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				D O C Q																											
ZZZZZZ			18:34																												
ICV 180-315890/2	1		19:00	X																											
ICB 180-315890/3	1		19:27	X																											
LCS 180-315890/4	1	D	19:53	X																											
LCSD 180-315890/5	1	D	20:20	X																											
MB 180-315890/6	1	D	20:47	X																											
180-105175-2	1	D	21:13	X																											
180-105175-2 MS	1	D	21:40	X																											
180-105175-2 MSD	1	D	22:07	X																											
180-105175-4	1	D	22:34	X																											
180-105175-6	1	D	23:02	X																											
180-105175-8	1	D	23:28	X																											
ZZZZZZ			23:55																												
CCV 180-315890/14	1		00:21	X																											
CCB 180-315890/15	1		00:48	X																											
ZZZZZZ			01:15																												
ZZZZZZ			01:42																												
ZZZZZZ			02:08																												
ZZZZZZ			02:35																												
CCV 180-315890/20			03:02																												
CCB 180-315890/21			03:28																												

Prep Types: _____
D = Dissolved

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105175-1

SDG No.: _____

Batch Number: 315105 Batch Start Date: 05/08/20 16:25 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 05/09/20 18:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	10 PPM TOC/CC 01416	ICV 40 PPM 01554	LCS 20 PPM 01549
ICV 180-315105/2		EPA 9060A						40 mL	
LCS 180-315105/4		EPA 9060A							40 mL
LCSD 180-315105/5		EPA 9060A							40 mL
180-105175-B-1	WQ1b-C_042720_SW 10 TOTAL	EPA 9060A	T			<2 SU			
180-105175-C-1 MS	WQ1b-C_042720_SW 10 TOTAL	EPA 9060A	T	40 mL	40 mL	<2 SU			
180-105175-C-1 MSD	WQ1b-C_042720_SW 10 TOTAL	EPA 9060A	T	40 mL	40 mL	<2 SU			
180-105175-B-3	WQ2-C_042720_SW 10 TOTAL	EPA 9060A	T			<2 SU			
180-105175-C-5	WQ3-L_042720_SW 10 TOTAL	EPA 9060A	T			<2 SU			
CCV 180-315105/14		EPA 9060A					40 mL		
180-105175-B-7	WQ1b-C_042720_SW 10 DUP TOTAL	EPA 9060A	T			<2 SU			
CCV 180-315105/26		EPA 9060A					40 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WTOC1000SP 00030					
ICV 180-315105/2		EPA 9060A							
LCS 180-315105/4		EPA 9060A							
LCSD 180-315105/5		EPA 9060A							
180-105175-B-1	WQ1b-C_042720_SW 10 TOTAL	EPA 9060A	T						
180-105175-C-1 MS	WQ1b-C_042720_SW 10 TOTAL	EPA 9060A	T	0.4 mL					
180-105175-C-1 MSD	WQ1b-C_042720_SW 10 TOTAL	EPA 9060A	T	0.4 mL					
180-105175-B-3	WQ2-C_042720_SW 10 TOTAL	EPA 9060A	T						
180-105175-C-5	WQ3-L_042720_SW 10 TOTAL	EPA 9060A	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105175-1

SDG No.: _____

Batch Number: 315105 Batch Start Date: 05/08/20 16:25 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 05/09/20 18:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	WTOC1000SP 00030					
CCV 180-315105/14		EPA 9060A							
180-105175-B-7	WQ1b-C_042720_SW 10 DUP TOTAL	EPA 9060A	T						
CCV 180-315105/26		EPA 9060A							

Batch Notes	
Batch Comment	pH strips: HC991818
Phosphoric Acid ID	3679865
Pipette/Syringe/Dispenser ID	B747014653, B747014865
Sodium Persulfate ID	3679866

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105175-1

SDG No.: _____

Batch Number: 315890 Batch Start Date: 05/18/20 18:34 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 05/19/20 03:46

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	10 PPM TOC/CC 01420	ICV 40 PPM 01558	LCS 20 PPM 01553
ICV 180-315890/2		EPA 9060A						40 mL	
LCS 180-315890/4		EPA 9060A							40 mL
LCS 180-315890/5		EPA 9060A							40 mL
180-105175-B-2	WQ1b-C_042720_SW 10 DISSOLVED	EPA 9060A	D			<2 SU			
180-105175-B-2 MS	WQ1b-C_042720_SW 10 DISSOLVED	EPA 9060A	D	40 mL	40 mL	<2 SU			
180-105175-A-2 MSD	WQ1b-C_042720_SW 10 DISSOLVED	EPA 9060A	D	40 mL	40 mL	<2 SU			
180-105175-B-4	WQ2-C_042720_SW 10 DISSOLVED	EPA 9060A	D			<2 SU			
180-105175-B-6	WQ3-L_042720_SW 10 DISSOLVED	EPA 9060A	D			<2 SU			
180-105175-B-8	WQ1b-C_042720_SW 10 DUP DISSOLVED	EPA 9060A	D			<2 SU			
CCV 180-315890/14		EPA 9060A					40 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WTOC1000SP 00030					
ICV 180-315890/2		EPA 9060A							
LCS 180-315890/4		EPA 9060A							
LCS 180-315890/5		EPA 9060A							
180-105175-B-2	WQ1b-C_042720_SW 10 DISSOLVED	EPA 9060A	D						
180-105175-B-2 MS	WQ1b-C_042720_SW 10 DISSOLVED	EPA 9060A	D	0.4 mL					
180-105175-A-2 MSD	WQ1b-C_042720_SW 10 DISSOLVED	EPA 9060A	D	0.4 mL					
180-105175-B-4	WQ2-C_042720_SW 10 DISSOLVED	EPA 9060A	D						
180-105175-B-6	WQ3-L_042720_SW 10 DISSOLVED	EPA 9060A	D						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105175-1

SDG No.: _____

Batch Number: 315890 Batch Start Date: 05/18/20 18:34 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 05/19/20 03:46

Lab Sample ID	Client Sample ID	Method Chain	Basis	WTOC1000SP 00030					
180-105175-B-8	WQ1b-C_042720_SW 10_DUP DISSOLVED	EPA 9060A	D						
CCV 180-315890/14		EPA 9060A							

Batch Notes	
Batch Comment	pH strips: HC991818
Phosphoric Acid ID	3702199
Pipette/Syringe/Dispenser ID	B747014653, B747014865
Sodium Persulfate ID	3702200

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105175-1

SDG No.: _____

Batch Number: 314392 Batch Start Date: 05/01/20 15:16 Batch Analyst: Partridge, Angela G

Batch Method: SM 2540D Batch End Date: 05/02/20 18:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	CrucibleID	TareWeight	InitialAmount	Weight1	Weight2	WeightOne%Diff
LCS 180-314392/1		SM 2540D		fGT98 0.1180	0.1180 g	50 mL	0.1220 g	0.1220 g	PASS <0.5mg
MB 180-314392/2		SM 2540D		fGT97 0.1191	0.1191 g	1000 mL	0.1191 g	0.1191 g	PASS <0.5mg
180-105175-A-1	WQ1b-C_042720_SW 10 TOTAL	SM 2540D	T	fGT96 0.1180	0.1180 g	500 mL	0.1193 g	0.1191 g	PASS <0.5mg
180-105175-A-1 DU	WQ1b-C_042720_SW 10 TOTAL	SM 2540D	T	fGT95 0.1174	0.1174 g	500 mL	0.1184 g	0.1185 g	PASS <0.5mg
180-105175-A-3	WQ2-C_042720_SW_ 10 TOTAL	SM 2540D	T	fGT94 0.1183	0.1183 g	1000 mL	0.1250 g	0.1249 g	PASS <0.5mg
180-105175-A-5	WQ3-L_042720_SW_ 10 TOTAL	SM 2540D	T	fGT93 0.1173	0.1173 g	1000 mL	0.1234 g	0.1233 g	PASS <0.5mg
180-105175-A-7	WQ1b-C_042720_SW 10 DUF TOTAL	SM 2540D	T	fGT92 0.1181	0.1181 g	1000 mL	0.1232 g	0.1231 g	PASS <0.5mg

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue	Residue2	FinalAmount	ResDishWt	DishWeight	WResPSP 00067
LCS 180-314392/1		SM 2540D		0.004 g	0.004 g	1000 mL	0.122 g	0.118 g	50 mL
MB 180-314392/2		SM 2540D		0 g	0 g	1000 mL	0.1191 g	0.1191 g	
180-105175-A-1	WQ1b-C_042720_SW 10 TOTAL	SM 2540D	T	0.0013 g	0.0011 g	1000 mL	0.1191 g	0.118 g	
180-105175-A-1 DU	WQ1b-C_042720_SW 10 TOTAL	SM 2540D	T	0.001 g	0.0011 g	1000 mL	0.1185 g	0.1174 g	
180-105175-A-3	WQ2-C_042720_SW_ 10 TOTAL	SM 2540D	T	0.0067 g	0.0066 g	1000 mL	0.1249 g	0.1183 g	
180-105175-A-5	WQ3-L_042720_SW_ 10 TOTAL	SM 2540D	T	0.0061 g	0.006 g	1000 mL	0.1233 g	0.1173 g	
180-105175-A-7	WQ1b-C_042720_SW 10 DUF TOTAL	SM 2540D	T	0.0051 g	0.005 g	1000 mL	0.1231 g	0.1181 g	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105175-1

SDG No.: _____

Batch Number: 314392 Batch Start Date: 05/01/20 15:16 Batch Analyst: Partridge, Angela G

Batch Method: SM 2540D Batch End Date: 05/02/20 18:20

Batch Notes	
Balance ID	1126020829
Date/Time - In - CW (WT2)	05/02/2020 15:45
Date/Time - Out - CW (WT2)	04/30/2020 17:50
Temperature - Start - CW (WT2) - Correct	105 Celsius
Temperature - End - CW (WT2) - Correct	105 Celsius
Temperature - Start-CW(WT2) -Uncorrected	105 Celsius
Temperature - End-CW(WT2) -Uncorrected	105 Celsius
Temperature - Start - Corrected	105 Celsius
Temperature - End - Corrected	105 Celsius
Date/Time - In	05/01/2020 16:05
Date/Time - Out	05/02/2020 14:10
Filter ID	Environmental Express 600024-080-R1
Nominal Amount Used	1000 mL
Oven ID	EZ Bake
Perform Calculation (0=No, 1=Yes)	1
Thermometer ID	QA Backup #1
Temperature - Start - Uncorrected	105 Celsius
Temperature - End - Uncorrected	105 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TEST AMERICA
301 ALPHA DRIVE
PITTSBURGH, PA
15238

Date Prepared: 05/11/2020 By: TOC

Date Approved: 05082020C By:

9060
Batch # 315105
TMS 5/11/20

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	BLANK	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	2,479	0.903	0.376	552	22.28	Pass
2	ICV 40 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk Standard	1:1	00000000	TOC	211,657	97.079	40.449	4,041	1.91	Fail
3	ICB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk Standard	1:1	00000000	TOC	1,443	0.161	0.067	304	21.04	Fail
4	LCS 20 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk Standard	1:1	00000000	TOC	110,167	50.284	20.952	1,456	1.32	Fail
5	LCSD 20 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk Standard	1:1	00000000	TOC	105,702	48.225	20.093	1,549	1.47	Fail
6	MB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk Standard	1:1	00000000	TOC	816	0.000	0.000	21	2.60	Fail
7	180-105447-B-1	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	985	0.214	0.089	95	9.63	Pass
8	180-105145-R-1	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	7,610	3.269	1.362	625	8.21	Pass
9	180-105175-B-1	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	36,924	16.785	6.994	1,491	4.04	Pass
10	180-105175-C-1 MS	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	92,988	42.635	17.765	1,306	1.40	Pass
11	180-105175-C-1 MSD	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	92,692	42.499	17.708	1,959	2.11	Pass
12	180-105175-B-3	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	31,913	14.475	6.031	373	1.17	Pass
13	180-105175-C-5	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	19,212	8.619	3.591	753	3.92	Pass
14	CCV 10 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk Standard	1:1	00000000	TOC	56,406	25.496	10.623	593	1.05	Fail
15	CCB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk Standard	1:1	00000000	TOC	1,063	0.031	0.013	235	22.10	Fail
16	180-105175-B-7	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	36,965	16.804	7.002	939	2.54	Pass
17	180-105387-M-1	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	5,168	2.143	0.893	648	12.53	Pass
18	180-105387-M-2	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	9,914	4.332	1.805	818	8.25	Pass
19	180-105387-L-3	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	5,121	2.121	0.884	812	15.87	Pass
20	180-105387-M-4	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	10,343	4.529	1.887	648	6.27	Pass
21	180-105387-M-5	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	4,685	1.920	0.800	508	10.83	Pass
22	180-105387-M-6	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	9,824	4.290	1.788	391	3.98	Pass
23	180-105387-L-7	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	10,052	4.395	1.831	516	5.13	Pass

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15238
USA

Date Prepared: 05/11/2020 By: **TOC**
Date Approved: By:

Sample ID	Sample Name	Method	Concentration	Unit	Result	Pass/Fail				
50	GCV 10 PPM	TOC	4	4	47,415	21,212	8,838	6,982	14.82	Fail
51	CCB	TOC	4	4	280	0.000	0.000	309	110.34	Fail
52	180-105456-L-13	TOC	4	4	27,173	12,289	5.120	17,598	64.76	Pass
53	180-105456-L-14	TOC	4	4	21,932	9,873	4.114	22,409	102.18	Pass
54	180-105456-L-15	TOC	4	4	27,377	12,383	5.160	26,692	97.50	Pass
55	180-105456-L-16	TOC	4	4	30,710	13,920	5.800	11,377	37.05	Pass
56	180-105456-L-17	TOC	4	4	21,048	9,465	3.944	18,197	86.45	Pass
57	CCV 10 PPM	TOC	4	4	46,456	20,908	8.712	6,876	14.80	Fail
58	CCB	TOC	4	4	186	0.000	0.000	204	109.69	Fail

*Reds run
m shift*

TEST AMERICA
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 15238
 USA

Date Prepared: 05/11/2020

By:

TOC

Date Approved:

By:

Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 05/08/2020 Status: Pass
 Vial #: 1 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:25 pm	-	-	-	3,132	1,204	0.502
2	4:30 pm	-	-	-	2,080	0.719	0.300
3	4:37 pm	-	-	-	2,739	1,023	0.426
4	4:42 pm	-	-	-	1,967	0.667	0.277

Avg. - - - 2,479 0.903 0.376
 Std.Dev.
 % RSD. 22.28

Spl #: 2 Sample ID: ICV 40 PPM Type: Chk Standard Date: 05/08/2020 Status: Fail
 Vial #: 2 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:52 pm	-	-	-	216,324	99,231	41.346
2	4:58 pm	-	-	-	206,458	94,682	39.451
3	5:04 pm	-	-	-	212,045	97,258	40.524
4	5:10 pm	-	-	-	211,801	97,146	40.477

Avg. - - - 211,657 97,079 40.449
 Std.Dev.
 % RSD. 1.91

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By: **TOC**

Date Prepared: 05/11/2020

Date Approved:

Spl #: 3 Sample ID: ICB

Vial #: 3 Method: TOC MAR 2020 - Mar 03, 2021 Type: Dilution

Chk Standard: 05/08/2020
 Date: 1 : 1
 Customer ID: 00000000

Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:19 pm	-	-	-	1,773	0.306	0.127
2	5:25 pm	-	-	-	1,539	0.198	0.082
3	5:31 pm	-	-	-	1,415	0.140	0.059
4	5:36 pm	-	-	-	1,046	0.000	0.000
Avg.		-	-	-	1,443	0.161	0.067
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	21.04	-	-

Status: Fail

Spl #: 4 Sample ID: LCS 20 PPM Type: Chk Standard: 05/08/2020
 Vial #: 4 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:46 pm	-	-	-	108,795	49.652	20.688
2	5:52 pm	-	-	-	109,452	49.954	20.814
3	5:58 pm	-	-	-	112,156	51.201	21.334
4	6:04 pm	-	-	-	110,266	50.330	20.971
Avg.		-	-	-	110,167	50.284	20.952
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.32	-	-

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TOC

Date Prepared: 05/11/2020

By:

Date Approved:

By:

Status: Fail

Chk Standard Date: 05/08/2020
 Customer ID: 00000000

Type: Dilution 1 : 1

Sample ID: LCSD 20 PPM
 Method: TOC MAR 2020 - Mar 03, 2021

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:13 pm	-	-	-	106,982	48.815	20.340
2	6:19 pm	-	-	-	104,138	47.504	19.793
3	6:25 pm	-	-	-	107,083	48.862	20.359
4	6:30 pm	-	-	-	104,604	47.719	19.882
Avg.					105,702	48.225	20.093
Std.Dev.							
% RSD.							1.47

Status: Fail

Chk Standard Date: 05/08/2020
 Customer ID: 00000000

Type: Dilution 1 : 1

Sample ID: MB
 Method: TOC MAR 2020 - Mar 03, 2021

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:40 pm	-	-	-	787	0.000	0.000
2	6:46 pm	-	-	-	837	0.000	0.000
3	6:51 pm	-	-	-	824	0.000	0.000
4	6:57 pm	-	-	-	817	0.000	0.000
Avg.					816	0.000	0.000
Std.Dev.							
% RSD.							2.60

TEST AMERICA
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 PITTSBURGH, PA
 15238
 USA

TOC

Date Prepared: 05/11/2020

By:

Date Approved:

By:

Status: Pass

Date: 05/08/2020
 Customer ID: 00000000

Type: Sample
 Dilution 1 : 1

Sample ID #: 180-105447-B-1
 Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 7
 Vial #: 7

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:07 pm	-	-	-	1,091	0.263	0.110
2	7:12 pm	-	-	-	1,036	0.238	0.099
3	7:18 pm	-	-	-	892	0.172	0.072
4	7:24 pm	-	-	-	919	0.184	0.077
Avg.					985	0.214	0.089
Std.Dev.							
% RSD.					9.63		

Status: Pass

Date: 05/08/2020
 Customer ID: 00000000

Type: Sample
 Dilution 1 : 1

Sample ID #: 180-105145-R-1
 Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 8
 Vial #: 8

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:34 pm	-	-	-	7,739	3.328	1.387
2	7:40 pm	-	-	-	7,157	3.060	1.275
3	7:45 pm	-	-	-	8,441	3.652	1.522
4	7:51 pm	-	-	-	7,102	3.035	1.265
Avg.					7,610	3.269	1.362
Std.Dev.							
% RSD.					8.21		

TEST AMERICA
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 PITTSBURGH, PA
 15238
 USA

TOC

Date Prepared: 05/11/2020

By:

Date Approved:

By:

Status: Pass

Date: 05/08/2020
 Customer ID: 00000000

Sample Type: 1 : 1
 Dilution

Sample ID: 180-105175-B-1
 Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 9
 Vial #: 9

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:01 pm	-	-	-	36,758	16,709	6,961
2	8:07 pm	-	-	-	35,002	15,899	6,625
3	8:13 pm	-	-	-	38,589	17,553	7,314
4	8:18 pm	-	-	-	37,344	16,979	7,075
Avg.		-	-	-	36,924	16,785	6,994
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	4.04	-	-

Date: 05/08/2020
 Customer ID: 00000000

Sample Type: 1 : 1
 Dilution

Sample ID: 180-105175-C-1 MS
 Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 10
 Vial #: 10

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:28 pm	-	-	-	92,979	42,631	17,763
2	8:34 pm	-	-	-	91,809	42,092	17,538
3	8:39 pm	-	-	-	94,811	43,476	18,114
4	8:45 pm	-	-	-	92,352	42,342	17,643
Avg.		-	-	-	92,988	42,635	17,765
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.40	-	-

Status: Pass

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Date Prepared: 05/11/2020

By:

Date Approved:

By:

Spl #: 11 Sample ID: 180-105175-C-1 MSD Type: Sample
 Vial #: 11 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Date: 05/08/2020 Status: Pass
 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:55 pm	-	-	-	92,286	42,311	17,630
2	9:00 pm	-	-	-	90,528	41,501	17,292
3	9:06 pm	-	-	-	95,273	43,689	18,204
4	9:12 pm	-	-	-	92,680	42,493	17,705
Avg.					92,692	42,499	17,708
Std.Dev.							
% RSD.							2.11

Status: Pass

Spl #: 12 Sample ID: 180-105175-B-3 Type: Sample
 Vial #: 12 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Date: 05/08/2020 Status: Pass
 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:22 pm	-	-	-	31,865	14,453	6.022
2	9:27 pm	-	-	-	31,404	14,240	5.933
3	9:33 pm	-	-	-	32,195	14,605	6.085
4	9:39 pm	-	-	-	32,187	14,601	6.084
Avg.					31,913	14,475	6.031
Std.Dev.							
% RSD.							1.17

Status: Pass

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Date Prepared: 05/11/2020

By:

Date Approved:

By:

Status: Pass

Sample Date: 05/08/2020
Dilution: 1 : 1
Customer ID: 00000000

Spl #: 13
Vial #: 13
Sample ID: 180-105175-C-5
Method: TOC MAR 2020 - Mar 03, 2021

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:49 pm	-	-	-	18,840	8.447	3.520
2	9:54 pm	-	-	-	20,148	9.050	3.771
3	10:00 pm	-	-	-	18,418	8.252	3.438
4	10:06 pm	-	-	-	19,445	8.726	3.636
Avg.					19,212	8.619	3.591
Std.Dev.							
% RSD.							3.92

Spl #: 14
Vial #: 14
Sample ID: CCV 10 PPM
Method: TOC MAR 2020 - Mar 03, 2021

Type: Chk Standard
Dilution: 1 : 1

Date: 05/08/2020
Customer ID: 00000000

Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:16 pm	-	-	-	56,517	25.547	10.645
2	10:21 pm	-	-	-	56,168	25.386	10.578
3	10:27 pm	-	-	-	57,169	25.848	10.769
4	10:33 pm	-	-	-	55,770	25.203	10.501
Avg.					56,406	25.496	10.623
Std.Dev.							
% RSD.							1.05

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Date Prepared: 05/11/2020

By:

Date Approved:

By:

Spl #: 15 Sample ID: CCB Type: Chk Standard Date: 05/08/2020 Status: Fail
 Vial #: 15 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:43 pm	-	-	-	1,052	0.000	0.000
2	10:49 pm	-	-	-	1,001	0.000	0.000
3	10:54 pm	-	-	-	818	0.000	0.000
4	11:00 pm	-	-	-	1,381	0.125	0.052
Avg.		-	-	-	1,063	0.031	0.013
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	22.10	-	-

Spl #: 16 Sample ID: 180-105175-B-7 Type: Sample Date: 05/08/2020 Status: Pass
 Vial #: 16 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:10 pm	-	-	-	36,516	16.597	6.916
2	11:16 pm	-	-	-	36,105	16.407	6.836
3	11:21 pm	-	-	-	38,270	17.406	7.253
4	11:27 pm	-	-	-	36,968	16.806	7.002
Avg.		-	-	-	36,965	16.804	7.002
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.54	-	-

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Date Prepared: 05/11/2020

By:

Date Approved:

By:

Spl #: 17 Sample ID: 180-105387-M-1 Type: Sample Date: 05/08/2020 Status: Pass
 Vial #: 17 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:37 pm	-	-	-	5.558	2.323	0.968
2	11:43 pm	-	-	-	4.733	1.942	0.809
3	11:48 pm	-	-	-	5.866	2.465	1.027
4	11:54 pm	-	-	-	4.513	1.841	0.767
Avg.		-	-	-	5.168	2.143	0.893
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	12.53	-	-

Status: Pass

Spl #: 18 Sample ID: 180-105387-M-2 Type: Sample Date: 05/09/2020 Status: Pass
 Vial #: 18 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:04 am	-	-	-	10,701	4.694	1.956
2	12:10 am	-	-	-	8,970	3.896	1.623
3	12:15 am	-	-	-	10,486	4.595	1.915
4	12:21 am	-	-	-	9,501	4.141	1.725
Avg.		-	-	-	9,914	4.332	1.805
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	8.25	-	-

Status: Pass

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By:

Date Approved:

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Status: Pass

Sample ID: 180-105387-L-3
Method: TOC MAR 2020 - Mar 03, 2021
Type: Dilution
Date: 05/09/2020
Customer ID: 00000000

Spl #: 19
Vial #: 19

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:31 am	-	-	-	6,012	2.532	1.055
2	12:37 am	-	-	-	4,270	1.729	0.720
3	12:43 am	-	-	-	5,580	2.333	0.972
4	12:48 am	-	-	-	4,620	1.891	0.788
Avg.		-	-	-	5,121	2.121	0.884
Std.Dev.							
% RSD.		15.87					

Sample ID: 180-105387-M-4
Method: TOC MAR 2020 - Mar 03, 2021
Type: Dilution
Date: 05/09/2020
Customer ID: 00000000

Spl #: 20
Vial #: 20

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:58 am	-	-	-	10,567	4.633	1.930
2	1:04 am	-	-	-	9,703	4.234	1.764
3	1:10 am	-	-	-	11,148	4.900	2.042
4	1:16 am	-	-	-	9,953	4.349	1.812
Avg.		-	-	-	10,343	4.529	1.887
Std.Dev.							
% RSD.		6.27					

Status: Pass

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TOC

Date Prepared: 05/11/2020

By:

Date Approved:

By:

Status: Pass

Sample Date: 05/09/2020
Dilution 1 : 1
Customer ID: 00000000

Spl #: 21
Vial #: 21
Sample ID: 180-105387-M-5
Method: TOC MAR 2020 - Mar 03, 2021

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:25 am	-	-	-	5,276	2.193	0.914
2	1:31 am	-	-	-	4,380	1.780	0.742
3	1:37 am	-	-	-	4,922	2.030	0.846
4	1:43 am	-	-	-	4,162	1.679	0.700
Avg.					4,685	1.920	0.800
Std.Dev.							
% RSD.					10.83		

Spl #: 22
Vial #: 22
Sample ID: 180-105387-M-6
Method: TOC MAR 2020 - Mar 03, 2021

Type: Sample
Dilution 1 : 1

Date: 05/09/2020
Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:52 am	-	-	-	9,888	4.320	1.800
2	1:58 am	-	-	-	9,494	4.138	1.724
3	2:04 am	-	-	-	10,352	4.533	1.889
4	2:10 am	-	-	-	9,563	4.169	1.737
Avg.					9,824	4.290	1.788
Std.Dev.							
% RSD.					3.98		

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By:

Date Approved:

By:

Status: Pass

Sample ID: 180-105387-L-7
Method: TOC MAR 2020 - Mar 03, 2021
Type: Sample
Dilution: 1 : 1
Date: 05/09/2020
Customer ID: 00000000

Spl #: 23
Vial #: 23

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:19 am	-	-	-	10,154	4.442	1.851
2	2:25 am	-	-	-	9,395	4.092	1.705
3	2:31 am	-	-	-	10,649	4.670	1.946
4	2:37 am	-	-	-	10,011	4.376	1.823
Avg.		-	-	-	10,052	4.395	1.831
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	5.13	-	-

Spl #: 24
Vial #: 24

Sample ID: 180-105387-L-8
Method: TOC MAR 2020 - Mar 03, 2021
Type: Sample
Dilution: 1 : 1
Date: 05/09/2020
Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:46 am	-	-	-	7,128	3.047	1.270
2	2:52 am	-	-	-	5,668	2.374	0.988
3	2:58 am	-	-	-	7,049	3.010	1.254
4	3:04 am	-	-	-	6,270	2.651	1.105
Avg.		-	-	-	6,529	2.770	1.154
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	10.60	-	-

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Date Prepared: 05/11/2020 By:
 Date Approved: By:

Spl #: 25 Sample ID: 180-105387-L-9 Type: Sample Status: Pass
 Vial #: 25 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:13 am	-	-	-	5,345	2.225	0.926
2	3:19 am	-	-	-	4,540	1.853	0.772
3	3:25 am	-	-	-	5,693	2.385	0.994
4	3:31 am	-	-	-	4,672	1.914	0.798
Avg.		-	-	-	5,062	2,094	0.873
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	10.84	-	-

Spl #: 26 Sample ID: CCV 10 PPM Type: Chk Standard Date: 05/09/2020 Status: Fail
 Vial #: 26 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:40 am	-	-	-	54,681	24,701	10,292
2	3:46 am	-	-	-	53,047	23,947	9,977
3	3:52 am	-	-	-	53,439	24,128	10,053
4	3:58 am	-	-	-	52,744	23,807	9,920
Avg.		-	-	-	53,478	24,146	10,060
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.59	-	-

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Date Prepared: 05/11/2020

By:

Date Approved:

By:

Spl #: 27

Sample ID: CCB

Type:

Chk Standard

Date: 05/09/2020

Vial #: 27

Method: TOC MAR 2020 - Mar 03, 2021

Dilution

Customer ID: 00000000

Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:07 am	-	-	-	590	0.000	0.000
2	4:13 am	-	-	-	979	0.000	0.000
3	4:19 am	-	-	-	909	0.000	0.000
4	4:24 am	-	-	-	683	0.000	0.000

Avg. Std.Dev. % RSD.

790 0.000 0.000
23.25

Spl #: 28

Sample ID: 180-105331-M-1

Type:

Sample

Date: 05/09/2020

Vial #: 28

Method: TOC MAR 2020 - Mar 03, 2021

Dilution

Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:35 am	-	-	-	4,722	1.937	0.807
2	4:40 am	-	-	-	3,690	1.462	0.609
3	4:46 am	-	-	-	4,726	1.939	0.807
4	4:52 am	-	-	-	3,870	1.545	0.644

Avg. Std.Dev. % RSD.

4,252 1.721 0.717
12.93

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By: *IOC*

Date Prepared: 05/11/2020

Date Approved:

Spl #: 29 Sample ID: 180-105331-L-2 Type: Sample
Vial #: 29 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1
Customer ID: 00000000 Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:02 am	-	-	-	6,147	2,595	1.081
2	5:07 am	-	-	-	4,573	1,869	0.779
3	5:13 am	-	-	-	6,599	2,803	1.168
4	5:19 am	-	-	-	5,743	2,408	1.003
Avg.		-	-	-	5,765	2,418	1.008
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	15.07	-	-

Status: Pass

Spl #: 30 Sample ID: 180-105331-L-3 Type: Sample
Vial #: 30 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1
Customer ID: 00000000 Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:29 am	-	-	-	5,203	2,159	0.900
2	5:35 am	-	-	-	3,847	1,534	0.639
3	5:40 am	-	-	-	4,521	1,845	0.769
4	5:46 am	-	-	-	3,953	1,583	0.660
Avg.		-	-	-	4,381	1,780	0.742
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	14.22	-	-

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Date Prepared: 05/11/2020 By: **TOC**

Date Approved: By:
 Status: Fail
 Customer ID: 00000000

Spl #: 31 Sample ID: LCS 20 PPM Type: Chk Standard Date: 05/09/2020
 Vial #: 31 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:56 am	-	-	-	108,982	49.738	20.724
2	6:02 am	-	-	-	110,289	50.341	20.975
3	6:08 am	-	-	-	112,673	51.440	21.433
4	6:13 am	-	-	-	109,263	49.867	20.778
Avg.		-	-	-	110,302	50.346	20.978
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.52	-	-

Spl #: 32 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 05/09/2020
 Vial #: 32 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:23 am	-	-	-	105,851	48.294	20.123
2	6:29 am	-	-	-	107,444	49.029	20.429
3	6:35 am	-	-	-	110,297	50.344	20.977
4	6:41 am	-	-	-	109,213	49.844	20.768
Avg.		-	-	-	108,201	49.378	20.574
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.81	-	-

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By: **TOC**

Date Prepared: 05/11/2020

Date Approved: By:

Spl #: 33 Sample ID: MB
 Vial #: 33 Method: TOC MAR 2020 - Mar 03, 2021 Type: Chk Standard Date: 05/09/2020 Status: Fail
 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:50 am	-	-	-	639	0.000	0.000
2	6:55 am	-	-	-	708	0.000	0.000
3	7:02 am	-	-	-	995	0.000	0.000
4	7:08 am	-	-	-	862	0.000	0.000
Avg.		-	-	-	801	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	19.92

Status: Pass

Spl #: 34 Sample ID: 180-105331-L-4
 Vial #: 34 Method: TOC MAR 2020 - Mar 03, 2021 Type: Sample Date: 05/09/2020
 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:17 am	-	-	-	13,013	5.760	2.400
2	7:23 am	-	-	-	13,528	5.998	2.499
3	7:29 am	-	-	-	15,406	6.864	2.860
4	7:35 am	-	-	-	15,398	6.860	2.858
Avg.		-	-	-	14,336	6.370	2.654
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	8.71

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Date Prepared: 05/11/2020 By:
Date Approved: By:

Status: Pass

Date: 05/09/2020
Customer ID: 00000000

Type: Sample
Dilution 1 : 1

Sample ID : 180-105405-V-1
Method : TOC MAR 2020 - Mar 03, 2021

Spl #: 35
Vial #: 35

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:44 am	-	-	-	9,441	4.113	1.714
2	7:50 am	-	-	-	7,855	3.382	1.409
3	7:56 am	-	-	-	9,766	4.263	1.776
4	8:02 am	-	-	-	6,839	2.913	1.214

Avg. - - - - - 8,475 3.668 1.528
Std.Dev.
% RSD. 16.21

Status: Pass

Date: 05/09/2020
Customer ID: 00000000

Type: Sample
Dilution 1 : 1

Sample ID : 180-105456-M-1
Method : TOC MAR 2020 - Mar 03, 2021

Spl #: 36
Vial #: 36

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:11 am	-	-	-	38,180	17.364	7.235
2	8:17 am	-	-	-	10,880	4.777	1.990
3	8:23 am	-	-	-	48,595	22.167	9.236
4	8:29 am	-	-	-	11,317	4.978	2.074

Avg. - - - - - 27,243 12.321 5.134
Std.Dev.
% RSD. 70.19

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Date Prepared: 05/11/2020 By: **TOC**

Date Approved: By: Status: Pass

Spl #: 37 Sample ID: 180-105456-M-2 Type: Sample
 Vial #: 37 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:38 am	-	-	-	41,993	19.122	7.968
2	8:44 am	-	-	-	12,002	5.294	2.206
3	8:50 am	-	-	-	42,500	19.356	8.065
4	8:56 am	-	-	-	11,656	5.135	2.139
Avg.		-	-	-	27,038	12.227	5.094
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	64.96	-	-

Spl #: 38 Sample ID: CCV 10 PPM Type: Chk Standard Date: 05/09/2020
 Vial #: 38 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:06 am	-	-	-	34,823	15.544	6.477
2	9:11 am	-	-	-	52,042	23.484	9.785
3	9:17 am	-	-	-	36,881	16.493	6.872
4	9:23 am	-	-	-	53,049	23.948	9.978
Avg.		-	-	-	44,199	19.867	8.278
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	21.91	-	-

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Date Prepared: 05/11/2020 By: *TOC*
 Date Approved: By:

Spl #: 39 Sample ID: CCB Type: Chk Standard Date: 05/09/2020 Status: Fail
 Vial #: 39 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:31 am	-	-	-	0	0.000	0.000
2	9:38 am	-	-	-	561	0.000	0.000
3	9:43 am	-	-	-	13	0.000	0.000
4	9:50 am	-	-	-	826	0.000	0.000
Avg.		-	-	-	350	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	117.53	-	-

Spl #: 40 Sample ID: 180-105456-M-3 Type: Sample Date: 05/09/2020 Status: Pass
 Vial #: 40 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:59 am	-	-	-	34,859	15.833	6.597
2	10:05 am	-	-	-	11,181	4.915	2.048
3	10:10 am	-	-	-	44,059	20.075	8.365
4	10:16 am	-	-	-	11,713	5.161	2.150
Avg.		-	-	-	25.453	11.496	4.790
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	65.24	-	-

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Date Prepared: 05/11/2020 By: *TOC*
 Date Approved: By:

Spl #: 41 Sample ID: 180-105456-L-4 Type: Sample Status: Pass
 Vial #: 41 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:26 am	-	-	-	40,316	18,349	7.646
2	10:32 am	-	-	-	12,353	5,456	2.273
3	10:38 am	-	-	-	43,165	19,663	8.193
4	10:43 am	-	-	-	12,777	5,651	2.355
Avg.		-	-	-	27,153	12,280	5.117
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	62.19	-	-

Spl #: 42 Sample ID: 180-105456-L-5 Type: Sample Status: Pass
 Vial #: 42 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:53 am	-	-	-	40,348	18,364	7.652
2	10:59 am	-	-	-	11,830	5,215	2.173
3	11:05 am	-	-	-	40,085	18,243	7.601
4	11:11 am	-	-	-	12,016	5,301	2.209
Avg.		-	-	-	26,070	11,781	4.909
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	62.66	-	-

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Date Prepared: 05/11/2020

By: **TOC**

Date Approved:

By:

Spl #: 43 Sample ID: 180-105456-L-6 Type: Sample
Vial #: 43 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1
Customer ID: 00000000 Date: 05/09/2020
Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:20 am	-	-	-	41,905	19,082	7.951
2	11:26 am	-	-	-	11,553	5,087	2.120
3	11:32 am	-	-	-	40,782	18,564	7.735
4	11:38 am	-	-	-	12,181	5,377	2.240
Avg.		-	-	-	26,605	12,027	5.011
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	64.00	-	-

Date: 05/09/2020
Customer ID: 00000000

Status: Pass

Spl #: 44 Sample ID: 180-105456-M-7 Type: Sample
Vial #: 44 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:47 am	-	-	-	28,969	13,117	5.466
2	11:53 am	-	-	-	9,505	4,143	1.726
3	11:59 am	-	-	-	27,168	12,287	5.120
4	12:05 pm	-	-	-	9,909	4,329	1.804
Avg.		-	-	-	18,888	8,469	3.529
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	56.27	-	-

Date: 05/09/2020
Customer ID: 00000000

Status: Pass

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TOC

Date Prepared: 05/11/2020 By:
Date Approved: By:

Status: Pass

Date: 05/09/2020
Customer ID: 00000000

Sample Type: 1 : 1
Dilution

Sample ID: 180-105456-L-8
Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 45
Vial #: 45

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:14 pm	-	-	-	27,392	12,390	5,163
2	12:20 pm	-	-	-	18,192	8,148	3,395
3	12:26 pm	-	-	-	29,393	13,313	5,547
4	12:32 pm	-	-	-	18,767	8,413	3,506
Avg.					23,436	10,566	4,403
Std.Dev.							
% RSD.					24.69		

Status: Pass

Date: 05/09/2020
Customer ID: 00000000

Sample Type: 1 : 1
Dilution

Sample ID: 180-105456-M-9
Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 46
Vial #: 46

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:41 pm	-	-	-	33,878	15,381	6,409
2	12:47 pm	-	-	-	4,675	1,916	0,798
3	12:53 pm	-	-	-	35,386	16,076	6,698
4	12:59 pm	-	-	-	4,507	1,838	0,766
Avg.					19,611	8,803	3,668
Std.Dev.							
% RSD.					88.50		

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Date Prepared: 05/11/2020 By: **IOC**
 Date Approved: By:

Spl #: 47 Sample ID: 180-105456-M-10 Type: Sample Status: Pass
 Vial #: 47 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:09 pm	-	-	-	30,346	13.752	5.730
2	1:14 pm	-	-	-	4,610	1.886	0.786
3	1:20 pm	-	-	-	39,560	18.001	7.500
4	1:26 pm	-	-	-	4,674	1.916	0.798
Avg.					19,798	8.889	3.704
Std.Dev.							
% RSD.							90.41

Spl #: 48 Sample ID: 180-105456-L-11 Type: Sample Status: Pass
 Vial #: 48 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:36 pm	-	-	-	39,505	17.975	7.490
2	1:42 pm	-	-	-	23,809	10.738	4.474
3	1:48 pm	-	-	-	43,344	19.745	8.227
4	1:53 pm	-	-	-	24,964	11.271	4.696
Avg.					32,905	14.932	6.222
Std.Dev.							
% RSD.							30.31

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Date Prepared: 05/11/2020 By:
Date Approved: By:

Status: Pass

Date: 05/09/2020
Customer ID: 00000000

Type: Sample
Dilution 1 : 1

Sample ID : 180-105456-M-12
Method : TOC MAR 2020 - Mar 03, 2021

Spl #: 49
Vial #: 49

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:03 pm	-	-	-	51,034	23,291	9,705
2	2:09 pm	-	-	-	34,476	15,656	6,524
3	2:15 pm	-	-	-	58,491	26,729	11,137
4	2:20 pm	-	-	-	34,282	15,567	6,486
Avg.		-	-	-	44,571	20,311	8,463
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	27.27	-	-

Spl #: 50
Vial #: 50
Sample ID : CCV 10 PPM
Method : TOC MAR 2020 - Mar 03, 2021
Type : Chk Standard
Dilution 1 : 1
Date: 05/09/2020
Customer ID: 00000000
Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:30 pm	-	-	-	39,848	17,861	7,442
2	2:36 pm	-	-	-	52,646	23,762	9,901
3	2:42 pm	-	-	-	42,444	19,058	7,941
4	2:48 pm	-	-	-	53,521	24,166	10,069
Avg.		-	-	-	47,115	21,212	8,838
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	14.82	-	-

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Date Prepared: 05/11/2020 By:
 Date Approved: By:

Status: Fail

Sample ID: CCB
 Method: TOC MAR 2020 - Mar 03, 2021
 Type: Chk Standard
 Dilution: 1 : 1
 Date: 05/09/2020
 Customer ID: 00000000

Spl #: 51
 Vial #: 51

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:56 pm	-	-	-	4	0.000	0.000
2	3:03 pm	-	-	-	667	0.000	0.000
3	3:07 pm	-	-	-	59	0.000	0.000
4	3:14 pm	-	-	-	391	0.000	0.000
Avg.		-	-	-	280	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	110.34	-	-

Spl #: 52
 Vial #: 52
 Sample ID: 180-105456-L-13
 Method: TOC MAR 2020 - Mar 03, 2021
 Type: Sample
 Dilution: 1 : 1
 Date: 05/09/2020
 Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:23 pm	-	-	-	42,683	19.440	8.100
2	3:29 pm	-	-	-	11,581	5.100	2.124
3	3:35 pm	-	-	-	42,136	19.188	7.995
4	3:41 pm	-	-	-	12,292	5.428	2.262
Avg.		-	-	-	27,173	12.289	5.120
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	64.76	-	-

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TOC

Date Prepared: 05/11/2020 By:
Date Approved: By:

Status: Pass

Date: 05/09/2020
Customer ID: 00000000

Type: Sample
Dilution 1 : 1

Sample ID: 180-105456-L-14
Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 53
Vial #: 53

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:51 pm	-	-	-	41,291	18,799	7.833
2	3:56 pm	-	-	-	2,464	0.897	0.374
3	4:02 pm	-	-	-	41,388	18,843	7.851
4	4:08 pm	-	-	-	2,586	0.952	0.397
Avg.		-	-	-	21,932	9.873	4.114
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	102.18	-	-

Date: 05/09/2020
Customer ID: 00000000

Type: Sample
Dilution 1 : 1

Sample ID: 180-105456-L-15
Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 54
Vial #: 54

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:18 pm	-	-	-	49,109	22,404	9.335
2	4:23 pm	-	-	-	4,167	1.682	0.701
3	4:29 pm	-	-	-	51,838	23,662	9.858
4	4:35 pm	-	-	-	4,396	1.787	0.745
Avg.		-	-	-	27,377	12.383	5.160
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	97.50	-	-

Status: Pass

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Date Prepared: 05/11/2020 By: *TOC*

Date Approved: By:

Spl #: 55 Sample ID: 180-105456-L-16 Type: Sample Status: Pass
 Vial #: 55 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:45 pm	-	-	-	41,725	18,999	7.916
2	4:51 pm	-	-	-	20,466	9,197	3.832
3	4:57 pm	-	-	-	39,317	17,889	7.454
4	5:02 pm	-	-	-	21,333	9,597	3.999
Avg.		-	-	-	30,710	13,920	5.800
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	37.05	-	-

Spl #: 56 Sample ID: 180-105456-L-17 Type: Sample Status: Pass
 Vial #: 56 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:12 pm	-	-	-	36,870	16,760	6.983
2	5:18 pm	-	-	-	4,985	2,063	0.860
3	5:24 pm	-	-	-	36,741	16,701	6.959
4	5:30 pm	-	-	-	5,587	2,336	0.973
Avg.		-	-	-	21,048	9,465	3.944
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	86.45	-	-

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By: **IOC**

Date Prepared: 05/11/2020

Date Approved: By:

Spl #: 57 Sample ID: CCV 10 PPM Type: Chk Standard Date: 05/09/2020 Status: Fail
 Vial #: 57 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:39 pm	-	-	-	40,830	18.314	7.631
2	5:45 pm	-	-	-	52,551	23.718	9.883
3	5:51 pm	-	-	-	40,183	18.016	7.507
4	5:57 pm	-	-	-	52,260	23.584	9.827
Avg.		-	-	-	46,456	20.908	8.712
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	14.80	-	-

Spl #: 58 Sample ID: CCB Type: Chk Standard Date: 05/09/2020 Status: Fail
 Vial #: 58 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:05 pm	-	-	-	0	0.000	0.000
2	6:12 pm	-	-	-	406	0.000	0.000
3	6:17 pm	-	-	-	25	0.000	0.000
4	6:23 pm	-	-	-	315	0.000	0.000
Avg.		-	-	-	186	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	109.69	-	-

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Date Prepared: 05/11/2020 By: *TOC*
 Date Approved: By:

Method Summary

Method Details

Method Name: TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM

Date Created: 03/03/2020
 Time Created: 16:44
 Created By: toc

Analysis Mode: NPOC Only
Sparging Mode: Internal
Pre-Acid Volume (mL): 1.000
Spurge Time (mm:ss): 02:00

Volumes
 Sample Volume (mL): 2.400
 Acid Volume (mL): 1.000
 Persulfate Volume(mL): 1.500

Other
 SysPressure: 20.00

Pre-Processing
 Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1

Outlier Removal Criteria
 Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses
 Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

Max. Std. Dev. 100 Use Modified Oxidant: No

Times
 React 01:30
 Detect 03:00
 Temp TIC
 React 02:00
 Detect 03:00
 Temp TOC
 React 70
 Detect 70
 React 98
 Detect 98

Calibration Summary

Calibration Generation
 Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Mode
 Primary Mode: TOC
 User for ALL Modes: Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.950	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

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Date Prepared: 05/11/2020

By:

TOC

Date Approved:

By:

Calibration Details

Calibration Mode: TOC
 Date Calibrated: 04/20/2020
 Time Calibrated: 8:30 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.4611
 R2: 0.9998
 R: 0.9999
 QC Blank(cts): 2,518
 Offset (cts): 396
 Offset (ugC): -0.183
 Reagent Blank (cts): 520
 Units of Measure: PPM->mg/L C

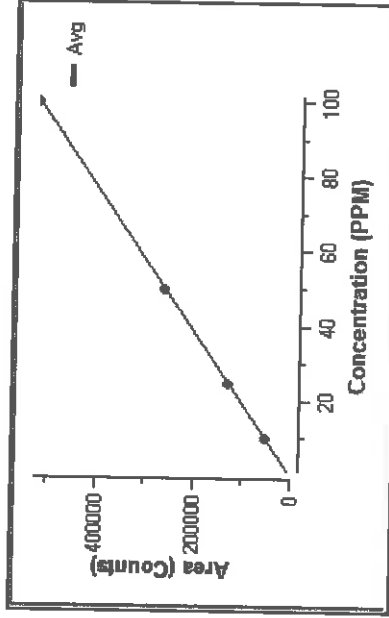
Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

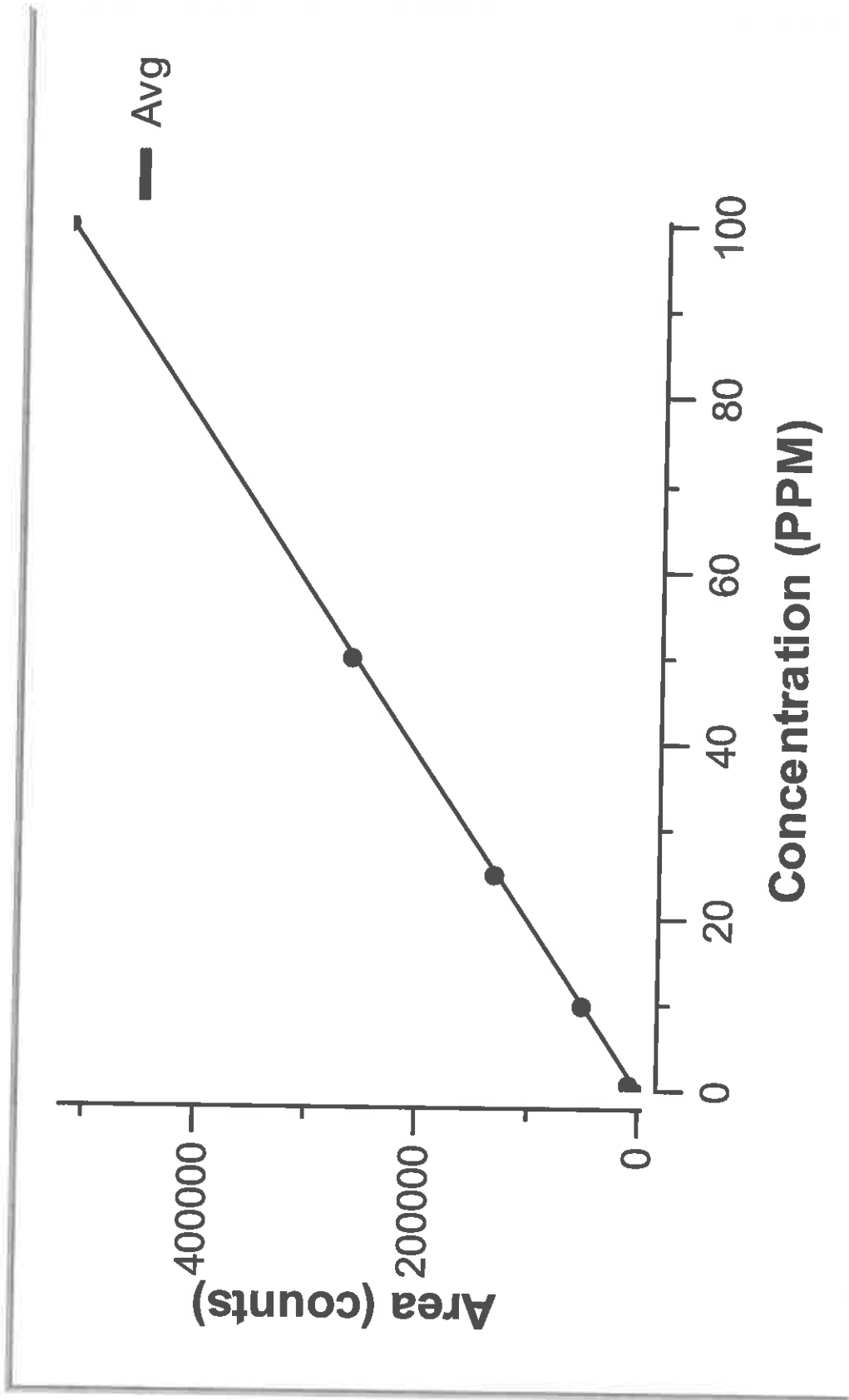
$$\text{Concentration} = \frac{\text{RF} \times \text{Area}}{1000 \times \text{volume}}$$

Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RB}
 CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RW}
 QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$$y = m \times x + b$$

$$y \Rightarrow \text{Area} \quad m \Rightarrow \frac{1000}{\text{RF} \times \text{volume}} \quad b \Rightarrow 0$$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 3-TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Modified By: toc
 Date Created: 2020/03/03; 04:44 PM
 Last Modified: 2020/04/20; 08:12 PM
 Last Calibrated: 2020/04/20; 08:12 PM

RF(ugC/k-cnt): 0.4611
 R2: 0.9998
 Reagent Blank(cts): 520
 Offset Area(cts): 396
 Offset Mass(ugC): -0.18

Std #	Conc (PPM)	Volume (mL)	# Repts	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	1,110	91	8.20	2020-04-20; 06:42PM
1	1.000	2.400	2	6,162	245	3.97	2020-04-20; 07:05PM
2	10.000	2.400	2	51,501	1,188	2.31	2020-04-20; 07:20PM
3	25.000	2.400	2	129,190	3,585	2.77	2020-04-20; 07:36PM
4	50.000	2.400	2	261,823	2,632	1.01	2020-04-20; 07:51PM
5	100.000	2.400	2	520,750	6,782	1.30	2020-04-20; 08:06PM

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TOC

Date Prepared: 04/21/2020 By:
 Date Approved: By:

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	DI WATER	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	1,570	0.883	0.368	218	13.91	Pass
2	BLANK	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	1,078	0.606	0.253	39	3.64	Pass
3	TOC-RW	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	1,110	0.000	0.000	91	8.20	
4	TOC-Std#1-1.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	6,162	2.400	1.000	245	3.97	
5	TOC-Std#2-10.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	51,501	24.000	10.000	1,188	2.31	
6	TOC-Std#3-25.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	129,190	60.000	25.000	3,585	2.77	
7	TOC-Std#4-50.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	261,823	120.000	50.000	2,632	1.01	
8	TOC-Std#5-100.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	520,750	240.000	100.000	6,782	1.30	
9	QC BLANK	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	QC Blank	1:1	00000000	TOC	2,518	0.000	0.000	1,686	66.94	

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 Date Approved: By:

Sample Results

Spl #: 1 Sample ID: DI WATER Type: Sample Date: 04/20/2020 Status: Pass
 Vial #: 1 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:08 pm	-	-	-	1,804	1.015	0.423
2	5:14 pm	-	-	-	1,473	0.828	0.345
3	5:19 pm	-	-	-	1,687	0.949	0.395
4	5:25 pm	-	-	-	1,315	0.739	0.307
Avg.					1,570	0.883	0.368
Std.Dev.							
% RSD.					13.91		

Spl #: 2 Sample ID: BLANK Type: Sample Date: 04/20/2020 Status: Pass
 Vial #: 2 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:34 pm	-	-	-	1,105	0.621	0.259
2	5:40 pm	-	-	-	1,050	0.590	0.246
Avg.					1,078	0.606	0.253
Std.Dev.							
% RSD.					3.64		

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Date Prepared: 04/21/2020 By:
 Date Approved: By:

Spl #: 4 Sample ID: TOC-RW Type: Std
 Vial #: 3 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Date: 04/20/2020 Status:
 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:42 pm	-	-	-	1,357	0.000	0.000
2	6:47 pm	-	-	-	1,046	0.000	0.000
3	6:58 pm	-	-	-	1,174	0.000	0.000
Avg.		-	-	-	1,110	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	8.20	-	-

Spl #: 5 Sample ID: TOC-Std#1-1.000 PPM Type: Std
 Vial #: 4 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Date: 04/20/2020 Status:
 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:05 pm	-	-	-	5,989	2.400	1.000
2	7:11 pm	-	-	-	6,335	2.400	1.000
Avg.		-	-	-	6,162	2.400	1.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	3.97	-	-

Spl #: 6 Sample ID: TOC-Std#2-10.000 PPM Type: Std
 Vial #: 5 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Date: 04/20/2020 Status:
 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:20 pm	-	-	-	50,661	24.000	10.000
2	7:26 pm	-	-	-	52,341	24.000	10.000
Avg.		-	-	-	51,501	24.000	10.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.31	-	-

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Date Prepared: 04/21/2020

By:

Date Approved:

By:

Spl #: 7 Sample ID: TOC-Std#3-25.000 PPM Type: Std
Vial #: 6 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1
Date: 04/20/2020
Customer ID: 00000000 Status:

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:36 pm	-	-	-	126,655	60.000	25.000
2	7:41 pm	-	-	-	131,724	60.000	25.000
Avg.		-	-	-	129,190	60.000	25.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.77	-	-

Spl #: 8 Sample ID: TOC-Std#4-50.000 PPM Type: Std
Vial #: 7 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1
Date: 04/20/2020
Customer ID: 00000000 Status:

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:51 pm	-	-	-	259,962	120.000	50.000
2	7:57 pm	-	-	-	263,684	120.000	50.000
Avg.		-	-	-	261,823	120.000	50.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.01	-	-

Spl #: 9 Sample ID: TOC-Std#5-100.000 PPM Type: Std
Vial #: 8 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1
Date: 04/20/2020
Customer ID: 00000000 Status:

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:06 pm	-	-	-	515,955	240.000	100.000
2	8:12 pm	-	-	-	525,546	240.000	100.000
Avg.		-	-	-	520,750	240.000	100.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.30	-	-

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Date Prepared: 04/21/2020

By:

Date Approved:

By:

Spl #: 10 Sample ID: QC BLANK Type: QC Blank Date: 04/20/2020 Status:
 Vial #: 9 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:24 pm	-	-	-	3,711	0.000	0.000
2	8:30 pm	-	-	-	1,326	0.000	0.000
Avg.		-	-	-	2,518	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	66.94	-	-

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Date Prepared: 04/21/2020 By:
 Date Approved: By:

TOC

Method Summary

Method Details

Method Name: TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Date Created: 03/03/2020
 Time Created: 16:44
 Created By: toc
 Analysis Mode: NPOC Only
 Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00
 Disabled: Automatic
 Dilution Mode: 1 : 1
 Dilution Factor: 10.00
 Outlier Removal Criteria Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00
 Rinse Volumes
 Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0
 Max. Std. Dev. 100
 Use Modified Oxidant: No

Times
 TIC 03:00 Detect
 TOC 03:00 Detect
 React 01:30
 React 02:00
 Temp
 TIC 70
 TOC 98
 Detect 70
 Detect 98

Calibration Summary

Calibration Generation

Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.950	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC
 User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

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Date Prepared: 04/21/2020 By: **TOC**

Date Approved: By:

Calibration Details

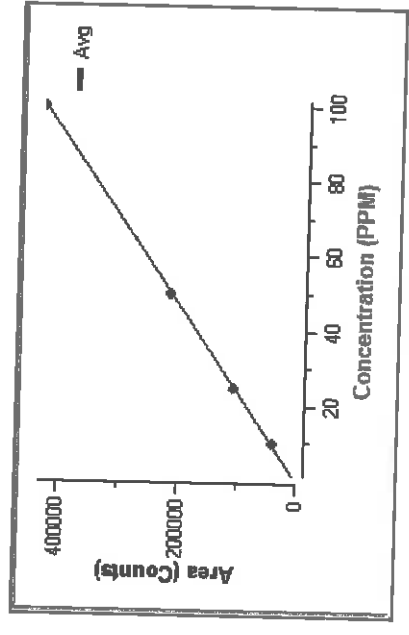
Calibration Mode: TOC
 Date Calibrated: 04/16/2020
 Time Calibrated: 12:14 am
 Calibrated By: toc
 RF (ugC/k-cts): 0.5631
 R2: 0.9997
 R: 0.9998
 QC Blank(cts): 4.067
 Offset (cts): -356
 Offset (ugC): 0.201
 Reagent Blank (cts): 2
 Units of Measure: PPM->mg/LC

Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

$Concentration = \frac{RF \times Area}{volume}$
 Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{QC}
 Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{QC}
 Area = Area_{Peak} - Area_{QCBlank}



$y = m \times x + b$
 $m \Rightarrow \frac{1000}{RF \times volume}$ $b \Rightarrow 0$

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TOC

Date Prepared: 04/21/2020 By:
 Date Approved: 15238 By:

Calibration Details

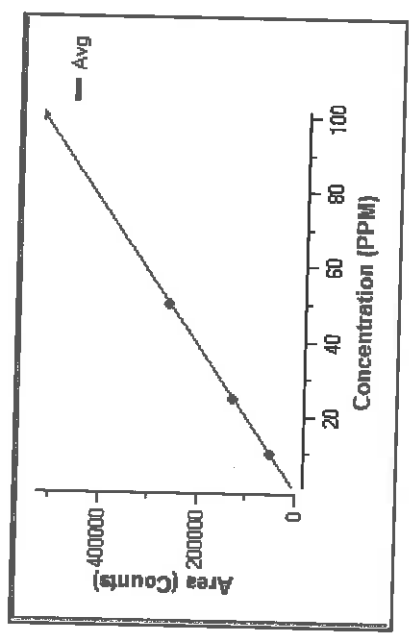
Calibration Mode: TOC
 Date Calibrated: 04/20/2020
 Time Calibrated: 8:12 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.4611
 R2: 0.9998
 R: 0.9999
 QC Blank(cts): 0
 Offset (cts): 396
 Offset (ugC): -0.183
 Reagent Blank (cts): 520
 Units of Measure: PPM->mg/L C

Calibration Settings

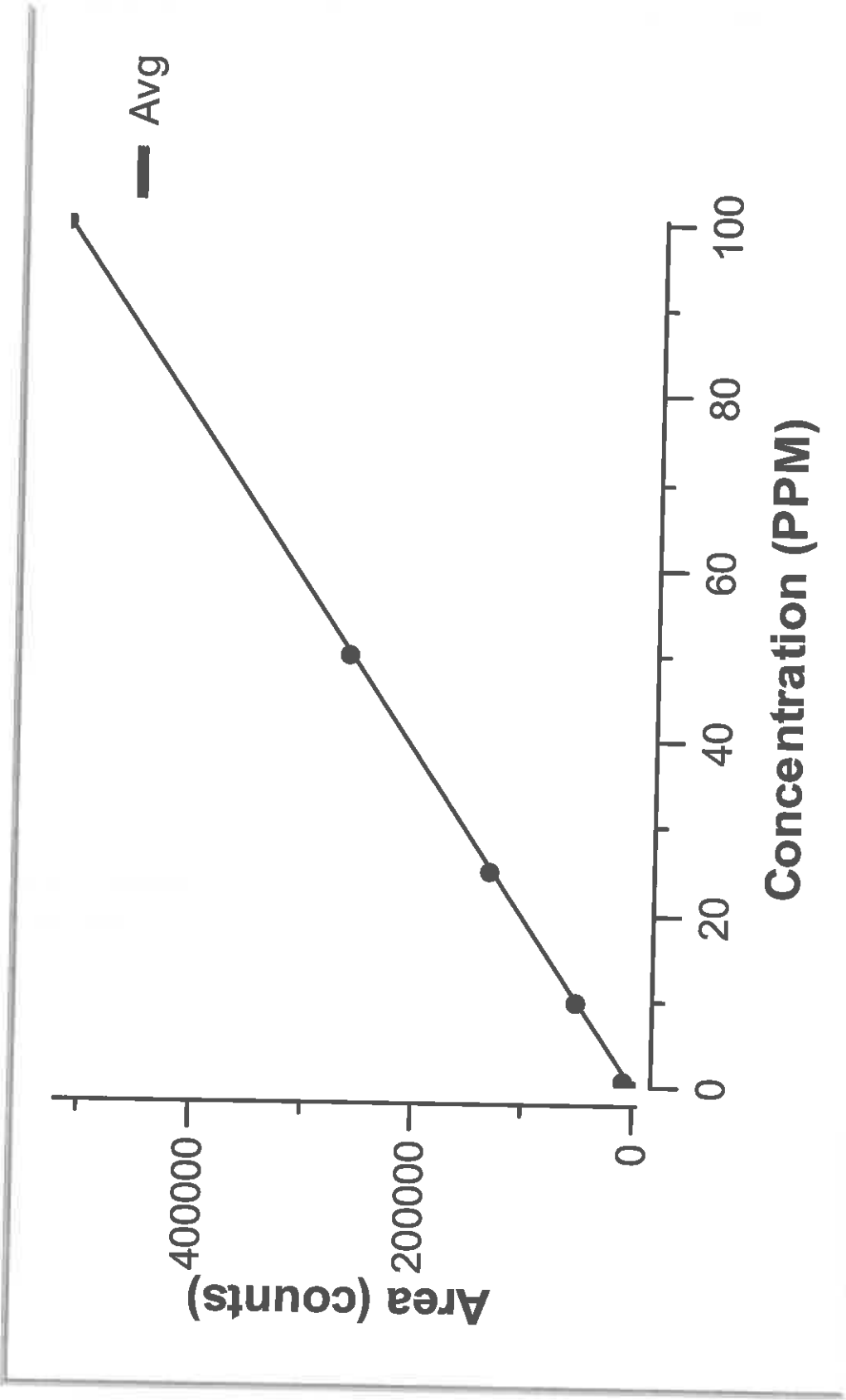
Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

$Concentration = \frac{RF \times Area}{1000 \times volume}$
 Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{QC}
 Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RW}
 Area = Area_{Peak} - Area_{QCBlank}



$y \Rightarrow Area$
 $y = m \times x + b$
 $m \Rightarrow \frac{1000}{RF \times volume}$
 $b \Rightarrow 0$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 3-TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Modified By: toc
 Date Created: 2020/03/03; 04:44 PM
 Last Modified: 2020/04/20; 08:12 PM
 Last Calibrated: 2020/04/20; 08:12 PM

RF(ugC/k-cnt): 0.4611
 R2: 0.9998
 Reagent Blank(cts): 520
 Offset Area(cts): 396
 Offset Mass(ugC): -0.18

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	1,110	91	8.20	2020-04-20; 06:42PM
1	1.000	2.400	2	6,162	245	3.97	2020-04-20; 07:05PM
2	10.000	2.400	2	51,501	1,188	2.31	2020-04-20; 07:20PM
3	25.000	2.400	2	129,190	3,585	2.77	2020-04-20; 07:36PM
4	50.000	2.400	2	261,823	2,632	1.01	2020-04-20; 07:51PM
5	100.000	2.400	2	520,750	6,782	1.30	2020-04-20; 08:06PM

TM 4/20/20

5310C/9060A TOC %Readback Error Calculation Spreadsheet

ICAL Std (ppm)	ICAL RF	ICAL ID	Average Area	Result (ppm)	%Readback Error	%Readback Criteria
1.000	0.4611	042020TOCCAL	6162	1.184	18.387	≤50%
10.000	0.4611	042020TOCCAL	51501	9.895	-1.054	≤20%
25.000	0.4611	042020TOCCAL	129190	24.821	-0.717	≤20%
50.000	0.4611	042020TOCCAL	261823	50.303	0.605	≤20%
100.000	0.4611	042020TOCCAL	520750	100.049	0.049	≤20%

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Date Prepared: 05/19/2020 By: *TOC*

Date Approved: *051820 Doc B* By: *TM 5/19/20*

DC1030
9060-Diss Batch # *315890*

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	BLANK	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	796	0.252	0.105	368	46.22	Pass
2	ICV 40 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk	1:1	00000000	TOC	169,229	93.766	39.069	4,358	2.58	Fail
3	ICB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	753	0.192	0.080	236	31.39	Fail
4	LCS 20 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	82,989	45.867	19.111	1,888	2.27	Fail
5	LCSD 20 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	86,084	47.586	19.828	2,139	2.48	Fail
6	MB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	721	0.175	0.073	174	24.18	Fail
7	180-105175-B-2	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Sample	1:1	00000000	TOC	26,914	14.758	6.149	963	3.58	Pass
8	180-105175-B-2 MS	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	69,231	38.261	15.942	1,073	1.55	Pass
9	180-105175-A-2 MSD	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	69,926	38.647	16.103	1,588	2.27	Pass
10	180-105175-B-4	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	23,595	12.914	5.381	337	1.43	Pass
11	180-105175-B-6	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	14,863	8.084	3.361	359	2.41	Pass
12	180-105175-B-8	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	27,264	14.952	6.230	685	2.51	Pass
13	180-105307-B-2	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	7,940	4.219	1.758	442	5.57	Pass
14	CCV 10 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk	1:1	00000000	TOC	42,739	23.512	9.796	588	1.38	Fail
15	CCB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	630	0.124	0.052	56	8.84	Fail
16	180-105307-B-4	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Sample	1:1	00000000	TOC	9,342	4.998	2.083	413	4.42	Pass
17	180-105307-B-6	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	9,706	5.200	2.167	394	4.06	Pass
18	180-105307-A-8	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	24,826	13.598	5.666	911	3.67	Pass
19	180-105307-B-10	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	31,667	17.398	7.249	841	2.66	Pass
20	CCV 10 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk	1:1	00000000	TOC	41,052	22.575	9.406	578	1.41	Fail
21	CCB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	671	0.147	0.061	167	24.92	Fail

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Date Prepared: 05/19/2020 By:
 Date Approved: By:

TOC

Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 05/18/2020 Status: Pass
 Vial #: 1 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:34 pm	-	-	-	938	0.330	0.138
2	6:39 pm	-	-	-	521	0.099	0.041
3	6:46 pm	-	-	-	1,251	0.504	0.210
4	6:50 pm	-	-	-	475	0.073	0.031
Avg.		-	-	-	796	0.252	0.105
Std.Dev.							
% RSD.		46.22					

Spl #: 2 Sample ID: ICV 40 PPM Type: Chk Standard Date: 05/18/2020 Status: Fail
 Vial #: 2 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:00 pm	-	-	-	163,044	90.331	37.638
2	7:06 pm	-	-	-	172,353	95.501	39.792
3	7:12 pm	-	-	-	169,295	93.803	39.084
4	7:18 pm	-	-	-	172,225	95.430	39.762
Avg.		-	-	-	169,229	93.766	39.069
Std.Dev.							
% RSD.		2.58					

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Date Prepared: 05/19/2020 By: **TOC**

Date Approved: By: Status: Fail

Spl #: 3 Sample ID: ICB Type: Chk Standard: Date: 05/18/2020
 Vial #: 3 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:27 pm	-	-	-	990	0.324	0.134
2	7:33 pm	-	-	-	907	0.278	0.116
3	7:38 pm	-	-	-	628	0.123	0.051
4	7:44 pm	-	-	-	485	0.043	0.018
Avg.		-	-	-	753	0.192	0.080
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	31.39	-	-

Spl #: 4 Sample ID: LCS 20 PPM Type: Chk Standard: Date: 05/18/2020
 Vial #: 4 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:53 pm	-	-	-	81,443	45.008	18.754
2	7:59 pm	-	-	-	85,546	47.287	19.703
3	8:05 pm	-	-	-	81,692	45.147	18.811
4	8:11 pm	-	-	-	83,273	46.025	19.176
Avg.		-	-	-	82,989	45.867	19.111
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.27	-	-

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TOC

Date Prepared: 05/19/2020 By:
Date Approved: By:

Status: Fail

Sample ID: LCSD 20 PPM
Method: TOC MAR 2020 - Mar 03, 2021
Type: Chk Standard
Dilution: 1 : 1
Date: 05/18/2020
Customer ID: 00000000

Spl #: 5
Vial #: 5

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:20 pm	-	-	-	83,622	46.219	19.258
2	8:26 pm	-	-	-	88,793	49.090	20.454
3	8:32 pm	-	-	-	85,573	47.302	19.709
4	8:37 pm	-	-	-	86,349	47.733	19.889
Avg.		-	-	-	86,084	47.586	19.828
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.48	-	-

Status: Fail

Sample ID: MB
Method: TOC MAR 2020 - Mar 03, 2021
Type: Chk Standard
Dilution: 1 : 1
Date: 05/18/2020
Customer ID: 00000000

Spl #: 6
Vial #: 6

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:47 pm	-	-	-	910	0.279	0.116
2	8:52 pm	-	-	-	747	0.189	0.079
3	8:58 pm	-	-	-	740	0.185	0.077
4	9:04 pm	-	-	-	488	0.045	0.019
Avg.		-	-	-	721	0.175	0.073
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	24.18	-	-

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TOC

Date Prepared: 05/19/2020

By:

Date Approved:

By:

Status: Pass

Date: 05/18/2020
 Customer ID: 00000000

Sample Type: 1 : 1
 Dilution

Sample ID: 180-105175-B-2
 Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 7
 Vial #: 7

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:13 pm	-	-	-	25,549	14,000	5.833
2	9:19 pm	-	-	-	26,992	14,801	6.167
3	9:25 pm	-	-	-	27,355	15,003	6.251
4	9:31 pm	-	-	-	27,761	15,228	6.345
Avg.		-	-	-	26,914	14,758	6.149
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	3.58	-	-

Date: 05/18/2020
 Customer ID: 00000000

Sample Type: 1 : 1
 Dilution

Sample ID: 180-105175-B-2 MS
 Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 8
 Vial #: 8

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:40 pm	-	-	-	67,749	37,438	15.599
2	9:46 pm	-	-	-	69,379	38,343	15.976
3	9:52 pm	-	-	-	69,482	38,401	16.000
4	9:57 pm	-	-	-	70,315	38,863	16.193
Avg.		-	-	-	69,231	38,261	15.942
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.55	-	-

Status: Pass

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By:

Date Approved:

By:

Status: Pass

Sample ID: 180-105175-A-2 MSD
Method: TOC MAR 2020 - Mar 03, 2021
Type: Dilution 1 : 1
Date: 05/18/2020
Customer ID: 00000000

Spl #: 9
Vial #: 9

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:07 pm	-	-	-	67,988	37.571	15.655
2	10:13 pm	-	-	-	69,691	38.517	16.049
3	10:19 pm	-	-	-	70,177	38.787	16.161
4	10:24 pm	-	-	-	71,847	39.714	16.548

Avg. 69.926
Std.Dev. 38.647
% RSD. 16.103
2.27

Status: Pass

Sample ID: 180-105175-B-4
Method: TOC MAR 2020 - Mar 03, 2021
Type: Dilution 1 : 1
Date: 05/18/2020
Customer ID: 00000000

Spl #: 10
Vial #: 10

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:34 pm	-	-	-	23,370	12.790	5.329
2	10:40 pm	-	-	-	24,041	13.162	5.484
3	10:46 pm	-	-	-	23,301	12.751	5.313
4	10:51 pm	-	-	-	23,666	12.954	5.398

Avg. 23.595
Std.Dev. 12.914
% RSD. 5.381
1.43

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Date Prepared: 05/19/2020 By: **TOC**
 Date Approved: By:

Spl #: 11 Sample ID: 180-105175-B-6 Type: Sample Date: 05/18/2020 Status: Pass
 Vial #: 11 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:02 pm	-	-	-	14,868	8.068	3.362
2	11:07 pm	-	-	-	15,326	8.322	3.468
3	11:13 pm	-	-	-	14,804	8.032	3.347
4	11:19 pm	-	-	-	14,453	7.837	3.265
Avg.		-	-	-	14,863	8.064	3.361
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.41	-	-

Spl #: 12 Sample ID: 180-105175-B-8 Type: Sample Date: 05/18/2020 Status: Pass
 Vial #: 12 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:28 pm	-	-	-	26,273	14.402	6.001
2	11:34 pm	-	-	-	27,678	15.182	6.326
3	11:39 pm	-	-	-	27,763	15.229	6.346
4	11:45 pm	-	-	-	27,342	14.995	6.248
Avg.		-	-	-	27,264	14.952	6.230
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.51	-	-

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Date Prepared: 05/19/2020 By: **TOC**

Date Approved: By: Status: Pass

Spl #: 13 Sample ID: 180-105307-B-2 Type: Sample Date: 05/19/2020
 Vial #: 13 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:55 pm	-	-	-	7,565	4,011	1,671
2	12:01 am	-	-	-	8,574	4,572	1,905
3	12:07 am	-	-	-	7,879	4,186	1,744
4	12:13 am	-	-	-	7,741	4,109	1,712
Avg.		-	-	-	7,940	4,219	1,758
Std.Dev.							
% RSD.					5.57		

Spl #: 14 Sample ID: CCV 10 PPM Type: Chk Standard Date: 05/19/2020
 Vial #: 14 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:21 am	-	-	-	41,939	23,067	9,611
2	12:27 am	-	-	-	43,350	23,851	9,938
3	12:33 am	-	-	-	42,886	23,593	9,831
4	12:39 am	-	-	-	42,781	23,535	9,806
Avg.		-	-	-	42,739	23,512	9,796
Std.Dev.							
% RSD.					1.38		

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Date Prepared: 05/19/2020

By:

Date Approved:

By:

Spl #: 15 Sample ID: CCB Type: Chk Standard: Date: 05/19/2020 Status: Fail
 Vial #: 15 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:48 am	-	-	-	700	0.163	0.068
2	12:54 am	-	-	-	614	0.115	0.048
3	12:59 am	-	-	-	639	0.129	0.054
4	1:05 am	-	-	-	566	0.088	0.037
Avg.		-	-	-	630	0.124	0.052
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	8.84	-	-

Status: Pass

Spl #: 16 Sample ID: 180-105307-B-4 Type: Sample Date: 05/19/2020
 Vial #: 16 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:15 am	-	-	-	8,921	4.764	1.985
2	1:21 am	-	-	-	9,588	5.135	2.140
3	1:27 am	-	-	-	9,069	4.847	2.020
4	1:32 am	-	-	-	9,789	5.246	2.186
Avg.		-	-	-	9,342	4.998	2.083
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	4.42	-	-

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Date Prepared: 05/19/2020

By:

Date Approved:

By:

Spl #: 17 Sample ID: 180-105307-B-6 Type: Sample Date: 05/19/2020 Status: Pass
 Vial #: 17 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:42 am	-	-	-	9,129	4.880	2.033
2	1:48 am	-	-	-	10,010	5.369	2.237
3	1:54 am	-	-	-	9,885	5.300	2.208
4	1:59 am	-	-	-	9,799	5.252	2.188
Avg.		-	-	-	9,706	5.200	2.167
Std.Dev.							
% RSD.		4.06					

Spl #: 18 Sample ID: 180-105307-A-8 Type: Sample Date: 05/19/2020 Status: Pass
 Vial #: 18 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:08 am	-	-	-	23,787	13.021	5.425
2	2:14 am	-	-	-	25,429	13.933	5.805
3	2:19 am	-	-	-	24,355	13.337	5.557
4	2:25 am	-	-	-	25,735	14.103	5.876
Avg.		-	-	-	24,826	13.598	5.666
Std.Dev.							
% RSD.		3.67					

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Date Prepared: 05/19/2020 By:

Date Approved: By:

Spl #: 19 Sample ID: 180-105307-B-10 Type: Sample Date: 05/19/2020 Status: Pass
 Vial #: 19 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:35 am	-	-	-	30,655	16,836	7,015
2	2:41 am	-	-	-	31,757	17,448	7,269
3	2:47 am	-	-	-	31,550	17,333	7,222
4	2:52 am	-	-	-	32,705	17,974	7,489
Avg.					31,667	17,398	7,249
Std.Dev.							
% RSD.							2.66

Spl #: 20 Sample ID: CCV 10 PPM Type: Chk Standard Date: 05/19/2020 Status: Fail
 Vial #: 20 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:02 am	-	-	-	40,334	22,176	9,239
2	3:08 am	-	-	-	41,634	22,898	9,541
3	3:13 am	-	-	-	40,855	22,465	9,361
4	3:19 am	-	-	-	41,385	22,760	9,483
Avg.					41,052	22,575	9,406
Std.Dev.							
% RSD.							1.41

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TOC

Date Prepared: 05/19/2020

By:

Date Approved:

By:

Spl #: 21

Sample ID: CCB

Type:

Chk Standard Date: 05/19/2020

Status: Fail

Method: TOC MAR 2020 - Mar 03, 2021

Dilution

Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:28 am	-	-	-	869	0.256	0.107
2	3:34 am	-	-	-	678	0.151	0.063
3	3:40 am	-	-	-	677	0.150	0.063
4	3:46 am	-	-	-	460	0.029	0.012

Avg.

Std.Dev.

% RSD.

671

0.147

0.061

24.92

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Date Prepared: 05/19/2020

By: TOC

Date Approved:

By:

Method Summary

Method Details

Method Name: TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Date Created: 03/03/2020
 Time Created: 16:44
 Created By: toc

Analysis Mode: NPOC Only
 Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00

Volumes
 Sample Volume (mL): 2.400
 Acid Volume (mL): 1.000
 Persulfate Volume(mL): 1.500

Other
 SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

Max. Std. Dev. 100 Use Modified Oxidant: No

Temp
 React 70
 Detect 70
 TIC
 TOC 98
 Detect 98

Times
 React 01:30
 Detect 03:00
 TIC
 TOC 03:00

Calibration Summary

Calibration Generation

Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.950	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC
 User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

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TOC

Date Prepared: 05/19/2020 By:

Date Approved: By:

Calibration Details

Calibration Mode: TOC
 Date Calibrated: 05/15/2020
 Time Calibrated: 6:14 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5554
 R2: 0.9981
 R: 0.9990
 QC Blank(cts): 3.948
 Offset (cts): -1456
 Offset (ugC): 0.809
 Reagent Blank (cts): 343
 Units of Measure: PPM->mg/L C

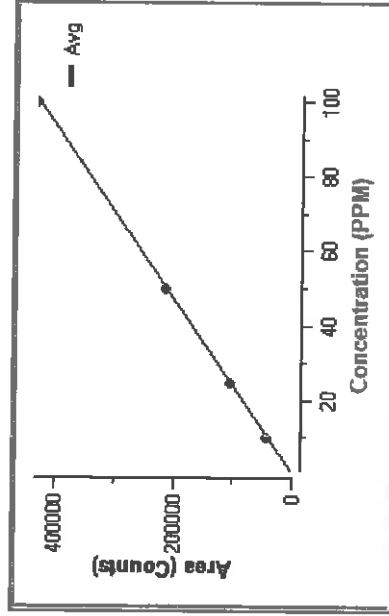
Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

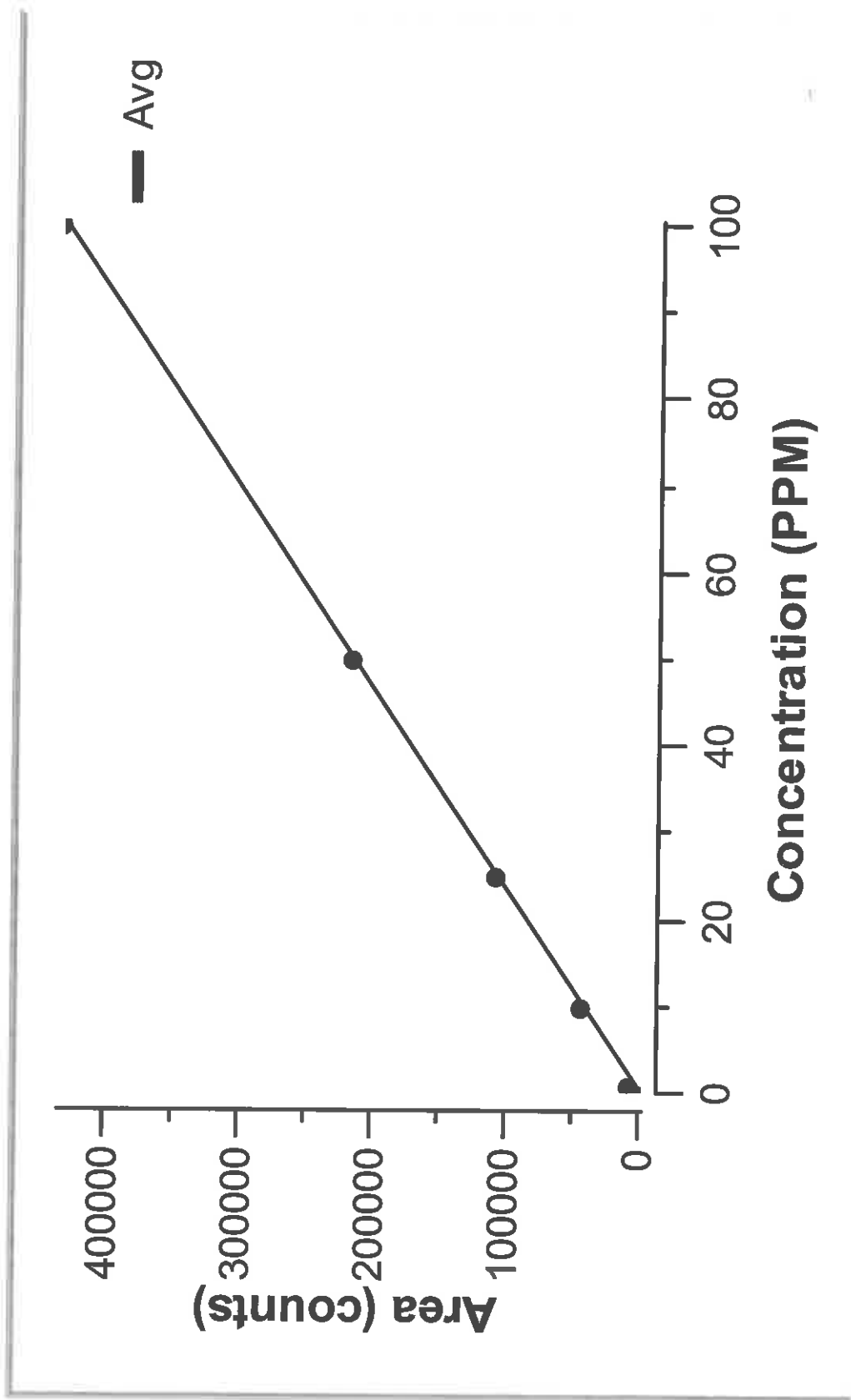
$$\text{Concentration} = \frac{\text{RF} \times \text{Area}}{\text{volume}}$$

Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RB}
 CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RW}
 QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$$y = m \times x + b$$

$$y \Rightarrow \text{Area} \quad m \Rightarrow \frac{1000}{\text{RF} \times \text{volume}} \quad b \Rightarrow 0$$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 5-TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Modified By: toc
 Date Created: 2020/03/03; 04:44 PM
 Last Modified: 2020/05/15; 05:54 PM
 Last Calibrated: 2020/05/15; 05:54 PM

RF(ugC/k-cnt): 0.5554

R2: 0.9981

Reagent Blank(cts): 343

Offset Area(cts): -1,456

Offset Mass(ugC): 0.81

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	408	10	2.46	2020-05-15; 04:25PM
1	1.000	2.400	2	4,450	70	1.58	2020-05-15; 04:48PM
2	10.000	2.400	2	41,019	1,860	4.53	2020-05-15; 05:02PM
3	25.000	2.400	2	103,906	3,785	3.64	2020-05-15; 05:18PM
4	50.000	2.400	2	213,059	9,408	4.42	2020-05-15; 05:33PM
5	100.000	2.400	2	432,151	19,878	4.60	2020-05-15; 05:48PM

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TOC

Date Prepared: 05/15/2020 By:
 Date Approved: By:

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	DI WATER	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	1,879	0.800	0.333	475	25.29	Pass
2	BLANK	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	1,026	0.333	0.138	250	24.40	Pass
3	TOC-RW	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	408	0.000	0.000	10	2.46	
4	TOC-Std#1-1.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	4,450	2.400	1.000	70	1.58	
5	TOC-Std#2-10.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	41,019	24.000	10.000	1,860	4.53	
6	TOC-Std#3-25.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	103,906	60.000	25.000	3,785	3.64	
7	TOC-Std#4-50.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	213,059	120.000	50.000	9,408	4.42	
8	TOC-Std#5-100.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1:1	00000000	TOC	432,151	240.000	100.000	19,878	4.60	
9	QC BLANK	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	QC Blank	1:1	00000000	TOC	3,948	0.000	0.000	2,110	53.43	

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Date Prepared: 05/15/2020

By: **TOC**

Date Approved:

By:

Sample Results

Spl #: 1 Sample ID: DI WATER Type: Sample Date: 05/15/2020 Status: Pass
 Vial #: 1 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:05 pm	-	-	-	2,461	1,118	0.466
2	3:11 pm	-	-	-	1,823	0.769	0.320
3	3:17 pm	-	-	-	1,931	0.828	0.345
4	3:22 pm	-	-	-	1,302	0.483	0.201

Avg. 1,879 0.800 0.333
 Std.Dev.
 % RSD. 25.29

Spl #: 2 Sample ID: BLANK Type: Sample Date: 05/15/2020 Status: Pass
 Vial #: 2 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:31 pm	-	-	-	1,203	0.429	0.178
2	3:37 pm	-	-	-	849	0.236	0.098

Avg. 1,026 0.333 0.138
 Std.Dev.
 % RSD. 24.40

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 PITTSBURGH, PA
 15238
 USA

By: **TOC**

Date Prepared: 05/15/2020

Date Approved:

By:

Spl #: 4 Sample ID: TOC-RW Type: Std Date: 05/15/2020 Status:
 Vial #: 3 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	4:25 pm	-	-	-	949	0.000	0.000	
2	4:31 pm	-	-	-	401	0.000	0.000	
3	4:40 pm	-	-	-	415	0.000	0.000	
Avg.		-	-	-	408	0.000	0.000	
Std.Dev.								2.46
% RSD.								

Spl #: 5 Sample ID: TOC-Std#1-1.000 PPM Type: Std Date: 05/15/2020 Status:
 Vial #: 4 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	4:48 pm	-	-	-	4,400	2,400	1,000	
2	4:54 pm	-	-	-	4,500	2,400	1,000	
Avg.		-	-	-	4,450	2,400	1,000	
Std.Dev.								1.58
% RSD.								

Spl #: 6 Sample ID: TOC-Std#2-10.000 PPM Type: Std Date: 05/15/2020 Status:
 Vial #: 5 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:02 pm	-	-	-	39,704	24,000	10,000	
2	5:08 pm	-	-	-	42,335	24,000	10,000	
Avg.		-	-	-	41,019	24,000	10,000	
Std.Dev.								4.53
% RSD.								

Date Prepared: 05/15/2020

By:

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15238
USA

Date Approved:

By:

Status:

Spl #: 7 Sample ID: TOC-Std#3-25.000 PPM Type: Std Date: 05/15/2020
Vial #: 6 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:18 pm	-	-	-	101,230	60.000	25.000	
2	5:23 pm	-	-	-	106,583	60.000	25.000	
Avg.		-	-	-	103,906	60.000	25.000	
Std.Dev.							3.64	
% RSD.								

Status:

Spl #: 8 Sample ID: TOC-Std#4-50.000 PPM Type: Std Date: 05/15/2020
Vial #: 7 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:33 pm	-	-	-	206,406	120.000	50.000	
2	5:39 pm	-	-	-	219,711	120.000	50.000	
Avg.		-	-	-	213,059	120.000	50.000	
Std.Dev.							4.42	
% RSD.								

Status:

Spl #: 9 Sample ID: TOC-Std#5-100.000 PPM Type: Std Date: 05/15/2020
Vial #: 8 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:48 pm	-	-	-	418,096	240.000	100.000	
2	5:54 pm	-	-	-	446,207	240.000	100.000	
Avg.		-	-	-	432,151	240.000	100.000	
Std.Dev.							4.60	
% RSD.								

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TOC

Date Prepared: 05/15/2020 By:

Date Approved: By:

Spl #: 10 Sample ID: QC BLANK Type: QC Blank Date: 05/15/2020 Status:
 Vial #: 9 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:08 pm	-	-	-	5,440	0.000	0.000
2	6:13 pm	-	-	-	2,456	0.000	0.000

Avg. - - - 3,948 0.000 0.000
 Std.Dev. 53.43
 % RSD.

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Date Prepared: 05/15/2020 By:
Date Approved: By:

TOC

Method Summary

Method Details

Method Name: TOC MAR 2020 - Mar 03,
2020; 04-44-41 PM
Date Created: 03/03/2020
Time Created: 16:44
Created By: toc

Analysis Mode: NPOC Only
Sparging Mode: Internal
Pre-Acid Volume (mL): 1.000
Spurge Time (mm:ss): 02:00

Volumes
Sample Volume (mL): 2.400
Acid Volume (mL): 1.000
Persulfate Volume(mL): 1.500

Other
SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled
Dilution Mode: Automatic
Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No
Additional Replicates: 1
Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
Rinses Per Sample: 1
Rinses Per Replicate: 0

Max. Std. Dev.

100 Use Modified Oxidant: No

Temp
React 70 98
Detect 03:00 03:00
TIC
TOC

Detect

React

Temp

Detect

React

Times

Disabled

Automatic

TOC MAR 2020 - Mar 03,
2020; 04-44-41 PM

Method Name:

Date Created:

Time Created:

Created By:

Analysis Mode:

Sparging Mode:

Pre-Acid Volume (mL):

Spurge Time (mm:ss):

Volumes

Sample Volume (mL):

Acid Volume (mL):

Persulfate Volume(mL):

Other

SysPressure:

Calibration Summary

Calibration Generation

Generation Mode: Manual
of Stds: 5
Dilution Factor: 10 : 1
Dilution Volume (mL): 1.000
Add Zero as Std #1: No

Calibration Mode

Primary Mode: TOC
User for ALL Modes: Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.950	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

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 PITTSBURGH, PA.
 15238
 USA

TOC

Date Prepared: 05/15/2020 By:
 Date Approved: 15238 By:

Calibration Details

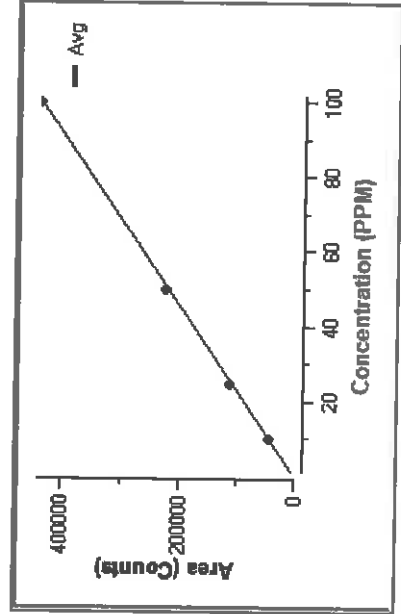
Calibration Mode: TOC
 Date Calibrated: 05/13/2020
 Time Calibrated: 7:18 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5476
 R2: 0.9996
 R: 0.9998
 QC Blank(cts): 497
 Offset (cts): 863
 Offset (ugC): -0.472
 Reagent Blank (cts): 419
 Units of Measure: PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

$Concentration = \frac{RF \times Area}{1000 \times volume}$
 Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{qig}
 CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{qRW}
 QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$y \Rightarrow Area$ $y = m \times x + b$
 $m \Rightarrow \frac{1000}{RF \times volume}$ $b \Rightarrow 0$

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 USA

Date Prepared: 05/15/2020 By:
 Date Approved: By:

TOC

Calibration Details

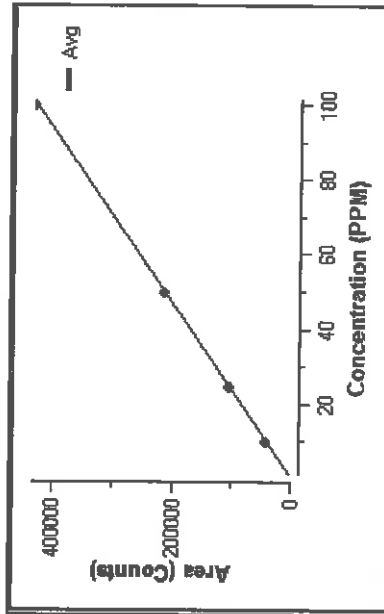
Calibration Mode: TOC
 Date Calibrated: 05/15/2020
 Time Calibrated: 5:54 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5554
 R2: 0.9981
 R: 0.9990
 QC Blank(cts): 0
 Offset (cts): -1456
 Offset (ugC): 0.809
 Reagent Blank (cts): 343
 Units of Measure: PPM->mg/L C

Calibration Settings

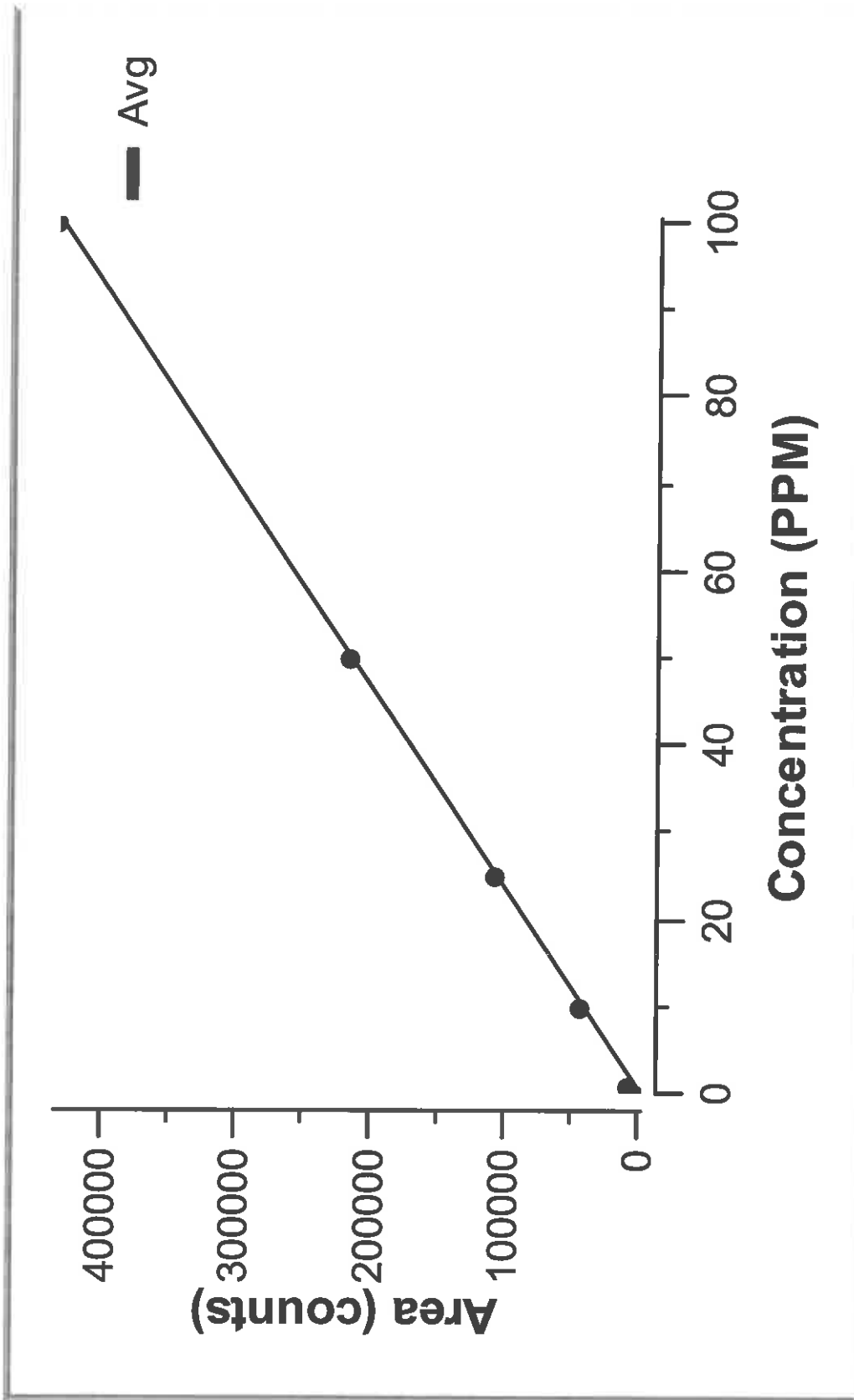
Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

$Concentration = \frac{RF \times Area}{1000 \times volume}$
 Samples: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RB}$
 CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RW}$
 QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$y \Rightarrow Area$ $y = m \times x + b$
 $m \Rightarrow \frac{1000}{RF \times volume}$ $b \Rightarrow 0$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 5-TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Modified By: toc
 Date Created: 2020/03/03; 04:44 PM
 Last Modified: 2020/05/15; 05:54 PM
 Last Calibrated: 2020/05/15; 05:54 PM

RF(ugC/k-cnt): 0.5554
 R2: 0.9981
 Reagent Blank(cts): 343
 Offset Area(cts): -1,456
 Offset Mass(ugC): 0.81

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	408	10	2.46	2020-05-15; 04:25PM
1	1.000	2.400	2	4,450	70	1.58	2020-05-15; 04:48PM
2	10.000	2.400	2	41,019	1,860	4.53	2020-05-15; 05:02PM
3	25.000	2.400	2	103,906	3,785	3.64	2020-05-15; 05:18PM
4	50.000	2.400	2	213,059	9,408	4.42	2020-05-15; 05:33PM
5	100.000	2.400	2	432,151	19,878	4.60	2020-05-15; 05:48PM

TMS/15/20

5310C/9060A TOC %Readback Error Calculation Spreadsheet

ICAL Std (ppm)	ICAL RF	ICAL ID	Average Area	Result (ppm)	%Readback Error	%Readback Criteria
1.000	0.5554	051520TOCCAL	4150	1.030	2.980	≤50%
10.000	0.5554	051520TOCCAL	41091	9.509	-4.909	≤20%
25.000	0.5554	051520TOCCAL	103906	24.046	-3.818	≤20%
50.000	0.5554	051520TOCCAL	213059	49.305	-1.389	≤20%
100.000	0.5554	051520TOCCAL	432151	100.007	0.007	≤20%

Shipping and Receiving Documents

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, Inc.
0D00074

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310
Fax: (000) 000-0000
Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Eurofins TestAmerica - Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone :4129637058
Fax: 4129632468

Analysis	Comments
----------	----------

Sample ID: WQ1b-C_042720_SW_10 TOTAL

EFGS Lab ID: 0D00074-01 **Matrix: Water**

Sampled: 27-Apr-20 14:25 (GMT-08:00) Pacific Time (US &

Due: 28-May-20 19:00

MS/MSD

Misc. Subcontract 5 **SM 2450D**

Misc. Subcontract 4 **EPA 9060**

Containers Supplied:

Sample ID: WQ1b-C_042720_SW_10 DISSOLVED

EFGS Lab ID: 0D00074-02 **Matrix: Water**

Sampled: 27-Apr-20 14:25 (GMT-08:00) Pacific Time (US &

Due: 28-May-20 19:00

MS/MSD

Misc. Subcontract 4 **EPA 9060**

Containers Supplied:

40 mL Amber Glass Vial (I) 40 mL Amber Glass Vial (J) 40 mL Amber Glass Vial (K) 40 mL Amber Glass Vial (L) 40 mL Amber Glass Vial (M)
40 mL Amber Glass Vial (N)

Sample ID: WQ2-C_042720_SW_10 TOTAL

EFGS Lab ID: 0D00074-03 **Matrix: Water**

Sampled: 27-Apr-20 15:45 (GMT-08:00) Pacific Time (US &

Due: 28-May-20 19:00

Misc. Subcontract 5 **SM 2450D**

Misc. Subcontract 4 **EPA 9060**

Containers Supplied:

Released By	Date	Received By	Date
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Released By	Date	Received By	Date
-------------	------	-------------	------

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, Inc.
0D00074

Analysis	Comments
-----------------	-----------------

Sample ID: WQ2-C_042720_SW_10 DISSOLVED

EFGS Lab ID: 0D00074-04 **Matrix: Water**

Sampled: 27-Apr-20 15:45 (GMT-08:00) Pacific Time (US &

Due: 28-May-20 19:00

Misc. Subcontract 4 **EPA 9060**

Containers Supplied:

40 mL Amber Glass Vial (C) 40 mL Amber Glass Vial (D)

Sample ID: WQ3-L_042720_SW_10 TOTAL

EFGS Lab ID: 0D00074-05 **Matrix: Water**

Sampled: 27-Apr-20 17:00 (GMT-08:00) Pacific Time (US &

Due: 28-May-20 19:00

Misc. Subcontract 5 **SM 2450D**

Misc. Subcontract 4 **EPA 9060**

Containers Supplied:

Sample ID: WQ3-L_042720_SW_10 DISSOLVED

EFGS Lab ID: 0D00074-06 **Matrix: Water**

Sampled: 27-Apr-20 17:00 (GMT-08:00) Pacific Time (US &

Due: 28-May-20 19:00

Misc. Subcontract 4 **EPA 9060**

Containers Supplied:

40 mL Amber Glass Vial (C) 40 mL Amber Glass Vial (D)

Sample ID: WQ1b-C_042720_SW_10_DUP TOTAL

EFGS Lab ID: 0D00074-07 **Matrix: Water**

Sampled: 27-Apr-20 14:25 (GMT-08:00) Pacific Time (US &

Due: 28-May-20 19:00

Misc. Subcontract 5 **SM 2450D**

Misc. Subcontract 4 **EPA 9060**

Containers Supplied:

Released By	Date	Received By	Date
-------------	------	-------------	------

Released By	Date	Received By	Date
-------------	------	-------------	------

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, Inc.
0D00074

Analysis	Comments
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Sample ID: WQ1b-C_042720_SW_10_DUP DISSOLVED

EFGS Lab ID: 0D00074-08 Matrix: Water

Sampled: 27-Apr-20 14:25 (GMT-08:00) Pacific Time (US &

Due: 28-May-20 19:00

Misc. Subcontract 4

EPA 9060

Containers Supplied:

Released By	Date	Received By	Date
-------------	------	-------------	------

Released By	Date	Received By	Date
-------------	------	-------------	------

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0D00074

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
 5755 8th Street East
 Tacoma, WA 98424
 Phone: (253) 922-2310
 Fax: (000) 000-0000
 Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Eurofins TestAmerica - Pittsburgh
 301 Alpha Drive RIDC Park
 Pittsburgh, PA 15238
 Phone :4129637058
 Fax: 4129632468



Analysis	Due	Expires	Comments
----------	-----	---------	----------

Sample ID: WQ1b-C_042720_SW_10 TOTAL **Sampled: 27-Apr-20 14:25 MS/MSD - Also includes DUP bottles**

Misc. Subcontract 5	28-May-20 19:00	25-May-20 14:25	SM 2450D
Misc. Subcontract 4	28-May-20 19:00	25-May-20 14:25	EPA 9060
Misc. Subcontract 3	28-May-20 19:00	25-May-20 14:25	ASTM D2937

Containers Supplied:

Sample ID: WQ1b-C_042720_SW_10 DISSOLVED **Sampled: 27-Apr-20 14:25 MS/MSD - Also includes DUP bottles**

Misc. Subcontract 4	28-May-20 19:00	25-May-20 14:25	EPA 9060
---------------------	-----------------	-----------------	----------

Containers Supplied:

40 mL Amber Glass Vial (40 mL Amber Glass Vial (40 mL Amber Glass Vial (40 mL Amber Glass Vial (40 mL Amber Glass Vial (40 mL Amber Glass Vial (40 mL Amber Glass Vial (40 mL Amber Glass Vial (

Sample ID: WQ2-C_042720_SW_10 TOTAL **Sampled: 27-Apr-20 15:45**

Misc. Subcontract 5	28-May-20 19:00	25-May-20 15:45	SM 2450D
Misc. Subcontract 4	28-May-20 19:00	25-May-20 15:45	EPA 9060
Misc. Subcontract 3	28-May-20 19:00	25-May-20 15:45	ASTM D2937

Containers Supplied:

Sample ID: WQ2-C_042720_SW_10 DISSOLVED **Sampled: 27-Apr-20 15:45**

Misc. Subcontract 4	28-May-20 19:00	25-May-20 15:45	EPA 9060
---------------------	-----------------	-----------------	----------

Containers Supplied:

40 mL Amber Glass Vial (40 mL Amber Glass Vial (

MS	4/29/2020	[Signature]	4/30/20 8:15
Released By	Date	Received By	Date

Released By	Date	Received By	Date
-------------	------	-------------	------

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0D00074

Analysis	Due	Expires	Comments
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Sample ID: WQ3-L_042720_SW_10 TOTAL Sampled: 27-Apr-20 17:00

Misc. Subcontract 5	28-May-20 19:00	25-May-20 17:00	SM 2450D
Misc. Subcontract 4	28-May-20 19:00	25-May-20 17:00	EPA 9060
Misc. Subcontract 3	28-May-20 19:00	25-May-20 17:00	ASTM D2937

Containers Supplied:

Sample ID: WQ3-L_042720_SW_10 DISSOLVED Sampled: 27-Apr-20 17:00

Misc. Subcontract 4	28-May-20 19:00	25-May-20 17:00	EPA 9060
---------------------	-----------------	-----------------	----------

Containers Supplied:

40 mL Amber Glass Vial (40 mL Amber Glass Vial (

MS	4/29/2020	[Signature]	4/30/20 815
Released By	Date	Received By	Date

Released By	Date	Received By	Date



ment Testing

RT 97
FZ

1
10:30 A
1332
04.30

ORIGIN ID: TCMA (253) 922-2310
SAMPLE RECEIVING
TA - SEATTLE
5755 8TH ST E
FIFE, WA 98424
UNITED STATES US

SHIP DATE: 29APR20
ACTWT: 36.65 LB
CAD: 989746/CAFE3313

BILL THIRD PARTY

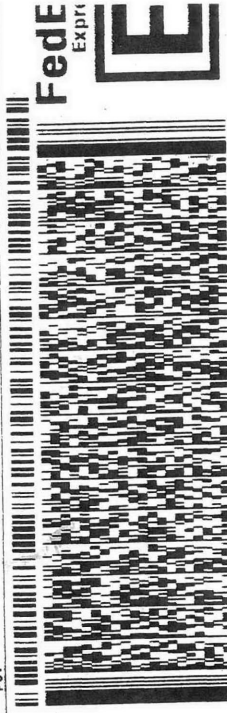
TO

EUROFINS TESTAMERICA - PITTSBURGH
301 ALPHA DRIVE RIDC PARK

PITTSBURGH PA 15238

REF: INU: PO:

DEPT:



THU - 30 APR 10:3
PRIORITY OVERNIG

TRK# 1794 2131 1332
0201

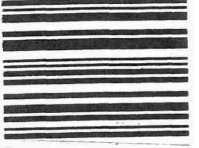
XH AGCA

152 PA-US F

Uncorrected temp 1.8 °C
Thermometer ID 17

CF Initials B.

PT-WI-SR-001 effective 7/26/13



Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 180-105175-1

Login Number: 105175
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

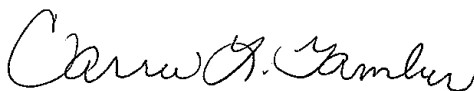
Job Number: 180-105307-1

Job Description: Wood Penobscot River Proposal

For:

Wood E&I Solutions Inc
271 Mill Road
Chelmsford, MA 01824

Attention: Ms. Denise King



Approved for release.
Carrie L. Gamber
Senior Project Manager
5/20/2020 11:34 AM

Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
carrie.gamber@testamericainc.com
05/20/2020

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Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Wood E&I Solutions Inc

Project: Wood Penobscot River Proposal

Report Number: 180-105307-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/02/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.4 C.

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. There is no relinquished by time listed on the COC.

GENERAL CHEMSITRY

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

Client Sample ID: WQ-FPT_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	1.2		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	4.0		1.0	1.0	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WQ-FPT_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	1.8		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: ES-15_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	2.0		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	4.5		0.50	0.50	mg/L	1		SM 2540D	Total/NA

Client Sample ID: ES-15_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	2.1		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: WQ-ECH_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	2.1		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	4.2		0.50	0.50	mg/L	1		SM 2540D	Total/NA

Client Sample ID: WQ-ECH_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	2.2		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: OV-02_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	5.7		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	0.80		0.50	0.50	mg/L	1		SM 2540D	Total/NA

Client Sample ID: OV-02_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	5.7		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: ADD-02_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	7.2		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	28		0.50	0.50	mg/L	1		SM 2540D	Total/NA

Client Sample ID: ADD-02_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	7.2		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry

Client Sample ID: WQ-FPT_042920_SW_10 TOTAL

Date Collected: 04/29/20 17:50

Date Received: 05/02/20 12:00

Lab Sample ID: 180-105307-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	1.2		1.0	0.51	mg/L			05/16/20 11:03	1
Total Suspended Solids	4.0		1.0	1.0	mg/L			05/06/20 14:40	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry

Client Sample ID: ES-15_042920_SW_10 TOTAL

Date Collected: 04/29/20 17:05

Date Received: 05/02/20 12:00

Lab Sample ID: 180-105307-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	2.0		1.0	0.51	mg/L			05/16/20 11:30	1
Total Suspended Solids	4.5		0.50	0.50	mg/L			05/06/20 14:40	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry

Client Sample ID: WQ-ECH_042920_SW_10 TOTAL

Date Collected: 04/29/20 16:15

Date Received: 05/02/20 12:00

Lab Sample ID: 180-105307-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	2.1		1.0	0.51	mg/L			05/16/20 12:50	1
Total Suspended Solids	4.2		0.50	0.50	mg/L			05/06/20 14:40	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry

Client Sample ID: OV-02_042920_SW_10 TOTAL

Date Collected: 04/29/20 12:45

Date Received: 05/02/20 12:00

Lab Sample ID: 180-105307-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	5.7		1.0	0.51	mg/L			05/16/20 13:16	1
Total Suspended Solids	0.80		0.50	0.50	mg/L			05/06/20 14:40	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry

Client Sample ID: ADD-02_042920_SW_10 TOTAL

Date Collected: 04/29/20 10:14

Date Received: 05/02/20 12:00

Lab Sample ID: 180-105307-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	7.2		1.0	0.51	mg/L			05/16/20 13:43	1
Total Suspended Solids	28		0.50	0.50	mg/L			05/06/20 14:40	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry - Dissolved

Client Sample ID: WQ-FPT_042920_SW_10 DISSOLVED

Date Collected: 04/29/20 17:50

Date Received: 05/02/20 12:00

Lab Sample ID: 180-105307-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	1.8		1.0	0.51	mg/L			05/18/20 23:55	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry - Dissolved

Client Sample ID: ES-15_042920_SW_10 DISSOLVED

Date Collected: 04/29/20 17:05

Date Received: 05/02/20 12:00

Lab Sample ID: 180-105307-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	2.1		1.0	0.51	mg/L			05/19/20 01:15	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry - Dissolved

Client Sample ID: WQ-ECH_042920_SW_10 DISSOLVED

Date Collected: 04/29/20 16:15

Date Received: 05/02/20 12:00

Lab Sample ID: 180-105307-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	2.2		1.0	0.51	mg/L			05/19/20 01:42	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry - Dissolved

Client Sample ID: OV-02_042920_SW_10 DISSOLVED

Date Collected: 04/29/20 12:45

Date Received: 05/02/20 12:00

Lab Sample ID: 180-105307-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	5.7		1.0	0.51	mg/L			05/19/20 02:08	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry - Dissolved

Client Sample ID: ADD-02_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-10

Date Collected: 04/29/20 10:14

Matrix: Water

Date Received: 05/02/20 12:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	7.2		1.0	0.51	mg/L			05/19/20 02:35	1

Default Detection Limits

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry

Analyte	RL	MDL	Units
Total Organic Carbon - Quad	1.0	0.51	mg/L
Total Suspended Solids	0.50	0.50	mg/L

General Chemistry - Dissolved

Analyte	RL	MDL	Units
Dissolved Organic Carbon - Quad	1.0	0.51	mg/L

QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

Method: EPA 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 180-315764/33
 Matrix: Water
 Analysis Batch: 315764

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	ND		1.0	0.51	mg/L			05/16/20 09:43	1

Lab Sample ID: LCS 180-315764/31
 Matrix: Water
 Analysis Batch: 315764

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Quad	20.0	18.9		mg/L		94	85 - 115

Lab Sample ID: LCSD 180-315764/32
 Matrix: Water
 Analysis Batch: 315764

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Quad	20.0	19.4		mg/L		97	85 - 115	2	20

Method: EPA 9060A - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 180-315890/6
 Matrix: Water
 Analysis Batch: 315890

Client Sample ID: Method Blank
 Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	ND		1.0	0.51	mg/L			05/18/20 20:47	1

Lab Sample ID: LCS 180-315890/4
 Matrix: Water
 Analysis Batch: 315890

Client Sample ID: Lab Control Sample
 Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	20.0	19.1		mg/L		96	85 - 115

Lab Sample ID: LCSD 180-315890/5
 Matrix: Water
 Analysis Batch: 315890

Client Sample ID: Lab Control Sample Dup
 Prep Type: Dissolved

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	20.0	19.8		mg/L		99	85 - 115	4	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 180-314727/2
 Matrix: Water
 Analysis Batch: 314727

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		0.50	0.50	mg/L			05/06/20 14:40	1

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QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 180-314727/1
Matrix: Water
Analysis Batch: 314727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	83.0	84.0		mg/L		101	80 - 120

Lab Sample ID: 180-105307-1 DU
Matrix: Water
Analysis Batch: 314727

Client Sample ID: WQ-FPT_042920_SW_10 TOTAL
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	4.0		4.00		mg/L		0	10

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

General Chemistry

Analysis Batch: 314727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105307-1	WQ-FPT_042920_SW_10 TOTAL	Total/NA	Water	SM 2540D	
180-105307-3	ES-15_042920_SW_10 TOTAL	Total/NA	Water	SM 2540D	
180-105307-5	WQ-ECH_042920_SW_10 TOTAL	Total/NA	Water	SM 2540D	
180-105307-7	OV-02_042920_SW_10 TOTAL	Total/NA	Water	SM 2540D	
180-105307-9	ADD-02_042920_SW_10 TOTAL	Total/NA	Water	SM 2540D	
MB 180-314727/2	Method Blank	Total/NA	Water	SM 2540D	
LCS 180-314727/1	Lab Control Sample	Total/NA	Water	SM 2540D	
180-105307-1 DU	WQ-FPT_042920_SW_10 TOTAL	Total/NA	Water	SM 2540D	

Analysis Batch: 315764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105307-1	WQ-FPT_042920_SW_10 TOTAL	Total/NA	Water	EPA 9060A	
180-105307-3	ES-15_042920_SW_10 TOTAL	Total/NA	Water	EPA 9060A	
180-105307-5	WQ-ECH_042920_SW_10 TOTAL	Total/NA	Water	EPA 9060A	
180-105307-7	OV-02_042920_SW_10 TOTAL	Total/NA	Water	EPA 9060A	
180-105307-9	ADD-02_042920_SW_10 TOTAL	Total/NA	Water	EPA 9060A	
MB 180-315764/33	Method Blank	Total/NA	Water	EPA 9060A	
LCS 180-315764/31	Lab Control Sample	Total/NA	Water	EPA 9060A	
LCSD 180-315764/32	Lab Control Sample Dup	Total/NA	Water	EPA 9060A	

Analysis Batch: 315890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105307-2	WQ-FPT_042920_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	
180-105307-4	ES-15_042920_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	
180-105307-6	WQ-ECH_042920_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	
180-105307-8	OV-02_042920_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	
180-105307-10	ADD-02_042920_SW_10 DISSOLVED	Dissolved	Water	EPA 9060A	
MB 180-315890/6	Method Blank	Dissolved	Water	EPA 9060A	
LCS 180-315890/4	Lab Control Sample	Dissolved	Water	EPA 9060A	
LCSD 180-315890/5	Lab Control Sample Dup	Dissolved	Water	EPA 9060A	

Lab Chronicle

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

Client Sample ID: WQ-FPT_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-1

Date Collected: 04/29/20 17:50

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9060A		1			315764	05/16/20 11:03	TAM	TAL PIT
		Instrument ID: TOC1030								
Total/NA	Analysis	SM 2540D		1	500 mL	1000 mL	314727	05/06/20 14:40	AGP	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: WQ-FPT_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-2

Date Collected: 04/29/20 17:50

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A		1			315890	05/18/20 23:55	TAM	TAL PIT
		Instrument ID: TOC1030								

Client Sample ID: ES-15_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-3

Date Collected: 04/29/20 17:05

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9060A		1			315764	05/16/20 11:30	TAM	TAL PIT
		Instrument ID: TOC1030								
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	314727	05/06/20 14:40	AGP	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: ES-15_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-4

Date Collected: 04/29/20 17:05

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A		1			315890	05/19/20 01:15	TAM	TAL PIT
		Instrument ID: TOC1030								

Client Sample ID: WQ-ECH_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-5

Date Collected: 04/29/20 16:15

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9060A		1			315764	05/16/20 12:50	TAM	TAL PIT
		Instrument ID: TOC1030								
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	314727	05/06/20 14:40	AGP	TAL PIT
		Instrument ID: NOEQUIP								

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

Client Sample ID: WQ-ECH_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-6

Date Collected: 04/29/20 16:15

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A		1			315890	05/19/20 01:42	TAM	TAL PIT
Instrument ID: TOC1030										

Client Sample ID: OV-02_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-7

Date Collected: 04/29/20 12:45

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9060A		1			315764	05/16/20 13:16	TAM	TAL PIT
Instrument ID: TOC1030										
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	314727	05/06/20 14:40	AGP	TAL PIT
Instrument ID: NOEQUIP										

Client Sample ID: OV-02_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-8

Date Collected: 04/29/20 12:45

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A		1			315890	05/19/20 02:08	TAM	TAL PIT
Instrument ID: TOC1030										

Client Sample ID: ADD-02_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-9

Date Collected: 04/29/20 10:14

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9060A		1			315764	05/16/20 13:43	TAM	TAL PIT
Instrument ID: TOC1030										
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	314727	05/06/20 14:40	AGP	TAL PIT
Instrument ID: NOEQUIP										

Client Sample ID: ADD-02_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-10

Date Collected: 04/29/20 10:14

Matrix: Water

Date Received: 05/02/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A		1			315890	05/19/20 02:35	TAM	TAL PIT
Instrument ID: TOC1030										

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

AGP = Angela Partridge

TAM = Tessa Mastalski

Eurofins TestAmerica, Pittsburgh

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Maine	State	PA00164	03-06-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 9060A		Water	Dissolved Organic Carbon - Quad

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

Method	Method Description	Protocol	Laboratory
EPA 9060A	Organic Carbon, Dissolved (DOC)	SW846	TAL PIT
EPA 9060A	Organic Carbon, Total (TOC)	SW846	TAL PIT
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-105307-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-105307-1	WQ-FPT_042920_SW_10 TOTAL	Water	04/29/20 17:50	05/02/20 12:00	
180-105307-2	WQ-FPT_042920_SW_10 DISSOLVED	Water	04/29/20 17:50	05/02/20 12:00	
180-105307-3	ES-15_042920_SW_10 TOTAL	Water	04/29/20 17:05	05/02/20 12:00	
180-105307-4	ES-15_042920_SW_10 DISSOLVED	Water	04/29/20 17:05	05/02/20 12:00	
180-105307-5	WQ-ECH_042920_SW_10 TOTAL	Water	04/29/20 16:15	05/02/20 12:00	
180-105307-6	WQ-ECH_042920_SW_10 DISSOLVED	Water	04/29/20 16:15	05/02/20 12:00	
180-105307-7	OV-02_042920_SW_10 TOTAL	Water	04/29/20 12:45	05/02/20 12:00	
180-105307-8	OV-02_042920_SW_10 DISSOLVED	Water	04/29/20 12:45	05/02/20 12:00	
180-105307-9	ADD-02_042920_SW_10 TOTAL	Water	04/29/20 10:14	05/02/20 12:00	
180-105307-10	ADD-02_042920_SW_10 DISSOLVED	Water	04/29/20 10:14	05/02/20 12:00	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105307-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
10 PPM TOC/CC_01419	05/16/20	05/15/20	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00030	2 mL	Total Organic Carbon - Quad	10 mg/L
.WTOC1000SP_00030	10/31/20		Ricca Chemical Co, Lot 2910D79		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
10 PPM TOC/CC_01420	05/19/20	05/18/20	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00030	2 mL	Dissolved Organic Carbon - Quad	10 mg/L
.WTOC1000SP_00030	10/31/20		Ricca Chemical Co, Lot 2910D79		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
ICV 40 PPM_01557	05/16/20	05/15/20	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00030	4 mL	Total Organic Carbon - Quad	40 mg/L
.WTOC1000SP_00030	10/31/20		Ricca Chemical Co, Lot 2910D79		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
ICV 40 PPM_01558	05/19/20	05/18/20	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00030	4 mL	Dissolved Organic Carbon - Quad	40 mg/L
.WTOC1000SP_00030	10/31/20		Ricca Chemical Co, Lot 2910D79		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
LCS 20 PPM_01552	05/16/20	05/15/20	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00047	4 mL	Total Organic Carbon - Quad	20 mg/L
.WTOC1000P_00047	08/09/21		Lab Chem, Lot J220-01		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
LCS 20 PPM_01553	05/19/20	05/18/20	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00047	4 mL	Dissolved Organic Carbon - Quad	20 mg/L
.WTOC1000P_00047	08/09/21		Lab Chem, Lot J220-01		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
WResPSP_00067	12/31/22		Phenova, Lot 8207-09B		(Purchased Reagent)		Total Suspended Solids	83 mg/L

Reagent

WResPSP_00067

WP Solids		Lot #8207-09B		
TNI Analyte Code	Analyte	Certified Value mg/L	Acceptance Limits mg/L	%
1955	Total Dissolved Solids at 180° (TFR)	192	147 - 237	76.6 - 123
1960	Non-Filterable Residue (TSS)	83.0	67.9 - 92.4	81.8 - 111
1950	Total Solids	275	230 - 320	83.6 - 116

Certified Values = "100% true concentration" of each analyte as determined from gravimetric and volumetric measurements made during standard manufacture.

Acceptance Limits = Generated based on the criteria established by The NELAC Institute (TNI) Fields of Proficiency Testing tables using regression equations and/or fixed percentage limits, historical data and other criteria distributed by accrediting agencies as applicable. Please note that regression based acceptance criteria are based on the Assigned Value and may have different criteria at different concentrations.

Solvent = Deionized Water

Store at 20-25°C.

Expiration Date: 12/22


Catalog #QC-SOL-WP

Preparation Instructions: The WP Solids standard is provided as a ready-to-use standard that does not require dilution prior to use. Shake adequately to homogenize the standard before removing an aliquot for analysis. Analyze by your normal procedures.

Note: It is strongly recommended that you analyze for TSS prior to removing aliquots for other analyses from the Solids bottle.

Approved by: BJW

Date: 03/20



3266569
ID: WResPSP_03067
Exp: 12/22/22 Prod: RSP
Phenova Residue - TSS

Reviewed by: AMB

Date: 03/20

Reagent

WTOC1000P_00047



3407498
 ID: WTCOC1000P_00047
 Exp: 08/09/21 Prod: TAM Opn: 10/07/19
 1000 ppm TOC standard

CERTIFICATE OF ANALYSIS

Description: CARBON STANDARD, 1000ppm ORGANIC (1mL = 1mg C)

Mfg. Date: 08/09/2019

Catalog Number: LC12910

Exp. Date: 08/09/2021

Lot Number: J220-01

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm C	1000ppm +/- 10ppm	1009 ppm
Concentration mg C/mL	1.000 +/- 0.010 mg C/mL	1.009 mg C/mL
Traceable to NIST	Potassium Hydrogen Phthalate	84L

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

Reagent

WTOC1000SP_00030

Certificate of Analysis


 3463729
 ID: WTOC1000SP_00030
 Exp:10/31/20 Ppd:TAM Opn:11/11/19
 1000 ppm TOC standard

Organic Carbon Standard, 1000 ppm C
Lot Number: 2910D79
Product Number: 1847
Manufacture Date: OCT 21, 2019
Expiration Date: OCT 2020

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/lit	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months
1847-4	120 mL amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)
Chris Collins (10/21/2019)
Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh

Job Number: 180-105307-1

SDG No.: _____

Project: Wood Penobscot River Proposal

Client Sample ID

WQ-FPT_042920_SW_10 TOTAL

WQ-FPT_042920_SW_10 DISSOLVED

ES-15_042920_SW_10 TOTAL

ES-15_042920_SW_10 DISSOLVED

WQ-ECH_042920_SW_10 TOTAL

WQ-ECH_042920_SW_10 DISSOLVED

OV-02_042920_SW_10 TOTAL

OV-02_042920_SW_10 DISSOLVED

ADD-02_042920_SW_10 TOTAL

ADD-02_042920_SW_10 DISSOLVED

Lab Sample ID

180-105307-1

180-105307-2

180-105307-3

180-105307-4

180-105307-5

180-105307-6

180-105307-7

180-105307-8

180-105307-9

180-105307-10

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ-FPT_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-1

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 17:50

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	1.2	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	4.0	1.0	1.0	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ-FPT_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-2

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 17:50

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	1.8	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: ES-15_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-3

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 17:05

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	2.0	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	4.5	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: ES-15_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-4

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 17:05

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	2.1	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ-ECH_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-5

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 16:15

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	2.1	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	4.2	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ-ECH_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-6

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 16:15

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	2.2	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OV-02_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-7

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 12:45

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	5.7	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	0.80	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: OV-02_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-8

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 12:45

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	5.7	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: ADD-02_042920_SW_10 TOTAL

Lab Sample ID: 180-105307-9

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 10:14

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	7.2	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	28	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: ADD-02_042920_SW_10 DISSOLVED

Lab Sample ID: 180-105307-10

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-105307-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/29/2020 10:14

Reporting Basis: WET

Date Received: 05/02/2020 12:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	7.2	1.0	0.51	mg/L			1	EPA 9060A

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105307-1

SDG No.: _____

Analyst: TAM Batch Start Date: 05/15/2020

Reporting Units: mg/L Analytical Batch No.: 315764

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	19:55	Total Organic Carbon - Quad	38.4	40.0	96	90-110		ICV 40 PPM_01557
3	ICB	20:22	Total Organic Carbon - Quad	ND					
26	CCV	06:37	Total Organic Carbon - Quad	9.31	10.0	93	90-110		10 PPM TOC/CC 01419
27	CCB	07:03	Total Organic Carbon - Quad	ND					
38	CCV	11:56	Total Organic Carbon - Quad	9.85	10.0	99	90-110		10 PPM TOC/CC 01419
39	CCB	12:22	Total Organic Carbon - Quad	ND					
43	CCV	14:10	Total Organic Carbon - Quad	10.1	10.0	101	90-110		10 PPM TOC/CC 01419
44	CCB	14:36	Total Organic Carbon - Quad	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105307-1
 SDG No.: _____
 Analyst: TAM Batch Start Date: 05/18/2020
 Reporting Units: mg/L Analytical Batch No.: 315890

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	19:00	Dissolved Organic Carbon - Quad	39.1	40.0	98	90-110		ICV 40 PPM_01558
3	ICB	19:27	Dissolved Organic Carbon - Quad	ND					
14	CCV	00:21	Dissolved Organic Carbon - Quad	9.80	10.0	98	90-110		10 PPM TOC/CC 01420
15	CCB	00:48	Dissolved Organic Carbon - Quad	ND					
20	CCV	03:02	Dissolved Organic Carbon - Quad	9.41	10.0	94	90-110		10 PPM TOC/CC 01420
21	CCB	03:28	Dissolved Organic Carbon - Quad	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105307-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 315764 Date: 05/16/2020 09:43							
EPA 9060A	MB 180-315764/33	Total Organic Carbon - Quad	ND		mg/L	1.0	1
Batch ID: 315890 Date: 05/18/2020 20:47							
EPA 9060A	MB 180-315890/6	Dissolved Organic Carbon - Quad	ND		mg/L	1.0	1
Batch ID: 314727 Date: 05/06/2020 14:40							
SM 2540D	MB 180-314727/2	Total Suspended Solids	ND		mg/L	0.50	1

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105307-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 314727 Date: 05/06/2020 14:40								
SM 2540D	WQ-FPT_042920_SW_1 0 TOTAL	180-105307-1	Total Suspended Solids	4.0	mg/L			
SM 2540D	WQ-FPT_042920_SW_1 0 TOTAL	180-105307-1 DU	Total Suspended Solids	4.00	mg/L	0	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105307-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 315764 Date: 05/16/2020 08:50											
						LCS Source: LCS 20 PPM_01552					
EPA 9060A	LCS 180-315764/31	Total Organic Carbon - Quad	18.9		mg/L	20.0	94	85-115	2	20	
Batch ID: 315890 Date: 05/18/2020 19:53											
						LCS Source: LCS 20 PPM_01553					
EPA 9060A	LCS 180-315890/4	Dissolved Organic Carbon - Quad	19.1		mg/L	20.0	96	85-115	4	20	
Batch ID: 314727 Date: 05/06/2020 14:40											
						LCS Source: WResPSP_00067					
SM 2540D	LCS 180-314727/1	Total Suspended Solids	84.0		mg/L	83.0	101	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105307-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 315764 Date: 05/16/2020 09:17											
						LCSD Source: LCS 20 PPM_01552					
EPA 9060A	LCSD 180-315764/32	Total Organic Carbon - Quad	19.4		mg/L	20.0	97	85-115	2	20	
Batch ID: 315890 Date: 05/18/2020 20:20											
						LCSD Source: LCS 20 PPM_01553					
EPA 9060A	LCSD 180-315890/5	Dissolved Organic Carbon - Quad	19.8		mg/L	20.0	99	85-115	4	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105307-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A MDL Date: 03/21/2017 16:51

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Organic Carbon - Quad		1	0.5084

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105307-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A XMDL Date: 03/21/2017 16:52

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Organic Carbon - Quad		1	0.5084

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105307-1

SDG Number: _____

Matrix: Water Instrument ID: TOC1030

Method: EPA 9060A MDL Date: 03/21/2017 16:51

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.5084

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105307-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A XMDL Date: 03/21/2017 16:52

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.5084

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105307-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540D MDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Suspended Solids		0.5	0.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-105307-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540D XMDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Suspended Solids		0.5	0.5

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105307-1

SDG No.: _____

Instrument ID: TOC1030 Analysis Method: EPA 9060A

Start Date: 05/15/2020 19:29 End Date: 05/16/2020 14:36

Lab Sample Id	D/F	Type	Time	Analytes																											
				TOC	Q																										
ZZZZZZ			19:29																												
ICV 180-315764/2	1		19:55	X																											
ICB 180-315764/3	1		20:22	X																											
ZZZZZZ			20:48																												
ZZZZZZ			21:15																												
ZZZZZZ			21:42																												
ZZZZZZ			22:08																												
ZZZZZZ			22:34																												
ZZZZZZ			23:01																												
ZZZZZZ			23:28																												
ZZZZZZ			23:55																												
ZZZZZZ			00:22																												
ZZZZZZ			00:48																												
CCV 180-315764/14			01:15																												
CCB 180-315764/15			01:42																												
ZZZZZZ			02:09																												
ZZZZZZ			02:35																												
ZZZZZZ			03:02																												
ZZZZZZ			03:29																												
ZZZZZZ			03:56																												
ZZZZZZ			04:23																												
ZZZZZZ			04:50																												
ZZZZZZ			05:16																												
ZZZZZZ			05:43																												
ZZZZZZ			06:10																												
CCV 180-315764/26	1		06:37	X																											
CCB 180-315764/27	1		07:03	X																											
ZZZZZZ			07:30																												
ZZZZZZ			07:56																												
ZZZZZZ			08:23																												
LCS 180-315764/31	1	T	08:50	X																											
LCSD 180-315764/32	1	T	09:17	X																											
MB 180-315764/33	1	T	09:43	X																											
ZZZZZZ			10:10																												
ZZZZZZ			10:36																												
180-105307-1	1	T	11:03	X																											
180-105307-3	1	T	11:30	X																											
CCV 180-315764/38	1		11:56	X																											
CCB 180-315764/39	1		12:22	X																											
180-105307-5	1	T	12:50	X																											

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105307-1

SDG No.: _____

Instrument ID: TOC1030 Analysis Method: EPA 9060A

Start Date: 05/15/2020 19:29 End Date: 05/16/2020 14:36

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				TOC	Q																										
180-105307-7	1	T	13:16	X																											
180-105307-9	1	T	13:43	X																											
CCV 180-315764/43	1		14:10	X																											
CCB 180-315764/44	1		14:36	X																											

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105307-1

SDG No.: _____

Batch Number: 315764 Batch Start Date: 05/15/20 19:29 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 05/16/20 14:54

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	10 PPM TOC/CC 01419	ICV 40 PPM 01557	LCS 20 PPM 01552		
ICV 180-315764/2		EPA 9060A				40 mL			
CCV 180-315764/26		EPA 9060A			40 mL				
LCS 180-315764/31		EPA 9060A					40 mL		
LCS 180-315764/32		EPA 9060A					40 mL		
180-105307-C-1	WQ-FPT_042920_SW 10 TOTAL	EPA 9060A	T	<2 SU					
180-105307-B-3	ES-15_042920_SW_ 10 TOTAL	EPA 9060A	T	<2 SU					
CCV 180-315764/38		EPA 9060A			40 mL				
180-105307-C-5	WQ-ECH_042920_SW 10 TOTAL	EPA 9060A	T	<2 SU					
180-105307-C-7	OV-02_042920_SW_ 10 TOTAL	EPA 9060A	T	<2 SU					
180-105307-C-9	ADD-02_042920_SW 10 TOTAL	EPA 9060A	T	<2 SU					
CCV 180-315764/43		EPA 9060A			40 mL				

Batch Notes	
Batch Comment	pH strips: HC991818
Phosphoric Acid ID	3702199
Pipette/Syringe/Dispenser ID	B747014653
Sodium Persulfate ID	3702200

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105307-1

SDG No.: _____

Batch Number: 315890 Batch Start Date: 05/18/20 18:34 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 05/19/20 03:46

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	10 PPM TOC/CC 01420	ICV 40 PPM 01558	LCS 20 PPM 01553		
ICV 180-315890/2		EPA 9060A				40 mL			
LCS 180-315890/4		EPA 9060A					40 mL		
LCS 180-315890/5		EPA 9060A					40 mL		
180-105307-B-2	WQ-FPT_042920_SW 10 DISSOLVED	EPA 9060A	D	<2 SU					
CCV 180-315890/14		EPA 9060A			40 mL				
180-105307-B-4	ES-15_042920_SW_ 10 DISSOLVED	EPA 9060A	D	<2 SU					
180-105307-B-6	WQ-ECH_042920_SW_ 10 DISSOLVED	EPA 9060A	D	<2 SU					
180-105307-A-8	OV-02_042920_SW_ 10 DISSOLVED	EPA 9060A	D	<2 SU					
180-105307-B-10	ADD-02_042920_SW_ 10 DISSOLVED	EPA 9060A	D	<2 SU					
CCV 180-315890/20		EPA 9060A			40 mL				

Batch Notes	
Batch Comment	pH strips: HC991818
Phosphoric Acid ID	3702199
Pipette/Syringe/Dispenser ID	B747014653, B747014865
Sodium Persulfate ID	3702200

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105307-1

SDG No.: _____

Batch Number: 314727 Batch Start Date: 05/06/20 14:40 Batch Analyst: Partridge, Angela G

Batch Method: SM 2540D Batch End Date: 05/07/20 19:57

Lab Sample ID	Client Sample ID	Method Chain	Basis	CrucibleID	TareWeight	InitialAmount	Weight1	Weight2	WeightOne%Diff
LCS 180-314727/1		SM 2540D		fGVZH 0.1177	0.1177 g	50 mL	0.1220 g	0.1219 g	PASS <0.5mg
MB 180-314727/2		SM 2540D		fGVZG 0.1191	0.1191 g	1000 mL	0.1192 g	0.1191 g	PASS <0.5mg
180-105307-A-1	WQ-FPT_042920_SW 10 TOTAL	SM 2540D	T	fGVZF 0.1193	0.1193 g	500 mL	0.1215 g	0.1213 g	PASS <0.5mg
180-105307-A-1 DU	WQ-FPT_042920_SW 10 TOTAL	SM 2540D	T	fGVZE 0.1182	0.1182 g	500 mL	0.1200 g	0.1202 g	PASS <0.5mg
180-105307-A-3	ES-15_042920_SW_ 10 TOTAL	SM 2540D	T	fGVZB 0.1171	0.1171 g	1000 mL	0.1217 g	0.1216 g	PASS <0.5mg
180-105307-A-5	WQ-ECH_042920_SW 10 TOTAL	SM 2540D	T	fGVZA 0.1168	0.1168 g	1000 mL	0.1211 g	0.1210 g	PASS <0.5mg
180-105307-A-7	OV-02_042920_SW_ 10 TOTAL	SM 2540D	T	fGVZ9 0.1191	0.1191 g	1000 mL	0.1200 g	0.1199 g	PASS <0.5mg
180-105307-A-9	ADD-02_042920_SW 10 TOTAL	SM 2540D	T	fGVZ8 0.1171	0.1171 g	1000 mL	0.1448 g	0.1446 g	PASS <0.5mg

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue	Residue2	FinalAmount	ResDishWt	DishWeight	WResPSP 00067
LCS 180-314727/1		SM 2540D		0.0043 g	0.0042 g	1000 mL	0.1219 g	0.1177 g	50 mL
MB 180-314727/2		SM 2540D		0.0001 g	0 g	1000 mL	0.1191 g	0.1191 g	
180-105307-A-1	WQ-FPT_042920_SW 10 TOTAL	SM 2540D	T	0.0022 g	0.002 g	1000 mL	0.1213 g	0.1193 g	
180-105307-A-1 DU	WQ-FPT_042920_SW 10 TOTAL	SM 2540D	T	0.0018 g	0.002 g	1000 mL	0.1202 g	0.1182 g	
180-105307-A-3	ES-15_042920_SW_ 10 TOTAL	SM 2540D	T	0.0046 g	0.0045 g	1000 mL	0.1216 g	0.1171 g	
180-105307-A-5	WQ-ECH_042920_SW 10 TOTAL	SM 2540D	T	0.0043 g	0.0042 g	1000 mL	0.121 g	0.1168 g	
180-105307-A-7	OV-02_042920_SW_ 10 TOTAL	SM 2540D	T	0.0009 g	0.0008 g	1000 mL	0.1199 g	0.1191 g	
180-105307-A-9	ADD-02_042920_SW 10 TOTAL	SM 2540D	T	0.0277 g	0.0275 g	1000 mL	0.1446 g	0.1171 g	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105307-1

SDG No.: _____

Batch Number: 314727 Batch Start Date: 05/06/20 14:40 Batch Analyst: Partridge, Angela G

Batch Method: SM 2540D Batch End Date: 05/07/20 19:57

Batch Notes	
Balance ID	1126020829
Date/Time - In - CW (WT2)	05/07/2020 15:12
Date/Time - Out - CW (WT2)	05/07/2020 19:00
Temperature - Start - CW (WT2) - Correct	105 Celsius
Temperature - End - CW (WT2) - Correct	105 Celsius
Temperature - Start-CW(WT2) -Uncorrected	105 Celsius
Temperature - End-CW(WT2) -Uncorrected	105 Celsius
Temperature - Start - Corrected	105 Celsius
Temperature - End - Corrected	105 Celsius
Date/Time - In	05/06/2020 15:30
Date/Time - Out	05/07/2020 08:00
Filter ID	Environmental Express 600024-080-R1
Nominal Amount Used	1000 mL
Oven ID	EZ Bake
Perform Calculation (0=No, 1=Yes)	1
Thermometer ID	QA Backup #1
Temperature - Start - Uncorrected	105 Celsius
Temperature - End - Uncorrected	105 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TEST AMERICA
301 ALPHA DRIVE
PITTSBURGH, PA.
15238
USA

Date Prepared: 05/18/2020

By: TOC

Batch # 315764

Date Approved: 05/15/2020

By: TM 5/18/20

TOC1030

9060

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	BLANK	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	699	0.198	0.083	289	41.38	Pass
2	ICV 40 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk	1 : 1	00000000	TOC	166,490	92.244	38.436	2,985	1.79	Fail
3	ICB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk	1 : 1	00000000	TOC	609	0.121	0.050	179	29.40	Fail
4	LCS 20 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard	1 : 1	00000000	TOC	84,578	46.750	19.479	2,478	2.93	Fail
5	LCSD 20 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard	1 : 1	00000000	TOC	85,928	47.500	19.792	2,752	3.20	Fail
6	MB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard	1 : 1	00000000	TOC	552	0.081	0.034	55	9.92	Fail
7	180-105331-M-1	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard	1 : 1	00000000	TOC	2,680	1.298	0.541	128	4.76	Pass
8	180-105331-L-2	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	3,685	1.856	0.773	168	4.56	Pass
9	180-105331-M-3	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	3,178	1.575	0.656	264	8.32	Pass
10	180-105331-M-4	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	10,376	5.573	2.322	792	7.63	Pass
11	180-105456-L-1	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	9,959	5.341	2.226	278	2.79	Pass
12	180-105456-L-2	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	9,424	5.044	2.102	123	1.31	Pass
13	180-105456-L-3	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	9,259	4.952	2.063	352	3.80	Pass
14	CCV 10 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	42,326	23.283	9.701	609	1.44	Fail
15	CCB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk	1 : 1	00000000	TOC	613	0.114	0.048	174	28.43	Fail
16	180-105456-M-4	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard	1 : 1	00000000	TOC	9,732	5.215	2.173	322	3.31	Pass
17	180-105456-M-5	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	9,547	5.112	2.130	235	2.47	Pass
18	180-105456-M-6	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	9,482	5.076	2.115	202	2.13	Pass
19	180-105456-L-7	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	7,388	3.913	1.631	123	1.67	Pass
20	180-105456-M-8	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	14,400	7.808	3.254	376	2.61	Pass
21	180-105456-L-9	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	4,029	2.047	0.853	147	3.65	Pass
22	180-105456-L-10	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	4,329	2.214	0.922	154	3.56	Pass
23	180-105456-M-11	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	18,401	10.030	4.179	447	2.43	Pass

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PITTSBURGH, PA.
15238
USA

Date Prepared: 05/18/2020

By:

IOC

Date Approved:

By:

Line	Sample ID	Sample Name	Sample Type	Concentration	Units	Result	Pass/Fail					
24	180-105456-L-12	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	25,941	14.217	5.923	634	2.44	Pass
25	180-105456-M-13	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	9,995	5.361	2.233	190	1.90	Pass
26	CCV 10 PPM	TOC MAR 2020 - Mar 03, 2020;	Chk	1 : 1	00000000	TOC	40,652	22.353	9.314	368	0.91	Fail
27	CCB	TOC MAR 2020 - Mar 03, 2020;	Standard	1 : 1	00000000	TOC	468	0.046	0.019	124	26.43	Fail
28	180-105456-M-14	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	2,555	1.229	0.512	193	7.54	Pass
29	180-105456-M-15	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	3,993	2.027	0.845	290	7.26	Pass
30	180-105456-M-16	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	15,851	8.613	3.589	462	2.91	Pass
31	LCS 20 PPM	TOC MAR 2020 - Mar 03, 2020;	Chk	1 : 1	00000000	TOC	82,063	45.353	18.897	1,254	1.53	Fail
32	LCSD 20 PPM	TOC MAR 2020 - Mar 03, 2020;	Standard	1 : 1	00000000	TOC	84,031	46.445	19.352	2,001	2.38	Fail
33	MB	TOC MAR 2020 - Mar 03, 2020;	Chk	1 : 1	00000000	TOC	721	0.174	0.073	122	16.89	Fail
34	180-105456-M-17	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	4,088	2.080	0.867	233	5.69	Pass
35	180-105405-U-1	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	4,959	2.564	1.068	250	5.04	Pass
36	180-105307-C-1	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	5,370	2.792	1.163	293	5.47	Pass
37	180-105307-B-3	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	9,142	4.887	2.036	301	3.29	Pass
38	CCV 10 PPM	TOC MAR 2020 - Mar 03, 2020;	Chk	1 : 1	00000000	TOC	42,988	23.650	9.854	1,034	2.40	Fail
39	CCB	TOC MAR 2020 - Mar 03, 2020;	Chk	1 : 1	00000000	TOC	578	0.112	0.047	216	37.31	Fail
40	180-105307-C-5	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	9,398	5.029	2.095	390	4.15	Pass
41	180-105307-C-7	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	24,910	13.645	5.685	363	1.46	Pass
42	180-105307-C-9	TOC MAR 2020 - Mar 03, 2020;	Sample	1 : 1	00000000	TOC	31,634	17.379	7.241	930	2.94	Pass
43	CCV 10 PPM	TOC MAR 2020 - Mar 03, 2020;	Chk	1 : 1	00000000	TOC	43,886	24.149	10.062	1,494	3.40	Fail
44	CCB	TOC MAR 2020 - Mar 03, 2020;	Standard	1 : 1	00000000	TOC	625	0.121	0.050	85	13.62	Fail

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 15238
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Date Prepared: 05/18/2020

By:

TOC

Date Approved:

By:

Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 05/15/2020 Status: Pass
 Vial #: 1 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:29 pm	-	-	-	523	0.100	0.042
2	7:35 pm	-	-	-	1,125	0.434	0.181
3	7:41 pm	-	-	-	631	0.160	0.067
4	7:46 pm	-	-	-	516	0.096	0.040

Avg. 699 0.198 0.083
 Std.Dev.
 % RSD. 41.38

Spl #: 2 Sample ID: ICV 40 PPM Type: Chk Standard Date: 05/15/2020 Status: Fail
 Vial #: 2 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:55 pm	-	-	-	165,234	91.547	38.145
2	8:01 pm	-	-	-	166,768	92.399	38.500
3	8:07 pm	-	-	-	163,471	90.568	37.737
4	8:13 pm	-	-	-	170,484	94.463	39.360

Avg. 166,490 92.244 38.436
 Std.Dev.
 % RSD. 1.79

Date Prepared: 05/18/2020 By:

Date Approved: By:

Status: Fail

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Spl #: 3 Sample ID: ICB Type: Chk Standard Date: 05/15/2020
Vial #: 3 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:22 pm	-	-	-	664	0.143	0.060
2	8:28 pm	-	-	-	750	0.191	0.080
3	8:33 pm	-	-	-	675	0.149	0.062
4	8:39 pm	-	-	-	347	0.000	0.000

Avg. - - - 609 0.121 0.050
Std.Dev.
% RSD. 29.40

Spl #: 4 Sample ID: LCS 20 PPM Type: Chk Standard Date: 05/15/2020
Vial #: 4 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:48 pm	-	-	-	80,998	44.761	18.651
2	8:54 pm	-	-	-	86,609	47.877	19.949
3	9:00 pm	-	-	-	84,977	46.971	19.571
4	9:06 pm	-	-	-	85,729	47.389	19.745

Avg. - - - 84,578 46.750 19.479
Std.Dev.
% RSD. 2.93

TEST AMERICA
 301 ALPHA DRIVE
 PITTSBURGH, PA.
 15238
 USA

Date Prepared: 05/18/2020

By: TOC

Date Approved:

By:

Spl #: 5 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 05/15/2020 Status: Fail
 Vial #: 5 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:15 pm	-	-	-	82,838	45.783	19.076
2	9:21 pm	-	-	-	89,071	49.245	20.519
3	9:27 pm	-	-	-	84,620	46.773	19.489
4	9:32 pm	-	-	-	87,185	48.197	20.082

Avg. - - - 85,928 47.500 19.792
 Std.Dev.
 % RSD. 3.20

Spl #: 6 Sample ID: MB Type: Chk Standard Date: 05/15/2020 Status: Fail
 Vial #: 6 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:42 pm	-	-	-	557	0.083	0.035
2	9:47 pm	-	-	-	620	0.118	0.049
3	9:53 pm	-	-	-	544	0.076	0.032
4	9:59 pm	-	-	-	487	0.044	0.019

Avg. - - - 552 0.081 0.034
 Std.Dev.
 % RSD. 9.92

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Date Prepared: 05/18/2020

By: *TOC*

Date Approved:

By:

Status: Pass

Spl #: 7 Sample ID: 180-105331-M-1 Type: Sample Date: 05/15/2020
 Vial #: 7 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:08 pm	-	-	-	2,548	1,225	0.510
2	10:14 pm	-	-	-	2,736	1,329	0.554
3	10:19 pm	-	-	-	2,831	1,382	0.576
4	10:25 pm	-	-	-	2,605	1,256	0.524
Avg.		-	-	-	2,680	1,298	0.541
Std.Dev.							
% RSD.					4.76		

Spl #: 8 Sample ID: 180-105331-L-2 Type: Sample Date: 05/15/2020
 Vial #: 8 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:34 pm	-	-	-	3,514	1,761	0.734
2	10:40 pm	-	-	-	3,567	1,791	0.746
3	10:46 pm	-	-	-	3,836	1,940	0.808
4	10:51 pm	-	-	-	3,822	1,932	0.805
Avg.		-	-	-	3,685	1,856	0.773
Std.Dev.							
% RSD.					4.56		

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Date Prepared: 05/18/2020

By: *TOC*

Date Approved:

By:

Spl #: 9 Sample ID #: 180-105331-M-3 Type: Sample Date: 05/15/2020 Status: Pass
 Vial #: 9 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:01 pm	-	-	-	3,345	1,667	0.695
2	11:07 pm	-	-	-	2,815	1,373	0.571
3	11:12 pm	-	-	-	3,399	1,697	0.707
4	11:18 pm	-	-	-	3,153	1,560	0.650

Avg. 3,178 1,575 0.656
 Std.Dev.
 % RSD. 8.32

Spl #: 10 Sample ID #: 180-105331-M-4 Type: Sample Date: 05/15/2020 Status: Pass
 Vial #: 10 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:28 pm	-	-	-	9,581	5,131	2.138
2	11:34 pm	-	-	-	9,810	5,258	2.191
3	11:40 pm	-	-	-	11,042	5,942	2.476
4	11:45 pm	-	-	-	11,073	5,959	2.483

Avg. 10,376 5,573 2.322
 Std.Dev.
 % RSD. 7.63

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Date Prepared: 05/18/2020

By:

Date Approved:

By:

Status: Pass

Spl #: 11 Sample ID: 180-105456-L-1 Type: Sample Date: 05/16/2020
 Vial #: 11 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:55 pm	-	-	-	10,184	5.466	2.277
2	12:00 am	-	-	-	10,185	5.466	2.278
3	12:06 am	-	-	-	9,614	5.149	2.146
4	12:12 am	-	-	-	9,853	5.282	2.201

Avg. 9,959 5.341 2.226
 Std.Dev.
 % RSD. 2.79

Spl #: 12 Sample ID: 180-105456-L-2 Type: Sample Date: 05/16/2020
 Vial #: 12 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:22 am	-	-	-	9,395	5.027	2.095
2	12:27 am	-	-	-	9,281	4.964	2.068
3	12:33 am	-	-	-	9,443	5.054	2.106
4	12:39 am	-	-	-	9,578	5.129	2.137

Avg. 9,424 5.044 2.102
 Std.Dev.
 % RSD. 1.31

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Date Prepared: 05/18/2020
 Date Approved:

By: **TOC**

Spl #: 13 Sample ID: 180-105456-L-3 Type: Sample Date: 05/16/2020 Status: Pass
 Vial #: 13 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:48 am	-	-	-	9,082	4.854	2.022
2	12:54 am	-	-	-	8,855	4.727	1.970
3	1:00 am	-	-	-	9,613	5.148	2.145
4	1:06 am	-	-	-	9,487	5.078	2.116

Avg. 9,259 4.952 2.063
 Std.Dev.
 % RSD. 3.80

Spl #: 14 Sample ID: CCV 10 PPM Type: Chk Standard Date: 05/16/2020 Status: Fail
 Vial #: 14 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:15 am	-	-	-	42,155	23.187	9.661
2	1:21 am	-	-	-	43,220	23.779	9.908
3	1:27 am	-	-	-	42,081	23.146	9.644
4	1:33 am	-	-	-	41,851	23.018	9.591

Avg. 42,326 23.283 9.701
 Std.Dev.
 % RSD. 1.44

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TOC

Date Prepared: 05/18/2020

By:

Date Approved:

By:

Status: Fail

Spl #: 15 Sample ID: CCB Type: Chk Standard Date: 05/16/2020
 Vial #: 15 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:42 am	-	-	-	820	0.230	0.096
2	1:48 am	-	-	-	675	0.149	0.062
3	1:53 am	-	-	-	542	0.075	0.031
4	1:59 am	-	-	-	415	0.004	0.002

Avg. - - - 613 0.114 0.048
 Std.Dev.
 % RSD. 28.43

Status: Pass

Spl #: 16 Sample ID: 180-105456-M-4 Type: Sample Date: 05/16/2020
 Vial #: 16 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:09 am	-	-	-	9,487	5.079	2.116
2	2:14 am	-	-	-	9,438	5.051	2.105
3	2:20 am	-	-	-	9,906	5.311	2.213
4	2:26 am	-	-	-	10,099	5.419	2.258

Avg. - - - 9,732 5.215 2.173
 Std.Dev.
 % RSD. 3.31

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TOC

Date Prepared: 05/18/2020

By:

Date Approved:

By:

Status: Pass

Spl #: 17 Sample ID : 180-105456-M-5 Type : Sample Date: 05/16/2020
 Vial #: 17 Method : TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:35 am	-	-	-	9,263	4.954	2.064
2	2:41 am	-	-	-	9,451	5.059	2.108
3	2:47 am	-	-	-	9,782	5.242	2.184
4	2:52 am	-	-	-	9,693	5.193	2.164
Avg.		-	-	-	9,547	5.112	2.130
Std.Dev.							
% RSD.							2.47

Status: Pass

Spl #: 18 Sample ID : 180-105456-M-6 Type : Sample Date: 05/16/2020
 Vial #: 18 Method : TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:02 am	-	-	-	9,308	4.979	2.075
2	3:08 am	-	-	-	9,419	5.041	2.100
3	3:14 am	-	-	-	9,774	5.238	2.183
4	3:20 am	-	-	-	9,428	5.046	2.103
Avg.		-	-	-	9,482	5.076	2.115
Std.Dev.							
% RSD.							2.13

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Date Prepared: 05/18/2020

By: **TOC**

Date Approved:

By:

Status: Pass

Sample ID: 180-105456-L-7
 Method: TOC MAR 2020 - Mar 03, 2021
 Type: Sample
 Dilution: 1 : 1
 Date: 05/16/2020
 Customer ID: 00000000

Spl #: 19
 Vial #: 19

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:29 am	-	-	-	7,466	3,956	1,649
2	3:35 am	-	-	-	7,233	3,827	1,595
3	3:41 am	-	-	-	7,505	3,978	1,658
4	3:46 am	-	-	-	7,345	3,889	1,621

Avg. -
 Std.Dev.
 % RSD. 1.67

Status: Pass

Sample ID: 180-105456-M-8
 Method: TOC MAR 2020 - Mar 03, 2021
 Type: Sample
 Dilution: 1 : 1
 Date: 05/16/2020
 Customer ID: 00000000

Spl #: 20
 Vial #: 20

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:56 am	-	-	-	13,840	7,496	3,124
2	4:02 am	-	-	-	14,570	7,902	3,293
3	4:08 am	-	-	-	14,548	7,889	3,287
4	4:14 am	-	-	-	14,644	7,943	3,310

Avg. -
 Std.Dev.
 % RSD. 2.61

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Date Prepared: 05/18/2020

By: *TOC*

Date Approved:

By:

Status: Pass

Spl #: 21 Sample ID: 180-105456-L-9 Type: Sample Date: 05/16/2020
 Vial #: 21 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:23 am	-	-	-	4,151	2,115	0.881
2	4:29 am	-	-	-	3,952	2,004	0.835
3	4:34 am	-	-	-	4,153	2,116	0.882
4	4:40 am	-	-	-	3,859	1,953	0.814

Avg. - - - 4,029 2,047 0.853
 Std.Dev.
 % RSD. 3.65

Spl #: 22 Sample ID: 180-105456-L-10 Type: Sample Date: 05/16/2020
 Vial #: 22 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:50 am	-	-	-	4,506	2,312	0.963
2	4:55 am	-	-	-	4,130	2,103	0.876
3	5:01 am	-	-	-	4,332	2,215	0.923
4	5:07 am	-	-	-	4,349	2,225	0.927

Avg. - - - 4,329 2,214 0.922
 Std.Dev.
 % RSD. 3.56

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TOC

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Date Approved:

By:

Status: Pass

Spl #: 23 Sample ID: 180-105456-M-11 Type: Sample Date: 05/16/2020
 Vial #: 23 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:16 am	-	-	-	17,818	9.706	4.044
2	5:22 am	-	-	-	18,288	9.967	4.153
3	5:27 am	-	-	-	18,712	10.202	4.251
4	5:33 am	-	-	-	18,787	10.244	4.268

Avg. 18,401 10,030 4.179
 Std.Dev.
 % RSD. 2.43

Spl #: 24 Sample ID: 180-105456-L-12 Type: Sample Date: 05/16/2020
 Vial #: 24 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:43 am	-	-	-	25,222	13.818	5.757
2	5:49 am	-	-	-	25,617	14.038	5.848
3	5:54 am	-	-	-	26,326	14.431	6.012
4	6:00 am	-	-	-	26,600	14.583	6.076

Avg. 25,941 14,217 5.923
 Std.Dev.
 % RSD. 2.44

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Date Prepared: 05/18/2020 By:
 Date Approved: By:

Spl #: 25 Sample ID: 180-105456-M-13 Type: Sample Date: 05/16/2020 Status: Pass
 Vial #: 25 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:10 am	-	-	-	9,985	5,355	2,231
2	6:15 am	-	-	-	9,816	5,262	2,192
3	6:21 am	-	-	-	10,260	5,508	2,294
4	6:27 am	-	-	-	9,918	5,318	2,216
Avg.		-	-	-	9,995	5,361	2,233
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.90	-	-

Spl #: 26 Sample ID: CCV 10 PPM Type: Chk Standard Date: 05/16/2020 Status: Fail
 Vial #: 26 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:37 am	-	-	-	40,700	22,379	9,325
2	6:42 am	-	-	-	40,887	22,483	9,368
3	6:48 am	-	-	-	40,117	22,056	9,190
4	6:54 am	-	-	-	40,904	22,493	9,371
Avg.		-	-	-	40,652	22,353	9,314
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	0.91	-	-

TEST AMERICA
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 USA

TOC

Date Prepared: 05/18/2020

By:

Date Approved:

By:

Status: Fail

05/16/2020
 00000000

Type :
 Dilution

CCB
 TOC MAR 2020 - Mar 03, 2021
 1 : 1

Spl #: 27
 Vial #: 27
 Sample ID : CCB
 Method : TOC MAR 2020 - Mar 03, 2021

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:03 am	-	-	-	603	0.109	0.045
2	7:09 am	-	-	-	360	0.000	0.000
3	7:15 am	-	-	-	543	0.075	0.031
4	7:21 am	-	-	-	367	0.000	0.000

Avg. - - - 468 0.046 0.019
 Std.Dev.
 % RSD. 26.43

Status: Pass

05/16/2020
 00000000

Type :
 Dilution

180-105456-M-14
 TOC MAR 2020 - Mar 03, 2021
 1 : 1

Spl #: 28
 Vial #: 28
 Sample ID : 180-105456-M-14
 Method : TOC MAR 2020 - Mar 03, 2021

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:30 am	-	-	-	2,701	1.310	0.546
2	7:35 am	-	-	-	2,463	1.177	0.491
3	7:41 am	-	-	-	2,728	1.325	0.552
4	7:47 am	-	-	-	2,328	1.103	0.460

Avg. - - - 2,555 1.229 0.512
 Std.Dev.
 % RSD. 7.54

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Date Prepared: 05/18/2020

By:

Date Approved:

By:

Spl #: 29 Sample ID: 180-105456-M-15 Type: Sample Date: 05/16/2020 Status: Pass
 Vial #: 29 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:56 am	-	-	-	3,842	1,943	0.810
2	8:01 am	-	-	-	3,721	1,876	0.782
3	8:08 am	-	-	-	4,386	2,245	0.936
4	8:13 am	-	-	-	4,021	2,043	0.851
Avg.		-	-	-	3,993	2,027	0.845
Std.Dev.							
% RSD.		7.26					

Spl #: 30 Sample ID: 180-105456-M-16 Type: Sample Date: 05/16/2020 Status: Pass
 Vial #: 30 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:23 am	-	-	-	15,176	8,238	3.433
2	8:29 am	-	-	-	16,218	8,817	3.674
3	8:34 am	-	-	-	16,038	8,717	3.632
4	8:40 am	-	-	-	15,970	8,680	3.617
Avg.		-	-	-	15,851	8,613	3.589
Std.Dev.							
% RSD.		2.91					

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Date Prepared: 05/18/2020

By:

Date Approved:

By:

Spl #: 31 Sample ID: LCS 20 PPM Type: Chk Standard Date: 05/16/2020 Status: Fail
 Vial #: 31 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:50 am	-	-	-	80,435	44,448	18,520
2	8:55 am	-	-	-	83,394	46,092	19,205
3	9:01 am	-	-	-	81,860	45,240	18,850
4	9:07 am	-	-	-	82,562	45,630	19,013
Avg.		-	-	-	82,063	45,353	18,897
Std.Dev.							
% RSD.		1.53					

Spl #: 32 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 05/16/2020 Status: Fail
 Vial #: 32 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:17 am	-	-	-	81,053	44,792	18,663
2	9:22 am	-	-	-	85,338	47,171	19,655
3	9:28 am	-	-	-	84,720	46,829	19,512
4	9:34 am	-	-	-	85,011	46,990	19,579
Avg.		-	-	-	84,031	46,445	19,352
Std.Dev.							
% RSD.		2.38					

Date Prepared: 05/18/2020

By:

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USA

Status: Fail

Date Approved:

By:

Sample ID: MB
Method: TOC MAR 2020 - Mar 03, 2021
Type: Chk Standard
Dilution: 1 : 1
Date: 05/16/2020
Customer ID: 00000000

Spl #: 33

Vial #: 33

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:43 am	-	-	-	856	0.250	0.103
2	9:49 am	-	-	-	603	0.109	0.045
3	9:55 am	-	-	-	790	0.213	0.089
4	10:00 am	-	-	-	634	0.126	0.053

Avg. - - - - - 721 0.174 0.073
 Std.Dev.
 % RSD. 16.89

Status: Pass

Sample ID: 180-105456-M-17
Method: TOC MAR 2020 - Mar 03, 2021
Type: Sample
Dilution: 1 : 1
Date: 05/16/2020
Customer ID: 00000000

Spl #: 34

Vial #: 34

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:10 am	-	-	-	4,082	2.077	0.865
2	10:15 am	-	-	-	3,862	1.955	0.814
3	10:21 am	-	-	-	4,410	2.259	0.941
4	10:27 am	-	-	-	3,999	2.031	0.846

Avg. - - - - - 4,088 2.080 0.867
 Std.Dev.
 % RSD. 5.69

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Date Prepared: 05/18/2020

By:

Date Approved:

By:

Status: Pass

Sample ID: 180-105405-U-1
 Method: TOC MAR 2020 - Mar 03, 2021
 Type: Sample
 Dilution: 1 : 1
 Date: 05/16/2020
 Customer ID: 00000000

Spl #: 35
 Vial #: 35

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:36 am	-	-	-	4,683	2,411	1,004
2	10:41 am	-	-	-	5,284	2,744	1,143
3	10:47 am	-	-	-	4,984	2,578	1,074
4	10:53 am	-	-	-	4,886	2,524	1,052

Avg. 4,959 2,564 1,068
 Std.Dev.
 % RSD. 5.04

Sample ID: 180-105307-C-1
 Method: TOC MAR 2020 - Mar 03, 2021
 Type: Sample
 Dilution: 1 : 1
 Date: 05/16/2020
 Customer ID: 00000000

Spl #: 36
 Vial #: 36

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:03 am	-	-	-	5,453	2,838	1,183
2	11:08 am	-	-	-	5,053	2,616	1,090
3	11:14 am	-	-	-	5,237	2,718	1,133
4	11:20 am	-	-	-	5,735	2,995	1,248

Avg. 5,370 2,792 1,163
 Std.Dev.
 % RSD. 5.47

Date Prepared: 05/18/2020

By:

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Status: Pass

Date: 05/16/2020
Customer ID: 00000000

Type: Sample
Dilution: 1 : 1

Sample ID: 180-105307-B-3
Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 37
Vial #: 37

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:30 am	-	-	-	9,022	4,821	2,009
2	11:35 am	-	-	-	9,587	5,134	2,139
3	11:41 am	-	-	-	8,926	4,767	1,986
4	11:47 am	-	-	-	9,033	4,827	2,011

Avg. 9,142 4,887 2,036
 Std.Dev.
 % RSD. 3.29

Status: Fail

Date: 05/16/2020
Customer ID: 00000000

Type: Chk Standard
Dilution: 1 : 1

Sample ID: CCV 10 PPM
Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 38
Vial #: 38

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:56 am	-	-	-	42,353	23,297	9,707
2	12:01 pm	-	-	-	44,443	24,458	10,191
3	12:07 pm	-	-	-	42,161	23,190	9,663
4	12:13 pm	-	-	-	42,995	23,654	9,856

Avg. 42,988 23,650 9,854
 Std.Dev.
 % RSD. 2.40

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Date Prepared: 05/18/2020

By: **TOC**

Date Approved:

By:

Spl #: 39 Sample ID: CCB Type: Chk Standard: Date: 05/16/2020 Status: Fail
 Vial #: 39 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:22 pm	-	-	-	792	0.214	0.089
2	12:28 pm	-	-	-	577	0.095	0.040
3	12:34 pm	-	-	-	658	0.139	0.057
4	12:39 pm	-	-	-	283	0.000	0.000
Avg.		-	-	-	578	0.112	0.047
Std.Dev.							
% RSD.					37.31		

Spl #: 40 Sample ID: 180-105307-C-5 Type: Sample Date: 05/16/2020 Status: Pass
 Vial #: 40 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:50 pm	-	-	-	9,511	5.092	2.122
2	12:55 pm	-	-	-	8,880	4.742	1.976
3	1:01 pm	-	-	-	9,817	5.262	2.192
4	1:07 pm	-	-	-	9,383	5.021	2.091
Avg.		-	-	-	9,398	5.029	2.095
Std.Dev.							
% RSD.					4.15		

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Date Prepared: 05/18/2020

By: **TOC**

Spl #: 41 Sample ID: 180-105307-C-7 Type: Sample Date: 05/16/2020 Status: Pass
 Vial #: 41 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:16 pm	-	-	-	24,569	13,455	5,606
2	1:22 pm	-	-	-	24,749	13,555	5,648
3	1:27 pm	-	-	-	24,909	13,644	5,685
4	1:33 pm	-	-	-	25,414	13,925	5,802

Avg. 24,910 13,645 5,685
 Std.Dev.
 % RSD. 1.46

Spl #: 42 Sample ID: 180-105307-C-9 Type: Sample Date: 05/16/2020 Status: Pass
 Vial #: 42 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:43 pm	-	-	-	30,347	16,664	6,944
2	1:48 pm	-	-	-	31,696	17,414	7,256
3	1:54 pm	-	-	-	31,943	17,551	7,313
4	2:00 pm	-	-	-	32,550	17,888	7,453

Avg. 31,634 17,379 7,241
 Std.Dev.
 % RSD. 2.94

Date Prepared: 05/18/2020

By:

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Status: Fail

05/16/2020
000000000

05/16/2020
000000000

Type :
Dilution

CCV 10 PPM
TOC MAR 2020 - Mar 03, 2021

Sample ID :
Method :

43
43

Spl #:
Vial #:

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:10 pm	-	-	-	42,134	23.176	9.657
2	2:15 pm	-	-	-	45,352	24.963	10.401
3	2:21 pm	-	-	-	43,182	23.758	9.899
4	2:27 pm	-	-	-	44,876	24.698	10.290
Avg.		-	-	-	43,886	24.149	10.062
Std.Dev.		3.40					
% RSD.		3.40					

Status: Fail

05/16/2020
000000000

05/16/2020
000000000

Type :
Dilution

CCB
TOC MAR 2020 - Mar 03, 2021

Sample ID :
Method :

44
44

Spl #:
Vial #:

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:36 pm	-	-	-	637	0.128	0.053
2	2:43 pm	-	-	-	721	0.175	0.073
3	2:48 pm	-	-	-	629	0.123	0.051
4	2:54 pm	-	-	-	514	0.059	0.025
Avg.		-	-	-	625	0.121	0.050
Std.Dev.		13.62					
% RSD.		13.62					

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Date Prepared: 05/18/2020

By: *TOC*

Date Approved:

By:

Method Summary

Method Details

Method Name: TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM

Date Created: 03/03/2020
 Time Created: 16:44
 Created By: toc

Analysis Mode: NPOC Only

Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00

Volumes

Sample Volume (mL): 2.400
 Acid Volume (mL): 1.000
 Persulfate Volume(mL): 1.500

Other

SysPressure: 20.00

Times

React 01:30
 Detect 03:00
 TIC
 React 02:00
 Detect 03:00
 TOC
 React 01:30
 Detect 03:00
 TIC
 React 02:00
 Detect 03:00
 TOC

Pre-Processing

Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.950	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC
 User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

Date Prepared: 05/18/2020 By:

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Date Approved: By:

Calibration Details

Calibration Mode: TOC
Date Calibrated: 05/15/2020
Time Calibrated: 6:14 pm
Calibrated By: toc
RF (ugC/k-cts): 0.5554
R2: 0.9981
R: 0.9990
QC Blank(cts): 3,948
Offset (cts): -1456
Offset (ugC): 0.809
Reagent Blank (cts): 343
Units of Measure: PPM->mg/L C

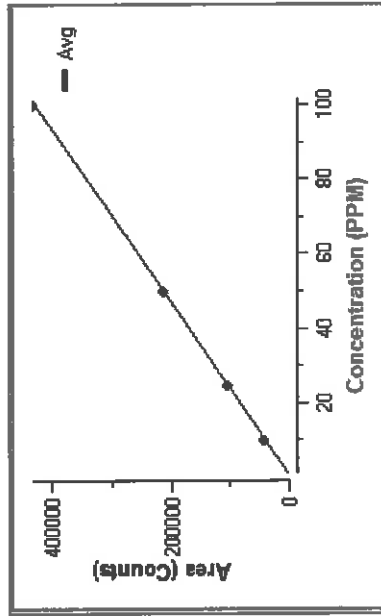
Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
of Reagent Blanks: 4
EFC Enabled: No
Total Flowrate w/EFC: 100 ml/min
Check Standards: Subtract RW
Samples: Subtract RB
Regression type: Unweighted Linear

Calculations:

$$\text{Concentration} = \frac{\text{RF} \times \text{Area}}{\text{volume}}$$

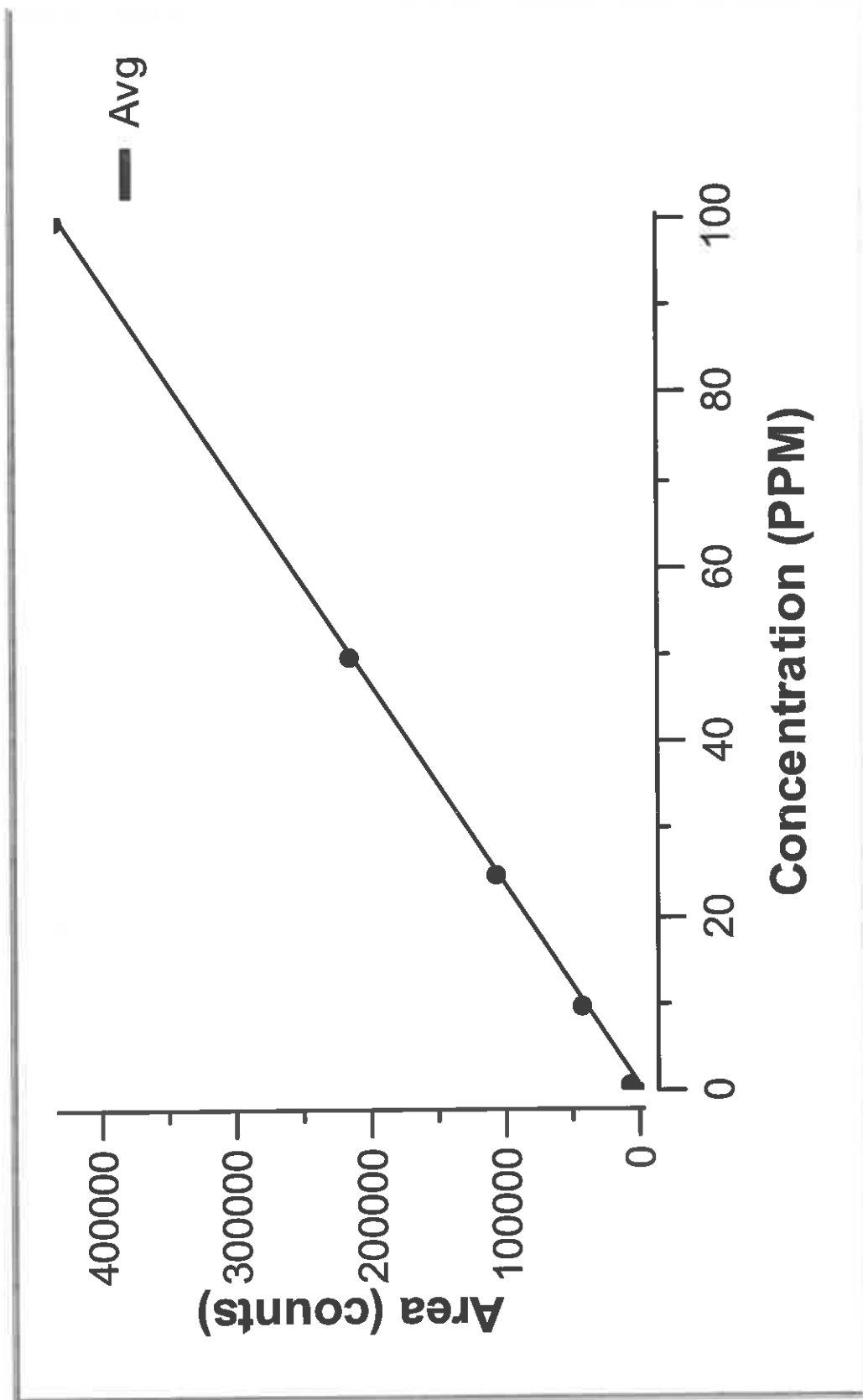
Samples: $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{Offset}}$ or $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{RB}}$
CHK Stds: $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{Offset}}$ or $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{RW}}$
QC Samples: $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{QCBlank}}$



$$y \Rightarrow \text{Area}$$

$$y = m \times x + b$$

$$m \Rightarrow \frac{1000}{\text{RF} \times \text{volume}} \quad b \Rightarrow 0$$



Instrument ID: E717730273

Wet - Chemistry

User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 5-TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Modified By: toc
 Date Created: 2020/03/03; 04:44 PM
 Last Modified: 2020/05/15; 05:54 PM
 Last Calibrated: 2020/05/15; 05:54 PM

RF(ugC/k-cnt): 0.5554
 R2: 0.9981
 Reagent Blank(cts): 343
 Offset Area(cts): -1,456
 Offset Mass(ugC): 0.81

Std #	Conc (PPM)	Volume (mL)	# Repts	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	408	10	2.46	2020-05-15; 04:25PM
1	1.000	2.400	2	4,450	70	1.58	2020-05-15; 04:48PM
2	10.000	2.400	2	41,019	1,860	4.53	2020-05-15; 05:02PM
3	25.000	2.400	2	103,906	3,785	3.64	2020-05-15; 05:18PM
4	50.000	2.400	2	213,059	9,408	4.42	2020-05-15; 05:33PM
5	100.000	2.400	2	432,151	19,878	4.60	2020-05-15; 05:48PM

Date Prepared: 05/15/2020 By:

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Date Approved: By:

Sample Results Summary

Spl Vial #	Sample ID	Num Rep	Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	DI WATER	4	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	000000000	TOC	1,879	0.800	0.333	475	25.29	Pass
2	BLANK	2	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	000000000	TOC	1,026	0.333	0.138	250	24.40	Pass
4	TOC-RW	2	3	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	000000000	TOC	408	0.000	0.000	10	2.46	
5	TOC-Std#1-1.000 PPM	2	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	000000000	TOC	4,450	2.400	1.000	70	1.58	
6	TOC-Std#2-10.000 PPM	2	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	000000000	TOC	41,019	24.000	10.000	1,860	4.53	
7	TOC-Std#3-25.000 PPM	2	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	000000000	TOC	103,906	60.000	25.000	3,785	3.64	
8	TOC-Std#4-50.000 PPM	2	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	000000000	TOC	213,059	120.000	50.000	9,408	4.42	
9	TOC-Std#5-100.000 PPM	2	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	000000000	TOC	432,151	240.000	100.000	19,878	4.60	
10	QC BLANK	2	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	QC Blank	1 : 1	000000000	TOC	3,948	0.000	0.000	2,110	53.43	

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Sample Results

Spl #: 1 Sample ID: DI WATER Type: Sample Date: 05/15/2020 Status: Pass
Vial #: 1 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:05 pm	-	-	-	2,461	1.118	0.466
2	3:11 pm	-	-	-	1,823	0.769	0.320
3	3:17 pm	-	-	-	1,931	0.828	0.345
4	3:22 pm	-	-	-	1,302	0.483	0.201

Avg. 1,879 0.800 0.333
Std.Dev.
% RSD. 25.29

Spl #: 2 Sample ID: BLANK Type: Sample Date: 05/15/2020 Status: Pass
Vial #: 2 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:31 pm	-	-	-	1,203	0.429	0.178
2	3:37 pm	-	-	-	849	0.236	0.098

Avg. 1,026 0.333 0.138
Std.Dev.
% RSD. 24.40

Date Prepared: 05/15/2020 By:

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Date Approved: By:

Status:

Spl #: 4 Sample ID: TOC-RW Type: Std Date: 05/15/2020
Vial #: 3 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:25 pm	-	-	-	949	0.000	0.000
2	4:31 pm	-	-	-	401	0.000	0.000
3	4:40 pm	-	-	-	415	0.000	0.000

Avg. 408 0.000 0.000
Std.Dev. 2.46
% RSD.

Status:

Spl #: 5 Sample ID: TOC-Std#1-1.000 PPM Type: Std Date: 05/15/2020
Vial #: 4 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:48 pm	-	-	-	4,400	2.400	1.000
2	4:54 pm	-	-	-	4,500	2.400	1.000

Avg. 4,450 2.400 1.000
Std.Dev. 1.58
% RSD.

Status:

Spl #: 6 Sample ID: TOC-Std#2-10.000 PPM Type: Std Date: 05/15/2020
Vial #: 5 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:02 pm	-	-	-	39,704	24.000	10.000
2	5:08 pm	-	-	-	42,335	24.000	10.000

Avg. 41,019 24.000 10.000
Std.Dev. 4.53
% RSD.

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Date Prepared: 05/15/2020 By:

Date Approved: By:

Status:

Date: 05/15/2020
Customer ID: 00000000

Type: Std
Dilution 1 : 1

Sample ID: TOC-Std#3-25.000 PPM
Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 7
Vial #: 6

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:18 pm	-	-	-	101,230	60.000	25.000	
2	5:23 pm	-	-	-	106,583	60.000	25.000	
Avg.		-	-	-	103,906	60.000	25.000	
Std.Dev.								3.64
% RSD.								

Status:

Date: 05/15/2020
Customer ID: 00000000

Type: Std
Dilution 1 : 1

Sample ID: TOC-Std#4-50.000 PPM
Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 8
Vial #: 7

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:33 pm	-	-	-	206,406	120.000	50.000	
2	5:39 pm	-	-	-	219,711	120.000	50.000	
Avg.		-	-	-	213,059	120.000	50.000	
Std.Dev.								4.42
% RSD.								

Status:

Date: 05/15/2020
Customer ID: 00000000

Type: Std
Dilution 1 : 1

Sample ID: TOC-Std#5-100.000 PPM
Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 9
Vial #: 8

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:48 pm	-	-	-	418,096	240.000	100.000	
2	5:54 pm	-	-	-	446,207	240.000	100.000	
Avg.		-	-	-	432,151	240.000	100.000	
Std.Dev.								4.60
% RSD.								

Date Prepared: 05/15/2020 By:

Date Approved: By:

Status:

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Spl #: 10 Sample ID: QC BLANK Type: QC Blank Date: 05/15/2020
Vial #: 9 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:08 pm				5,440	0.000	0.000
2	6:13 pm				2,456	0.000	0.000

Avg. 3,948 0.000 0.000

Std.Dev. 53.43

% RSD.

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Date Prepared: 05/15/2020

By: *TOC*

Date Approved:

By:

Method Summary

Method Details

Method Name: TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM

Date Created: 03/03/2020
 Time Created: 16:44

Created By: toc

Analysis Mode: NPOC Only

Sparging Mode: Internal

Pre-Acid Volume (mL): 1.000

Sparge Time (mm:ss): 02:00

Volumes

Sample Volume (mL): 2.400

Acid Volume (mL): 1.000

Persulfate Volume(mL): 1.500

Other

SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled

Dilution Mode: Automatic

Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No

Additional Replicates: 1

Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000

Rinses Per Sample: 1

Rinses Per Replicate: 0

Max. Std. Dev. 100 Use Modified Oxidant: No

Temp
 React 70
 Detect 70
 TIC
 React 98
 Detect 98
 TOC

Calibration Summary

Calibration Generation

Generation Mode: Manual

of Stds: 5

Dilution Factor: 10 : 1

Dilution Volume (mL): 1.000

Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.950	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC

User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

Date Prepared: 05/15/2020 By:

Date Approved: By:

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Calibration Details

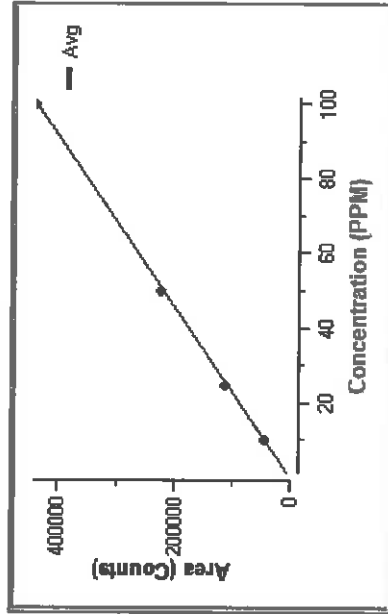
Calibration Mode: TOC
Date Calibrated: 05/13/2020
Time Calibrated: 7:18 pm
Calibrated By: toc
RF (ugC/k-cts): 0.5476
R2: 0.9996
R: 0.9998
QC Blank(cts): 497
Offset (cts): 863
Offset (ugC): -0.472
Reagent Blank (cts): 419
Units of Measure: PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
of Reagent Blanks: 4
EFC Enabled: No
Total Flowrate w/EFC: 100 ml/min
Check Standards: Subtract RW
Samples: Subtract RB
Regression type: Unweighted Linear

Calculations:

$Concentration = \frac{RF \times Area}{volume}$
Samples: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RB}$
CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RW}$
QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$y \Rightarrow Area$
 $y = m \times x + b$
 $m \Rightarrow \frac{1000}{RF \times volume}$ $b \Rightarrow 0$

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By: **TOC**

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Date Approved:

By:

Calibration Details

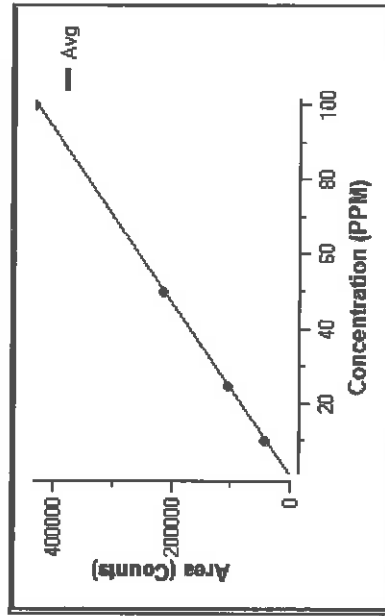
Calibration Mode: TOC
 Date Calibrated: 05/15/2020
 Time Calibrated: 5:54 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5554
 R2: 0.9981
 R: 0.9990
 QC Blank(cts): 0
 Offset (cts): -1456
 Offset (ugC): 0.809
 Reagent Blank (cts): 343
 Units of Measure: PPM->mg/L C

Calibration Settings

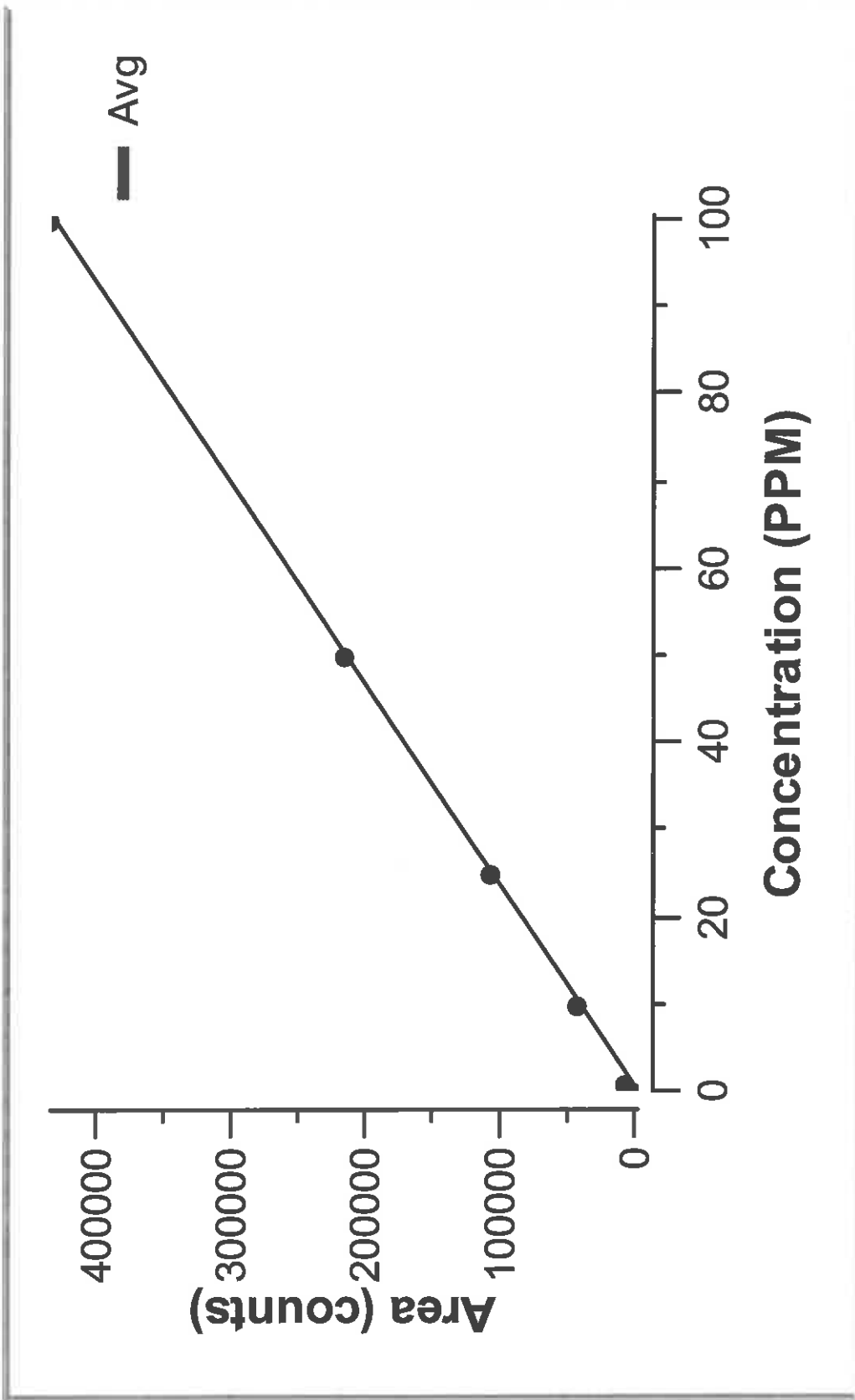
Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

$Concentration = \frac{RF \times Area}{1000 \times volume}$
 Samples: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RB}$
 CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RW}$
 QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$y \Rightarrow Area$ $y = m \times x + b$
 $m \Rightarrow \frac{1000}{RF \times volume}$ $b \Rightarrow 0$



User ID:toc

Name:Total Organic Carbon

Title:Mr

Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 5-TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM

Modified By: toc

Date Created: 2020/03/03; 04:44 PM

Last Modified: 2020/05/15; 05:54 PM

Last Calibrated: 2020/05/15; 05:54 PM

RF(ugC/k-cnt): 0.5554

R2: 0.9981

Reagent Blank(cts): 343

Offset Area(cts): -1,456

Offset Mass(ugC): 0.81

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	408	10	2.46	2020-05-15; 04:25PM
1	1.000	2.400	2	4,450	70	1.58	2020-05-15; 04:48PM
2	10.000	2.400	2	41,019	1,860	4.53	2020-05-15; 05:02PM
3	25.000	2.400	2	103,906	3,785	3.64	2020-05-15; 05:18PM
4	50.000	2.400	2	213,059	9,408	4.42	2020-05-15; 05:33PM
5	100.000	2.400	2	432,151	19,878	4.60	2020-05-15; 05:48PM

TMS 15/12/20

5310C/9060A TOC %Readback Error Calculation Spreadsheet

ICAL Std (ppm)	ICAL RF	ICAL ID	Average Area	Result (ppm)	%Readback Error	%Readback Criteria
1.000	0.5554	051520TOCCAL	4430	1.030	2.980	≤50%
10.000	0.5554	051520TOCCAL	41091	9.509	-4.909	≤20%
25.000	0.5554	051520TOCCAL	103906	24.046	-3.818	≤20%
50.000	0.5554	051520TOCCAL	213059	49.305	-1.389	≤20%
100.000	0.5554	051520TOCCAL	432151	100.007	0.007	≤20%

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Date Prepared: 05/19/2020 By: *TOC*

Date Approved: *051820 Doc B* By: *TM 5/19/20*

DC1030
9060-Diss Batch # *315890*

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	BLANK	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	796	0.252	0.105	368	46.22	Pass
2	ICV 40 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk	1:1	00000000	TOC	169,229	93.766	39.069	4,358	2.58	Fail
3	ICB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	753	0.192	0.080	236	31.39	Fail
4	LCS 20 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	82,989	45.867	19.111	1,888	2.27	Fail
5	LCSD 20 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	86,084	47.586	19.828	2,139	2.48	Fail
6	MB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	721	0.175	0.073	174	24.18	Fail
7	180-105175-B-2	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Sample	1:1	00000000	TOC	26,914	14.758	6.149	963	3.58	Pass
8	180-105175-B-2 MS	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	69,231	38.261	15.942	1,073	1.55	Pass
9	180-105175-A-2 MSD	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	69,926	38.647	16.103	1,588	2.27	Pass
10	180-105175-B-4	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	23,595	12.914	5.381	337	1.43	Pass
11	180-105175-B-6	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	14,863	8.084	3.361	359	2.41	Pass
12	180-105175-B-8	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	27,264	14.952	6.230	685	2.51	Pass
13	180-105307-B-2	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	7,940	4.219	1.758	442	5.57	Pass
14	CCV 10 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk	1:1	00000000	TOC	42,739	23.512	9.796	588	1.38	Fail
15	CCB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	630	0.124	0.052	56	8.84	Fail
16	180-105307-B-4	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Sample	1:1	00000000	TOC	9,342	4.998	2.083	413	4.42	Pass
17	180-105307-B-6	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	9,706	5.200	2.167	394	4.06	Pass
18	180-105307-A-8	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	24,826	13.598	5.666	911	3.67	Pass
19	180-105307-B-10	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1:1	00000000	TOC	31,667	17.398	7.249	841	2.66	Pass
20	CCV 10 PPM	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Chk	1:1	00000000	TOC	41,052	22.575	9.406	578	1.41	Fail
21	CCB	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Standard Chk	1:1	00000000	TOC	671	0.147	0.061	167	24.92	Fail

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Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 05/18/2020 Status: Pass
 Vial #: 1 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:34 pm	-	-	-	938	0.330	0.138
2	6:39 pm	-	-	-	521	0.099	0.041
3	6:46 pm	-	-	-	1,251	0.504	0.210
4	6:50 pm	-	-	-	475	0.073	0.031
Avg.		-	-	-	796	0.252	0.105
Std.Dev.							
% RSD.		46.22					

Spl #: 2 Sample ID: ICV 40 PPM Type: Chk Standard Date: 05/18/2020 Status: Fail
 Vial #: 2 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:00 pm	-	-	-	163,044	90.331	37.638
2	7:06 pm	-	-	-	172,353	95.501	39.792
3	7:12 pm	-	-	-	169,295	93.803	39.084
4	7:18 pm	-	-	-	172,225	95.430	39.762
Avg.		-	-	-	169,229	93.766	39.069
Std.Dev.							
% RSD.		2.58					

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Date Prepared: 05/19/2020 By:
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Spl #: 3 Sample ID: ICB Type: Chk Standard: Date: 05/18/2020 Status: Fail
 Vial #: 3 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:27 pm	-	-	-	990	0.324	0.134
2	7:33 pm	-	-	-	907	0.278	0.116
3	7:38 pm	-	-	-	628	0.123	0.051
4	7:44 pm	-	-	-	485	0.043	0.018
Avg.		-	-	-	753	0.192	0.080
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	31.39	-	-

Status: Fail

Spl #: 4 Sample ID: LCS 20 PPM Type: Chk Standard: Date: 05/18/2020 Status: Fail
 Vial #: 4 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:53 pm	-	-	-	81,443	45.008	18.754
2	7:59 pm	-	-	-	85,546	47.287	19.703
3	8:05 pm	-	-	-	81,692	45.147	18.811
4	8:11 pm	-	-	-	83,273	46.025	19.176
Avg.		-	-	-	82,989	45.867	19.111
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.27	-	-

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Date Prepared: 05/19/2020

By:

Date Approved:

By:

Sample ID: LCSD 20 PPM
Method: TOC MAR 2020 - Mar 03, 2021

Chk Standard: 1 : 1
Date: 05/18/2020
Customer ID: 00000000

Status: Fail

Type: Dilution

Spl #: 5
Vial #: 5

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:20 pm	-	-	-	83,622	46.219	19.258
2	8:26 pm	-	-	-	88,793	49.090	20.454
3	8:32 pm	-	-	-	85,573	47.302	19.709
4	8:37 pm	-	-	-	86,349	47.733	19.889
Avg.		-	-	-	86,084	47.586	19.828
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.48	-	-

Status: Fail

Chk Standard: 1 : 1
Date: 05/18/2020
Customer ID: 00000000

Type: Dilution

Spl #: 6
Vial #: 6

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:47 pm	-	-	-	910	0.279	0.116
2	8:52 pm	-	-	-	747	0.189	0.079
3	8:58 pm	-	-	-	740	0.185	0.077
4	9:04 pm	-	-	-	488	0.045	0.019
Avg.		-	-	-	721	0.175	0.073
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	24.18	-	-

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Date Prepared: 05/19/2020

By:

Date Approved:

By:

Status: Pass

Date: 05/18/2020
 Customer ID: 00000000

Sample Type: 1 : 1
 Dilution

Sample ID: 180-105175-B-2
 Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 7
 Vial #: 7

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:13 pm	-	-	-	25,549	14,000	5.833
2	9:19 pm	-	-	-	26,992	14,801	6.167
3	9:25 pm	-	-	-	27,355	15,003	6.251
4	9:31 pm	-	-	-	27,761	15,228	6.345
Avg.					26,914	14,758	6.149
Std.Dev.							
% RSD.					3.58		

Date: 05/18/2020
 Customer ID: 00000000

Sample Type: 1 : 1
 Dilution

Sample ID: 180-105175-B-2 MS
 Method: TOC MAR 2020 - Mar 03, 2021

Spl #: 8
 Vial #: 8

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:40 pm	-	-	-	67,749	37,438	15.599
2	9:46 pm	-	-	-	69,379	38,343	15.976
3	9:52 pm	-	-	-	69,482	38,401	16.000
4	9:57 pm	-	-	-	70,315	38,863	16.193
Avg.					69,231	38,261	15.942
Std.Dev.							
% RSD.					1.55		

Status: Pass

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Date Prepared: 05/19/2020

By:

Date Approved:

By:

Spl #: 9 Sample ID: 180-105175-A-2 MSD Type: Sample Date: 05/18/2020 Status: Pass
 Vial #: 9 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:07 pm	-	-	-	67,988	37.571	15.655
2	10:13 pm	-	-	-	69,691	38.517	16.049
3	10:19 pm	-	-	-	70,177	38.787	16.161
4	10:24 pm	-	-	-	71,847	39.714	16.548
Avg.		-	-	-	69,926	38.647	16.103
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.27	-	-

Spl #: 10 Sample ID: 180-105175-B-4 Type: Sample Date: 05/18/2020 Status: Pass
 Vial #: 10 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:34 pm	-	-	-	23,370	12.790	5.329
2	10:40 pm	-	-	-	24,041	13.162	5.484
3	10:46 pm	-	-	-	23,301	12.751	5.313
4	10:51 pm	-	-	-	23,666	12.954	5.398
Avg.		-	-	-	23,595	12.914	5.381
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.43	-	-

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Date Prepared: 05/19/2020 By: **TOC**

Date Approved: By: Status: Pass

Spl #: 11 Sample ID: 180-105175-B-6 Type: Sample Date: 05/18/2020
 Vial #: 11 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:02 pm	-	-	-	14,868	8.068	3.362
2	11:07 pm	-	-	-	15,326	8.322	3.468
3	11:13 pm	-	-	-	14,804	8.032	3.347
4	11:19 pm	-	-	-	14,453	7.837	3.265
Avg.		-	-	-	14,863	8.064	3.361
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.41	-	-

Status: Pass

Spl #: 12 Sample ID: 180-105175-B-8 Type: Sample Date: 05/18/2020
 Vial #: 12 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:28 pm	-	-	-	26,273	14.402	6.001
2	11:34 pm	-	-	-	27,678	15.182	6.326
3	11:39 pm	-	-	-	27,763	15.229	6.346
4	11:45 pm	-	-	-	27,342	14.995	6.248
Avg.		-	-	-	27,264	14.952	6.230
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.51	-	-

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Date Prepared: 05/19/2020 By: **TOC**
 Date Approved: By:

Spl #: 13 Sample ID: 180-105307-B-2 Type: Sample Date: 05/19/2020 Status: Pass
 Vial #: 13 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:55 pm	-	-	-	7,565	4,011	1,671
2	12:01 am	-	-	-	8,574	4,572	1,905
3	12:07 am	-	-	-	7,879	4,186	1,744
4	12:13 am	-	-	-	7,741	4,109	1,712
Avg.		-	-	-	7,940	4,219	1,758
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	5.57	-	-

Spl #: 14 Sample ID: CCV 10 PPM Type: Chk Standard Date: 05/19/2020 Status: Fail
 Vial #: 14 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:21 am	-	-	-	41,939	23,067	9,611
2	12:27 am	-	-	-	43,350	23,851	9,938
3	12:33 am	-	-	-	42,886	23,593	9,831
4	12:39 am	-	-	-	42,781	23,535	9,806
Avg.		-	-	-	42,739	23,512	9,796
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.38	-	-

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Date Prepared: 05/19/2020

By:

Date Approved:

By:

Spl #: 15 Sample ID: CCB Type: Chk Standard: Date: 05/19/2020 Status: Fail
 Vial #: 15 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:48 am	-	-	-	700	0.163	0.068
2	12:54 am	-	-	-	614	0.115	0.048
3	12:59 am	-	-	-	639	0.129	0.054
4	1:05 am	-	-	-	566	0.088	0.037
Avg.		-	-	-	630	0.124	0.052
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	8.84	-	-

Status: Pass

Spl #: 16 Sample ID: 180-105307-B-4 Type: Sample Date: 05/19/2020
 Vial #: 16 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:15 am	-	-	-	8,921	4.764	1.985
2	1:21 am	-	-	-	9,588	5.135	2.140
3	1:27 am	-	-	-	9,069	4.847	2.020
4	1:32 am	-	-	-	9,789	5.246	2.186
Avg.		-	-	-	9,342	4.998	2.083
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	4.42	-	-

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TOC

Date Prepared: 05/19/2020

By:

Date Approved:

By:

Spl #: 17 Sample ID: 180-105307-B-6 Type: Sample Date: 05/19/2020 Status: Pass
 Vial #: 17 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:42 am	-	-	-	9,129	4.880	2.033
2	1:48 am	-	-	-	10,010	5.369	2.237
3	1:54 am	-	-	-	9,885	5.300	2.208
4	1:59 am	-	-	-	9,799	5.252	2.188
Avg.		-	-	-	9,706	5.200	2.167
Std.Dev.							
% RSD.					4.06		

Spl #: 18 Sample ID: 180-105307-A-8 Type: Sample Date: 05/19/2020 Status: Pass
 Vial #: 18 Method: TOC MAR 2020 - Mar 03, 2021 Dilution: 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:08 am	-	-	-	23,787	13.021	5.425
2	2:14 am	-	-	-	25,429	13.933	5.805
3	2:19 am	-	-	-	24,355	13.337	5.557
4	2:25 am	-	-	-	25,735	14.103	5.876
Avg.		-	-	-	24,826	13.598	5.666
Std.Dev.							
% RSD.					3.67		

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Date Prepared: 05/19/2020 By: **TOC**

Date Approved: By: Status: Pass
 Date: 05/19/2020
 Customer ID: 00000000

Spl #: 19 Sample ID : 180-105307-B-10 Type :
 Vial #: 19 Method : TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:35 am	-	-	-	30,655	16,836	7,015
2	2:41 am	-	-	-	31,757	17,448	7,269
3	2:47 am	-	-	-	31,550	17,333	7,222
4	2:52 am	-	-	-	32,705	17,974	7,489
Avg.					31,667	17,398	7,249
Std.Dev.							
% RSD.							2.66

Spl #: 20 Sample ID : CCV 10 PPM Type :
 Vial #: 20 Method : TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1

Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:02 am	-	-	-	40,334	22,176	9,239
2	3:08 am	-	-	-	41,634	22,898	9,541
3	3:13 am	-	-	-	40,855	22,465	9,361
4	3:19 am	-	-	-	41,385	22,760	9,483
Avg.					41,052	22,575	9,406
Std.Dev.							
% RSD.							1.41

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Date Prepared: 05/19/2020

By:

Date Approved:

By:

Spl #: 21

Sample ID: CCB

Type: Chk Standard

Date: 05/19/2020

Status: Fail

Method: TOC MAR 2020 - Mar 03, 2021

Dilution 1 : 1

Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:28 am	-	-	-	869	0.256	0.107
2	3:34 am	-	-	-	678	0.151	0.063
3	3:40 am	-	-	-	677	0.150	0.063
4	3:46 am	-	-	-	460	0.029	0.012

Avg.

Std.Dev.

% RSD.

671

0.147

0.061

24.92

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Date Prepared: 05/19/2020

By: TOC

Date Approved:

By:

Method Summary

Method Details

Method Name: TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Date Created: 03/03/2020
 Time Created: 16:44
 Created By: toc

Analysis Mode: NPOC Only
 Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00

Volumes
 Sample Volume (mL): 2.400
 Acid Volume (mL): 1.000
 Persulfate Volume(mL): 1.500

Other
 SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

Max. Std. Dev. 100 Use Modified Oxidant: No

Temp
 React 70
 Detect 70
 TIC
 TOC 98
 Detect 98

Times
 React 01:30
 Detect 03:00
 TIC
 TOC 03:00

Calibration Summary

Calibration Generation

Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	No	0.950	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC
 User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

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TOC

Date Prepared: 05/19/2020 By:

Date Approved: By:

Calibration Details

Calibration Mode: TOC
 Date Calibrated: 05/15/2020
 Time Calibrated: 6:14 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5554
 R2: 0.9981
 R: 0.9990
 QC Blank(cts): 3.948
 Offset (cts): -1456
 Offset (ugC): 0.809
 Reagent Blank (cts): 343
 Units of Measure: PPM->mg/L C

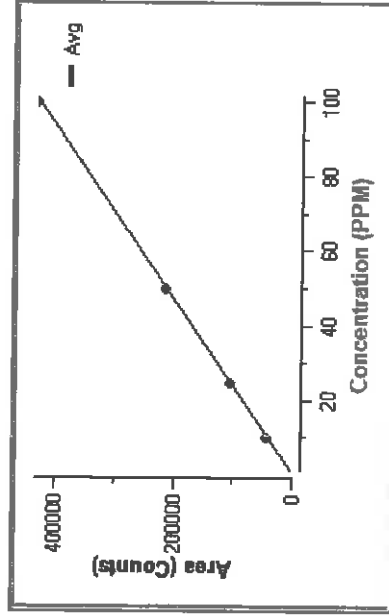
Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

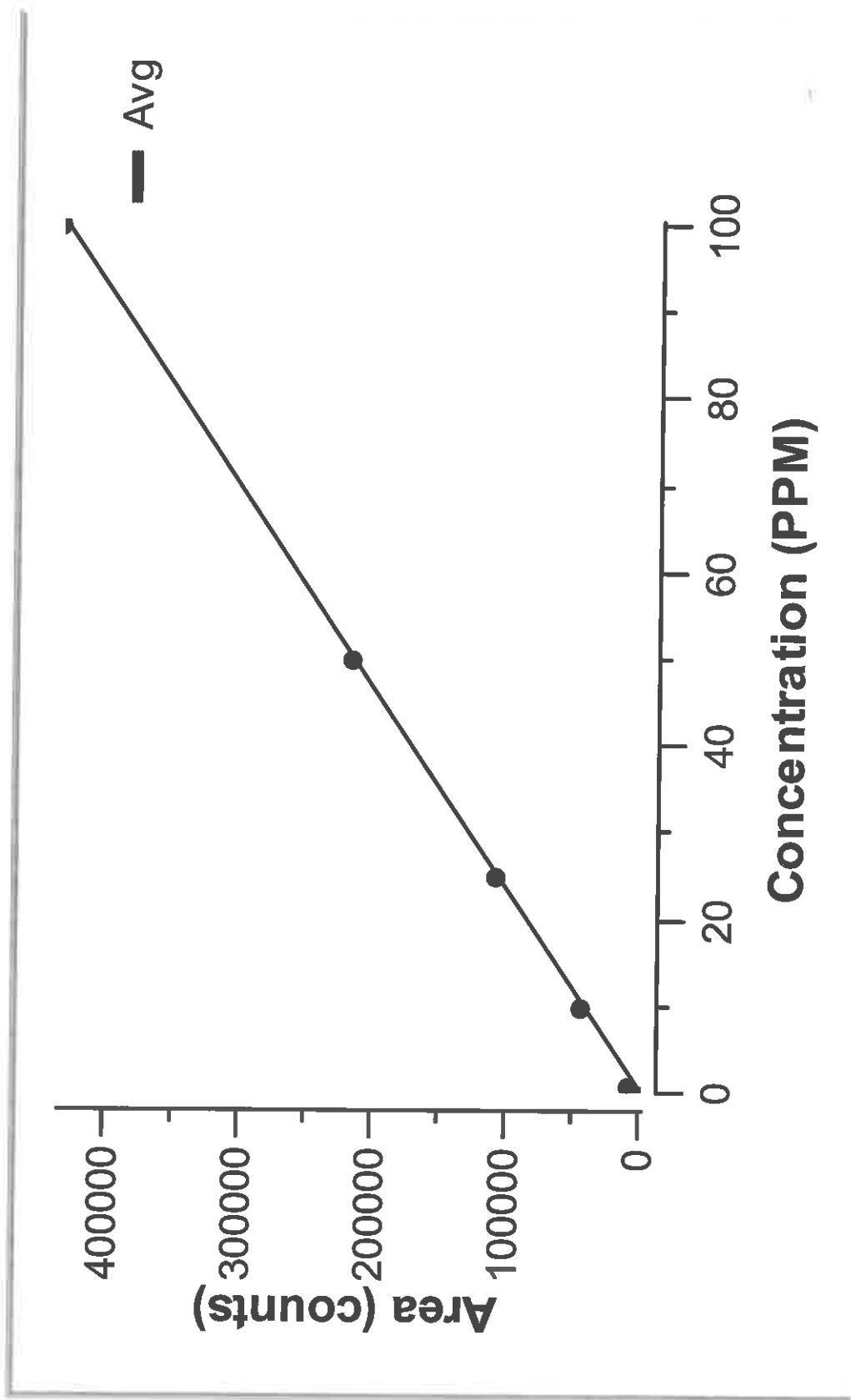
$$\text{Concentration} = \frac{\text{RF} \times \text{Area}}{\text{volume}}$$

Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RB}
 CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RW}
 QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$$y = m \times x + b$$

$$y \Rightarrow \text{Area} \quad m \Rightarrow \frac{1000}{\text{RF} \times \text{volume}} \quad b \Rightarrow 0$$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 5-TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Modified By: toc
 Date Created: 2020/03/03; 04:44 PM
 Last Modified: 2020/05/15; 05:54 PM
 Last Calibrated: 2020/05/15; 05:54 PM

RF(ugC/k-cnt): 0.5554
 R2: 0.9981
 Reagent Blank(cts): 343
 Offset Area(cts): -1,456
 Offset Mass(ugC): 0.81

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	408	10	2.46	2020-05-15; 04:25PM
1	1.000	2.400	2	4,450	70	1.58	2020-05-15; 04:48PM
2	10.000	2.400	2	41,019	1,860	4.53	2020-05-15; 05:02PM
3	25.000	2.400	2	103,906	3,785	3.64	2020-05-15; 05:18PM
4	50.000	2.400	2	213,059	9,408	4.42	2020-05-15; 05:33PM
5	100.000	2.400	2	432,151	19,878	4.60	2020-05-15; 05:48PM

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Date Prepared: 05/15/2020 By:
 Date Approved: By:

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	DI WATER	4	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	1,879	0.800	0.333	475	25.29	Pass
2	BLANK	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Sample	1 : 1	00000000	TOC	1,026	0.333	0.138	250	24.40	Pass
3	TOC-RW	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	00000000	TOC	408	0.000	0.000	10	2.46	
4	TOC-Std#1-1.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	00000000	TOC	4,450	2.400	1.000	70	1.58	
5	TOC-Std#2-10.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	00000000	TOC	41,019	24.000	10.000	1,860	4.53	
6	TOC-Std#3-25.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	00000000	TOC	103,906	60.000	25.000	3,785	3.64	
7	TOC-Std#4-50.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	00000000	TOC	213,059	120.000	50.000	9,408	4.42	
8	TOC-Std#5-100.000 PPM	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	Std	1 : 1	00000000	TOC	432,151	240.000	100.000	19,878	4.60	
9	QC BLANK	2	TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM	QC Blank	1 : 1	00000000	TOC	3,948	0.000	0.000	2,110	53.43	

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Date Prepared: 05/15/2020

By: *TOC*

Date Approved:

By:

Sample Results

Spl #: 1 Sample ID: DI WATER Type: Sample Date: 05/15/2020 Status: Pass
 Vial #: 1 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:05 pm	-	-	-	2,461	1,118	0.466
2	3:11 pm	-	-	-	1,823	0.769	0.320
3	3:17 pm	-	-	-	1,931	0.828	0.345
4	3:22 pm	-	-	-	1,302	0.483	0.201

Avg. 1,879 0.800 0.333
 Std.Dev.
 % RSD. 25.29

Spl #: 2 Sample ID: BLANK Type: Sample Date: 05/15/2020 Status: Pass
 Vial #: 2 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:31 pm	-	-	-	1,203	0.429	0.178
2	3:37 pm	-	-	-	849	0.236	0.098

Avg. 1,026 0.333 0.138
 Std.Dev.
 % RSD. 24.40

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Date Prepared: 05/15/2020

By:

TOC

Spl #: 4 Sample ID: TOC-RW Type: Std Date: 05/15/2020 Status:
Vial #: 3 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	4:25 pm	-	-	-	949	0.000	0.000	
2	4:31 pm	-	-	-	401	0.000	0.000	
3	4:40 pm	-	-	-	415	0.000	0.000	
Avg.		-	-	-	408	0.000	0.000	
Std.Dev.								2.46
% RSD.								

Spl #: 5 Sample ID: TOC-Std#1-1.000 PPM Type: Std Date: 05/15/2020 Status:
Vial #: 4 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	4:48 pm	-	-	-	4,400	2,400	1,000	
2	4:54 pm	-	-	-	4,500	2,400	1,000	
Avg.		-	-	-	4,450	2,400	1,000	
Std.Dev.								1.58
% RSD.								

Spl #: 6 Sample ID: TOC-Std#2-10.000 PPM Type: Std Date: 05/15/2020 Status:
Vial #: 5 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:02 pm	-	-	-	39,704	24,000	10,000	
2	5:08 pm	-	-	-	42,335	24,000	10,000	
Avg.		-	-	-	41,019	24,000	10,000	
Std.Dev.								4.53
% RSD.								

Date Prepared: 05/15/2020

By:

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Date Approved:

By:

Status:

Sample ID : TOC-Std#3-25.000 PPM
Method : TOC MAR 2020 - Mar 03, 2021
Type : Std
Dilution 1 : 1
Date: 05/15/2020
Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:18 pm	-	-	-	101,230	60.000	25.000	
2	5:23 pm	-	-	-	106,583	60.000	25.000	
Avg.		-	-	-	103,906	60.000	25.000	
Std.Dev.								
% RSD.								3.64

Status:

Sample ID : TOC-Std#4-50.000 PPM
Method : TOC MAR 2020 - Mar 03, 2021
Type : Std
Dilution 1 : 1
Date: 05/15/2020
Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:33 pm	-	-	-	206,406	120.000	50.000	
2	5:39 pm	-	-	-	219,711	120.000	50.000	
Avg.		-	-	-	213,059	120.000	50.000	
Std.Dev.								
% RSD.								4.42

Status:

Sample ID : TOC-Std#5-100.000 PPM
Method : TOC MAR 2020 - Mar 03, 2021
Type : Std
Dilution 1 : 1
Date: 05/15/2020
Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:48 pm	-	-	-	418,096	240.000	100.000	
2	5:54 pm	-	-	-	446,207	240.000	100.000	
Avg.		-	-	-	432,151	240.000	100.000	
Std.Dev.								
% RSD.								4.60

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Date Prepared: 05/15/2020 By:

Date Approved: By:

Spl #: 10 Sample ID: QC BLANK Type: QC Blank Date: 05/15/2020 Status:
 Vial #: 9 Method: TOC MAR 2020 - Mar 03, 2021 Dilution 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:08 pm	-	-	-	5,440	0.000	0.000
2	6:13 pm	-	-	-	2,456	0.000	0.000

Avg. - - - 3,948 0.000 0.000
 Std.Dev. 53.43
 % RSD.

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Date Prepared: 05/15/2020 By:
 Date Approved: By:

TOC

Method Summary

Method Details

Method Name: TOC MAR 2020 - Mar 03, 2020; 04:44:41 PM
 Date Created: 03/03/2020
 Time Created: 16:44
 Created By: toc

Analysis Mode: NPOC Only
 Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00

Volumes
 Sample Volume (mL): 2.400
 Acid Volume (mL): 1.000
 Persulfate Volume(mL): 1.500

Other
 SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

Max. Std. Dev. 100 Use Modified Oxidant: No

Times
 Detect 03:00
 React 01:30
 Detect 03:00
 React 02:00
 Temp
 TIC
 TOC
 React 70
 Detect 70
 React 98
 Detect 98

Calibration Summary

Calibration Generation

Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.950	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC
 User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Re-run	Continue
QC #1	0.000	10.00	Re-run	Continue
QC #2	0.000	10.00	Re-run	Continue
QC #3	0.000	10.00	Re-run	Continue
QC #4	0.000	10.00	Re-run	Continue
SST	0.000	15.00	Abort	Abort

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TOC

Date Prepared: 05/15/2020 By:
 Date Approved: 15238 By:

Calibration Details

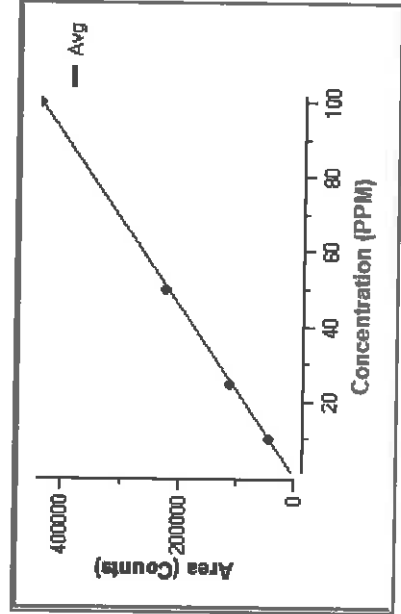
Calibration Mode: TOC
 Date Calibrated: 05/13/2020
 Time Calibrated: 7:18 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5476
 R2: 0.9996
 R: 0.9998
 QC Blank(cts): 497
 Offset (cts): 863
 Offset (ugC): -0.472
 Reagent Blank (cts): 419
 Units of Measure: PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

$Concentration = \frac{RF \times Area}{1000 \times volume}$
 Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{qig}
 CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{qRW}
 QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$y \Rightarrow Area$ $y = m \times x + b$
 $m \Rightarrow \frac{1000}{RF \times volume}$ $b \Rightarrow 0$

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Date Prepared: 05/15/2020 By:
 Date Approved: By:

TOC

Calibration Details

Calibration Mode: TOC
 Date Calibrated: 05/15/2020
 Time Calibrated: 5:54 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5554
 R2: 0.9981
 R: 0.9990
 QC Blank(cts): 0
 Offset (cts): -1456
 Offset (ugC): 0.809
 Reagent Blank (cts): 343
 Units of Measure: PPM->mg/L C

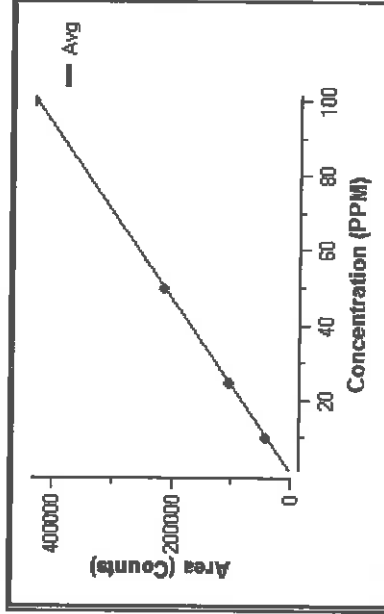
Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 4
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Unweighted Linear

Calculations:

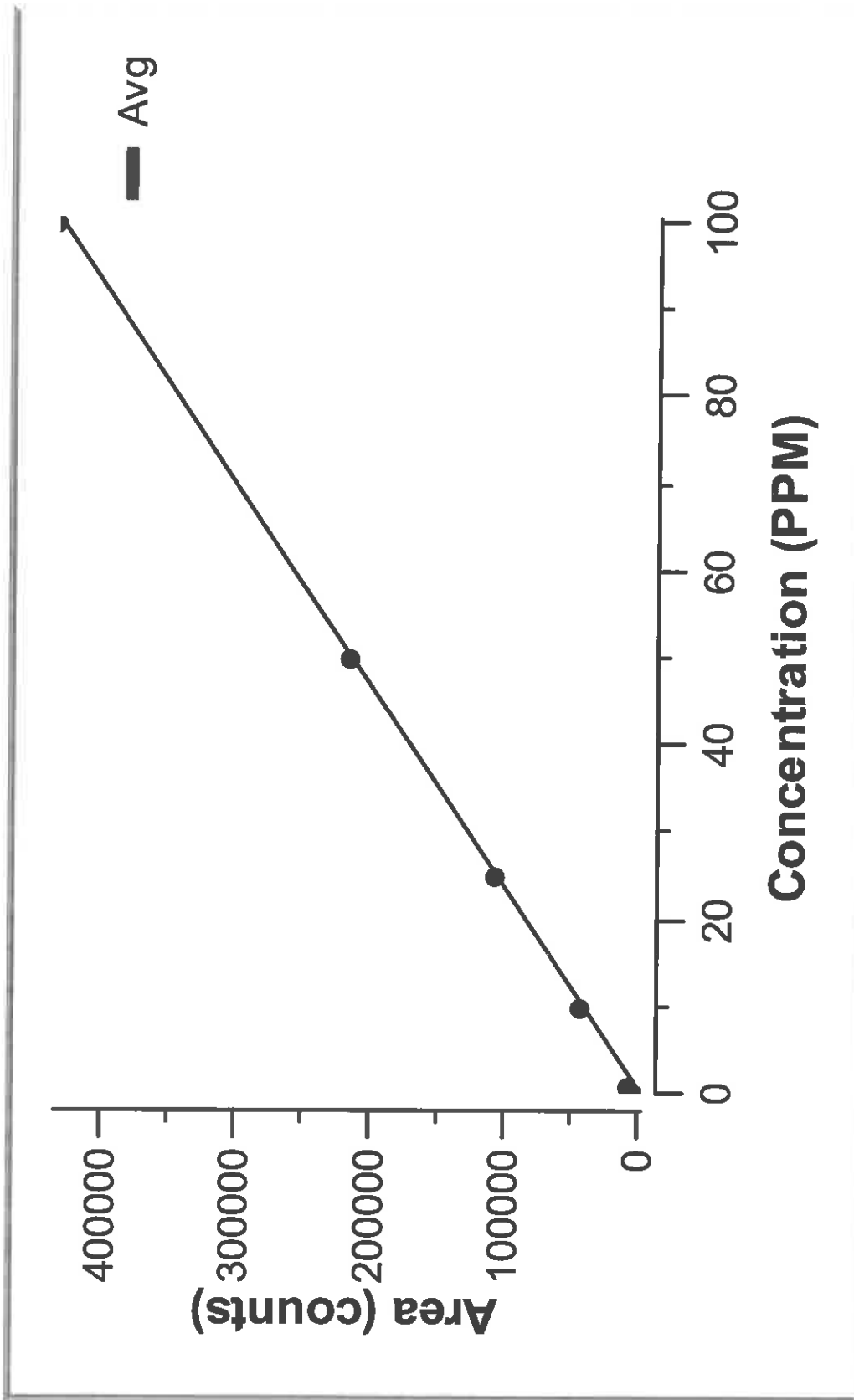
$$\text{Concentration} = \frac{\text{RF} \times \text{Area}}{\text{volume}}$$

Samples: $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{Offset}}$ or $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{RB}}$
 CHK Stds: $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{Offset}}$ or $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{RW}}$
 QC Samples: $\text{Area} = \text{Area}_{\text{Peak}} - \text{Area}_{\text{QCBlank}}$



$$y \Rightarrow \text{Area} \quad y = m \times x + b$$

$$m \Rightarrow \frac{1000}{\text{RF} \times \text{volume}} \quad b \Rightarrow 0$$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 5-TOC MAR 2020 - Mar 03, 2020; 04-44-41 PM
 Modified By: toc
 Date Created: 2020/03/03; 04:44 PM
 Last Modified: 2020/05/15; 05:54 PM
 Last Calibrated: 2020/05/15; 05:54 PM

RF(ugC/k-cnt): 0.5554
 R2: 0.9981
 Reagent Blank(cts): 343
 Offset Area(cts): -1,456
 Offset Mass(ugC): 0.81

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	408	10	2.46	2020-05-15; 04:25PM
1	1.000	2.400	2	4,450	70	1.58	2020-05-15; 04:48PM
2	10.000	2.400	2	41,019	1,860	4.53	2020-05-15; 05:02PM
3	25.000	2.400	2	103,906	3,785	3.64	2020-05-15; 05:18PM
4	50.000	2.400	2	213,059	9,408	4.42	2020-05-15; 05:33PM
5	100.000	2.400	2	432,151	19,878	4.60	2020-05-15; 05:48PM

TW 5/15/20

5310C/9060A TOC %Readback Error Calculation Spreadsheet

ICAL Std (ppm)	ICAL RF	ICAL ID	Average Area	Result (ppm)	%Readback Error	%Readback Criteria
1.000	0.5554	051520TOCCAL	4150	1.030	2.980	≤50%
10.000	0.5554	051520TOCCAL	41091	9.509	-4.909	≤20%
25.000	0.5554	051520TOCCAL	103906	24.046	-3.818	≤20%
50.000	0.5554	051520TOCCAL	213059	49.305	-1.389	≤20%
100.000	0.5554	051520TOCCAL	432151	100.007	0.007	≤20%

Shipping and Receiving Documents

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0E00002

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
 5755 8th Street East
 Tacoma, WA 98424
 Phone: (253) 922-2310
 Fax: (000) 000-0000
 Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Eurofins TestAmerica - Pittsburgh
 301 Alpha Drive RIDC Park
 Pittsburgh, PA 15238
 Phone :4129637058
 Fax: 4129632468



Analysis	Due	Expires	Comments
----------	-----	---------	----------

Sample ID: WQ-FPT_042920_SW_10 TOTAL **Sampled: 29-Apr-20 17:50**

Misc. Subcontract 5	22-May-20 19:00	27-May-20 17:50	SM 2450D
Misc. Subcontract 4	22-May-20 19:00	27-May-20 17:50	EPA 9060

Containers Supplied:

Sample ID: WQ-FPT_042920_SW_10 DISSOLVED **Sampled: 29-Apr-20 17:50**

Misc. Subcontract 4	22-May-20 19:00	27-May-20 17:50	EPA 9060
---------------------	-----------------	-----------------	----------

Containers Supplied:

Sample ID: ES-15_042920_SW_10 TOTAL **Sampled: 29-Apr-20 17:05**

Misc. Subcontract 5	22-May-20 19:00	27-May-20 17:05	SM 2450D
Misc. Subcontract 4	22-May-20 19:00	27-May-20 17:05	EPA 9060

Containers Supplied:

Sample ID: ES-15_042920_SW_10 DISSOLVED **Sampled: 29-Apr-20 17:05**

Misc. Subcontract 4	22-May-20 19:00	27-May-20 17:05	EPA 9060
---------------------	-----------------	-----------------	----------

Containers Supplied:

Released By	Date	Received By	Date
<i>MS</i>	5/11/2020	<i>Michelle Wilson</i>	5-2-20
		<i>EATAP/H</i>	12:00
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0E00002

Analysis	Due	Expires	Comments
----------	-----	---------	----------

Sample ID: WQ-ECH_042920_SW_10 TOTAL **Sampled: 29-Apr-20 16:15**

Misc. Subcontract 5	22-May-20 19:00	27-May-20 16:15	SM 2450D
Misc. Subcontract 4	22-May-20 19:00	27-May-20 16:15	EPA 9060

Containers Supplied:

Sample ID: WQ_ECH_042920_SW_10 DISSOLVED **Sampled: 29-Apr-20 16:15**

Misc. Subcontract 4	22-May-20 19:00	27-May-20 16:15	EPA 9060
---------------------	-----------------	-----------------	----------

Containers Supplied:

Sample ID: OV-02_042920_SW_10 TOTAL **Sampled: 29-Apr-20 12:45**

Misc. Subcontract 5	22-May-20 19:00	27-May-20 12:45	SM 2450D
Misc. Subcontract 4	22-May-20 19:00	27-May-20 12:45	EPA 9060

Containers Supplied:

Sample ID: OV-02_042920_SW_10 DISSOLVED **Sampled: 29-Apr-20 12:45**

Misc. Subcontract 4	22-May-20 19:00	27-May-20 12:45	EPA 9060
---------------------	-----------------	-----------------	----------

Containers Supplied:

Sample ID: ADD-02_042920_SW_10 TOTAL **Sampled: 29-Apr-20 10:14**

Misc. Subcontract 5	22-May-20 19:00	27-May-20 10:14	SM 2450D
Misc. Subcontract 4	22-May-20 19:00	27-May-20 10:14	EPA 9060

Containers Supplied:

Sample ID: ADD-02_042920_SW_10 DISSOLVED **Sampled: 29-Apr-20 10:14**

Misc. Subcontract 4	22-May-20 19:00	27-May-20 10:14	EPA 9060
---------------------	-----------------	-----------------	----------

Containers Supplied:

MS 5/1/2020		Muller ET AP 11	5-2-20 12:00
Released By	Date	Received By	Date
Released By	Date	Received By	Date



180-105307 Waybill



SDR

FedEx Saturday Delivery

151967 REV 7/08 RRD

ORIGIN ID:TCMA (253) 922-2310
SAMPLE RECEIVING
TA- SEATTLE
5755 8TH ST E

SHIP DATE: 01MAY20
ACTWGT: 51.30 LB
CAD: 989746/CAFE3313

FIP: WA 98424
UNIT: STATES US

BILL THIRD PARTY

TO

EURGENS TESTAMERICA - PITTSBURGH
301 ALPHA DRIVE RIDC PARK

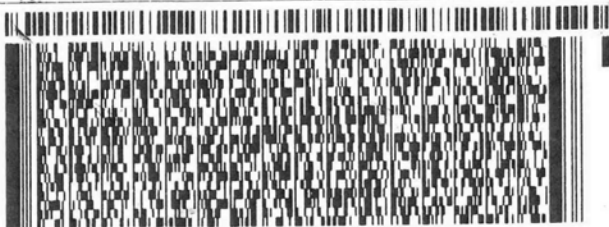
PITTSBURGH PA 15238

5552477R36/0567

INV:
PO:

REF:

DEPT:



FedEx
Express



J19121905200107

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 1794 2131 1630
0201

XO AGCA

15238
PA-US PIT

Uncorrected temp 2.4 °C
Thermometer ID 17

CF 0 Initials TS

PT-WI-SR-001 effective 7/26/13



Part # 159471-434 RIT EXP 12/20

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 180-105307-1

Login Number: 105307
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	Samples submitted from a sister lab.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

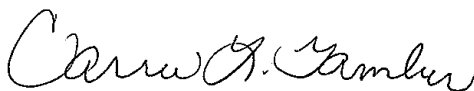
Job Number: 180-112876-1

Job Description: Wood Penobscot River Proposal

For:

Wood E&I Solutions Inc
271 Mill Road
Chelmsford, MA 01824

Attention: Ms. Denise King



Approved for release.
Carrie L. Gamber
Senior Project Manager
11/30/2020 5:29 AM

Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
Carrie.Gamber@Eurofinset.com
11/30/2020

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238
Tel (412) 963-7058 Fax (412) 963-2468 www.testamericainc.com

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Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Wood E&I Solutions Inc

Project: Wood Penobscot River Proposal

Report Number: 180-112876-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/29/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.5 C.

GENERAL CHEMSITRY

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

Client Sample ID: WQ1B-C_102820_SW_10

Lab Sample ID: 180-112876-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	7.7		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	5.7		0.50	0.50	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon - Quad	7.4		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: WQ2-C_102820_SW_10

Lab Sample ID: 180-112876-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	3.9		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	8.8		1.0	1.0	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon - Quad	4.1		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: WQ3-L_102820_SW_10

Lab Sample ID: 180-112876-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	2.3		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	3.8		0.50	0.50	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon - Quad	2.3		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: WQ-ECH_102820_SW_10

Lab Sample ID: 180-112876-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	1.5		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	5.1		0.50	0.50	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon - Quad	1.4		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: ES-15_102820_SW_10

Lab Sample ID: 180-112876-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	0.92	J	1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	5.9		0.50	0.50	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon - Quad	0.84	J	1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: WQ-FPT_102820_SW_10

Lab Sample ID: 180-112876-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	1.1		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	3.5		0.50	0.50	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon - Quad	0.98	J	1.0	0.51	mg/L	1		EPA 9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pittsburgh

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry

Client Sample ID: WQ1B-C_102820_SW_10

Date Collected: 10/28/20 09:45

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	7.7		1.0	0.51	mg/L			11/03/20 04:23	1
Total Suspended Solids	5.7		0.50	0.50	mg/L			10/30/20 07:42	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry

Client Sample ID: WQ2-C_102820_SW_10

Date Collected: 10/28/20 10:35

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	3.9		1.0	0.51	mg/L			11/03/20 04:50	1
Total Suspended Solids	8.8		1.0	1.0	mg/L			10/30/20 07:42	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry

Client Sample ID: WQ3-L_102820_SW_10

Date Collected: 10/28/20 11:35

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	2.3		1.0	0.51	mg/L			11/03/20 05:17	1
Total Suspended Solids	3.8		0.50	0.50	mg/L			10/30/20 07:42	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry

Client Sample ID: WQ-ECH_102820_SW_10

Date Collected: 10/28/20 12:35

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	1.5		1.0	0.51	mg/L			11/03/20 05:44	1
Total Suspended Solids	5.1		0.50	0.50	mg/L			10/30/20 07:42	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry

Client Sample ID: ES-15_102820_SW_10

Date Collected: 10/28/20 13:30

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	0.92	J	1.0	0.51	mg/L			11/03/20 06:11	1
Total Suspended Solids	5.9		0.50	0.50	mg/L			10/30/20 07:42	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry

Client Sample ID: WQ-FPT_102820_SW_10

Date Collected: 10/28/20 14:20

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	1.1		1.0	0.51	mg/L			11/03/20 06:38	1
Total Suspended Solids	3.5		0.50	0.50	mg/L			10/30/20 07:42	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry - Dissolved

Client Sample ID: WQ1B-C_102820_SW_10

Date Collected: 10/28/20 09:45

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	7.4		1.0	0.51	mg/L			11/24/20 19:09	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry - Dissolved

Client Sample ID: WQ2-C_102820_SW_10

Date Collected: 10/28/20 10:35

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	4.1		1.0	0.51	mg/L			11/24/20 19:36	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry - Dissolved

Client Sample ID: WQ3-L_102820_SW_10

Date Collected: 10/28/20 11:35

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	2.3		1.0	0.51	mg/L			11/24/20 20:03	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry - Dissolved

Client Sample ID: WQ-ECH_102820_SW_10

Date Collected: 10/28/20 12:35

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	1.4		1.0	0.51	mg/L			11/24/20 20:30	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry - Dissolved

Client Sample ID: ES-15_102820_SW_10

Date Collected: 10/28/20 13:30

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	0.84	J	1.0	0.51	mg/L			11/24/20 20:57	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry - Dissolved

Client Sample ID: WQ-FPT_102820_SW_10

Date Collected: 10/28/20 14:20

Date Received: 10/29/20 08:00

Lab Sample ID: 180-112876-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	0.98	J	1.0	0.51	mg/L			11/24/20 21:23	1

Default Detection Limits

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry

Analyte	RL	MDL	Units
Total Organic Carbon - Quad	1.0	0.51	mg/L
Total Suspended Solids	0.50	0.50	mg/L

General Chemistry - Dissolved

Analyte	RL	MDL	Units
Dissolved Organic Carbon - Quad	1.0	0.51	mg/L

QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

Method: EPA 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 180-335749/6
 Matrix: Water
 Analysis Batch: 335749

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	ND		1.0	0.51	mg/L			11/02/20 23:58	1

Lab Sample ID: LCS 180-335749/4
 Matrix: Water
 Analysis Batch: 335749

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Quad	20.0	19.7		mg/L		98	85 - 115

Lab Sample ID: LCSD 180-335749/5
 Matrix: Water
 Analysis Batch: 335749

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Quad	20.0	19.5		mg/L		98	85 - 115	1	20

Method: EPA 9060A - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 180-338508/6
 Matrix: Water
 Analysis Batch: 338508

Client Sample ID: Method Blank
 Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	ND		1.0	0.51	mg/L			11/24/20 18:42	1

Lab Sample ID: LCS 180-338508/4
 Matrix: Water
 Analysis Batch: 338508

Client Sample ID: Lab Control Sample
 Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	20.0	19.4		mg/L		97	85 - 115

Lab Sample ID: LCSD 180-338508/5
 Matrix: Water
 Analysis Batch: 338508

Client Sample ID: Lab Control Sample Dup
 Prep Type: Dissolved

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	20.0	19.5		mg/L		98	85 - 115	0	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 180-335342/2
 Matrix: Water
 Analysis Batch: 335342

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		0.50	0.50	mg/L			10/30/20 07:42	1

QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 180-335342/1
Matrix: Water
Analysis Batch: 335342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	31.6	32.0		mg/L		101	80 - 120

Lab Sample ID: 180-112876-2 DU
Matrix: Water
Analysis Batch: 335342

Client Sample ID: WQ2-C_102820_SW_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	8.8		8.00		mg/L		10	10

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

General Chemistry

Analysis Batch: 335342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112876-1	WQ1B-C_102820_SW_10	Total/NA	Water	SM 2540D	
180-112876-2	WQ2-C_102820_SW_10	Total/NA	Water	SM 2540D	
180-112876-3	WQ3-L_102820_SW_10	Total/NA	Water	SM 2540D	
180-112876-4	WQ-ECH_102820_SW_10	Total/NA	Water	SM 2540D	
180-112876-5	ES-15_102820_SW_10	Total/NA	Water	SM 2540D	
180-112876-6	WQ-FPT_102820_SW_10	Total/NA	Water	SM 2540D	
MB 180-335342/2	Method Blank	Total/NA	Water	SM 2540D	
LCS 180-335342/1	Lab Control Sample	Total/NA	Water	SM 2540D	
180-112876-2 DU	WQ2-C_102820_SW_10	Total/NA	Water	SM 2540D	

Analysis Batch: 335749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112876-1	WQ1B-C_102820_SW_10	Total/NA	Water	EPA 9060A	
180-112876-2	WQ2-C_102820_SW_10	Total/NA	Water	EPA 9060A	
180-112876-3	WQ3-L_102820_SW_10	Total/NA	Water	EPA 9060A	
180-112876-4	WQ-ECH_102820_SW_10	Total/NA	Water	EPA 9060A	
180-112876-5	ES-15_102820_SW_10	Total/NA	Water	EPA 9060A	
180-112876-6	WQ-FPT_102820_SW_10	Total/NA	Water	EPA 9060A	
MB 180-335749/6	Method Blank	Total/NA	Water	EPA 9060A	
LCS 180-335749/4	Lab Control Sample	Total/NA	Water	EPA 9060A	
LCSD 180-335749/5	Lab Control Sample Dup	Total/NA	Water	EPA 9060A	

Analysis Batch: 338508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112876-1	WQ1B-C_102820_SW_10	Dissolved	Water	EPA 9060A	
180-112876-2	WQ2-C_102820_SW_10	Dissolved	Water	EPA 9060A	
180-112876-3	WQ3-L_102820_SW_10	Dissolved	Water	EPA 9060A	
180-112876-4	WQ-ECH_102820_SW_10	Dissolved	Water	EPA 9060A	
180-112876-5	ES-15_102820_SW_10	Dissolved	Water	EPA 9060A	
180-112876-6	WQ-FPT_102820_SW_10	Dissolved	Water	EPA 9060A	
MB 180-338508/6	Method Blank	Dissolved	Water	EPA 9060A	
LCS 180-338508/4	Lab Control Sample	Dissolved	Water	EPA 9060A	
LCSD 180-338508/5	Lab Control Sample Dup	Dissolved	Water	EPA 9060A	

Lab Chronicle

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

Client Sample ID: WQ1B-C_102820_SW_10

Lab Sample ID: 180-112876-1

Date Collected: 10/28/20 09:45

Matrix: Water

Date Received: 10/29/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			338508	11/24/20 19:09	TAM	TAL PIT
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			335749	11/03/20 04:23	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	335342	10/30/20 07:42	AVS	TAL PIT

Client Sample ID: WQ2-C_102820_SW_10

Lab Sample ID: 180-112876-2

Date Collected: 10/28/20 10:35

Matrix: Water

Date Received: 10/29/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			338508	11/24/20 19:36	TAM	TAL PIT
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			335749	11/03/20 04:50	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	500 mL	1000 mL	335342	10/30/20 07:42	AVS	TAL PIT

Client Sample ID: WQ3-L_102820_SW_10

Lab Sample ID: 180-112876-3

Date Collected: 10/28/20 11:35

Matrix: Water

Date Received: 10/29/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			338508	11/24/20 20:03	TAM	TAL PIT
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			335749	11/03/20 05:17	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	335342	10/30/20 07:42	AVS	TAL PIT

Client Sample ID: WQ-ECH_102820_SW_10

Lab Sample ID: 180-112876-4

Date Collected: 10/28/20 12:35

Matrix: Water

Date Received: 10/29/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			338508	11/24/20 20:30	TAM	TAL PIT
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			335749	11/03/20 05:44	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	335342	10/30/20 07:42	AVS	TAL PIT

Lab Chronicle

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

Client Sample ID: ES-15_102820_SW_10

Lab Sample ID: 180-112876-5

Date Collected: 10/28/20 13:30

Matrix: Water

Date Received: 10/29/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			338508	11/24/20 20:57	TAM	TAL PIT
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			335749	11/03/20 06:11	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	335342	10/30/20 07:42	AVS	TAL PIT

Client Sample ID: WQ-FPT_102820_SW_10

Lab Sample ID: 180-112876-6

Date Collected: 10/28/20 14:20

Matrix: Water

Date Received: 10/29/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			338508	11/24/20 21:23	TAM	TAL PIT
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			335749	11/03/20 06:38	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	335342	10/30/20 07:42	AVS	TAL PIT

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

AVS = Abbey Smith

TAM = Tessa Mastalski

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

<u>Authority</u>	<u>Program</u>	<u>Identification Number</u>	<u>Expiration Date</u>
Maine	State	PA00164	03-06-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

<u>Analysis Method</u>	<u>Prep Method</u>	<u>Matrix</u>	<u>Analyte</u>
EPA 9060A		Water	Dissolved Organic Carbon - Quad

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

Method	Method Description	Protocol	Laboratory
EPA 9060A	Organic Carbon, Dissolved (DOC)	SW846	TAL PIT
EPA 9060A	Organic Carbon, Total (TOC)	SW846	TAL PIT
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112876-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-112876-1	WQ1B-C_102820_SW_10	Water	10/28/20 09:45	10/29/20 08:00	
180-112876-2	WQ2-C_102820_SW_10	Water	10/28/20 10:35	10/29/20 08:00	
180-112876-3	WQ3-L_102820_SW_10	Water	10/28/20 11:35	10/29/20 08:00	
180-112876-4	WQ-ECH_102820_SW_10	Water	10/28/20 12:35	10/29/20 08:00	
180-112876-5	ES-15_102820_SW_10	Water	10/28/20 13:30	10/29/20 08:00	
180-112876-6	WQ-FPT_102820_SW_10	Water	10/28/20 14:20	10/29/20 08:00	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112876-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
10 PPM TOC/CC 01520	11/03/20	11/02/20	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00031	2 mL	Total Organic Carbon - Quad	10 mg/L
.WTOC1000SP_00031	09/30/21		Ricca Chemical Co, Lot 2008H29		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
10 PPM TOC/CC_01535	11/25/20	11/24/20	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00031	2 mL	Dissolved Organic Carbon - Quad	10 mg/L
.WTOC1000SP_00031	09/30/21		Ricca Chemical Co, Lot 2008H29		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
ICV 40 PPM 01659	11/03/20	11/02/20	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00031	4 mL	Total Organic Carbon - Quad	40 mg/L
.WTOC1000SP_00031	09/30/21		Ricca Chemical Co, Lot 2008H29		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
ICV 40 PPM_01674	11/25/20	11/24/20	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00031	4 mL	Dissolved Organic Carbon - Quad	40 mg/L
.WTOC1000SP_00031	09/30/21		Ricca Chemical Co, Lot 2008H29		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
LCS 20 PPM 01655	11/03/20	11/02/20	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00048	4 mL	Total Organic Carbon - Quad	20 mg/L
.WTOC1000P_00048	05/28/22		Lab Chem, Lot K149-01		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
LCS 20 PPM_01670	11/25/20	11/24/20	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00048	4 mL	Dissolved Organic Carbon - Quad	20 mg/L
.WTOC1000P_00048	05/28/22		Lab Chem, Lot K149-01		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
WResPSP 00072	02/28/23		Phenova, Lot 8210-09		(Purchased Reagent)		Total Suspended Solids	31.6 mg/L

Reagent

WResPSP_00072



WP Solids		Lot #8210-09		
TNI Analyte Code	Analyte	Certified Value mg/L	Acceptance Limits mg/L	%
1955	Total Dissolved Solids at 180° (TFR)	714	643 - 786	90.1 - 110
1960	Non-Filterable Residue (TSS)	31.6	22.5 - 37.6	71.2 - 119
1950	Total Solids	746	671 - 821	89.9 - 110

Certified Values = "100% true concentration" of each analyte as determined from gravimetric and volumetric measurements made during standard manufacture.

Acceptance Limits = Generated based on the criteria established by The NELAC Institute (TNI) Fields of Proficiency Testing tables using regression equations and/or fixed percentage limits, historical data and other criteria distributed by accrediting agencies as applicable. Please note that regression based acceptance criteria are based on the Assigned Value and may have different criteria at different concentrations.

Solvent = Deionized Water

Store at 20-25°C.

Expiration Date: 02/2023

Catalog #QC-SOL-WP

Preparation Instructions: The WP Solids standard is provided as a ready-to-use standard that does not require dilution prior to use. Shake adequately to homogenize the standard before removing an aliquot for analysis. Analyze by your normal procedures.

Note: It is strongly recommended that you analyze for TSS prior to removing aliquots for other analyses from the Solids bottle.

Approved AMB

Reviewed by: BJW

Date: 7/20

Date: 7/20

Reagent

WTOC1000P_00048



3799720
 ID: WTOC1000P_00048
 Exp:05/28/22 Prod:TAM Opr:07/29/20
 1000 ppm TOC standard

CERTIFICATE OF ANALYSIS

Description: CARBON STANDARD, 1000ppm ORGANIC (1mL = 1mg C)

Mfg. Date: 05/29/2020

Catalog Number: LC12910

Exp. Date: 05/29/2022

Lot Number: K149-01

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm C	1000ppm +/- 10ppm	996 ppm
Concentration mg C/mL	1.000 +/- 0.010 mg C/mL	0.996 mg C/mL
Traceable to NIST	Potassium Hydrogen Phthalate	84L

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

Reagent

WTOC1000SP_00031

Certificate of Analysis



39551-5

 ID: WTK01000SF_00031
 Exp:09/30/21 Pipe TAM Gen 11/01/20
 1000 ppm TOC Standard

Organic Carbon Standard, 1000 ppm C

Lot Number: 2008H29

Product Number: 1847

Manufacture Date: AUG 31, 2020

Expiration Date: AUG 2021

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/lit	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months
1847-4	120 mL amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Chris Collins (08/31/2020)
 Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job Number: 180-112876-1

SDG No.: _____

Project: Wood Penobscot River Proposal

Client Sample ID	Lab Sample ID
<u>WQ1B-C_102820_SW_10</u>	<u>180-112876-1</u>
<u>WQ2-C_102820_SW_10</u>	<u>180-112876-2</u>
<u>WQ3-L_102820_SW_10</u>	<u>180-112876-3</u>
<u>WQ-ECH_102820_SW_10</u>	<u>180-112876-4</u>
<u>ES-15_102820_SW_10</u>	<u>180-112876-5</u>
<u>WQ-FPT_102820_SW_10</u>	<u>180-112876-6</u>

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ1B-C_102820_SW_10

Lab Sample ID: 180-112876-1

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 09:45

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	7.7	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	5.7	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ1B-C_102820_SW_10

Lab Sample ID: 180-112876-1

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 09:45

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	7.4	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ2-C_102820_SW_10

Lab Sample ID: 180-112876-2

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 10:35

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	3.9	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	8.8	1.0	1.0	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ2-C_102820_SW_10

Lab Sample ID: 180-112876-2

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 10:35

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	4.1	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ3-L_102820_SW_10

Lab Sample ID: 180-112876-3

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 11:35

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	2.3	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	3.8	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ3-L_102820_SW_10

Lab Sample ID: 180-112876-3

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 11:35

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	2.3	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ-ECH_102820_SW_10

Lab Sample ID: 180-112876-4

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 12:35

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	1.5	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	5.1	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ-ECH_102820_SW_10

Lab Sample ID: 180-112876-4

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 12:35

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	1.4	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: ES-15_102820_SW_10

Lab Sample ID: 180-112876-5

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 13:30

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	0.92	1.0	0.51	mg/L	J		1	EPA 9060A
	Total Suspended Solids	5.9	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: ES-15_102820_SW_10

Lab Sample ID: 180-112876-5

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 13:30

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	0.84	1.0	0.51	mg/L	J		1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: WQ-FPT_102820_SW_10

Lab Sample ID: 180-112876-6

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 14:20

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	1.1	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	3.5	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: WQ-FPT_102820_SW_10

Lab Sample ID: 180-112876-6

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112876-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/28/2020 14:20

Reporting Basis: WET

Date Received: 10/29/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	0.98	1.0	0.51	mg/L	J		1	EPA 9060A

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112876-1
 SDG No.: _____
 Analyst: TAM Batch Start Date: 11/02/2020
 Reporting Units: mg/L Analytical Batch No.: 335749

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	22:10	Total Organic Carbon - Quad	39.2	40.0	98	90-110		ICV 40 PPM_01659
3	ICB	22:37	Total Organic Carbon - Quad	ND					
14	CCV	03:29	Total Organic Carbon - Quad	9.86	10.0	99	90-110		10 PPM TOC/CC 01520
15	CCB	03:56	Total Organic Carbon - Quad	ND					
26	CCV	08:52	Total Organic Carbon - Quad	9.98	10.0	100	90-110		10 PPM TOC/CC 01520
27	CCB	09:19	Total Organic Carbon - Quad	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112876-1
 SDG No.: _____
 Analyst: TAM Batch Start Date: 11/24/2020
 Reporting Units: mg/L Analytical Batch No.: 338508

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	16:56	Dissolved Organic Carbon - Quad	39.3	40.0	98	90-110		ICV 40 PPM_01674
3	ICB	17:22	Dissolved Organic Carbon - Quad	ND					
14	CCV	22:16	Dissolved Organic Carbon - Quad	9.24	10.0	92	90-110		10 PPM TOC/CC 01535
15	CCB	22:43	Dissolved Organic Carbon - Quad	ND					
26	CCV	03:38	Dissolved Organic Carbon - Quad	9.62	10.0	96	90-110		10 PPM TOC/CC 01535
27	CCB	04:04	Dissolved Organic Carbon - Quad	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112876-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 335749 Date: 11/02/2020 23:58							
EPA 9060A	MB 180-335749/6	Total Organic Carbon - Quad	ND		mg/L	1.0	1
Batch ID: 338508 Date: 11/24/2020 18:42							
EPA 9060A	MB 180-338508/6	Dissolved Organic Carbon - Quad	ND		mg/L	1.0	1
Batch ID: 335342 Date: 10/30/2020 07:42							
SM 2540D	MB 180-335342/2	Total Suspended Solids	ND		mg/L	0.50	1

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112876-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result Unit	RPD	RPD Limit	Qual
Batch ID: 335342 Date: 10/30/2020 07:42							
SM 2540D	WQ2-C_102820_SW_10	180-112876-2	Total Suspended Solids	8.8 mg/L			
SM 2540D	WQ2-C_102820_SW_10	180-112876-2 DU	Total Suspended Solids	8.00 mg/L	10	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112876-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 335749 Date: 11/02/2020 23:04											
						LCS Source: LCS 20 PPM_01655					
EPA 9060A	LCS 180-335749/4	Total Organic Carbon - Quad	19.7		mg/L	20.0	98	85-115	1	20	
Batch ID: 338508 Date: 11/24/2020 17:49											
						LCS Source: LCS 20 PPM_01670					
EPA 9060A	LCS 180-338508/4	Dissolved Organic Carbon - Quad	19.4		mg/L	20.0	97	85-115	0	20	
Batch ID: 335342 Date: 10/30/2020 07:42											
						LCS Source: WResPSP_00072					
SM 2540D	LCS 180-335342/1	Total Suspended Solids	32.0		mg/L	31.6	101	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112876-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 335749 Date: 11/02/2020 23:31											
						LCSD Source: LCS 20 PPM_01655					
EPA 9060A	LCSD 180-335749/5	Total Organic Carbon - Quad	19.5		mg/L	20.0	98	85-115	1	20	
Batch ID: 338508 Date: 11/24/2020 18:16											
						LCSD Source: LCS 20 PPM_01670					
EPA 9060A	LCSD 180-338508/5	Dissolved Organic Carbon - Quad	19.5		mg/L	20.0	98	85-115	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112876-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A MDL Date: 03/21/2017 16:51

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Organic Carbon - Quad		1	0.5084

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112876-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A XMDL Date: 03/21/2017 16:52

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Organic Carbon - Quad		1	0.5084

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112876-1

SDG Number: _____

Matrix: Water Instrument ID: TOC1030

Method: EPA 9060A MDL Date: 03/21/2017 16:51

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.5084

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112876-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A XMDL Date: 03/21/2017 16:52

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.5084

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112876-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540D MDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Suspended Solids		0.5	0.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112876-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540D XMDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Suspended Solids		0.5	0.5

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112876-1

SDG No.: _____

Instrument ID: TOC1030 Analysis Method: EPA 9060A

Start Date: 11/02/2020 21:44 End Date: 11/03/2020 14:40

Lab Sample Id	D/F	Type	Time	Analytes																											
				TOC	Q																										
ZZZZZZ			21:44																												
ICV 180-335749/2	1		22:10	X																											
ICB 180-335749/3	1		22:37	X																											
LCS 180-335749/4	1	T	23:04	X																											
LCSD 180-335749/5	1	T	23:31	X																											
MB 180-335749/6	1	T	23:58	X																											
ZZZZZZ			00:24																												
ZZZZZZ			00:50																												
ZZZZZZ			01:16																												
ZZZZZZ			01:42																												
ZZZZZZ			02:09																												
ZZZZZZ			02:36																												
ZZZZZZ			03:03																												
CCV 180-335749/14	1		03:29	X																											
CCB 180-335749/15	1		03:56	X																											
180-112876-1	1	T	04:23	X																											
180-112876-2	1	T	04:50	X																											
180-112876-3	1	T	05:17	X																											
180-112876-4	1	T	05:44	X																											
180-112876-5	1	T	06:11	X																											
180-112876-6	1	T	06:38	X																											
ZZZZZZ			07:04																												
ZZZZZZ			07:31																												
ZZZZZZ			07:58																												
ZZZZZZ			08:25																												
CCV 180-335749/26	1		08:52	X																											
CCB 180-335749/27	1		09:19	X																											
ZZZZZZ			09:46																												
CCV 180-335749/29			10:12																												
CCB 180-335749/30			10:39																												
ZZZZZZ			11:06																												
ZZZZZZ			11:33																												
ZZZZZZ			11:59																												
ZZZZZZ			12:25																												
ZZZZZZ			12:52																												
ZZZZZZ			13:19																												
ZZZZZZ			13:46																												
CCV 180-335749/38			14:13																												
CCB 180-335749/39			14:40																												

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112876-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: SM 2540D

Start Date: 10/30/2020 07:42 End Date: 10/30/2020 07:42

Lab Sample Id	D/F	T y p e	Time	T S S	Analytes																			
LCS 180-335342/1	1	T	07:42	X																				
MB 180-335342/2	1	T	07:42	X																				
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
180-112876-1	1	T	07:42	X																				
180-112876-2	1	T	07:42	X																				
180-112876-2 DU	1	T	07:42	X																				
180-112876-3	1	T	07:42	X																				
180-112876-4	1	T	07:42	X																				
180-112876-5	1	T	07:42	X																				
180-112876-6	1	T	07:42	X																				
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					
ZZZZZZ			07:42																					

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112876-1

SDG No.: _____

Batch Number: 335749 Batch Start Date: 11/02/20 21:44 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 11/03/20 14:57

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	10 PPM TOC/CC 01520	ICV 40 PPM 01659	LCS 20 PPM 01655		
ICV 180-335749/2		EPA 9060A				40 mL			
LCS 180-335749/4		EPA 9060A					40 mL		
LCSD 180-335749/5		EPA 9060A					40 mL		
CCV 180-335749/14		EPA 9060A			40 mL				
180-112876-C-1	WQ1B-C_102820_SW_10	EPA 9060A	T	<2 SU					
180-112876-B-2	WQ2-C_102820_SW_10	EPA 9060A	T	<2 SU					
180-112876-B-3	WQ3-L_102820_SW_10	EPA 9060A	T	<2 SU					
180-112876-B-4	WQ-ECH_102820_SW_10	EPA 9060A	T	<2 SU					
180-112876-C-5	ES-15_102820_SW_10	EPA 9060A	T	<2 SU					
180-112876-B-6	WQ-FPT_102820_SW_10	EPA 9060A	T	<2 SU					
CCV 180-335749/26		EPA 9060A			40 mL				

Batch Notes	
Batch Comment	pH strips: HC991298
Phosphoric Acid ID	3932779
Pipette/Syringe/Dispenser ID	B747014865, B747014653
Sodium Persulfate ID	3932780

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112876-1

SDG No.: _____

Batch Number: 338508 Batch Start Date: 11/24/20 16:29 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 11/25/20 07:03

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	10 PPM TOC/CC 01535	ICV 40 PPM 01674	LCS 20 PPM 01670		
ICV 180-338508/2		EPA 9060A				40 mL			
LCS 180-338508/4		EPA 9060A					40 mL		
LCS 180-338508/5		EPA 9060A					40 mL		
180-112876-E-1	WQ1B-C_102820_SW_10	EPA 9060A	D	<2 SU					
180-112876-E-2	WQ2-C_102820_SW_10	EPA 9060A	D	<2 SU					
180-112876-E-3	WQ3-L_102820_SW_10	EPA 9060A	D	<2 SU					
180-112876-E-4	WQ-ECH_102820_SW_10	EPA 9060A	D	<2 SU					
180-112876-E-5	ES-15_102820_SW_10	EPA 9060A	D	<2 SU					
180-112876-E-6	WQ-FPT_102820_SW_10	EPA 9060A	D	<2 SU					
CCV 180-338508/14		EPA 9060A			40 mL				
CCV 180-338508/26		EPA 9060A			40 mL				

Batch Notes	
Batch Comment	pH strips: HC991298
Phosphoric Acid ID	3932779
Pipette/Syringe/Dispenser ID	B747014653, B747014865
Sodium Persulfate ID	3932780

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112876-1

SDG No.: _____

Batch Number: 335342 Batch Start Date: 10/30/20 07:42 Batch Analyst: Smith, Abbey V

Batch Method: SM 2540D Batch End Date: 10/31/20 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	CrucibleID	TareWeight	InitialAmount	Weight1	Weight2	WeightOne%Diff
LCS 180-335342/1		SM 2540D		fZBLX 0.1197	0.1197 g	50 mL	0.1214 g	0.1213 g	PASS <0.5mg
MB 180-335342/2		SM 2540D		fZBLW 0.1192	0.1192 g	1000 mL	0.1194 g	0.1193 g	PASS <0.5mg
180-112876-A-1	WQ1B-C_102820_SW_10	SM 2540D	T	fZBLK 0.1187	0.1187 g	1000 mL	0.1246 g	0.1244 g	PASS <0.5mg
180-112876-A-2	WQ2-C_102820_SW_10	SM 2540D	T	fZBLJ 0.1192	0.1192 g	500 mL	0.1238 g	0.1236 g	PASS <0.5mg
180-112876-A-2 DU	WQ2-C_102820_SW_10	SM 2540D	T	fZBLI 0.1162	0.1162 g	500 mL	0.1201 g	0.1202 g	PASS <0.5mg
180-112876-A-3	WQ3-L_102820_SW_10	SM 2540D	T	fZBLH 0.1207	0.1207 g	1000 mL	0.1246 g	0.1245 g	PASS <0.5mg
180-112876-A-4	WQ-ECH_102820_SW_10	SM 2540D	T	fZBLG 0.1200	0.1200 g	1000 mL	0.1253 g	0.1251 g	PASS <0.5mg
180-112876-A-5	ES-15_102820_SW_10	SM 2540D	T	fZBLF 0.1191	0.1191 g	1000 mL	0.1251 g	0.1250 g	PASS <0.5mg
180-112876-A-6	WQ-FPT_102820_SW_10	SM 2540D	T	fZBLE 0.1188	0.1188 g	1000 mL	0.1224 g	0.1223 g	PASS <0.5mg

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue	Residue2	FinalAmount	ResDishWt	DishWeight	WResPSP 00072
LCS 180-335342/1		SM 2540D		0.0017 g	0.0016 g	1000 mL	0.1213 g	0.1197 g	50 mL
MB 180-335342/2		SM 2540D		0.0002 g	0.0001 g	1000 mL	0.1193 g	0.1192 g	
180-112876-A-1	WQ1B-C_102820_SW_10	SM 2540D	T	0.0059 g	0.0057 g	1000 mL	0.1244 g	0.1187 g	
180-112876-A-2	WQ2-C_102820_SW_10	SM 2540D	T	0.0046 g	0.0044 g	1000 mL	0.1236 g	0.1192 g	
180-112876-A-2 DU	WQ2-C_102820_SW_10	SM 2540D	T	0.0039 g	0.004 g	1000 mL	0.1202 g	0.1162 g	
180-112876-A-3	WQ3-L_102820_SW_10	SM 2540D	T	0.0039 g	0.0038 g	1000 mL	0.1245 g	0.1207 g	
180-112876-A-4	WQ-ECH_102820_SW_10	SM 2540D	T	0.0053 g	0.0051 g	1000 mL	0.1251 g	0.12 g	
180-112876-A-5	ES-15_102820_SW_10	SM 2540D	T	0.006 g	0.0059 g	1000 mL	0.125 g	0.1191 g	
180-112876-A-6	WQ-FPT_102820_SW_10	SM 2540D	T	0.0036 g	0.0035 g	1000 mL	0.1223 g	0.1188 g	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112876-1

SDG No.: _____

Batch Number: 335342 Batch Start Date: 10/30/20 07:42 Batch Analyst: Smith, Abbey V

Batch Method: SM 2540D Batch End Date: 10/31/20 16:00

Batch Notes	
Balance ID	1126020829
Batch Comment	Completed by AGP
Date/Time - In - CW (WT2)	10/31/2020 11:30
Date/Time - Out - CW (WT2)	10/31/2020 14:00
Temperature - Start - CW (WT2) - Correct	105 Celsius
Temperature - End - CW (WT2) - Correct	105 Celsius
Temperature - Start-CW(WT2) -Uncorrected	105 Celsius
Temperature - End-CW(WT2) -Uncorrected	105 Celsius
Temperature - Start - Corrected	105 Celsius
Temperature - End - Corrected	105 Celsius
Date/Time - In	10/30/2020 08:18
Date/Time - Out	10/31/2020 09:45
Filter ID	Environmental Express 600024-0293-R1
Nominal Amount Used	1000 mL
Oven ID	EZ-BAKE
Perform Calculation (0=No, 1=Yes)	1
Thermometer ID	QA Backup #1
Temperature - Start - Uncorrected	105 Celsius
Temperature - End - Uncorrected	105 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TEST AMERICA
301 ALPHA DRIVE
PITTSBURGH, PA.
15238

Date Prepared: 11/03/2020

By:

TOC

7001030

9060

USA Batch # 335749

Date Approved:

By:

11022020c NM 11/3/20

Sample Results Summary

Spl #	Vial #	Sample ID	Num Act	Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	1	BLANK	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	4,825	2.317	0.965	2,551	52.88	Pass
2	2	ICV 40 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	167,453	94.197	39.249	2,239	1.34	Fail
3	3	ICB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	1,454	0.447	0.186	431	29.67	Fail
4	4	LCS 20 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	84,324	47.249	19.687	780	0.93	Fail
5	5	LCSD 20 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	83,635	46.860	19.525	1,033	1.24	Fail
6	6	MB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	793	0.083	0.035	174	21.95	Fail
7	7	460-221462-D-10	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	2,401	0.948	0.395	37	1.54	Pass
8	8	460-221519-H-7	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	1,264	0.306	0.128	117	9.27	Pass
9	9	460-221627-D-6	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	2,244	0.860	0.358	123	5.46	Pass
10	10	180-112658-B-10	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	7,290	3.709	1.546	137	1.87	Pass
11	11	180-112932-D-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	76,432	42.758	17.815	1,826	2.39	Pass
12	12	180-112932-D-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	25,397	13.935	5.806	565	2.22	Pass
13	13	180-112932-C-3	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	11,238	5.939	2.474	490	4.36	Pass
14	14	CCV 10 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	42,558	23.661	9.859	874	2.05	Fail
15	15	CCB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	677	0.022	0.009	90	13.26	Fail
16	16	180-112876-C-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	33,354	18.429	7.679	660	1.98	Pass
17	17	180-112876-B-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	17,437	9.440	3.933	338	1.94	Pass
18	18	180-112876-B-3	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	10,681	5.624	2.343	248	2.33	Pass
19	19	180-112876-B-4	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	7,187	3.651	1.522	102	1.42	Pass
20	20	180-112876-C-5	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	4,623	2.203	0.918	310	6.71	Pass
21	21	180-112876-B-6	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	5,234	2.548	1.062	227	4.34	Pass
22	22	180-112945-C-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	38,258	21.199	8.833	1,107	2.89	Pass
23	23	180-112945-A-1 MS	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	79,109	44.270	18.446	1,381	1.75	Pass

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Sample No.	Sample Name	Sample Type	Sample Date	Sample Volume	Sample ID	Sample Description	Sample Ratio	Sample TOC	Sample Pass/Fail		
24	180-112945-A-1 MSD	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	1,410	1.76	Pass
25	180-112945-B-2	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	1,319	3.36	Pass
26	CCV 10 PPM	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	130	0.30	Fail
27	CCB	Standard	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	84	10.40	Fail
28	180-112945-B-3	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	1,310	3.71	Pass
29	CCV 10 PPM	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	647	1.49	Fail
30	CCB	Standard	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	160	20.06	Fail
31	LCS 20 PPM	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	19,850	0.42	Fail
32	LCSD 20 PPM	Standard	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	20,022	0.55	Fail
33	MB	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	57	8.16	Fail
34	LB 180-335086/1-A	Standard	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	41	5.18	Pass
35	180-112803-A-1-C	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	15,371	3.96	Pass
36	180-112804-A-1-E	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	448	22.45	Pass
37	180-112806-A-1-C	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	836	2.03	Pass
38	CCV 10 PPM	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	607	1.41	Fail
39	CCB	Standard	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	1 : 1	00000000	123	17.52	Fail

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Date Approved:

By:

Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Status: Pass
 Vial #: 1 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000 Date: 11/02/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:44 pm	-	-	-	8,348	4.307	1.795
2	9:49 pm	-	-	-	3,864	1.775	0.739
3	9:56 pm	-	-	-	4,751	2.275	0.948
4	10:00 pm	-	-	-	2,337	0.912	0.380
Avg.		-	-	-	4,825	2.317	0.965
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	52.88	-	-

Spl #: 2 Sample ID: ICV 40 PPM Type: Chk Standard Status: Fail
 Vial #: 2 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000 Date: 11/02/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:10 pm	-	-	-	164,668	92.624	38.593
2	10:16 pm	-	-	-	167,675	94.322	39.301
3	10:22 pm	-	-	-	170,140	95.714	39.881
4	10:28 pm	-	-	-	167,330	94.127	39.220
Avg.		-	-	-	167,453	94.197	39.249
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.34	-	-

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By: **IOC**

Date Prepared: 11/03/2020

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Spl #: 3 Sample ID: ICB Type: Chk Standard Date: 11/02/2020 Status: Fail
 Vial #: 3 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:37 pm	-	-	-	2,064	0.792	0.330
2	10:43 pm	-	-	-	1,321	0.372	0.155
3	10:49 pm	-	-	-	1,380	0.405	0.169
4	10:54 pm	-	-	-	1,050	0.219	0.091
Avg.		-	-	-	1,454	0.447	0.186
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	29.67	-	-

Spl #: 4 Sample ID: LCS 20 PPM Type: Chk Standard Date: 11/02/2020 Status: Fail
 Vial #: 4 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:04 pm	-	-	-	83,429	46.743	19.476
2	11:10 pm	-	-	-	84,455	47.323	19.718
3	11:16 pm	-	-	-	85,304	47.802	19.918
4	11:22 pm	-	-	-	84,108	47.127	19.636
Avg.		-	-	-	84,324	47.249	19.687
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	0.93	-	-

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Date Prepared: 11/03/2020

By:

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By:

Spl #: 5 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 11/02/2020 Status: Fail
 Vial #: 5 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:31 pm	-	-	-	82,286	46.098	19.207
2	11:37 pm	-	-	-	83,371	46.710	19.463
3	11:43 pm	-	-	-	84,506	47.351	19.730
4	11:48 pm	-	-	-	84,379	47.280	19.700
Avg.		-	-	-	83,635	46.860	19.525
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.24	-	-

Status: Fail

Spl #: 6 Sample ID: MB Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 6 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:58 pm	-	-	-	999	0.190	0.079
2	12:03 am	-	-	-	718	0.032	0.013
3	12:09 am	-	-	-	859	0.111	0.046
4	12:15 am	-	-	-	597	0.000	0.000
Avg.		-	-	-	793	0.083	0.035
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	21.95	-	-

Status: Fail

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Date Prepared: 11/03/2020 By: **TOC**
 Date Approved: By:

Spl #: 7 Sample ID: 460-221462-D-10 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 7 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:24 am	-	-	-	2,419	0.958	0.399
2	12:30 am	-	-	-	2,380	0.936	0.390
3	12:35 am	-	-	-	2,444	0.973	0.405
4	12:41 am	-	-	-	2,362	0.926	0.386
Avg.		-	-	-	2,401	0.948	0.395
Std.Dev.							
% RSD.		1.54					

Spl #: 8 Sample ID: 460-221519-H-7 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 8 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:50 am	-	-	-	1,350	0.355	0.148
2	12:56 am	-	-	-	1,192	0.265	0.111
3	1:01 am	-	-	-	1,376	0.370	0.153
4	1:07 am	-	-	-	1,137	0.235	0.098
Avg.		-	-	-	1,264	0.306	0.128
Std.Dev.							
% RSD.		9.27					

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Date Prepared: 11/03/2020

By:

Date Approved:

By:

Spl #: 9 Sample ID: 460-221627-D-6 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 9 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:16 am	-	-	-	2,350	0.919	0.382
2	1:22 am	-	-	-	2,158	0.811	0.338
3	1:28 am	-	-	-	2,349	0.919	0.383
4	1:33 am	-	-	-	2,119	0.789	0.329
Avg.					2,244	0.860	0.358
Std.Dev.							
% RSD.							5.46

Spl #: 10 Sample ID: 180-112658-B-10 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 10 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:42 am	-	-	-	7,258	3.691	1.538
2	1:48 am	-	-	-	7,126	3.616	1.507
3	1:54 am	-	-	-	7,454	3.802	1.584
4	2:00 am	-	-	-	7,321	3.727	1.553
Avg.					7,290	3.709	1.546
Std.Dev.							
% RSD.							1.87

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Date Prepared: 11/03/2020 By: **TOC**

Date Approved: By: Status: Pass

Spl #: 11 Sample ID: 180-112932-D-1 Type: Sample Date: 11/03/2020
 Vial #: 11 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:09 am	-	-	-	73,755	41,246	17,186
2	2:15 am	-	-	-	76,893	43,018	17,924
3	2:21 am	-	-	-	77,835	43,550	18,145
4	2:27 am	-	-	-	77,244	43,217	18,007
Avg.		-	-	-	76,432	42,758	17,815
Std.Dev.							
% RSD.							2.39

Spl #: 12 Sample ID: 180-112932-D-2 Type: Sample Date: 11/03/2020
 Vial #: 12 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:36 am	-	-	-	24,778	13,586	5.861
2	2:42 am	-	-	-	25,956	14,251	5.938
3	2:48 am	-	-	-	25,786	14,155	5.898
4	2:54 am	-	-	-	25,067	13,749	5.729
Avg.		-	-	-	25,397	13,935	5.806
Std.Dev.							
% RSD.							2.22

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Date Prepared: 11/03/2020

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Spl #: 13 Sample ID: 180-112932-C-3 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 13 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:03 am	-	-	-	11,172	5.902	2.459
2	3:08 am	-	-	-	10,646	5.604	2.335
3	3:15 am	-	-	-	11,839	6.279	2.616
4	3:20 am	-	-	-	11,295	5.971	2.488
Avg.		-	-	-	11,238	5.939	2.474
Std.Dev.							
% RSD.					4.36		

Spl #: 14 Sample ID: CCV 10 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 14 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:29 am	-	-	-	41,302	22.952	9.563
2	3:35 am	-	-	-	42,634	23.704	9.877
3	3:41 am	-	-	-	43,219	24.035	10.014
4	3:47 am	-	-	-	43,077	23.954	9.981
Avg.		-	-	-	42,558	23.661	9.859
Std.Dev.							
% RSD.					2.05		

Date Prepared: 11/03/2020 By:

Date Approved: By:

Status: Fail

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Spl #: 15 Sample ID: CCB Type: Chk Standard Date: 11/03/2020
Vial #: 15 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:56 am	-	-	-	789	0.071	0.030
2	4:02 am	-	-	-	690	0.016	0.007
3	4:07 am	-	-	-	659	0.000	0.000
4	4:13 am	-	-	-	571	0.000	0.000
Avg.		-	-	-	677	0.022	0.009
Std.Dev.							
% RSD.		13.26					

Spl #: 16 Sample ID: 180-112876-C-1 Type: Sample Date: 11/03/2020
Vial #: 16 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:23 am	-	-	-	32,478	17.934	7.473
2	4:29 am	-	-	-	33,594	18.565	7.735
3	4:35 am	-	-	-	34,046	18.820	7.842
4	4:41 am	-	-	-	33,299	18.398	7.666
Avg.		-	-	-	33,354	18.429	7.679
Std.Dev.							
% RSD.		1.98					

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By:

Date Approved:

By:

Spl #: 17 Sample ID: 180-112876-B-2 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 17 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:50 am	-	-	-	17,244	9.331	3.888
2	4:56 am	-	-	-	17,563	9.511	3.963
3	5:02 am	-	-	-	17,091	9.245	3.851
4	5:08 am	-	-	-	17,849	9.672	4.030
Avg.		-	-	-	17,437	9.440	3.933
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	1.94

Spl #: 18 Sample ID: 180-112876-B-3 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 18 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:17 am	-	-	-	10,636	5.599	2.333
2	5:23 am	-	-	-	10,351	5.438	2.265
3	5:29 am	-	-	-	10,821	5.704	2.377
4	5:35 am	-	-	-	10,915	5.757	2.399
Avg.		-	-	-	10,681	5.624	2.343
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	2.33

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Spl #: 19 Sample ID: 180-112876-B-4 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 19 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:44 am	-	-	-	7,045	3,571	1,488
2	5:50 am	-	-	-	7,287	3,708	1,545
3	5:56 am	-	-	-	7,199	3,658	1,524
4	6:02 am	-	-	-	7,218	3,669	1,529

Avg. 7,187 3,651 1,522
 Std.Dev.
 % RSD. 1.42

Spl #: 20 Sample ID: 180-112876-C-5 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 20 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:11 am	-	-	-	4,701	2,247	0.936
2	6:17 am	-	-	-	4,368	2,059	0.858
3	6:23 am	-	-	-	5,029	2,433	1,014
4	6:29 am	-	-	-	4,394	2,074	0.864

Avg. 4,623 2,203 0.918
 Std.Dev.
 % RSD. 6.71

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By: **TOC**

Date Prepared: 11/03/2020

Date Approved:

By:

Status: Pass

Sample ID: 180-112876-B-6
Method: TOC OCT 2020 - Oct 08, 202C
Type: Sample
Dilution: 1 : 1

Date: 11/03/2020
Customer ID: 00000000

Spl #: 21
Vial #: 21

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:38 am	-	-	-	5,104	2,475	1,031
2	6:44 am	-	-	-	5,349	2,613	1,089
3	6:50 am	-	-	-	5,490	2,693	1,122
4	6:56 am	-	-	-	4,991	2,411	1,005

Avg. -
Std.Dev.
% RSD. 4.34

Date: 11/03/2020
Customer ID: 00000000

Sample ID: 180-112945-C-1
Method: TOC OCT 2020 - Oct 08, 202C
Type: Sample
Dilution: 1 : 1

Spl #: 22
Vial #: 22

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:04 am	-	-	-	37,636	20,847	8,686
2	7:10 am	-	-	-	37,196	20,599	8,583
3	7:16 am	-	-	-	39,710	22,019	9,175
4	7:22 am	-	-	-	38,491	21,330	8,888

Avg. -
Std.Dev.
% RSD. 2.89

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Date Prepared: 11/03/2020 By:
Date Approved: By:

Status: Pass

Date: 11/03/2020
Customer ID: 00000000

Type: Sample
Dilution 1 : 1

Sample ID: 180-112945-A-1 MS
Method: TOC OCT 2020 - Oct 08, 202C

Spl #: 23
Vial #: 23

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:31 am	-	-	-	79,429	44,450	18,521
2	7:37 am	-	-	-	78,264	43,792	18,247
3	7:43 am	-	-	-	80,916	45,290	18,871
4	7:49 am	-	-	-	77,828	43,546	18,144

Avg. 79,109 44,270 18,446
Std.Dev.
% RSD. 1.75

Status: Pass

Date: 11/03/2020
Customer ID: 00000000

Type: Sample
Dilution 1 : 1

Sample ID: 180-112945-A-1 MSD
Method: TOC OCT 2020 - Oct 08, 202C

Spl #: 24
Vial #: 24

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:58 am	-	-	-	77,979	43,632	18,180
2	8:04 am	-	-	-	80,008	44,777	18,657
3	8:10 am	-	-	-	81,096	45,392	18,913
4	8:16 am	-	-	-	80,826	45,240	18,850

Avg. 79,977 44,760 18,650
Std.Dev.
% RSD. 1.76

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Date Prepared: 11/03/2020 By:

Date Approved: By:

Spl #: 25 Sample ID: 180-112945-B-2 Type: Sample Status: Pass
 Vial #: 25 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:25 am	-	-	-	37,492	20,766	8.653
2	8:31 am	-	-	-	38,909	21,566	8.986
3	8:37 am	-	-	-	39,985	22,174	9.239
4	8:43 am	-	-	-	40,464	22,445	9.351
Avg.		-	-	-	39,213	21,738	9.057
Std.Dev.		3.36					
% RSD.		3.36					

Spl #: 26 Sample ID: CCV 10 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 26 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:52 am	-	-	-	43,074	23,952	9.980
2	8:58 am	-	-	-	42,966	23,892	9.955
3	9:04 am	-	-	-	43,244	24,048	10.020
4	9:09 am	-	-	-	42,972	23,895	9.956
Avg.		-	-	-	43,064	23,947	9.978
Std.Dev.		0.30					
% RSD.		0.30					

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Date Prepared: 11/03/2020

By:

Date Approved:

By:

Spl #: 27 Sample ID: CCB Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 27 Method: TOC OCT 2020 - Oct 08, 202C Dilution: 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:19 am	-	-	-	926	0.149	0.062
2	9:25 am	-	-	-	782	0.068	0.028
3	9:30 am	-	-	-	777	0.065	0.027
4	9:36 am	-	-	-	734	0.041	0.017
Avg.		-	-	-	805	0.081	0.034
Std.Dev.		10.40					
% RSD.		10.40					

Spl #: 28 Sample ID: 180-112945-B-3 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 28 Method: TOC OCT 2020 - Oct 08, 202C Dilution: 1 : 1 Customer ID: 000000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:46 am	-	-	-	33,475	18.498	7.707
2	9:52 am	-	-	-	35,865	19.847	8.270
3	9:58 am	-	-	-	35,474	19.627	8.178
4	10:03 am	-	-	-	36,512	20.213	8.421
Avg.		-	-	-	35,332	19.546	8.144
Std.Dev.		3.71					
% RSD.		3.71					

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Date Prepared: 11/03/2020 By:
 Date Approved: By:

Spl #: 29 Sample ID: CCV 10 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 29 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:12 am	-	-	-	42,492	23.624	9.843
2	10:18 am	-	-	-	43,819	24.373	10.156
3	10:24 am	-	-	-	43,544	24,218	10.091
4	10:30 am	-	-	-	43,890	24,413	10.172
Avg.					43,436	24.157	10.065
Std.Dev.							
% RSD.							1.49

Spl #: 30 Sample ID: CCB Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 30 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:39 am	-	-	-	829	0.095	0.039
2	10:45 am	-	-	-	1,009	0.196	0.082
3	10:51 am	-	-	-	699	0.021	0.009
4	10:56 am	-	-	-	652	0.000	0.000
Avg.					797	0.078	0.033
Std.Dev.							
% RSD.							20.06

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Date Prepared: 11/03/2020

By:

Date Approved:

By:

Spl #: 31 Sample ID: LCS 20 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 31 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:06 am	-	-	-	84,676	47,447	19,770
2	11:11 am	-	-	-	85,520	47,924	19,969
3	11:17 am	-	-	-	84,957	47,606	19,835
4	11:23 am	-	-	-	84,905	47,577	19,824

Avg. 85,015 47,639 19,850
 Std.Dev.
 % RSD. 0.42

Status: Fail

Spl #: 32 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 11/03/2020
 Vial #: 32 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:33 am	-	-	-	85,223	47,757	19,899
2	11:38 am	-	-	-	86,143	48,276	20,115
3	11:44 am	-	-	-	86,157	48,284	20,118
4	11:50 am	-	-	-	85,471	47,896	19,957

Avg. 85,748 48,053 20,022
 Std.Dev.
 % RSD. 0.55

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TOC

Date Prepared: 11/03/2020

By:

Date Approved:

By:

Spl #: 33 Sample ID: MB Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 33 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:59 am	-	-	-	780	0.067	0.028
2	12:05 pm	-	-	-	652	0.000	0.000
3	12:11 pm	-	-	-	678	0.009	0.004
4	12:17 pm	-	-	-	680	0.010	0.004
Avg.		-	-	-	697	0.021	0.009
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	8.16	-	-

Spl #: 34 Sample ID: LB 180-335086/1-A Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 34 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:25 pm	-	-	-	735	0.007	0.003
2	12:31 pm	-	-	-	824	0.057	0.024
3	12:37 pm	-	-	-	771	0.028	0.012
4	12:43 pm	-	-	-	813	0.051	0.021
Avg.		-	-	-	786	0.036	0.015
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	5.18	-	-

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Date Prepared: 11/03/2020 By: **TOC**
 Date Approved: By:

Status: Pass

Date: 11/03/2020
 Customer ID: 00000000

Type: Sample
 Dilution: 1 : 1

Sample ID: 180-112803-A-1-C
 Method: TOC OCT 2020 - Oct 08, 202C

Spl #: 35
 Vial #: 35

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:52 pm	-	-	-	62,607	34,950	14,563
2	12:58 pm	-	-	-	65,436	36,548	15,228
3	1:04 pm	-	-	-	67,766	37,863	15,776
4	1:10 pm	-	-	-	68,362	38,200	15,917
Avg.		-	-	-	66,043	36,890	15,371
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	3.96	-	-

Date: 11/03/2020
 Customer ID: 00000000

Type: Sample
 Dilution: 1 : 1

Sample ID: 180-112804-A-1-E
 Method: TOC OCT 2020 - Oct 08, 202C

Spl #: 36
 Vial #: 36

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:19 pm	-	-	-	2,483	0.995	0.415
2	1:25 pm	-	-	-	2,227	0.850	0.354
3	1:31 pm	-	-	-	1,785	0.601	0.250
4	1:36 pm	-	-	-	1,480	0.428	0.179
Avg.		-	-	-	1,994	0.718	0.299
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	22.45	-	-

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Date Prepared: 11/03/2020 By: *TOC*
 Date Approved: By:

Spl #: 37 Sample ID: 180-112806-A-1-C Type: Sample Status: Pass
 Vial #: 37 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:46 pm	-	-	-	40,044	22,207	9,253
2	1:52 pm	-	-	-	41,044	22,772	9,488
3	1:58 pm	-	-	-	41,920	23,267	9,695
4	2:04 pm	-	-	-	41,672	23,127	9,636
Avg.		-	-	-	41,170	22,843	9,518
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.03	-	-

Spl #: 38 Sample ID: CCV 10 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 38 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:13 pm	-	-	-	42,171	23,442	9,768
2	2:19 pm	-	-	-	43,463	24,172	10,072
3	2:25 pm	-	-	-	43,449	24,164	10,068
4	2:31 pm	-	-	-	43,120	23,978	9,991
Avg.		-	-	-	43,050	23,939	9,975
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.41	-	-

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Date Prepared: 11/03/2020 By: *TOC*

Date Approved: By:

Spl #: 39 Sample ID: CCB Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 39 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:40 pm				835	0.098	0.041
2	2:46 pm				755	0.053	0.022
3	2:52 pm				667	0.003	0.001
4	2:57 pm				549	0.000	0.000
Avg.					701	0.038	0.016
Std.Dev.							
% RSD.							17.52

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Date Prepared: 11/03/2020 By: *IOC*

Date Approved: By:

Method Summary

Method Details

Method Name: TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Date Created: 10/08/2020
 Time Created: 13:42
 Created By: toc

Analysis Mode: NPOC Only
 Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00

Volumes
 Sample Volume (mL): 2.400
 Acid Volume (mL): 1.000
 Persulfate Volume(mL): 1.500

Other
 SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

Max. Std. Dev. 100 Use Modified Oxidant: No

Times

React	01:30	Detect	03:00	Temp	TIC
React	02:00	Detect	03:00	Temp	TOC
					Detect
					70
					98

Calibration Summary

Calibration Generation

Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Mode

Primary Mode: TOC
 User for ALL Modes: Enabled

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.995	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Continue	Continue
QC #1	40.000	10.00	Continue	Continue
QC #2	20.000	20.00	Continue	Continue
QC #3	25.000	10.00	Continue	Continue
QC #4	0.000	10.00	Continue	Continue
SST	0.000	15.00	Continue	Continue

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Date Prepared: 11/03/2020

By: JOC

Date Approved:

By:

Calibration Details

Calibration Mode: TOC
 Date Calibrated: 10/08/2020
 Time Calibrated: 5:27 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5648
 R2: 0.9992
 R: 0.9996
 QC Blank(cts): 1,430
 Offset (cts): 674
 Offset (ugC): -0.381
 Reagent Blank (cts): 722
 Units of Measure: PPM->mg/L C

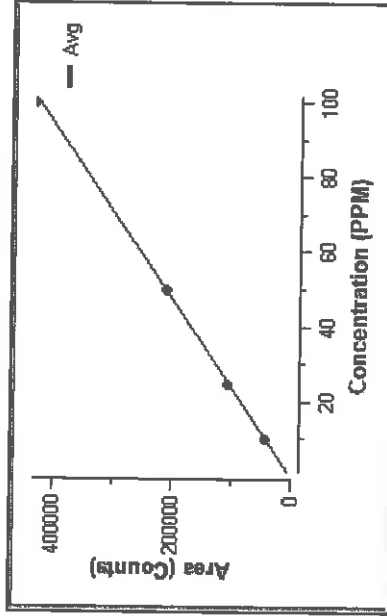
Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 3
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Weighted Linear
 weighting factor => 1 / mass

Calculations:

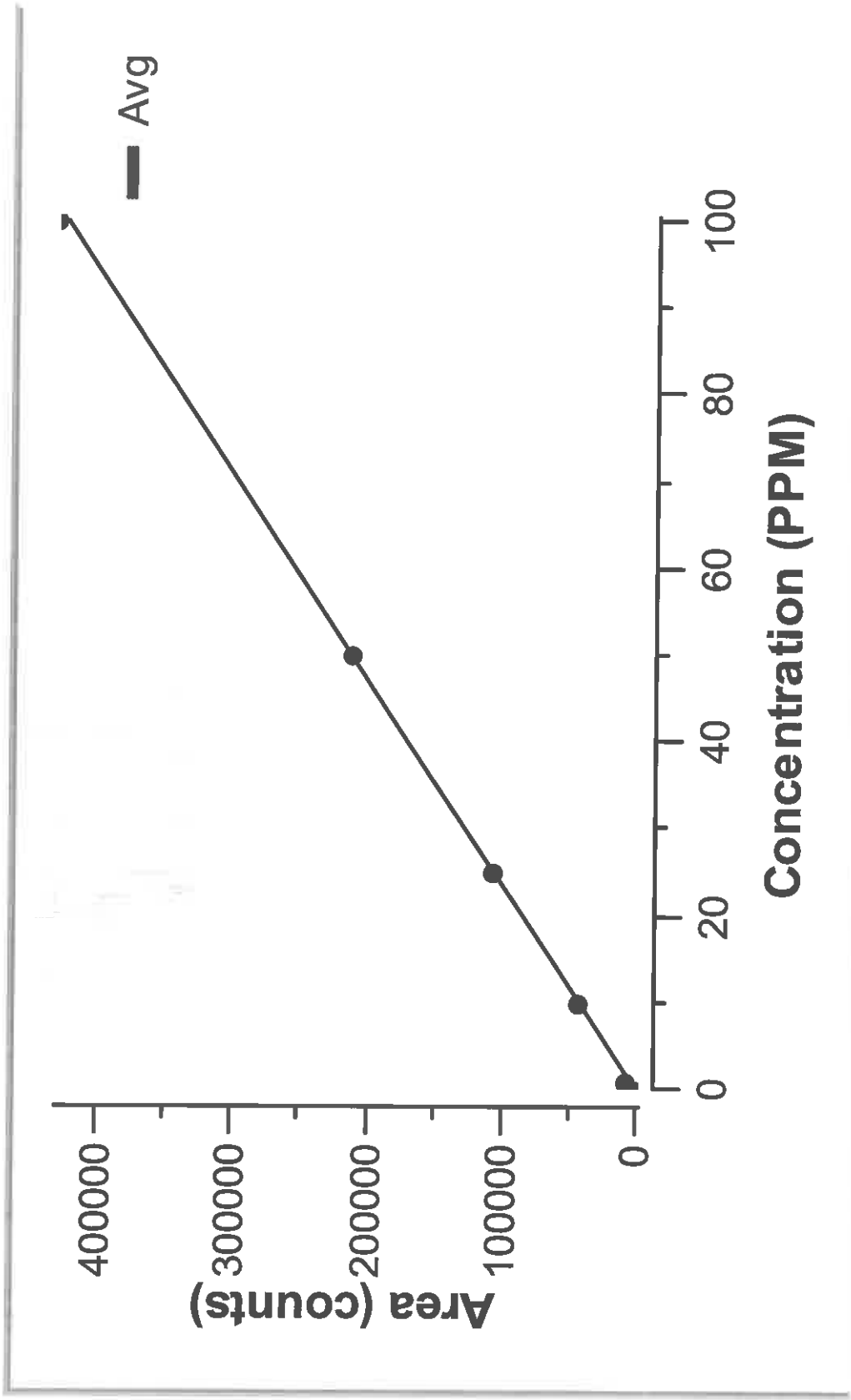
$$\text{Concentration} = \frac{\text{RF} \times \text{Area}}{\text{volume}}$$

Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RB}
 CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RB}
 QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$$y = m \times x + b$$

$$y \Rightarrow \text{Area} \quad m \Rightarrow \frac{1000}{\text{RF} \times \text{volume}} \quad b \Rightarrow 0$$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 1-TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Modified By: toc
 Date Created: 2020/10/08; 01:42 PM
 Last Modified: 2020/10/08; 05:08 PM
 Last Calibrated: 2020/10/08; 05:08 PM

RF(ugC/k-cnt): 0.5648
 R2: 0.9992
 Reagent Blank(cts): 722
 Offset Area(cts): 674
 Offset Mass(ugC): -0.38

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	662	49	7.35	2020-10-08; 03:37PM
1	1.000	2.400	2	5,780	894	15.47	2020-10-08; 04:01PM
2	10.000	2.400	2	41,583	619	1.49	2020-10-08; 04:16PM
3	25.000	2.400	2	106,117	2,774	2.61	2020-10-08; 04:31PM
4	50.000	2.400	2	209,986	3,616	1.72	2020-10-08; 04:46PM
5	100.000	2.400	2	430,699	11,254	2.61	2020-10-08; 05:02PM

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Date Prepared: 10/08/2020

By:

TOC

Date Approved:

By:

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	DI WATER	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1	00000000	TOC	2,923	0.000	0.000	546	18.69	Pass
2	BLANK	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1	00000000	TOC	2,081	0.000	0.000	541	25.98	Pass
4	TOC-RW	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	662	0.000	0.000	49	7.35	
5	TOC-Std#1-1.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	5,780	2.400	1.000	894	15.47	
6	TOC-Std#2-10.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	41,583	24.000	10.000	619	1.49	
7	TOC-Std#3-25.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	106,117	60.000	25.000	2,774	2.61	
8	TOC-Std#4-50.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	209,986	120.000	50.000	3,616	1.72	
9	TOC-Std#5-100.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	430,699	240.000	100.000	11,254	2.61	
10	QC BLANK	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	QC Blank	1 : 1	00000000	TOC	1,431	0.000	0.000	431	30.14	

100820700A

TEST AMERICA
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 15238
 USA

Date Prepared: 10/08/2020 By: *TOC*
 Date Approved: By:

Sample Results

Spl #: 1 Sample ID: DI WATER Type: Sample Status: Pass
 Vial #: 1 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000 Date: 10/08/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:23 pm	-	-	-	3,455	0.000	0.000
2	2:28 pm	-	-	-	3,119	0.000	0.000
3	2:34 pm	-	-	-	2,951	0.000	0.000
4	2:40 pm	-	-	-	2,166	0.000	0.000
Avg.		-	-	-	2,923	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	18.69	-	-

Spl #: 2 Sample ID: BLANK Type: Sample Status: Pass
 Vial #: 2 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000 Date: 10/05/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:49 pm	-	-	-	2,464	0.000	0.000
2	2:54 pm	-	-	-	1,699	0.000	0.000
Avg.		-	-	-	2,081	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	25.98	-	-

TEST AMERICA
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 USA

By: **TOC**

Date Prepared: 10/08/2020

By:

Date Approved:

By:

Spl #: 4 Sample ID: TOC-RW Type: Std Dilution 1 : 1 Date: 10/08/2020 Status:
 Vial #: 3 Method: TOC OCT 2020 - Oct 08, 202C Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:37 pm	-	-	-	1,365	0.000	0.000
2	3:43 pm	-	-	-	697	0.000	0.000
3	3:52 pm	-	-	-	628	0.000	0.000
Avg.		-	-	-	662	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	7.35	-	-

Spl #: 5 Sample ID: TOC-Std#1-1.000 PPM Type: Std Dilution 1 : 1 Date: 10/08/2020 Status:
 Vial #: 4 Method: TOC OCT 2020 - Oct 08, 202C Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:01 pm	-	-	-	6,412	2.400	1.000
2	4:06 pm	-	-	-	5,148	2.400	1.000
Avg.		-	-	-	5,780	2.400	1.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	15.47	-	-

Spl #: 6 Sample ID: TOC-Std#2-10.000 PPM Type: Std Dilution 1 : 1 Date: 10/08/2020 Status:
 Vial #: 5 Method: TOC OCT 2020 - Oct 08, 202C Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:16 pm	-	-	-	41,145	24.000	10.000
2	4:21 pm	-	-	-	42,021	24.000	10.000
Avg.		-	-	-	41,583	24.000	10.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.49	-	-

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TOC

Date Prepared: 10/08/2020 By:
 Date Approved: By:

Spl #: 7 Sample ID: TOC-Std#3-25.000 PPM Type: Std Status: 10/08/2020
 Vial #: 6 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:31 pm	-	-	-	104,156	60.000	25.000
2	4:37 pm	-	-	-	108,078	60.000	25.000
Avg.		-	-	-	106,117	60.000	25.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.61	-	-

Spl #: 8 Sample ID: TOC-Std#4-50.000 PPM Type: Std Status: 10/08/2020
 Vial #: 7 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:46 pm	-	-	-	207,429	120.000	50.000
2	4:52 pm	-	-	-	212,543	120.000	50.000
Avg.		-	-	-	209,986	120.000	50.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.72	-	-

Spl #: 9 Sample ID: TOC-Std#5-100.000 PPM Type: Std Status: 10/08/2020
 Vial #: 8 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:02 pm	-	-	-	422,741	240.000	100.000
2	5:07 pm	-	-	-	438,656	240.000	100.000
Avg.		-	-	-	430,699	240.000	100.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.61	-	-

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Date Prepared: 10/08/2020 By: JOC

Date Approved: By:

Spl #: 10 Sample ID: QC BLANK Type: QC Blank Date: 10/08/2020 Status:
 Vial #: 9 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)	
1	5:21 pm	-	-	-	1,736	0.000	0.000	
2	5:27 pm	-	-	-	1,126	0.000	0.000	
Avg.		-	-	-	1,431	0.000	0.000	
Std.Dev.							30.14	
% RSD.								

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Date Prepared: 10/08/2020

By:

TOC

Date Approved:

By:

Method Summary

Method Details

Method Name: TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM

Date Created: 10/08/2020

Time Created: 13:42

Created By: toc

Analysis Mode: NPOC Only

Sparging Mode: Internal

Pre-Acid Volume (mL): 1.000

Spurge Time (mm:ss): 02:00

Volumes

Sample Volume (mL): 2.400

Acid Volume (mL): 1.000

Persulfate Volume(mL): 1.500

Other

SysPressure: 20.00

Pre-Processing

Sample Dilution:

Dilution Mode: Automatic

Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No

Additional Replicates: 1

Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000

Rinses Per Sample: 1

Rinses Per Replicate: 0

Max. Std. Dev. 100

Use Modified Oxidant: No

Times

React 01:30

React 02:00

Detect 03:00

Detect 03:00

Temp

TIC 70

TOC 98

Detect 70

Detect 98

Calibration Summary

Calibration Generation

Generation Mode: Manual

of Stds: 5

Dilution Factor: 10 : 1

Dilution Volume (mL): 1.000

Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.995	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC

User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a			
QC #1	40.000	10.00	Continue	Continue
QC #2	20.000	10.00	Continue	Continue
QC #3	25.000	20.00	Continue	Continue
QC #4	0.000	10.00	Continue	Continue
SST	0.000	15.00	Continue	Continue

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Date Prepared: 10/08/2020 By:
 Date Approved: By:

TOC

Calibration Details

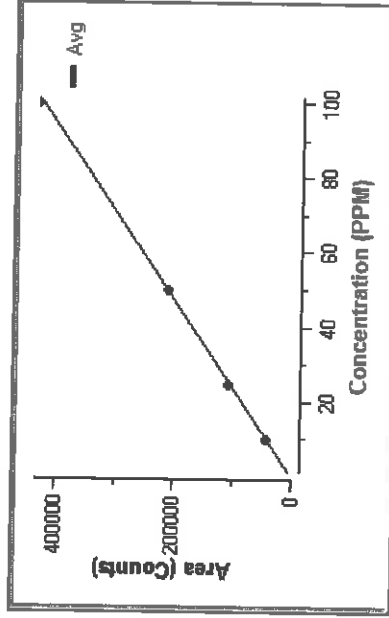
Calibration Mode: TOC
 Date Calibrated: 10/08/2020
 Time Calibrated: 5:08 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5648
 R2: 0.9992
 R: 0.9996
 QC Blank(cts): 0
 Offset (cts): 674
 Offset (ugC): -0.381
 Reagent Blank (cts): 722
 Units of Measure: PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 3
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Weighted Linear
 weighting factor => 1 / mass

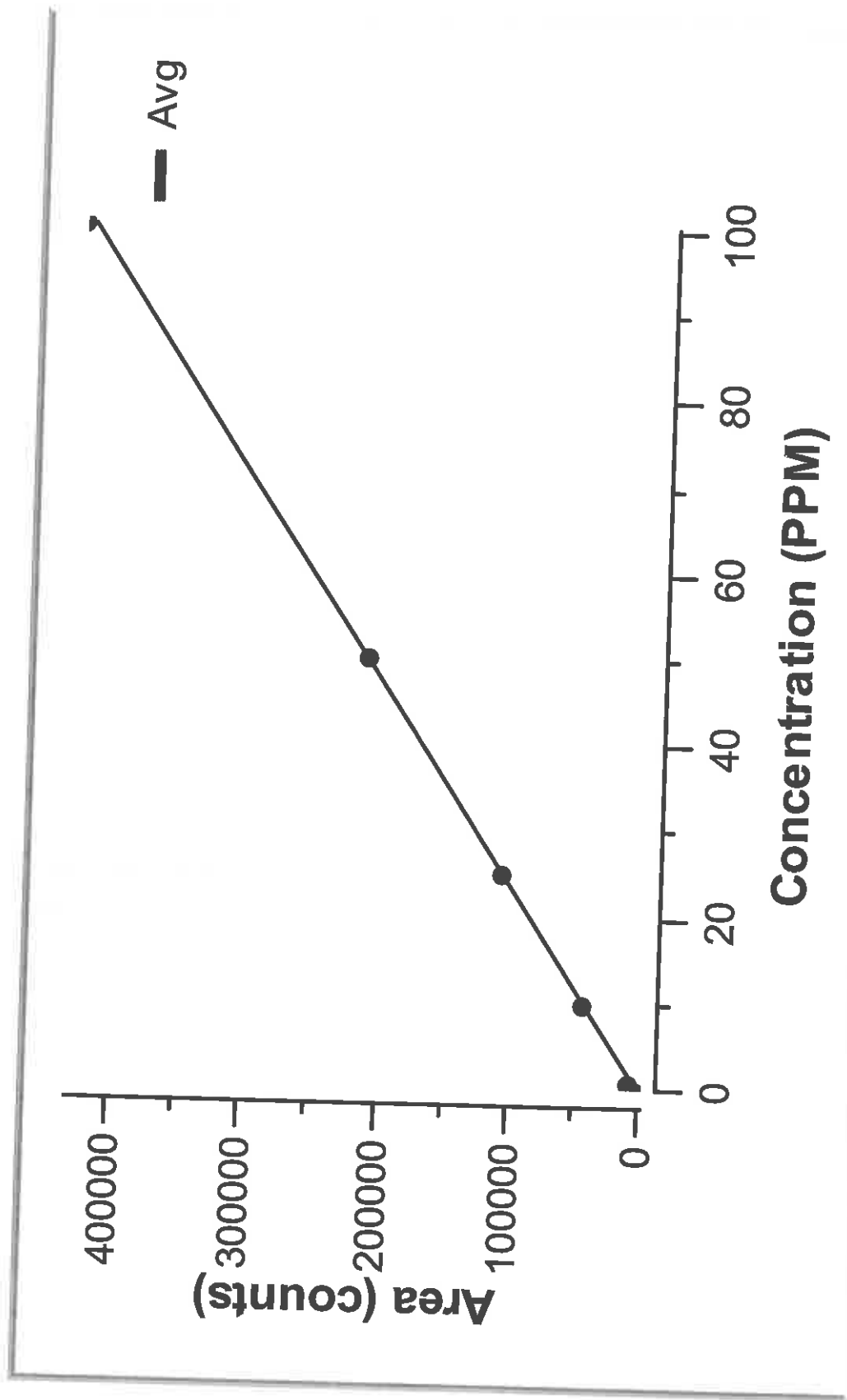
Calculations:

Concentration = $\frac{RF \times Area}{1000 \times volume}$
 Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RB}
 CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RW}
 QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$y = m \times x + b$

$y \rightarrow Area$ $m \rightarrow \frac{1000}{RF \times volume}$ $b \rightarrow 0$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 1-TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Modified By: toc
 Date Created: 2020/10/08; 01:42 PM
 Last Modified: 2020/10/08; 05:08 PM
 Last Calibrated: 2020/10/08; 05:08 PM

RF(ugC/k-cnt): 0.5648
 R2: 0.9992
 Reagent Blank(cts): 722
 Offset Area(cts): 674
 Offset Mass(ugC): -0.38

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	662	49	7.35	2020-10-08; 03:37PM
1	1.000	2.400	2	5,780	894	15.47	2020-10-08; 04:01PM
2	10.000	2.400	2	41,583	619	1.49	2020-10-08; 04:16PM
3	25.000	2.400	2	106,117	2,774	2.61	2020-10-08; 04:31PM
4	50.000	2.400	2	209,986	3,616	1.72	2020-10-08; 04:46PM
5	100.000	2.400	2	430,699	11,254	2.61	2020-10-08; 05:02PM



TM 10/08/20

5310C/9060A TOC %Readback Error Calculation Spreadsheet

ICAL Std (ppm)	ICAL RF	ICAL ID	Average Area	Result (ppm)	%Readback Error	%Readback Criteria
1.000	0.5648	100820TOCCAL	5780	1.360	36.023	≤50%
10.000	0.5648	100820TOCCAL	41583	9.786	-2.141	≤20%
25.000	0.5648	100820TOCCAL	106117	24.973	-0.109	≤20%
50.000	0.5648	100820TOCCAL	209986	49.417	-1.167	≤20%
100.000	0.5648	100820TOCCAL	430699	101.358	1.358	≤20%

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301 ALPHA DRIVE
PITTSBURGH, PA.
15238

Date Prepared: 11/25/2020

By: JOC

9040-DISS

USA Borden #338500

1124720DOC

TW 11/25/20

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	1	BLANK	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	702	0.020	0.009	106	15.06	Pass
2	2	ICV 40 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	167,850	94.421	39.342	4,051	2.41	Fail
3	3	ICB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	657	0.026	0.011	131	19.96	Fail
4	4	LCS 20 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	83,228	46.630	19.429	1,139	1.37	Fail
5	5	LCSD 20 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	83,634	46.859	19.525	1,093	1.31	Fail
6	6	MB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	595	0.001	0.000	59	10.00	Fail
7	7	180-112876-E-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	32,323	17.847	7.436	1,237	3.83	Pass
8	8	180-112876-E-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	18,215	9.879	4.116	844	4.64	Pass
9	9	180-112876-E-3	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	10,454	5.496	2.290	501	4.79	Pass
10	10	180-112876-E-4	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	6,663	3.349	1.396	331	4.97	Pass
11	11	180-112876-E-5	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	4,295	2.018	0.841	187	4.36	Pass
12	12	180-112876-E-6	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	4,878	2.347	0.978	200	4.10	Pass
13	13	180-112945-E-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	38,787	21.497	8.957	768	1.98	Pass
14	14	CCV 10 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	39,929	22.176	9.240	294	0.74	Fail
15	15	CCB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	602	0.002	0.001	100	16.67	Fail
16	16	180-112945-D-1 MS	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	78,626	43.997	18.332	1,467	1.87	Pass
17	17	180-112945-C-1 MSD	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	79,085	44.256	18.440	1,075	1.36	Pass
18	18	180-112945-D-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	38,102	21.111	8.796	1,270	3.33	Pass
19	19	180-112945-E-3	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	36,461	20.184	8.410	1,490	4.09	Pass
20	20	240-140458-G-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	277,297	156.198	65.083	5,340	1.93	Pass
21	21	240-140458-G-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	41,591	23.081	9.617	1,116	2.68	Pass
22	22	240-140458-H-5	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	8,476	4.379	1.825	199	2.34	Pass
23	23	240-140720-G-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	33,801	18.682	7.784	399	1.18	Pass

TEST AMERICA
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PITTSBURGH, PA
15238
USA

TOC

Date Prepared: 11/25/2020 By:

Date Approved: By:

Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 11/24/2020 Status: Pass
 Vial #: 1 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:29 pm	-	-	-	801	0.045	0.019
2	4:35 pm	-	-	-	786	0.036	0.015
3	4:41 pm	-	-	-	620	0.000	0.000
4	4:47 pm	-	-	-	602	0.000	0.000

Avg. 702 0.020 0.009
 Std.Dev.
 % RSD. 15.06

Spl #: 2 Sample ID: ICV 40 PPM Type: Chk Standard Date: 11/24/2020 Status: Fail
 Vial #: 2 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:56 pm	-	-	-	161,880	91.049	37.937
2	5:02 pm	-	-	-	169,576	95.395	39.748
3	5:08 pm	-	-	-	170,865	96.123	40.051
4	5:13 pm	-	-	-	169,082	95.116	39.632

Avg. 167,850 94.421 39.342
 Std.Dev.
 % RSD. 2.41

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 USA

TOC

Date Prepared: 11/25/2020

By:

Date Approved:

By:

Status: Fail

Sample ID: ICB
 Method: TOC OCT 2020 - Oct 08, 202C
 Type: Dilution
 Chk Standard: 1 : 1
 Date: 11/24/2020
 Customer ID: 00000000

Spl #: 3
 Vial #: 3

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:22 pm	-	-	-	837	0.099	0.041
2	5:28 pm	-	-	-	670	0.004	0.002
3	5:34 pm	-	-	-	546	0.000	0.000
4	5:40 pm	-	-	-	575	0.000	0.000
Avg.		-	-	-	657	0.026	0.011
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	19.96	-	-

Sample ID: LCS 20 PPM
 Method: TOC OCT 2020 - Oct 08, 202C
 Type: Dilution
 Chk Standard: 1 : 1
 Date: 11/24/2020
 Customer ID: 00000000

Spl #: 4
 Vial #: 4

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:49 pm	-	-	-	81,560	45.688	19.037
2	5:54 pm	-	-	-	83,598	46.839	19.516
3	6:00 pm	-	-	-	84,132	47.141	19.642
4	6:06 pm	-	-	-	83,621	46.852	19.522
Avg.		-	-	-	83,228	46.630	19.429
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.37	-	-

Date Prepared: 11/25/2020 By:

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Spl #: 5 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 11/24/2020 Status: Fail
Vial #: 5 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:16 pm	-	-	-	82,384	46.153	19.230
2	6:21 pm	-	-	-	83,262	46.649	19.437
3	6:27 pm	-	-	-	83,914	47.017	19.590
4	6:33 pm	-	-	-	84,977	47.618	19.841
Avg.		-	-	-	83,634	46.859	19.525
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.31	-	-

Spl #: 6 Sample ID: MB Type: Chk Standard Date: 11/24/2020 Status: Fail
Vial #: 6 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:42 pm	-	-	-	667	0.003	0.001
2	6:48 pm	-	-	-	589	0.000	0.000
3	6:54 pm	-	-	-	602	0.000	0.000
4	6:59 pm	-	-	-	522	0.000	0.000
Avg.		-	-	-	595	0.001	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	10.00	-	-

Date Prepared: 11/25/2020

By: [Signature]

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15238
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Status: Pass

Date: 11/24/2020
Customer ID: 00000000

Type: Dilution

Sample ID: 180-112876-E-1
Method: TOC OCT 2020 - Oct 08, 2020

Spl #: 7
Vial #: 7

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:09 pm	-	-	-	30,472	16,802	7,001
2	7:15 pm	-	-	-	32,819	18,127	7,552
3	7:21 pm	-	-	-	32,990	18,224	7,593
4	7:27 pm	-	-	-	33,010	18,235	7,598

Avg. 32,323 17,847 7,436
 Std.Dev.
 % RSD. 3.83

Status: Pass

Date: 11/24/2020
Customer ID: 00000000

Type: Dilution

Sample ID: 180-112876-E-2
Method: TOC OCT 2020 - Oct 08, 2020

Spl #: 8
Vial #: 8

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:36 pm	-	-	-	17,042	9,217	3,840
2	7:42 pm	-	-	-	18,681	10,142	4,225
3	7:48 pm	-	-	-	18,183	9,861	4,108
4	7:54 pm	-	-	-	18,954	10,297	4,290

Avg. 18,215 9,879 4,116
 Std.Dev.
 % RSD. 4.64

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Pass

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Spl #: 9 Sample ID: 180-112876-E-3 Type:
Vial #: 9 Method: TOC OCT 2020 - Oct 08, 202C Dilution

Date: 11/24/2020
Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:03 pm	-	-	-	10,030	5.257	2.190
2	8:09 pm	-	-	-	10,637	5.600	2.333
3	8:15 pm	-	-	-	10,069	5.279	2.199
4	8:20 pm	-	-	-	11,079	5.849	2.437
Avg.		-	-	-	10,454	5.496	2.290
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	4.79	-	-

Spl #: 10 Sample ID: 180-112876-E-4 Type:
Vial #: 10 Method: TOC OCT 2020 - Oct 08, 202C Dilution

Status: Pass

Date: 11/24/2020
Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:30 pm	-	-	-	6,313	3.158	1.316
2	8:36 pm	-	-	-	6,589	3.314	1.381
3	8:41 pm	-	-	-	6,601	3.320	1.384
4	8:47 pm	-	-	-	7,107	3.606	1.502
Avg.		-	-	-	6,653	3.349	1.396
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	4.97	-	-

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Pass

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Spl #: 11 Sample ID: 180-112876-E-5 Type: Dilution
Vial #: 11 Method: TOC OCT 2020 - Oct 08, 2020 Customer ID: C0000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:57 pm	-	-	-	4,145	1.933	0.806
2	9:03 pm	-	-	-	4,199	1.964	0.818
3	9:08 pm	-	-	-	4,271	2.004	0.835
4	9:14 pm	-	-	-	4,565	2.170	0.904

Avg. 4,295 2.018 0.841
 Std.Dev.
 % RSD. 4.36

Spl #: 12 Sample ID: 180-112876-E-6 Type: Dilution
Vial #: 12 Method: TOC OCT 2020 - Oct 08, 2020 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:23 pm	-	-	-	4,931	2.377	0.991
2	9:29 pm	-	-	-	4,706	2.250	0.938
3	9:35 pm	-	-	-	4,736	2.267	0.944
4	9:41 pm	-	-	-	5,138	2.494	1.039

Avg. 4,878 2.347 0.978
 Std.Dev.
 % RSD. 4.10

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Pass

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Spl #: 13 Sample ID: 180-112945-E-1 Type: Sample Date: 11/24/2020
Vial #: 13 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: C0000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:50 pm	-	-	-	37,740	20,906	8.711
2	9:55 pm	-	-	-	39,288	21,781	9.075
3	10:01 pm	-	-	-	39,428	21,860	9.108
4	10:07 pm	-	-	-	38,690	21,443	8.934

Avg. 38,787 21,497 8.957

Std.Dev. 1.98

Spl #: 14 Sample ID: CCV 10 PPM Type: Chk Standard Date: 11/24/2020
Vial #: 14 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:16 pm	-	-	-	39,613	21,998	9.166
2	10:22 pm	-	-	-	40,180	22,318	9.299
3	10:28 pm	-	-	-	39,744	22,072	9.197
4	10:34 pm	-	-	-	40,179	22,317	9.299

Avg. 39,929 22,176 9.240

Std.Dev. 0.74

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Fail

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Spl #: 15 Sample ID: CCB Type: Chk-Standard Date: 11/24/2020
Vial #: 15 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: C0000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:43 pm	-	-	-	652	0.000	0.000
2	10:49 pm	-	-	-	629	0.000	0.000
3	10:55 pm	-	-	-	675	0.007	0.002
4	11:00 pm	-	-	-	454	0.000	0.000

Avg. 602 0.002 0.001
 Std.Dev.
 % RSD. 16.67

Status: Pass

Spl #: 16 Sample ID: 180-112945-D-1 MS Type: Sample Date: 11/24/2020
Vial #: 16 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:09 pm	-	-	-	76,877	43.009	17.921
2	11:15 pm	-	-	-	78,665	44.019	18.341
3	11:21 pm	-	-	-	80,464	45.035	18.765
4	11:27 pm	-	-	-	78,497	43.924	18.302

Avg. 78,626 43.997 18.332
 Std.Dev.
 % RSD. 1.87

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TOC

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Pass

Spl #: 17 Sample ID: 180-112945-C-1 MSD Type: Sample Date: 11/24/2020
 Vial #: 17 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:36 pm	-	-	-	77,681	43,463	18,110
2	11:42 pm	-	-	-	78,858	44,128	18,387
3	11:48 pm	-	-	-	80,136	44,850	18,688
4	11:54 pm	-	-	-	79,666	44,584	18,577
Avg.		-	-	-	79,085	44,256	18,440
Std.Dev.							
% RSD.							1.36

Spl #: 18 Sample ID: 180-112945-D-2 Type: Sample Date: 11/25/2020
 Vial #: 18 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:03 am	-	-	-	36,415	20,158	8,399
2	12:09 am	-	-	-	37,906	21,000	8,750
3	12:15 am	-	-	-	39,343	21,811	9,088
4	12:21 am	-	-	-	38,745	21,474	8,947
Avg.		-	-	-	38,102	21,111	8,796
Std.Dev.							
% RSD.							3.33

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Pass

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Spl #: 19 Sample ID: 180-112945-E-3 Type: Dilution
Vial #: 19 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:31 am	-	-	-	34,306	18,967	7,903
2	12:37 am	-	-	-	37,740	20,906	8,710
3	12:42 am	-	-	-	36,899	20,431	8,512
4	12:48 am	-	-	-	36,897	20,430	8,513

Avg. 36,461 20,184 8,410
 Std.Dev.
 % RSD. 4.09

Spl #: 20 Sample ID: 240-140458-G-1 Type: Dilution
 Vial #: 20 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:57 am	-	-	-	269,890	152,015	63,339
2	1:03 am	-	-	-	277,254	156,174	65,072
3	1:08 am	-	-	-	282,231	158,985	66,244
4	1:14 am	-	-	-	279,813	157,619	65,675

Avg. 277,297 156,198 65,083
 Std.Dev.
 % RSD. 1.93

Date Prepared: 11/25/2020

By:

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Spl #: 21 Sample ID: 240-140458-G-2 Type: TOC OCT 2020 - Oct 08, 202C Date: 11/25/2020 Status: Pass
Vial #: 21 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:24 am	-	-	-	40,174	22.281	9.284
2	1:29 am	-	-	-	41,297	22.915	9.548
3	1:35 am	-	-	-	42,747	23.734	9.889
4	1:41 am	-	-	-	42,148	23.395	9.748

Avg. 41,591 23.081 9.617
Std.Dev.
% RSD. 2.68

Spl #: 22 Sample ID: 240-140458-H-5 Type: TOC OCT 2020 - Oct 08, 202C Date: 11/25/2020 Status: Pass
Vial #: 22 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:51 am	-	-	-	8,470	4.376	1.823
2	1:56 am	-	-	-	8,506	4.396	1.832
3	2:02 am	-	-	-	8,705	4.509	1.879
4	2:08 am	-	-	-	8,221	4.235	1.765

Avg. 8,476 4.379 1.825
Std.Dev.
% RSD. 2.34

Date Prepared: 11/25/2020

By:

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Status: Pass

Sample Date: 11/25/2020
Customer ID: 00000000

Spl #: 23 Sample ID: 240-140720-G-1 Type: TOC
Vial #: 23 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:18 am	-	-	-	33,259	18,375	7.656
2	2:23 am	-	-	-	33,744	18,649	7.771
3	2:29 am	-	-	-	34,075	18,837	7.849
4	2:35 am	-	-	-	34,126	18,865	7.861
Avg.		-	-	-	33,801	18,682	7.784
Std.Dev.		1.18					
% RSD.		1.18					

Status: Pass

Sample Date: 11/25/2020
Customer ID: 00000000

Spl #: 24 Sample ID: 240-140720-H-2 Type: TOC
Vial #: 24 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:45 am	-	-	-	6,517	3,273	1.364
2	2:50 am	-	-	-	6,764	3,412	1.422
3	2:56 am	-	-	-	7,239	3,680	1.533
4	3:02 am	-	-	-	6,534	3,282	1.368
Avg.		-	-	-	6,763	3,412	1.422
Std.Dev.		4.97					
% RSD.		4.97					

Date Prepared: 11/25/2020

By:

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Status: Pass

Date: 11/25/2020
Customer ID: 00000000

Type: Dilution

Sample ID: 240-140720-G-3
Method: TOC OCT 2020 - Oct 08, 2020

Spl #: 25
Vial #: 25

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:11 am	-	-	-	2,919	1.241	0.517
2	3:17 am	-	-	-	2,830	1.190	0.495
3	3:23 am	-	-	-	2,877	1.217	0.507
4	3:29 am	-	-	-	2,828	1.189	0.496

Avg. 2,863 1.209 0.504

Std.Dev.
% RSD. 1.51

Status: Fail

Date: 11/25/2020
Customer ID: 00000000

Type: Dilution

Sample ID: CCV 10 PPM
Method: TOC OCT 2020 - Oct 08, 2020

Spl #: 26
Vial #: 26

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:38 am	-	-	-	40,616	22.564	9.402
2	3:43 am	-	-	-	41,274	22.936	9.557
3	3:49 am	-	-	-	42,406	23.575	9.822
4	3:55 am	-	-	-	41,830	23.250	9.688

Avg. 41,531 23.081 9.617

Std.Dev.
% RSD. 1.84

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TOC

Date Prepared: 11/25/2020

By:

Date Approved:

By:

Spl #: 27 Sample ID: CCB Type: Chk Standard Date: 11/25/2020 Status: Fail
 Vial #: 27 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:04 am	-	-	-	587	0.000	0.000
2	4:10 am	-	-	-	722	0.034	0.014
3	4:16 am	-	-	-	822	0.090	0.038
4	4:22 am	-	-	-	502	0.000	0.000

Avg. 658 0.031 0.013
 Std.Dev.
 % RSD. 21.57

Spl #: 28 Sample ID: 240-140720-J-4 Type: Chk Standard Date: 11/25/2020 Status: Pass
 Vial #: 28 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:31 am	-	-	-	7,521	3.840	1.599
2	4:36 am	-	-	-	7,834	4.016	1.674
3	4:42 am	-	-	-	8,508	4.397	1.832
4	4:48 am	-	-	-	8,334	4.299	1.791

Avg. 8,049 4.138 1.724
 Std.Dev.
 % RSD. 5.63

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Date Prepared: 11/25/2020

By:

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Status: Pass

Sample Date: 11/25/2020
Customer ID: 00000000

Spl #: 29 Sample ID: 240-140720-F-5 Type: TOC
Vial #: 29 Method: TOC OCT 2020 - Oct 08, 2020 Dilution: 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:58 am	-	-	-	28,442	15,655	6.523
2	5:04 am	-	-	-	28,351	15,604	6.502
3	5:09 am	-	-	-	29,846	16,448	6.853
4	5:15 am	-	-	-	29,130	16,044	6.685
Avg.					28,942	15,938	6.641
Std.Dev.							
% RSD.							2.40

Status: Pass

Sample Date: 11/25/2020
Customer ID: 00000000

Spl #: 30 Sample ID: 240-140720-J-6 Type: TOC
Vial #: 30 Method: TOC OCT 2020 - Oct 08, 2020 Dilution: 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:24 am	-	-	-	17,048	9,220	3.842
2	5:30 am	-	-	-	17,249	9,334	3.889
3	5:36 am	-	-	-	17,942	9,725	4.052
4	5:42 am	-	-	-	17,851	9,674	4.031
Avg.					17,523	9,488	3.954
Std.Dev.							
% RSD.							2.52

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TOC

Date Prepared: 11/25/2020

By:

Date Approved:

By:

Status: Pass

Sample Date: 11/25/2020
 Customer ID: 00000000

Spl #: 31 Sample ID: 240-140720-J-7 Type: TOC
 Vial #: 31 Method: TOC OCT 2020 - Oct 08, 2020 Dilution: 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:52 am	-	-	-	74,350	41,582	17,326
2	5:57 am	-	-	-	76,576	42,839	17,850
3	6:03 am	-	-	-	79,272	44,362	18,483
4	6:09 am	-	-	-	78,459	43,903	18,293
Avg.		-	-	-	77,164	43,171	17,988
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	2.84

Status: Fail

Sample Date: 11/25/2020
 Customer ID: 00000000

Spl #: 32 Sample ID: CCV 10 PPM Type: TOC
 Vial #: 32 Method: TOC OCT 2020 - Oct 08, 2020 Dilution: 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:19 am	-	-	-	40,557	22,531	9,388
2	6:24 am	-	-	-	41,656	23,152	9,647
3	6:30 am	-	-	-	42,242	23,483	9,785
4	6:36 am	-	-	-	42,136	23,423	9,760
Avg.		-	-	-	41,648	23,147	9,645
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	-	-	1.85

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TOC

Date Prepared: 11/25/2020

By:

Date Approved:

By:

Spl #: 33 Sample ID: CCB Type: Chk Standard Date: 11/25/2020 Status: Fail
 Vial #: 33 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:45 am	-	-	-	561	0.000	0.000
2	6:51 am	-	-	-	663	0.000	0.000
3	6:57 am	-	-	-	712	0.028	0.012
4	7:03 am	-	-	-	626	0.000	0.000

Avg. 640 0.007 0.003
 Std.Dev.
 % RSD. 9.98

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Date Approved: By:

Method Summary

Method Details

Method Name: TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM

Date Created: 10/08/2020
Time Created: 13:42
Created By: toc

Analysis Mode: NPOC Only
Sparging Mode: Internal
Pre-Acid Volume (mL): 1.000
Spurge Time (mm:ss): 02:00

Volumes
Sample Volume (mL): 2.400
Acid Volume (mL): 1.000
Persulfate Volume(mL): 1.500

Other
SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled
Dilution Mode: Automatic
Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No
Additional Replicates: 1
Max. % RSD: 10.00

Rinses
Rinse Volume (mL): 10.000
Rinses/Per Sample: 1
Rinses/Per Replicate: 0

Max. Std. Dev.: 100 Use Modified Oxidant: No

Times

React: 01:30
Detect: 03:00
TIC

React: 02:00
Detect: 03:00
TOC

Temp
TIC
TOC

React: 70
Detect: 70

React: 98
Detect: 98

Calibration Summary

Calibration Generation

Generation Mode: Manual
of Stds: 5
Dilution Factor: 10 : 1
Dilution Volume (mL): 1.000
Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.995	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC
User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Continue	Continue
QC #1	40.000	10.00	Continue	Continue
QC #2	20.000	20.00	Continue	Continue
QC #3	25.000	10.00	Continue	Continue
QC #4	0.000	10.00	Continue	Continue
1st	0.000	15.00	Continue	Continue

Date Prepared: 11/25/2020 By:

Date Approved: By:

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Calibration Details

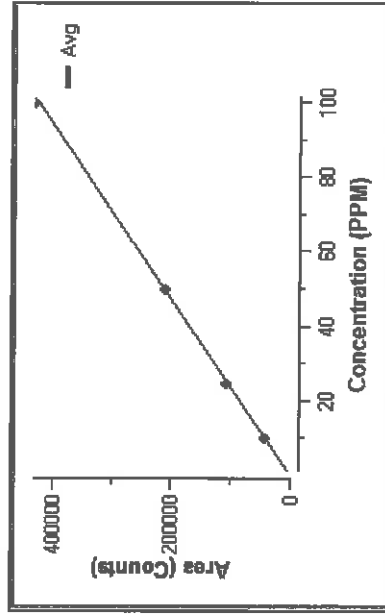
Calibration Mode: TOC
Date Calibrated: 10/08/2020
Time Calibrated: 5:27 pm
Calibrated By: toc
RF (ugC/k-cts): 0.5648
R2: 0.9992
R: 0.9996
QC Blank(cts): 1,430
Offset (cts): 674
Offset (ugC): -0.381
Reagent Blank (cts): 722
Units of Measure: PPM->mg/L C

Calibration Settings

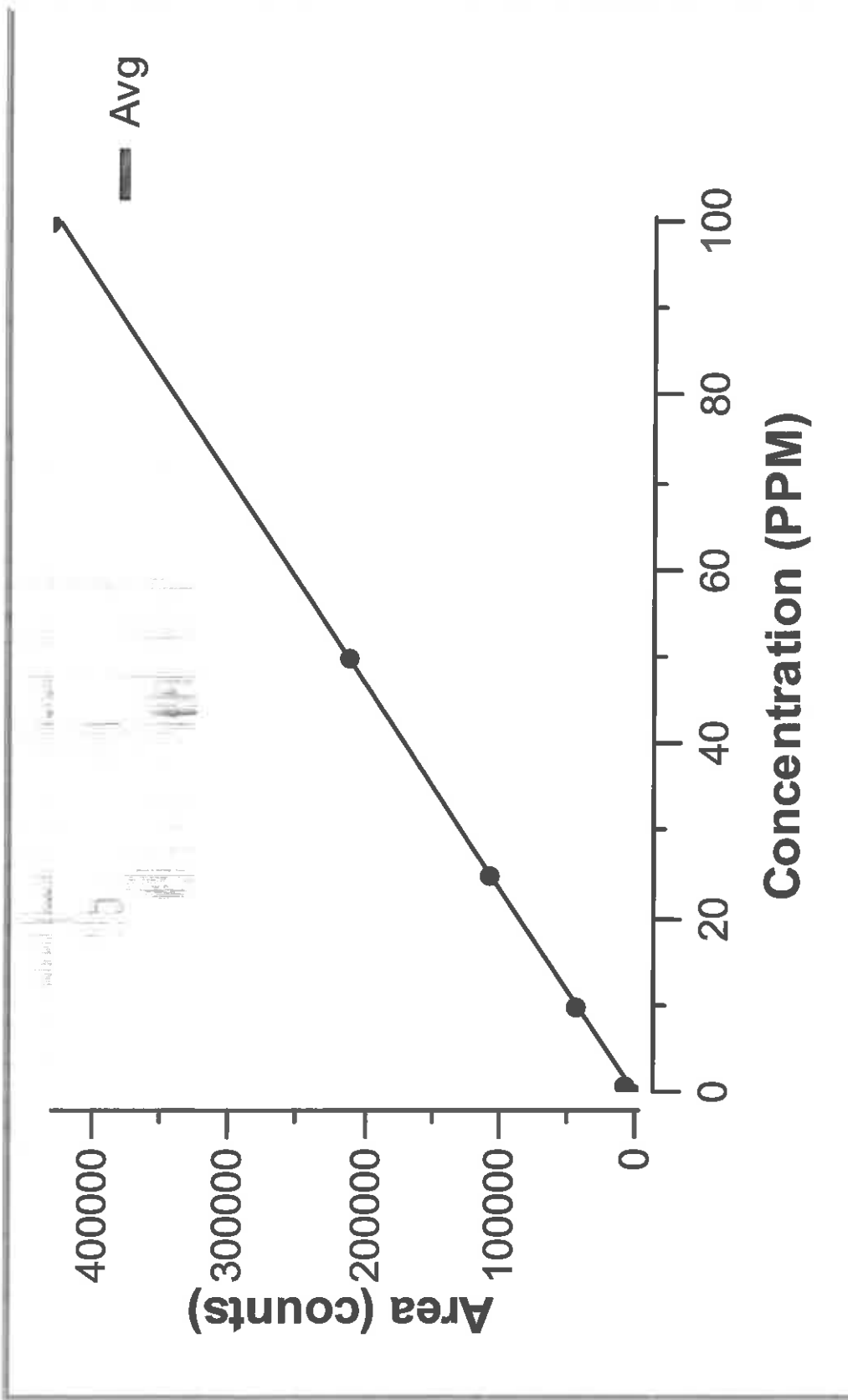
Stock Conc. For Dilutions: (PPM) 1,000.000
of Reagent Blanks: 3
EFC Enabled: No
Total Flowrate w/EFC: 100 ml/min
Check Standards: Subtract RW
Samples: Subtract RB
Regression type: Weighted Linear
weighting factor => 1 / mass

Calculations:

Concentration = $\frac{RF \times Area}{1000 \times volume}$
Samples: Area = Area Peak - Area Offset or Area = Area Peak - Area RB
CHK Stds: Area = Area Peak - Area Offset or Area = Area Peak - Area RW
QC Samples: Area = Area Peak - Area GC Blank



$y = m \times x + b$
 $y \Rightarrow Area$
 $m \Rightarrow \frac{1000}{RF \times volume}$
 $b \Rightarrow 0$



Calibration - Quick View -TOC

Revision: 1-TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM

Modified By: toc

Date Created: 2020/10/08; 01:42 PM

Last Modified: 2020/10/08; 05:08 PM

Last Calibrated: 2020/10/08; 05:08 PM

RF(ugC/k-ct): 0.5648

R2: 0.9992

Reagent Blank(cts): 722

Offset Area(cts): 674

Offset Mass(ugC): -0.38

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	662	49	7.35	2020-10-08; 03:37PM
1	1.000	2.400	2	5,780	894	15.47	2020-10-08; 04:01PM
2	10.000	2.400	2	41,583	619	1.49	2020-10-08; 04:16PM
3	25.000	2.400	2	106,117	2,774	2.61	2020-10-08; 04:31PM
4	50.000	2.400	2	209,986	3,616	1.72	2020-10-08; 04:46PM
5	100.000	2.400	2	430,699	11,254	2.61	2020-10-08; 05:02PM

User ID: toc	Name: Total Organic Carbon
Title: Mr	Dept: OIC-TOC

TEST AMERICA
 301 ALPHA DRIVE
 PITTSBURGH, PA.
 15238
 USA

Date Prepared: 10/08/2020

By:

TOC

Date Approved:

By:

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cls)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	DI WATER	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	2,923	0.000	0.000	546	18.69	Pass
2	BLANK	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	2,081	0.000	0.000	541	25.98	Pass
4	TOC-RW	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1:1	00000000	TOC	662	0.000	0.000	49	7.35	
5	TOC-Std#1-1.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1:1	00000000	TOC	5,780	2.400	1.000	894	15.47	
6	TOC-Std#2-10.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1:1	00000000	TOC	41,583	24.000	10.000	619	1.49	
7	TOC-Std#3-25.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1:1	00000000	TOC	106,117	60.000	25.000	2,774	2.61	
8	TOC-Std#4-50.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1:1	00000000	TOC	209,986	120.000	50.000	3,616	1.72	
9	TOC-Std#5-100.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1:1	00000000	TOC	430,699	240.000	100.000	11,254	2.61	
10	QC BLANK	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	QC Blank	1:1	00000000	TOC	1,431	0.000	0.000	431	30.14	

1008207000A

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Date Prepared: 10/08/2020 By:
 Date Approved: By:

TOC

Sample Results

Spl #: 1 Sample ID: DI WATER Type: Sample Date: 10/08/2020 Status: Pass
 Vial #: 1 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:23 pm	-	-	-	3,455	0.000	0.000
2	2:28 pm	-	-	-	3,119	0.000	0.000
3	2:34 pm	-	-	-	2,951	0.000	0.000
4	2:40 pm	-	-	-	2,166	0.000	0.000

Avg. 2,923 0.000 0.000
 Std.Dev.
 % RSD. 18.69

Spl #: 2 Sample ID: BLANK Type: Sample Date: 10/08/2020 Status: Pass
 Vial #: 2 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:49 pm	-	-	-	2,464	0.000	0.000
2	2:54 pm	-	-	-	1,699	0.000	0.000

Avg. 2,081 0.000 0.000
 Std.Dev.
 % RSD. 25.98

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TOC

Date Prepared: 10/08/2020 By:
 Date Approved: By:

Spl #: 4 Sample ID: TOC-RW Type: Std Date: 10/08/2020 Status:
 Vial #: 3 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: C0000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:37 pm	-	-	-	1,369	0.000	0.000
2	3:43 pm	-	-	-	697	0.000	0.000
3	3:52 pm	-	-	-	628	0.000	0.000
Avg.		-	-	-	662	0.000	0.000
Std.Dev.							
% RSD.		7.35					

Spl #: 5 Sample ID: TOC-Std#1-1.000 PPM Type: Std Date: 10/08/2020 Status:
 Vial #: 4 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:01 pm	-	-	-	6,412	2.400	1.000
2	4:06 pm	-	-	-	5,148	2.400	1.000
Avg.		-	-	-	5,780	2.400	1.000
Std.Dev.							
% RSD.		15.47					

Spl #: 6 Sample ID: TOC-Std#2-10.000 PPM Type: Std Date: 10/08/2020 Status:
 Vial #: 5 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:16 pm	-	-	-	41,145	24.000	10.000
2	4:21 pm	-	-	-	42,021	24.000	10.000
Avg.		-	-	-	41,583	24.000	10.000
Std.Dev.							
% RSD.		1.49					

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TOC

Date Prepared: 10/08/2020 By:
Date Approved: By:

Spl #: 7 Sample ID: TOC-Std#3-25.000 PPM Type: Std Status:
Vial #: 6 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000 Date: 10/08/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:31 pm	-	-	-	104,156	60.000	25.000
2	4:37 pm	-	-	-	108,078	60.000	25.000

Avg. 106,117 60.000 25.000
Std.Dev.
% RSD. 2.61

Spl #: 8 Sample ID: TOC-Std#4-50.000 PPM Type: Std Status:
Vial #: 7 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000 Date: 10/08/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:46 pm	-	-	-	207,429	120.000	50.000
2	4:52 pm	-	-	-	212,543	120.000	50.000

Avg. 209,986 120.000 50.000
Std.Dev.
% RSD. 1.72

Spl #: 9 Sample ID: TOC-Std#5-100.000 PPM Type: Std Status:
Vial #: 8 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000 Date: 10/08/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:02 pm	-	-	-	422,741	240.000	100.000
2	5:07 pm	-	-	-	438,656	240.000	100.000

Avg. 430,699 240.000 100.000
Std.Dev.
% RSD. 2.61

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Date Prepared: 10/08/2020 By:
 Date Approved: By:

TOC

Spl #: 10 Sample ID: QC BLANK Type: QC Blank Date: 10/08/2020 Status:
 Vial #: 9 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:21 pm			-	1,736	0.000	0.000
2	5:27 pm			-	1,126	0.000	0.000

Avg. 1,431 0.000 0.000
 Std.Dev. 30.14
 % RSD.

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Date Prepared: 10/08/2020 By: *TOC*
 Date Approved: By:

Method Summary

Method Details

Method Name: TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Date Created: 10/08/2020
 Time Created: 13:42
 Created By: toc
 Analysis Mode: NPOC Only
 Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00

Outlier Removal Criteria

Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

Other

SysPressure: 20.00
 Max. Std. Dev. 100 Use Modified Oxidant: No

Pre-Processing
 Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1

Times
 TIC
 TOC
 React 01:30
 Detect 03:00
 React 02:00
 Detect 03:00
 Temp
 TIC
 TOC
 React 70
 Detect 70
 React 98
 Detect 98

Calibration Summary

Calibration Generation

Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.995	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC
 User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a			
QC #1	40.000	10.00	Continue	Continue
QC #2	20.000	10.00	Continue	Continue
QC #3	25.000	20.00	Continue	Continue
QC #4	0.000	10.00	Continue	Continue
SST	0.000	15.00	Continue	Continue

Date Prepared: 10/08/2020 By:

Date Approved: By:

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Calibration Details

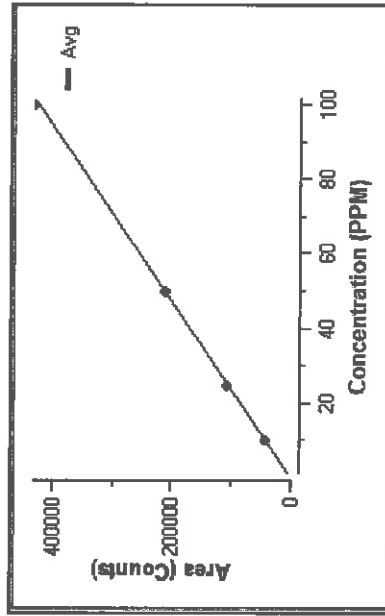
Calibration Mode: TOC
Date Calibrated: 10/08/2020
Time Calibrated: 5:08 pm
Calibrated By: toc
RF (ugC/k-cts): 0.5648
R2: 0.9992
R: 0.9996
QC Blank(cts): 0
Offset (cts): 674
Offset (ugC): -0.381
Reagent Blank (cts): 722
Units of Measure: PPM->mg/L C

Calibration Settings

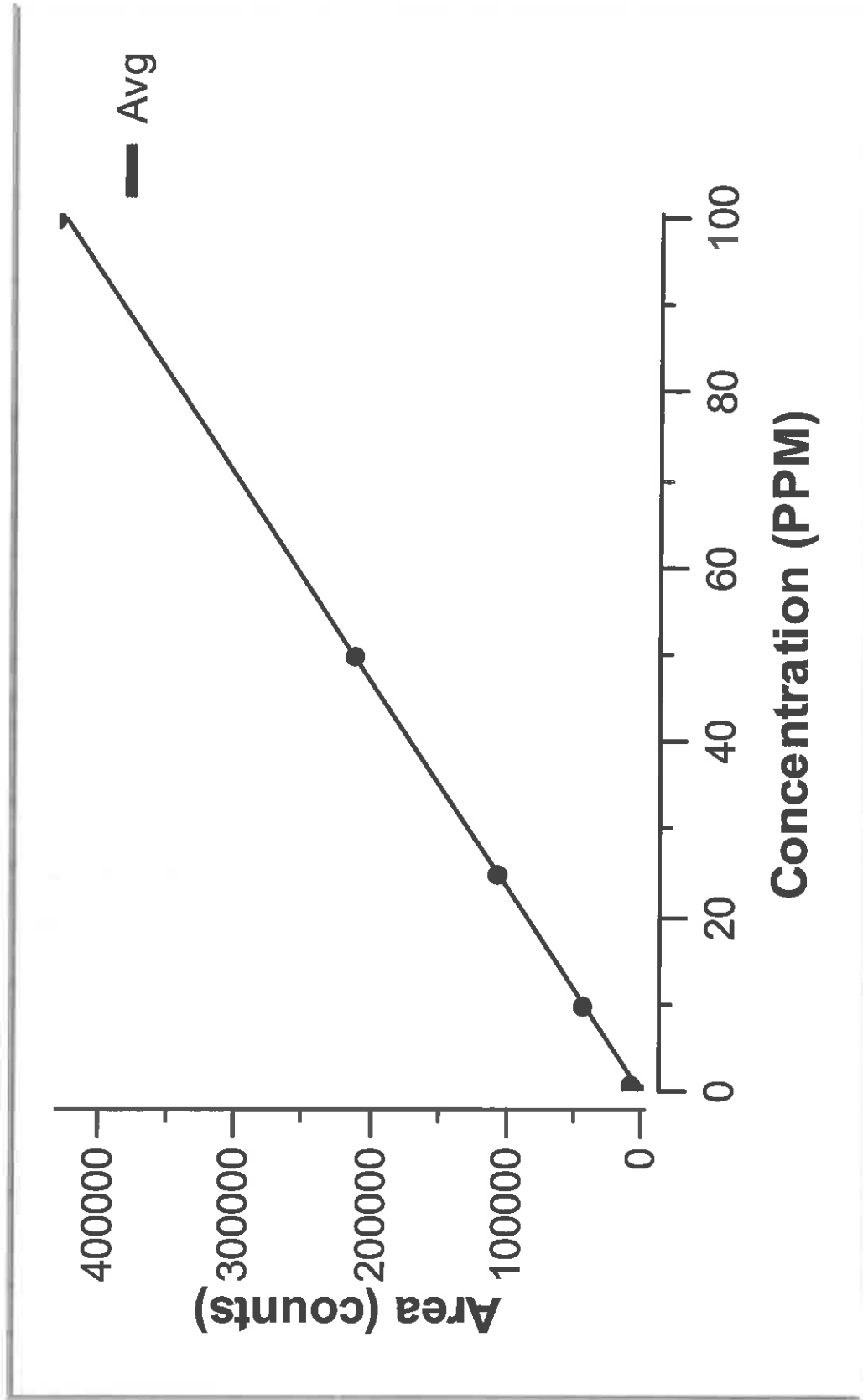
Stock Conc. For Dilutions: (PPM) 1,000.000
of Reagent Blanks: 3
EFC Enabled: No
Total Flowrate w/EFC: 100 ml/min
Check Standards: Subtract RW
Samples: Subtract RB
Regression type: Weighted Linear
weighting factor => 1 / mass

Calculations:

$Concentration = \frac{RF \times Area}{volume}$
Samples: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RB}$
CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RW}$
QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$y \Rightarrow Area$
 $y = m \times x + b$
 $m \Rightarrow \frac{1000}{RF \times volume}$
 $b \Rightarrow 0$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 1-TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Modified By: toc
 Date Created: 2020/10/08; 01:42 PM
 Last Modified: 2020/10/08; 05:08 PM
 Last Calibrated: 2020/10/08; 05:08 PM

RF(ugC/k-cnt): 0.5648
 R2: 0.9992
 Reagent Blank(cts): 722
 Offset Area(cts): 674
 Offset Mass(ugC): -0.38

Std #	Conc (PPM)	Volume (mL)	# Repts	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	662	49	7.35	2020-10-08; 03:37PM
1	1.000	2.400	2	5,780	894	15.47	2020-10-08; 04:01PM
2	10.000	2.400	2	41,583	619	1.49	2020-10-08; 04:16PM
3	25.000	2.400	2	106,117	2,774	2.61	2020-10-08; 04:31PM
4	50.000	2.400	2	209,986	3,616	1.72	2020-10-08; 04:46PM
5	100.000	2.400	2	430,699	11,254	2.61	2020-10-08; 05:02PM

TM 10/08/20

5310C/9060A TOC %Readback Error Calculation Spreadsheet

ICAL Std (ppm)	ICAL RF	ICAL ID	Average Area	Result (ppm)	%Readback Error	%Readback Criteria
1.000	0.5648	100820TOCCAL	5780	1.360	36.023	≤50%
10.000	0.5648	100820TOCCAL	41583	9.786	-2.141	≤20%
25.000	0.5648	100820TOCCAL	106117	24.973	-0.109	≤20%
50.000	0.5648	100820TOCCAL	209986	49.417	-1.167	≤20%
100.000	0.5648	100820TOCCAL	430699	101.358	1.358	≤20%

General Chemistry Raw Data Report

Job ID: 180-112876-1

Batch: 335342
Method: SM 2540D

Analyst Initials: AVS
Instrument: No Equipment

Lab Sample ID: LCS 180-335342/1

Analysis Date: Oct 30, 2020 07:42

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Total Suspended Solids	None	1	1.6	mg/L	50 mL	1000 mL

Lab Sample ID: MB 180-335342/2

Analysis Date: Oct 30, 2020 07:42

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Total Suspended Solids	None	1	0.100000000000003	mg/L	1000 mL	1000 mL

Lab Sample ID: 180-112876-A-1

Analysis Date: Oct 30, 2020 07:42

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Total Suspended Solids	None	1	5.7	mg/L	1000 mL	1000 mL

Lab Sample ID: 180-112876-A-2

Analysis Date: Oct 30, 2020 07:42

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Total Suspended Solids	None	1	4.4	mg/L	500 mL	1000 mL

Lab Sample ID: 180-112876-A-2 DU

Analysis Date: Oct 30, 2020 07:42

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Total Suspended Solids	None	1	4	mg/L	500 mL	1000 mL

Lab Sample ID: 180-112876-A-3

Analysis Date: Oct 30, 2020 07:42

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Total Suspended Solids	None	1	3.8	mg/L	1000 mL	1000 mL

Lab Sample ID: 180-112876-A-4

Analysis Date: Oct 30, 2020 07:42

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Total Suspended Solids	None	1	5.09999999999999	mg/L	1000 mL	1000 mL

Lab Sample ID: 180-112876-A-5

Analysis Date: Oct 30, 2020 07:42

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Total Suspended Solids	None	1	5.9	mg/L	1000 mL	1000 mL

Lab Sample ID: 180-112876-A-6

Analysis Date: Oct 30, 2020 07:42

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Total Suspended Solids	None	1	3.5	mg/L	1000 mL	1000 mL

Shipping and Receiving Documents

Client Information Client Contact: Robert Brunette Company: Eurofins Frontier Global Sciences LLC Address: 5755 8th Street E City: Tacoma State, Zip: WA, 98424 Phone: 978-392-5339(Tel) Email: RobertBrunette@EurofinsUS.com Project Name: Wood Penobscot River Proposal Site:		Sampler: Lab PM: Gamber, Carrie L Phone: E-Mail: Carrie.Gamber@Eurofinset.com Carrier Tracking No(s): COC No: 180-64221-12258.2 Page: Page 2 of 2 Job #:	
Due Date Requested: TAT Requested (days): PO #: Proj # 3617207.486.03 WO #: Project #: 18022259 SSOW#:		Analysis Requested Total Number of containers Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Identification WQ16-C-102820-SW-10 WQ2-C-102820-SW-10 WQ3-L-102820-SW-10 WQ-ECH-102820-SW-10 ES-15-102820-SW-10 WQ-FPT-102820-SW-10		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Special Instructions/Note: FP=FIELD FILTERED DOC WAS .45 MICRON FIELD FILTERED	
Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)
10/28/20	0945	G	W
10/28/20	1035	G	W
10/28/20	1135	G	W
10/28/20	1235	G	W
10/28/20	1330	G	W
10/28/20	1420	G	W
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by:		Date:	
Relinquished by: <i>R P Wnp</i>		Date: 10/28/20 1700	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: A Yes <input type="checkbox"/> No <input type="checkbox"/>		Custody Seal No.:	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Method of Shipment:	
Special Instructions/QC Requirements:		Date/Time:	
Received by: <i>[Signature]</i>		Date/Time: 10/29/20 800	
Received by:		Date/Time:	
Received by:		Date/Time:	
Cooler Temperature(s) °C and Other Remarks:		Company: <i>[Signature]</i>	
		Company:	
		Company:	

ORIGIN ID: 98RA (207) 828-3460
THOMAS GERHEAD
4000 ES
511 CONGRESS ST
PORTLAND, ME 04101
UNITED STATES US

SHIP DATE: 28OCT20
ACT WT: 40.90 LB
CAD: 6993789/SSFE2121
DIMS: 23x13x14 IN
BILL THIRD PARTY

TO ROBER BRUNETTN
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238

REF: (412) 963-7068

SHIP DATE: 28OCT20
ACT WT: 40.90 LB
CAD: 6993789/SSFE2121
DIMS: 23x13x14 IN
BILL THIRD PARTY

SHIP DATE: 28OCT20
ACT WT: 40.90 LB
CAD: 6993789/SSFE2121
DIMS: 23x13x14 IN
BILL THIRD PARTY

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BILL THIRD PARTY

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ACT WT: 40.90 LB
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DIMS: 23x13x14 IN
BILL THIRD PARTY

SHIP DATE: 28OCT20
ACT WT: 40.90 LB
CAD: 6993789/SSFE2121
DIMS: 23x13x14 IN
BILL THIRD PARTY

SHIP DATE: 28OCT20
ACT WT: 40.90 LB
CAD: 6993789/SSFE2121
DIMS: 23x13x14 IN
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CAD: 6993789/SSFE2121
DIMS: 23x13x14 IN
BILL THIRD PARTY

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 180-112876-1

Login Number: 112876
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

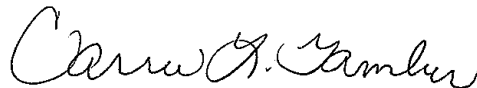
Job Number: 180-112945-1

Job Description: Wood Penobscot River Proposal

For:

Wood E&I Solutions Inc
271 Mill Road
Chelmsford, MA 01824

Attention: Ms. Denise King



Approved for release.
Carrie L. Gamber
Senior Project Manager
11/30/2020 5:36 AM

Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
Carrie.Gamber@Eurofinset.com
11/30/2020

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins TestAmerica and its client. All questions regarding this report should be directed to the Eurofins TestAmerica Project Manager or designee who has signed this report.

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238
Tel (412) 963-7058 Fax (412) 963-2468 www.testamericainc.com

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Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Wood E&I Solutions Inc

Project: Wood Penobscot River Proposal

Report Number: 180-112945-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/30/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.9 C.

GENERAL CHEMSITRY

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

Client Sample ID: OV-02_102920_SW_10

Lab Sample ID: 180-112945-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	8.8		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	2.1		0.50	0.50	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon - Quad	9.0		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: OV-02_102920_SW_10_DUP

Lab Sample ID: 180-112945-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	9.1		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	1.0		0.50	0.50	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon - Quad	8.8		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

Client Sample ID: ADD-02_102920_SW_10

Lab Sample ID: 180-112945-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Quad	8.1		1.0	0.51	mg/L	1		EPA 9060A	Total/NA
Total Suspended Solids	20		0.50	0.50	mg/L	1		SM 2540D	Total/NA
Dissolved Organic Carbon - Quad	8.4		1.0	0.51	mg/L	1		EPA 9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pittsburgh

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

General Chemistry

Client Sample ID: OV-02_102920_SW_10

Date Collected: 10/29/20 08:30

Date Received: 10/30/20 08:00

Lab Sample ID: 180-112945-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	8.8		1.0	0.51	mg/L			11/03/20 07:04	1
Total Suspended Solids	2.1		0.50	0.50	mg/L			10/30/20 11:19	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

General Chemistry

Client Sample ID: OV-02_102920_SW_10_DUP

Date Collected: 10/29/20 08:30

Date Received: 10/30/20 08:00

Lab Sample ID: 180-112945-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	9.1		1.0	0.51	mg/L			11/03/20 08:25	1
Total Suspended Solids	1.0		0.50	0.50	mg/L			10/30/20 11:19	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

General Chemistry

Client Sample ID: ADD-02_102920_SW_10

Date Collected: 10/29/20 11:30

Date Received: 10/30/20 08:00

Lab Sample ID: 180-112945-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	8.1		1.0	0.51	mg/L			11/03/20 09:46	1
Total Suspended Solids	20		0.50	0.50	mg/L			10/30/20 11:19	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

General Chemistry - Dissolved

Client Sample ID: OV-02_102920_SW_10

Date Collected: 10/29/20 08:30

Date Received: 10/30/20 08:00

Lab Sample ID: 180-112945-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	9.0		1.0	0.51	mg/L			11/24/20 21:50	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

General Chemistry - Dissolved

Client Sample ID: OV-02_102920_SW_10_DUP

Date Collected: 10/29/20 08:30

Date Received: 10/30/20 08:00

Lab Sample ID: 180-112945-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	8.8		1.0	0.51	mg/L			11/25/20 00:03	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

General Chemistry - Dissolved

Client Sample ID: ADD-02_102920_SW_10

Date Collected: 10/29/20 11:30

Date Received: 10/30/20 08:00

Lab Sample ID: 180-112945-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	8.4		1.0	0.51	mg/L			11/25/20 00:31	1

Default Detection Limits

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

General Chemistry

Analyte	RL	MDL	Units
Total Organic Carbon - Quad	1.0	0.51	mg/L
Total Suspended Solids	0.50	0.50	mg/L

General Chemistry - Dissolved

Analyte	RL	MDL	Units
Dissolved Organic Carbon - Quad	1.0	0.51	mg/L

QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

Method: EPA 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 180-335749/6
Matrix: Water
Analysis Batch: 335749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad	ND		1.0	0.51	mg/L			11/02/20 23:58	1

Lab Sample ID: LCS 180-335749/4
Matrix: Water
Analysis Batch: 335749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Quad	20.0	19.7		mg/L		98	85 - 115

Lab Sample ID: LCSD 180-335749/5
Matrix: Water
Analysis Batch: 335749

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Quad	20.0	19.5		mg/L		98	85 - 115	1	20

Lab Sample ID: 180-112945-1 MS
Matrix: Water
Analysis Batch: 335749

Client Sample ID: OV-02_102920_SW_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Quad	8.8		10.0	18.4		mg/L		96	75 - 125

Lab Sample ID: 180-112945-1 MSD
Matrix: Water
Analysis Batch: 335749

Client Sample ID: OV-02_102920_SW_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Quad	8.8		10.0	18.7		mg/L		98	75 - 125	1	20

Method: EPA 9060A - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 180-338508/6
Matrix: Water
Analysis Batch: 338508

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	ND		1.0	0.51	mg/L			11/24/20 18:42	1

Lab Sample ID: LCS 180-338508/4
Matrix: Water
Analysis Batch: 338508

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	20.0	19.4		mg/L		97	85 - 115

QC Sample Results

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

Method: EPA 9060A - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: LCSD 180-338508/5
Matrix: Water
Analysis Batch: 338508

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	20.0	19.5		mg/L		98	85 - 115	0	20

Lab Sample ID: 180-112945-1 MS
Matrix: Water
Analysis Batch: 338508

Client Sample ID: OV-02_102920_SW_10
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	9.0		10.0	18.3		mg/L		94	75 - 125

Lab Sample ID: 180-112945-1 MSD
Matrix: Water
Analysis Batch: 338508

Client Sample ID: OV-02_102920_SW_10
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	9.0		10.0	18.4		mg/L		95	75 - 125	1	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 180-335392/2
Matrix: Water
Analysis Batch: 335392

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		0.50	0.50	mg/L			10/30/20 11:19	1

Lab Sample ID: LCS 180-335392/1
Matrix: Water
Analysis Batch: 335392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	31.6	34.0		mg/L		108	80 - 120

Lab Sample ID: 180-112945-1 DU
Matrix: Water
Analysis Batch: 335392

Client Sample ID: OV-02_102920_SW_10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	2.1		2.00		mg/L		5	10

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

General Chemistry

Analysis Batch: 335392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112945-1	OV-02_102920_SW_10	Total/NA	Water	SM 2540D	
180-112945-2	OV-02_102920_SW_10_DUP	Total/NA	Water	SM 2540D	
180-112945-3	ADD-02_102920_SW_10	Total/NA	Water	SM 2540D	
MB 180-335392/2	Method Blank	Total/NA	Water	SM 2540D	
LCS 180-335392/1	Lab Control Sample	Total/NA	Water	SM 2540D	
180-112945-1 DU	OV-02_102920_SW_10	Total/NA	Water	SM 2540D	

Analysis Batch: 335749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112945-1	OV-02_102920_SW_10	Total/NA	Water	EPA 9060A	
180-112945-2	OV-02_102920_SW_10_DUP	Total/NA	Water	EPA 9060A	
180-112945-3	ADD-02_102920_SW_10	Total/NA	Water	EPA 9060A	
MB 180-335749/6	Method Blank	Total/NA	Water	EPA 9060A	
LCS 180-335749/4	Lab Control Sample	Total/NA	Water	EPA 9060A	
LCSD 180-335749/5	Lab Control Sample Dup	Total/NA	Water	EPA 9060A	
180-112945-1 MS	OV-02_102920_SW_10	Total/NA	Water	EPA 9060A	
180-112945-1 MSD	OV-02_102920_SW_10	Total/NA	Water	EPA 9060A	

Analysis Batch: 338508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-112945-1	OV-02_102920_SW_10	Dissolved	Water	EPA 9060A	
180-112945-2	OV-02_102920_SW_10_DUP	Dissolved	Water	EPA 9060A	
180-112945-3	ADD-02_102920_SW_10	Dissolved	Water	EPA 9060A	
MB 180-338508/6	Method Blank	Dissolved	Water	EPA 9060A	
LCS 180-338508/4	Lab Control Sample	Dissolved	Water	EPA 9060A	
LCSD 180-338508/5	Lab Control Sample Dup	Dissolved	Water	EPA 9060A	
180-112945-1 MS	OV-02_102920_SW_10	Dissolved	Water	EPA 9060A	
180-112945-1 MSD	OV-02_102920_SW_10	Dissolved	Water	EPA 9060A	

Lab Chronicle

Client: Wood E&I Solutions Inc
 Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

Client Sample ID: OV-02_102920_SW_10

Lab Sample ID: 180-112945-1

Date Collected: 10/29/20 08:30

Matrix: Water

Date Received: 10/30/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			338508	11/24/20 21:50	TAM	TAL PIT
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			335749	11/03/20 07:04	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	335392	10/30/20 11:19	AVS	TAL PIT

Client Sample ID: OV-02_102920_SW_10_DUP

Lab Sample ID: 180-112945-2

Date Collected: 10/29/20 08:30

Matrix: Water

Date Received: 10/30/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			338508	11/25/20 00:03	TAM	TAL PIT
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			335749	11/03/20 08:25	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	335392	10/30/20 11:19	AVS	TAL PIT

Client Sample ID: ADD-02_102920_SW_10

Lab Sample ID: 180-112945-3

Date Collected: 10/29/20 11:30

Matrix: Water

Date Received: 10/30/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	EPA 9060A Instrument ID: TOC1030		1			338508	11/25/20 00:31	TAM	TAL PIT
Total/NA	Analysis	EPA 9060A Instrument ID: TOC1030		1			335749	11/03/20 09:46	TAM	TAL PIT
Total/NA	Analysis	SM 2540D Instrument ID: NOEQUIP		1	1000 mL	1000 mL	335392	10/30/20 11:19	AVS	TAL PIT

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

AVS = Abbey Smith

TAM = Tessa Mastalski

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

<u>Authority</u>	<u>Program</u>	<u>Identification Number</u>	<u>Expiration Date</u>
Maine	State	PA00164	03-06-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

<u>Analysis Method</u>	<u>Prep Method</u>	<u>Matrix</u>	<u>Analyte</u>
EPA 9060A		Water	Dissolved Organic Carbon - Quad

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

Method	Method Description	Protocol	Laboratory
EPA 9060A	Organic Carbon, Dissolved (DOC)	SW846	TAL PIT
EPA 9060A	Organic Carbon, Total (TOC)	SW846	TAL PIT
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: Wood Penobscot River Proposal

Job ID: 180-112945-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-112945-1	OV-02_102920_SW_10	Water	10/29/20 08:30	10/30/20 08:00	
180-112945-2	OV-02_102920_SW_10_DUP	Water	10/29/20 08:30	10/30/20 08:00	
180-112945-3	ADD-02_102920_SW_10	Water	10/29/20 11:30	10/30/20 08:00	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
10 PPM TOC/CC_01520	11/03/20	11/02/20	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00031	2 mL	Total Organic Carbon - Quad	10 mg/L
.WTOC1000SP_00031	09/30/21		Ricca Chemical Co, Lot 2008H29		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
10 PPM TOC/CC_01535	11/25/20	11/24/20	DI Water, Lot DI WATER	200 mg/L	WTOC1000SP_00031	2 mL	Dissolved Organic Carbon - Quad	10 mg/L
.WTOC1000SP_00031	09/30/21		Ricca Chemical Co, Lot 2008H29		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
ICV 40 PPM 01659	11/03/20	11/02/20	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00031	4 mL	Total Organic Carbon - Quad	40 mg/L
.WTOC1000SP_00031	09/30/21		Ricca Chemical Co, Lot 2008H29		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
ICV 40 PPM_01674	11/25/20	11/24/20	DI Water, Lot DIWATER	100 mg/L	WTOC1000SP_00031	4 mL	Dissolved Organic Carbon - Quad	40 mg/L
.WTOC1000SP_00031	09/30/21		Ricca Chemical Co, Lot 2008H29		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
LCS 20 PPM 01655	11/03/20	11/02/20	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00048	4 mL	Total Organic Carbon - Quad	20 mg/L
.WTOC1000P_00048	05/28/22		Lab Chem, Lot K149-01		(Purchased Reagent)		Total Organic Carbon - Quad	1000 mg/L
LCS 20 PPM_01670	11/25/20	11/24/20	DI Water, Lot DIWATER	200 mg/L	WTOC1000P_00048	4 mL	Dissolved Organic Carbon - Quad	20 mg/L
.WTOC1000P_00048	05/28/22		Lab Chem, Lot K149-01		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
WResPSP 00072	02/28/23		Phenova, Lot 8210-09		(Purchased Reagent)		Total Suspended Solids	31.6 mg/L
WTOC1000SP_00031	09/30/21		Ricca Chemical Co, Lot 2008H29		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 mg/L
							Total Organic Carbon - Quad	1000 mg/L

Reagent

WResPSP_00072



WP Solids		Lot #8210-09		
TNI Analyte Code	Analyte	Certified Value mg/L	Acceptance Limits mg/L	%
1955	Total Dissolved Solids at 180° (TFR)	714	643 - 786	90.1 - 110
1960	Non-Filterable Residue (TSS)	31.6	22.5 - 37.6	71.2 - 119
1950	Total Solids	746	671 - 821	89.9 - 110

Certified Values = "100% true concentration" of each analyte as determined from gravimetric and volumetric measurements made during standard manufacture.

Acceptance Limits = Generated based on the criteria established by The NELAC Institute (TNI) Fields of Proficiency Testing tables using regression equations and/or fixed percentage limits, historical data and other criteria distributed by accrediting agencies as applicable. Please note that regression based acceptance criteria are based on the Assigned Value and may have different criteria at different concentrations.

Solvent = Deionized Water

Store at 20-25°C.

Expiration Date: 02/2023

Catalog #QC-SOL-WP

Preparation Instructions: The WP Solids standard is provided as a ready-to-use standard that does not require dilution prior to use. Shake adequately to homogenize the standard before removing an aliquot for analysis. Analyze by your normal procedures.

Note: It is strongly recommended that you analyze for TSS prior to removing aliquots for other analyses from the Solids bottle.

Approved AMB

Reviewed by: BJW

Date: 7/20

Date: 7/20

Reagent

WTOC1000P_00048



3799720
 ID: WTOC1000P_00048
 Exp:05/28/22 Prod:TAM Opr:07/29/20
 1000 ppm TOC standard

CERTIFICATE OF ANALYSIS

Description: CARBON STANDARD, 1000ppm ORGANIC (1mL = 1mg C)

Mfg. Date: 05/29/2020

Catalog Number: LC12910

Exp. Date: 05/29/2022

Lot Number: K149-01

ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm C	1000ppm +/- 10ppm	996 ppm
Concentration mg C/mL	1.000 +/- 0.010 mg C/mL	0.996 mg C/mL
Traceable to NIST	Potassium Hydrogen Phthalate	84L

Intended Use - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

Storage Information - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

Instructions for Handling and Use - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

Preparation - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor

Reagent

WTOC1000SP_00031

Certificate of Analysis



39551-5

 ID: WTK01000SF_00031
 Exp:09/30/21 Pipe TAM Gen 11/01/20
 1000 ppm TOC Standard

Organic Carbon Standard, 1000 ppm C

Lot Number: 2008H29

Product Number: 1847

Manufacture Date: AUG 31, 2020

Expiration Date: AUG 2021

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/lit	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months
1847-4	120 mL amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Chris Collins (08/31/2020)
 Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job Number: 180-112945-1

SDG No.: _____

Project: Wood Penobscot River Proposal

Client Sample ID	Lab Sample ID
<u>OV-02_102920_SW_10</u>	<u>180-112945-1</u>
<u>OV-02_102920_SW_10_DUP</u>	<u>180-112945-2</u>
<u>ADD-02_102920_SW_10</u>	<u>180-112945-3</u>

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OV-02_102920_SW_10

Lab Sample ID: 180-112945-1

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112945-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/29/2020 08:30

Reporting Basis: WET

Date Received: 10/30/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	8.8	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	2.1	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: OV-02_102920_SW_10

Lab Sample ID: 180-112945-1

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112945-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/29/2020 08:30

Reporting Basis: WET

Date Received: 10/30/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	9.0	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OV-02_102920_SW_10_DUP

Lab Sample ID: 180-112945-2

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112945-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/29/2020 08:30

Reporting Basis: WET

Date Received: 10/30/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	9.1	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	1.0	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: OV-02_102920_SW_10_DUP

Lab Sample ID: 180-112945-2

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112945-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/29/2020 08:30

Reporting Basis: WET

Date Received: 10/30/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	8.8	1.0	0.51	mg/L			1	EPA 9060A

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: ADD-02_102920_SW_10

Lab Sample ID: 180-112945-3

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112945-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/29/2020 11:30

Reporting Basis: WET

Date Received: 10/30/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Quad	8.1	1.0	0.51	mg/L			1	EPA 9060A
	Total Suspended Solids	20	0.50	0.50	mg/L			1	SM 2540D

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: ADD-02_102920_SW_10

Lab Sample ID: 180-112945-3

Lab Name: Eurofins TestAmerica, Pittsburgh

Job No.: 180-112945-1

SDG ID.: _____

Matrix: Water

Date Sampled: 10/29/2020 11:30

Reporting Basis: WET

Date Received: 10/30/2020 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon - Quad	8.4	1.0	0.51	mg/L			1	EPA 9060A

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1
 SDG No.: _____
 Analyst: TAM Batch Start Date: 11/02/2020
 Reporting Units: mg/L Analytical Batch No.: 335749

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	22:10	Total Organic Carbon - Quad	39.2	40.0	98	90-110		ICV 40 PPM_01659
3	ICB	22:37	Total Organic Carbon - Quad	ND					
14	CCV	03:29	Total Organic Carbon - Quad	9.86	10.0	99	90-110		10 PPM TOC/CC 01520
15	CCB	03:56	Total Organic Carbon - Quad	ND					
26	CCV	08:52	Total Organic Carbon - Quad	9.98	10.0	100	90-110		10 PPM TOC/CC 01520
27	CCB	09:19	Total Organic Carbon - Quad	ND					
29	CCV	10:12	Total Organic Carbon - Quad	10.1	10.0	101	90-110		10 PPM TOC/CC 01520
30	CCB	10:39	Total Organic Carbon - Quad	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1
 SDG No.: _____
 Analyst: TAM Batch Start Date: 11/24/2020
 Reporting Units: mg/L Analytical Batch No.: 338508

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	16:56	Dissolved Organic Carbon - Quad	39.3	40.0	98	90-110		ICV 40 PPM_01674
3	ICB	17:22	Dissolved Organic Carbon - Quad	ND					
14	CCV	22:16	Dissolved Organic Carbon - Quad	9.24	10.0	92	90-110		10 PPM TOC/CC 01535
15	CCB	22:43	Dissolved Organic Carbon - Quad	ND					
26	CCV	03:38	Dissolved Organic Carbon - Quad	9.62	10.0	96	90-110		10 PPM TOC/CC 01535
27	CCB	04:04	Dissolved Organic Carbon - Quad	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 335749 Date: 11/02/2020 23:58							
EPA 9060A	MB 180-335749/6	Total Organic Carbon - Quad	ND		mg/L	1.0	1
Batch ID: 338508 Date: 11/24/2020 18:42							
EPA 9060A	MB 180-338508/6	Dissolved Organic Carbon - Quad	ND		mg/L	1.0	1
Batch ID: 335392 Date: 10/30/2020 11:19							
SM 2540D	MB 180-335392/2	Total Suspended Solids	ND		mg/L	0.50	1

5-IN
 MATRIX SPIKE SAMPLE RECOVERY
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 335749 Date: 11/03/2020 07:31											
EPA 9060A	180-112945-1	Total Organic Carbon - Quad	8.8		mg/L						
EPA 9060A	180-112945-1	Total Organic Carbon - Quad	18.4		mg/L	10.0	96	75-125			
Batch ID: 338508 Date: 11/24/2020 23:09											
EPA 9060A	180-112945-1	Dissolved Organic Carbon - Quad	9.0		mg/L						
EPA 9060A	180-112945-1	Dissolved Organic Carbon - Quad	18.3		mg/L	10.0	94	75-125			

Calculations are performed before rounding to avoid round-off errors in calculated results.

5-IN
 MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 335749 Date: 11/03/2020 07:58											
EPA 9060A	180-112945-1	Total Organic Carbon - Quad	18.7		mg/L	10.0	98	75-125	1	20	
Batch ID: 338508 Date: 11/24/2020 23:36											
EPA 9060A	180-112945-1	Dissolved Organic Carbon - Quad	18.4		mg/L	10.0	95	75-125	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result Unit	RPD	RPD Limit	Qual
Batch ID: 335392 Date: 10/30/2020 11:19							
SM 2540D	OV-02_102920_SW_10	180-112945-1	Total Suspended Solids	2.1 mg/L			
SM 2540D	OV-02_102920_SW_10	180-112945-1 DU	Total Suspended Solids	2.00 mg/L	5	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 335749 Date: 11/02/2020 23:04											
						LCS Source: LCS 20 PPM_01655					
EPA 9060A	LCS 180-335749/4	Total Organic Carbon - Quad	19.7		mg/L	20.0	98	85-115	1	20	
Batch ID: 338508 Date: 11/24/2020 17:49											
						LCS Source: LCS 20 PPM_01670					
EPA 9060A	LCS 180-338508/4	Dissolved Organic Carbon - Quad	19.4		mg/L	20.0	97	85-115	0	20	
Batch ID: 335392 Date: 10/30/2020 11:19											
						LCS Source: WResPSP_00072					
SM 2540D	LCS 180-335392/1	Total Suspended Solids	34.0		mg/L	31.6	108	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE DUPLICATE
 GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 335749 Date: 11/02/2020 23:31			LCSD Source: LCS 20 PPM_01655								
EPA 9060A	LCSD 180-335749/5	Total Organic Carbon - Quad	19.5		mg/L	20.0	98	85-115	1	20	
Batch ID: 338508 Date: 11/24/2020 18:16			LCSD Source: LCS 20 PPM_01670								
EPA 9060A	LCSD 180-338508/5	Dissolved Organic Carbon - Quad	19.5		mg/L	20.0	98	85-115	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112945-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A MDL Date: 03/21/2017 16:51

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Organic Carbon - Quad		1	0.5084

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112945-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A XMDL Date: 03/21/2017 16:52

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Organic Carbon - Quad		1	0.5084

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112945-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A MDL Date: 03/21/2017 16:51

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.5084

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112945-1
SDG Number: _____
Matrix: Water Instrument ID: TOC1030
Method: EPA 9060A XMDL Date: 03/21/2017 16:52

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.5084

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112945-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540D MDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Suspended Solids		0.5	0.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburg Job Number: 180-112945-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540D XMDL Date: 01/28/2010 13:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Suspended Solids		0.5	0.5

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Instrument ID: TOC1030 Analysis Method: EPA 9060A

Start Date: 11/02/2020 21:44 End Date: 11/03/2020 14:40

Lab Sample Id	D/F	Type	Time	Analytes																											
				TOC	Q																										
ZZZZZZ			21:44																												
ICV 180-335749/2	1		22:10	X																											
ICB 180-335749/3	1		22:37	X																											
LCS 180-335749/4	1	T	23:04	X																											
LCSD 180-335749/5	1	T	23:31	X																											
MB 180-335749/6	1	T	23:58	X																											
ZZZZZZ			00:24																												
ZZZZZZ			00:50																												
ZZZZZZ			01:16																												
ZZZZZZ			01:42																												
ZZZZZZ			02:09																												
ZZZZZZ			02:36																												
ZZZZZZ			03:03																												
CCV 180-335749/14	1		03:29	X																											
CCB 180-335749/15	1		03:56	X																											
ZZZZZZ			04:23																												
ZZZZZZ			04:50																												
ZZZZZZ			05:17																												
ZZZZZZ			05:44																												
ZZZZZZ			06:11																												
ZZZZZZ			06:38																												
180-112945-1	1	T	07:04	X																											
180-112945-1 MS	1	T	07:31	X																											
180-112945-1 MSD	1	T	07:58	X																											
180-112945-2	1	T	08:25	X																											
CCV 180-335749/26	1		08:52	X																											
CCB 180-335749/27	1		09:19	X																											
180-112945-3	1	T	09:46	X																											
CCV 180-335749/29	1		10:12	X																											
CCB 180-335749/30	1		10:39	X																											
ZZZZZZ			11:06																												
ZZZZZZ			11:33																												
ZZZZZZ			11:59																												
ZZZZZZ			12:25																												
ZZZZZZ			12:52																												
ZZZZZZ			13:19																												
ZZZZZZ			13:46																												
CCV 180-335749/38			14:13																												
CCB 180-335749/39			14:40																												

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Instrument ID: TOC1030 Analysis Method: EPA 9060A

Start Date: 11/24/2020 16:29 End Date: 11/25/2020 06:45

Lab Sample Id	D/F	Type	Time	Analytes																											
				D	O	C	Q																								
ZZZZZZ			16:29																												
ICV 180-338508/2	1		16:56	X																											
ICB 180-338508/3	1		17:22	X																											
LCS 180-338508/4	1	D	17:49	X																											
LCSD 180-338508/5	1	D	18:16	X																											
MB 180-338508/6	1	D	18:42	X																											
ZZZZZZ			19:09																												
ZZZZZZ			19:36																												
ZZZZZZ			20:03																												
ZZZZZZ			20:30																												
ZZZZZZ			20:57																												
ZZZZZZ			21:23																												
180-112945-1	1	D	21:50	X																											
CCV 180-338508/14	1		22:16	X																											
CCB 180-338508/15	1		22:43	X																											
180-112945-1 MS	1	D	23:09	X																											
180-112945-1 MSD	1	D	23:36	X																											
180-112945-2	1	D	00:03	X																											
180-112945-3	1	D	00:31	X																											
ZZZZZZ			00:57																												
ZZZZZZ			01:24																												
ZZZZZZ			01:51																												
ZZZZZZ			02:18																												
ZZZZZZ			02:45																												
ZZZZZZ			03:11																												
CCV 180-338508/26	1		03:38	X																											
CCB 180-338508/27	1		04:04	X																											
ZZZZZZ			04:31																												
ZZZZZZ			04:58																												
ZZZZZZ			05:24																												
ZZZZZZ			05:52																												
CCV 180-338508/32			06:19																												
CCB 180-338508/33			06:45																												

Prep Types: _____
D = Dissolved

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-112945-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: SM 2540D

Start Date: 10/30/2020 11:19 End Date: 10/30/2020 11:19

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				T S S																											
LCS 180-335392/1	1	T	11:19	X																											
MB 180-335392/2	1	T	11:19	X																											
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
180-112945-1	1	T	11:19	X																											
180-112945-1 DU	1	T	11:19	X																											
ZZZZZZ			11:19																												
180-112945-2	1	T	11:19	X																											
180-112945-3	1	T	11:19	X																											
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												
ZZZZZZ			11:19																												

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112945-1

SDG No.: _____

Batch Number: 335749 Batch Start Date: 11/02/20 21:44 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 11/03/20 14:57

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	10 PPM TOC/CC 01520	ICV 40 PPM 01659	LCS 20 PPM 01655
ICV 180-335749/2		EPA 9060A						40 mL	
LCS 180-335749/4		EPA 9060A							40 mL
LCSD 180-335749/5		EPA 9060A							40 mL
CCV 180-335749/14		EPA 9060A					40 mL		
180-112945-C-1	OV-02_102920_SW_10	EPA 9060A	T			<2 SU			
180-112945-A-1	OV-02_102920_SW_10	EPA 9060A	T	40 mL	40 mL	<2 SU			
180-112945-A-1	OV-02_102920_SW_10	EPA 9060A	T	40 mL	40 mL	<2 SU			
180-112945-B-2	OV-02_102920_SW_10 DUP	EPA 9060A	T			<2 SU			
CCV 180-335749/26		EPA 9060A					40 mL		
180-112945-B-3	ADD-02_102920_SW_10	EPA 9060A	T			<2 SU			
CCV 180-335749/29		EPA 9060A					40 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WTOC1000SP 00031					
ICV 180-335749/2		EPA 9060A							
LCS 180-335749/4		EPA 9060A							
LCSD 180-335749/5		EPA 9060A							
CCV 180-335749/14		EPA 9060A							
180-112945-C-1	OV-02_102920_SW_10	EPA 9060A	T						
180-112945-A-1	OV-02_102920_SW_10	EPA 9060A	T	0.4 mL					
180-112945-A-1	OV-02_102920_SW_10	EPA 9060A	T	0.4 mL					
180-112945-B-2	OV-02_102920_SW_10 DUP	EPA 9060A	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112945-1

SDG No.: _____

Batch Number: 335749 Batch Start Date: 11/02/20 21:44 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 11/03/20 14:57

Lab Sample ID	Client Sample ID	Method Chain	Basis	WTOC1000SP 00031					
CCV 180-335749/26		EPA 9060A							
180-112945-B-3	ADD-02_102920_SW 10	EPA 9060A	T						
CCV 180-335749/29		EPA 9060A							

Batch Notes	
Batch Comment	pH strips: HC991298
Phosphoric Acid ID	3932779
Pipette/Syringe/Dispenser ID	B747014865, B747014653
Sodium Persulfate ID	3932780

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112945-1

SDG No.: _____

Batch Number: 338508 Batch Start Date: 11/24/20 16:29 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 11/25/20 07:03

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	10 PPM TOC/CC 01535	ICV 40 PPM 01674	LCS 20 PPM 01670
ICV 180-338508/2		EPA 9060A						40 mL	
LCS 180-338508/4		EPA 9060A							40 mL
LCSD 180-338508/5		EPA 9060A							40 mL
180-112945-E-1	OV-02_102920_SW_10	EPA 9060A	D			<2 SU			
CCV 180-338508/14		EPA 9060A					40 mL		
180-112945-D-1 MS	OV-02_102920_SW_10	EPA 9060A	D	40 mL	40 mL	<2 SU			
180-112945-C-1 MSD	OV-02_102920_SW_10	EPA 9060A	D	40 mL	40 mL	<2 SU			
180-112945-D-2	OV-02_102920_SW_10 DUF	EPA 9060A	D			<2 SU			
180-112945-E-3	ADD-02_102920_SW_10	EPA 9060A	D			<2 SU			
CCV 180-338508/26		EPA 9060A					40 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	WTOC1000SP 00031					
ICV 180-338508/2		EPA 9060A							
LCS 180-338508/4		EPA 9060A							
LCSD 180-338508/5		EPA 9060A							
180-112945-E-1	OV-02_102920_SW_10	EPA 9060A	D						
CCV 180-338508/14		EPA 9060A							
180-112945-D-1 MS	OV-02_102920_SW_10	EPA 9060A	D	0.4 mL					
180-112945-C-1 MSD	OV-02_102920_SW_10	EPA 9060A	D	0.4 mL					
180-112945-D-2	OV-02_102920_SW_10 DUF	EPA 9060A	D						
180-112945-E-3	ADD-02_102920_SW_10	EPA 9060A	D						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112945-1

SDG No.: _____

Batch Number: 338508 Batch Start Date: 11/24/20 16:29 Batch Analyst: Mastalski, Tessa A

Batch Method: EPA 9060A Batch End Date: 11/25/20 07:03

Lab Sample ID	Client Sample ID	Method Chain	Basis	WTOC1000SP 00031					
CCV 180-338508/26		EPA 9060A							

Batch Notes	
Batch Comment	pH strips: HC991298
Phosphoric Acid ID	3932779
Pipette/Syringe/Dispenser ID	B747014653, B747014865
Sodium Persulfate ID	3932780

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112945-1

SDG No.: _____

Batch Number: 335392 Batch Start Date: 10/30/20 11:19 Batch Analyst: Smith, Abbey V

Batch Method: SM 2540D Batch End Date: 10/31/20 16:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	CrucibleID	TareWeight	InitialAmount	Weight1	Weight2	WeightOne%Diff
LCS 180-335392/1		SM 2540D		fZBLZ 0.1190	0.1190 g	50 mL	0.1209 g	0.1207 g	PASS <0.5mg
MB 180-335392/2		SM 2540D		fZBLY 0.1193	0.1193 g	1000 mL	0.1193 g	0.1193 g	PASS <0.5mg
180-112945-A-1	OV-02_102920_SW_10	SM 2540D	T	fZBN1 0.1219	0.1219 g	1000 mL	0.1241 g	0.1240 g	PASS <0.5mg
180-112945-B-1 DU	OV-02_102920_SW_10	SM 2540D	T	fZBN0 0.1201	0.1201 g	1000 mL	0.1221 g	0.1221 g	PASS <0.5mg
180-112945-A-2	OV-02_102920_SW_10 DUP	SM 2540D	T	fZBMY 0.1172	0.1172 g	1000 mL	0.1183 g	0.1182 g	PASS <0.5mg
180-112945-A-3	ADD-02_102920_SW_10	SM 2540D	T	fZBMX 0.1170	0.1170 g	1000 mL	0.1368 g	0.1367 g	PASS <0.5mg

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue	Residue2	FinalAmount	ResDishWt	DishWeight	WResPSP 00072
LCS 180-335392/1		SM 2540D		0.0019 g	0.0017 g	1000 mL	0.1207 g	0.119 g	50 mL
MB 180-335392/2		SM 2540D		0 g	0 g	1000 mL	0.1193 g	0.1193 g	
180-112945-A-1	OV-02_102920_SW_10	SM 2540D	T	0.0022 g	0.0021 g	1000 mL	0.124 g	0.1219 g	
180-112945-B-1 DU	OV-02_102920_SW_10	SM 2540D	T	0.002 g	0.002 g	1000 mL	0.1221 g	0.1201 g	
180-112945-A-2	OV-02_102920_SW_10 DUP	SM 2540D	T	0.0011 g	0.001 g	1000 mL	0.1182 g	0.1172 g	
180-112945-A-3	ADD-02_102920_SW_10	SM 2540D	T	0.0198 g	0.0197 g	1000 mL	0.1367 g	0.117 g	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-112945-1

SDG No.: _____

Batch Number: 335392 Batch Start Date: 10/30/20 11:19 Batch Analyst: Smith, Abbey V

Batch Method: SM 2540D Batch End Date: 10/31/20 16:20

Batch Notes	
Balance ID	1126020829
Date/Time - In - CW (WT2)	10/31/2020 11:20
Date/Time - Out - CW (WT2)	10/31/2020 14:00
Temperature - Start - CW (WT2) - Correct	105 Celsius
Temperature - End - CW (WT2) - Correct	105 Celsius
Temperature - Start-CW(WT2) -Uncorrected	105 Celsius
Temperature - End-CW(WT2) -Uncorrected	105 Celsius
Temperature - Start - Corrected	105 Celsius
Temperature - End - Corrected	105 Celsius
Date/Time - In	10/30/2020 11:52
Date/Time - Out	10/31/2020 09:45
Filter ID	Environmental Express 600024-0293-R1
Nominal Amount Used	1000 mL
Oven ID	EZ-BAKE
Perform Calculation (0=No, 1=Yes)	1
Thermometer ID	QA Backup #1
Temperature - Start - Uncorrected	105 Celsius
Temperature - End - Uncorrected	105 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TEST AMERICA
301 ALPHA DRIVE
PITTSBURGH, PA.
15238

Date Prepared: 11/03/2020

By:

TOC

7041030

9060

USA Batch # 335749

Date Approved:

By:

11022020c NM 11/3/20

Sample Results Summary

Spl Vial #	Sample ID	Num Act	Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	1 BLANK	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	4,825	2.317	0.965	2,551	52.88	Pass
2	2 ICV 40 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	167,453	94.197	39.249	2,239	1.34	Fail
3	3 ICB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	1,454	0.447	0.186	431	29.67	Fail
4	4 LCS 20 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	84,324	47.249	19.687	780	0.93	Fail
5	5 LCSD 20 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	83,635	46.860	19.525	1,033	1.24	Fail
6	6 MB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	793	0.083	0.035	174	21.95	Fail
7	7 460-221462-D-10	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	2,401	0.948	0.395	37	1.54	Pass
8	8 460-221519-H-7	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	1,264	0.306	0.128	117	9.27	Pass
9	9 460-221627-D-6	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	2,244	0.860	0.358	123	5.46	Pass
10	10 180-112658-B-10	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	7,290	3.709	1.546	137	1.87	Pass
11	11 180-112932-D-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	76,432	42.758	17.815	1,826	2.39	Pass
12	12 180-112932-D-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	25,397	13.935	5.806	565	2.22	Pass
13	13 180-112932-C-3	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	11,238	5.939	2.474	490	4.36	Pass
14	14 CCV 10 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	42,558	23.661	9.859	874	2.05	Fail
15	15 CCB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	677	0.022	0.009	90	13.26	Fail
16	16 180-112876-C-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	33,354	18.429	7.679	660	1.98	Pass
17	17 180-112876-B-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	17,437	9.440	3.933	338	1.94	Pass
18	18 180-112876-B-3	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	10,681	5.624	2.343	248	2.33	Pass
19	19 180-112876-B-4	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	7,187	3.651	1.522	102	1.42	Pass
20	20 180-112876-C-5	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	4,623	2.203	0.918	310	6.71	Pass
21	21 180-112876-B-6	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	5,234	2.548	1.062	227	4.34	Pass
22	22 180-112945-C-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	38,258	21.199	8.833	1,107	2.89	Pass
23	23 180-112945-A-1 MS	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	79,109	44.270	18.446	1,381	1.75	Pass

TEST AMERICA
301 ALPHA DRIVE
PITTSBURGH, PA
15238

Date Prepared: 11/03/2020

By:

TOC

Date Approved:

By:

Sample No	Sample Name	Sample Type	Sample Date	Sample Volume	Sample ID	Sample Description	Sample Date	Sample Type	Sample Volume	Sample ID	Sample Description	Sample Date	Sample Type	Sample Volume	Sample ID	Sample Description
24	180-112945-A-1 MSD	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Sample	1 : 1	00000000	TOC	79,977	44,760	18,650	1,410	1.76 Pass
25	180-112945-B-2	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Sample	1 : 1	00000000	TOC	39,213	21,738	9,057	1,319	3.36 Pass
26	CCV 10 PPM	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Standard	1 : 1	00000000	TOC	43,064	23,947	9,978	130	0.30 Fail
27	CCB	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Standard	1 : 1	00000000	TOC	805	0.081	0.034	84	10.40 Fail
28	180-112945-B-3	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Sample	1 : 1	00000000	TOC	35,332	19,546	8,144	1,310	3.71 Pass
29	CCV 10 PPM	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Standard	1 : 1	00000000	TOC	43,436	24,157	10,065	647	1.49 Fail
30	CCB	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Standard	1 : 1	00000000	TOC	797	0.078	0.033	160	20.06 Fail
31	LCS 20 PPM	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Standard	1 : 1	00000000	TOC	85,015	47,639	19,850	359	0.42 Fail
32	LCSD 20 PPM	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Standard	1 : 1	00000000	TOC	85,748	48,053	20,022	474	0.55 Fail
33	MB	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Standard	1 : 1	00000000	TOC	697	0.021	0.009	57	8.16 Fail
34	LB 180-335086/1-A	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Sample	1 : 1	00000000	TOC	786	0.036	0.015	41	5.18 Pass
35	180-112803-A-1-C	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Sample	1 : 1	00000000	TOC	66,043	36,890	15,371	2,615	3.96 Pass
36	180-112804-A-1-E	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Sample	1 : 1	00000000	TOC	1,994	0.718	0.299	448	22.45 Pass
37	180-112806-A-1-C	Sample	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Sample	1 : 1	00000000	TOC	41,170	22,843	9,518	836	2.03 Pass
38	CCV 10 PPM	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Standard	1 : 1	00000000	TOC	43,050	23,939	9,975	607	1.41 Fail
39	CCB	Chk	TOC OCT 2020 - Oct 08, 2020;	4	4	TOC OCT 2020 - Oct 08, 2020;	01-42-54 PM	Standard	1 : 1	00000000	TOC	701	0.038	0.016	123	17.52 Fail

Page 2 of 24

Instrument ID: E717730273 (Wet Chemical)

Report_ID: TOC1030-R03172 (Report generated by OI Analytical's TOC Reporter V1.4.2)

Date Printed: 11/3/2020

By Sample Report

Denotes Excluded Replicates

Denotes First Failed Samples

TEST AMERICA
 301 ALPHA DRIVE
 PITTSBURGH, PA
 15238
 USA

Date Prepared: 11/03/2020

By: JOC

Date Approved:

By:

Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Status: Pass
 Vial #: 1 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000 Date: 11/02/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:44 pm	-	-	-	8,348	4.307	1.795
2	9:49 pm	-	-	-	3,864	1.775	0.739
3	9:56 pm	-	-	-	4,751	2.275	0.948
4	10:00 pm	-	-	-	2,337	0.912	0.380
Avg.		-	-	-	4,825	2.317	0.965
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	52.88	-	-

Spl #: 2 Sample ID: ICV 40 PPM Type: Chk Standard Status: Fail
 Vial #: 2 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000 Date: 11/02/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:10 pm	-	-	-	164,668	92.624	38.593
2	10:16 pm	-	-	-	167,675	94.322	39.301
3	10:22 pm	-	-	-	170,140	95.714	39.881
4	10:28 pm	-	-	-	167,330	94.127	39.220
Avg.		-	-	-	167,453	94.197	39.249
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.34	-	-

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By: **IOC**

Date Prepared: 11/03/2020

Date Approved: By:

Spl #: 3 Sample ID: ICB
 Vial #: 3 Method: TOC OCT 2020 - Oct 08, 202C Type: Chk Standard Date: 11/02/2020
 Dilution 1 : 1 Customer ID: 00000000 Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:37 pm	-	-	-	2,064	0.792	0.330
2	10:43 pm	-	-	-	1,321	0.372	0.155
3	10:49 pm	-	-	-	1,380	0.405	0.169
4	10:54 pm	-	-	-	1,050	0.219	0.091
Avg.		-	-	-	1,454	0.447	0.186
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	29.67	-	-

Status: Fail

Spl #: 4 Sample ID: LCS 20 PPM
 Vial #: 4 Method: TOC OCT 2020 - Oct 08, 202C Type: Chk Standard Date: 11/02/2020
 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:04 pm	-	-	-	83,429	46.743	19.476
2	11:10 pm	-	-	-	84,455	47.323	19.718
3	11:16 pm	-	-	-	85,304	47.802	19.918
4	11:22 pm	-	-	-	84,108	47.127	19.636
Avg.		-	-	-	84,324	47.249	19.687
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	0.93	-	-

Status: Fail

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Date Prepared: 11/03/2020

By:

Date Approved:

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Spl #: 5 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 11/02/2020 Status: Fail
 Vial #: 5 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:31 pm	-	-	-	82,286	46.098	19.207
2	11:37 pm	-	-	-	83,371	46.710	19.463
3	11:43 pm	-	-	-	84,506	47.351	19.730
4	11:48 pm	-	-	-	84,379	47.280	19.700
Avg.		-	-	-	83,635	46.860	19.525
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.24	-	-

Status: Fail

Spl #: 6 Sample ID: MB Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 6 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:58 pm	-	-	-	999	0.190	0.079
2	12:03 am	-	-	-	718	0.032	0.013
3	12:09 am	-	-	-	859	0.111	0.046
4	12:15 am	-	-	-	597	0.000	0.000
Avg.		-	-	-	793	0.083	0.035
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	21.95	-	-

Status: Fail

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Spl #: 7 Sample ID: 460-221462-D-10 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 7 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:24 am	-	-	-	2,419	0.958	0.399
2	12:30 am	-	-	-	2,380	0.936	0.390
3	12:35 am	-	-	-	2,444	0.973	0.405
4	12:41 am	-	-	-	2,362	0.926	0.386
Avg.		-	-	-	2,401	0.948	0.395
Std.Dev.							
% RSD.		1.54					

Spl #: 8 Sample ID: 460-221519-H-7 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 8 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:50 am	-	-	-	1,350	0.355	0.148
2	12:56 am	-	-	-	1,192	0.265	0.111
3	1:01 am	-	-	-	1,376	0.370	0.153
4	1:07 am	-	-	-	1,137	0.235	0.098
Avg.		-	-	-	1,264	0.306	0.128
Std.Dev.							
% RSD.		9.27					

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By:

Spl #: 9 Sample ID: 460-221627-D-6 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 9 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:16 am	-	-	-	2,350	0.919	0.382
2	1:22 am	-	-	-	2,158	0.811	0.338
3	1:28 am	-	-	-	2,349	0.919	0.383
4	1:33 am	-	-	-	2,119	0.789	0.329
Avg.					2,244	0.860	0.358
Std.Dev.							
% RSD.							5.46

Spl #: 10 Sample ID: 180-112658-B-10 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 10 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:42 am	-	-	-	7,258	3.691	1.538
2	1:48 am	-	-	-	7,126	3.616	1.507
3	1:54 am	-	-	-	7,454	3.802	1.584
4	2:00 am	-	-	-	7,321	3.727	1.553
Avg.					7,290	3.709	1.546
Std.Dev.							
% RSD.							1.87

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Date Prepared: 11/03/2020 By:
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Spl #: 11 Sample ID: 180-112932-D-1 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 11 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:09 am	-	-	-	73,755	41,246	17,186
2	2:15 am	-	-	-	76,893	43,018	17,924
3	2:21 am	-	-	-	77,835	43,550	18,145
4	2:27 am	-	-	-	77,244	43,217	18,007
Avg.		-	-	-	76,432	42,758	17,815
Std.Dev.							
% RSD.							2.39

Spl #: 12 Sample ID: 180-112932-D-2 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 12 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:36 am	-	-	-	24,778	13,586	5,861
2	2:42 am	-	-	-	25,956	14,251	5,938
3	2:48 am	-	-	-	25,786	14,155	5,898
4	2:54 am	-	-	-	25,067	13,749	5,729
Avg.		-	-	-	25,397	13,935	5,806
Std.Dev.							
% RSD.							2.22

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By: TOC

Date Prepared: 11/03/2020

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Spl #: 13 Sample ID: 180-112932-C-3 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 13 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:03 am	-	-	-	11,172	5.902	2.459
2	3:08 am	-	-	-	10,646	5.604	2.335
3	3:15 am	-	-	-	11,839	6.279	2.616
4	3:20 am	-	-	-	11,295	5.971	2.488
Avg.		-	-	-	11,238	5.939	2.474
Std.Dev.							
% RSD.					4.36		

Spl #: 14 Sample ID: CCV 10 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 14 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:29 am	-	-	-	41,302	22.952	9.563
2	3:35 am	-	-	-	42,634	23.704	9.877
3	3:41 am	-	-	-	43,219	24.035	10.014
4	3:47 am	-	-	-	43,077	23.954	9.981
Avg.		-	-	-	42,558	23.661	9.859
Std.Dev.							
% RSD.					2.05		

Date Prepared: 11/03/2020 By:

Date Approved: By:

Status: Fail

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Spl #: 15 Sample ID: CCB Type: Chk Standard Date: 11/03/2020
Vial #: 15 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:56 am	-	-	-	789	0.071	0.030
2	4:02 am	-	-	-	690	0.016	0.007
3	4:07 am	-	-	-	659	0.000	0.000
4	4:13 am	-	-	-	571	0.000	0.000
Avg.		-	-	-	677	0.022	0.009
Std.Dev.							
% RSD.		13.26					

Spl #: 16 Sample ID: 180-112876-C-1 Type: Sample Date: 11/03/2020
Vial #: 16 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:23 am	-	-	-	32,478	17.934	7.473
2	4:29 am	-	-	-	33,594	18.565	7.735
3	4:35 am	-	-	-	34,046	18.820	7.842
4	4:41 am	-	-	-	33,299	18.398	7.666
Avg.		-	-	-	33,354	18.429	7.679
Std.Dev.							
% RSD.		1.98					

Status: Pass

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By:

Date Approved:

By:

Spl #: 17 Sample ID: 180-112876-B-2 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 17 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:50 am	-	-	-	17,244	9.331	3.888
2	4:56 am	-	-	-	17,563	9.511	3.963
3	5:02 am	-	-	-	17,091	9.245	3.851
4	5:08 am	-	-	-	17,849	9.672	4.030
Avg.		-	-	-	17,437	9.440	3.933
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.94	-	-

Spl #: 18 Sample ID: 180-112876-B-3 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 18 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:17 am	-	-	-	10,636	5.599	2.333
2	5:23 am	-	-	-	10,351	5.438	2.265
3	5:29 am	-	-	-	10,821	5.704	2.377
4	5:35 am	-	-	-	10,915	5.757	2.399
Avg.		-	-	-	10,681	5.624	2.343
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.33	-	-

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 Date Approved:

By: *TOC*
 By:

Spl #: 19 Sample ID: 180-112876-B-4 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 19 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:44 am	-	-	-	7,045	3,571	1,488
2	5:50 am	-	-	-	7,287	3,708	1,545
3	5:56 am	-	-	-	7,199	3,658	1,524
4	6:02 am	-	-	-	7,218	3,669	1,529

Avg. 7,187 3,651 1,522
 Std.Dev.
 % RSD. 1.42

Spl #: 20 Sample ID: 180-112876-C-5 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 20 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:11 am	-	-	-	4,701	2,247	0.936
2	6:17 am	-	-	-	4,368	2,059	0.858
3	6:23 am	-	-	-	5,029	2,433	1,014
4	6:29 am	-	-	-	4,394	2,074	0.864

Avg. 4,623 2,203 0.918
 Std.Dev.
 % RSD. 6.71

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By: **IOC**

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Date Approved:

By:

Status: Pass

Sample ID: 180-112876-B-6
Method: TOC OCT 2020 - Oct 08, 202C
Type: TOC
Dilution: 1 : 1
Date: 11/03/2020
Customer ID: 00000000

Spl #: 21
Vial #: 21

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:38 am	-	-	-	5,104	2,475	1,031
2	6:44 am	-	-	-	5,349	2,613	1,089
3	6:50 am	-	-	-	5,490	2,693	1,122
4	6:56 am	-	-	-	4,991	2,411	1,005

Avg. -
Std.Dev. 5,234 2,548 1,062
% RSD. 4.34

Status: Pass

Sample ID: 180-112945-C-1
Method: TOC OCT 2020 - Oct 08, 202C
Type: TOC
Dilution: 1 : 1
Date: 11/03/2020
Customer ID: 00000000

Spl #: 22
Vial #: 22

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:04 am	-	-	-	37,636	20,847	8,686
2	7:10 am	-	-	-	37,196	20,599	8,583
3	7:16 am	-	-	-	39,710	22,019	9,175
4	7:22 am	-	-	-	38,491	21,330	8,888

Avg. -
Std.Dev. 38,258 21,199 8,833
% RSD. 2.89

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Date Prepared: 11/03/2020 By:
Date Approved: By:

Status: Pass

Date: 11/03/2020
Customer ID: 00000000

Type: Sample
Dilution 1 : 1

Sample ID: 180-112945-A-1 MS
Method: TOC OCT 2020 - Oct 08, 202C

Spl #: 23
Vial #: 23

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:31 am	-	-	-	79,429	44,450	18,521
2	7:37 am	-	-	-	78,264	43,792	18,247
3	7:43 am	-	-	-	80,916	45,290	18,871
4	7:49 am	-	-	-	77,828	43,546	18,144

Avg. 79,109 44,270 18,446
Std.Dev.
% RSD. 1.75

Status: Pass

Date: 11/03/2020
Customer ID: 00000000

Type: Sample
Dilution 1 : 1

Sample ID: 180-112945-A-1 MSD
Method: TOC OCT 2020 - Oct 08, 202C

Spl #: 24
Vial #: 24

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:58 am	-	-	-	77,979	43,632	18,180
2	8:04 am	-	-	-	80,008	44,777	18,657
3	8:10 am	-	-	-	81,096	45,392	18,913
4	8:16 am	-	-	-	80,826	45,240	18,850

Avg. 79,977 44,760 18,650
Std.Dev.
% RSD. 1.76

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Date Prepared: 11/03/2020 By:

Date Approved: By:

Spl #: 25 Sample ID: 180-112945-B-2 Type: Sample Status: Pass
 Vial #: 25 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:25 am	-	-	-	37,492	20,766	8.653
2	8:31 am	-	-	-	38,909	21,566	8.986
3	8:37 am	-	-	-	39,985	22,174	9.239
4	8:43 am	-	-	-	40,464	22,445	9.351
Avg.		-	-	-	39,213	21,738	9.057
Std.Dev.		3.36					
% RSD.		3.36					

Spl #: 26 Sample ID: CCV 10 PPM Type: Chk Standard Status: Fail
 Vial #: 26 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:52 am	-	-	-	43,074	23,952	9.980
2	8:58 am	-	-	-	42,966	23,892	9.955
3	9:04 am	-	-	-	43,244	24,048	10.020
4	9:09 am	-	-	-	42,972	23,895	9.956
Avg.		-	-	-	43,064	23,947	9.978
Std.Dev.		0.30					
% RSD.		0.30					

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Date Prepared: 11/03/2020

By:

Date Approved:

By:

Spl #: 27 Sample ID: CCB Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 27 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:19 am	-	-	-	926	0.149	0.062
2	9:25 am	-	-	-	782	0.068	0.028
3	9:30 am	-	-	-	777	0.065	0.027
4	9:36 am	-	-	-	734	0.041	0.017
Avg.		-	-	-	805	0.081	0.034
Std.Dev.							
% RSD.					10.40		

Spl #: 28 Sample ID: 180-112945-B-3 Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 28 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:46 am	-	-	-	33,475	18.498	7.707
2	9:52 am	-	-	-	35,865	19.847	8.270
3	9:58 am	-	-	-	35,474	19.627	8.178
4	10:03 am	-	-	-	36,512	20.213	8.421
Avg.		-	-	-	35,332	19.546	8.144
Std.Dev.							
% RSD.					3.71		

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Date Prepared: 11/03/2020 By:
Date Approved: By:

Spl #: 29 Sample ID: CCV 10 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
Vial #: 29 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:12 am	-	-	-	42,492	23.624	9.843
2	10:18 am	-	-	-	43,819	24.373	10.156
3	10:24 am	-	-	-	43,544	24,218	10.091
4	10:30 am	-	-	-	43,890	24,413	10.172
Avg.					43,436	24.157	10.065
Std.Dev.							
% RSD.					1.49		

Spl #: 30 Sample ID: CCB Type: Chk Standard Date: 11/03/2020 Status: Fail
Vial #: 30 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:39 am	-	-	-	829	0.095	0.039
2	10:45 am	-	-	-	1,009	0.196	0.082
3	10:51 am	-	-	-	699	0.021	0.009
4	10:56 am	-	-	-	652	0.000	0.000
Avg.					797	0.078	0.033
Std.Dev.							
% RSD.					20.06		

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TOC

Date Prepared: 11/03/2020

By:

Date Approved:

By:

Spl #: 31 Sample ID: LCS 20 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 31 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:06 am	-	-	-	84,676	47,447	19,770
2	11:11 am	-	-	-	85,520	47,924	19,969
3	11:17 am	-	-	-	84,957	47,606	19,835
4	11:23 am	-	-	-	84,905	47,577	19,824
Avg.		-	-	-	85,015	47,639	19,850
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	0.42	-	-

Status: Fail

Spl #: 32 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 32 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:33 am	-	-	-	85,223	47,757	19,899
2	11:38 am	-	-	-	86,143	48,276	20,115
3	11:44 am	-	-	-	86,157	48,284	20,118
4	11:50 am	-	-	-	85,471	47,896	19,957
Avg.		-	-	-	85,748	48,053	20,022
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	0.55	-	-

Status: Fail

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TOC

Date Prepared: 11/03/2020

By:

Date Approved:

By:

Spl #: 33 Sample ID: MB Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 33 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:59 am	-	-	-	780	0.067	0.028
2	12:05 pm	-	-	-	652	0.000	0.000
3	12:11 pm	-	-	-	678	0.009	0.004
4	12:17 pm	-	-	-	680	0.010	0.004
Avg.		-	-	-	697	0.021	0.009
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	8.16	-	-

Spl #: 34 Sample ID: LB 180-335086/1-A Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 34 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:25 pm	-	-	-	735	0.007	0.003
2	12:31 pm	-	-	-	824	0.057	0.024
3	12:37 pm	-	-	-	771	0.028	0.012
4	12:43 pm	-	-	-	813	0.051	0.021
Avg.		-	-	-	786	0.036	0.015
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	5.18	-	-

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Date Prepared: 11/03/2020 By: *TOC*

Date Approved: By:

Spl #: 35 Sample ID: 180-112803-A-1-C Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 35 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:52 pm	-	-	-	62,607	34,950	14,563
2	12:58 pm	-	-	-	65,436	36,548	15,228
3	1:04 pm	-	-	-	67,766	37,863	15,776
4	1:10 pm	-	-	-	68,362	38,200	15,917
Avg.		-	-	-	66,043	36,890	15,371
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	3.96	-	-

Spl #: 36 Sample ID: 180-112804-A-1-E Type: Sample Date: 11/03/2020 Status: Pass
 Vial #: 36 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:19 pm	-	-	-	2,483	0.995	0.415
2	1:25 pm	-	-	-	2,227	0.850	0.354
3	1:31 pm	-	-	-	1,785	0.601	0.250
4	1:36 pm	-	-	-	1,480	0.428	0.179
Avg.		-	-	-	1,994	0.718	0.299
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	22.45	-	-

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Date Prepared: 11/03/2020 By: *TOC*
 Date Approved: By:

Spl #: 37 Sample ID: 180-112806-A-1-C Type: Sample Status: Pass
 Vial #: 37 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:46 pm	-	-	-	40,044	22,207	9,253
2	1:52 pm	-	-	-	41,044	22,772	9,488
3	1:58 pm	-	-	-	41,920	23,267	9,695
4	2:04 pm	-	-	-	41,672	23,127	9,636
Avg.		-	-	-	41,170	22,843	9,518
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	2.03	-	-

Spl #: 38 Sample ID: CCV 10 PPM Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 38 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:13 pm	-	-	-	42,171	23,442	9,768
2	2:19 pm	-	-	-	43,463	24,172	10,072
3	2:25 pm	-	-	-	43,449	24,164	10,068
4	2:31 pm	-	-	-	43,120	23,978	9,991
Avg.		-	-	-	43,050	23,939	9,975
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.41	-	-

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Date Prepared: 11/03/2020 By: *TOC*

Date Approved: By:

Spl #: 39 Sample ID: CCB Type: Chk Standard Date: 11/03/2020 Status: Fail
 Vial #: 39 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:40 pm				835	0.098	0.041
2	2:46 pm				755	0.053	0.022
3	2:52 pm				667	0.003	0.001
4	2:57 pm				549	0.000	0.000
Avg.					701	0.038	0.016
Std.Dev.							
% RSD.							17.52

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Date Prepared: 11/03/2020 By:
 Date Approved: By:

TOC

Method Summary

Method Details

Method Name: TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Date Created: 10/08/2020
 Time Created: 13:42
 Created By: toc
 Analysis Mode: NPOC Only
 Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00
 Volumes
 Sample Volume (mL): 2.400
 Acid Volume (mL): 1.000
 Persulfate Volume(mL): 1.500
 Other
 SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1
 Times
 React 01:30 Detect 03:00
 React 02:00 Detect 03:00
 TIC TIC
 TOC TOC
 Temp
 React 70 Detect 70
 React 98 Detect 98

Outlier Removal Criteria

Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

Other

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.995	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC
 User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Continue	Continue
QC #1	40.000	10.00	Continue	Continue
QC #2	20.000	20.00	Continue	Continue
QC #3	25.000	10.00	Continue	Continue
QC #4	0.000	10.00	Continue	Continue
SST	0.000	15.00	Continue	Continue

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 USA

Date Prepared: 11/03/2020

By: JOC

Date Approved:

By:

Calibration Details

Calibration Mode: TOC
 Date Calibrated: 10/08/2020
 Time Calibrated: 5:27 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5648
 R2: 0.9992
 R: 0.9996
 QC Blank(cts): 1,430
 Offset (cts): 674
 Offset (ugC): -0.381
 Reagent Blank (cts): 722
 Units of Measure: PPM->mg/L C

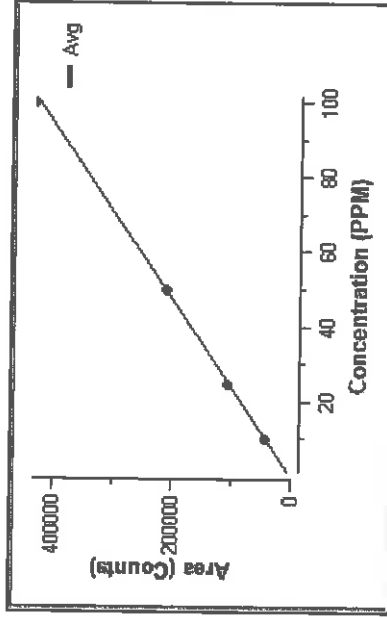
Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 3
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Weighted Linear
 weighting factor => 1 / mass

Calculations:

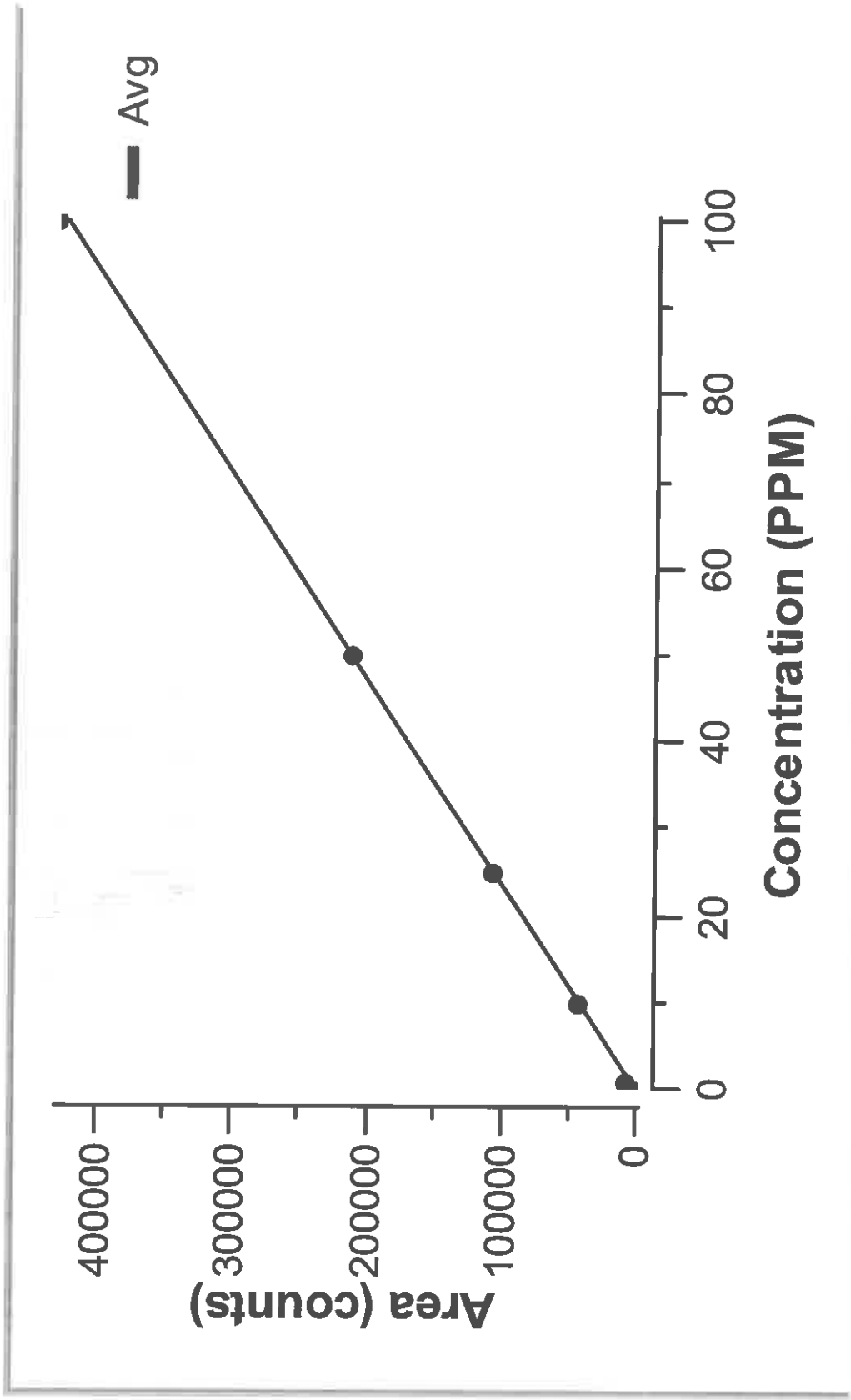
$$\text{Concentration} = \frac{\text{RF} \times \text{Area}}{\text{volume}}$$

Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RB}
 CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RW}
 QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$$y = m \times x + b$$

$$y \Rightarrow \text{Area} \quad m \Rightarrow \frac{1000}{\text{RF} \times \text{volume}} \quad b \Rightarrow 0$$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 1-TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Modified By: toc
 Date Created: 2020/10/08; 01:42 PM
 Last Modified: 2020/10/08; 05:08 PM
 Last Calibrated: 2020/10/08; 05:08 PM

RF(ugC/k-cnt): 0.5648
 R2: 0.9992
 Reagent Blank(cts): 722
 Offset Area(cts): 674
 Offset Mass(ugC): -0.38

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	662	49	7.35	2020-10-08; 03:37PM
1	1.000	2.400	2	5,780	894	15.47	2020-10-08; 04:01PM
2	10.000	2.400	2	41,583	619	1.49	2020-10-08; 04:16PM
3	25.000	2.400	2	106,117	2,774	2.61	2020-10-08; 04:31PM
4	50.000	2.400	2	209,986	3,616	1.72	2020-10-08; 04:46PM
5	100.000	2.400	2	430,699	11,254	2.61	2020-10-08; 05:02PM

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 USA

Date Prepared: 10/08/2020

By:

TOC

Date Approved:

By:

Sample Results Summary

Spl Vial #	Sample ID	Num Act Rep	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	DI WATER	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1	00000000	TOC	2,923	0.000	0.000	546	18.69	Pass
2	BLANK	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1	00000000	TOC	2,081	0.000	0.000	541	25.98	Pass
4	TOC-RW	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	662	0.000	0.000	49	7.35	
5	TOC-Std#1-1.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	5,780	2.400	1.000	894	15.47	
6	TOC-Std#2-10.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	41,583	24.000	10.000	619	1.49	
7	TOC-Std#3-25.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	106,117	60.000	25.000	2,774	2.61	
8	TOC-Std#4-50.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	209,986	120.000	50.000	3,616	1.72	
9	TOC-Std#5-100.000 PPM	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Std	1 : 1	00000000	TOC	430,699	240.000	100.000	11,254	2.61	
10	QC BLANK	2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	QC Blank	1 : 1	00000000	TOC	1,431	0.000	0.000	431	30.14	

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Date Prepared: 10/08/2020 By: *TOC*
 Date Approved: By:

Sample Results

Spl #: 1 Sample ID: DI WATER Type: Sample Status: Pass
 Vial #: 1 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000 Date: 10/08/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:23 pm	-	-	-	3,455	0.000	0.000
2	2:28 pm	-	-	-	3,119	0.000	0.000
3	2:34 pm	-	-	-	2,951	0.000	0.000
4	2:40 pm	-	-	-	2,166	0.000	0.000
Avg.		-	-	-	2,923	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	18.69	-	-

Spl #: 2 Sample ID: BLANK Type: Sample Status: Pass
 Vial #: 2 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000 Date: 10/05/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:49 pm	-	-	-	2,464	0.000	0.000
2	2:54 pm	-	-	-	1,699	0.000	0.000
Avg.		-	-	-	2,081	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	25.98	-	-

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By: **TOC**

Date Prepared: 10/08/2020

By:

Date Approved:

By:

Spl #: 4 Sample ID: TOC-RW Type: Std Dilution 1 : 1 Date: 10/08/2020 Status:
 Vial #: 3 Method: TOC OCT 2020 - Oct 08, 202C Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:37 pm	-	-	-	1,365	0.000	0.000
2	3:43 pm	-	-	-	697	0.000	0.000
3	3:52 pm	-	-	-	628	0.000	0.000
Avg.		-	-	-	662	0.000	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	7.35	-	-

Spl #: 5 Sample ID: TOC-Std#1-1.000 PPM Type: Std Dilution 1 : 1 Date: 10/08/2020 Status:
 Vial #: 4 Method: TOC OCT 2020 - Oct 08, 202C Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:01 pm	-	-	-	6,412	2.400	1.000
2	4:06 pm	-	-	-	5,148	2.400	1.000
Avg.		-	-	-	5,780	2.400	1.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	15.47	-	-

Spl #: 6 Sample ID: TOC-Std#2-10.000 PPM Type: Std Dilution 1 : 1 Date: 10/08/2020 Status:
 Vial #: 5 Method: TOC OCT 2020 - Oct 08, 202C Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:16 pm	-	-	-	41,145	24.000	10.000
2	4:21 pm	-	-	-	42,021	24.000	10.000
Avg.		-	-	-	41,583	24.000	10.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.49	-	-

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Date Prepared: 10/08/2020 By:
 Date Approved: By:

Spl #: 7 Sample ID: TOC-Std#3-25.000 PPM Type: Std Status: 10/08/2020
 Vial #: 6 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:31 pm	-	-	-	104,156	60.000	25.000
2	4:37 pm	-	-	-	108,078	60.000	25.000
Avg.					106,117	60.000	25.000
Std.Dev.							
% RSD.					2.61		

Spl #: 8 Sample ID: TOC-Std#4-50.000 PPM Type: Std Status: 10/08/2020
 Vial #: 7 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:46 pm	-	-	-	207,429	120.000	50.000
2	4:52 pm	-	-	-	212,543	120.000	50.000
Avg.					209,986	120.000	50.000
Std.Dev.							
% RSD.					1.72		

Spl #: 9 Sample ID: TOC-Std#5-100.000 PPM Type: Std Status: 10/08/2020
 Vial #: 8 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:02 pm	-	-	-	422,741	240.000	100.000
2	5:07 pm	-	-	-	438,656	240.000	100.000
Avg.					430,699	240.000	100.000
Std.Dev.							
% RSD.					2.61		

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Date Prepared: 10/08/2020

By: JOC

Date Approved:

By:

Spl #: 10 Sample ID: QC BLANK Type: QC Blank Date: 10/08/2020 Status:
 Vial #: 9 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:21 pm	-	-	-	1,736	0.000	0.000
2	5:27 pm	-	-	-	1,126	0.000	0.000

Avg.

Std.Dev.

% RSD.

1,431 0.000 0.000
 30.14

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Date Prepared: 10/08/2020

By:

TOC

Date Approved:

By:

Method Summary

Method Details

Method Name: TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM

Date Created: 10/08/2020

Time Created: 13:42

Created By: toc

Analysis Mode: NPOC Only

Sparging Mode: Internal

Pre-Acid Volume (mL): 1.000

Spurge Time (mm:ss): 02:00

Volumes

Sample Volume (mL): 2.400

Acid Volume (mL): 1.000

Persulfate Volume(mL): 1.500

Other

SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled

Dilution Mode: Automatic

Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No

Additional Replicates: 1

Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000

Rinses Per Sample: 1

Rinses Per Replicate: 0

Max. Std. Dev. 100 Use Modified Oxidant: No

Times
 React Detect
 TIC 01:30 03:00
 TOC 02:00 03:00
 Temp
 TIC 70
 TOC 98
 Detect 70
 98

Calibration Summary

Calibration Generation

Generation Mode: Manual

of Stds: 5

Dilution Factor: 10 : 1

Dilution Volume (mL): 1.000

Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.995	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC

User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Continue	Continue
QC #1	40.000	10.00	Continue	Continue
QC #2	20.000	20.00	Continue	Continue
QC #3	25.000	10.00	Continue	Continue
QC #4	0.000	10.00	Continue	Continue
SST	0.000	15.00	Continue	Continue

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Calibration Details

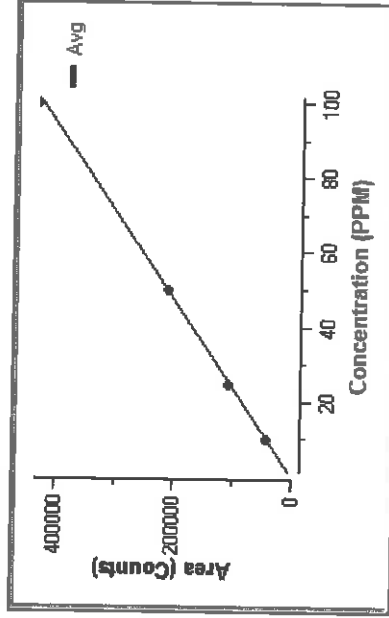
Calibration Mode: TOC
 Date Calibrated: 10/08/2020
 Time Calibrated: 5:08 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5648
 R2: 0.9992
 R: 0.9996
 QC Blank(cts): 0
 Offset (cts): 674
 Offset (ugC): -0.381
 Reagent Blank (cts): 722
 Units of Measure: PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 3
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Weighted Linear
 weighting factor => 1 / mass

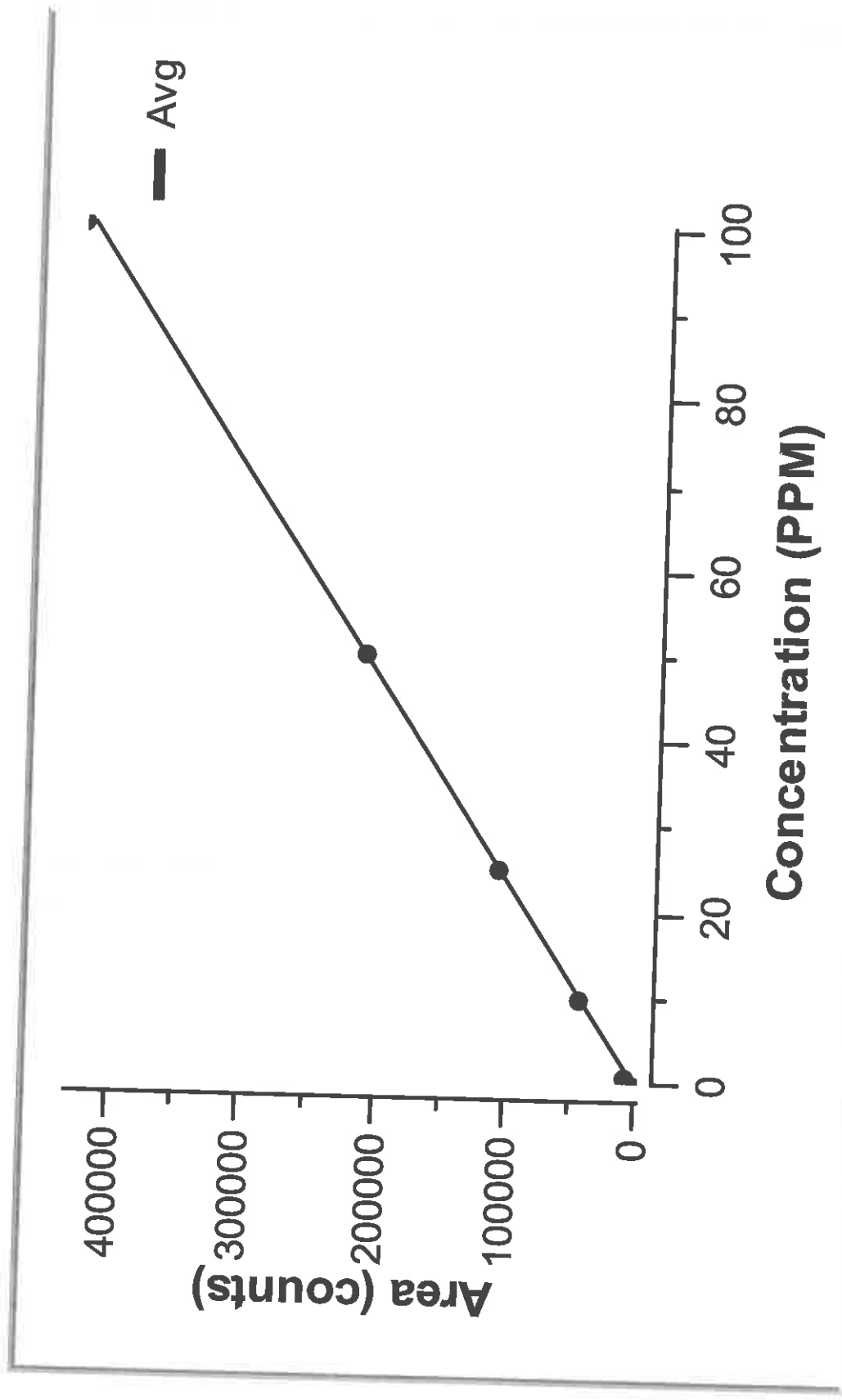
Calculations:

Concentration = $\frac{RF \times Area}{1000 \times volume}$
 Samples: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RB}
 CHK Stds: Area = Area_{Peak} - Area_{Offset} or Area = Area_{Peak} - Area_{RW}
 QC Samples: Area = Area_{Peak} - Area_{QCBlank}



$y = m \times x + b$

$y \rightarrow Area$ $m \rightarrow \frac{1000}{RF \times volume}$ $b \rightarrow 0$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 1-TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Modified By: toc
 Date Created: 2020/10/08; 01:42 PM
 Last Modified: 2020/10/08; 05:08 PM
 Last Calibrated: 2020/10/08; 05:08 PM

RF(ugC/k-cnt): 0.5648
 R2: 0.9992
 Reagent Blank(cts): 722
 Offset Area(cts): 674
 Offset Mass(ugC): -0.38

Std #	Conc (PPM)	Volume (mL)	# Repts	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	662	49	7.35	2020-10-08; 03:37PM
1	1.000	2.400	2	5,780	894	15.47	2020-10-08; 04:01PM
2	10.000	2.400	2	41,583	619	1.49	2020-10-08; 04:16PM
3	25.000	2.400	2	106,117	2,774	2.61	2020-10-08; 04:31PM
4	50.000	2.400	2	209,986	3,616	1.72	2020-10-08; 04:46PM
5	100.000	2.400	2	430,699	11,254	2.61	2020-10-08; 05:02PM



TM 10/08/20

5310C/9060A TOC %Readback Error Calculation Spreadsheet

ICAL Std (ppm)	ICAL RF	ICAL ID	Average Area	Result (ppm)	%Readback Error	%Readback Criteria
1.000	0.5648	100820TOCCAL	5780	1.360	36.023	≤50%
10.000	0.5648	100820TOCCAL	41583	9.786	-2.141	≤20%
25.000	0.5648	100820TOCCAL	106117	24.973	-0.109	≤20%
50.000	0.5648	100820TOCCAL	209986	49.417	-1.167	≤20%
100.000	0.5648	100820TOCCAL	430699	101.358	1.358	≤20%

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9040-DISS

USA Borden #338500

1124720DOC

TW 11/25/20

Sample Results Summary

Spl #	Vial #	Sample ID	Num Rep	Act	Method	Type	Dil	Cust ID	Mode	Avg. Area (cts)	Avg. Mass (ug)	Avg. Conc (PPM)	Std. Dev	% RSD	Notes
1	1	BLANK	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	702	0.020	0.009	106	15.06	Pass
2	2	ICV 40 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	167,850	94.421	39.342	4,051	2.41	Fail
3	3	ICB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	657	0.026	0.011	131	19.96	Fail
4	4	LCS 20 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	83,228	46.630	19.429	1,139	1.37	Fail
5	5	LCSD 20 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	83,634	46.859	19.525	1,093	1.31	Fail
6	6	MB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	595	0.001	0.000	59	10.00	Fail
7	7	180-112876-E-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	32,323	17.847	7.436	1,237	3.83	Pass
8	8	180-112876-E-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	18,215	9.879	4.116	844	4.64	Pass
9	9	180-112876-E-3	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	10,454	5.496	2.290	501	4.79	Pass
10	10	180-112876-E-4	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	6,663	3.349	1.396	331	4.97	Pass
11	11	180-112876-E-5	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	4,295	2.018	0.841	187	4.36	Pass
12	12	180-112876-E-6	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	4,878	2.347	0.978	200	4.10	Pass
13	13	180-112945-E-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	38,787	21.497	8.957	768	1.98	Pass
14	14	CCV 10 PPM	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk	1:1	00000000	TOC	39,929	22.176	9.240	294	0.74	Fail
15	15	CCB	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	602	0.002	0.001	100	16.67	Fail
16	16	180-112945-D-1 MS	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Standard	1:1	00000000	TOC	78,626	43.997	18.332	1,467	1.87	Pass
17	17	180-112945-C-1 MSD	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	79,085	44.256	18.440	1,075	1.36	Pass
18	18	180-112945-D-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	38,102	21.111	8.796	1,270	3.33	Pass
19	19	180-112945-E-3	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	36,461	20.184	8.410	1,490	4.09	Pass
20	20	240-140458-G-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	277,297	156.198	65.083	5,340	1.93	Pass
21	21	240-140458-G-2	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	41,591	23.081	9.617	1,116	2.68	Pass
22	22	240-140458-H-5	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	8,476	4.379	1.825	199	2.34	Pass
23	23	240-140720-G-1	4	4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1:1	00000000	TOC	33,801	18.682	7.784	399	1.18	Pass

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Line	Sample ID	Sample Name	Sample Type	Concentration	TOC	By	Pass/Fail
24	240-140720-H-2	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1 00000000	6,763	1.422	336 4.97 Pass
25	240-140720-G-3	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1 00000000	2,863	0.504	43 1.51 Pass
26	26 CCV 10 PPM	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk Standard	1 : 1 00000000	41,531	9.617	766 1.84 Fail
27	27 CCB	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk Standard	1 : 1 00000000	658	0.013	142 21.57 Fail
28	240-140720-J-4	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1 00000000	8,049	1.724	453 5.63 Pass
29	240-140720-F-5	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1 00000000	28,942	6.641	696 2.40 Pass
30	240-140720-J-6	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1 00000000	17,523	3.954	441 2.52 Pass
31	240-140720-J-7	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Sample	1 : 1 00000000	77,164	17.988	2,190 2.84 Pass
32	32 CCV 10 PPM	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk Standard	1 : 1 00000000	41,648	9.645	771 1.85 Fail
33	33 CCB	TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM	Chk Standard	1 : 1 00000000	640	0.007	64 9.98 Fail

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Sample Results

Spl #: 1 Sample ID: BLANK Type: Sample Date: 11/24/2020 Status: Pass
 Vial #: 1 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:29 pm	-	-	-	801	0.045	0.019
2	4:35 pm	-	-	-	786	0.036	0.015
3	4:41 pm	-	-	-	620	0.000	0.000
4	4:47 pm	-	-	-	602	0.000	0.000

Avg. 702 0.020 0.009
 Std.Dev.
 % RSD. 15.06

Spl #: 2 Sample ID: ICV 40 PPM Type: Chk Standard Date: 11/24/2020 Status: Fail
 Vial #: 2 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:56 pm	-	-	-	161,880	91.049	37.937
2	5:02 pm	-	-	-	169,576	95.395	39.748
3	5:08 pm	-	-	-	170,865	96.123	40.051
4	5:13 pm	-	-	-	169,082	95.116	39.632

Avg. 167,850 94.421 39.342
 Std.Dev.
 % RSD. 2.41

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By:

Status: Fail

Spl #: 3 Sample ID: ICB Type: Chk Standard Date: 11/24/2020
 Vial #: 3 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:22 pm	-	-	-	837	0.099	0.041
2	5:28 pm	-	-	-	670	0.004	0.002
3	5:34 pm	-	-	-	546	0.000	0.000
4	5:40 pm	-	-	-	575	0.000	0.000

Avg. 657 0.026 0.011
 Std.Dev.
 % RSD. 19.96

Spl #: 4 Sample ID: LCS 20 PPM Type: Chk Standard Date: 11/24/2020
 Vial #: 4 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:49 pm	-	-	-	81,560	45.688	19.037
2	5:54 pm	-	-	-	83,598	46.839	19.516
3	6:00 pm	-	-	-	84,132	47.141	19.642
4	6:06 pm	-	-	-	83,621	46.852	19.522

Avg. 83,228 46.630 19.429
 Std.Dev.
 % RSD. 1.37

Date Prepared: 11/25/2020 By:

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Spl #: 5 Sample ID: LCSD 20 PPM Type: Chk Standard Date: 11/24/2020 Status: Fail
Vial #: 5 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:16 pm	-	-	-	82,384	46.153	19.230
2	6:21 pm	-	-	-	83,262	46.649	19.437
3	6:27 pm	-	-	-	83,914	47.017	19.590
4	6:33 pm	-	-	-	84,977	47.618	19.841
Avg.		-	-	-	83,634	46.859	19.525
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	1.31	-	-

Spl #: 6 Sample ID: MB Type: Chk Standard Date: 11/24/2020 Status: Fail
Vial #: 6 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:42 pm	-	-	-	667	0.003	0.001
2	6:48 pm	-	-	-	589	0.000	0.000
3	6:54 pm	-	-	-	602	0.000	0.000
4	6:59 pm	-	-	-	522	0.000	0.000
Avg.		-	-	-	595	0.001	0.000
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	10.00	-	-

Date Prepared: 11/25/2020

By: [Signature]

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Spl #: 7 Sample ID: 180-112876-E-1 Type: Dilution Date: 11/24/2020 Status: Pass
Vial #: 7 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:09 pm	-	-	-	30,472	16,802	7,001
2	7:15 pm	-	-	-	32,819	18,127	7,552
3	7:21 pm	-	-	-	32,990	18,224	7,593
4	7:27 pm	-	-	-	33,010	18,235	7,598
Avg.		-	-	-	32,323	17,847	7,436
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	3.83	-	-

Spl #: 8 Sample ID: 180-112876-E-2 Type: Dilution Date: 11/24/2020 Status: Pass
Vial #: 8 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	7:36 pm	-	-	-	17,042	9,217	3,840
2	7:42 pm	-	-	-	18,681	10,142	4,225
3	7:48 pm	-	-	-	18,183	9,861	4,108
4	7:54 pm	-	-	-	18,954	10,297	4,290
Avg.		-	-	-	18,215	9,879	4,116
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	4.64	-	-

Date Prepared: 11/25/2020 By:

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Date Approved: By:

Spl #: 9 Sample ID: 180-112876-E-3 Type: Date: 11/24/2020 Status: Pass
 Vial #: 9 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:03 pm	-	-	-	10,030	5.257	2.190
2	8:09 pm	-	-	-	10,637	5.600	2.333
3	8:15 pm	-	-	-	10,069	5.279	2.199
4	8:20 pm	-	-	-	11,079	5.849	2.437
Avg.		-	-	-	10,454	5.496	2.290
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	4.79	-	-

Spl #: 10 Sample ID: 180-112876-E-4 Type: Date: 11/24/2020 Status: Pass
 Vial #: 10 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:30 pm	-	-	-	6,313	3.158	1.316
2	8:36 pm	-	-	-	6,589	3.314	1.381
3	8:41 pm	-	-	-	6,601	3.320	1.384
4	8:47 pm	-	-	-	7,107	3.606	1.502
Avg.		-	-	-	6,653	3.349	1.396
Std.Dev.		-	-	-	-	-	-
% RSD.		-	-	-	4.97	-	-

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Pass

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Spl #: 11 Sample ID: 180-112876-E-5 Type: Dilution
Vial #: 11 Method: TOC OCT 2020 - Oct 08, 2020 Customer ID: C0000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	8:57 pm	-	-	-	4,145	1.933	0.806
2	9:03 pm	-	-	-	4,199	1.964	0.818
3	9:08 pm	-	-	-	4,271	2.004	0.835
4	9:14 pm	-	-	-	4,565	2.170	0.904

Avg. 4,295 2.018 0.841
 Std.Dev.
 % RSD. 4.36

Spl #: 12 Sample ID: 180-112876-E-6 Type: Dilution
Vial #: 12 Method: TOC OCT 2020 - Oct 08, 2020 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:23 pm	-	-	-	4,931	2.377	0.991
2	9:29 pm	-	-	-	4,706	2.250	0.938
3	9:35 pm	-	-	-	4,736	2.267	0.944
4	9:41 pm	-	-	-	5,138	2.494	1.039

Avg. 4,878 2.347 0.978
 Std.Dev.
 % RSD. 4.10

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Pass

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Spl #: 13 Sample ID: 180-112945-E-1 Type: Sample Date: 11/24/2020
Vial #: 13 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: C0000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	9:50 pm	-	-	-	37,740	20,906	8.711
2	9:55 pm	-	-	-	39,288	21,781	9.075
3	10:01 pm	-	-	-	39,428	21,860	9.108
4	10:07 pm	-	-	-	38,690	21,443	8.934

Avg. 38,787 21,497 8.957

Std.Dev.
% RSD. 1.98

Spl #: 14 Sample ID: CCV 10 PPM Type: Chk Standard Date: 11/24/2020
Vial #: 14 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:16 pm	-	-	-	39,613	21,998	9.166
2	10:22 pm	-	-	-	40,180	22,318	9.299
3	10:28 pm	-	-	-	39,744	22,072	9.197
4	10:34 pm	-	-	-	40,179	22,317	9.299

Avg. 39,929 22,176 9.240

Std.Dev.
% RSD. 0.74

Date Prepared: 11/25/2020

By:

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Spl #: 15 Sample ID: CCB Type: Chk-Standard Date: 11/24/2020 Status: Fail
Vial #: 15 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: C0000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	10:43 pm	-	-	-	652	0.000	0.000
2	10:49 pm	-	-	-	629	0.000	0.000
3	10:55 pm	-	-	-	675	0.007	0.002
4	11:00 pm	-	-	-	454	0.000	0.000

Avg. 602 0.002 0.001
Std.Dev.
% RSD. 16.67

Spl #: 16 Sample ID: 180-112945-D-1 MS Type: Sample Date: 11/24/2020 Status: Pass
Vial #: 16 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:09 pm	-	-	-	76,877	43.009	17.921
2	11:15 pm	-	-	-	78,665	44.019	18.341
3	11:21 pm	-	-	-	80,464	45.035	18.765
4	11:27 pm	-	-	-	78,497	43.924	18.302

Avg. 78,626 43.997 18.332
Std.Dev.
% RSD. 1.87

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TOC

Date Prepared: 11/25/2020 By:

Date Approved: By:

Spl #: 17 Sample ID: 180-112945-C-1 MSD Type: Sample Date: 11/24/2020 Status: Pass
 Vial #: 17 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	11:36 pm	-	-	-	77,681	43,463	18,110
2	11:42 pm	-	-	-	78,858	44,128	18,387
3	11:48 pm	-	-	-	80,136	44,850	18,688
4	11:54 pm	-	-	-	79,666	44,584	18,577
Avg.		-	-	-	79,085	44,256	18,440
Std.Dev.							
% RSD.					1.36		

Spl #: 18 Sample ID: 180-112945-D-2 Type: Sample Date: 11/25/2020 Status: Pass
 Vial #: 18 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:03 am	-	-	-	36,415	20,158	8,399
2	12:09 am	-	-	-	37,906	21,000	8,750
3	12:15 am	-	-	-	39,343	21,811	9,088
4	12:21 am	-	-	-	38,745	21,474	8,947
Avg.		-	-	-	38,102	21,111	8,796
Std.Dev.							
% RSD.					3.33		

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Pass

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Spl #: 19 Sample ID: 180-112945-E-3 Type: Dilution
Vial #: 19 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:31 am	-	-	-	34,306	18,967	7,903
2	12:37 am	-	-	-	37,740	20,906	8,710
3	12:42 am	-	-	-	36,899	20,431	8,512
4	12:48 am	-	-	-	36,897	20,430	8,513

Avg. 36,461 20,184 8,410
 Std.Dev.
 % RSD. 4.09

Spl #: 20 Sample ID: 240-140458-G-1 Type: Dilution
 Vial #: 20 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1:1

Status: Pass

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	12:57 am	-	-	-	269,890	152,015	63,339
2	1:03 am	-	-	-	277,254	156,174	65,072
3	1:08 am	-	-	-	282,231	158,985	66,244
4	1:14 am	-	-	-	279,813	157,619	65,675

Avg. 277,297 156,198 65,083
 Std.Dev.
 % RSD. 1.93

Date Prepared: 11/25/2020 By:

Date Approved: By:

Status: Pass

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Spl #: 21 Sample ID: 240-140458-G-2 Type: Sample... Date: 11/25/2020
Vial #: 21 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:24 am	-	-	-	40,174	22.281	9.284
2	1:29 am	-	-	-	41,297	22.915	9.548
3	1:35 am	-	-	-	42,747	23.734	9.889
4	1:41 am	-	-	-	42,148	23.395	9.748

Avg. 41,591 23.081 9.617
Std.Dev.
% RSD. 2.68

Spl #: 22 Sample ID: 240-140458-H-5 Type: Sample Date: 11/25/2020
Vial #: 22 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1:1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	1:51 am	-	-	-	8,470	4.376	1.823
2	1:56 am	-	-	-	8,506	4.396	1.832
3	2:02 am	-	-	-	8,705	4.509	1.879
4	2:08 am	-	-	-	8,221	4.235	1.765

Avg. 8,476 4.379 1.825
Std.Dev.
% RSD. 2.34

Date Prepared: 11/25/2020

By:

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Sample ID: 240-140720-G-1

Spl #: 23

Vial #: 23

Date Approved:

By:

Type: TOC OCT 2020 - Oct 08, 2020

Method: TOC OCT 2020 - Oct 08, 2020

Dilution: 1 : 1

Status: Pass

Date: 11/25/2020

Sample

Customer ID: 00000000

Dilution: 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:18 am	-	-	-	33,259	18,375	7.656
2	2:23 am	-	-	-	33,744	18,649	7.771
3	2:29 am	-	-	-	34,075	18,837	7.849
4	2:35 am	-	-	-	34,126	18,865	7.861
Avg.		-	-	-	33,801	18,682	7.784
Std.Dev.							
% RSD.		1.18					

Status: Pass

Date: 11/25/2020

Sample

Customer ID: 00000000

Dilution: 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:45 am	-	-	-	6,517	3,273	1.364
2	2:50 am	-	-	-	6,764	3,412	1.422
3	2:56 am	-	-	-	7,239	3,680	1.533
4	3:02 am	-	-	-	6,534	3,282	1.368
Avg.		-	-	-	6,763	3,412	1.422
Std.Dev.							
% RSD.		4.97					

Date Prepared: 11/25/2020

By:

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Status: Pass

Sample ID: 240-140720-G-3
Method: TOC OCT 2020 - Oct 08, 2020
Type: TOC
Dilution: 1 : 1
Date: 11/25/2020
Customer ID: 00000000

Spl #: 25
Vial #: 25
Sample ID: 240-140720-G-3
Method: TOC OCT 2020 - Oct 08, 2020
Type: TOC
Dilution: 1 : 1
Date: 11/25/2020
Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:11 am	-	-	-	2,919	1.241	0.517
2	3:17 am	-	-	-	2,830	1.190	0.495
3	3:23 am	-	-	-	2,877	1.217	0.507
4	3:29 am	-	-	-	2,828	1.189	0.496
Avg.					2,863	1.209	0.504
Std.Dev.							
% RSD.					1.51		

Status: Fail

Sample ID: CCV 10 PPM
Method: TOC OCT 2020 - Oct 08, 2020
Type: TOC
Dilution: 1 : 1
Date: 11/25/2020
Customer ID: 00000000

Spl #: 26
Vial #: 26
Sample ID: CCV 10 PPM
Method: TOC OCT 2020 - Oct 08, 2020
Type: TOC
Dilution: 1 : 1
Date: 11/25/2020
Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:38 am	-	-	-	40,616	22.564	9.402
2	3:43 am	-	-	-	41,274	22.936	9.557
3	3:49 am	-	-	-	42,406	23.575	9.822
4	3:55 am	-	-	-	41,830	23.250	9.688
Avg.					41,531	23.081	9.617
Std.Dev.							
% RSD.					1.84		

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Date Prepared: 11/25/2020 By:

Date Approved: By:

Spl #: 27 Sample ID: CCB Type: Chk Standard Date: 11/25/2020 Status: Fail
 Vial #: 27 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:04 am	-	-	-	587	0.000	0.000
2	4:10 am	-	-	-	722	0.034	0.014
3	4:16 am	-	-	-	822	0.090	0.038
4	4:22 am	-	-	-	502	0.000	0.000
Avg.					658	0.031	0.013
Std.Dev.							
% RSD.					21.57		

Spl #: 28 Sample ID: 240-140720-J-4 Type: Sample Date: 11/25/2020 Status: Pass
 Vial #: 28 Method: TOC OCT 2020 - Oct 08, 202C Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:31 am	-	-	-	7,521	3.840	1.599
2	4:36 am	-	-	-	7,834	4.016	1.674
3	4:42 am	-	-	-	8,508	4.397	1.832
4	4:48 am	-	-	-	8,334	4.299	1.791
Avg.					8,049	4.138	1.724
Std.Dev.							
% RSD.					5.63		

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By:

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Status: Pass

Sample Date: 11/25/2020
Customer ID: 00000000

Spl #: 29 Sample ID: 240-140720-F-5 Type: TOC
Vial #: 29 Method: TOC OCT 2020 - Oct 08, 2020 Dilution: 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:58 am	-	-	-	28,442	15,655	6.523
2	5:04 am	-	-	-	28,351	15,604	6.502
3	5:09 am	-	-	-	29,846	16,448	6.853
4	5:15 am	-	-	-	29,130	16,044	6.685
Avg.					28,942	15,938	6.641
Std.Dev.							
% RSD.							2.40

Status: Pass

Sample Date: 11/25/2020
Customer ID: 00000000

Spl #: 30 Sample ID: 240-140720-J-6 Type: TOC
Vial #: 30 Method: TOC OCT 2020 - Oct 08, 2020 Dilution: 1 : 1

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:24 am	-	-	-	17,048	9,220	3.842
2	5:30 am	-	-	-	17,249	9,334	3.889
3	5:36 am	-	-	-	17,942	9,725	4.052
4	5:42 am	-	-	-	17,851	9,674	4.031
Avg.					17,523	9,488	3.954
Std.Dev.							
% RSD.							2.52

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Date Prepared: 11/25/2020

By:

Date Approved:

By:

Status: Pass

Spl #: 31 Sample ID : 240-140720-J-7 Type : Date: 11/25/2020
 Vial #: 31 Method : TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:52 am	-	-	-	74,350	41,582	17,326
2	5:57 am	-	-	-	76,576	42,839	17,850
3	6:03 am	-	-	-	79,272	44,362	18,483
4	6:09 am	-	-	-	78,459	43,903	18,293

Avg. 77,164 43,171 17,988
 Std.Dev.
 % RSD. 2.84

Spl #: 32 Sample ID : CCV 10 PPM Type : Chk Standard Date: 11/25/2020
 Vial #: 32 Method : TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Status: Fail

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:19 am	-	-	-	40,557	22,531	9,388
2	6:24 am	-	-	-	41,656	23,152	9,647
3	6:30 am	-	-	-	42,242	23,483	9,785
4	6:36 am	-	-	-	42,136	23,423	9,760

Avg. 41,648 23,147 9,645
 Std.Dev.
 % RSD. 1.85

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TOC

Date Prepared: 11/25/2020

By:

Date Approved:

By:

Spl #: 33 Sample ID: CCB Type: Chk Standard Date: 11/25/2020 Status: Fail
 Vial #: 33 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	6:45 am	-	-	-	561	0.000	0.000
2	6:51 am	-	-	-	663	0.000	0.000
3	6:57 am	-	-	-	712	0.028	0.012
4	7:03 am	-	-	-	626	0.000	0.000

Avg. 640 0.007 0.003
 Std.Dev.
 % RSD. 9.98

Method Summary

Method Details

Method Name: TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM

Date Created: 10/08/2020

Time Created: 13:42

Created By: toc

Analysis Mode: NPOC Only

Sparging Mode: Internal

Pre-Acid Volume (mL): 1.000

Sparge Time (mm:ss): 02:00

Volumes

Sample Volume (mL): 2.400

Acid Volume (mL): 1.000

Persulfate Volume(mL): 1.500

Other

SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled

Dilution Mode: Automatic

Dilution Factor: 1 : 1

Outlier Removal Criteria

Enabled: No

Additional Replicates: 1

Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000

Rinses/Per Sample: 1

Rinses/Per Replicate: 0

Max. Std. Dev.: 0.100

Use Modified Oxidant: No

Times

React: 01:30

Detect: 03:00

Temp: TIC

React: 02:00

Detect: 03:00

Temp: TOC

React: 70

Detect: 70

Temp: 98

Calibration Summary

Calibration Generation

Generation Mode: Manual

of Stds: 5

Dilution Factor: 10 : 1

Dilution Volume (mL): 1.000

Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.995	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC

User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Continue	Continue
QC #1	40.000	10.00	Continue	Continue
QC #2	20.000	20.00	Continue	Continue
QC #3	25.000	10.00	Continue	Continue
QC #4	0.000	10.00	Continue	Continue
QC #5	0.000	15.00	Continue	Continue

Date Prepared: 11/25/2020 By:

Date Approved: By:

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Calibration Details

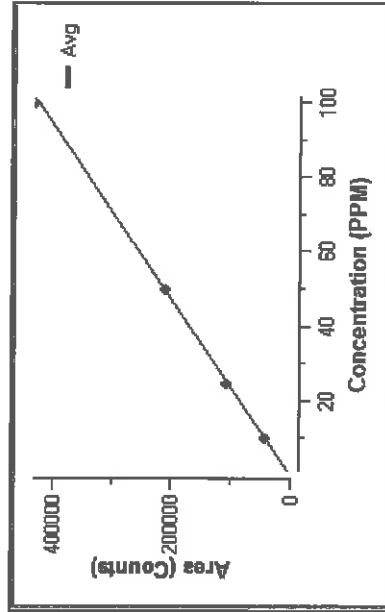
Calibration Mode: TOC
Date Calibrated: 10/08/2020
Time Calibrated: 5:27 pm
Calibrated By: toc
RF (ugC/k-cts): 0.5648
R2: 0.9992
R: 0.9996
QC Blank(cts): 1,430
Offset (cts): 674
Offset (ugC): -0.381
Reagent Blank (cts): 722
Units of Measure: PPM->mg/L C

Calibration Settings

Stock Conc. For Dilutions: (PPM) 1,000.000
of Reagent Blanks: 3
EFC Enabled: No
Total Flowrate w/EFC: 100 ml/min
Check Standards: Subtract RW
Samples: Subtract RB
Regression type: Weighted Linear
weighting factor => 1 / mass

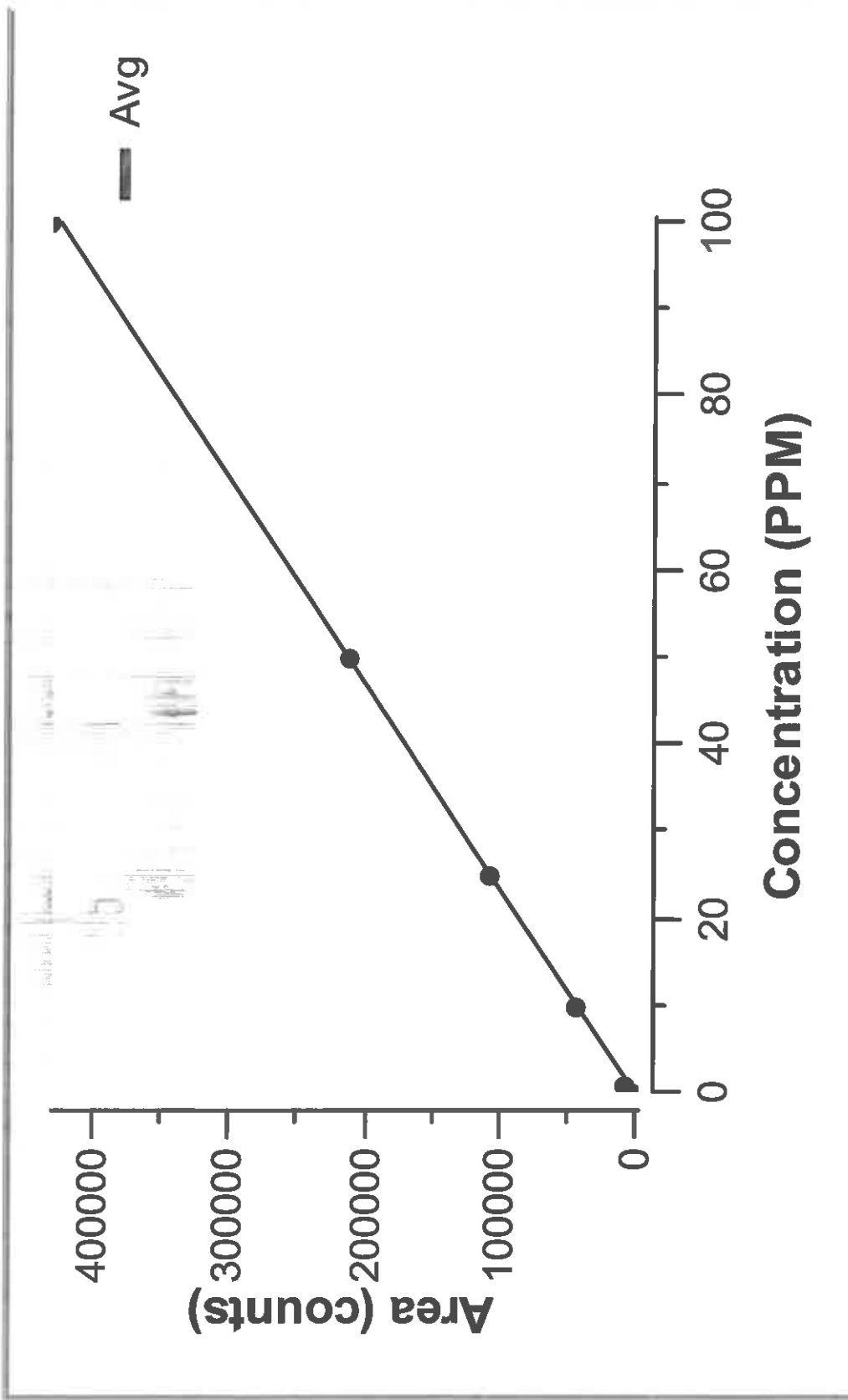
Calculations:

Concentration = $\frac{RF \times Area}{1000 \times volume}$
Samples: Area = Area Peak - Area Offset or Area = Area Peak - Area RB
CHK Stds: Area = Area Peak - Area Offset or Area = Area Peak - Area RW
QC Samples: Area = Area Peak - Area GC Blank



y = m x x + b

y => Area
m => 1000 / RF x volume
b => 0



Calibration - Quick View -TOC

Revision: 1-TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM

Modified By: toc

Date Created: 2020/10/08; 01:42 PM

Last Modified: 2020/10/08; 05:08 PM

Last Calibrated: 2020/10/08; 05:08 PM

RF(ugC/k-ent): 0.5648

R2: 0.9992

Reagent Blank(cts): 722

Offset Area(cts): 674

Offset Mass(ugC): -0.38

Std #	Conc (PPM)	Volume (mL)	# Reps	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	662	49	7.35	2020-10-08; 03:37PM
1	1.000	2.400	2	5,780	894	15.47	2020-10-08; 04:01PM
2	10.000	2.400	2	41,583	619	1.49	2020-10-08; 04:16PM
3	25.000	2.400	2	106,117	2,774	2.61	2020-10-08; 04:31PM
4	50.000	2.400	2	209,986	3,616	1.72	2020-10-08; 04:46PM
5	100.000	2.400	2	430,699	11,254	2.61	2020-10-08; 05:02PM

User ID: toc	Name: Total Organic Carbon
Title: Mr	Dept: OIC-TOC

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Date Prepared: 10/08/2020 By:
 Date Approved: By:

TOC

Sample Results

Spl #: 1 Sample ID: DI WATER Type: Sample Date: 10/08/2020 Status: Pass
 Vial #: 1 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:23 pm	-	-	-	3,455	0.000	0.000
2	2:28 pm	-	-	-	3,119	0.000	0.000
3	2:34 pm	-	-	-	2,951	0.000	0.000
4	2:40 pm	-	-	-	2,166	0.000	0.000

Avg. 2,923 0.000 0.000
 Std.Dev.
 % RSD. 18.69

Spl #: 2 Sample ID: BLANK Type: Sample Date: 10/08/2020 Status: Pass
 Vial #: 2 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	2:49 pm	-	-	-	2,464	0.000	0.000
2	2:54 pm	-	-	-	1,699	0.000	0.000

Avg. 2,081 0.000 0.000
 Std.Dev.
 % RSD. 25.98

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 Date Approved: By:

TOC

Spl #: 4 Sample ID: TOC-RW Type: Std Date: 10/08/2020 Status:
 Vial #: 3 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: C0000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	3:37 pm	-	-	-	1,369	0.000	0.000
2	3:43 pm	-	-	-	697	0.000	0.000
3	3:52 pm	-	-	-	628	0.000	0.000

Avg. 662 0.000 0.000
 Std.Dev.
 % RSD. 7.35

Spl #: 5 Sample ID: TOC-Std#1-1.000 PPM Type: Std Date: 10/08/2020 Status:
 Vial #: 4 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:01 pm	-	-	-	6,412	2.400	1.000
2	4:06 pm	-	-	-	5,148	2.400	1.000

Avg. 5,780 2.400 1.000
 Std.Dev.
 % RSD. 15.47

Spl #: 6 Sample ID: TOC-Std#2-10.000 PPM Type: Std Date: 10/08/2020 Status:
 Vial #: 5 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:16 pm	-	-	-	41,145	24.000	10.000
2	4:21 pm	-	-	-	42,021	24.000	10.000

Avg. 41,583 24.000 10.000
 Std.Dev.
 % RSD. 1.49

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Date Prepared: 10/08/2020 By:
 Date Approved: By:

Spl #: 7 Sample ID: TOC-Std#3-25.000 PPM Type: Std Status:
 Vial #: 6 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000 Date: 10/08/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:31 pm	-	-	-	104,156	60.000	25.000
2	4:37 pm	-	-	-	108,078	60.000	25.000

Avg. 106,117 60.000 25.000
 Std.Dev.
 % RSD. 2.61

Spl #: 8 Sample ID: TOC-Std#4-50.000 PPM Type: Std Status:
 Vial #: 7 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000 Date: 10/08/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	4:46 pm	-	-	-	207,429	120.000	50.000
2	4:52 pm	-	-	-	212,543	120.000	50.000

Avg. 209,986 120.000 50.000
 Std.Dev.
 % RSD. 1.72

Spl #: 9 Sample ID: TOC-Std#5-100.000 PPM Type: Std Status:
 Vial #: 8 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000 Date: 10/08/2020

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:02 pm	-	-	-	422,741	240.000	100.000
2	5:07 pm	-	-	-	438,656	240.000	100.000

Avg. 430,699 240.000 100.000
 Std.Dev.
 % RSD. 2.61

TEST AMERICA
 301 ALPHA DRIVE
 PITTSBURGH, PA.
 15238
 USA

Date Prepared: 10/08/2020 By:
 Date Approved: By:

TOC

Spl #: 10 Sample ID: QC BLANK Type: QC Blank Date: 10/08/2020 Status:
 Vial #: 9 Method: TOC OCT 2020 - Oct 08, 2020 Dilution 1 : 1 Customer ID: 00000000

Rep #	Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (PPM)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (PPM)
1	5:21 pm			-	1,736	0.000	0.000
2	5:27 pm			-	1,126	0.000	0.000

Avg. 1,431 0.000 0.000
 Std.Dev. 30.14
 % RSD.

TEST AMERICA
 301 ALPHA DRIVE
 PITTSBURGH, PA.
 15238
 USA

Date Prepared: 10/08/2020 By: *TOC*
 Date Approved: By:

Method Summary

Method Details

Method Name: TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Date Created: 10/08/2020
 Time Created: 13:42
 Created By: toc
 Analysis Mode: NPOC Only
 Sparging Mode: Internal
 Pre-Acid Volume (mL): 1.000
 Sparge Time (mm:ss): 02:00
 Volumes
 Sample Volume (mL): 2.400
 Acid Volume (mL): 1.000
 Persulfate Volume(mL): 1.500
 Other
 SysPressure: 20.00

Pre-Processing

Sample Dilution: Disabled
 Dilution Mode: Automatic
 Dilution Factor: 1 : 1

Times

TIC
 TOC

Temp

TIC
 TOC

React 70
 Detect 70
 React 98
 Detect 98

Outlier Removal Criteria

Enabled: No
 Additional Replicates: 1
 Max. % RSD: 10.00

Rinses

Rinse Volume (mL): 10.000
 Rinses Per Sample: 1
 Rinses Per Replicate: 0

Max. Std. Dev. 100 Use Modified Oxidant: No

Calibration Summary

Calibration Generation

Generation Mode: Manual
 # of Stds: 5
 Dilution Factor: 10 : 1
 Dilution Volume (mL): 1.000
 Add Zero as Std #1: No

Calibration Pass/Fail Criteria

Parameter	Enabled	Low	High	Failure
RE (ugC/K-cts)	Yes	0.1000	0.3000	Continue
Offset (area) (cts)	Yes	0.995	1.000	Continue
Offset (mass) (ugC)	No	-	-	-
QC Blank(cts)	No	-	-	-

Calibration Mode

Primary Mode: TOC
 User for ALL Modes: Enabled

Checks, QC's and Actions

Type	Target (PPM)	Tolerance (+/- %)	1st Failure	2nd Failure
CK Std	n/a	10.00	Continue	Continue
QC #1	40.000	10.00	Continue	Continue
QC #2	20.000	20.00	Continue	Continue
QC #3	25.000	10.00	Continue	Continue
QC #4	0.000	10.00	Continue	Continue
SST	0.000	15.00	Continue	Continue

TEST AMERICA
 301 ALPHA DRIVE
 PITTSBURGH, PA.
 15238
 USA

By: *IOC*

Date Prepared: 10/08/2020

By:

USA

Date Approved:

By:

Calibration Details

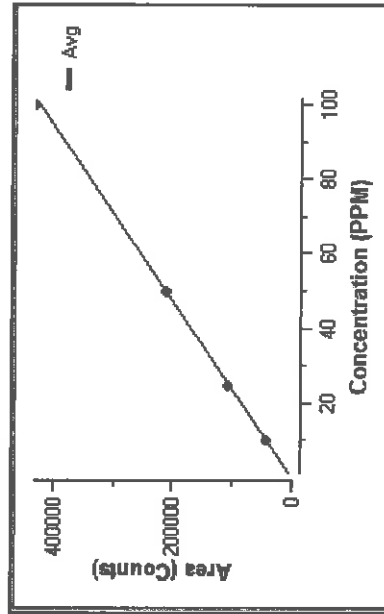
Calibration Mode: TOC
 Date Calibrated: 10/08/2020
 Time Calibrated: 5:08 pm
 Calibrated By: toc
 RF (ugC/k-cts): 0.5648
 R2: 0.9992
 R: 0.9996
 QC Blank(cts): 0
 Offset (cts): 674
 Offset (ugC): -0.381
 Reagent Blank (cts): 722
 Units of Measure: PPM->mg/L C

Calibration Settings

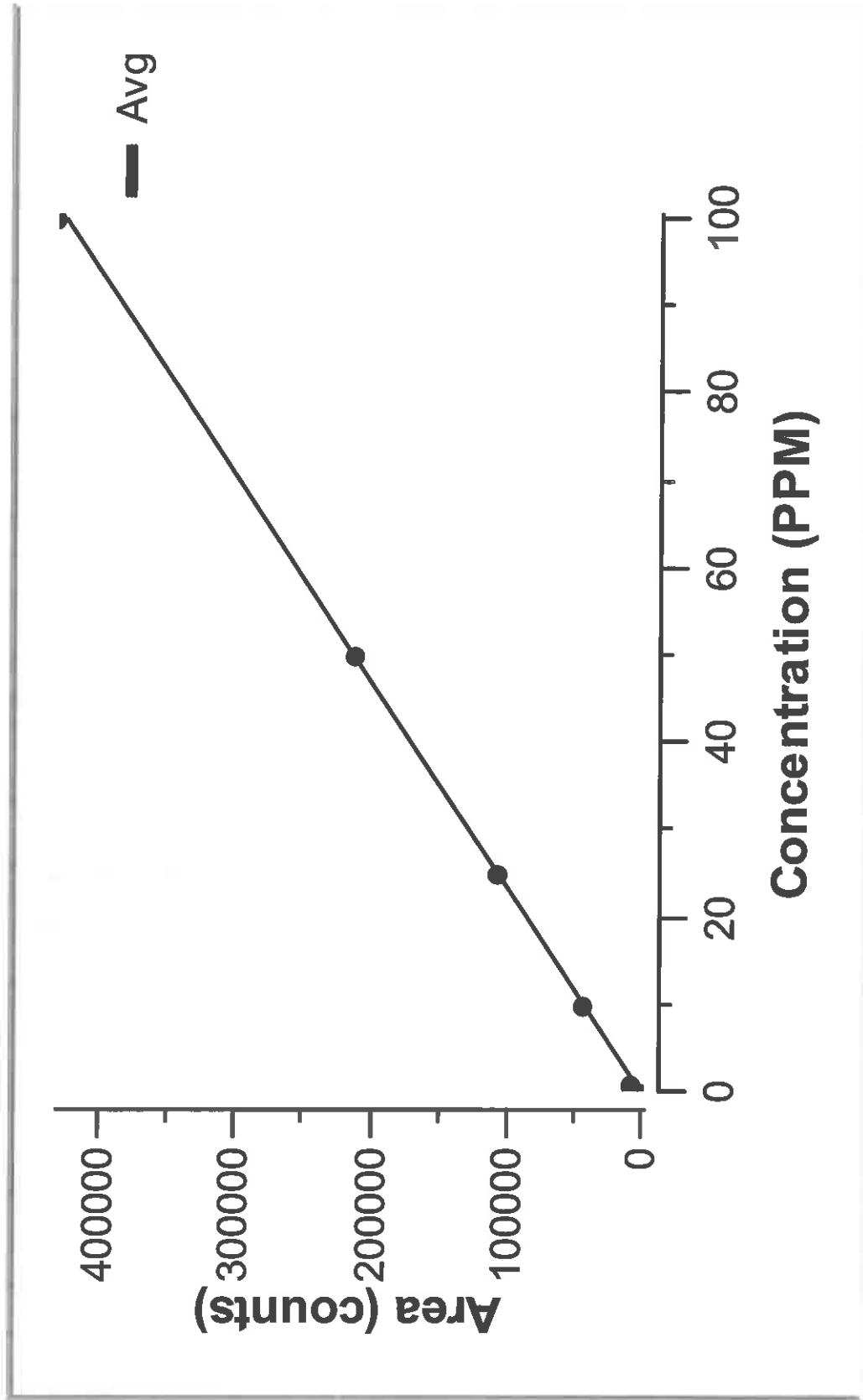
Stock Conc. For Dilutions: (PPM) 1,000.000
 # of Reagent Blanks: 3
 EFC Enabled: No
 Total Flowrate w/EFC: 100 ml/min
 Check Standards: Subtract RW
 Samples: Subtract RB
 Regression type: Weighted Linear
 weighting factor => 1 / mass

Calculations:

$Concentration = \frac{RF \times Area}{volume}$
 Samples: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RB}$
 CHK Stds: $Area = Area_{Peak} - Area_{Offset}$ or $Area = Area_{Peak} - Area_{RW}$
 QC Samples: $Area = Area_{Peak} - Area_{QCBlank}$



$y \Rightarrow Area$
 $y = m \times x + b$
 $m \Rightarrow \frac{1000}{RF \times volume}$
 $b \Rightarrow 0$



User ID:toc	Name:Total Organic Carbon
Title:Mr	Dept:OIC-TOC

Calibration - Quick View -TOC

Revision: 1-TOC OCT 2020 - Oct 08, 2020; 01-42-54 PM
 Modified By: toc
 Date Created: 2020/10/08; 01:42 PM
 Last Modified: 2020/10/08; 05:08 PM
 Last Calibrated: 2020/10/08; 05:08 PM

RF(ugC/k-cnt): 0.5648
 R2: 0.9992
 Reagent Blank(cts): 722
 Offset Area(cts): 674
 Offset Mass(ugC): -0.38

Std #	Conc (PPM)	Volume (mL)	# Repts	Area	Std. Dev	%RSD	Date Analysed
RW	0.000	2.400	2	662	49	7.35	2020-10-08; 03:37PM
1	1.000	2.400	2	5,780	894	15.47	2020-10-08; 04:01PM
2	10.000	2.400	2	41,583	619	1.49	2020-10-08; 04:16PM
3	25.000	2.400	2	106,117	2,774	2.61	2020-10-08; 04:31PM
4	50.000	2.400	2	209,986	3,616	1.72	2020-10-08; 04:46PM
5	100.000	2.400	2	430,699	11,254	2.61	2020-10-08; 05:02PM



TMA 10/08/20

5310C/9060A TOC %Readback Error Calculation Spreadsheet

ICAL Std (ppm)	ICAL RF	ICAL ID	Average Area	Result (ppm)	%Readback Error	%Readback Criteria
1.000	0.5648	100820TOCCAL	5780	1.360	36.023	≤50%
10.000	0.5648	100820TOCCAL	41583	9.786	-2.141	≤20%
25.000	0.5648	100820TOCCAL	106117	24.973	-0.109	≤20%
50.000	0.5648	100820TOCCAL	209986	49.417	-1.167	≤20%
100.000	0.5648	100820TOCCAL	430699	101.358	1.358	≤20%

General Chemistry Raw Data Report

Job ID: 180-112945-1

Batch: 335392
Method: SM 2540D

Analyst Initials: AVS
Instrument: No Equipment

Lab Sample ID: LCS 180-335392/1

Analysis Date: Oct 30, 2020 11:19

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Total Suspended Solids	None	1	1.70000000000001	mg/L	50 mL	1000 mL

Lab Sample ID: MB 180-335392/2

Analysis Date: Oct 30, 2020 11:19

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Total Suspended Solids	None	1	0	mg/L	1000 mL	1000 mL

Lab Sample ID: 180-112945-A-1

Analysis Date: Oct 30, 2020 11:19

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Total Suspended Solids	None	1	2.1	mg/L	1000 mL	1000 mL

Lab Sample ID: 180-112945-B-1 DU

Analysis Date: Oct 30, 2020 11:19

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Total Suspended Solids	None	1	2	mg/L	1000 mL	1000 mL

Lab Sample ID: 180-112945-A-2

Analysis Date: Oct 30, 2020 11:19

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Total Suspended Solids	None	1	1	mg/L	1000 mL	1000 mL

Lab Sample ID: 180-112945-A-3

Analysis Date: Oct 30, 2020 11:19

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Total Suspended Solids	None	1	19.7	mg/L	1000 mL	1000 mL

Shipping and Receiving Documents

EUROFINS TENTAMERICA
 301 ALPHA DR. REDX PARK
 PITTSBURGH, PA 15238
 Address: 412-963-7050

Chain of Custody Record 435660 eurofins

Environment Testing
 TestAmerica

TAL-8210

Regulatory Program: DW NPDES RCRA Other:

Client Contact Company Name: WOOD EBES Address: 511 COUNTESS ST, City/State/Zip: PORTLAND, ME 04101 Phone: 207-828-5461 Fax: Project Name: PENOBSCOT Site: PO# 3617207486,02		Project Manager: BOBBI BURNETTE Site Contact: DENISE KAY Lab Contact: Tel/Email: Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Date: 10/29/20 Carrier: COC No: _____ of _____ COCs	
Sample Identification		Sample Specific Notes:		Sample Specific Notes:	
OV-02-102920-SW-10	10/29/20 0830	G	W	2 2 1	DOC 45 MIERON
OV-02-102920-SW-10-DUF	0830	G	W	2 2 1	FEED FILTERED
OV-02-102920-SW-10-MS	0830	G	W	2 2 1	
OV-02-102920-SW-10-MSD	0830	G	W	2 2 1	
ATD-02-102920-SW-10	1130	G	W	2 2 1	
BPA					
Barcode		Barcode		Barcode	
180-112945 Chain of Custody					
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other Possible Hazard Identification: _____ Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.					
<input type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
Special Instructions/QC Requirements & Comments: 3617207.486.03 PO, PROJECT # 18022259					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temp. (°C): Obs'd: _____		Therm ID No.: _____	
Relinquished by: R. J. Wolf		Received by: [Signature]		Date/Time: 10/30/20 8:00	
Relinquished by:		Received by:		Date/Time:	
Relinquished by:		Received in Laboratory by:		Date/Time:	

FedEx Express

FO

FedEx First Overnight®

City

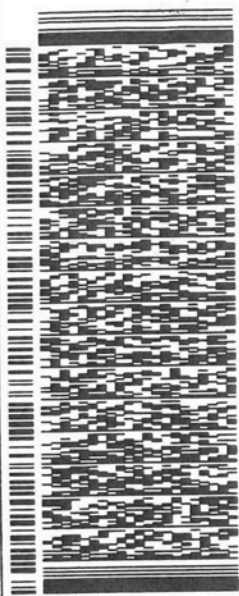
ORIGIN ID:LEMA (207) 828-3460
THOMAS GERHARD
WOOD ENVIRONMENT
,511 CONGRESS ST
PORTLAND, ME 04101
UNITED STATES US

DATE: 29OCT20
ACTWGT: 41.05 LB
CAD: 6994962/SSFE2121
DIMS: 18x14x12 IN
BILL THIRD PARTY

TO ATTN: ROBERT BRUNETTE
EUROFINS TEST AMERICA PITTSBURG
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238

(412) 863-7058 REF:
UNIT: DEPT:
PO1 361207485 02



FedEx Express

REL# 3785346

FRI - 30 OCT 8:30
FIRST OVERNIGHT

TRK# 3983 7956 2192
0201

X1 AGCA

15238 PA-US PIT

Uncorrected temp
Thermometer ID 119 °C
CF 0 Initials B

PT-WI-SR-001 effective 7/26/13



Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 180-112945-1

Login Number: 112945
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX D-3 AQUATIC BIOTA LARS



Frontier Global Sciences

5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310

03 September 2020

Denise King
Wood - MA
271 Mill Road
Chelmsford, MA 01824
RE: Penobscot

Enclosed are the analytical results for samples received by Eurofins Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Patrick Garcia-Strickland". The signature is written in a cursive, flowing style.

Patrick Garcia-Strickland
Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BO-04_20ET204_062320_EEL_WB_01	0G00004-01	Tissue	23-Jun-20 11:11	01-Jul-20 09:50
BO-04_20ET204_062320_EEL_WB_02	0G00004-02	Tissue	23-Jun-20 11:11	01-Jul-20 09:50
BO-04_20ET211_062320_EEL_WB_03	0G00004-03	Tissue	23-Jun-20 11:32	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_04	0G00004-04	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_05	0G00004-05	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_06	0G00004-06	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_07	0G00004-07	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_08	0G00004-08	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_09	0G00004-09	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_10	0G00004-10	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_11	0G00004-11	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_12	0G00004-12	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_13	0G00004-13	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_14	0G00004-14	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET215_062320_EEL_WB_15	0G00004-15	Tissue	23-Jun-20 11:46	01-Jul-20 09:50
BO-04_20ET219_062320_EEL_WB_16	0G00004-16	Tissue	23-Jun-20 12:01	01-Jul-20 09:50
BO-04_20ET228_062320_EEL_WB_17	0G00004-17	Tissue	23-Jun-20 12:14	01-Jul-20 09:50
BO-04_20ET228_062320_EEL_WB_18	0G00004-18	Tissue	23-Jun-20 12:14	01-Jul-20 09:50
BO-04_20ET225_062320_EEL_WB_19	0G00004-19	Tissue	23-Jun-20 12:22	01-Jul-20 09:50
BO-04_20ET224_062320_EEL_WB_20	0G00004-20	Tissue	23-Jun-20 12:24	01-Jul-20 09:50
OB-05_20ET127_062320_EEL_WB_02	0G00004-21	Tissue	23-Jun-20 09:30	01-Jul-20 09:50
OB-05_20ET125_062320_EEL_WB_03	0G00004-22	Tissue	23-Jun-20 09:34	01-Jul-20 09:50
OB-05_20ET125_062320_EEL_WB_04	0G00004-23	Tissue	23-Jun-20 09:34	01-Jul-20 09:50
OB-05_20ET125_062320_EEL_WB_05	0G00004-24	Tissue	23-Jun-20 09:34	01-Jul-20 09:50
OB-05_20ET119_062320_EEL_WB_06	0G00004-25	Tissue	23-Jun-20 09:44	01-Jul-20 09:50
OB-05_20ET119_062320_EEL_WB_07	0G00004-26	Tissue	23-Jun-20 09:44	01-Jul-20 09:50

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OB-05_20ET117_062320_EEL_WB_08	0G00004-27	Tissue	23-Jun-20 09:51	01-Jul-20 09:50
OB-05_20ET115_062320_EEL_WB_09	0G00004-28	Tissue	23-Jun-20 09:58	01-Jul-20 09:50
OB-05_20ET115_062320_EEL_WB_10	0G00004-29	Tissue	23-Jun-20 09:58	01-Jul-20 09:50
OB-05_20ET100_062320_EEL_WB_11	0G00004-30	Tissue	23-Jun-20 10:01	01-Jul-20 09:50
OB-05_20ET100_062320_EEL_WB_12	0G00004-31	Tissue	23-Jun-20 10:01	01-Jul-20 09:50
OB-05_20ET100_062320_EEL_WB_13	0G00004-32	Tissue	23-Jun-20 10:01	01-Jul-20 09:50
OB-05_20ET100_062320_EEL_WB_14	0G00004-33	Tissue	23-Jun-20 10:01	01-Jul-20 09:50
OB-05_20ET100_062320_EEL_WB_15	0G00004-34	Tissue	23-Jun-20 10:01	01-Jul-20 09:50
OB-05_20ET100_062320_EEL_WB_16	0G00004-35	Tissue	23-Jun-20 10:01	01-Jul-20 09:50
OB-05_20ET100_062320_EEL_WB_17	0G00004-36	Tissue	23-Jun-20 10:01	01-Jul-20 09:50
OB-05_20ET102_062320_EEL_WB_18	0G00004-37	Tissue	23-Jun-20 10:11	01-Jul-20 09:50
OB-05_20ET102_062320_EEL_WB_19	0G00004-38	Tissue	23-Jun-20 10:11	01-Jul-20 09:50
OB-05_20ET102_062320_EEL_WB_20	0G00004-39	Tissue	23-Jun-20 10:11	01-Jul-20 09:50
OB-01_20ET300_062420_EEL_WB_01	0G00004-40	Tissue	24-Jun-20 10:52	01-Jul-20 09:50
OB-01_20ET301_062420_EEL_WB_02	0G00004-41	Tissue	24-Jun-20 10:55	01-Jul-20 09:50
OB-01_20ET365_062620_EEL_WB_03	0G00004-42	Tissue	26-Jun-20 09:20	01-Jul-20 09:50
OB-01_20ET302_062420_EEL_WB_04	0G00004-43	Tissue	24-Jun-20 10:58	01-Jul-20 09:50
OB-01_20ET304_062420_EEL_WB_05	0G00004-44	Tissue	24-Jun-20 11:05	01-Jul-20 09:50
OB-01_20ET305_062420_EEL_WB_06	0G00004-45	Tissue	24-Jun-20 11:09	01-Jul-20 09:50
OB-01_20ET333_062520_EEL_WB_07	0G00004-46	Tissue	25-Jun-20 09:30	01-Jul-20 09:50
OB-01_20ET356_062520_EEL_WB_08	0G00004-47	Tissue	25-Jun-20 10:54	01-Jul-20 09:50
OB-01_20ET355_062520_EEL_WB_09	0G00004-48	Tissue	25-Jun-20 10:57	01-Jul-20 09:50
HORSESHOE CRAB_062420_EEL_BAIT	0G00004-49	Tissue	24-Jun-20 10:26	01-Jul-20 09:50
OB-05_20ET129_062320_EEL_WB_01	0G00004-50	Tissue	23-Jun-20 09:20	01-Jul-20 09:50

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager

Wood - MA
271 Mill Road
Chelmsford MA, 01824Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King**Reported:**
03-Sep-20 16:21

SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 01-Jul-20 09:50. The samples were received intact, on-ice within a sealed cooler at

<u>Cooler</u>	<u>Temp C°</u>
Default Cooler	-38.6

SAMPLE PREPARATION AND ANALYSIS

Tissue samples were homogenized per EFGS SOP5141 prior to digestion.

Total mercury preparation and analysis was performed by flow injection atomic fluorescence spectrometry (FI-AFS) in accordance with EPA 1631B (EFGS SOP2822).

Lipids analysis was sent to Eurofins Calsciencs. A copy of their reports is included seperately.

ANALYTICAL AND QUALITY CONTROL ISSUES

Method blanks were prepared for every preparation to assess possible blank contribution from the sample preparation procedure. The method blanks were carried through the entire analytical procedure. All blanks fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

Liquid spikes, certified reference material (CRM) or a quality control samples (QCS) were prepared for every preparation as a measure of accuracy. All liquid spikes, CRMs and/or QCS samples fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

As an additional measure of the accuracy of the methods used and to check for matrix interference, matrix spikes (MS) and matrix spike duplicates (MSD) were digested and analyzed. All of the matrix spike recoveries fell within the established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

A reasonable measure of the precision of the analytical methods is the relative percent difference (RPD) between a matrix spike recovery and a matrix spike duplicate recovery and between laboratory control sample recovery and laboratory control sample duplicate recoveries. All of the relative percent differences established acceptance criteria with the exception of any items flagged and described in the notes and

Eurofins Frontier Global Sciences, LLC



The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

definitions section of the report.



Sample Receipt Checklist

Client: WOOD ENV

Date & Time Received: 9:50 7/11/20 Date Labeled: 7/11/20 Labeled By: EMB

Project: TISSUE

Received By: EMB Label Verified By: [Signature]

of Coolers Received: 2 Samples Arrived By: Shipping Service Courier Hand Other (Specify: _____)

Coolant: None/Ambient Loose Ice Gel Ice Dry Ice Coolant Required: Y N Temp Blank Used: Y N for Cooler(s): _____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y N

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	<u>Y</u>	
Custody Seals are present and intact:	<u>Y</u>	
Custody seals signed:	<u>Y</u>	

TID:	CF:	Temp:	Date/time:	By:
<u>14113978</u>	<u>FU.4</u>	<u>°C</u>	<u>9:50 7/11/20</u>	<u>EMB</u>
Cooler 1:	<u>-39</u>	<u>°C</u>	w/ CF: <u>33</u>	°C
Cooler 2:	<u>°C</u>	w/ CF: <u>°C</u>	Cooler 5:	<u>°C</u> w/ CF: <u>°C</u>
Cooler 3:	<u>°C</u>	w/ CF: <u>°C</u>	Cooler 6:	<u>°C</u> w/ CF: <u>°C</u>

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	<u>Y</u>	
Date and time of collection:	<u>Y</u>	
Sampled by:	<u>Y</u>	
Preservation type:	<u>Y</u>	
Requested analyses:	<u>Y</u>	
Required signatures:	<u>Y</u>	
Internal COC required:	<u>N</u>	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	<u>Y</u>	
Sample labels are present and legible:	<u>Y</u>	
Sample ID on container/bag matches COC:	<u>Y</u>	
Correct sample containers used:	<u>Y</u>	
Samples received within holding times:	<u>Y</u>	
Sample volume sufficient for requested analyses:	<u>Y</u>	
Correct preservative used for requested analyses:	<u>N</u>	

Anomalies/Non-conformances (attach additional pages if needed):

* Sample discrepancy, PM notified and email to client sent
EMB 7/11/20

0G00004



Client: Wood Env.		Project Manager: Rod Pendleton			Sampled By	Field Filtered (Y/N)	Field Preserved: HNO3 HCl BrCl Other (%)	EFGS Supplied Containers (Y/N)	Analyses Requested				EFGS PM: Patrick Garcia-Strickland	
Address: 511 Congress St. Suite 200 Portland, ME 04101		Phone: 207-828-3605 E-mail: rod.pendleton@woodplc.com							Date: 06/30/20				TAT: Standard or RUSH (For TAT < 15 days, contact PM.) Surcharges apply for RUSH TAT	
Project Name: USDC Penobscot		Project #: 3617207486.05.**** PO: C012906205							Total Hg - 1631e				% Lipids - NOAA	Saturday delivery? (If yes, please CONTACT PM)
Report To: Denise King		Invoice To: Rod Pendleton											EDD Format - EQUiS EZEDD	Report Format - Level II or IV
Address: 271 Mill Rd Chelmsford, MA 01824		Address: 511 Congress St., Suite 200 Portland, ME 04101												Comments
Phone: 508-789-1738		Phone: 207-828-3605												
E-mail: denise.king@woodplc.com		E-mail: denise.king@woodplc.com												
No.	Sample ID	# of Bottles	Matrix	Date & Time										
1	BO-04_20ET204_062320_EEL_WB_01	1	TS	06/23/20 1111			N	X	X			MS/MSD		
2	BO-04_20ET204_062320_EEL_WB_02	1	TS	06/23/20 1111			N	X	X					
3	BO-04_20ET211_062320_EEL_WB_03	1	TS	06/23/20 1132			N	X	X					
4	BO-04_20ET215_062320_EEL_WB_04	1	TS	06/23/20 1146			N	X	X					
5	BO-04_20ET215_062320_EEL_WB_05	1	TS	06/23/20 1146			N	X	X					
6	BO-04_20ET215_062320_EEL_WB_06	1	TS	06/23/20 1146			N	X	X					
7	BO-04_20ET215_062320_EEL_WB_07	1	TS	06/23/20 1146			N	X	X					
8	BO-04_20ET215_062320_EEL_WB_08	1	TS	06/23/20 1146			N	X	X					
9	BO-04_20ET215_062320_EEL_WB_09	1	TS	06/23/20 1146			N	X	X					
10	BO-04_20ET215_062320_EEL_WB_10	1	TS	06/23/20 1146			N	X	X					
11	BO-04_20ET215_062320_EEL_WB_11	1	TS	06/23/20 1146			N	X	X					
12	BO-04_20ET215_062320_EEL_WB_12	1	TS	06/23/20 1146			N	X	X					
For Laboratory Use Only		Matrix Codes:			Relinquished By: <i>[Signature]</i>		Received By: <i>[Signature]</i>							
COC Seal	Comments:	FW: Fresh Water WW: Waste Water SB: Sea and Brackish Water SS: Soil and Sediment TS: Plant and Animal Tissue HC: Hydrocarbons TR: Trap OT: Other			Name: Tom Gerhard		Name: <i>[Signature]</i>							
Cooler Temp					Organization: Wood E&IS		Organization: <i>EFGS</i>							
Carrier					Date & Time: 6/30/20 1400		Date & Time: 7/1/20 9:50							
VESR					Tracking number:									
# of Coolers					By signing, you declare that you agree with EFGS' terms and conditions, and that you authorize EFGS to perform the specified analyses.									
Sample Disposal:		Customer Approval:		Date:										
<input type="checkbox"/> Return (shipping fees will apply) <input checked="" type="checkbox"/> Standard Disposal - 30 Days after report <input type="checkbox"/> Retain for ___ weeks after report (storage fees will apply)														

3743 7393 4192

Client: Wood Env.		Project Manager: Rod Pendleton			Sampled By	Field Filtered (Y/N)	Field Preserved: HNO3 HCl BrCl Other (%)	EFGS Supplied Containers (Y/N)	Analyses Requested				EFGS PM: Patrick Garcia-Strickland
Address: 511 Congress St. Suite 200 Portland, ME 04101		Phone: 207-828-3605 E-mail: rod.pendleton@woodplc.com							Date: 06/30/20				TAT: Standard or RUSH (For TAT < 15 days, contact PM.) Surcharges apply for RUSH TAT
Project Name: USDC Penobscot		Project #: 3617207486.05.**** PO: C012906205							Total Hg - 1631e				Saturday delivery? (If yes, please CONTACT PM)
Report To: Denise King		Invoice To: Rod Pendleton							% Lipids - NOAA				EDD Format - EQUiS EZEDD
Address: 271 Mill Rd Chelmsford, MA 01824		Address: 511 Congress St., Suite 200 Portland, ME 04101											Report Format - Level II or IV
Phone: 508-789-1738		Phone: 207-828-3605											Comments
E-mail: denise.king@woodplc.com		E-mail: denise.king@woodplc.com											
E-mail: denise.king@woodplc.com		E-mail: denise.king@woodplc.com											
No.	Sample ID	# of Bottles	Matrix	Date & Time									
1	BO-04_20ET215_062320_EEL_WB_13	1	TS	06/23/20 1146				N	X	X			
2	BO-04_20ET215_062320_EEL_WB_14	1	TS	06/23/20 1146				N	X	X			
3	BO-04_20ET215_062320_EEL_WB_15	1	TS	06/23/20 1146				N	X	X			
4	BO-04_20ET219_062320_EEL_WB_16	1	TS	06/23/20 1201				N	X	X			
5	BO-04_20ET228_062320_EEL_WB_17	1	TS	06/23/20 1214				N	X	X			
6	BO-04_20ET228_062320_EEL_WB_18	1	TS	06/23/20 1214				N	X	X			
7	BO-04_20ET225_062320_EEL_WB_19	1	TS	06/23/20 1222				N	X	X			
8	BO-04_20ET224_062320_EEL_WB_20	1	TS	06/23/20 1224				N	X	X			
9	OB-05_20ET129_062320_EEL_WB_01	1	TS	06/23/20 0920				N	X	X		MS/MSD	
10	OB-05_20ET127_062320_EEL_WB_02	1	TS	06/23/20 0930				N	X	X			
11	OB-05_20ET125_062320_EEL_WB_03	1	TS	6/23/20 0934				N	X	X			
12	OB-05_20ET125_062320_EEL_WB_04	1	TS	6/23/20 0934				N	X	X			
For Laboratory Use Only		Matrix Codes:			Relinquished By:			Received By:					
COC Seal:	Comments:	FW: Fresh Water WW: Waste Water SB: Sea and Brackish Water SS: Soil and Sediment TS: Plant and Animal Tissue HC: Hydrocarbons TR: Trap OT: Other			Name: Tom Gerhard			Name: <i>Elise Bugge</i>					
Cooler Temp:					Organization: Wood E&IS			Organization: <i>EFGS</i>					
Carrier:					Date & Time: 6/30/20, 1400			Date & Time: <i>7/1/20 9:50</i>					
VTSR:					Tracking number:								
# of Coolers:					By signing, you declare that you agree with EFGS' terms and conditions, and that you authorize EFGS to perform the specified analyses.			Customer Approval: _____ Date: _____					
Sample Disposal:													
<input type="checkbox"/> Return (shipping fees will apply)													
<input checked="" type="checkbox"/> Standard Disposal - 30 Days after report													
<input type="checkbox"/> Retain for ____ weeks after report (storage fees will apply)													



Frontier Global Sciences

Chain of Custody Record & Laboratory Analysis Request
Air, Water, Sediments, Plant and Animal Tissue,
Hydrocarbon & Other Samples

5755 8th St E
Tacoma, WA 98424
Phone: 253 922-2310

IUS34_PM@Eurofinsus.com

http://www.Eurofinsus.com/Frontier/

Page 3 of 5

Client: Wood Env. Project Manager: Rod Pendleton
Address: 511 Congress St. Phone: 207-828-3605
Suite 200 E-mail: rod.pendleton@woodplc.com
Portland, ME 04101
Project Name: USDC Penobscot Project #: 3617207486.05.****
PO: C012906205
Report To: Denise King Invoice To: Rod Pendleton
Address: 271 Mill Rd Address: 511 Congress St., Suite 200
Chelmsford, MA 01824 Portland, ME 04101
Phone: 508-789-1738 Phone: 207-828-3605
E-mail: denise.king@woodplc.com E-mail: denise.king@woodplc.com
Table with columns: No., Sample ID, # of Bottles, Matrix, Date & Time, Analyses Requested (Total Hg - 1631e, % Lipids - NOAA), Comments.
Matrix Codes: FW: Fresh Water, WW: Waste Water, SB: Sea and Brackish Water, SS: Soil and Sediment, TS: Plant and Animal Tissue, HC: Hydrocarbons, TR: Trap, OT: Other.
Relinquished By: Tom Gerhard, Received By: EFGS.
Date & Time: 6/30/2014, Date & Time: 7/1/20 9:50.
Sample Disposal: [] Return (shipping fees will apply), [x] Standard Disposal - 30 Days after report, [] Retain for ___ weeks after report (storage fees will apply).
By signing, you declare that you agree with EFGS' terms and conditions, and that you authorize EFGS to perform the specified analyses.
Customer Approval: Date:

Chain of Custody Record & Laboratory Analysis Request
Air, Water, Sediments, Plant and Animal Tissue,
Hydrocarbon & Other Samples

Client: Wood Env.		Project Manager: Rod Pendleton			Sampled By	Field Filtered (Y/N)	Field Preserved: HNO3 HCl BrCl Other (%)	EFGS Supplied Containers (Y/N)	Analyses Requested			EFGS PM: Patrick Garcia-Strickland		
Address: 511 Congress St. Suite 200 Portland, ME 04101		Phone: 207-828-3605 E-mail: rod.pendleton@woodplc.com							Date: 06/30/20			TAT: Standard or RUSH (For TAT < 15 days, contact PM.) Surcharges apply for RUSH TAT		
Project Name: USDC Penobscot		Project #: 3617207486.05.**** PO: C012906205							Total Hg - 1631e			Saturday delivery? (If yes, please CONTACT PM)		
Report To: Denise King		Invoice To: Rod Pendleton							% Lipids - NOAA			EDD Format - EQUIS EZEDD		
Address: 271 Mill Rd Chelmsford, MA 01824		Address: 511 Congress St., Suite 200 Portland, ME 04101							Report Format - Level II or <u>IV</u>			Comments		
Phone: 508-789-1738		Phone: 207-828-3605												
E-mail: denise.king@woodplc.com		E-mail: denise.king@woodplc.com												
No.	Sample ID	# of Bottles	Matrix	Date & Time										
1	OB-05_20ET125_062320_EEL_WB_05	1	TS	6/23/20 0934			N	X	X					
2	OB-05_20ET119_062320_EEL_WB_06	1	TS	6/23/20 0944			N	X	X					
3	OB-05_20ET119_062320_EEL_WB_07	1	TS	6/23/20 0944			N	X	X					
4	OB-05_20ET123_062320_EEL_WB_08	1	TS	6/23/20 0951			N	X	X					
5	OB-05_20ET115_062320_EEL_WB_09	1	TS	6/23/20 0958			N	X	X					
6	OB-05_20ET115_062320_EEL_WB_10	1	TS	6/23/20 0958			N	X	X					
7	OB-05_20ET100_062320_EEL_WB_11	1	TS	6/23/20 1001			N	X	X					
8	OB-05_20ET100_062320_EEL_WB_12	1	TS	6/23/20 1001			N	X	X					
9	OB-05_20ET100_062320_EEL_WB_13	1	TS	6/23/20 1001			N	X	X					
10	OB-05_20ET100_062320_EEL_WB_14	1	TS	6/23/20 1001			N	X	X					
11	OB-05_20ET100_062320_EEL_WB_15	1	TS	6/23/20 1001			N	X	X					
12	OB-05_20ET100_062320_EEL_WB_16	1	TS	6/23/20 1001			N	X	X					
For Laboratory Use Only		Matrix Codes:			Relinquished By: <i>[Signature]</i>			Received By: <i>[Signature]</i>						
COC Seal:	Comments:	FW: Fresh Water			Name: Tom Gerhard			Name: <i>[Signature]</i>						
Cooler Temp:		WW: Waste Water			Organization: Wood E&IS			Organization: <i>[Signature]</i>						
Carrier:		SB: Sea and Brackish Water			Date & Time: 6/30/20, <i>[Signature]</i>			Date & Time: 7/7/20 7/1/20 9:50						
VTSR:		SS: Soil and Sediment			Tracking number:									
# of Coolers:		TS: Plant and Animal Tissue			By signing, you declare that you agree with EFGS' terms and conditions, and that you authorize EFGS to perform the specified analyses.			Customer Approval: _____ Date: _____						
		HC: Hydrocarbons												
		TR: Trip												
		OT: Other												
Sample Disposal:														
<input type="checkbox"/> Return (shipping fees will apply)														
<input checked="" type="checkbox"/> Standard Disposal - 30 Days after report														
<input type="checkbox"/> Retain for _____ weeks after report (storage fees will apply)														

Chain of Custody Record & Laboratory Analysis Request
Air, Water, Sediments, Plant and Animal Tissue,
Hydrocarbon & Other Samples

Client: Wood Env.		Project Manager: Rod Pendleton			Sampled By	Field Filtered (Y/N)	Field Preserved: HNO3 HCl BrCl Other (%)	EFGS Supplied Containers (Y/N)	Analyses Requested				EFGS PM: Patrick Garcia-Strickland	
Address: 511 Congress St. Suite 200 Portland, ME 04101		Phone: 207-828-3605 E-mail: rod.pendleton@woodplc.com							Date: 06/30/20				TAT: Standard or RUSH (For TAT < 15 days, contact PM.) Surcharges apply for RUSH TAT	
Project Name: USDC Penobscot		Project #: 3617207486.05.**** PO: C012906205							Total Hg - 1631e				% Lipids - NOAA	Saturday delivery? (If yes, please CONTACT PM)
Report To: Denise King		Invoice To: Rod Pendleton												EDD Format - EQUiS EZEDD
Address: 271 Mill Rd Chelmsford, MA 01824		Address: 511 Congress St., Suite 200 Portland, ME 04101												Report Format - Level II or IV
Phone: 508-789-1738		Phone: 207-828-3605												Comments
E-mail: denise.king@woodplc.com		E-mail: denise.king@woodplc.com												
E-mail: denise.king@woodplc.com		E-mail: denise.king@woodplc.com												
No.	Sample ID	# of Bottles	Matrix	Date & Time										
1	OB-05_20ET100_062320_EEL_WB_17	1	TS	6/23/20 1001				N	X	X				
2	OB-05_20ET102_062320_EEL_WB_18	1	TS	6/23/20 1011				N	X	X				
3	OB-05_20ET102_062320_EEL_WB_19	1	TS	6/23/20 1011				N	X	X				
4	OB-05_20ET102_062320_EEL_WB_20	1	TS	6/23/20 1011				N	X	X				
5	OB-01_20ET300_062420_EEL_WB_01	1	TS	6/24/20 1052				N	X	X			MS/MSD	
6	OB-01_20ET301_062420_EEL_WB_02	1	TS	6/24/20 1055				N	X	X				
7	OB-01_20ET365_062620_EEL_WB_03	1	TS	6/26/20 0920				N	X	X				
8	OB-01_20ET302_062420_EEL_WB_04	1	TS	6/24/20 1058				N	X	X				
9	OB-01_20ET304_062420_EEL_WB_05	1	TS	6/24/20 1105				N	X	X				
10	OB-01_20ET305_062420_EEL_WB_06	1	TS	6/24/20 1109				N	X	X				
11	OB-01_20ET333_062520_EEL_WB_07	1	TS	6/25/20 0930				N	X	X				
12	OB-01_20ET356_062520_EEL_WB_08	1	TS	6/25/20 1054				N	X	X				
For Laboratory Use Only		Matrix Codes:			Relinquished By: <i>[Signature]</i>				Received By: <i>[Signature]</i>					
COC Seal:	Comments:	FW: Fresh Water			Name: Tom Gerhard				Name: <i>Elise Bugge</i>					
Cooler Temp:		WW: Waste Water			Organization: Wood E&I				Organization: <i>EFGS</i>					
Carrier:		SB: Sea and Brackish Water			Date & Time: 6/30/20 <i>140</i>				Date & Time: <i>7/1/20 9:50</i>					
VTSR:		SS: Soil and Sediment			Tracking number:									
# of Containers:		TS: Plant and Animal Tissue												
		HC: Hydrocarbons												
		TR: Trap												
		OT: Other												
Sample Disposal:					By signing, you declare that you agree with EFGS' terms and conditions, and that you authorize EFGS to perform the specified analyses.									
<input type="checkbox"/> Return (shipping fees will apply) <input checked="" type="checkbox"/> Standard Disposal - 30 Days after report <input type="checkbox"/> Retain for ___ weeks after report (storage fees will apply)					Customer Approval:				Date:					

Chain of Custody Record & Laboratory Analysis Request
Air, Water, Sediments, Plant and Animal Tissue,
Hydrocarbon & Other Samples

Client: Wood Env.		Project Manager: Rod Pendleton			Sampled By	Field Filtered (Y/N)	Field Preserved: HNO3 HCl BrCl Other (%)	EFGS Supplied Containers (Y/N)	Analyses Requested				EFGS PM: Patrick Garcia-Strickland	
Address: 511 Congress St. Suite 200 Portland, ME 04101		Phone: 207-828-3605 E-mail: rod.pendleton@woodplc.com											Date: 06/30/20	
Project Name: USDC Penobscot		Project #: 3617207486.05.**** PO: C012906205											TAT: Standard or RUSH (For TAT < 15 days, contact PM.) Surcharges apply for RUSH TAT	
Report To: Denise King		Invoice To: Rod Pendleton											Saturday delivery? (If yes, please CONTACT PM)	
Address: 271 Mill Rd Chelmsford, MA 01824		Address: 511 Congress St., Suite 200 Portland, ME 04101											EDD Format - EQUiS EZEDD	
Phone: 508-789-1738		Phone: 207-828-3605											Report Format - Level II or IV	
E-mail: denise.king@woodplc.com		E-mail: denise.king@woodplc.com											Comments	
No.	Sample ID	# of Bottles	Matrix	Date & Time					Total Hg - 1631e	% Lipids - NOAA				
1	OB-01_20ET355_062520_EEL_WB_09	1	TS	6/25/20 1057				N	X	X				
2	HORSESHOE CRAB_062420_EEL_BAIT	1	OT	6/24/20 1026				N	X					
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
For Laboratory Use Only		Matrix Codes:			Relinquished By: <i>[Signature]</i>				Received By: <i>[Signature]</i>					
COC Seal:	Comments:	FW: Fresh Water WW: Waste Water SB: Sea and Brackish Water SS: Soil and Sediment TS: Plant and Animal Tissue HC: Hydrocarbons TR: Trap OT: Other			Name: Tom Gerhard				Name: <i>Elise Buge</i>					
Cooler Temp:					Organization: Wood E&IS				Organization: <i>EFGS</i>					
Carrier:					Date & Time: 6/30/20, 1400				Date & Time: <i>7/1/20 9:50</i>					
MTR:					Tracking number:									
Sample Disposal:					By signing, you declare that you agree with EFGS' terms and conditions, and that you authorize EFGS to perform the specified analyses.									
<input type="checkbox"/> Return (shipping fees will apply)														
<input checked="" type="checkbox"/> Standard Disposal – 30 Days after report														
<input type="checkbox"/> Retain for ____ weeks after report (storage fees will apply)					Customer Approval:				Date:					



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET204_062320_EEL_WB_01
0G00004-01

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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Sample Preparation: EPA 1631B

Mercury	569	1.69	15.1	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET204_062320_EEL_WB_02
0G00004-02

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	623	1.77	15.8	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET211_062320_EEL_WB_03
0G00004-03

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	1640	4.47	39.9	ng/g	1000	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
----------------------------------------------------	----------------------------------------------------------------------------------------------	-------------------------------------

BO-04_20ET215_062320_EEL_WB_04
0G00004-04

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	514	1.72	15.3	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

BO-04_20ET215_062320_EEL_WB_05
0G00004-05

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	581	1.66	14.8	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET215_062320_EEL_WB_06
0G00004-06

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	610	1.71	15.3	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET215_062320_EEL_WB_07
0G00004-07

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	665	1.72	15.4	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

BO-04_20ET215_062320_EEL_WB_08
0G00004-08

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	609	1.71	15.2	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET215_062320_EEL_WB_09
0G00004-09

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	486	1.73	15.4	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET215_062320_EEL_WB_10
0G00004-10

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	624	1.66	14.8	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET215_062320_EEL_WB_11
0G00004-11

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	397	1.76	15.7	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET215_062320_EEL_WB_12
0G00004-12

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	528	1.66	14.8	ng/g	400	F007314	17-Jul-20	0G22009	22-Jul-20	EPA 1631B	QB-01

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET215_062320_EEL_WB_13
0G00004-13

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	600	1.77	15.8	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET215_062320_EEL_WB_14
0G00004-14

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	540	1.76	15.7	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET215_062320_EEL_WB_15
0G00004-15

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	636	1.78	15.9	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

BO-04_20ET219_062320_EEL_WB_16
0G00004-16

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	1080	1.75	15.6	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

BO-04_20ET228_062320_EEL_WB_17
0G00004-17

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	978	1.72	15.3	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET228_062320_EEL_WB_18
0G00004-18

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	849	1.74	15.5	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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BO-04_20ET225_062320_EEL_WB_19
0G00004-19

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	974	1.70	15.1	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

BO-04_20ET224_062320_EEL_WB_20
0G00004-20

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	847	1.76	15.7	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET127_062320_EEL_WB_02
0G00004-21

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	308	1.77	15.8	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET125_062320_EEL_WB_03
0G00004-22

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	318	1.68	15.0	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01

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Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

OB-05_20ET125_062320_EEL_WB_04
0G00004-23

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	283	1.71	15.2	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET125_062320_EEL_WB_05
0G00004-24

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	638	1.74	15.5	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET119_062320_EEL_WB_06
0G00004-25

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	496	1.73	15.4	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET119_062320_EEL_WB_07
0G00004-26

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	213	1.66	14.8	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET117_062320_EEL_WB_08
0G00004-27

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	169	1.74	15.6	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET115_062320_EEL_WB_09
0G00004-28

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	273	1.79	15.9	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

OB-05_20ET115_062320_EEL_WB_10
0G00004-29

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	332	1.68	15.0	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET100_062320_EEL_WB_11
0G00004-30

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	394	1.67	14.9	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET100_062320_EEL_WB_12
0G00004-31

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	240	1.79	16.0	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET100_062320_EEL_WB_13
0G00004-32

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	298	1.66	14.8	ng/g	400	F007315	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET100_062320_EEL_WB_14
0G00004-33

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	216	1.76	15.7	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET100_062320_EEL_WB_15
0G00004-34

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	555	1.79	16.0	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET100_062320_EEL_WB_16
0G00004-35

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	279	1.72	15.4	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET100_062320_EEL_WB_17
0G00004-36

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	229	1.74	15.5	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

OB-05_20ET102_062320_EEL_WB_18
0G00004-37

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	216	1.67	14.9	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

OB-05_20ET102_062320_EEL_WB_19
0G00004-38

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	201	1.78	15.9	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET102_062320_EEL_WB_20
0G00004-39

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	267	1.78	15.9	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-01_20ET300_062420_EEL_WB_01
0G00004-40

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	541	1.79	16.0	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

OB-01_20ET301_062420_EEL_WB_02
0G00004-41

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	182	1.79	16.0	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

OB-01_20ET365_062620_EEL_WB_03
0G00004-42

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	530	1.73	15.5	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-01_20ET302_062420_EEL_WB_04
0G00004-43

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	466	1.76	15.7	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-01_20ET304_062420_EEL_WB_05
0G00004-44

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	368	1.71	15.3	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-01_20ET305_062420_EEL_WB_06
0G00004-45

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	408	1.70	15.1	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-01_20ET333_062520_EEL_WB_07
0G00004-46

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	515	1.70	15.2	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
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OB-01_20ET356_062520_EEL_WB_08
0G00004-47

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	466	1.72	15.3	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-01_20ET355_062520_EEL_WB_09
0G00004-48

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	352	1.73	15.5	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

HORSESHOE CRAB_062420_EEL_BAIT
0G00004-49

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	124	1.78	15.9	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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OB-05_20ET129_062320_EEL_WB_01
0G00004-50

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	451	1.77	15.8	ng/g	400	F007316	21-Jul-20	0G27012	24-Jul-20	EPA 1631B	QB-01



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G22009 - F007314											
Cal Standard (0G22009-CAL1)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	0.583	-		ng/L	0.50000		117				
Cal Standard (0G22009-CAL2)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	1.101	-		ng/L	1.0000		110				
Cal Standard (0G22009-CAL3)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	4.540	-		ng/L	5.0000		90.8				
Cal Standard (0G22009-CAL4)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	18.30	-		ng/L	20.000		91.5				
Cal Standard (0G22009-CAL5)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	36.42	-		ng/L	40.000		91.1				
Calibration Blank (0G22009-CCB1)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	0.007	-		ng/L							
Calibration Blank (0G22009-CCB2)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	0.147	-		ng/L							
Calibration Blank (0G22009-CCB3)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	0.0008	-		ng/L							
Calibration Blank (0G22009-CCB4)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	0.110	-		ng/L							
Calibration Blank (0G22009-CCB5)					Prepared: 21-Jul-20 Analyzed: 22-Jul-20						
Mercury	0.163	-		ng/L							

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G22009 - F007314											
Calibration Blank (0G22009-CCB6) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	0.278	-		ng/L							
Calibration Check (0G22009-CCV1) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	4.883	-		ng/L	4.9950		97.8	77-123			
Calibration Check (0G22009-CCV2) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	5.131	-		ng/L	4.9950		103	77-123			
Calibration Check (0G22009-CCV3) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	4.814	-		ng/L	4.9950		96.4	77-123			
Calibration Check (0G22009-CCV4) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	4.913	-		ng/L	4.9950		98.4	77-123			
Calibration Check (0G22009-CCV5) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	5.756	-		ng/L	4.9950		115	77-123			
Calibration Check (0G22009-CCV6) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	5.091	-		ng/L	4.9950		102	77-123			
Instrument Blank (0G22009-IBL1) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	ND	0.00	0.00	ng/L							U
Instrument Blank (0G22009-IBL2) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	ND	0.00	0.00	ng/L							U
Instrument Blank (0G22009-IBL3) Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	ND	0.00	0.00	ng/L							U

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G22009 - F007314											
Initial Cal Blank (0G22009-ICB1)											
Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	0.108	-		ng/L							
Initial Cal Check (0G22009-ICV1)											
Prepared: 21-Jul-20 Analyzed: 22-Jul-20											
Mercury	5.490	-		ng/L	4.9950		110	79-121			
Batch 0G24004 - F007314											
Cal Standard (0G24004-CAL1)											
Prepared & Analyzed: 23-Jul-20											
Mercury	0.502	-		ng/L	0.50000		100				
Cal Standard (0G24004-CAL2)											
Prepared & Analyzed: 23-Jul-20											
Mercury	0.988	-		ng/L	1.0000		98.8				
Cal Standard (0G24004-CAL3)											
Prepared & Analyzed: 23-Jul-20											
Mercury	4.857	-		ng/L	5.0000		97.1				
Cal Standard (0G24004-CAL4)											
Prepared & Analyzed: 23-Jul-20											
Mercury	19.71	-		ng/L	20.000		98.5				
Cal Standard (0G24004-CAL5)											
Prepared & Analyzed: 23-Jul-20											
Mercury	42.04	-		ng/L	40.000		105				
Calibration Blank (0G24004-CCB1)											
Prepared & Analyzed: 23-Jul-20											
Mercury	0.153	-		ng/L							
Calibration Blank (0G24004-CCB2)											
Prepared & Analyzed: 23-Jul-20											
Mercury	0.239	-		ng/L							





Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G24004 - F007314											
Calibration Blank (0G24004-CCB3) Prepared & Analyzed: 23-Jul-20											
Mercury	0.216	-		ng/L							
Calibration Blank (0G24004-CCB4) Prepared & Analyzed: 23-Jul-20											
Mercury	0.258	-		ng/L							
Calibration Blank (0G24004-CCB5) Prepared & Analyzed: 23-Jul-20											
Mercury	0.380	-		ng/L							
Calibration Blank (0G24004-CCB6) Prepared & Analyzed: 23-Jul-20											
Mercury	0.292	-		ng/L							
Calibration Check (0G24004-CCV1) Prepared & Analyzed: 23-Jul-20											
Mercury	5.760	-		ng/L	4.9950		115	77-123			
Calibration Check (0G24004-CCV2) Prepared & Analyzed: 23-Jul-20											
Mercury	5.816	-		ng/L	4.9950		116	77-123			
Calibration Check (0G24004-CCV3) Prepared & Analyzed: 23-Jul-20											
Mercury	5.854	-		ng/L	4.9950		117	77-123			
Calibration Check (0G24004-CCV4) Prepared & Analyzed: 23-Jul-20											
Mercury	5.665	-		ng/L	4.9950		113	77-123			
Calibration Check (0G24004-CCV5) Prepared & Analyzed: 23-Jul-20											
Mercury	5.930	-		ng/L	4.9950		119	77-123			
Calibration Check (0G24004-CCV6) Prepared & Analyzed: 23-Jul-20											
Mercury	5.895	-		ng/L	4.9950		118	77-123			

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G24004 - F007314											
Instrument Blank (0G24004-IBL1) Prepared & Analyzed: 23-Jul-20											
Mercury	ND	0.00	0.00	ng/L							U
Instrument Blank (0G24004-IBL2) Prepared & Analyzed: 23-Jul-20											
Mercury	ND	0.00	0.00	ng/L							U
Instrument Blank (0G24004-IBL3) Prepared & Analyzed: 23-Jul-20											
Mercury	ND	0.00	0.00	ng/L							U
Initial Cal Blank (0G24004-ICB1) Prepared & Analyzed: 23-Jul-20											
Mercury	0.181	-		ng/L							
Initial Cal Blank (0G24004-ICB2) Prepared & Analyzed: 23-Jul-20											
Mercury	0.196	-		ng/L							
Initial Cal Check (0G24004-ICV1) Prepared & Analyzed: 23-Jul-20											
Mercury	5.556	-		ng/L	4.9950		111	79-121			
Initial Cal Check (0G24004-ICV2) Prepared & Analyzed: 23-Jul-20											
Mercury	5.464	-		ng/L	4.9950		109	79-121			
Initial Cal Check (0G24004-ICV3) Prepared & Analyzed: 23-Jul-20											
Mercury	5.549	-		ng/L	4.9950		111	79-121			
Batch 0G27012 - F007315											
Cal Standard (0G27012-CAL1) Prepared & Analyzed: 24-Jul-20											
Mercury	0.480	-		ng/L	0.50000		96.0				



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0G27012 - F007315

Cal Standard (0G27012-CAL2)					Prepared & Analyzed: 24-Jul-20						
Mercury	0.943	-		ng/L	1.0000		94.3				
Cal Standard (0G27012-CAL3)					Prepared & Analyzed: 24-Jul-20						
Mercury	5.126	-		ng/L	5.0000		103				
Cal Standard (0G27012-CAL4)					Prepared & Analyzed: 24-Jul-20						
Mercury	20.51	-		ng/L	20.000		103				
Cal Standard (0G27012-CAL5)					Prepared & Analyzed: 24-Jul-20						
Mercury	41.85	-		ng/L	40.000		105				
Calibration Blank (0G27012-CCB1)					Prepared & Analyzed: 24-Jul-20						
Mercury	0.192	-		ng/L							
Calibration Blank (0G27012-CCB2)					Prepared & Analyzed: 24-Jul-20						
Mercury	0.133	-		ng/L							
Calibration Blank (0G27012-CCB3)					Prepared & Analyzed: 24-Jul-20						
Mercury	0.133	-		ng/L							
Calibration Blank (0G27012-CCB4)					Prepared & Analyzed: 24-Jul-20						
Mercury	0.223	-		ng/L							
Calibration Blank (0G27012-CCB5)					Prepared & Analyzed: 24-Jul-20						
Mercury	0.185	-		ng/L							
Calibration Blank (0G27012-CCB6)					Prepared & Analyzed: 24-Jul-20						
Mercury	0.151	-		ng/L							

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G27012 - F007315											
Calibration Blank (0G27012-CCB7) Prepared & Analyzed: 24-Jul-20											
Mercury	0.205	-		ng/L							
Calibration Blank (0G27012-CCB8) Prepared & Analyzed: 24-Jul-20											
Mercury	0.089	-		ng/L							
Calibration Blank (0G27012-CCB9) Prepared & Analyzed: 24-Jul-20											
Mercury	0.158	-		ng/L							
Calibration Check (0G27012-CCV1) Prepared & Analyzed: 24-Jul-20											
Mercury	5.466	-		ng/L	4.9950		109	77-123			
Calibration Check (0G27012-CCV2) Prepared & Analyzed: 24-Jul-20											
Mercury	5.713	-		ng/L	4.9950		114	77-123			
Calibration Check (0G27012-CCV3) Prepared & Analyzed: 24-Jul-20											
Mercury	5.487	-		ng/L	4.9950		110	77-123			
Calibration Check (0G27012-CCV4) Prepared & Analyzed: 24-Jul-20											
Mercury	5.736	-		ng/L	4.9950		115	77-123			
Calibration Check (0G27012-CCV5) Prepared & Analyzed: 24-Jul-20											
Mercury	5.523	-		ng/L	4.9950		111	77-123			
Calibration Check (0G27012-CCV6) Prepared & Analyzed: 24-Jul-20											
Mercury	5.439	-		ng/L	4.9950		109	77-123			
Calibration Check (0G27012-CCV7) Prepared & Analyzed: 24-Jul-20											
Mercury	5.324	-		ng/L	4.9950		107	77-123			

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0G27012 - F007315

Calibration Check (0G27012-CCV8) Prepared & Analyzed: 24-Jul-20

Mercury	5.064	-		ng/L	4.9950		101	77-123			
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Calibration Check (0G27012-CCV9) Prepared & Analyzed: 24-Jul-20

Mercury	4.992	-		ng/L	4.9950		99.9	77-123			
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Instrument Blank (0G27012-IBL1) Prepared & Analyzed: 24-Jul-20

Mercury	ND	0.004	0.040	ng/L							U
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Instrument Blank (0G27012-IBL2) Prepared & Analyzed: 24-Jul-20

Mercury	ND	0.004	0.040	ng/L							U
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Instrument Blank (0G27012-IBL3) Prepared & Analyzed: 24-Jul-20

Mercury	ND	0.004	0.040	ng/L							U
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Initial Cal Blank (0G27012-ICB1) Prepared & Analyzed: 24-Jul-20

Mercury	0.121	-		ng/L							
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Initial Cal Check (0G27012-ICV1) Prepared & Analyzed: 24-Jul-20

Mercury	5.535	-		ng/L	4.9950		111	79-121			
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Batch F007314 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F007314-BLK1) Prepared: 17-Jul-20 Analyzed: 22-Jul-20

Mercury	ND	0.00	0.00	ng/g							QB-10, U
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Blank (F007314-BLK2) Prepared: 17-Jul-20 Analyzed: 22-Jul-20

Mercury	ND	0.00	0.00	ng/g							QB-10, U
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F007314 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F007314-BLK3)		Prepared: 17-Jul-20 Analyzed: 22-Jul-20									
Mercury	ND	0.00	0.00	ng/g							QB-10, U
Blank (F007314-BLK4)		Prepared: 17-Jul-20 Analyzed: 22-Jul-20									
Mercury	ND	0.00	0.00	ng/g							U
LCS (F007314-BS1)		Prepared: 17-Jul-20 Analyzed: 22-Jul-20									
Mercury	ND	0.00	0.00	ng/g	0.0000			75-125			U
LCS Dup (F007314-BSD1)		Prepared: 17-Jul-20 Analyzed: 22-Jul-20									
Mercury	ND	0.00	0.00	ng/g	0.0000			75-125	24		Z-01, U
Matrix Spike (F007314-MS1)		Source: 0G00004-01		Prepared: 17-Jul-20 Analyzed: 22-Jul-20							
Mercury	ND	0.00	0.00	ng/g	0.0000	569.1		71-125			QB-01, U
Matrix Spike (F007314-MS2)		Source: 0E00102-37RE1		Prepared: 17-Jul-20 Analyzed: 22-Jul-20							
Mercury	ND	0.00	0.00	ng/g	0.0000	ND		71-125			QB-01, U
Matrix Spike Dup (F007314-MSD1)		Source: 0G00004-01		Prepared: 17-Jul-20 Analyzed: 22-Jul-20							
Mercury	ND	0.00	0.00	ng/g	0.0000	569.1		71-125	24		QM-07, U
Matrix Spike Dup (F007314-MSD2)		Source: 0E00102-37RE1		Prepared: 17-Jul-20 Analyzed: 22-Jul-20							
Mercury	ND	0.00	0.00	ng/g	0.0000	ND		71-125	24		QB-01, U

Batch F007315 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F007315-BLK1)		Prepared: 21-Jul-20 Analyzed: 24-Jul-20									
Mercury	ND	0.00	0.00	ng/g							QB-10, U

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F007315 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F007315-BLK2)												Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	ND	0.00	0.00	ng/g								QB-10, U	
Blank (F007315-BLK3)												Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	ND	0.00	0.00	ng/g								QB-10, U	
LCS (F007315-BS1)												Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	ND	0.00	0.00	ng/g	0.0000			75-125				U	
LCS Dup (F007315-BSD1)												Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	ND	0.00	0.00	ng/g	0.0000			75-125	24			U	
Matrix Spike (F007315-MS1)												Source: 0G00004-13 Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	ND	0.00	0.00	ng/g	0.0000	599.9		71-125				U	
Matrix Spike (F007315-MS2)												Source: 0G00004-14 Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	ND	0.00	0.00	ng/g	0.0000	540.0		71-125				U	
Matrix Spike Dup (F007315-MSD1)												Source: 0G00004-13 Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	ND	0.00	0.00	ng/g	0.0000	599.9		71-125	24			U	
Matrix Spike Dup (F007315-MSD2)												Source: 0G00004-14 Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	ND	0.00	0.00	ng/g	0.0000	540.0		71-125	24			U	

Batch F007316 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F007316-BLK1)												Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	1.094	0.090	0.800	ng/g								QB-10	

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 03-Sep-20 16:21
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F007316 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F007316-BLK2)												Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	1.639	0.090	0.800	ng/g								QB-10	
Blank (F007316-BLK3)												Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	2.689	0.090	0.800	ng/g								QB-10	
LCS (F007316-BS1)												Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	8.186	0.090	0.800	ng/g	8.0000		102	75-125					
LCS Dup (F007316-BSD1)												Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	7.757	0.090	0.800	ng/g	8.0000		97.0	75-125	5.38	24			
Matrix Spike (F007316-MS1)												Source: 0G00004-40 Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	952.0	1.71	15.3	ng/g	381.01	540.9	108	71-125					
Matrix Spike (F007316-MS2)												Source: 0G00004-50 Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	832.9	1.68	15.0	ng/g	374.02	450.7	102	71-125					
Matrix Spike Dup (F007316-MSD1)												Source: 0G00004-40 Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	976.4	1.75	15.7	ng/g	391.15	540.9	111	71-125	3.15	24			
Matrix Spike Dup (F007316-MSD2)												Source: 0G00004-50 Prepared: 21-Jul-20 Analyzed: 24-Jul-20	
Mercury	886.4	1.76	15.7	ng/g	391.92	450.7	111	71-125	8.41	24			



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
03-Sep-20 16:21

Notes and Definitions

- Z-01a LCS/LCSD not within control due to error. All MS/MSDs within control and within the limits of the LCS
- Z-01 BS Recovery within 71-125, within control.
- U Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
- QB-10 The method blank and/or initial/continuing calibration blank contains analyte at a concentration above the MRL. Only report sample results greater than 10 times the contamination value (QB-01), or samples less than the MRL (QB-02).
- QB-01 The method blank and/or initial/continuing calibration blank contains analyte at a concentration above the MRL. However, the blank concentration(s) are less than 10% of the sample result.
- E-01 Sample was preceded by a sample exceeding the calibration curve and was reanalyzed for confirmation.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the method detection limit if reported to the MDL or above the reporting limit if reported to the MRL.
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



QUALITY ASSURANCE

PEER - REVIEWED

ANALYSIS SEQUENCE

0G22009

0622009 analyzed w/ 0622008

Instrument: Hg2600-3 *PGS*



Calibration ID: UNASSIGNED

Analyzed: 7/21/2020

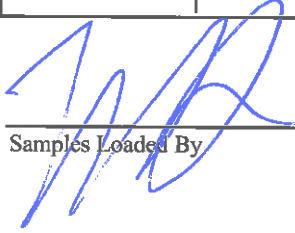

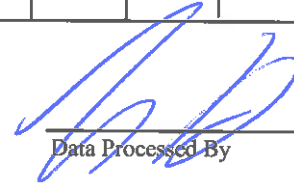
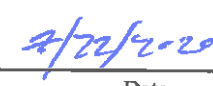
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0G22009-IBL1	QC	1			
0G22009-IBL2	QC	2			
0G22009-IBL3	QC	3			
0G22009-CAL1	QC	4	2001474		
0G22009-CAL2	QC	5	2001475		
0G22009-CAL3	QC	6	2001634		
0G22009-CAL4	QC	7	2001635		
0G22009-CAL5	QC	8	2001636		
0G22009-ICV1	QC	9	2001548		
0G22009-ICB1	QC	10			
0G22009-CCV1	QC	11	2001548		
0G22009-CCB1	QC	12			
0G22009-CCV2	QC	13	2001548		
0G22009-CCB2	QC	14			
0G22009-CCV3	QC	15	2001548		
0G22009-CCB3	QC	16			
F007314-BS1	QC	17			
F007314-BSD1	QC	18			
F007314-BLK1	QC	19			
F007314-BLK2	QC	20			
F007314-BLK3	QC	21			
F007314-BLK4	QC	22			
0G00004-01	Hg-CVAFS-T-7030	23			
F007314-MS1	QC	24			
F007314-MSD1	QC	25			
0E00102-37RE1	Hg-CVAFS-T-7030	26			Rebatch due to blank contamination - ZKH 7/6/2020
0G22009-CCV4	QC	27	2001548		
0G22009-CCB4	QC	28			
F007314-MS2	QC	29			
F007314-MSD2	QC	30			
0E00102-38RE1	Hg-CVAFS-T-7030	31			Rebatch due to blank contamination - ZKH 7/6/2020
0E00102-39RE1	Hg-CVAFS-T-7030	32			Rebatch due to blank contamination - ZKH 7/6/2020
0E00102-40RE1	Hg-CVAFS-T-7030	33			Rebatch due to blank contamination - ZKH 7/6/2020
0E00102-41RE1	Hg-CVAFS-T-7030	34			Rebatch due to blank contamination - ZKH 7/6/2020
0E00102-42RE1	Hg-CVAFS-T-7030	35			Rebatch due to blank contamination - ZKH 7/6/2020
0E00102-43RE1	Hg-CVAFS-T-7030	36			Rebatch due to blank contamination - ZKH 7/6/2020

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 7/21/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0G00004-02	Hg-CVAFS-T-7030	37			
0G00004-03	Hg-CVAFS-T-7030	38			
0G22009-CCV5	QC	39	2001548		
0G22009-CCB5	QC	40			
0G00004-04	Hg-CVAFS-T-7030	41			
0G00004-05	Hg-CVAFS-T-7030	42			
0G00004-06	Hg-CVAFS-T-7030	43			
0G00004-07	Hg-CVAFS-T-7030	44			
0G00004-08	Hg-CVAFS-T-7030	45			
0G00004-09	Hg-CVAFS-T-7030	46			
0G00004-10	Hg-CVAFS-T-7030	47			
0G00004-11	Hg-CVAFS-T-7030	48			
0G00004-12	Hg-CVAFS-T-7030	49			
0G00019-01	Hg-CVAFS-T-7030	50			Scan all data for level IV report
0G22009-CCV6	QC	51	2001548		
0G22009-CCB6	QC	52			

 Samples Loaded By _____
 Date 7/21/2020
 Data Processed By _____
 Date 7/21/2020

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>ZKH</u>	Sequence(s) #: <u>0G22009</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200721-2</u>
Date: <u>7/22/2020</u>	WO (s) #: <u>multiple</u>
Batch #(s): <u>F007314</u>	

● Select the correct preparation method.

Analyte	Prep Method		Matrix
<input checked="" type="checkbox"/> THg	EFAFS-T-AFS-SOP2885	FSTM Trap 70:30 Digest	Air/Gas
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia	Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest	Sed/Soil
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb	Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest	Tissue
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation	Air/Gas
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric	Tissue
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation	Water
<input type="checkbox"/> Hg0	NA	NA	Water
<input type="checkbox"/> Inorg Hg	NA	NA	Water

Analyst Initials: ZKH Reviewer Initials: PKS

- | | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | | | |
| (b) Check 5% of transcription from Instrument print-out and Excel file | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | | | |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 50 ml / aliquot = Excel dilution value | | | |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): _____ | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>ZKH</u>	Sequence(s) #: <u>0G22009</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200721-2</u>
Date: <u>7/22/2020</u>	WO (s) #: <u>multiple</u>
Batch #(s): <u>F007314</u>	

Analyst Initials ZKH Reviewer Initials PFS

- 5b. Has the B/C section data been uploaded? YES NO N/A
- QA/QC Data Checked**
6. RSD CF (≤ 15%) PASS FAIL
 Comments: _____
7. The calibration curve included a minimum of 5 Standards YES NO
 Comments: _____
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) PASS FAIL
9. ICV and CCV % Recoveries EPA 1631E (77-123%) PASS FAIL
 Comments: _____
10. Do all calibration points pass acceptance criteria? YES NO
 Comments: _____
11. Are qualifiers consistent with the data review flowcharts? YES NO N/A
 Comments: _____
12. Explain any items on the failed data report from Element
 Comments: _____
13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) PASS FAIL
- (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit: _____
- (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? YES NO
- (c) Was a BrCl Blank analyzed for each preservation level? YES NO N/A
- (d) Are Preparation Blanks summarized on QC page? YES NO
14. Filtration Blank Prepared (if yes, use FB qualifier) YES NO
- (a) Filtration Blank prep date same as associated samples' prep date YES NO N/A
- (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI YES NO N/A
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? PASS FAIL
 Comments: _____
16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? PASS FAIL
 Comments: _____
17. Have Total Solids been applied? (if NO, please ensure that they are done or nearly done) YES NO N/A
18. Is the correct 'Source' designated for MD/MS/MSD? YES NO
19. For digested preps: was there a spike witness signature & date on the prep bench sheet? YES NO N/A

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>ZKH</u>	Sequence(s) #: <u>0G22009</u>	
Reviewer: _____	Dataset ID(s): <u>THg26003-200721-2</u>	
Date: <u>7/22/2020</u>	WO (s) #: <u>multiple</u>	
Batch #(s): <u>F007314</u>		


Analyst Initials ZKH Reviewer Initials PGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|------------------------------------------------------------------|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| Comments: _____ | | | |
| 22. Are the samples run at the correct dilution level for the method? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| Comments: _____ | | | |
| 23. Dissolved < Total (if applicable) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 24. Effluent < Influent (visually confirm if needed) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 25. Are re-runs noted with reason? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 27. Is the B trap <5% A Traps | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 28. Are spiked trap recoveries 75-125% of true value? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 30. Have re-extracts been created for non-reportable samples? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| 32. Does the data set need scanning? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| 33. Does the dataset have an LOQ/LOQ or DOC? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| 34. Water samples: has the preservation log been included in dataset for final volume verification? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| 35. Water samples-is the final volume correct in the sequence? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
- Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs**
- | | | | | |
|----------------------------------------------------------------|----------------------------------|-----------------------------------------|----------------------------------------|--------------------------|
| 36. Date of analyst IDOC/CDOC: <u>7/26/2015</u> | IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: <u>7/25/2019</u> | Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 38. Date of LOD: <u>12/29/2019</u> | LOD within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 39. Date of LOQ: <u>12/29/2019</u> | LOQ within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |


Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0G22009

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F007314-MSDI	Hg-CVAFS-T-7030	845.5	15.3	925.4469569	0698	382.47	ng/g	72.3	71.00	125.00	28.0	24.00	PASS-OVER	FAIL-MSD (RPD)	QM-07



 Analyst Reviewed By _____ Date 7/22/2020



 Peer Reviewed By _____ Date 7/22/2020

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS 7/17/2020
Upload/Date: MFS 7/17/2020

Samples to lab: 1839 Batch #: FO073M
Reviewer/Date: ZUH 7/17/2020

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP3145	Microwave Digestion (Inorganics)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	N/A	Other?	

Initials	SOP Date	DOC Date
<u>MFS</u>	<u>10/28/19</u>	<u>11/18/19</u>
Comments: _____		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: SOP2795 70:30 TRG

<p>1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.</p> <p>2. Check prep method (a) For Ceuticals: Is correct Hg code being used in LIMS?</p> <p>3. Compare sample ID & container ID with benchsheet & in LIMS</p> <p>4. Check for transcription errors from benchsheet (a) Check and compare initial and final volumes (b) Check and compare mass (c) Has the number of pills been documented (Special Info 5 in benchsheet)? (d) Have assay logbook copies been attached & avg masses entered? (e) For re-digests, have e-mails been attached and verified? (f) Benchsheet prep date MUST match actual prep date</p> <p>5. Samples per Batch? Check QC Requirements (a) PBs per batch? (b) Are pre and post homogenization blanks in batch? (c) BS, BS/BSO or CRM in batch? (d) MS/MSD in batch? (e) MD in batch? (f) Is there at least one duplicate QC source in batch? (g) Are there any client specific requests, QC requests, etc? Document: <u>WO 0600004</u></p> <p>(h) Correct LIMS spike ID included for BS, BS/BSO and/or MS/MSD? (i) Correct 'source' designated for MD/MS/MSD? (j) For EFGS-filtered samples, was a filtration blank included?</p> <p>6. Special prep requirements? (a) For 1638: Have samples sat for 48 hours after preservation? (b) For 200.8: Have samples sat for 16 hours after preservation? (c) For DOD have pipettes been calibrated day of prep?</p> <p>7. Are the samples appropriately spiked? (a) Is the spike and amount used appropriate and entered into LIMS? (b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook) (c) Spikes added:</p>	<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%;"><input type="checkbox"/> YES</td> <td style="width: 15%;"><input type="checkbox"/> NO</td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td></td> <td colspan="5">If YES, notify supervisor and technician immediately.</td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> NO</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input type="checkbox"/> ICPMS</td> <td><input type="checkbox"/> CV-AFS</td> <td><input type="checkbox"/> 70:30</td> <td><input checked="" type="checkbox"/> N/A</td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> N/A</td> <td></td> <td><input 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Reviewer Initials: ZUH Tertiary Review: VGS
MFS 7/17/2020

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: N/A

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL

MFS 7/17/20

PREPARATION BENCH SHEET

F007314

Eurofins Frontier Global Sciences, LLC

1408 / Prepared: 7/17/2020

Matrix: Soil/Sediment Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F007314-BLK1	Blank	0.25	20					
F007314-BLK2	Blank	0.25	20					
F007314-BLK3	Blank	0.25	20					
F007314-BLK4	Filter Blank 0G00019-02A	0.2539	20					
F007314-BS1	LCS	0.25	20	2001202	20			
F007314-BSD1	LCS Dup	0.25	20	2001202	20			
F007314-MS1	Matrix Spike [0G00004-01]	0.2685	20	2001204	100			
F007314-MS2	Matrix Spike [0E00102-37RE1]	0.2578	20	2001204	100			
F007314-MSD1	Matrix Spike Dup [0G00004-01]	0.2612	20	2001204	100			
F007314-MSD2	Matrix Spike Dup [0E00102-37RE1]	0.2608	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001202	THg 100ng/mL Primary Spiking Standard	26-Aug-20 00:00	2000213	Boiling Chips for ICPMS	14-Aug-20 00:00
2001204	THg 1,000ng/mL Secondary Spiking Standard	26-Aug-20 00:00	2001688	70/30 Digestion Acid	03-Aug-20 00:00
			2001702	5% BrCl	28-Dec-20 00:00

PREPARATION BENCH SHEET

F007314

Eurofins Frontier Global Sciences, LLC

Matrix: Soil/Sediment

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/17/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0E00102-37RE1	YUWA-1093	0.255	20	-	-		Rebatch due to blank contamination - 1	
0E00102-38RE1	YUWA-1095	0.2513	20	-	-		Rebatch due to blank contamination - 1	
0E00102-39RE1	YUWA-1098	0.2526	20	-	-		Rebatch due to blank contamination - 1	
0E00102-40RE1	YUWA-1099	0.2641	20	-	-		Rebatch due to blank contamination - 1	
0E00102-41RE1	YUWA-1100	0.2504	20	-	-		Rebatch due to blank contamination - 1	
0E00102-42RE1	YUWA-1101	0.2602	20	-	-		Rebatch due to blank contamination - 1	
0E00102-43RE1	YUWA-1102	0.2589	20	-	-		Rebatch due to blank contamination - 1	
0G000004-01	BO-04_20ET204_062320_EEL_WB_01	0.2657	20	QC	-	eezer 23	MS/MSD	
0G000004-02	BO-04_20ET204_062320_EEL_WB_02	0.2534	20	-	-	eezer 23		
0G000004-03	BO-04_20ET211_062320_EEL_WB_03	0.2504	20	-	-	eezer 23		
0G000004-04	BO-04_20ET215_062320_EEL_WB_04	0.2607	20	-	-	eezer 23		
0G000004-05	BO-04_20ET215_062320_EEL_WB_05	0.2699	20	-	-	eezer 23		
0G000004-06	BO-04_20ET215_062320_EEL_WB_06	0.2615	20	-	-	eezer 23		
0G000004-07	BO-04_20ET215_062320_EEL_WB_07	0.2605	20	-	-	eezer 23		
0G000004-08	BO-04_20ET215_062320_EEL_WB_08	0.2624	20	-	-	eezer 23		
0G000004-09	BO-04_20ET215_062320_EEL_WB_09	0.2592	20	-	-	eezer 23		
0G000004-10	BO-04_20ET215_062320_EEL_WB_10	0.2695	20	-	-	eezer 23		
0004-11	BO-04_20ET215_062320_EEL_WB_11	0.2551	20	-	-	eezer 23		
0004-12	BO-04_20ET215_062320_EEL_WB_12	0.2701	20	-	-	eezer 23		

PREPARATION BENCH SHEET

F007314

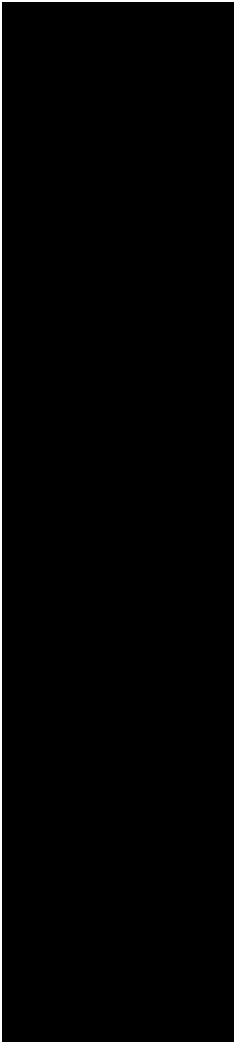
Eurofins Frontier Global Sciences, LLC

Matrix: Soil/Sediment

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/17/2020

0G00019-01	OL-3518-01	0.1313	/	20	/	-	-	i Refriger	Scan all data for level IV report	
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Technician: ZUH AFS Batch #: F007353 Date: 7/17/2020
 EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A
 Balance #: 14 Calibrated? Yes No
 *Time in: 1408 Actual Temp. (raw): 24.3
 Time out: 1620 Actual Temp. (raw): 21.9 °C w/ CF: 72.6 °C *Time in can't begin before target temperature is reached
 °C w/ CF: 70.2 °C

Final vol.: 20 mL (LIMS ID: 2001202) BS Spike vol.: 20 µL (LIMS ID: 2001202)
 Spike Witness: ML 7-17-2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2001202)
 HCl LIMS ID: N/A Pipette SN#: 0007853 Calibration Date: 7/14/20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2001680 Dispenser SN#: 14681607 Calibrated? Yes No
 Other Acid LIMS ID: 2001202 (SK BrCl) Dispenser #: 1932796 Calibrated? Yes No
 Glass Vial # 0600004-09 Boiling Chip lot # 2000213 *Hotblock Position: F5

Vial #	Sample ID Number	Container ID	Sample Size mL [X]g	Vial #	Sample ID Number	Container ID	Sample Size mL [X]g	CRM LIMS ID
1	F007314-06S1	E	0.2676	19	0600004-02	B	0.2534	NA
2	F007314-06S1	E	0.2672	20	0600004-03	B	0.2564	
3	F007314-06S1	E	0.2533	21	0600004-04	B	0.2607	
5	F007314-06S2	E	0.2552	22	0600004-05	B	0.2699	
6	F007314-06S3	E	0.2660	23	0600004-06	B	0.2615	
7	F007314-06S4	E	0.2539	24	0600004-07	B	0.2605	
8	0600004-01 (Spike)	B	0.2457	25	0600004-08	B	0.2624	
9	F007314-MS1	B	0.2685	26	0600004-09	B	0.2592	
10	F007314-MS01	B	0.2617	27	0600004-10	B	0.2695	
11	0600002-37 RE1 (Spike)	A	0.2550	28	0600004-11	B	0.2551	
12	F007314-MS2	A	0.2578	29	0600004-12	B	0.2701	
13	F007314-MS02	A	0.2608	30	0600019-01	B	0.1813	
14	0600102-35 RE1	A	0.2513	31				
15	0600102-39 RE1	A	0.2526	32				
16	0600102-40 RE1	A	0.2611	33				
17	0600102-41 RE1	A	0.2801	34				
18	0600102-42 RE1	A	0.2607	35				
	0600102-43 RE1	A	0.2589	36				

Analysis Datasheet for Total Mercury

Date of Analysis: July 22, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 0G22008_0G22009

Analyst: ZKH
 Units: ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	213.57 units	427.14	117.72 units	235.44	116.6 %Rec
SEQ-CAL2	1	1.00 ng/L	318.12 units	318.12	222.27 units	222.27	110.1 %Rec
SEQ-CAL3	1	5.00 ng/L	1012.68 units	202.54	916.83 units	183.37	90.8 %Rec
SEQ-CAL4	1	20.00 ng/L	3792.79 units	189.64	3696.94 units	184.85	91.5 %Rec
SEQ-CAL5	1	40.00 ng/L	7451.93 units	186.30	7356.08 units	183.90	91.1 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 201.97 Corr. St. Dev RF +/- 24.99 Corr. RSD CF 12.4% RSD Uncorr. Mean RF 264.75

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-BL	3	95.85 units	±4.15	0.36 ng/L	±0.02

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	4	0.013 ng/L	±0.018
BLK	2	4	51.184 ng/L	±72.870
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	ZKH	CAL	SEQ-IBL1	1	7/22/2020 15:37:36	0044-2.RAW	3:37:36 PM	94.01			-1.8	-0.009	-0.009	ng/L	
Hg2600-3	ZKH	CAL	SEQ-IBL2	1	7/22/2020 15:41:45	0046-1.RAW	3:41:45 PM	100.60			0.024	0.024	0.024	ng/L	
Hg2600-3	ZKH	CAL	SEQ-IBL3	1	7/22/2020 15:45:54	0047-1.RAW	3:45:54 PM	92.99			-2.9	-0.014	-0.014	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL1	1	7/22/2020 15:50:02	0048-1.RAW	3:50:02 PM	213.57			117.7	0.563	0.563	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL2	1	7/22/2020 15:54:11	0049-1.RAW	3:54:11 PM	318.12			222.3	1.101	1.101	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL3	1	7/22/2020 15:58:20	0050-1.RAW	3:58:20 PM	1012.86			916.8	4.540	4.540	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL4	1	7/22/2020 16:02:29	0051-1.RAW	4:02:29 PM	3792.76			3696.9	18.305	18.305	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL5	1	7/22/2020 16:06:38	0052-1.RAW	4:06:38 PM	7451.99			7356.1	36.423	36.423	ng/L	
Hg2600-3	ZKH	CAL	SEQ-ICV1	1	7/22/2020 16:10:48	0053-1.RAW	4:10:48 PM	1204.70			21.8	5.490	5.490	ng/L	
Hg2600-3	ZKH	CAL	SEQ-ICB1	1	7/22/2020 16:14:57	0054-1.RAW	4:14:57 PM	117.62			0.108	0.108	0.108	ng/L	
Hg2600-3	ZKH	SAM	F007340-BS1	1	7/22/2020 16:18:06	0055-1.RAW	4:18:06 PM	1046.51			950.7	4.694	4.694	ng/L	F007340
Hg2600-3	ZKH	SAM	F007340-BSD1	1	7/22/2020 16:22:25	0057-1.RAW	4:22:25 PM	1048.56			952.7	4.704	4.704	ng/L	F007340
Hg2600-3	ZKH	BLK	F007340-BLK1	1	7/22/2020 16:23:16	0056-1.RAW	4:23:16 PM	96.38			0.5	0.003	0.003	ng/L	F007340
Hg2600-3	ZKH	BLK	F007340-BLK2	1	7/22/2020 16:27:25	0057-1.RAW	4:27:25 PM	94.41			-1.4	-0.007	-0.007	ng/L	F007340
Hg2600-3	ZKH	BLK	F007340-BLK3	1	7/22/2020 16:31:35	0058-1.RAW	4:31:35 PM	101.96			6.1	0.030	0.030	ng/L	F007340
Hg2600-3	ZKH	BLK	F007340-BLK4	1	7/22/2020 16:35:44	0059-1.RAW	4:35:44 PM	101.43			5.6	0.028	0.028	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00055-02	1	7/22/2020 16:39:53	0060-1.RAW	4:39:53 PM	212.67			116.8	0.565	0.565	ng/L	F007340
Hg2600-3	ZKH	SAM	F007340-MS1	1	7/22/2020 16:44:03	0061-1.RAW	4:44:03 PM	1028.35			930.5	4.594	4.594	ng/L	F007340
Hg2600-3	ZKH	SAM	F007340-MSD1	1	7/22/2020 16:48:12	0062-1.RAW	4:48:12 PM	769.86			674.0	4.606	4.606	ng/L	F007340
Hg2600-3	ZKH	CAL	SEQ-CCV1	10	7/22/2020 17:00:40	0065-1.RAW	4:56:31 PM	1062.14			986.3	4.883	4.883	ng/L	F007340
Hg2600-3	ZKH	CAL	SEQ-CCB1	1	7/22/2020 17:04:50	0066-1.RAW	5:04:50 PM	1636.38			1.3	0.007	0.007	ng/L	
Hg2600-3	ZKH	SAM	F007340-MS2	10	7/22/2020 17:08:59	0067-1.RAW	5:08:59 PM	1664.11			1540.5	7.626	7.626	ng/L	F007340
Hg2600-3	ZKH	SAM	F000068-01	1	7/22/2020 17:13:08	0068-1.RAW	5:13:08 PM	680.78			584.3	7.764	7.764	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00041-01RE2	1	7/22/2020 17:17:18	0069-1.RAW	5:17:18 PM	94.89			2.883	2.883	2.883	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00041-02RE1	1	7/22/2020 17:21:27	0070-1.RAW	5:21:27 PM	906.09			-1.0	-0.018	-0.018	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00041-05RE1	1	7/22/2020 17:25:37	0071-1.RAW	5:25:37 PM	210.34			810.2	3.998	3.998	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00046-02RE1	1	7/22/2020 17:29:48	0072-1.RAW	5:29:48 PM	302.09			114.5	0.554	0.554	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00046-03RE1	1	7/22/2020 17:33:58	0073-1.RAW	5:33:58 PM	2585.28			206.2	1.006	1.006	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00049-01RE1	10	7/22/2020 17:38:06	0074-1.RAW	5:42:15 PM	3137.61			2489.4	15.060	15.060	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00051-01	1	7/22/2020 17:42:15	0075-1.RAW	5:42:15 PM	1841.88			1746.0	8.632	8.632	ng/L	F007340
Hg2600-3	ZKH	CAL	SEQ-CCV2	1	7/22/2020 17:46:24	0076-1.RAW	5:46:24 PM	132.16			1036.3	5.131	5.131	ng/L	F007340
Hg2600-3	ZKH	CAL	SEQ-CCB2	1	7/22/2020 17:50:34	0077-1.RAW	5:50:34 PM	125.62			29.8	0.147	0.147	ng/L	
Hg2600-3	ZKH	SAM	OG00051-02	1	7/22/2020 17:54:44	0078-1.RAW	5:54:44 PM	124.10			28.2	0.127	0.127	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00052-01	1	7/22/2020 18:03:04	0080-1.RAW	6:03:04 PM	220.46			124.6	0.604	0.604	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00052-02	1	7/22/2020 18:07:14	0081-1.RAW	6:07:14 PM	191.17			95.3	0.459	0.459	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00052-03	1	7/22/2020 18:11:26	0082-1.RAW	6:11:26 PM	80.21			-27.0	-0.147	-0.147	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00055-01	1	7/22/2020 18:15:40	0083-1.RAW	6:15:40 PM	80.21			-15.6	-0.091	-0.091	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00055-03	10	7/22/2020 18:19:52	0084-1.RAW	6:19:52 PM	78.06			-17.8	-0.089	-0.089	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00057-01	1	7/22/2020 18:24:02	0085-1.RAW	6:24:02 PM	75.40			-17.7	-0.101	-0.101	ng/L	F007340
Hg2600-3	ZKH	SAM	OG00057-02	1	7/22/2020 18:28:15	0086-1.RAW	6:28:15 PM	172.28			-20.5	-0.115	-0.115	ng/L	F007340
Hg2600-3	ZKH	CAL	SEQ-CCV3	1	7/22/2020 18:32:26	0087-1.RAW	6:32:26 PM	1068.03			76.4	0.365	0.365	ng/L	F007340
Hg2600-3	ZKH	CAL	SEQ-CCB3	1	7/22/2020 18:36:37	0088-1.RAW	6:36:37 PM	96.02			972.2	4.814	4.814	ng/L	
Hg2600-3	ZKH	SAM	F007314-BS1	20	7/22/2020 18:40:48	0089-1.RAW	6:40:48 PM	1447.99			0.2	0.001	0.001	ng/L	F007314
Hg2600-3	ZKH	SAM	F007314-BSD1	20	7/22/2020 18:45:00	0090-1.RAW	6:45:00 PM	1333.91			1352.1	4.136	4.136	ng/L	F007314
Hg2600-3	ZKH	BLK	F007314-BLK1	20	7/22/2020 18:49:10	0091-1.RAW	6:49:10 PM	315.96			1238.1	3.571	3.571	ng/L	F007314
Hg2600-3	ZKH	BLK	F007314-BLK2	20	7/22/2020 18:53:20	0092-1.RAW	6:53:20 PM	252.56			220.1	1.090	1.090	ng/L	F007314
Hg2600-3	ZKH	BLK	F007314-BLK3	20	7/22/2020 18:57:30	0093-1.RAW	6:57:30 PM	169.51			156.7	0.776	0.776	ng/L	F007314
Hg2600-3	ZKH	BLK	F007314-BLK4	20	7/22/2020 19:01:40	0094-1.RAW	7:01:40 PM	169.51			1617.0	8.006	8.006	ng/L	F007314
Hg2600-3	ZKH	SAM	OG00004-01	400	7/22/2020 19:05:49	0095-1.RAW	7:05:49 PM	3938.88			73.7	0.365	0.365	ng/L	F007314
Hg2600-3	ZKH	SAM	F007314-MS1	400	7/22/2020 19:09:59	0096-1.RAW	7:09:59 PM	6394.76			3843.0	18.900	18.900	ng/L	F007314
Hg2600-3	ZKH	SAM	F007314-MSD1	400	7/22/2020 19:14:09	0097-1.RAW	7:14:09 PM	5996.79			6298.9	31.060	31.060	ng/L	F007314
Hg2600-3	ZKH	SAM	OG00102-37RE1	100	7/22/2020 19:18:18	0098-1.RAW	7:18:18 PM	4137.03			5600.9	27.604	27.604	ng/L	F007314
Hg2600-3	ZKH	CAL	SEQ-CCV4	1	7/22/2020 19:22:28	0099-1.RAW	7:22:28 PM	1088.10			4041.2	19.497	19.497	ng/L	F007314
Hg2600-3	ZKH	CAL	SEQ-CCB4	1	7/22/2020 19:26:38	0100-1.RAW	7:26:38 PM	118.14			992.2	4.913	4.913	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCB4	1	7/22/2020 19:30:48	0101-1.RAW	7:30:48 PM				22.3	0.110	0.110	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2500-3	ZKH	SAM	F007314-M82	400	7/22/2020 19:34:57	0102-1-RAW	7:34:57 PM	3584.35			3468.5	17.046	6818.325	ng/L	F007314
Hg2500-3	ZKH	SAM	F007314-M82	400	7/22/2020 19:39:07	0103-1-RAW	7:39:07 PM	3836.96			3740.1	18.391	7356.257	ng/L	F007314
Hg2500-3	ZKH	SAM	0E00102-38RE1	100	7/22/2020 19:43:17	0104-1-RAW	7:43:17 PM	1183.67			1087.8	4.874	487.433	ng/L	F007314
Hg2500-3	ZKH	SAM	0E00102-39RE1	100	7/22/2020 19:47:27	0105-1-RAW	7:47:27 PM	5553.67			5457.8	26.512	2651.172	ng/L	F007314
Hg2500-3	ZKH	SAM	0E00102-40RE1	100	7/22/2020 19:51:37	0106-1-RAW	7:51:37 PM	1148.06			1052.2	4.698	469.810	ng/L	F007314
Hg2500-3	ZKH	SAM	0E00102-41RE1	100	7/22/2020 19:55:46	0107-1-RAW	7:55:46 PM	825.31			729.5	3.100	309.995	ng/L	F007314
Hg2500-3	ZKH	SAM	0E00102-42RE1	100	7/22/2020 19:59:56	0108-1-RAW	7:59:56 PM	986.46			870.6	3.799	379.893	ng/L	F007314
Hg2500-3	ZKH	SAM	0E00102-43RE1	100	7/22/2020 20:04:06	0109-1-RAW	8:04:06 PM	856.57			763.7	3.270	326.963	ng/L	F007314
Hg2500-3	ZKH	SAM	0G000004-02	400	7/22/2020 20:08:16	0110-1-RAW	8:08:16 PM	4106.75			4010.9	19.731	7892.553	ng/L	F007314
Hg2500-3	ZKH	CAL	SEQ-CCV5	1000	7/22/2020 20:12:25	0111-1-RAW	8:12:25 PM	4241.97			4145.5	20.475	20474.736	ng/L	F007314
Hg2500-3	ZKH	CAL	SEQ-CCB5	1	7/22/2020 20:16:35	0112-1-RAW	8:16:35 PM	1256.37846			1162.5	5.756	5.756	ng/L	
Hg2500-3	ZKH	SAM	0G000004-04	400	7/22/2020 20:20:45	0113-1-RAW	8:20:45 PM	128.83			33.0	0.163	0.163	ng/L	
Hg2500-3	ZKH	SAM	0G000004-05	400	7/22/2020 20:24:55	0114-1-RAW	8:24:55 PM	3502.56			3406.7	16.740	6695.942	ng/L	F007314
Hg2500-3	ZKH	SAM	0G000004-06	400	7/22/2020 20:28:05	0115-1-RAW	8:28:05 PM	4077.63			3981.8	19.587	7834.897	ng/L	F007314
Hg2500-3	ZKH	SAM	0G000004-07	400	7/22/2020 20:33:14	0116-1-RAW	8:33:14 PM	4151.16			4055.3	19.951	7980.508	ng/L	F007314
Hg2500-3	ZKH	SAM	0G000004-08	400	7/22/2020 20:37:24	0117-1-RAW	8:37:24 PM	4494.91			4399.1	21.653	8661.333	ng/L	F007314
Hg2500-3	ZKH	SAM	0G000004-09	400	7/22/2020 20:41:34	0118-1-RAW	8:41:34 PM	4157.38			4061.5	19.982	7992.844	ng/L	F007314
Hg2500-3	ZKH	SAM	0G000004-11	400	7/22/2020 20:45:44	0119-1-RAW	8:45:44 PM	3301.62			3205.8	15.745	6297.967	ng/L	F007314
Hg2500-3	ZKH	SAM	0G000004-12	400	7/22/2020 20:49:54	0120-1-RAW	8:49:54 PM	4367.64			4271.8	21.023	8409.261	ng/L	F007314
Hg2500-3	ZKH	SAM	0G000004-12	400	7/22/2020 20:54:04	0121-1-RAW	8:54:04 PM	2676.78			2580.9	12.651	5060.448	ng/L	F007314
Hg2500-3	ZKH	SAM	0G000019-01	20	7/22/2020 20:58:14	0122-1-RAW	8:58:14 PM	3722.87			3627.0	17.891	7132.281	ng/L	F007314
Hg2500-3	ZKH	CAL	SEQ-CCV6	1	7/22/2020 21:02:23	0123-1-RAW	9:02:23 PM	1177.76			1081.9	2.798	55.955	ng/L	F007314
Hg2500-3	ZKH	CAL	SEQ-CCB6	1	7/22/2020 21:06:33	0124-1-RAW	9:06:33 PM	1124.05			1028.2	5.091	5.091	ng/L	F007314
Hg2500-3	ZKH	CAL	SEQ-CCB6	1	7/22/2020 21:10:43	0125-1-RAW	9:10:43 PM	151.92			56.1	0.278	0.278	ng/L	

0G00057-02	C1	1	95.85	0.38		0087-1.RAW	18:32:26	172.28	Sample	OK	1	F007340
SEQ-CCV3	C2	1	95.85	4.81	96.27	0088-1.RAW	18:36:37	1068.03	Sample	OK	1	
SEQ-CCB3	C3	1	95.85	0.00	0.00	0089-1.RAW	18:40:48	96.02	Sample	OK	1	
F007314-BS1	C4	20	95.85	133.90		0090-1.RAW	18:45:00	1447.99	Sample	OK	1	F007314
F007314-BSD1	C5	20	95.85	122.60		0091-1.RAW	18:49:10	1333.91	Sample	OK	1	F007314
F007314-BLK1	C6	20	95.85	21.80		0092-1.RAW	18:53:20	315.96	Sample	OK	1	F007314
F007314-BLK2	C7	20	95.85	15.52		0093-1.RAW	18:57:30	252.56	Sample	OK	1	F007314
F007314-BLK3	C8	20	95.85	160.12		0094-1.RAW	19:01:40	1712.83	Sample	OK	1	F007314
F007314-BLK4	C9	20	95.85	7.29		0095-1.RAW	19:05:49	169.51	Sample	OK	1	F007314
0G00004-01	C10	400	95.85	7611.28		0096-1.RAW	19:09:59	3938.88	Sample	OK	1	F007314
F007314-MS1	C11	400	95.85	12475.31		0097-1.RAW	19:14:09	6394.79	Sample	OK	1	F007314
F007314-MSD1	C12	400	95.85	11092.82		0098-1.RAW	19:18:18	5696.76	Sample	OK	1	F007314
0E00102-3TRE1	C13	100	95.85	2000.93		0099-1.RAW	19:22:28	4137.03	Sample	OK	1	F007314
SEQ-CCV4	C14	1	95.85	4.91		0100-1.RAW	19:26:38	1088.10	Sample	OK	1	
SEQ-CCB4	C15	1	95.85	0.11	98.26	0101-1.RAW	19:30:48	118.14	Sample	OK	1	
F007314-MS2	C16	400	95.85	6869.51	0.00	0102-1.RAW	19:34:57	3564.35	Sample	OK	1	F007314
F007314-MSD2	C17	400	95.85	7407.44	343475.44	0103-1.RAW	19:39:07	3835.96	Sample	OK	1	F007314
0E00102-38RE1	C18	100	95.85	538.62		0104-1.RAW	19:43:17	1183.67	Sample	OK	1	F007314
0E00102-39RE1	C19	100	95.85	2702.36		0105-1.RAW	19:47:27	5553.67	Sample	OK	1	F007314
0E00102-40RE1	C20	100	95.85	520.99		0106-1.RAW	19:51:37	1148.08	Sample	OK	1	F007314
0E00102-41RE1	C21	100	95.85	361.18		0107-1.RAW	19:55:46	825.31	Sample	OK	1	F007314
0E00102-42RE1	A1	100	95.85	431.08		0108-1.RAW	19:59:56	966.48	Sample	OK	1	F007314
0E00102-43RE1	A2	100	95.85	378.15		0109-1.RAW	20:04:06	859.57	Sample	OK	1	F007314
0G00004-02	A3	400	95.85	7943.74		0110-1.RAW	20:08:16	4106.75	Sample	OK	1	F007314
0G00004-03	A4	1000	95.85	20525.92		0111-1.RAW	20:12:25	4241.37	Sample	OK	1	F007314
SEQ-CCV5	A5	1	95.85	5.76	115.12	0112-1.RAW	20:16:35	1258.38	Sample	OK	1	
SEQ-CCB5	A6	1	95.85	0.16	0.00	0113-1.RAW	20:20:45	128.83	Sample	OK	1	
0G00004-04	A7	400	95.85	6747.13		0114-1.RAW	20:24:55	3502.56	Sample	OK	1	F007314
0G00004-05	A8	400	95.85	7886.08		0115-1.RAW	20:29:05	4077.63	Sample	OK	1	F007314
0G00004-06	A9	400	95.85	8031.69		0116-1.RAW	20:33:14	4151.16	Sample	OK	1	F007314
0G00004-07	A10	400	95.85	8712.52		0117-1.RAW	20:37:24	4494.91	Sample	OK	1	F007314
0G00004-08	A11	400	95.85	8044.03		0118-1.RAW	20:41:34	4157.38	Sample	OK	1	F007314
0G00004-09	A12	400	95.85	6349.15		0119-1.RAW	20:45:44	3301.62	Sample	OK	1	F007314
0G00004-10	A13	400	95.85	8460.44		0120-1.RAW	20:49:54	4367.64	Sample	OK	1	F007314
0G00004-11	A14	400	95.85	5111.63		0121-1.RAW	20:54:04	2676.78	Sample	OK	1	F007314
0G00004-12	A15	400	95.85	7183.46		0122-1.RAW	20:58:14	3722.87	Sample	OK	1	F007314
0G00019-01	A16	20	95.85	107.14		0123-1.RAW	21:02:23	1177.76	Sample	OK	1	F007314
SEQ-CCV6	A17	1	95.85	5.09	101.82	0124-1.RAW	21:06:33	1124.05	Sample	OK	1	
SEQ-CCB6	A18	1	95.85	0.28	0.00	0125-1.RAW	21:10:43	151.92	Sample	OK	1	

SEQ-IBL1	A1				
SEQ-IBL2	A2	OG00049-01RE	B10		
SEQ-IBL3	A3	OG00051-01	B11		
SEQ-CAL1	A4	SEQ-CCV2	B12		
SEQ-CAL2	A5	SEQ-CCB2	B13		
SEQ-CAL3	A6	OG00051-02	B14		
SEQ-CAL4	A7	OG00052-01	B15		
SEQ-CAL5	A8	OG00052-02	B16		
SEQ-ICV1	A9	OG00052-03	B17	OE00102-38RE	C18
SEQ-ICB1	A10	OG00052-04	B18	OE00102-39RE	C19
F007340-BS1	A11	OG00055-01	B19	OE00102-40RE	C20
F007340-BSD1	A12	OG00055-03	B20	OE00102-41RE	C21
F007340-BLK1	A13	OG00057-01	B21	OE00102-42RE	A1
F007340-BLK2	A14	OG00057-02	C1	OE00102-43RE	A2
F007340-BLK3	A15	SEQ-CCV3	C2	OG00004-02	A3
F007340-BLK4	A16	SEQ-CCB3	C3	OG00004-03	A4
OG00055-02	A17	F007314-BS1	C4	SEQ-CCV5	A5
F007340-MS1	A18	F007314-BSD1	C5	SEQ-CCB5	A6
F007340-MSD1	A19	F007314-BLK1	C6	OG00004-04	A7
OG00057-03	A20	F007314-BLK2	C7	OG00004-05	A8
SEQ-CCV1	A21	F007314-BLK3	C8	OG00004-06	A9
SEQ-CCB1	B1	F007314-BLK4	C9	OG00004-07	A10
F007340-MS2	B2	OG00004-01	C10	OG00004-08	A11
F007340-MSD2	B3	F007314-MS1	C11	OG00004-09	A12
OF00068-01	B4	F007314-MSD1	C12	OG00004-10	A13
OG00041-01RE	B5	OE00102-37RE	C13	OG00004-11	A14
OG00041-02RE	B6	SEQ-CCV4	C14	OG00004-12	A15
OG00041-05RE	B7	SEQ-CCB4	C15	OG00019-01	A16
OG00046-02RE	B8	F007314-MS2	C16	SEQ-CCV6	A17
OG00046-03RE	B9	F007314-MSD2	C17	SEQ-CCB6	A18

MS 7/22/2020

ANALYSIS SEQUENCE

0G27012

0G27013 attached

Instrument: Hg2600-3



QUALITY ASSURANCE

Calibration ID: UNASSIGNED

Analyzed: 7/24/2020

PEER REVIEWED

Comments

INITIALS: PCS

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0G27012-IBL1	QC	1			
0G27012-IBL2	QC	2			
0G27012-IBL3	QC	3			
0G27012-CAL1	QC	4	2001807		
0G27012-CAL2	QC	5	2001808		
0G27012-CAL3	QC	6	2001634		
0G27012-CAL4	QC	7	2001635		
0G27012-CAL5	QC	8	2001636		
0G27012-ICV1	QC	9	2001809		
0G27012-ICB1	QC	10			
F007316-BS1	QC	11			
F007316-BSD1	QC	12			
F007316-BLK1	QC	13			
F007316-BLK2	QC	14			
F007316-BLK3	QC	15			
0G00004-40	Hg-CVAFS-T-7030	16			
F007316-MS1	QC	17			
F007316-MSD1	QC	18			
0G00004-50	Hg-CVAFS-T-7030	19			
F007316-MS2	QC	20			
0G27012-CCV1	QC	21	2001809		
0G27012-CCB1	QC	22			
F007316-MSD2	QC	23			
0G00004-33	Hg-CVAFS-T-7030	24			
0G00004-34	Hg-CVAFS-T-7030	25			
0G00004-35	Hg-CVAFS-T-7030	26			
0G00004-36	Hg-CVAFS-T-7030	27			
0G00004-37	Hg-CVAFS-T-7030	28			
0G00004-38	Hg-CVAFS-T-7030	29			
0G00004-39	Hg-CVAFS-T-7030	30			
0G00004-41	Hg-CVAFS-T-7030	31			
0G00004-42	Hg-CVAFS-T-7030	32			
0G27012-CCV2	QC	33	2001809		
0G27012-CCB2	QC	34			
0G00004-43	Hg-CVAFS-T-7030	35			
0G00004-44	Hg-CVAFS-T-7030	36			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 7/24/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0G00004-45	Hg-CVAFS-T-7030	37			
0G00004-46	Hg-CVAFS-T-7030	38			
0G00004-47	Hg-CVAFS-T-7030	39			
0G00004-48	Hg-CVAFS-T-7030	40			
0G00004-49	Hg-CVAFS-T-7030	41			
F007315-BS1	QC	42			
F007315-BSD1	QC	43			
F007315-BLK1	QC	44			
0G27012-CCV3	QC	45	2001809		
0G27012-CCB3	QC	46			
F007315-BLK2	QC	47			
F007315-BLK3	QC	48			
0G00004-13	Hg-CVAFS-T-7030	49			
F007315-MS1	QC	50			
F007315-MSD1	QC	51			
0G00004-14	Hg-CVAFS-T-7030	52			
F007315-MS2	QC	53			
F007315-MSD2	QC	54			
0G00004-15	Hg-CVAFS-T-7030	55			
0G00004-16	Hg-CVAFS-T-7030	56			
0G27012-CCV4	QC	57	2001809		
0G27012-CCB4	QC	58			
0G00004-17	Hg-CVAFS-T-7030	59			
0G00004-18	Hg-CVAFS-T-7030	60			
0G00004-19	Hg-CVAFS-T-7030	61			
0G00004-20	Hg-CVAFS-T-7030	62			
0G00004-21	Hg-CVAFS-T-7030	63			
0G00004-22	Hg-CVAFS-T-7030	64			
0G00004-23	Hg-CVAFS-T-7030	65			
0G00004-24	Hg-CVAFS-T-7030	66			
0G00004-25	Hg-CVAFS-T-7030	67			
0G00004-26	Hg-CVAFS-T-7030	68			
0G27012-CCV5	QC	69	2001809		
0G27012-CCB5	QC	70			
0G00004-27	Hg-CVAFS-T-7030	71			
0G00004-28	Hg-CVAFS-T-7030	72			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 7/24/2020

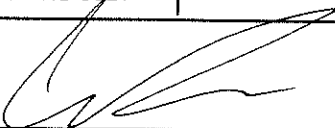
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0G00004-29	Hg-CVAFS-T-7030	73			
0G00004-30	Hg-CVAFS-T-7030	74			
0G00004-31	Hg-CVAFS-T-7030	75			
0G00004-32	Hg-CVAFS-T-7030	76			
F007344-BS1	QC	77			
F007344-BSD1	QC	78			
F007344-BLK1	QC	79			
F007344-BLK2	QC	80			
0G27012-CCV6	QC	81	2001809		
0G27012-CCB6	QC	82			
F007344-BLK3	QC	83			
0G00054-01	Hg-CVAFS-T-7030	84			
F007344-MS1	QC	85			
F007344-MSD1	QC	86			
0G00054-02	Hg-CVAFS-T-7030	87			
F007344-MS2	QC	88			
F007344-MSD2	QC	89			
0G00054-03	Hg-CVAFS-T-7030	90			
0G00054-04	Hg-CVAFS-T-7030	91			
0G00054-05	Hg-CVAFS-T-7030	92			
0G27012-CCV7	QC	93	2001809		
0G27012-CCB7	QC	94			
0G00054-06	Hg-CVAFS-T-7030	95			
0G00054-07	Hg-CVAFS-T-7030	96			
0G00054-08	Hg-CVAFS-T-7030	97			
0G00054-09	Hg-CVAFS-T-7030	98			
0G00054-10	Hg-CVAFS-T-7030	99			
0G00054-11	Hg-CVAFS-T-7030	100			
0G00054-12	Hg-CVAFS-T-7030	101			
0G00054-13	Hg-CVAFS-T-7030	102			
0G00054-14	Hg-CVAFS-T-7030	103			
0G00054-15	Hg-CVAFS-T-7030	104			
0G27012-CCV8	QC	105	2001809		
0G27012-CCB8	QC	106			
0G00054-16	Hg-CVAFS-T-7030	107			
0G00054-17	Hg-CVAFS-T-7030	108			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 7/24/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0G00054-18	Hg-CVAFS-T-7030	109			
0G00054-19	Hg-CVAFS-T-7030	110			
0G00054-20	Hg-CVAFS-T-7030	111			
F007344-BS2	QC	112			
F007344-BSD2	QC	113			
0G27012-CCV9	QC	114	2001809		
0G27012-CCB9	QC	115			


Samples Loaded By _____
Date 7/27/20


Data Processed By _____
Date 7/27/20

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>EMB</u>	Sequence(s) #: <u>0G27012</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200724-1</u>
Date: <u>7/27/2020</u>	WO (s) #: _____
Batch #(s): <u>F007316, F007315, F007344</u>	

• Select the correct preparation method.

Analyte	Prep Method	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb HF/HNO3/HCl Digest
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb
<input checked="" type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation
<input type="checkbox"/> Hg0	NA	NA
<input type="checkbox"/> Inorg Hg	NA	NA

Analyst Initials: EMB 7/27/20 Reviewer Initials: PGS

- | | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | | | |
| (b) Check 5% of transcription from Instrument print-out and Excel file | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | | | |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 50 ml / aliquot = Excel dilution value | | | |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): _____ | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>EMB</u>	Sequence(s) #: <u>0G27012</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200724-1</u>
Date: <u>7/27/2020</u>	WO (s) #: <u>0</u>
Batch #(s): <u>F007316, F007315, F007344</u>	_____

Analyst Initials EMB 7/27/20 **Reviewer Initials** PGS

- 5b. Has the B/C section data been uploaded? YES NO N/A
- QA/QC Data Checked**
6. RSD CF ($\leq 15\%$) PASS FAIL
 Comments: _____
7. The calibration curve included a minimum of 5 Standards YES NO
 Comments: _____
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) PASS FAIL
9. ICV and CCV % Recoveries EPA 1631E (77-123%) PASS FAIL
 Comments: _____
10. Do all calibration points pass acceptance criteria? YES NO
 Comments: _____
11. Are qualifiers consistent with the data review flowcharts? YES NO N/A
 Comments: _____
12. Explain any items on the failed data report from Element
 Comments: _____
13. Are the individual Preparation Blanks $< PQL$ or $< 2.2 \times MDL$ for WI (refer to appropriate prep method PQL list) PASS FAIL
 (a) If not $< PQL$ or $< 2.2 \times MDL$ for WI, note which PB(s) are above control limit:
 (b) Is the mean PB $< PQL$ or $< 2.2 \times MDL$ for WI (for appropriate qualification)? YES NO
 (c) Was a BrCl Blank analyzed for each preservation level? YES NO N/A
 (d) Are Preparation Blanks summarized on QC page? YES NO
14. Filtration Blank Prepared (if yes, use FB qualifier) YES NO
 (a) Filtration Blank prep date same as associated samples' prep date YES NO N/A
 (b) Filtration Blank absolute value $< PQL$ or $< 2.2 \times MDL$ for WI YES NO N/A
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? PASS FAIL
 Comments: _____
16. CCBs individually < 0.50 ng/L or $2.2 \times MDL$ for WI? PASS FAIL
 Comments: _____
17. Have Total Solids been applied? (if NO, please ensure that they are done or nearly done) YES NO N/A
18. Is the correct 'Source' designated for MD/MS/MSD? YES NO
19. For digested preps: was there a spike witness signature & date on the prep bench sheet? YES NO N/A

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	EMB	Sequence(s) #:	0G27012
Reviewer:		Dataset ID(s):	THg26003-200724-1
Date:	7/27/2020	WO (s) #:	0
Batch #(s):	F007316, F007315, F007344		

Analyst Initials EMB 7/27/20

Reviewer Initials PGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|------------------------------------------------------------------|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| Comments: _____ | | | |
| 22. Are the samples run at the correct dilution level for the method? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| Comments: _____ | | | |
| 23. Dissolved < Total (if applicable) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 24. Effluent < Influent (visually confirm if needed) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 25. Are re-runs noted with reason? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 27. Is the B trap <5% A Traps | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 28. Are spiked trap recoveries 75-125% of true value? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| Comments: _____ | | | |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| Comments: _____ | | | |
| 30. Have re-extracts been created for non-reportable samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A <input type="checkbox"/> |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| 32. Does the data set need scanning? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| 33. Does the dataset have an LOQ/LOQ or DOC? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| 34. Water samples: has the preservation log been included in dataset for final volume verification? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |
| 35. Water samples-is the final volume correct in the sequence? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A <input type="checkbox"/> |

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

- | | | | | | |
|-----------------------------------------------------|----------|----------------------------------|-----------------------------------------|-----------------------------|--------------------------|
| 36. Date of analyst IDOC/CDOC: _____ | 1/31/20 | IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: _____ | 12/25/19 | Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 38. Date of LOD: _____ | 1/30/20 | LOD within last 3 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 39. Date of LOQ: _____ | 1/30/20 | LOQ within last 3 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0G27012

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD Limit	Over Cal	Failure	Qualifier
F007315-BLK1	Hg-CVAFS-T-7030	1.114	0.800				ng/g					PASS-OVER	FAIL-BLK	B
F007315-BLK2	Hg-CVAFS-T-7030	1.074	0.800				ng/g					PASS-OVER	FAIL-BLK	B
F007315-BLK3	Hg-CVAFS-T-7030	3.527	0.800				ng/g					PASS-OVER	FAIL-BLK	B
F007344-BS2	Hg-CVAFS-T-7030	22.06	0.800			8.0000	ng/g	276	75.00	125.00		PASS-OVER	FAIL-BS	

[Handwritten Signature]

7/27/20
Date

[Handwritten Signature]
Peer Reviewed By
Date

PREPARATION BENCH SHEET

F007316

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 7/21/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F007316-BLK1	Blank	0.25	20					
F007316-BLK2	Blank	0.25	20					
F007316-BLK3	Blank	0.25	20					
F007316-BS1	LCS	0.25	20	2001202	20			
F007316-BSD1	LCS Dup	0.25	20	2001202	20			
F007316-MS1	Matrix Spike [0G00004-40]	0.2622	20	2001204	100			
F007316-MS2	Matrix Spike [0G00004-50]	0.2671	20	2001204	100			
F007316-MSD1	Matrix Spike Dup [0G00004-40]	0.2554	20	2001204	100			
F007316-MSD2	Matrix Spike Dup [0G00004-50]	0.2549	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001202	THg 100ng/mL Primary Spiking Standard	26-Aug-20 00:00	2000213	Boiling Chips for ICPMS	14-Aug-20 00:00
2001204	THg 1,000ng/mL Secondary Spiking Standard	26-Aug-20 00:00	2001276	2.5% Hydroxylamine-HCl working solution	06-Aug-20 00:00
			2001632	THg Washstation (0.5% BrCl)	28-Dec-20 00:00
			2001686	THg 2% BrCl	03-Aug-20 00:00
			2001775	70/30 Digestion Acid	28-Dec-20 00:00
			2001790	5% BrCl	28-Dec-20 00:00
			2001792	3% SnCl2 THg reductant	21-Jan-21 00:00

PREPARATION BENCH SHEET

F007316

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 7/21/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0G00004-33	OB-05_20ET100_062320_EEL_WB_14	0.2547	20	-	-	eezer 23		
0G00004-34	OB-05_20ET100_062320_EEL_WB_15	0.25	20	-	-	eezer 23		
0G00004-35	OB-05_20ET100_062320_EEL_WB_16	0.26	20	-	-	eezer 23		
0G00004-36	OB-05_20ET100_062320_EEL_WB_17	0.2574	20	-	-	eezer 23		
0G00004-37	OB-05_20ET102_062320_EEL_WB_18	0.2688	20	-	-	eezer 23		
0G00004-38	OB-05_20ET102_062320_EEL_WB_19	0.2514	20	-	-	eezer 23		
0G00004-39	OB-05_20ET102_062320_EEL_WB_20	0.2512	20	-	-	eezer 23		
0G00004-40	OB-01_20ET300_062420_EEL_WB_01	0.2507	20	QC	-	eezer 23	MS/MSD	
0G00004-41	OB-01_20ET301_062420_EEL_WB_02	0.2507	20	-	-	eezer 23		
0G00004-42	OB-01_20ET365_062620_EEL_WB_03	0.2584	20	-	-	eezer 23		
0G00004-43	OB-01_20ET302_062420_EEL_WB_04	0.2551	20	-	-	eezer 23		
0G00004-44	OB-01_20ET304_062420_EEL_WB_05	0.2616	20	-	-	eezer 23		
0G00004-45	OB-01_20ET305_062420_EEL_WB_06	0.2643	20	-	-	eezer 23		
0G00004-46	OB-01_20ET333_062520_EEL_WB_07	0.2633	20	-	-	eezer 23		
0G00004-47	OB-01_20ET356_062520_EEL_WB_08	0.2611	20	-	-	eezer 23		
0G00004-48	OB-01_20ET355_062520_EEL_WB_09	0.2585	20	-	-	eezer 23		
0G00004-49	HORSESHOE CRAB_062420_EEL_BAIT	0.2517	20	-	-	eezer 23		
00004-50	OB-05_20ET129_062320_EEL_WB_01	0.2528	20	QC	-	eezer 23	MS/MSD	

PREPARATION BENCH SHEET

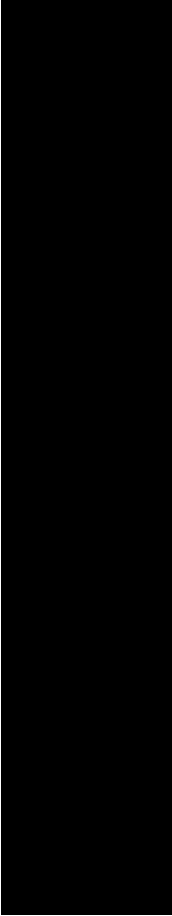
F007316

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/21/2020



PREPARATION BENCH SHEET

F007316

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/21/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F007316-BLK1	Blank	0.25	20					
F007316-BLK2	Blank	0.25	20					
F007316-BLK3	Blank	0.25	20					
F007316-BS1	LCS	0.25	20	2001202	20			
F007316-BSD1	LCS Dup	0.25	20	2001202	20			
F007316-MS1	Matrix Spike [0G00004-40]	0.2622	20	2001204	100			
F007316-MS2	Matrix Spike [0G00004-50]	0.2671	20	2001204	100			
F007316-MSD1	Matrix Spike Dup [0G00004-40]	0.2554	20	2001204	100			
F007316-MSD2	Matrix Spike Dup [0G00004-50]	0.2549	20	2001204	100			

Standard ID(s):

2001202 ✓
2001204 ✓

Description:
THg 100ng/mL Primary Spiking Standard
THg 1,000ng/mL Secondary Spiking Standard

Expiration:

26-Aug-20 00:00
26-Aug-20 00:00

Reagent ID(s):

2000213 ✓
2001775 ✓
2001790 ✓

Description:

Boiling Chips for ICPMS
70/30 Digestion Acid
5% BrCl

Expiration:

14-Aug-20 00:00
03-Aug-20 00:00
28-Dec-20 00:00

PREPARATION BENCH SHEET

F007316

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/21/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0G00004-33	OB-05_20ET100_062320_EEL_WB_14	0.2547	20	-	-	eezer 23		
0G00004-34	OB-05_20ET100_062320_EEL_WB_15	0.25	20	-	-	eezer 23		
0G00004-35	OB-05_20ET100_062320_EEL_WB_16	0.26	20	-	-	eezer 23		
0G00004-36	OB-05_20ET100_062320_EEL_WB_17	0.2574	20	-	-	eezer 23		
0G00004-37	OB-05_20ET102_062320_EEL_WB_18	0.2688	20	-	-	eezer 23		
0G00004-38	OB-05_20ET102_062320_EEL_WB_19	0.2514	20	-	-	eezer 23		
0G00004-39	OB-05_20ET102_062320_EEL_WB_20	0.2512	20	-	-	eezer 23		
0G00004-40	OB-01_20ET300_062420_EEL_WB_01	0.2507	20	QC	-	eezer 23	MS/MSD ✓	
0G00004-41	OB-01_20ET301_062420_EEL_WB_02	0.2507	20	-	-	eezer 23		
0G00004-42	OB-01_20ET365_062620_EEL_WB_03	0.2584	20	-	-	eezer 23		
0G00004-43	OB-01_20ET302_062420_EEL_WB_04	0.2551	20	-	-	eezer 23		
0G00004-44	OB-01_20ET304_062420_EEL_WB_05	0.2616	20	-	-	eezer 23		
0G00004-45	OB-01_20ET305_062420_EEL_WB_06	0.2643	20	-	-	eezer 23		
0G00004-46	OB-01_20ET333_062520_EEL_WB_07	0.2633	20	-	-	eezer 23		
0G00004-47	OB-01_20ET356_062520_EEL_WB_08	0.2611	20	-	-	eezer 23		
0G00004-48	OB-01_20ET355_062520_EEL_WB_09	0.2585	20	-	-	eezer 23		
0G00004-49	HORSESHOE CRAB_062420_EEL_BAIT	0.2517	20	-	-	eezer 23		
00004-50	OB-05_20ET129_062320_EEL_WB_01	0.2528	20	QC	-	eezer 23	MS/MSD ✓	

PREPARATION BENCH SHEET

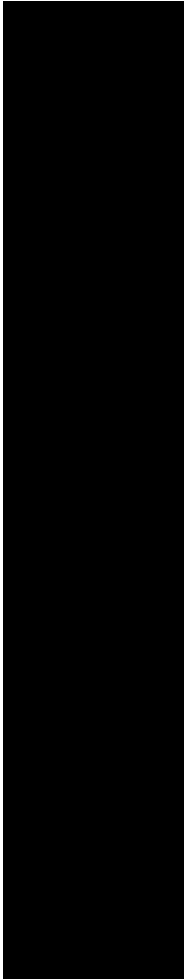
F007316

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/21/2020



Technician: JS Batch #: F007316 Date: 7/21/2020
MPS Spike and Digest
 EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A
 Vial Type: Glass Teflon
 Balances #: 23 Calibrated? Yes No
 Therm. #: 70750088 Calibrated? Yes No
 *Time in: 1524 Actual Temp. (raw): 72.4 °C w/ CF: 71.3 °C *Time in can't begin before target temperature is reached
 Time out: 1725 Actual Temp. (raw): 78.2 °C w/ CF: 77.1 °C

Final vol.: 20 mL (LIMS ID: 2001790) BS Spike vol.: 20 µL (LIMS ID: 2001702)
 Spike Witness: JKH 7/21/2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2001704)

HCl LIMS ID: N/A Pipette SN #: 0007852 Calibration Date: 7/21/2020
 HNO₃ LIMS ID: N/A Pipette SN #: 01181607 Calibration Date: N/A
 70/30 LIMS ID: 2001715 Dispenser #: 197281607 Calibrated? Yes No
 Other Acid LIMS ID: 2001790 Dispenser #: 19331453 Calibrated? Yes No
 Glass Vial # 1 see comments Boiling Chip lot # 2006213 *Hotblock Position: FL6

Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID
1	F007316-BLK1	N/A	0.2548	19	0600004-44	C	0.2616	<input checked="" type="checkbox"/> NA
2	F007316-BLK2	N/A	0.2506	20	0600004-45	C	0.2643	
3	F007316-BLK3	N/A	0.2551	21	0600004-46	C	0.2633	
4	F007316-BL51	N/A	0.2647	22	0600004-47	C	0.2611	
5	F007316-BSD1	N/A	0.2549	23	0600004-48	C	0.2585	
6	0600004-33	B	0.2547	24	0600004-49	C	0.2517	⓪ Vials labelled by another analyst. vial lot not recorded -MPS 7/21/2020
7	0600004-34	B	0.2500	25	0600004-50	B	0.2528	
8	0600004-35	B	0.2600	26	F007316-MSA	B	0.2671	
9	0600004-36	B	0.2574	27	F007316-MSD2	B	0.2549	
10	0600004-37	B	0.2688	28				
11	0600004-38	B	0.2514	29				
12	0600004-39	B	0.2512	30				
13	0600004-40	B	0.2507	31				
14	F007316-MS1	B	0.2622	32				
15	F007316-MSD1	B	0.2554	33				
16	0600004-41	B	0.2507	34				
17	0600004-42	B	0.2584	35				
18	0600004-43	B	0.2551	36				

Verified By: JKH
7/21/2020

PREPARATION BENCH SHEET

F007315

Eurofins Frontier Global Sciences, LLC

Matrix: Soil/Sediment Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 7/21/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F007315-BLK1	Blank	0.25	20					
F007315-BLK2	Blank	0.25	20					
F007315-BLK3	Blank	0.25	20					
F007315-BS1	LCS	0.25	20	2001202	20			
F007315-BSD1	LCS Dup	0.25	20	2001202	20			
F007315-MS1	Matrix Spike [0G00004-13]	0.258	20	2001204	100			
F007315-MS2	Matrix Spike [0G00004-14]	0.2642	20	2001204	100			
F007315-MSD1	Matrix Spike Dup [0G00004-13]	0.2564	20	2001204	100			
F007315-MSD2	Matrix Spike Dup [0G00004-14]	0.2511	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001202	THg 100ng/mL Primary Spiking Standard	26-Aug-20 00:00	2000213	Boiling Chips for ICPMS	14-Aug-20 00:00
2001204	THg 1,000ng/mL Secondary Spiking Standard	26-Aug-20 00:00	2001276	2.5% Hydroxylamine-HCl working solution	06-Aug-20 00:00
			2001632	THg Washstation (0.5% BrCl)	28-Dec-20 00:00
			2001686	THg 2% BrCl	03-Aug-20 00:00
			2001775	70/30 Digestion Acid	28-Dec-20 00:00
			2001790	5% BrCl	21-Jan-21 00:00
			2001792	3% SnCl2 THg reductant	

PREPARATION BENCH SHEET

F007315

Eurofins Frontier Global Sciences, LLC

Matrix: Soil/Sediment

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/21/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0G00004-13	BO-04_20ET215_062320_EEL_WB_13	0.2534	20	-	-	eezer 23		
0G00004-14	BO-04_20ET215_062320_EEL_WB_14	0.2546	20	-	-	eezer 23		
0G00004-15	BO-04_20ET215_062320_EEL_WB_15	0.2517	20	-	-	eezer 23		
0G00004-16	BO-04_20ET219_062320_EEL_WB_16	0.2561	20	-	-	eezer 23		
0G00004-17	BO-04_20ET228_062320_EEL_WB_17	0.2609	20	-	-	eezer 23		
0G00004-18	BO-04_20ET228_062320_EEL_WB_18	0.258	20	-	-	eezer 23		
0G00004-19	BO-04_20ET225_062320_EEL_WB_19	0.2643	20	-	-	eezer 23		
0G00004-20	BO-04_20ET224_062320_EEL_WB_20	0.2547	20	-	-	eezer 23		
0G00004-21	OB-05_20ET127_062320_EEL_WB_02	0.2528	20	-	-	eezer 23		
0G00004-22	OB-05_20ET125_062320_EEL_WB_03	0.2668	20	-	-	eezer 23		
0G00004-23	OB-05_20ET125_062320_EEL_WB_04	0.2626	20	-	-	eezer 23		
0G00004-24	OB-05_20ET125_062320_EEL_WB_05	0.2575	20	-	-	eezer 23		
0G00004-25	OB-05_20ET119_062320_EEL_WB_06	0.2589	20	-	-	eezer 23		
0G00004-26	OB-05_20ET119_062320_EEL_WB_07	0.2696	20	-	-	eezer 23		
0G00004-27	OB-05_20ET117_062320_EEL_WB_08	0.257	20	-	-	eezer 23		
0G00004-28	OB-05_20ET115_062320_EEL_WB_09	0.2509	20	-	-	eezer 23		
0G00004-29	OB-05_20ET115_062320_EEL_WB_10	0.2666	20	-	-	eezer 23		
0004-30	OB-05_20ET100_062320_EEL_WB_11	0.2685	20	-	-	eezer 23		
0004-31	OB-05_20ET100_062320_EEL_WB_12	0.2503	20	-	-	eezer 23		

PREPARATION BENCH SHEET

F007315

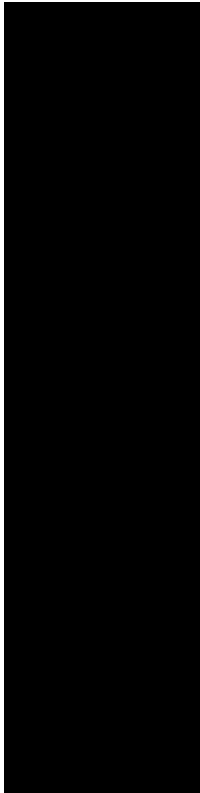
Eurofins Frontier Global Sciences, LLC

Matrix: Soil/Sediment

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/21/2020

0C00004-32	OB-05_20ET100_062320_EEL_WB_13	0.2703	20	-	-	eezet 23	
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Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS 7/21/2020
Upload/Date: MFS 7/21/2020

Samples to lab: 1600
Reviewer/Date: _____

Batch #: F007315

EFGS Preparation Method			
<input type="checkbox"/> SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS	<input type="checkbox"/> AFS
<input type="checkbox"/> SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2840	Modified Aqua Regia		
<input type="checkbox"/> SOP2820	RP		
<input type="checkbox"/> SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2993	Oven Digestion (As, Se Speciation)		
<input type="checkbox"/> SOP5145	Microwave Digestion (Nutraceuticals)		
<input type="checkbox"/> SOP5145	Microwave Digestion (3051)		
<input checked="" type="checkbox"/> NA	Other: <u>SOP 2795 70:30</u>		

Initials	SOP Date	DOC Date
<u>MFS</u>	<u>10/28/19</u>	<u>11/18/19</u>

Comments: _____

Conditionally formatted training files located at:
 \\us34file\General and Admin\Quality Assurance\Training\Training Master
 (Contact QA for any problems regarding these training files.)

Analytes: THg

<p>1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.</p> <p>2. Check prep method (a) For Ceuticals: Is correct Hg code being used in LIMS? <input type="checkbox"/> ICPMS</p> <p>3. Compare sample ID & container ID with benchsheet & in LIMS</p> <p>4. Check for transcription errors from benchsheet (a) Check and compare initial and final volumes (b) Check and compare mass (c) Has the number of pills been documented (Special Info 5 in benchsheet)? (d) Have assay logbook copies been attached & avg masses entered? (e) For re-digests, have e-mails been attached and verified? (f) Benchsheet prep date MUST match actual prep date</p> <p>5. Samples per Batch? Check QC Requirements (a) PBs per batch? (b) Are pre and post homogenization blanks in batch? (c) BS, BS/BSD or CRM in batch? (d) MS/MSD in batch? (e) MD in batch? (f) Is there at least one duplicate QC source in batch? (g) Are there any client specific requests, QC requests, etc?</p> <p>Document: _____</p> <p>(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? (i) Correct 'source' designated for MD/MS/MSD? (j) For EFGS-filtered samples, was a filtration blank included?</p> <p>6. Special prep requirements? (a) For 1638: Have samples sat for 48 hours after preservation? (b) For 200.8: Have samples sat for 16 hours after preservation? (c) For DOD have pipettes been calibrated day of prep?</p> <p>7. Are the samples appropriately spiked? (a) Is the spike and amount used appropriate and entered into LIMS? (b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook) (c) Spikes added:</p>	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO</td> <td style="text-align: center;">Tertiary Review</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td colspan="3" style="text-align: center;">If YES, notify supervisor and technician immediately.</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/> YES</td> <td style="text-align: center;"><input checked="" type="checkbox"/> N/A</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> CV-AFS</td> <td style="text-align: center;"><input type="checkbox"/> N/A</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> 70:30</td> <td style="text-align: center;"><input type="checkbox"/> N/A</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/> YES</td> <td style="text-align: center;"><input type="checkbox"/> N/A</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/> YES</td> <td style="text-align: center;"><input type="checkbox"/> N/A</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/> YES</td> <td style="text-align: center;"><input type="checkbox"/> N/A</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> YES</td> <td style="text-align: center;"><input checked="" type="checkbox"/> 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NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: MFS N/A MFS 7/21/2020

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL

MFS 7/21/2020

PREPARATION BENCH SHEET

F007315

Eurofins Frontier Global Sciences, LLC

Matrix: Soil/Sediment Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 7/21/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spikel ID	µl Spikel	Spike2 ID	µl Spike2	Extraction Comments
F007315-BLK1	Blank	0.25	20 ✓					
F007315-BLK2	Blank	0.25	20 ✓					
F007315-BLK3	Blank	0.25	20 ✓					
F007315-BS1	LCS	0.25	20 ✓	2001202	20 ✓			
F007315-BSD1	LCS Dup	0.25	20 ✓	2001202	20 ✓			
F007315-MS1	Matrix Spike [0G00004-13] ✓	0.258 ✓	20 ✓	2001204	100 ✓			
F007315-MS2	Matrix Spike [0G00004-14] ✓	0.2642 ✓	20 ✓	2001204	100 ✓			
F007315-MSD1	Matrix Spike Dup [0G00004-13] ✓	0.2564 ✓	20 ✓	2001204	100 ✓			
F007315-MSD2	Matrix Spike Dup [0G00004-14] ✓	0.2511 ✓	20 ✓	2001204	100 ✓			

Standard ID(s):	Description:	Reagent ID(s):	Description:	Expiration:
2001202 ✓	THg 100ng/mL Primary Spiking Standard	2000213 ✓	Boiling Chips for ICPMS	14-Aug-20 00:00
2001204 ✓	THg 1,000ng/mL Secondary Spiking Standard	2001775 ✓	70/30 Digestion Acid	03-Aug-20 00:00
		2001790 ✓	5% BrCl	28-Dec-20 00:00

PREPARATION BENCH SHEET

F007315

Eurofins Frontier Global Sciences, LLC

Matrix: Soil/Sediment Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/21/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0G00004-13	BO-04_20ET215_062320_EEL_WB_13	0.2534	20	-	-	eezer 23		
0G00004-14	BO-04_20ET215_062320_EEL_WB_14	0.2546	20	-	-	eezer 23		
0G00004-15	BO-04_20ET215_062320_EEL_WB_15	0.2517	20	-	-	eezer 23		
0G00004-16	BO-04_20ET219_062320_EEL_WB_16	0.2561	20	-	-	eezer 23		
0G00004-17	BO-04_20ET228_062320_EEL_WB_17	0.2609	20	-	-	eezer 23		
0G00004-18	BO-04_20ET228_062320_EEL_WB_18	0.258	20	-	-	eezer 23		
0G00004-19	BO-04_20ET225_062320_EEL_WB_19	0.2643	20	-	-	eezer 23		
0G00004-20	BO-04_20ET224_062320_EEL_WB_20	0.2547	20	-	-	eezer 23		
0G00004-21	OB-05_20ET127_062320_EEL_WB_02	0.2528	20	-	-	eezer 23		
0G00004-22	OB-05_20ET125_062320_EEL_WB_03	0.2668	20	-	-	eezer 23		
0G00004-23	OB-05_20ET125_062320_EEL_WB_04	0.2626	20	-	-	eezer 23		
0G00004-24	OB-05_20ET125_062320_EEL_WB_05	0.2575	20	-	-	eezer 23		
0G00004-25	OB-05_20ET119_062320_EEL_WB_06	0.2589	20	-	-	eezer 23		
0G00004-26	OB-05_20ET119_062320_EEL_WB_07	0.2696	20	-	-	eezer 23		
0G00004-27	OB-05_20ET117_062320_EEL_WB_08	0.257	20	-	-	eezer 23		
0G00004-28	OB-05_20ET115_062320_EEL_WB_09	0.2509	20	-	-	eezer 23		
0G00004-29	OB-05_20ET115_062320_EEL_WB_10	0.2666	20	-	-	eezer 23		
0004-30	OB-05_20ET100_062320_EEL_WB_11	0.2685	20	-	-	eezer 23		
0004-31	OB-05_20ET100_062320_EEL_WB_12	0.2503	20	-	-	eezer 23		

PREPARATION BENCH SHEET

F007315

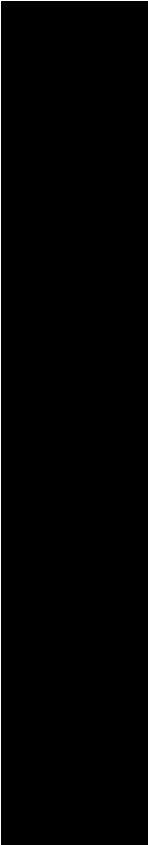
Eurofins Frontier Global Sciences, LLC

Matrix: Soil/Sediment

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 7/21/2020

0G00004-32	OB-05_20ET100_062320_EEL_WB_13	0.2703	✓	20	-	-	eczet 23	
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Technician: VA Batch #: F007315 Date: 11/21/2020 MS 7/21/2020
MS Spike + Digest
 EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/Ch₂O₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: VA
 Balances #: 23 Vial Type: Glass Teflon
 *Time in: 1131 Calibrated? Yes No Therm. #: 10756090 Calibrated? Yes No
 Time out: 1353 Actual Temp. (raw): 73.4 °C w/ CF: 72.3 °C *Time in can't begin before target temperature is reached
 Actual Temp. (raw): 81.3 °C w/ CF: 80.2 °C

Final vol.: 20 mL (LIMS ID: 2001775) BS Spike vol.: 20 µL (LIMS ID: 2001702)
 Spike Witness: ZH 7/21/2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2002011)

HCl LIMS ID: VA Pipette SN #: 0007852 Calibration Date: 7/21/2020 MS 7/21/2020
 HNO₃ LIMS ID: VA Pipette SN #: 10756090 Calibration Date: 7/21/2020
 70/30 LIMS ID: 2001775 Dispenser #: 19281007 Calibration Date: 7/21/2020
 Other Acid LIMS ID: 2001775 Dispenser #: 19281007 Calibration Date: 7/21/2020
 Glass Vial # 1) See comments Boiling Chip lot # 2000215 *Hotblock Position: HU

Vial #	Sample ID Number	Container ID	Sample Size ml, µg	Vial #	Sample ID Number	Container ID	Sample Size ml, µg	CRM LIMS ID
1	F007315-B1K1	E	0.2632	19	0600004-20	B	0.2660	X NA
2	F007315-B1K2	E	0.2996	20	0600004-23	B	0.2620	
3	F007315-B1K3	E	0.2767	21	0600004-24	B	0.2575	
4	F007315-B5I	E	0.2632	22	0600004-25	B	0.2589	
5	F007315-B5D1	E	0.2532	23	0600004-26	B	0.2690	
6	0600004-13	C	0.2534	24	0600004-27	B	0.2570	
7	F007315-M5I	C	0.2580	25	0600004-28	B	0.2509	
8	F007315-M5D1	C	0.2504	26	0600004-29	B	0.2660	
9	0600004-14	C	0.2546	27	0600004-30	B	0.2685	
10	F007315-M52	C	0.2612	28	0600004-31	B	0.2503	
11	F007315-M5D2	C	0.2511	29	0600004-32	B	0.2703	
12	0600004-15	C	0.2517	30				
13	0600004-16	C	0.2561	31				
14	0600004-17	C	0.2609	32				
15	0600004-18	C	0.2560	33				
16	0600004-19	B	0.2613	34				
17	0600004-20	B	0.2517	35				
18	0600004-21	B	0.2528	36				

1) Vials pre-labeled, labler did not. Note the vial lot # - MS 7/21/2020

PREPARATION BENCH SHEET

F007344

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 7/23/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F007344-BLK1	Blank	0.25	20					
F007344-BLK2	Blank	0.25	20					
F007344-BLK3	Blank	0.25	20					
F007344-BS1	LCS	0.25	20	2001202	20			
F007344-BS2	LCS	0.25	20	2001202	20			RR FOR CONFIRMATION. EMB 7/27/20
F007344-BSD1	LCS Dup	0.25	20	2001202	20			
F007344-BSD2	LCS Dup	0.25	20	2001202	20			RR FOR CONFIRMATION. EMB 7/27/20
F007344-MS1	Matrix Spike [0G00054-01]	0.2675	20	2001204	100			
F007344-MS2	Matrix Spike [0G00054-02]	0.2685	20	2001204	100			
F007344-MS3	Matrix Spike [0G00054-01]	0.2675	20	2001204	100			RR @ 1000X. EMB 7/27/20
F007344-MS4	Matrix Spike [0G00054-02]	0.2685	20	2001204	100			RR @ 1000X. EMB 7/27/20
F007344-MSD1	Matrix Spike Dup [0G00054-01]	0.2657	20	2001204	100			
F007344-MSD2	Matrix Spike Dup [0G00054-02]	0.2727	20	2001204	100			
F007344-MSD3	Matrix Spike Dup [0G00054-01]	0.2657	20	2001204	100			RR @ 1000X. EMB 7/27/20
F007344-MSD4	Matrix Spike Dup [0G00054-02]	0.2727	20	2001204	100			RR @ 1000X. EMB 7/27/20

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001202	THg 100ng/mL Primary Spiking Standard	26-Aug-20 00:00	2000213	Boiling Chips for ICPMS	14-Aug-20 00:00
2001204	THg 1,000ng/mL Secondary Spiking Standard	26-Aug-20 00:00	20001775	70/30 Digestion Acid	03-Aug-20 00:00
			20001790	5% BrCl	28-Dec-20 00:00

PREPARATION BENCH SHEET

F007344

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 7/23/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0G00054-01	PA01	0.2652	20	-	-	250201		
0G00054-02	PA02	0.2541	20	-	-	250201		
0G00054-02RE1	PA02	0.2541	20	-	-	250201	Added 7/27/2020 by EMB	RR @400X, E-01. EMB 7/27/2020
0G00054-03	PA03	0.2724	20	-	-	250201		
0G00054-03RE1	PA03	0.2724	20	-	-	250201	Added 7/27/2020 by EMB	RR @400X, E-01. EMB 7/27/2020
0G00054-04	PA04	0.25	20	-	-	250201		
0G00054-05	PA05	0.2613	20	-	-	250201		
0G00054-06	PA05-DUP	0.2622	20	-	-	250201		
0G00054-07	PA06	0.261	20	-	-	250201		
0G00054-08	PA07	0.2714	20	-	-	250201		
0G00054-09	PA08	0.2678	20	-	-	250201		
0G00054-10	PA09	0.2556	20	-	-	250201		
0G00054-11	PA10	0.2553	20	-	-	250201		
0G00054-12	PA11	0.2501	20	-	-	250201		
0G00054-13	PA12	0.2554	20	-	-	250201		
0G00054-14	PA13	0.2579	20	-	-	250201		
0G00054-15	PA14	0.2523	20	-	-	250201		
0054-16	PA15	0.2516	20	-	-	250201		
0054-17	PA16	0.2591	20	-	-	250201		

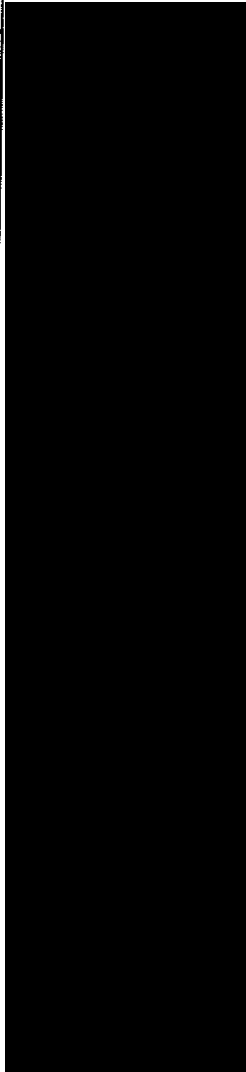
PREPARATION BENCH SHEET

F007344

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue
 Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion
 Prepared: 7/23/2020

0G00054-18	PA17	0.2557	20	-	-	250201	
0G00054-19	PA18	0.2562	20	-	-	250201	
0G00054-20	PA19	0.2611	20	-	-	250201	



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: EMB 7/23/20
Upload/Date: EMB 7/23/20

Samples to lab: 7/23/20
Reviewer/Date: _____

Batch #: FO07344

EFGS Preparation Method	
<input type="checkbox"/> SOP2836 Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/> SOP2837 Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2840 Modified Aqua Regia	
<input type="checkbox"/> SOP2820 RP	
<input type="checkbox"/> SOP2821 HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2825 Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2993 Oven Digestion (As, Se Speciation)	
<input type="checkbox"/> SOP5145 Microwave Digestion (Nutraceuticals)	
<input type="checkbox"/> SOP5145 Microwave Digestion (3051)	
<input checked="" type="checkbox"/> NA Other: <u>SOP 2795 70:30</u>	

Initials	SOP Date	DOC Date
<u>MFS</u>	<u>10/28/2019</u>	<u>11/18/19</u>

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

- | | | | | | |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 1. Is any SOP/DOC expiring within one week of Submission Date? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | Reviewer Initials: <u>EMB</u> | Tertiary Review: <u>EMB 7/27/20</u> | <input type="checkbox"/> |
| Data cannot be reported without a current IDOC/CDOC. | | | | | |
| If YES, notify supervisor and technician immediately. | | | | | |
| 2. Check prep method | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> ICPMS <input type="checkbox"/> CV-AFS <input checked="" type="checkbox"/> 70:30 | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Check for transcription errors from benchsheet | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Check and compare mass | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (e) For re-digests, have e-mails been attached and verified? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Samples per Batch? Check QC Requirements | <input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10 | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (a) PBs per batch? | <input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Are pre and post homogenization blanks in batch? | <input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) BS, BS/BSD or CRM in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) MS/MSD in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (e) MD in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (f) Is there at least one duplicate QC source in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (g) Are there any client specific requests, QC requests, etc? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Document: _____ | | | | | |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (i) Correct 'source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Special prep requirements? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) Spikes added: | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : _____

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
100 ng/ml 10 THg std	2001202	20			
1000 ng/ml std 20 THg	2001204	100			

EMB 7/23/20

PREPARATION BENCH SHEET

F007344

Eurofins Frontier Global Sciences, LLC

Prepared: 7/23/2020 ¹⁵⁵⁶

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F007344-BLK1	Blank	0.25	20					
F007344-BLK2	Blank	0.25	20					
F007344-BLK3	Blank	0.25	20					
F007344-BS1	LCS	0.25	20	2001202	20			
F007344-BSD1	LCS Dup	0.25	20	2001202	20			
F007344-MS1	Matrix Spike [0G00054-01]	0.2675	20	2001204	100			
F007344-MS2	Matrix Spike [0G00054-02]	0.2685	20	2001204	100			
F007344-MSD1	Matrix Spike Dup [0G00054-01]	0.2657	20	2001204	100			
F007344-MSD2	Matrix Spike Dup [0G00054-02]	0.2727	20	2001204	100			

Standard ID(s)	Description	Expiration	Reagent ID(s)	Description	Expiration
2001202	THg 100ng/mL Primary Spiking Standard	26-Aug-20 00:00	2000213	Boiling Chips for ICPMS	14-Aug-20 00:00
2001204	THg 1.000ng/mL Secondary Spiking Standard	26-Aug-20 00:00	2001775	70/30 Digestion Acid	03-Aug-20 00:00
			2001790	5% BrCl	28-Dec-20 00:00

PREPARATION BENCH SHEET

F007344

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 7/23/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0G00054-01	PA01	0.2652	20	-	-	250201		
0G00054-02	PA02	0.2541	20	-	-	250201		
0G00054-03	PA03	0.2724	20	-	-	250201		
0G00054-04	PA04	0.25	20	-	-	250201		
0G00054-05	PA05	0.2613	20	-	-	250201		
0G00054-06	PA05-DUP	0.2622	20	-	-	250201		
0G00054-07	PA06	0.261	20	-	-	250201		
0G00054-08	PA07	0.2714	20	-	-	250201		
0G00054-09	PA08	0.2678	20	-	-	250201		
0G00054-10	PA09	0.2556	20	-	-	250201		
0G00054-11	PA10	0.2553	20	-	-	250201		
0G00054-12	PA11	0.2501	20	-	-	250201		
0G00054-13	PA12	0.2554	20	-	-	250201		
0G00054-14	PA13	0.2579	20	-	-	250201		
0G00054-15	PA14	0.2523	20	-	-	250201		
0G00054-16	PA15	0.2516	20	-	-	250201		
0G00054-17	PA16	0.2591	20	-	-	250201		
00054-18	PA17	0.2557	20	-	-	250201		
00054-19	PA18	0.2562	20	-	-	250201		

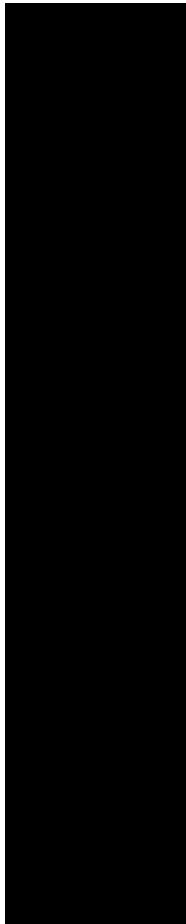
PREPARATION BENCH SHEET

F007344

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 7/23/2020

0G00054-20	PA19	0.2611	20	/	-	-	250201	
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Technician: EMMO Batch #: FO07344 Date: 7/23/20
 MPS Spike & Digest 7/23/20
 EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A
 Balance #: 19 Calibrated? Yes No Vial Type: Glass Teflon
 *Time in: 1554 Actual Temp. (raw): 71.7 °C w/ CF: 70.4 °C *Time in can't begin before target temperature is reached
 Time out: 1764 Actual Temp. (raw): 77.0 °C w/ CF: 75.9 °C

Final vol.: 20 mL (LIMS ID: 2001748) BS Spike vol.: 20 µL (LIMS ID: 2001202)
 Spike Witness: val (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2001204)

HCl LIMS ID: N/A Pipette SN#: 0007852 Calibration Date: 7/21/2019
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2001720 Dispenser SN#: 14281607 Calibrated? Yes No
 Other Acid LIMS ID: 2001740 (51.35-01) Dispenser #: 14237255 Calibrated? Yes No
 Glass Vial # 00010927 Boiling Chip lot # 2000113 *Hotblock Position: FL0

Vial #	Sample ID Number	Container ID	Sample Size □ mL □ µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL □ µg	CRM LIMS ID
1	FO07344-BUK1	NA	0.2508	19	060054-10	A	0.2550	N/A
2	FO07344-BUK2	NA	0.2068	20	060054-11	A	0.2553	
3	FO07344-BUK3	NA	0.1678	21	060054-12	A	0.2501	
4	FO07344-BS1	NA	0.2601	22	060054-13	A	0.2554	
5	FO07344-BSD1	NA	0.1709	23	060054-14	A	0.2579	
6	060054-01	A	0.1652	24	060054-15	A	0.2523	
7	FO07344-MS1	A	0.1675	25	060054-16	A	0.2591	
8	FO07344-MSD1	A	0.1657	26	060054-17	A	0.2591	
9	060054-02	A	0.2541	27	060054-18	A	0.2557	
10	FO07344-MS2	A	0.2685	28	060054-19	A	0.2502	
11	FO07344-MSD2	A	0.2717	29	060054-20	A	0.2011	
12	060054-03	A	0.2724	30				
13	060054-04	A	0.2500	31				
14	060054-05	A	0.2613	32				
15	060054-06	A	0.2622	33				
16	060054-07	A	0.2610	34				
17	060054-08	A	0.2714	35				
18	060054-09	A	0.2676	36				

Comments:
 emb 7/23/20
 0.2510
 *samples weighed on 7/23/20 by emb
 *samples left in hood with comes overnight

Analysis Datasheet for Total Mercury

Date of Analysis: July 24, 2020

Analyst: Units ng/L

Instrument #: Hg2600-3

LIMS Sequence #:

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	147.94 units	295.88	90.05 units	180.10	96.0 %Rec
SEQ-CAL2	1	1.00 ng/L	234.78 units	234.78	176.89 units	176.89	94.3 %Rec
SEQ-CAL3	1	5.00 ng/L	1019.71 units	203.94	961.82 units	192.36	102.5 %Rec
SEQ-CAL4	1	20.00 ng/L	3906.64 units	195.33	3848.75 units	192.44	102.6 %Rec
SEQ-CAL5	1	40.00 ng/L	7910.10 units	197.75	7852.22 units	196.31	104.6 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 187.62 Corr. St Dev RF +/- 8.56 Corr. RSD CF 4.6% RSD Uncorr. Mean RF 225.54

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-BL1	3	57.89 units	±5.82	0.26 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	22.592 ng/L	±10.137
BLK	2	3	23.814 ng/L	±17.557
BLK	3	3	37.481 ng/L	±22.159
BLK	4	3	0.292 ng/L	±0.044
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-CCB4	1	7/24/2020 13:57:58	0453-1.RAW	1:57:59 PM	96.65			41.8	0.223	0.223	ng/L	
Hg2600-3	00	SAM	0G00004-17	400	7/24/2020 14:02:10	0454-1.RAW	2:02:10 PM	6055.37	2		5997.5	31.907	12762.678	ng/L	
Hg2600-3	00	SAM	0G00004-18	400	7/24/2020 14:06:16	0455-1.RAW	2:06:19 PM	5208.61	2		5150.7	27.394	10957.411	ng/L	
Hg2600-3	00	SAM	0G00004-19	400	7/24/2020 14:10:30	0456-1.RAW	2:10:30 PM	6108.43	2		6050.5	32.190	12875.812	ng/L	
Hg2600-3	00	SAM	0G00004-20	400	7/24/2020 14:14:41	0457-1.RAW	2:14:41 PM	5126.96	2		5069.1	26.958	10783.339	ng/L	
Hg2600-3	00	SAM	0G00004-21	400	7/24/2020 14:18:51	0458-1.RAW	2:18:51 PM	1896.56	2		1838.7	9.740	3896.182	ng/L	
Hg2600-3	00	SAM	0G00004-22	400	7/24/2020 14:23:01	0459-1.RAW	2:23:01 PM	2059.34	2		2001.5	10.608	4243.235	ng/L	
Hg2600-3	00	SAM	0G00004-23	400	7/24/2020 14:27:11	0460-1.RAW	2:27:11 PM	1812.72	2		1754.8	9.294	3717.441	ng/L	
Hg2600-3	00	SAM	0G00004-24	400	7/24/2020 14:31:21	0461-1.RAW	2:31:21 PM	3919.68	2		3861.8	20.524	8209.463	ng/L	
Hg2600-3	00	SAM	0G00004-25	400	7/24/2020 14:35:30	0462-1.RAW	2:35:30 PM	3080.53	2		3022.6	16.051	6420.393	ng/L	
Hg2600-3	00	CAL	SEQ-COV5	1	7/24/2020 14:39:40	0463-1.RAW	2:39:40 PM	1416.55682	2		1358.7	7.182	2872.836	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	7/24/2020 14:48:00	0464-1.RAW	2:43:50 PM	1094.16	2		1036.3	5.523	5.523	ng/L	
Hg2600-3	00	SAM	0G00004-27	400	7/24/2020 14:52:10	0466-1.RAW	2:48:00 PM	92.59	2		1028.3	5.421	0.185	ng/L	
Hg2600-3	00	SAM	0G00004-28	400	7/24/2020 14:56:21	0467-1.RAW	2:52:10 PM	1086.15	2		1028.3	5.421	2168.406	ng/L	
Hg2600-3	00	SAM	0G00004-29	400	7/24/2020 15:00:31	0468-1.RAW	2:56:21 PM	1678.24	2		1620.3	8.977	3430.737	ng/L	
Hg2600-3	00	SAM	0G00004-30	400	7/24/2020 15:04:41	0469-1.RAW	3:00:31 PM	2142.38	2		2084.5	11.051	4420.285	ng/L	
Hg2600-3	00	SAM	0G00004-31	400	7/24/2020 15:08:52	0470-1.RAW	3:04:41 PM	2549.43	2		2491.5	13.220	5288.098	ng/L	
Hg2600-3	00	SAM	0G00004-32	400	7/24/2020 15:13:02	0471-1.RAW	3:08:52 PM	1475.86	2		1418.0	7.498	2999.279	ng/L	
Hg2600-3	00	SAM	F007344-B51	20	7/24/2020 15:17:12	0472-1.RAW	3:13:02 PM	1960.93	2		1903.0	10.084	4033.433	ng/L	
Hg2600-3	00	SAM	F007344-B5D1	20	7/24/2020 15:21:23	0473-1.RAW	3:17:12 PM	2884.85	3		2827.0	13.194	263.870	ng/L	
Hg2600-3	00	BLK	F007344-BLK1	20	7/24/2020 15:25:34	0474-1.RAW	3:21:23 PM	9102.49	3		9044.6	46.333	926.665	ng/L	
Hg2600-3	00	BLK	F007344-BLK2	20	7/24/2020 15:29:44	0475-1.RAW	3:25:34 PM	562.53	3		504.6	2.690	53.794	ng/L	
Hg2600-3	00	CAL	SEQ-CCV6	1	7/24/2020 15:33:57	0476-1.RAW	3:29:44 PM	493.12	3		435.2	2.320	46.395	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	7/24/2020 15:38:08	0477-1.RAW	3:33:57 PM	1078.37	3		1020.5	5.439	5.439	ng/L	
Hg2600-3	00	BLK	F007344-BLK3	20	7/24/2020 15:42:19	0478-1.RAW	3:38:08 PM	86.26	3		28.4	0.151	0.151	ng/L	
Hg2600-3	00	SAM	0G00054-01	400	7/24/2020 15:46:30	0479-1.RAW	3:42:19 PM	172.83	3		114.9	0.613	12.252	ng/L	
Hg2600-3	00	SAM	F007344-MS1	400	7/24/2020 15:50:40	0480-1.RAW	3:46:30 PM	5488.87	3		5431.0	28.853	11541.257	ng/L	
Hg2600-3	00	SAM	F007344-MSD1	400	7/24/2020 15:54:50	0481-1.RAW	3:50:40 PM	7761.05	3		7703.2	40.964	16385.498	ng/L	
Hg2600-3	00	SAM	0G00054-02	400	7/24/2020 15:59:01	0482-1.RAW	3:54:50 PM	8171.53	3		8113.6	43.152	17260.623	ng/L	
Hg2600-3	00	SAM	F007344-MS2	400	7/24/2020 16:03:14	0483-1.RAW	3:59:01 PM	5855.19	3		5797.3	30.806	12322.232	ng/L	
Hg2600-3	00	SAM	F007344-MSD2	400	7/24/2020 16:07:25	0484-1.RAW	4:03:14 PM	8688.01	3		8630.1	45.904	18361.758	ng/L	
Hg2600-3	00	SAM	WS	400	7/24/2020 16:11:35	0485-1.RAW	4:07:25 PM	9084.80	3		9026.9	48.019	19207.694	ng/L	
Hg2600-3	00	SAM	WS	400	7/24/2020 16:15:45	0486-1.RAW	4:11:35 PM	132.55	3		74.7	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	0G00054-03	400	7/24/2020 16:19:57	0487-1.RAW	4:15:45 PM	97.39	3		39.5	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	0G00054-04	400	7/24/2020 16:24:07	0488-1.RAW	4:19:57 PM	1978.90	3		1921.0	10.145	4058.066	ng/L	
Hg2600-3	00	SAM	0G00054-05	400	7/24/2020 16:28:17	0489-1.RAW	4:24:07 PM	2204.13	3		2146.2	11.346	4538.250	ng/L	
Hg2600-3	00	CAL	SEQ-CCV7	1	7/24/2020 16:32:28	0490-1.RAW	4:28:17 PM	2773.76	3		2715.9	14.382	5752.690	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	7/24/2020 16:36:38	0491-1.RAW	4:32:28 PM	1056.79	3		998.9	5.324	5.324	ng/L	
Hg2600-3	00	SAM	0G00054-06	400	7/24/2020 16:40:48	0492-1.RAW	4:36:38 PM	96.42	3		38.5	0.205	0.205	ng/L	
Hg2600-3	00	SAM	0G00054-07	400	7/24/2020 16:44:59	0493-1.RAW	4:40:48 PM	2881.71	3		2823.8	14.957	5982.843	ng/L	
Hg2600-3	00	SAM	0G00054-08	400	7/24/2020 16:49:11	0494-1.RAW	4:45:00 PM	2656.56	3		2598.7	13.757	5502.833	ng/L	
Hg2600-3	00	SAM	0G00054-09	400	7/24/2020 16:53:21	0495-1.RAW	4:49:11 PM	3812.80	3		3754.9	19.920	7967.907	ng/L	
Hg2600-3	00	SAM	0G00054-10	400	7/24/2020 16:57:32	0496-1.RAW	4:53:21 PM	1147.04	3		1089.2	5.711	2284.565	ng/L	
Hg2600-3	00	SAM	0G00054-11	400	7/24/2020 17:01:42	0497-1.RAW	4:57:32 PM	1913.60	3		1855.7	9.797	3918.856	ng/L	
Hg2600-3	00	SAM	0G00054-12	400	7/24/2020 17:05:53	0498-1.RAW	5:01:42 PM	1413.51	3		1355.6	7.132	2852.663	ng/L	
Hg2600-3	00	SAM	0G00054-13	400	7/24/2020 17:10:03	0499-1.RAW	5:05:53 PM	1319.39	3		1261.5	6.630	2652.002	ng/L	
Hg2600-3	00	SAM	0G00054-14	400	7/24/2020 17:14:14	0500-1.RAW	5:10:03 PM	1046.88	3		989.0	5.178	2071.027	ng/L	
Hg2600-3	00	SAM	0G00054-15	400	7/24/2020 17:18:26	0501-1.RAW	5:14:14 PM	771.98	3		714.1	3.712	1484.949	ng/L	
Hg2600-3	00	CAL	SEQ-CCV8	1	7/24/2020 17:22:36	0502-1.RAW	5:18:26 PM	648.21	3		590.3	3.053	3.053	ng/L	
Hg2600-3	00	CAL	SEQ-CCB8	1	7/24/2020 17:26:48	0503-1.RAW	5:22:36 PM	1008.08	3		950.2	5.064	5.064	ng/L	
Hg2600-3	00	SAM	0G00054-16	400	7/24/2020 17:30:59	0504-1.RAW	5:26:48 PM	74.53	3		16.6	0.089	0.089	ng/L	
Hg2600-3	00	SAM	0G00054-17	400	7/24/2020 17:35:09	0505-1.RAW	5:30:59 PM	532.10	3		474.2	2.434	973.519	ng/L	
Hg2600-3	00	SAM	0G00054-18	400	7/24/2020 17:39:20	0506-1.RAW	5:35:09 PM	2136.42	3		2078.5	10.985	4393.897	ng/L	
Hg2600-3	00	SAM	0G00054-19	400	7/24/2020 17:43:30	0507-1.RAW	5:39:20 PM	2891.46	3		2833.6	15.009	6003.639	ng/L	
Hg2600-3	00	SAM	0G00054-20	400	7/24/2020 17:47:41	0508-1.RAW	5:43:30 PM	1687.89	3		1556.8	8.204	3281.606	ng/L	
Hg2600-3	00	SAM	F007344-B52	20	7/24/2020 17:51:53	0509-1.RAW	5:47:41 PM	2647.61	3		1630.0	8.594	3437.643	ng/L	
Hg2600-3	00	SAM	F007344-B5D2	20	7/24/2020 17:56:04	0510-1.RAW	5:51:53 PM	2647.61	4		2589.7	13.768	275.770	ng/L	
Hg2600-3	00	SAM	F006413-B51	1	7/24/2020 18:00:15	0511-1.RAW	5:56:04 PM	8536.63	4		8478.7	45.177	903.533	ng/L	
Hg2600-3	00	SAM	F006413-B5D1	1	7/24/2020 18:04:25	0512-1.RAW	6:00:15 PM	1085.12	4		1027.2	5.183	5.183	ng/L	
Hg2600-3	00	BLK	F006413-BLK1	1	7/24/2020 18:08:36	0513-1.RAW	6:04:25 PM	1028.60	4		970.7	4.882	4.882	ng/L	
Hg2600-3	00	CAL	SEQ-CCV9	1	7/24/2020 18:12:46	0514-1.RAW	6:08:36 PM	121.85	4		64.0	0.341	0.341	ng/L	
Hg2600-3	00	CAL	SEQ-CCB9	1	7/24/2020 18:16:57	0515-1.RAW	6:12:46 PM	994.56	4		936.7	4.992	4.992	ng/L	
Hg2600-3	00	BLK	F006413-BLK2	1	7/24/2020 18:21:07	0516-1.RAW	6:16:57 PM	87.50	4		4.992	0.158	0.158	ng/L	
Hg2600-3	00	BLK	F006413-BLK3	1	7/24/2020 18:25:17	0517-1.RAW	6:21:07 PM	110.29	4		52.4	0.279	0.279	ng/L	
Hg2600-3	00	BLK	F006413-BLK3	1	7/24/2020 18:29:17	0518-1.RAW	6:25:17 PM	105.78	4		47.9	0.255	0.255	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0F00110-21	1	7/24/2020 18:29:28	0518-1.RAW	6:29:28 PM	3097.22	4		3039.3	15.908	15.908	ng/L	
Hg2600-3	00	SAM	F006413-MS1	1	7/24/2020 18:33:38	0519-1.RAW	6:33:38 PM	3989.17	4		3931.3	20.662	20.662	ng/L	
Hg2600-3	00	SAM	F006413-MSD1	1	7/24/2020 18:37:49	0520-1.RAW	6:37:49 PM	4066.96	4		4009.1	21.076	21.076	ng/L	
Hg2600-3	00	SAM	0F00110-40	1	7/24/2020 18:41:59	0521-1.RAW	6:41:59 PM	3888.36	4		3830.5	20.124	20.124	ng/L	
Hg2600-3	00	SAM	F006413-MS2	1	7/24/2020 18:46:10	0522-1.RAW	6:46:10 PM	4807.55	4		4749.7	25.024	25.024	ng/L	
Hg2600-3	00	SAM	F006413-MSD2	1	7/24/2020 18:50:20	0523-1.RAW	6:50:20 PM	4663.03	4		4605.1	24.253	24.253	ng/L	
Hg2600-3	00	SAM	0F00110-22	1	7/24/2020 18:54:30	0524-1.RAW	6:54:30 PM	3644.92	4		3587.0	18.827	18.827	ng/L	
Hg2600-3	00	CAL	SEQ-CCVA	1	7/24/2020 18:58:41	0525-1.RAW	6:58:41 PM	3656.49	4		3598.6	18.889	18.889	ng/L	
Hg2600-3	00	CAL	SEQ-CCBA	1	7/24/2020 19:02:51	0526-1.RAW	7:02:51 PM	1034.28	4		976.4	5.204	5.204	ng/L	
Hg2600-3	00	CAL	SEQ-CCCA	1	7/24/2020 19:07:01	0527-1.RAW	7:07:01 PM	97.51	4		39.6	0.211	0.211	ng/L	
Hg2600-3	00	SAM	0F00110-24	1	7/24/2020 19:11:12	0528-1.RAW	7:11:12 PM	3014.49	4		2956.6	Error	#VALUE!	ng/L	
Hg2600-3	00	SAM	0F00110-25	1	7/24/2020 19:15:22	0529-1.RAW	7:15:22 PM	3729.45	4		3671.6	19.277	19.277	ng/L	
Hg2600-3	00	SAM	0F00110-26	1	7/24/2020 19:19:32	0530-1.RAW	7:19:32 PM	3518.86	4		3461.0	18.155	18.155	ng/L	
Hg2600-3	00	SAM	0F00110-27	1	7/24/2020 19:23:43	0531-1.RAW	7:23:43 PM	3295.96	4		3238.1	16.967	16.967	ng/L	
Hg2600-3	00	SAM	0F00110-28	1	7/24/2020 19:27:53	0532-1.RAW	7:27:53 PM	3409.87	4		3352.0	17.574	17.574	ng/L	
Hg2600-3	00	SAM	0F00110-29	1	7/24/2020 19:32:04	0533-1.RAW	7:32:04 PM	3440.72	4		3382.8	17.738	17.738	ng/L	
Hg2600-3	00	SAM	0F00110-30	1	7/24/2020 19:36:15	0534-1.RAW	7:36:15 PM	3278.25	4		3220.4	16.873	16.873	ng/L	
Hg2600-3	00	SAM	0F00110-31	1	7/24/2020 19:40:25	0535-1.RAW	7:40:25 PM	3878.84	4		3821.0	20.074	20.074	ng/L	
Hg2600-3	00	SAM	0F00110-32	1	7/24/2020 19:44:35	0536-1.RAW	7:44:35 PM	3273.84	4		3216.0	16.849	16.849	ng/L	
Hg2600-3	00	CAL	SEQ-CCVB	1	7/24/2020 19:48:46	0537-1.RAW	7:48:46 PM	2811.95	4		2754.1	14.387	14.387	ng/L	
Hg2600-3	00	CAL	SEQ-CCBB	1	7/24/2020 19:52:56	0538-1.RAW	7:52:56 PM	1000.36	4		942.5	5.023	5.023	ng/L	
Hg2600-3	00	SAM	0F00110-34	1	7/24/2020 20:01:17	0540-1.RAW	7:57:07 PM	96.70	4		38.8	0.207	0.207	ng/L	
Hg2600-3	00	SAM	0F00110-35	1	7/24/2020 20:05:28	0541-1.RAW	8:01:17 PM	3962.62	4		3904.7	20.520	20.520	ng/L	
Hg2600-3	00	SAM	0F00110-36	1	7/24/2020 20:09:38	0542-1.RAW	8:05:28 PM	3834.30	4		3776.4	19.836	19.836	ng/L	
Hg2600-3	00	SAM	0F00110-37	1	7/24/2020 20:13:49	0543-1.RAW	8:09:38 PM	3468.12	4		3410.2	17.885	17.885	ng/L	
Hg2600-3	00	SAM	0F00110-38	1	7/24/2020 20:17:59	0544-1.RAW	8:13:49 PM	3358.47	4		3300.6	17.300	17.300	ng/L	
Hg2600-3	00	SAM	0F00110-39	1	7/24/2020 20:22:10	0545-1.RAW	8:17:59 PM	3533.56	4		3475.7	18.233	18.233	ng/L	
Hg2600-3	00	CAL	SEQ-CCVC	1	7/24/2020 20:26:20	0546-1.RAW	8:22:10 PM	3366.48	4		3308.6	17.343	17.343	ng/L	
Hg2600-3	00	CAL	SEQ-CCBC	1	7/24/2020 20:30:31	0547-1.RAW	8:26:20 PM	1010.45	4		952.6	5.077	5.077	ng/L	
Hg2600-3	00	CAL		1			8:30:31 PM	95.26			37.4	0.199	0.199	ng/L	

SEQ-IBL1	A1	OG00004-41	B10				F006413-BLK1	C11
SEQ-IBL2	A2	OG00004-42	B11	OG00004-19	C19		SEQ-CCV9	C12
SEQ-IBL3	A3	SEQ-CCV2	B12	OG00004-20	C20		SEQ-CCB9	C13
SEQ-CAL1	A4	SEQ-CCB2	B13	OG00004-21	C21		F006413-BLK2	C14
SEQ-CAL2	A5	OG00004-43	B14	OG00004-22	A1	OG00054-03	B6 F006413-BLK3	C15
SEQ-CAL3	A6	OG00004-44	B15	OG00004-23	A2	OG00054-04	B7 OF00110-21	C16
SEQ-CAL4	A7	OG00004-45	B16	OG00004-24	A3	OG00054-05	B8 F006413-MS1	C17
SEQ-CAL5	A8	OG00004-46	B17	OG00004-25	A4	SEQ-CCV7	B9 F006413-MSD1	C18
SEQ-ICV1	A9	OG00004-47	B18	OG00004-26	A5	SEQ-CCB7	B10 OF00110-40	C19
SEQ-ICB1	A10	OG00004-48	B19	SEQ-CCV5	A6	OG00054-06	B11 F006413-MS2	C20
F007316-BS1	A11	OG00004-49	B20	SEQ-CCB5	A7	OG00054-07	B12 F006413-MSD2	C21
F007316-BSD1	A12	F007315-BS1	B21	OG00004-27	A8	OG00054-08	B13 OF00110-22	A1
F007316-BLK1	A13	F007315-BSD1	C1	OG00004-28	A9	OG00054-09	B14 OF00110-23	A2
F007316-BLK2	A14	F007315-BLK1	C2	OG00004-29	A10	OG00054-10	B15 SEQ-CCVA	A3
F007316-BLK3	A15	SEQ-CCV3	C3	OG00004-30	A11	OG00054-11	B16 SEQ-CCBA	A4
OG00004-40	A16	SEQ-CCB3	C4	OG00004-31	A12	OG00054-12	B17 OF00110-24	A5
F007316-MS1	A17	F007315-BLK2	C5	OG00004-32	A13	OG00054-13	B18 OF00110-25	A6
F007316-MSD1	A18	F007315-BLK3	C6	F007344-BS1	A14	OG00054-14	B19 OF00110-26	A7
OG00004-50	A19	OG00004-13	C7	F007344-BSD1	A15	OG00054-15	B20 OF00110-27	A8
F007316-MS2	A20	F007315-MS1	C8	F007344-BLK1	A16	SEQ-CCV8	B21 OF00110-28	A9
SEQ-CCV1	A21	F007315-MSD1	C9	F007344-BLK2	A17	SEQ-CCB8	C1 OF00110-29	A10
SEQ-CCB1	B1	OG00004-14	C10	SEQ-CCV6	A18	OG00054-16	C2 OF00110-30	A11
F007316-MSD2	B2	OG00004-15	C11	SEQ-CCB6	A19	OG00054-17	C3 OF00110-31	A12
OG00004-33	B3	F007315-MSD2	C12	F007344-BLK3	A20	OG00054-18	C4 OF00110-32	A13
OG00004-34	B4	OG00004-16	C13	OG00054-01	A21	OG00054-19	C5 OF00110-33	A14
OG00004-35	B5	OG00004-17	C14	F007344-MS1	B1	OG00054-20	C6 SEQ-CCVB	A15
OG00004-36	B6	SEQ-CCV4	C15	F007344-MSD1	B2	F007344-BS2	C7 SEQ-CCBB	A16
OG00004-37	B7	SEQ-CCB4	C16	OG00054-02	B3	F007344-BSD2	C8 OF00110-34	A17
OG00004-38	B8	OG00004-18	C17	F007344-MS2	B4	F006413-BS1	C9 OF00110-35	A18
OG00004-39	B9	OG00004-18	C18	F007344-MSD2	B5	F006413-BSD1	C10 OF00110-36	A19
OF00110-37	A20							
OF00110-38	A21							
OF00110-39	B1							
SEQ-CCVC	B2							
SEQ-CC8C	B3							

L 7/27/2020

ANALYTICAL REPORT

Job Number: 570-33855-1

Job Description: 0G00004

For:

Eurofins Frontier Global Sciences LLC
5755 8th Street E
Tacoma, WA 98424

Attention: Mr. Patrick Garcia-Strickland



Approved for release.
Jimmy Jin
Project Manager I
7/31/2020 11:31 AM

Designee for
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carlahollowell@eurofinsus.com
07/31/2020

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Eurofins Frontier Global Sciences LLC

Project: 0G00004

Report Number: 570-33855-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 7/21/2020 at 9:45 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was -3.6°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2 degrees Celsius of the required temperature or method specified range. For samples with a specified temperature of 4 degrees Celsius, samples with a temperature ranging from just above freezing temperature of water to 6 degrees Celsius shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Receipt Exceptions

COC requested that samples #1, #40, and #49 be used for MS/MSD samples. It was determined that there was not enough sample mass submitted for samples #1 and #40 to be used for MS/MSD. The client was notified and gave approval to proceed with analyses.

PERCENT LIPIDS

Samples BO-04_20ET204_062320_EEL_WB_01 (570-33855-1), BO-04_20ET204_062320_EEL_WB_02 (570-33855-2), BO-04_20ET211_062320_EEL_WB_03 (570-33855-3), BO-04_20ET215_062320_EEL_WB_04 (570-33855-4), BO-04_20ET215_062320_EEL_WB_05 (570-33855-5), BO-04_20ET215_062320_EEL_WB_06 (570-33855-6), BO-04_20ET215_062320_EEL_WB_07 (570-33855-7), BO-04_20ET215_062320_EEL_WB_08 (570-33855-8), BO-04_20ET215_062320_EEL_WB_09 (570-33855-9), BO-04_20ET215_062320_EEL_WB_10 (570-33855-10), BO-04_20ET215_062320_EEL_WB_11 (570-33855-11), BO-04_20ET215_062320_EEL_WB_12 (570-33855-12), BO-04_20ET215_062320_EEL_WB_13 (570-33855-13), BO-04_20ET215_062320_EEL_WB_14 (570-33855-14), BO-04_20ET215_062320_EEL_WB_15 (570-33855-15), BO-04_20ET219_062320_EEL_WB_16 (570-33855-16), BO-04_20ET228_062320_EEL_WB_17 (570-33855-17), BO-04_20ET228_062320_EEL_WB_18 (570-33855-18), BO-04_20ET225_062320_EEL_WB_19 (570-33855-19), BO-04_20ET224_062320_EEL_WB_20 (570-33855-20), OB-05_20ET127_062320_EEL_WB_02 (570-33855-21), OB-05_20ET125_062320_EEL_WB_03 (570-33855-22), OB-05_20ET125_062320_EEL_WB_04 (570-33855-23), OB-05_20ET125_062320_EEL_WB_05 (570-33855-24), OB-05_20ET119_062320_EEL_WB_06 (570-33855-25), OB-05_20ET119_062320_EEL_WB_07 (570-33855-26), OB-05_20ET117_062320_EEL_WB_08 (570-33855-27), OB-05_20ET115_062320_EEL_WB_09 (570-33855-28), OB-05_20ET115_062320_EEL_WB_10 (570-33855-29), OB-05_20ET100_062320_EEL_WB_11 (570-33855-30), OB-05_20ET100_062320_EEL_WB_12 (570-33855-31), OB-05_20ET100_062320_EEL_WB_13 (570-33855-32), OB-05_20ET100_062320_EEL_WB_14 (570-33855-33), OB-05_20ET100_062320_EEL_WB_15 (570-33855-34), OB-05_20ET100_062320_EEL_WB_16 (570-33855-35), OB-05_20ET100_062320_EEL_WB_17 (570-33855-36), OB-05_20ET102_062320_EEL_WB_18 (570-33855-37), OB-05_20ET102_062320_EEL_WB_19 (570-33855-38), OB-05_20ET102_062320_EEL_WB_20 (570-33855-39), OB-01_20ET300_062420_EEL_WB_01 (570-33855-40), OB-01_20ET301_062420_EEL_WB_02 (570-33855-41), OB-01_20ET365_062620_EEL_WB_03 (570-33855-42), OB-01_20ET302_062420_EEL_WB_04 (570-33855-43), OB-01_20ET304_062420_EEL_WB_05 (570-33855-44), OB-01_20ET305_062420_EEL_WB_06 (570-33855-45), OB-01_20ET333_062520_EEL_WB_07 (570-33855-46), OB-01_20ET356_062520_EEL_WB_08 (570-33855-47), OB-01_20ET355_062520_EEL_WB_09 (570-33855-48) and OB-05_20ET129_062320_EEL_WB_01 (570-33855-49) were analyzed for percent lipids in accordance with TestAmerica SOP. The samples were prepared and analyzed on 07/26/2020 and 07/27/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3541: The initial volume(s) used for the following samples deviated from the standard procedure:

OB-05_20ET127_062320_EEL_WB_02 (570-33855-21), OB-05_20ET125_062320_EEL_WB_03 (570-33855-22), OB-05_20ET125_062320_EEL_WB_04 (570-33855-23), OB-05_20ET125_062320_EEL_WB_05 (570-33855-24), OB-05_20ET119_062320_EEL_WB_06 (570-33855-25), OB-05_20ET119_062320_EEL_WB_07 (570-33855-26), OB-05_20ET117_062320_EEL_WB_08 (570-33855-27), OB-05_20ET115_062320_EEL_WB_09 (570-33855-28), OB-05_20ET115_062320_EEL_WB_10 (570-33855-29), OB-05_20ET100_062320_EEL_WB_11 (570-33855-30), OB-05_20ET100_062320_EEL_WB_12 (570-33855-31), OB-05_20ET100_062320_EEL_WB_13 (570-33855-32), OB-05_20ET100_062320_EEL_WB_14 (570-33855-33), OB-05_20ET100_062320_EEL_WB_15 (570-33855-34), OB-05_20ET100_062320_EEL_WB_16 (570-33855-35), OB-05_20ET100_062320_EEL_WB_17 (570-33855-36), OB-05_20ET102_062320_EEL_WB_18 (570-33855-37), OB-05_20ET102_062320_EEL_WB_19 (570-33855-38), OB-05_20ET102_062320_EEL_WB_20 (570-33855-39), OB-01_20ET300_062420_EEL_WB_01 (570-33855-40) and (570-33855-A-37-A DU). The reporting limits (RLs) have been adjusted proportionately. Adjusted the initial mass from 20g to 5g due to limited samples.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: BO-04_20ET204_062320_EEL_WB_01

Lab Sample ID: 570-33855-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.09		0.0998	0.0998	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET204_062320_EEL_WB_02

Lab Sample ID: 570-33855-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	5.60		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET211_062320_EEL_WB_03

Lab Sample ID: 570-33855-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	9.26		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_04

Lab Sample ID: 570-33855-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	4.79		0.0962	0.0962	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_05

Lab Sample ID: 570-33855-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.58		0.0962	0.0962	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_06

Lab Sample ID: 570-33855-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	4.95		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_07

Lab Sample ID: 570-33855-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.530		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_08

Lab Sample ID: 570-33855-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	2.43		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_09

Lab Sample ID: 570-33855-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	8.81		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_10

Lab Sample ID: 570-33855-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.13		0.0962	0.0962	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_11

Lab Sample ID: 570-33855-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	6.25		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_12

Lab Sample ID: 570-33855-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	2.79		0.0980	0.0980	%	1		Lipids	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Detection Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_13

Lab Sample ID: 570-33855-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	8.30		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_14

Lab Sample ID: 570-33855-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.89		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET215_062320_EEL_WB_15

Lab Sample ID: 570-33855-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	6.00		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET219_062320_EEL_WB_16

Lab Sample ID: 570-33855-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.365		0.0962	0.0962	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET228_062320_EEL_WB_17

Lab Sample ID: 570-33855-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.18		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET228_062320_EEL_WB_18

Lab Sample ID: 570-33855-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	2.57		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET225_062320_EEL_WB_19

Lab Sample ID: 570-33855-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.385		0.0962	0.0962	%	1		Lipids	Total/NA

Client Sample ID: BO-04_20ET224_062320_EEL_WB_20

Lab Sample ID: 570-33855-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.14		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET127_062320_EEL_WB_02

Lab Sample ID: 570-33855-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	2.20		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET125_062320_EEL_WB_03

Lab Sample ID: 570-33855-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.54		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET125_062320_EEL_WB_04

Lab Sample ID: 570-33855-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	4.36		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET125_062320_EEL_WB_05

Lab Sample ID: 570-33855-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	6.25		0.0980	0.0980	%	1		Lipids	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Detection Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: OB-05_20ET119_062320_EEL_WB_06

Lab Sample ID: 570-33855-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	8.13		0.0962	0.0962	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET119_062320_EEL_WB_07

Lab Sample ID: 570-33855-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	8.90		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET117_062320_EEL_WB_08

Lab Sample ID: 570-33855-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	6.99		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET115_062320_EEL_WB_09

Lab Sample ID: 570-33855-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	4.98		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET115_062320_EEL_WB_10

Lab Sample ID: 570-33855-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	3.79		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET100_062320_EEL_WB_11

Lab Sample ID: 570-33855-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.431		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET100_062320_EEL_WB_12

Lab Sample ID: 570-33855-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	2.93		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET100_062320_EEL_WB_13

Lab Sample ID: 570-33855-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	3.99		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET100_062320_EEL_WB_14

Lab Sample ID: 570-33855-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.856		0.111	0.111	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET100_062320_EEL_WB_15

Lab Sample ID: 570-33855-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.404		0.0962	0.0962	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET100_062320_EEL_WB_16

Lab Sample ID: 570-33855-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	6.42		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET100_062320_EEL_WB_17

Lab Sample ID: 570-33855-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	4.56		0.106	0.106	%	1		Lipids	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Detection Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: OB-05_20ET102_062320_EEL_WB_18

Lab Sample ID: 570-33855-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	7.88		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET102_062320_EEL_WB_19

Lab Sample ID: 570-33855-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	3.96		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-05_20ET102_062320_EEL_WB_20

Lab Sample ID: 570-33855-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	4.57		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-01_20ET300_062420_EEL_WB_01

Lab Sample ID: 570-33855-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.190		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-01_20ET301_062420_EEL_WB_02

Lab Sample ID: 570-33855-41

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.600		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-01_20ET365_062620_EEL_WB_03

Lab Sample ID: 570-33855-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.577		0.0962	0.0962	%	1		Lipids	Total/NA

Client Sample ID: OB-01_20ET302_062420_EEL_WB_04

Lab Sample ID: 570-33855-43

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.04		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-01_20ET304_062420_EEL_WB_05

Lab Sample ID: 570-33855-44

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	5.18		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-01_20ET305_062420_EEL_WB_06

Lab Sample ID: 570-33855-45

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.206		0.0980	0.0980	%	1		Lipids	Total/NA

Client Sample ID: OB-01_20ET333_062520_EEL_WB_07

Lab Sample ID: 570-33855-46

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	0.144		0.0962	0.0962	%	1		Lipids	Total/NA

Client Sample ID: OB-01_20ET356_062520_EEL_WB_08

Lab Sample ID: 570-33855-47

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.19		0.100	0.100	%	1		Lipids	Total/NA

Client Sample ID: OB-01_20ET355_062520_EEL_WB_09

Lab Sample ID: 570-33855-48

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	6.93		0.100	0.100	%	1		Lipids	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Detection Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: OB-05_20ET129_062320_EEL_WB_01

Lab Sample ID: 570-33855-49

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Percent Lipids	1.34		0.0980	0.0980	%	1		Lipids	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry

Client Sample ID: BO-04_20ET204_062320_EEL_WB_01

Date Collected: 06/23/20 11:11

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-1

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.09		0.0998	0.0998	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET204_062320_EEL_WB_02

Date Collected: 06/23/20 11:11

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-2

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	5.60		0.100	0.100	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET211_062320_EEL_WB_03

Date Collected: 06/23/20 11:32

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-3

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	9.26		0.0980	0.0980	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_04

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-4

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	4.79		0.0962	0.0962	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_05

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-5

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.58		0.0962	0.0962	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_06

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-6

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	4.95		0.0980	0.0980	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_07

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-7

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.530		0.100	0.100	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_08

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-8

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	2.43		0.0980	0.0980	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_09

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-9

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	8.81		0.100	0.100	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample Results

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry

Client Sample ID: BO-04_20ET215_062320_EEL_WB_10

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-10

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.13		0.0962	0.0962	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_11

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-11

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	6.25		0.0980	0.0980	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_12

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-12

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	2.79		0.0980	0.0980	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_13

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-13

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	8.30		0.0980	0.0980	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_14

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-14

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.89		0.100	0.100	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_15

Date Collected: 06/23/20 11:46

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-15

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	6.00		0.0980	0.0980	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET219_062320_EEL_WB_16

Date Collected: 06/23/20 12:01

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-16

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.365		0.0962	0.0962	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET228_062320_EEL_WB_17

Date Collected: 06/23/20 12:14

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-17

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.18		0.100	0.100	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET228_062320_EEL_WB_18

Date Collected: 06/23/20 12:14

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-18

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	2.57		0.0980	0.0980	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample Results

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry

Client Sample ID: BO-04_20ET225_062320_EEL_WB_19

Date Collected: 06/23/20 12:22

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-19

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.385		0.0962	0.0962	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: BO-04_20ET224_062320_EEL_WB_20

Date Collected: 06/23/20 12:24

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-20

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.14		0.0980	0.0980	%		07/26/20 11:20	07/26/20 11:20	1

Client Sample ID: OB-05_20ET127_062320_EEL_WB_02

Date Collected: 06/23/20 09:30

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-21

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	2.20		0.0980	0.0980	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET125_062320_EEL_WB_03

Date Collected: 06/23/20 09:34

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-22

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.54		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET125_062320_EEL_WB_04

Date Collected: 06/23/20 09:34

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-23

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	4.36		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET125_062320_EEL_WB_05

Date Collected: 06/23/20 09:34

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-24

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	6.25		0.0980	0.0980	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET119_062320_EEL_WB_06

Date Collected: 06/23/20 09:44

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-25

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	8.13		0.0962	0.0962	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET119_062320_EEL_WB_07

Date Collected: 06/23/20 09:44

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-26

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	8.90		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET117_062320_EEL_WB_08

Date Collected: 06/23/20 09:51

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-27

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	6.99		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample Results

Client: Eurofins Frontier Global Sciences LLC
 Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry

Client Sample ID: OB-05_20ET115_062320_EEL_WB_09

Date Collected: 06/23/20 09:58

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-28

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	4.98		0.0980	0.0980	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET115_062320_EEL_WB_10

Date Collected: 06/23/20 09:58

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-29

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	3.79		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET100_062320_EEL_WB_11

Date Collected: 06/23/20 10:01

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-30

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.431		0.0980	0.0980	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET100_062320_EEL_WB_12

Date Collected: 06/23/20 10:01

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-31

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	2.93		0.0980	0.0980	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET100_062320_EEL_WB_13

Date Collected: 06/23/20 10:01

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-32

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	3.99		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET100_062320_EEL_WB_14

Date Collected: 06/23/20 10:01

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-33

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.856		0.111	0.111	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET100_062320_EEL_WB_15

Date Collected: 06/23/20 10:01

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-34

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.404		0.0962	0.0962	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET100_062320_EEL_WB_16

Date Collected: 06/23/20 10:01

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-35

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	6.42		0.0980	0.0980	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET100_062320_EEL_WB_17

Date Collected: 06/23/20 10:01

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-36

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	4.56		0.106	0.106	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample Results

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry

Client Sample ID: OB-05_20ET102_062320_EEL_WB_18

Date Collected: 06/23/20 10:11

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-37

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	7.88		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET102_062320_EEL_WB_19

Date Collected: 06/23/20 10:11

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-38

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	3.96		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-05_20ET102_062320_EEL_WB_20

Date Collected: 06/23/20 10:11

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-39

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	4.57		0.0980	0.0980	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-01_20ET300_062420_EEL_WB_01

Date Collected: 06/24/20 10:52

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-40

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.190		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Client Sample ID: OB-01_20ET301_062420_EEL_WB_02

Date Collected: 06/26/20 10:55

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-41

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.600		0.100	0.100	%		07/27/20 16:31	07/27/20 16:31	1

Client Sample ID: OB-01_20ET365_062620_EEL_WB_03

Date Collected: 06/26/20 09:20

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-42

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.577		0.0962	0.0962	%		07/27/20 16:31	07/27/20 16:31	1

Client Sample ID: OB-01_20ET302_062420_EEL_WB_04

Date Collected: 06/24/20 10:58

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-43

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.04		0.0980	0.0980	%		07/27/20 16:31	07/27/20 16:31	1

Client Sample ID: OB-01_20ET304_062420_EEL_WB_05

Date Collected: 06/24/20 11:05

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-44

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	5.18		0.0980	0.0980	%		07/27/20 16:31	07/27/20 16:31	1

Client Sample ID: OB-01_20ET305_062420_EEL_WB_06

Date Collected: 06/24/20 11:09

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-45

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.206		0.0980	0.0980	%		07/27/20 16:31	07/27/20 16:31	1

Client Sample Results

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry

Client Sample ID: OB-01_20ET333_062520_EEL_WB_07

Date Collected: 06/25/20 09:30

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-46

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	0.144		0.0962	0.0962	%		07/27/20 16:31	07/27/20 16:31	1

Client Sample ID: OB-01_20ET356_062520_EEL_WB_08

Date Collected: 06/25/20 10:54

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-47

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.19		0.100	0.100	%		07/27/20 16:31	07/27/20 16:31	1

Client Sample ID: OB-01_20ET355_062520_EEL_WB_09

Date Collected: 06/25/20 10:57

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-48

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	6.93		0.100	0.100	%		07/27/20 16:31	07/27/20 16:31	1

Client Sample ID: OB-05_20ET129_062320_EEL_WB_01

Date Collected: 06/23/20 09:20

Date Received: 07/21/20 09:45

Lab Sample ID: 570-33855-49

Matrix: Tissue

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	1.34		0.0980	0.0980	%		07/27/20 16:31	07/27/20 16:31	1

Default Detection Limits

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry

Prep: 3541

Analyte	RL	MDL	Units
Percent Lipids	0.100	0.100	%

QC Sample Results

Client: Eurofins Frontier Global Sciences LLC
 Project/Site: 0G00004

Job ID: 570-33855-1

Method: Lipids - Percent Lipids

Lab Sample ID: MB 570-83623/1-A
Matrix: Tissue
Analysis Batch: 83835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 83623

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	ND		0.100	0.100	%		07/26/20 11:20	07/26/20 11:20	1

Lab Sample ID: 570-33855-3 DU
Matrix: Tissue
Analysis Batch: 83835

Client Sample ID: BO-04_20ET211_062320_EEL_WB_03
Prep Type: Total/NA
Prep Batch: 83623

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Lipids	9.26		9.222		%		0.5	25

Lab Sample ID: MB 570-83624/1-A
Matrix: Tissue
Analysis Batch: 83836

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 83624

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	ND		0.100	0.100	%		07/26/20 11:35	07/26/20 11:35	1

Lab Sample ID: 570-33855-37 DU
Matrix: Tissue
Analysis Batch: 83836

Client Sample ID: OB-05_20ET102_062320_EEL_WB_18
Prep Type: Total/NA
Prep Batch: 83624

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Lipids	7.88		7.980		%		1	25

Lab Sample ID: MB 570-83832/1-A
Matrix: Tissue
Analysis Batch: 83837

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 83832

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Lipids	ND		0.100	0.100	%		07/27/20 16:31	07/27/20 16:31	1

Lab Sample ID: 570-33855-49 DU
Matrix: Tissue
Analysis Batch: 83837

Client Sample ID: OB-05_20ET129_062320_EEL_WB_01
Prep Type: Total/NA
Prep Batch: 83832

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Lipids	1.34		1.225		%		9	25

QC Association Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry

Pre Prep Batch: 83274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-33855-1	BO-04_20ET204_062320_EEL_WB_01	Total/NA	Tissue	In House	
570-33855-2	BO-04_20ET204_062320_EEL_WB_02	Total/NA	Tissue	In House	
570-33855-3	BO-04_20ET211_062320_EEL_WB_03	Total/NA	Tissue	In House	
570-33855-4	BO-04_20ET215_062320_EEL_WB_04	Total/NA	Tissue	In House	
570-33855-5	BO-04_20ET215_062320_EEL_WB_05	Total/NA	Tissue	In House	
570-33855-6	BO-04_20ET215_062320_EEL_WB_06	Total/NA	Tissue	In House	
570-33855-7	BO-04_20ET215_062320_EEL_WB_07	Total/NA	Tissue	In House	
570-33855-8	BO-04_20ET215_062320_EEL_WB_08	Total/NA	Tissue	In House	
570-33855-9	BO-04_20ET215_062320_EEL_WB_09	Total/NA	Tissue	In House	
570-33855-10	BO-04_20ET215_062320_EEL_WB_10	Total/NA	Tissue	In House	
570-33855-11	BO-04_20ET215_062320_EEL_WB_11	Total/NA	Tissue	In House	
570-33855-12	BO-04_20ET215_062320_EEL_WB_12	Total/NA	Tissue	In House	
570-33855-13	BO-04_20ET215_062320_EEL_WB_13	Total/NA	Tissue	In House	
570-33855-14	BO-04_20ET215_062320_EEL_WB_14	Total/NA	Tissue	In House	
570-33855-15	BO-04_20ET215_062320_EEL_WB_15	Total/NA	Tissue	In House	
570-33855-16	BO-04_20ET219_062320_EEL_WB_16	Total/NA	Tissue	In House	
570-33855-17	BO-04_20ET228_062320_EEL_WB_17	Total/NA	Tissue	In House	
570-33855-18	BO-04_20ET228_062320_EEL_WB_18	Total/NA	Tissue	In House	
570-33855-19	BO-04_20ET225_062320_EEL_WB_19	Total/NA	Tissue	In House	
570-33855-20	BO-04_20ET224_062320_EEL_WB_20	Total/NA	Tissue	In House	
570-33855-21	OB-05_20ET127_062320_EEL_WB_02	Total/NA	Tissue	In House	
570-33855-22	OB-05_20ET125_062320_EEL_WB_03	Total/NA	Tissue	In House	
570-33855-23	OB-05_20ET125_062320_EEL_WB_04	Total/NA	Tissue	In House	
570-33855-24	OB-05_20ET125_062320_EEL_WB_05	Total/NA	Tissue	In House	
570-33855-25	OB-05_20ET119_062320_EEL_WB_06	Total/NA	Tissue	In House	
570-33855-26	OB-05_20ET119_062320_EEL_WB_07	Total/NA	Tissue	In House	
570-33855-27	OB-05_20ET117_062320_EEL_WB_08	Total/NA	Tissue	In House	
570-33855-28	OB-05_20ET115_062320_EEL_WB_09	Total/NA	Tissue	In House	
570-33855-29	OB-05_20ET115_062320_EEL_WB_10	Total/NA	Tissue	In House	
570-33855-30	OB-05_20ET100_062320_EEL_WB_11	Total/NA	Tissue	In House	
570-33855-31	OB-05_20ET100_062320_EEL_WB_12	Total/NA	Tissue	In House	
570-33855-32	OB-05_20ET100_062320_EEL_WB_13	Total/NA	Tissue	In House	
570-33855-33	OB-05_20ET100_062320_EEL_WB_14	Total/NA	Tissue	In House	
570-33855-34	OB-05_20ET100_062320_EEL_WB_15	Total/NA	Tissue	In House	
570-33855-35	OB-05_20ET100_062320_EEL_WB_16	Total/NA	Tissue	In House	
570-33855-36	OB-05_20ET100_062320_EEL_WB_17	Total/NA	Tissue	In House	
570-33855-37	OB-05_20ET102_062320_EEL_WB_18	Total/NA	Tissue	In House	
570-33855-38	OB-05_20ET102_062320_EEL_WB_19	Total/NA	Tissue	In House	
570-33855-39	OB-05_20ET102_062320_EEL_WB_20	Total/NA	Tissue	In House	
570-33855-40	OB-01_20ET300_062420_EEL_WB_01	Total/NA	Tissue	In House	
570-33855-41	OB-01_20ET301_062420_EEL_WB_02	Total/NA	Tissue	In House	
570-33855-42	OB-01_20ET365_062620_EEL_WB_03	Total/NA	Tissue	In House	
570-33855-43	OB-01_20ET302_062420_EEL_WB_04	Total/NA	Tissue	In House	
570-33855-44	OB-01_20ET304_062420_EEL_WB_05	Total/NA	Tissue	In House	
570-33855-45	OB-01_20ET305_062420_EEL_WB_06	Total/NA	Tissue	In House	
570-33855-46	OB-01_20ET333_062520_EEL_WB_07	Total/NA	Tissue	In House	
570-33855-47	OB-01_20ET356_062520_EEL_WB_08	Total/NA	Tissue	In House	
570-33855-48	OB-01_20ET355_062520_EEL_WB_09	Total/NA	Tissue	In House	
570-33855-49	OB-05_20ET129_062320_EEL_WB_01	Total/NA	Tissue	In House	
570-33855-3 DU	BO-04_20ET211_062320_EEL_WB_03	Total/NA	Tissue	In House	
570-33855-37 DU	OB-05_20ET102_062320_EEL_WB_18	Total/NA	Tissue	In House	

QC Association Summary

Client: Eurofins Frontier Global Sciences LLC
 Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry (Continued)

Pre Prep Batch: 83274 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-33855-49 DU	OB-05_20ET129_062320_EEL_WB_01	Total/NA	Tissue	In House	

Prep Batch: 83623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-33855-1	BO-04_20ET204_062320_EEL_WB_01	Total/NA	Tissue	3541	83274
570-33855-2	BO-04_20ET204_062320_EEL_WB_02	Total/NA	Tissue	3541	83274
570-33855-3	BO-04_20ET211_062320_EEL_WB_03	Total/NA	Tissue	3541	83274
570-33855-4	BO-04_20ET215_062320_EEL_WB_04	Total/NA	Tissue	3541	83274
570-33855-5	BO-04_20ET215_062320_EEL_WB_05	Total/NA	Tissue	3541	83274
570-33855-6	BO-04_20ET215_062320_EEL_WB_06	Total/NA	Tissue	3541	83274
570-33855-7	BO-04_20ET215_062320_EEL_WB_07	Total/NA	Tissue	3541	83274
570-33855-8	BO-04_20ET215_062320_EEL_WB_08	Total/NA	Tissue	3541	83274
570-33855-9	BO-04_20ET215_062320_EEL_WB_09	Total/NA	Tissue	3541	83274
570-33855-10	BO-04_20ET215_062320_EEL_WB_10	Total/NA	Tissue	3541	83274
570-33855-11	BO-04_20ET215_062320_EEL_WB_11	Total/NA	Tissue	3541	83274
570-33855-12	BO-04_20ET215_062320_EEL_WB_12	Total/NA	Tissue	3541	83274
570-33855-13	BO-04_20ET215_062320_EEL_WB_13	Total/NA	Tissue	3541	83274
570-33855-14	BO-04_20ET215_062320_EEL_WB_14	Total/NA	Tissue	3541	83274
570-33855-15	BO-04_20ET215_062320_EEL_WB_15	Total/NA	Tissue	3541	83274
570-33855-16	BO-04_20ET219_062320_EEL_WB_16	Total/NA	Tissue	3541	83274
570-33855-17	BO-04_20ET228_062320_EEL_WB_17	Total/NA	Tissue	3541	83274
570-33855-18	BO-04_20ET228_062320_EEL_WB_18	Total/NA	Tissue	3541	83274
570-33855-19	BO-04_20ET225_062320_EEL_WB_19	Total/NA	Tissue	3541	83274
570-33855-20	BO-04_20ET224_062320_EEL_WB_20	Total/NA	Tissue	3541	83274
MB 570-83623/1-A	Method Blank	Total/NA	Tissue	3541	
570-33855-3 DU	BO-04_20ET211_062320_EEL_WB_03	Total/NA	Tissue	3541	83274

Prep Batch: 83624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-33855-21	OB-05_20ET127_062320_EEL_WB_02	Total/NA	Tissue	3541	83274
570-33855-22	OB-05_20ET125_062320_EEL_WB_03	Total/NA	Tissue	3541	83274
570-33855-23	OB-05_20ET125_062320_EEL_WB_04	Total/NA	Tissue	3541	83274
570-33855-24	OB-05_20ET125_062320_EEL_WB_05	Total/NA	Tissue	3541	83274
570-33855-25	OB-05_20ET119_062320_EEL_WB_06	Total/NA	Tissue	3541	83274
570-33855-26	OB-05_20ET119_062320_EEL_WB_07	Total/NA	Tissue	3541	83274
570-33855-27	OB-05_20ET117_062320_EEL_WB_08	Total/NA	Tissue	3541	83274
570-33855-28	OB-05_20ET115_062320_EEL_WB_09	Total/NA	Tissue	3541	83274
570-33855-29	OB-05_20ET115_062320_EEL_WB_10	Total/NA	Tissue	3541	83274
570-33855-30	OB-05_20ET100_062320_EEL_WB_11	Total/NA	Tissue	3541	83274
570-33855-31	OB-05_20ET100_062320_EEL_WB_12	Total/NA	Tissue	3541	83274
570-33855-32	OB-05_20ET100_062320_EEL_WB_13	Total/NA	Tissue	3541	83274
570-33855-33	OB-05_20ET100_062320_EEL_WB_14	Total/NA	Tissue	3541	83274
570-33855-34	OB-05_20ET100_062320_EEL_WB_15	Total/NA	Tissue	3541	83274
570-33855-35	OB-05_20ET100_062320_EEL_WB_16	Total/NA	Tissue	3541	83274
570-33855-36	OB-05_20ET100_062320_EEL_WB_17	Total/NA	Tissue	3541	83274
570-33855-37	OB-05_20ET102_062320_EEL_WB_18	Total/NA	Tissue	3541	83274
570-33855-38	OB-05_20ET102_062320_EEL_WB_19	Total/NA	Tissue	3541	83274
570-33855-39	OB-05_20ET102_062320_EEL_WB_20	Total/NA	Tissue	3541	83274
570-33855-40	OB-01_20ET300_062420_EEL_WB_01	Total/NA	Tissue	3541	83274
MB 570-83624/1-A	Method Blank	Total/NA	Tissue	3541	
570-33855-37 DU	OB-05_20ET102_062320_EEL_WB_18	Total/NA	Tissue	3541	83274

QC Association Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry

Prep Batch: 83832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-33855-41	OB-01_20ET301_062420_EEL_WB_02	Total/NA	Tissue	3541	83274
570-33855-42	OB-01_20ET365_062620_EEL_WB_03	Total/NA	Tissue	3541	83274
570-33855-43	OB-01_20ET302_062420_EEL_WB_04	Total/NA	Tissue	3541	83274
570-33855-44	OB-01_20ET304_062420_EEL_WB_05	Total/NA	Tissue	3541	83274
570-33855-45	OB-01_20ET305_062420_EEL_WB_06	Total/NA	Tissue	3541	83274
570-33855-46	OB-01_20ET333_062520_EEL_WB_07	Total/NA	Tissue	3541	83274
570-33855-47	OB-01_20ET356_062520_EEL_WB_08	Total/NA	Tissue	3541	83274
570-33855-48	OB-01_20ET355_062520_EEL_WB_09	Total/NA	Tissue	3541	83274
570-33855-49	OB-05_20ET129_062320_EEL_WB_01	Total/NA	Tissue	3541	83274
MB 570-83832/1-A	Method Blank	Total/NA	Tissue	3541	
570-33855-49 DU	OB-05_20ET129_062320_EEL_WB_01	Total/NA	Tissue	3541	83274

Analysis Batch: 83835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-33855-1	BO-04_20ET204_062320_EEL_WB_01	Total/NA	Tissue	Lipids	83623
570-33855-2	BO-04_20ET204_062320_EEL_WB_02	Total/NA	Tissue	Lipids	83623
570-33855-3	BO-04_20ET211_062320_EEL_WB_03	Total/NA	Tissue	Lipids	83623
570-33855-4	BO-04_20ET215_062320_EEL_WB_04	Total/NA	Tissue	Lipids	83623
570-33855-5	BO-04_20ET215_062320_EEL_WB_05	Total/NA	Tissue	Lipids	83623
570-33855-6	BO-04_20ET215_062320_EEL_WB_06	Total/NA	Tissue	Lipids	83623
570-33855-7	BO-04_20ET215_062320_EEL_WB_07	Total/NA	Tissue	Lipids	83623
570-33855-8	BO-04_20ET215_062320_EEL_WB_08	Total/NA	Tissue	Lipids	83623
570-33855-9	BO-04_20ET215_062320_EEL_WB_09	Total/NA	Tissue	Lipids	83623
570-33855-10	BO-04_20ET215_062320_EEL_WB_10	Total/NA	Tissue	Lipids	83623
570-33855-11	BO-04_20ET215_062320_EEL_WB_11	Total/NA	Tissue	Lipids	83623
570-33855-12	BO-04_20ET215_062320_EEL_WB_12	Total/NA	Tissue	Lipids	83623
570-33855-13	BO-04_20ET215_062320_EEL_WB_13	Total/NA	Tissue	Lipids	83623
570-33855-14	BO-04_20ET215_062320_EEL_WB_14	Total/NA	Tissue	Lipids	83623
570-33855-15	BO-04_20ET215_062320_EEL_WB_15	Total/NA	Tissue	Lipids	83623
570-33855-16	BO-04_20ET219_062320_EEL_WB_16	Total/NA	Tissue	Lipids	83623
570-33855-17	BO-04_20ET228_062320_EEL_WB_17	Total/NA	Tissue	Lipids	83623
570-33855-18	BO-04_20ET228_062320_EEL_WB_18	Total/NA	Tissue	Lipids	83623
570-33855-19	BO-04_20ET225_062320_EEL_WB_19	Total/NA	Tissue	Lipids	83623
570-33855-20	BO-04_20ET224_062320_EEL_WB_20	Total/NA	Tissue	Lipids	83623
MB 570-83623/1-A	Method Blank	Total/NA	Tissue	Lipids	83623
570-33855-3 DU	BO-04_20ET211_062320_EEL_WB_03	Total/NA	Tissue	Lipids	83623

Analysis Batch: 83836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-33855-21	OB-05_20ET127_062320_EEL_WB_02	Total/NA	Tissue	Lipids	83624
570-33855-22	OB-05_20ET125_062320_EEL_WB_03	Total/NA	Tissue	Lipids	83624
570-33855-23	OB-05_20ET125_062320_EEL_WB_04	Total/NA	Tissue	Lipids	83624
570-33855-24	OB-05_20ET125_062320_EEL_WB_05	Total/NA	Tissue	Lipids	83624
570-33855-25	OB-05_20ET119_062320_EEL_WB_06	Total/NA	Tissue	Lipids	83624
570-33855-26	OB-05_20ET119_062320_EEL_WB_07	Total/NA	Tissue	Lipids	83624
570-33855-27	OB-05_20ET117_062320_EEL_WB_08	Total/NA	Tissue	Lipids	83624
570-33855-28	OB-05_20ET115_062320_EEL_WB_09	Total/NA	Tissue	Lipids	83624
570-33855-29	OB-05_20ET115_062320_EEL_WB_10	Total/NA	Tissue	Lipids	83624
570-33855-30	OB-05_20ET100_062320_EEL_WB_11	Total/NA	Tissue	Lipids	83624
570-33855-31	OB-05_20ET100_062320_EEL_WB_12	Total/NA	Tissue	Lipids	83624
570-33855-32	OB-05_20ET100_062320_EEL_WB_13	Total/NA	Tissue	Lipids	83624

QC Association Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

General Chemistry (Continued)

Analysis Batch: 83836 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-33855-33	OB-05_20ET100_062320_EEL_WB_14	Total/NA	Tissue	Lipids	83624
570-33855-34	OB-05_20ET100_062320_EEL_WB_15	Total/NA	Tissue	Lipids	83624
570-33855-35	OB-05_20ET100_062320_EEL_WB_16	Total/NA	Tissue	Lipids	83624
570-33855-36	OB-05_20ET100_062320_EEL_WB_17	Total/NA	Tissue	Lipids	83624
570-33855-37	OB-05_20ET102_062320_EEL_WB_18	Total/NA	Tissue	Lipids	83624
570-33855-38	OB-05_20ET102_062320_EEL_WB_19	Total/NA	Tissue	Lipids	83624
570-33855-39	OB-05_20ET102_062320_EEL_WB_20	Total/NA	Tissue	Lipids	83624
570-33855-40	OB-01_20ET300_062420_EEL_WB_01	Total/NA	Tissue	Lipids	83624
MB 570-83624/1-A	Method Blank	Total/NA	Tissue	Lipids	83624
570-33855-37 DU	OB-05_20ET102_062320_EEL_WB_18	Total/NA	Tissue	Lipids	83624

Analysis Batch: 83837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-33855-41	OB-01_20ET301_062420_EEL_WB_02	Total/NA	Tissue	Lipids	83832
570-33855-42	OB-01_20ET365_062620_EEL_WB_03	Total/NA	Tissue	Lipids	83832
570-33855-43	OB-01_20ET302_062420_EEL_WB_04	Total/NA	Tissue	Lipids	83832
570-33855-44	OB-01_20ET304_062420_EEL_WB_05	Total/NA	Tissue	Lipids	83832
570-33855-45	OB-01_20ET305_062420_EEL_WB_06	Total/NA	Tissue	Lipids	83832
570-33855-46	OB-01_20ET333_062520_EEL_WB_07	Total/NA	Tissue	Lipids	83832
570-33855-47	OB-01_20ET356_062520_EEL_WB_08	Total/NA	Tissue	Lipids	83832
570-33855-48	OB-01_20ET355_062520_EEL_WB_09	Total/NA	Tissue	Lipids	83832
570-33855-49	OB-05_20ET129_062320_EEL_WB_01	Total/NA	Tissue	Lipids	83832
MB 570-83832/1-A	Method Blank	Total/NA	Tissue	Lipids	83832
570-33855-49 DU	OB-05_20ET129_062320_EEL_WB_01	Total/NA	Tissue	Lipids	83832

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
 Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: BO-04_20ET204_062320_EEL_WB_01

Lab Sample ID: 570-33855-1

Date Collected: 06/23/20 11:11

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.01 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET204_062320_EEL_WB_02

Lab Sample ID: 570-33855-2

Date Collected: 06/23/20 11:11

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET211_062320_EEL_WB_03

Lab Sample ID: 570-33855-3

Date Collected: 06/23/20 11:32

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_04

Lab Sample ID: 570-33855-4

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.2 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_05

Lab Sample ID: 570-33855-5

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.2 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_06

Lab Sample ID: 570-33855-6

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_07

Lab Sample ID: 570-33855-7

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_08

Lab Sample ID: 570-33855-8

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_09

Lab Sample ID: 570-33855-9

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_10

Lab Sample ID: 570-33855-10

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.2 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: BO-04_20ET215_062320_EEL_WB_11

Lab Sample ID: 570-33855-11

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_12

Lab Sample ID: 570-33855-12

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_13

Lab Sample ID: 570-33855-13

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_14

Lab Sample ID: 570-33855-14

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET215_062320_EEL_WB_15

Lab Sample ID: 570-33855-15

Date Collected: 06/23/20 11:46

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: BO-04_20ET219_062320_EEL_WB_16

Lab Sample ID: 570-33855-16

Date Collected: 06/23/20 12:01

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.2 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET228_062320_EEL_WB_17

Lab Sample ID: 570-33855-17

Date Collected: 06/23/20 12:14

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET228_062320_EEL_WB_18

Lab Sample ID: 570-33855-18

Date Collected: 06/23/20 12:14

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET225_062320_EEL_WB_19

Lab Sample ID: 570-33855-19

Date Collected: 06/23/20 12:22

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.2 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: BO-04_20ET224_062320_EEL_WB_20

Lab Sample ID: 570-33855-20

Date Collected: 06/23/20 12:24

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83623	07/26/20 11:20	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83835	07/26/20 11:20	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: OB-05_20ET127_062320_EEL_WB_02

Lab Sample ID: 570-33855-21

Date Collected: 06/23/20 09:30

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET125_062320_EEL_WB_03

Lab Sample ID: 570-33855-22

Date Collected: 06/23/20 09:34

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET125_062320_EEL_WB_04

Lab Sample ID: 570-33855-23

Date Collected: 06/23/20 09:34

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET125_062320_EEL_WB_05

Lab Sample ID: 570-33855-24

Date Collected: 06/23/20 09:34

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET119_062320_EEL_WB_06

Lab Sample ID: 570-33855-25

Date Collected: 06/23/20 09:44

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.2 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: OB-05_20ET119_062320_EEL_WB_07

Lab Sample ID: 570-33855-26

Date Collected: 06/23/20 09:44

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET117_062320_EEL_WB_08

Lab Sample ID: 570-33855-27

Date Collected: 06/23/20 09:51

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET115_062320_EEL_WB_09

Lab Sample ID: 570-33855-28

Date Collected: 06/23/20 09:58

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET115_062320_EEL_WB_10

Lab Sample ID: 570-33855-29

Date Collected: 06/23/20 09:58

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET100_062320_EEL_WB_11

Lab Sample ID: 570-33855-30

Date Collected: 06/23/20 10:01

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: OB-05_20ET100_062320_EEL_WB_12

Lab Sample ID: 570-33855-31

Date Collected: 06/23/20 10:01

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET100_062320_EEL_WB_13

Lab Sample ID: 570-33855-32

Date Collected: 06/23/20 10:01

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET100_062320_EEL_WB_14

Lab Sample ID: 570-33855-33

Date Collected: 06/23/20 10:01

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			4.5 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET100_062320_EEL_WB_15

Lab Sample ID: 570-33855-34

Date Collected: 06/23/20 10:01

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.2 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET100_062320_EEL_WB_16

Lab Sample ID: 570-33855-35

Date Collected: 06/23/20 10:01

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
 Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: OB-05_20ET100_062320_EEL_WB_17

Lab Sample ID: 570-33855-36

Date Collected: 06/23/20 10:01

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			4.7 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET102_062320_EEL_WB_18

Lab Sample ID: 570-33855-37

Date Collected: 06/23/20 10:11

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET102_062320_EEL_WB_19

Lab Sample ID: 570-33855-38

Date Collected: 06/23/20 10:11

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET102_062320_EEL_WB_20

Lab Sample ID: 570-33855-39

Date Collected: 06/23/20 10:11

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-01_20ET300_062420_EEL_WB_01

Lab Sample ID: 570-33855-40

Date Collected: 06/24/20 10:52

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83624	07/26/20 11:35	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83836	07/26/20 11:35	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: OB-01_20ET301_062420_EEL_WB_02

Lab Sample ID: 570-33855-41

Date Collected: 06/26/20 10:55

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83832	07/27/20 16:31	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83837	07/27/20 16:31	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-01_20ET365_062620_EEL_WB_03

Lab Sample ID: 570-33855-42

Date Collected: 06/26/20 09:20

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.2 g	0.5 mL	83832	07/27/20 16:31	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83837	07/27/20 16:31	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-01_20ET302_062420_EEL_WB_04

Lab Sample ID: 570-33855-43

Date Collected: 06/24/20 10:58

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83832	07/27/20 16:31	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83837	07/27/20 16:31	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-01_20ET304_062420_EEL_WB_05

Lab Sample ID: 570-33855-44

Date Collected: 06/24/20 11:05

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83832	07/27/20 16:31	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83837	07/27/20 16:31	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-01_20ET305_062420_EEL_WB_06

Lab Sample ID: 570-33855-45

Date Collected: 06/24/20 11:09

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83832	07/27/20 16:31	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83837	07/27/20 16:31	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Client Sample ID: OB-01_20ET333_062520_EEL_WB_07

Lab Sample ID: 570-33855-46

Date Collected: 06/25/20 09:30

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.2 g	0.5 mL	83832	07/27/20 16:31	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83837	07/27/20 16:31	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-01_20ET356_062520_EEL_WB_08

Lab Sample ID: 570-33855-47

Date Collected: 06/25/20 10:54

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83832	07/27/20 16:31	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83837	07/27/20 16:31	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-01_20ET355_062520_EEL_WB_09

Lab Sample ID: 570-33855-48

Date Collected: 06/25/20 10:57

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.0 g	0.5 mL	83832	07/27/20 16:31	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83837	07/27/20 16:31	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: OB-05_20ET129_062320_EEL_WB_01

Lab Sample ID: 570-33855-49

Date Collected: 06/23/20 09:20

Matrix: Tissue

Date Received: 07/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	In House					83274	07/24/20 08:48	UWEZ	ECL 3
Total/NA	Prep	3541			5.1 g	0.5 mL	83832	07/27/20 16:31	UWEZ	ECL 1
Total/NA	Analysis	Lipids		1			83837	07/27/20 16:31	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 3 = Eurofins Calscience LLC Knott, 11380 Knott Street, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

Method Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Method	Method Description	Protocol	Laboratory
Lipids	Percent Lipids	Lab SOP	ECL 1
3541	Automated Soxhlet Extraction	SW846	ECL 1
In House	Tissue Handling and Preparation	NOAA	ECL 3

Protocol References:

Lab SOP = Laboratory Standard Operating Procedure

NOAA = National Marine Fisheries Service, National Oceanic And Atmospheric Administration, Seattle, WA, November 1988

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

ECL 3 = Eurofins Calscience LLC Knott, 11380 Knott Street, Garden Grove, CA 92841, TEL (714)895-5494

Sample Summary

Client: Eurofins Frontier Global Sciences LLC
Project/Site: 0G00004

Job ID: 570-33855-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-33855-1	BO-04_20ET204_062320_EEL_WB_01	Tissue	06/23/20 11:11	07/21/20 09:45	
570-33855-2	BO-04_20ET204_062320_EEL_WB_02	Tissue	06/23/20 11:11	07/21/20 09:45	
570-33855-3	BO-04_20ET211_062320_EEL_WB_03	Tissue	06/23/20 11:32	07/21/20 09:45	
570-33855-4	BO-04_20ET215_062320_EEL_WB_04	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-5	BO-04_20ET215_062320_EEL_WB_05	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-6	BO-04_20ET215_062320_EEL_WB_06	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-7	BO-04_20ET215_062320_EEL_WB_07	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-8	BO-04_20ET215_062320_EEL_WB_08	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-9	BO-04_20ET215_062320_EEL_WB_09	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-10	BO-04_20ET215_062320_EEL_WB_10	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-11	BO-04_20ET215_062320_EEL_WB_11	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-12	BO-04_20ET215_062320_EEL_WB_12	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-13	BO-04_20ET215_062320_EEL_WB_13	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-14	BO-04_20ET215_062320_EEL_WB_14	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-15	BO-04_20ET215_062320_EEL_WB_15	Tissue	06/23/20 11:46	07/21/20 09:45	
570-33855-16	BO-04_20ET219_062320_EEL_WB_16	Tissue	06/23/20 12:01	07/21/20 09:45	
570-33855-17	BO-04_20ET228_062320_EEL_WB_17	Tissue	06/23/20 12:14	07/21/20 09:45	
570-33855-18	BO-04_20ET228_062320_EEL_WB_18	Tissue	06/23/20 12:14	07/21/20 09:45	
570-33855-19	BO-04_20ET225_062320_EEL_WB_19	Tissue	06/23/20 12:22	07/21/20 09:45	
570-33855-20	BO-04_20ET224_062320_EEL_WB_20	Tissue	06/23/20 12:24	07/21/20 09:45	
570-33855-21	OB-05_20ET127_062320_EEL_WB_02	Tissue	06/23/20 09:30	07/21/20 09:45	
570-33855-22	OB-05_20ET125_062320_EEL_WB_03	Tissue	06/23/20 09:34	07/21/20 09:45	
570-33855-23	OB-05_20ET125_062320_EEL_WB_04	Tissue	06/23/20 09:34	07/21/20 09:45	
570-33855-24	OB-05_20ET125_062320_EEL_WB_05	Tissue	06/23/20 09:34	07/21/20 09:45	
570-33855-25	OB-05_20ET119_062320_EEL_WB_06	Tissue	06/23/20 09:44	07/21/20 09:45	
570-33855-26	OB-05_20ET119_062320_EEL_WB_07	Tissue	06/23/20 09:44	07/21/20 09:45	
570-33855-27	OB-05_20ET117_062320_EEL_WB_08	Tissue	06/23/20 09:51	07/21/20 09:45	
570-33855-28	OB-05_20ET115_062320_EEL_WB_09	Tissue	06/23/20 09:58	07/21/20 09:45	
570-33855-29	OB-05_20ET115_062320_EEL_WB_10	Tissue	06/23/20 09:58	07/21/20 09:45	
570-33855-30	OB-05_20ET100_062320_EEL_WB_11	Tissue	06/23/20 10:01	07/21/20 09:45	
570-33855-31	OB-05_20ET100_062320_EEL_WB_12	Tissue	06/23/20 10:01	07/21/20 09:45	
570-33855-32	OB-05_20ET100_062320_EEL_WB_13	Tissue	06/23/20 10:01	07/21/20 09:45	
570-33855-33	OB-05_20ET100_062320_EEL_WB_14	Tissue	06/23/20 10:01	07/21/20 09:45	
570-33855-34	OB-05_20ET100_062320_EEL_WB_15	Tissue	06/23/20 10:01	07/21/20 09:45	
570-33855-35	OB-05_20ET100_062320_EEL_WB_16	Tissue	06/23/20 10:01	07/21/20 09:45	
570-33855-36	OB-05_20ET100_062320_EEL_WB_17	Tissue	06/23/20 10:01	07/21/20 09:45	
570-33855-37	OB-05_20ET102_062320_EEL_WB_18	Tissue	06/23/20 10:11	07/21/20 09:45	
570-33855-38	OB-05_20ET102_062320_EEL_WB_19	Tissue	06/23/20 10:11	07/21/20 09:45	
570-33855-39	OB-05_20ET102_062320_EEL_WB_20	Tissue	06/23/20 10:11	07/21/20 09:45	
570-33855-40	OB-01_20ET300_062420_EEL_WB_01	Tissue	06/24/20 10:52	07/21/20 09:45	
570-33855-41	OB-01_20ET301_062420_EEL_WB_02	Tissue	06/26/20 10:55	07/21/20 09:45	
570-33855-42	OB-01_20ET365_062620_EEL_WB_03	Tissue	06/26/20 09:20	07/21/20 09:45	
570-33855-43	OB-01_20ET302_062420_EEL_WB_04	Tissue	06/24/20 10:58	07/21/20 09:45	
570-33855-44	OB-01_20ET304_062420_EEL_WB_05	Tissue	06/24/20 11:05	07/21/20 09:45	
570-33855-45	OB-01_20ET305_062420_EEL_WB_06	Tissue	06/24/20 11:09	07/21/20 09:45	
570-33855-46	OB-01_20ET333_062520_EEL_WB_07	Tissue	06/25/20 09:30	07/21/20 09:45	
570-33855-47	OB-01_20ET356_062520_EEL_WB_08	Tissue	06/25/20 10:54	07/21/20 09:45	
570-33855-48	OB-01_20ET355_062520_EEL_WB_09	Tissue	06/25/20 10:57	07/21/20 09:45	
570-33855-49	OB-05_20ET129_062320_EEL_WB_01	Tissue	06/23/20 09:20	07/21/20 09:45	

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job Number: 570-33855-1

SDG No.:

Project: 0G00004

Client Sample ID	Lab Sample ID
BO-04 20ET204 062320 EEL WB 01	570-33855-1
BO-04 20ET204 062320 EEL WB 02	570-33855-2
BO-04 20ET211 062320 EEL WB 03	570-33855-3
BO-04 20ET215 062320 EEL WB 04	570-33855-4
BO-04 20ET215 062320 EEL WB 05	570-33855-5
BO-04 20ET215 062320 EEL WB 06	570-33855-6
BO-04 20ET215 062320 EEL WB 07	570-33855-7
BO-04 20ET215 062320 EEL WB 08	570-33855-8
BO-04 20ET215 062320 EEL WB 09	570-33855-9
BO-04 20ET215 062320 EEL WB 10	570-33855-10
BO-04 20ET215 062320 EEL WB 11	570-33855-11
BO-04 20ET215 062320 EEL WB 12	570-33855-12
BO-04 20ET215 062320 EEL WB 13	570-33855-13
BO-04 20ET215 062320 EEL WB 14	570-33855-14
BO-04 20ET215 062320 EEL WB 15	570-33855-15
BO-04 20ET219 062320 EEL WB 16	570-33855-16
BO-04 20ET228 062320 EEL WB 17	570-33855-17
BO-04 20ET228 062320 EEL WB 18	570-33855-18
BO-04 20ET225 062320 EEL WB 19	570-33855-19
BO-04 20ET224 062320 EEL WB 20	570-33855-20
OB-05 20ET127 062320 EEL WB 02	570-33855-21
OB-05 20ET125 062320 EEL WB 03	570-33855-22
OB-05 20ET125 062320 EEL WB 04	570-33855-23
OB-05 20ET125 062320 EEL WB 05	570-33855-24
OB-05 20ET119 062320 EEL WB 06	570-33855-25
OB-05 20ET119 062320 EEL WB 07	570-33855-26
OB-05 20ET117 062320 EEL WB 08	570-33855-27
OB-05 20ET115 062320 EEL WB 09	570-33855-28
OB-05 20ET115 062320 EEL WB 10	570-33855-29
OB-05 20ET100 062320 EEL WB 11	570-33855-30
OB-05 20ET100 062320 EEL WB 12	570-33855-31
OB-05 20ET100 062320 EEL WB 13	570-33855-32
OB-05 20ET100 062320 EEL WB 14	570-33855-33
OB-05 20ET100 062320 EEL WB 15	570-33855-34
OB-05 20ET100 062320 EEL WB 16	570-33855-35
OB-05 20ET100 062320 EEL WB 17	570-33855-36
OB-05 20ET102 062320 EEL WB 18	570-33855-37
OB-05 20ET102 062320 EEL WB 19	570-33855-38
OB-05 20ET102 062320 EEL WB 20	570-33855-39
OB-01 20ET300 062420 EEL WB 01	570-33855-40
OB-01 20ET301 062420 EEL WB 02	570-33855-41
OB-01 20ET365 062620 EEL WB 03	570-33855-42
OB-01 20ET302 062420 EEL WB 04	570-33855-43
OB-01 20ET304 062420 EEL WB 05	570-33855-44
OB-01 20ET305 062420 EEL WB 06	570-33855-45

Comments:

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience _____

Job Number: 570-33855-1 _____

SDG No.: _____

Project: 0G00004 _____

Client Sample ID

OB-01_20ET333_062520_EEL_WB_07
OB-01_20ET356_062520_EEL_WB_08
OB-01_20ET355_062520_EEL_WB_09
OB-05_20ET129_062320_EEL_WB_01

Lab Sample ID

570-33855-46
570-33855-47
570-33855-48
570-33855-49

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET204_062320_EEL_WB_01

Lab Sample ID: 570-33855-1

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:11

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.09	0.0998	0.0998	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET204_062320_EEL_WB_02

Lab Sample ID: 570-33855-2

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:11

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	5.60	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET211_062320_EEL_WB_03

Lab Sample ID: 570-33855-3

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:32

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	9.26	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_04

Lab Sample ID: 570-33855-4

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	4.79	0.0962	0.0962	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_05

Lab Sample ID: 570-33855-5

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.58	0.0962	0.0962	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_06

Lab Sample ID: 570-33855-6

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	4.95	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_07

Lab Sample ID: 570-33855-7

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.530	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_08

Lab Sample ID: 570-33855-8

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	2.43	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_09

Lab Sample ID: 570-33855-9

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	8.81	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_10

Lab Sample ID: 570-33855-10

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.13	0.0962	0.0962	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_11

Lab Sample ID: 570-33855-11

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	6.25	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_12

Lab Sample ID: 570-33855-12

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	2.79	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_13

Lab Sample ID: 570-33855-13

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	8.30	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_14

Lab Sample ID: 570-33855-14

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.89	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET215_062320_EEL_WB_15

Lab Sample ID: 570-33855-15

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 11:46

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	6.00	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET219_062320_EEL_WB_16

Lab Sample ID: 570-33855-16

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 12:01

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.365	0.0962	0.0962	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET228_062320_EEL_WB_17

Lab Sample ID: 570-33855-17

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 12:14

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.18	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET228_062320_EEL_WB_18

Lab Sample ID: 570-33855-18

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 12:14

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	2.57	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET225_062320_EEL_WB_19

Lab Sample ID: 570-33855-19

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 12:22

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.385	0.0962	0.0962	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: BO-04_20ET224_062320_EEL_WB_20

Lab Sample ID: 570-33855-20

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 12:24

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.14	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET127_062320_EEL_WB_02

Lab Sample ID: 570-33855-21

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:30

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	2.20	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET125_062320_EEL_WB_03

Lab Sample ID: 570-33855-22

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:34

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.54	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET125_062320_EEL_WB_04

Lab Sample ID: 570-33855-23

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:34

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	4.36	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET125_062320_EEL_WB_05

Lab Sample ID: 570-33855-24

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:34

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	6.25	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET119_062320_EEL_WB_06

Lab Sample ID: 570-33855-25

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:44

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	8.13	0.0962	0.0962	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET119_062320_EEL_WB_07

Lab Sample ID: 570-33855-26

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:44

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	8.90	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET117_062320_EEL_WB_08

Lab Sample ID: 570-33855-27

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:51

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	6.99	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET115_062320_EEL_WB_09

Lab Sample ID: 570-33855-28

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:58

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	4.98	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET115_062320_EEL_WB_10

Lab Sample ID: 570-33855-29

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:58

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	3.79	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET100_062320_EEL_WB_11

Lab Sample ID: 570-33855-30

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 10:01

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.431	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET100_062320_EEL_WB_12

Lab Sample ID: 570-33855-31

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 10:01

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	2.93	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET100_062320_EEL_WB_13

Lab Sample ID: 570-33855-32

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 10:01

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	3.99	0.100	0.100	%			1	Lipids

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET100_062320_EEL_WB_14

Lab Sample ID: 570-33855-33

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.:

Matrix: Tissue

Date Sampled: 06/23/2020 10:01

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.856	0.111	0.111	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET100_062320_EEL_WB_15

Lab Sample ID: 570-33855-34

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 10:01

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.404	0.0962	0.0962	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET100_062320_EEL_WB_16

Lab Sample ID: 570-33855-35

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 10:01

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	6.42	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET100_062320_EEL_WB_17

Lab Sample ID: 570-33855-36

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 10:01

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	4.56	0.106	0.106	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET102_062320_EEL_WB_18

Lab Sample ID: 570-33855-37

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 10:11

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	7.88	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET102_062320_EEL_WB_19

Lab Sample ID: 570-33855-38

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 10:11

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	3.96	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET102_062320_EEL_WB_20

Lab Sample ID: 570-33855-39

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 10:11

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	4.57	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-01_20ET300_062420_EEL_WB_01

Lab Sample ID: 570-33855-40

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/24/2020 10:52

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.190	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-01_20ET301_062420_EEL_WB_02

Lab Sample ID: 570-33855-41

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/26/2020 10:55

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.600	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-01_20ET365_062620_EEL_WB_03

Lab Sample ID: 570-33855-42

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/26/2020 09:20

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.577	0.0962	0.0962	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-01_20ET302_062420_EEL_WB_04

Lab Sample ID: 570-33855-43

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/24/2020 10:58

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.04	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-01_20ET304_062420_EEL_WB_05

Lab Sample ID: 570-33855-44

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/24/2020 11:05

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	5.18	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-01_20ET305_062420_EEL_WB_06

Lab Sample ID: 570-33855-45

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/24/2020 11:09

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.206	0.0980	0.0980	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-01_20ET333_062520_EEL_WB_07

Lab Sample ID: 570-33855-46

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/25/2020 09:30

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	0.144	0.0962	0.0962	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-01_20ET356_062520_EEL_WB_08

Lab Sample ID: 570-33855-47

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/25/2020 10:54

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.19	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-01_20ET355_062520_EEL_WB_09

Lab Sample ID: 570-33855-48

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/25/2020 10:57

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	6.93	0.100	0.100	%			1	Lipids

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: OB-05_20ET129_062320_EEL_WB_01

Lab Sample ID: 570-33855-49

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG ID.: _____

Matrix: Tissue

Date Sampled: 06/23/2020 09:20

Reporting Basis: WET

Date Received: 07/21/2020 09:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Percent Lipids	1.34	0.0980	0.0980	%			1	Lipids

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience _____

Job No.: 570-33855-1 _____

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 83835	Date: 07/26/2020 11:20	Prep Batch: 83623	Date: 07/26/2020 11:20				
Lipids	MB 570-83623/1-A	Percent Lipids	ND		%	0.100	1
Batch ID: 83836	Date: 07/26/2020 11:35	Prep Batch: 83624	Date: 07/26/2020 11:35				
Lipids	MB 570-83624/1-A	Percent Lipids	ND		%	0.100	1
Batch ID: 83837	Date: 07/27/2020 16:31	Prep Batch: 83832	Date: 07/27/2020 16:31				
Lipids	MB 570-83832/1-A	Percent Lipids	ND		%	0.100	1

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Matrix: Tissue

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 83835 Date: 07/26/2020 11:20 Prep Batch: 83623 Date: 07/26/2020 11:20								
Lipids	BO-04_20ET211_0623 20_EEL_WB_03	570-33855-3	Percent Lipids	9.26	%			
Lipids	BO-04_20ET211_0623 20_EEL_WB_03	570-33855-3 DU	Percent Lipids	9.222	%	0.5	25	
Batch ID: 83836 Date: 07/26/2020 11:35 Prep Batch: 83624 Date: 07/26/2020 11:35								
Lipids	OB-05_20ET102_0623 20_EEL_WB_18	570-33855-37	Percent Lipids	7.88	%			
Lipids	OB-05_20ET102_0623 20_EEL_WB_18	570-33855-37 DU	Percent Lipids	7.980	%	1	25	
Batch ID: 83837 Date: 07/27/2020 16:31 Prep Batch: 83832 Date: 07/27/2020 16:31								
Lipids	OB-05_20ET129_0623 20_EEL_WB_01	570-33855-49	Percent Lipids	1.34	%			
Lipids	OB-05_20ET129_0623 20_EEL_WB_01	570-33855-49 DU	Percent Lipids	1.225	%	9	25	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job Number: 570-33855-1

SDG Number: _____

Matrix: Tissue

Instrument ID: NOEQUIP

Method: Lipids

RL Date: 04/16/2016 16:36

Prep Method: 3541

Analyte	Wavelength/ Mass	RL (%)	
Percent Lipids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job Number: 570-33855-1

SDG Number: _____

Matrix: Tissue

Instrument ID: NOEQUIP

Method: Lipids

XRL Date: 04/16/2016 16:36

Analyte	Wavelength/ Mass	XRL (%)	
Percent Lipids		0.1	

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG No.: _____

Prep Method: 3541

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 570-83623/1-A	07/26/2020 11:20	83623	20.0		2
570-33855-3 DU	07/26/2020 11:20	83623	5.01		0.5
570-33855-1	07/26/2020 11:20	83623	5.01		0.5
570-33855-2	07/26/2020 11:20	83623	5.0		0.5
570-33855-3	07/26/2020 11:20	83623	5.1		0.5
570-33855-4	07/26/2020 11:20	83623	5.2		0.5
570-33855-5	07/26/2020 11:20	83623	5.2		0.5
570-33855-6	07/26/2020 11:20	83623	5.1		0.5
570-33855-7	07/26/2020 11:20	83623	5.0		0.5
570-33855-8	07/26/2020 11:20	83623	5.1		0.5
570-33855-9	07/26/2020 11:20	83623	5.0		0.5
570-33855-10	07/26/2020 11:20	83623	5.2		0.5
570-33855-11	07/26/2020 11:20	83623	5.1		0.5
570-33855-12	07/26/2020 11:20	83623	5.1		0.5
570-33855-13	07/26/2020 11:20	83623	5.1		0.5
570-33855-14	07/26/2020 11:20	83623	5.0		0.5
570-33855-15	07/26/2020 11:20	83623	5.1		0.5
570-33855-16	07/26/2020 11:20	83623	5.2		0.5
570-33855-17	07/26/2020 11:20	83623	5.0		0.5
570-33855-18	07/26/2020 11:20	83623	5.1		0.5
570-33855-19	07/26/2020 11:20	83623	5.2		0.5
570-33855-20	07/26/2020 11:20	83623	5.1		0.5

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG No.: _____

Prep Method: 3541

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 570-83624/1-A	07/26/2020 11:35	83624	20.0		2
570-33855-37 DU	07/26/2020 11:35	83624	5.0		0.5
570-33855-21	07/26/2020 11:35	83624	5.1		0.5
570-33855-22	07/26/2020 11:35	83624	5.0		0.5
570-33855-23	07/26/2020 11:35	83624	5.0		0.5
570-33855-24	07/26/2020 11:35	83624	5.1		0.5
570-33855-25	07/26/2020 11:35	83624	5.2		0.5
570-33855-26	07/26/2020 11:35	83624	5.0		0.5
570-33855-27	07/26/2020 11:35	83624	5.0		0.5
570-33855-28	07/26/2020 11:35	83624	5.1		0.5
570-33855-29	07/26/2020 11:35	83624	5.0		0.5
570-33855-30	07/26/2020 11:35	83624	5.1		0.5
570-33855-31	07/26/2020 11:35	83624	5.1		0.5
570-33855-32	07/26/2020 11:35	83624	5.0		0.5
570-33855-33	07/26/2020 11:35	83624	4.5		0.5
570-33855-34	07/26/2020 11:35	83624	5.2		0.5
570-33855-35	07/26/2020 11:35	83624	5.1		0.5
570-33855-36	07/26/2020 11:35	83624	4.7		0.5
570-33855-37	07/26/2020 11:35	83624	5.0		0.5
570-33855-38	07/26/2020 11:35	83624	5.0		0.5
570-33855-39	07/26/2020 11:35	83624	5.1		0.5
570-33855-40	07/26/2020 11:35	83624	5.0		0.5

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience

Job No.: 570-33855-1

SDG No.: _____

Prep Method: 3541

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 570-83832/1-A	07/27/2020 16:31	83832	20		2
570-33855-49 DU	07/27/2020 16:31	83832	5.1		0.5
570-33855-41	07/27/2020 16:31	83832	5.0		0.5
570-33855-42	07/27/2020 16:31	83832	5.2		0.5
570-33855-43	07/27/2020 16:31	83832	5.1		0.5
570-33855-44	07/27/2020 16:31	83832	5.1		0.5
570-33855-45	07/27/2020 16:31	83832	5.1		0.5
570-33855-46	07/27/2020 16:31	83832	5.2		0.5
570-33855-47	07/27/2020 16:31	83832	5.0		0.5
570-33855-48	07/27/2020 16:31	83832	5.0		0.5
570-33855-49	07/27/2020 16:31	83832	5.1		0.5

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: Lipids

Start Date: 07/26/2020 11:20 End Date: 07/26/2020 11:20

Lab Sample Id	D/F	Type	Time	Analytes																			
				P	e	r	c	e	n	t	L	i	p	i	d	s							
MB 570-83623/1-A	1	T	11:20	X																			
570-33855-3 DU	1	T	11:20	X																			
570-33855-1	1	T	11:20	X																			
570-33855-2	1	T	11:20	X																			
570-33855-3	1	T	11:20	X																			
570-33855-4	1	T	11:20	X																			
570-33855-5	1	T	11:20	X																			
570-33855-6	1	T	11:20	X																			
570-33855-7	1	T	11:20	X																			
570-33855-8	1	T	11:20	X																			
570-33855-9	1	T	11:20	X																			
570-33855-10	1	T	11:20	X																			
570-33855-11	1	T	11:20	X																			
570-33855-12	1	T	11:20	X																			
570-33855-13	1	T	11:20	X																			
570-33855-14	1	T	11:20	X																			
570-33855-15	1	T	11:20	X																			
570-33855-16	1	T	11:20	X																			
570-33855-17	1	T	11:20	X																			
570-33855-18	1	T	11:20	X																			
570-33855-19	1	T	11:20	X																			
570-33855-20	1	T	11:20	X																			

Prep Types: _____
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: Lipids

Start Date: 07/26/2020 11:35 End Date: 07/26/2020 11:35

Lab Sample Id	D/F	Type	Time	Analytes																			
				P																			
MB 570-83624/1-A	1	T	11:35	X																			
570-33855-37 DU	1	T	11:35	X																			
570-33855-21	1	T	11:35	X																			
570-33855-22	1	T	11:35	X																			
570-33855-23	1	T	11:35	X																			
570-33855-24	1	T	11:35	X																			
570-33855-25	1	T	11:35	X																			
570-33855-26	1	T	11:35	X																			
570-33855-27	1	T	11:35	X																			
570-33855-28	1	T	11:35	X																			
570-33855-29	1	T	11:35	X																			
570-33855-30	1	T	11:35	X																			
570-33855-31	1	T	11:35	X																			
570-33855-32	1	T	11:35	X																			
570-33855-33	1	T	11:35	X																			
570-33855-34	1	T	11:35	X																			
570-33855-35	1	T	11:35	X																			
570-33855-36	1	T	11:35	X																			
570-33855-37	1	T	11:35	X																			
570-33855-38	1	T	11:35	X																			
570-33855-39	1	T	11:35	X																			
570-33855-40	1	T	11:35	X																			

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83274 Batch Start Date: 07/24/20 08:47 Batch Analyst: Zhou, Weimin

Batch Method: In House Batch End Date: 07/24/20 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	WtAfterHomogen				
570-33855-A-1	BO-04 20ET204_06 2320 EEL WB 01	In House, 3541, Lipids	T	5.54 g				
570-33855-A-2	BO-04 20ET204_06 2320 EEL WB 02	In House, 3541, Lipids	T	9.37 g				
570-33855-A-3	BO-04 20ET211_06 2320 EEL WB 03	In House, 3541, Lipids	T	19.54 g				
570-33855-A-4	BO-04 20ET215_06 2320 EEL WB 04	In House, 3541, Lipids	T	12.52 g				
570-33855-A-5	BO-04 20ET215_06 2320 EEL WB 05	In House, 3541, Lipids	T	9.43 g				
570-33855-A-6	BO-04 20ET215_06 2320 EEL WB 06	In House, 3541, Lipids	T	9.98 g				
570-33855-A-7	BO-04 20ET215_06 2320 EEL WB 07	In House, 3541, Lipids	T	8.13 g				
570-33855-A-8	BO-04 20ET215_06 2320 EEL WB 08	In House, 3541, Lipids	T	7.98 g				
570-33855-A-9	BO-04 20ET215_06 2320 EEL WB 09	In House, 3541, Lipids	T	14.05 g				
570-33855-A-10	BO-04 20ET215_06 2320 EEL WB 10	In House, 3541, Lipids	T	6.58 g				
570-33855-A-11	BO-04 20ET215_06 2320 EEL WB 11	In House, 3541, Lipids	T	11.38 g				
570-33855-A-12	BO-04 20ET215_06 2320 EEL WB 12	In House, 3541, Lipids	T	8.67 g				
570-33855-A-13	BO-04 20ET215_06 2320 EEL WB 13	In House, 3541, Lipids	T	10.42 g				
570-33855-A-14	BO-04 20ET215_06 2320 EEL WB 14	In House, 3541, Lipids	T	10.14 g				
570-33855-A-15	BO-04 20ET215_06 2320 EEL WB 15	In House, 3541, Lipids	T	9.67 g				
570-33855-A-16	BO-04 20ET219_06 2320 EEL WB 16	In House, 3541, Lipids	T	11.02 g				
570-33855-A-17	BO-04 20ET228_06 2320 EEL WB 17	In House, 3541, Lipids	T	17.82 g				
570-33855-A-18	BO-04 20ET228_06 2320 EEL WB 18	In House, 3541, Lipids	T	8.41 g				
570-33855-A-19	BO-04 20ET225_06 2320 EEL WB 19	In House, 3541, Lipids	T	10.40 g				
570-33855-A-20	BO-04 20ET224_06 2320 EEL WB 20	In House, 3541, Lipids	T	6.67 g				
570-33855-A-21	OB-05 20ET127_06 2320 EEL WB 02	In House, 3541, Lipids	T	5.18 g				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83274 Batch Start Date: 07/24/20 08:47 Batch Analyst: Zhou, Weimin

Batch Method: In House Batch End Date: 07/24/20 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	WtAfterHomogen				
570-33855-A-22	OB-05_20ET125_06 2320 EEL WB 03	In House, 3541, Lipids	T	6.33 g				
570-33855-A-23	OB-05_20ET125_06 2320 EEL WB 04	In House, 3541, Lipids	T	6.29 g				
570-33855-A-24	OB-05_20ET125_06 2320 EEL WB 05	In House, 3541, Lipids	T	8.35 g				
570-33855-A-25	OB-05_20ET119_06 2320 EEL WB 06	In House, 3541, Lipids	T	12.26 g				
570-33855-A-26	OB-05_20ET119_06 2320 EEL WB 07	In House, 3541, Lipids	T	10.5 g				
570-33855-A-27	OB-05_20ET117_06 2320 EEL WB 08	In House, 3541, Lipids	T	12.8 g				
570-33855-A-28	OB-05_20ET115_06 2320 EEL WB 09	In House, 3541, Lipids	T	12.1 g				
570-33855-A-29	OB-05_20ET115_06 2320 EEL WB 10	In House, 3541, Lipids	T	9.8 g				
570-33855-A-30	OB-05_20ET100_06 2320 EEL WB 11	In House, 3541, Lipids	T	6.3 g				
570-33855-A-31	OB-05_20ET100_06 2320 EEL WB 12	In House, 3541, Lipids	T	5.8 g				
570-33855-A-32	OB-05_20ET100_06 2320 EEL WB 13	In House, 3541, Lipids	T	12.4 g				
570-33855-A-33	OB-05_20ET100_06 2320 EEL WB 14	In House, 3541, Lipids	T	4.5 g				
570-33855-A-34	OB-05_20ET100_06 2320 EEL WB 15	In House, 3541, Lipids	T	8.4 g				
570-33855-A-35	OB-05_20ET100_06 2320 EEL WB 16	In House, 3541, Lipids	T	10.2 g				
570-33855-A-36	OB-05_20ET100_06 2320 EEL WB 17	In House, 3541, Lipids	T	4.7 g				
570-33855-A-37	OB-05_20ET102_06 2320 EEL WB 18	In House, 3541, Lipids	T	17.7 g				
570-33855-A-38	OB-05_20ET102_06 2320 EEL WB 19	In House, 3541, Lipids	T	10.1 g				
570-33855-A-39	OB-05_20ET102_06 2320 EEL WB 20	In House, 3541, Lipids	T	6.0 g				
570-33855-A-40	OB-01_20ET300_06 2420 EEL WB 01	In House, 3541, Lipids	T	11.6 g				
570-33855-A-41	OB-01_20ET301_06 2420 EEL WB 02	In House, 3541, Lipids	T	8.1 g				
570-33855-A-42	OB-01_20ET365_06 2620 EEL WB 03	In House, 3541, Lipids	T	3.3 g				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83274 Batch Start Date: 07/24/20 08:47 Batch Analyst: Zhou, Weimin

Batch Method: In House Batch End Date: 07/24/20 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	WtAfterHomogen				
570-33855-A-43	OB-01_20ET302_06 2420 EEL WB 04	In House, 3541, Lipids	T	11.9 g				
570-33855-A-44	OB-01_20ET304_06 2420 EEL WB 05	In House, 3541, Lipids	T	7.6 g				
570-33855-A-45	OB-01_20ET305_06 2420 EEL WB 06	In House, 3541, Lipids	T	4.2 g				
570-33855-A-46	OB-01_20ET333_06 2520 EEL WB 07	In House, 3541, Lipids	T	13.3 g				
570-33855-A-47	OB-01_20ET356_06 2520 EEL WB 08	In House, 3541, Lipids	T	18.6 g				
570-33855-A-48	OB-01_20ET355_06 2520 EEL WB 09	In House, 3541, Lipids	T	8.2 g				
570-33855-A-49	OB-05_20ET129_06 2320 EEL WB 01	In House, 3541, Lipids	T	5.7 g				
570-33855-A-49 DU	OB-05_20ET129_06 2320 EEL WB 01	In House, 3541, Lipids	T	5.7 g				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83623 Batch Start Date: 07/26/20 11:20 Batch Analyst: Zhou, Weimin

Batch Method: 3541 Batch End Date: 07/27/20 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 570-83623/1		3541, Lipids		20.0 g	2 mL				
570-33855-A-3-A DU	BO-04 20ET211 06 2320 EEL WB 03	3541, Lipids	T	5.01 g	0.5 mL				
570-33855-A-1-A	BO-04 20ET204 06 2320 EEL WB 01	3541, Lipids	T	5.01 g	0.5 mL				
570-33855-A-2-A	BO-04 20ET204 06 2320 EEL WB 02	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-3-A	BO-04 20ET211 06 2320 EEL WB 03	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-4-A	BO-04 20ET215 06 2320 EEL WB 04	3541, Lipids	T	5.2 g	0.5 mL				
570-33855-A-5-A	BO-04 20ET215 06 2320 EEL WB 05	3541, Lipids	T	5.2 g	0.5 mL				
570-33855-A-6-A	BO-04 20ET215 06 2320 EEL WB 06	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-7-A	BO-04 20ET215 06 2320 EEL WB 07	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-8-A	BO-04 20ET215 06 2320 EEL WB 08	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-9-A	BO-04 20ET215 06 2320 EEL WB 09	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-10-A	BO-04 20ET215 06 2320 EEL WB 10	3541, Lipids	T	5.2 g	0.5 mL				
570-33855-A-11-A	BO-04 20ET215 06 2320 EEL WB 11	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-12-A	BO-04 20ET215 06 2320 EEL WB 12	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-13-A	BO-04 20ET215 06 2320 EEL WB 13	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-14-A	BO-04 20ET215 06 2320 EEL WB 14	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-15-A	BO-04 20ET215 06 2320 EEL WB 15	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-16-A	BO-04 20ET219 06 2320 EEL WB 16	3541, Lipids	T	5.2 g	0.5 mL				
570-33855-A-17-A	BO-04 20ET228 06 2320 EEL WB 17	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-18-A	BO-04 20ET228 06 2320 EEL WB 18	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-19-A	BO-04 20ET225 06 2320 EEL WB 19	3541, Lipids	T	5.2 g	0.5 mL				
570-33855-A-20-A	BO-04 20ET224 06 2320 EEL WB 20	3541, Lipids	T	5.1 g	0.5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83623 Batch Start Date: 07/26/20 11:20 Batch Analyst: Zhou, Weimin

Batch Method: 3541 Batch End Date: 07/27/20 17:00

Batch Notes	
Balance ID	BAL 70
Batch Comment	lipids/FV=0.5ml
Blank Matrix ID	236991
Analyst ID - Concentration	UWEZ
Concentration 1 Corrected Temperature	40.5 Degrees C
Analyst ID - Clean Up	UWEZ
Equipment ID - Concentration 1	TVP-003
Analyst ID - Extraction	UWEZ
Filter ID	351682
Extraction 1 End Time	07/26/2020 13:50
Extraction 1 Start Time	07/26/2020 11:20
Method/Fraction	lipids /3541
Na2SO4 ID	551850
Nominal Amount Used	5 g
Pipette/Syringe/Dispenser ID	E-008/D-079
Prep Solvent ID	802367
Soxtherm Unit ID	SOXTHERM #2~#4
Sufficient Volume for Batch QC	YES
Thermometer ID - Concentration 1	C24829
Concentration 1 Uncorrected Temperature	40 Degrees C
Vial Lot Number	00283383

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83624 Batch Start Date: 07/26/20 11:20 Batch Analyst: Zhou, Weimin

Batch Method: 3541 Batch End Date: 07/27/20 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 570-83624/1		3541, Lipids		20.0 g	2 mL				
570-33855-A-37-A DU	OB-05_20ET102_06 2320 EEL WB 18	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-21-A	OB-05_20ET127_06 2320 EEL WB 02	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-22-A	OB-05_20ET125_06 2320 EEL WB 03	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-23-A	OB-05_20ET125_06 2320 EEL WB 04	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-24-A	OB-05_20ET125_06 2320 EEL WB 05	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-25-A	OB-05_20ET119_06 2320 EEL WB 06	3541, Lipids	T	5.2 g	0.5 mL				
570-33855-A-26-A	OB-05_20ET119_06 2320 EEL WB 07	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-27-A	OB-05_20ET117_06 2320 EEL WB 08	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-28-A	OB-05_20ET115_06 2320 EEL WB 09	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-29-A	OB-05_20ET115_06 2320 EEL WB 10	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-30-A	OB-05_20ET100_06 2320 EEL WB 11	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-31-A	OB-05_20ET100_06 2320 EEL WB 12	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-32-A	OB-05_20ET100_06 2320 EEL WB 13	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-33-A	OB-05_20ET100_06 2320 EEL WB 14	3541, Lipids	T	4.5 g	0.5 mL				
570-33855-A-34-A	OB-05_20ET100_06 2320 EEL WB 15	3541, Lipids	T	5.2 g	0.5 mL				
570-33855-A-35-A	OB-05_20ET100_06 2320 EEL WB 16	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-36-A	OB-05_20ET100_06 2320 EEL WB 17	3541, Lipids	T	4.7 g	0.5 mL				
570-33855-A-37-A	OB-05_20ET102_06 2320 EEL WB 18	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-38-A	OB-05_20ET102_06 2320 EEL WB 19	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-39-A	OB-05_20ET102_06 2320 EEL WB 20	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-40-A	OB-01_20ET300_06 2420 EEL WB 01	3541, Lipids	T	5.0 g	0.5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83624 Batch Start Date: 07/26/20 11:20 Batch Analyst: Zhou, Weimin

Batch Method: 3541 Batch End Date: 07/27/20 17:00

Batch Notes	
Balance ID	BAL 70
Batch Comment	lipids/FV=0.5ml
Blank Matrix ID	236991
Analyst ID - Concentration	UWEZ
Concentration 1 Corrected Temperature	40.5 Degrees C
Analyst ID - Clean Up	UWEZ
Equipment ID - Concentration 1	TVP-003
Analyst ID - Extraction	UWEZ
Filter ID	351682
Extraction 1 End Time	07/26/2020 13:50
Extraction 1 Start Time	07/26/2020 11:20
Method/Fraction	lipids /3541
Na2SO4 ID	551850
Nominal Amount Used	5 g
Pipette/Syringe/Dispenser ID	E-008/D-079
Prep Solvent ID	802367
Soxtherm Unit ID	SOXTHERM #2~#4
Sufficient Volume for Batch QC	YES
Thermometer ID - Concentration 1	C24829
Concentration 1 Uncorrected Temperature	40 Degrees C
Vial Lot Number	00283383

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83832 Batch Start Date: 07/27/20 09:00 Batch Analyst: Zhou, Weimin

Batch Method: 3541 Batch End Date: 07/27/20 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 570-83832/1		3541, Lipids		20 g	2 mL				
570-33855-A-49-D DU	OB-05 20ET129 06 2320 EEL WB 01	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-41-A	OB-01 20ET301 06 2420 EEL WB 02	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-42-A	OB-01 20ET365 06 2620 EEL WB 03	3541, Lipids	T	5.2 g	0.5 mL				
570-33855-A-43-A	OB-01 20ET302 06 2420 EEL WB 04	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-44-A	OB-01 20ET304 06 2420 EEL WB 05	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-45-A	OB-01 20ET305 06 2420 EEL WB 06	3541, Lipids	T	5.1 g	0.5 mL				
570-33855-A-46-A	OB-01 20ET333 06 2520 EEL WB 07	3541, Lipids	T	5.2 g	0.5 mL				
570-33855-A-47-A	OB-01 20ET356 06 2520 EEL WB 08	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-48-A	OB-01 20ET355 06 2520 EEL WB 09	3541, Lipids	T	5.0 g	0.5 mL				
570-33855-A-49-A	OB-05 20ET129 06 2320 EEL WB 01	3541, Lipids	T	5.1 g	0.5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83832 Batch Start Date: 07/27/20 09:00 Batch Analyst: Zhou, WeiminBatch Method: 3541 Batch End Date: 07/27/20 17:30

Batch Notes	
Balance ID	BAL 70
Batch Comment	lipids/FV=0.5ml.2ml
Blank Matrix ID	236991
Analyst ID - Concentration	UWEZ
Concentration 1 Corrected Temperature	40.5 Degrees C
Analyst ID - Clean Up	UWEZ
Equipment ID - Concentration 1	TVP-003
Analyst ID - Extraction	UWEZ
Filter ID	351682
Extraction 1 End Time	07/27/2020 11:30
Extraction 1 Start Time	07/27/2020 09:00
Method/Fraction	lipids /3541
Na2SO4 ID	551850
Nominal Amount Used	5 g
Pipette/Syringe/Dispenser ID	E-008/D-079
Prep Solvent ID	802367
Soxtherm Unit ID	SOXTHERM #2~#4
Sufficient Volume for Batch QC	YES
Thermometer ID - Concentration 1	C24829
Concentration 1 Uncorrected Temperature	40 Degrees C
Vial Lot Number	00283383

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83835 Batch Start Date: 07/28/20 10:00 Batch Analyst: Zhou, Weimin

Batch Method: Lipids Batch End Date: 07/28/20 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SampTare	ResDishWt	Residue		
MB 570-83623/1-A		Lipids		0.1 mL	2.0666 g	2.0667 g	0.0001 g		
570-33855-A-3-B DU	BO-04 20ET211 06 2320 EEL WB 03	Lipids	T	0.1 mL	2.0659 g	2.1583 g	0.0924 g		
570-33855-A-1-B	BO-04 20ET204 06 2320 EEL WB 01	Lipids	T	0.1 mL	2.0773 g	2.0882 g	0.0109 g		
570-33855-A-2-B	BO-04 20ET204 06 2320 EEL WB 02	Lipids	T	0.1 mL	2.0522 g	2.1082 g	0.056 g		
570-33855-A-3-C	BO-04 20ET211 06 2320 EEL WB 03	Lipids	T	0.1 mL	2.0523 g	2.1468 g	0.0945 g		
570-33855-A-4-B	BO-04 20ET215 06 2320 EEL WB 04	Lipids	T	0.1 mL	2.0585 g	2.1083 g	0.0498 g		
570-33855-A-5-B	BO-04 20ET215 06 2320 EEL WB 05	Lipids	T	0.1 mL	2.0495 g	2.0659 g	0.0164 g		
570-33855-A-6-B	BO-04 20ET215 06 2320 EEL WB 06	Lipids	T	0.1 mL	2.0673 g	2.1178 g	0.0505 g		
570-33855-A-7-B	BO-04 20ET215 06 2320 EEL WB 07	Lipids	T	0.1 mL	2.0430 g	2.0483 g	0.0053 g		
570-33855-A-8-B	BO-04 20ET215 06 2320 EEL WB 08	Lipids	T	0.1 mL	2.0344 g	2.0592 g	0.0248 g		
570-33855-A-9-B	BO-04 20ET215 06 2320 EEL WB 09	Lipids	T	0.1 mL	2.0820 g	2.1701 g	0.0881 g		
570-33855-A-10-B	BO-04 20ET215 06 2320 EEL WB 10	Lipids	T	0.1 mL	2.0780 g	2.0897 g	0.0117 g		
570-33855-A-11-B	BO-04 20ET215 06 2320 EEL WB 11	Lipids	T	0.1 mL	2.0682 g	2.1319 g	0.0637 g		
570-33855-A-12-B	BO-04 20ET215 06 2320 EEL WB 12	Lipids	T	0.1 mL	2.0865 g	2.1150 g	0.0285 g		
570-33855-A-13-B	BO-04 20ET215 06 2320 EEL WB 13	Lipids	T	0.1 mL	2.0877 g	2.1724 g	0.0847 g		
570-33855-A-14-B	BO-04 20ET215 06 2320 EEL WB 14	Lipids	T	0.1 mL	2.1102 g	2.1291 g	0.0189 g		
570-33855-A-15-B	BO-04 20ET215 06 2320 EEL WB 15	Lipids	T	0.1 mL	2.0880 g	2.1492 g	0.0612 g		
570-33855-A-16-B	BO-04 20ET219 06 2320 EEL WB 16	Lipids	T	0.1 mL	2.0774 g	2.0812 g	0.0038 g		
570-33855-A-17-B	BO-04 20ET228 06 2320 EEL WB 17	Lipids	T	0.1 mL	2.0723 g	2.0841 g	0.0118 g		
570-33855-A-18-B	BO-04 20ET228 06 2320 EEL WB 18	Lipids	T	0.1 mL	2.0969 g	2.1231 g	0.0262 g		
570-33855-A-19-B	BO-04 20ET225 06 2320 EEL WB 19	Lipids	T	0.1 mL	2.0070 g	2.0110 g	0.004 g		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83835 Batch Start Date: 07/28/20 10:00 Batch Analyst: Zhou, Weimin

Batch Method: Lipids Batch End Date: 07/28/20 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SampTare	ResDishWt	Residue		
570-33855-A-20-B	BO-04_20ET224_06 2320 EEL WB 20	Lipids	T	0.1 mL	2.0086 g	2.0202 g	0.0116 g		

Batch Notes	
Balance ID	BAL 70
Batch Comment	lipids/FV=0.1ml
MeCL2 ID	802367
Na2SO4 ID	551850

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83836 Batch Start Date: 07/28/20 10:00 Batch Analyst: Zhou, Weimin

Batch Method: Lipids Batch End Date: 07/28/20 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SampTare	ResDishWt	Residue		
MB 570-83624/1-A		Lipids		0.1 mL	2.0738 g	2.0740 g	0.0002 g		
570-33855-A-37-B DU	OB-05_20ET102_06 2320 EEL WB 18	Lipids	T	0.1 mL	2.0801 g	2.1599 g	0.0798 g		
570-33855-A-21-B	OB-05_20ET127_06 2320 EEL WB 02	Lipids	T	0.1 mL	2.0680 g	2.0904 g	0.0224 g		
570-33855-A-22-B	OB-05_20ET125_06 2320 EEL WB 03	Lipids	T	0.1 mL	2.0707 g	2.0861 g	0.0154 g		
570-33855-A-23-B	OB-05_20ET125_06 2320 EEL WB 04	Lipids	T	0.1 mL	2.0716 g	2.1152 g	0.0436 g		
570-33855-A-24-B	OB-05_20ET125_06 2320 EEL WB 05	Lipids	T	0.1 mL	2.0362 g	2.1000 g	0.0638 g		
570-33855-A-25-B	OB-05_20ET119_06 2320 EEL WB 06	Lipids	T	0.1 mL	2.0443 g	2.1289 g	0.0846 g		
570-33855-A-26-B	OB-05_20ET119_06 2320 EEL WB 07	Lipids	T	0.1 mL	2.0458 g	2.1348 g	0.089 g		
570-33855-A-27-B	OB-05_20ET117_06 2320 EEL WB 08	Lipids	T	0.1 mL	2.0674 g	2.1373 g	0.0699 g		
570-33855-A-28-B	OB-05_20ET115_06 2320 EEL WB 09	Lipids	T	0.1 mL	2.0600 g	2.1108 g	0.0508 g		
570-33855-A-29-B	OB-05_20ET115_06 2320 EEL WB 10	Lipids	T	0.1 mL	2.0719 g	2.1098 g	0.0379 g		
570-33855-A-30-B	OB-05_20ET100_06 2320 EEL WB 11	Lipids	T	0.1 mL	2.0671 g	2.0715 g	0.0044 g		
570-33855-A-31-B	OB-05_20ET100_06 2320 EEL WB 12	Lipids	T	0.1 mL	2.0735 g	2.1034 g	0.0299 g		
570-33855-A-32-B	OB-05_20ET100_06 2320 EEL WB 13	Lipids	T	0.1 mL	2.0595 g	2.0994 g	0.0399 g		
570-33855-A-33-B	OB-05_20ET100_06 2320 EEL WB 14	Lipids	T	0.1 mL	2.0837 g	2.0914 g	0.0077 g		
570-33855-A-34-B	OB-05_20ET100_06 2320 EEL WB 15	Lipids	T	0.1 mL	2.0835 g	2.0877 g	0.0042 g		
570-33855-A-35-B	OB-05_20ET100_06 2320 EEL WB 16	Lipids	T	0.1 mL	2.0467 g	2.1122 g	0.0655 g		
570-33855-A-36-B	OB-05_20ET100_06 2320 EEL WB 17	Lipids	T	0.1 mL	2.0514 g	2.0943 g	0.0429 g		
570-33855-A-37-C	OB-05_20ET102_06 2320 EEL WB 18	Lipids	T	0.1 mL	2.0516 g	2.1304 g	0.0788 g		
570-33855-A-38-B	OB-05_20ET102_06 2320 EEL WB 19	Lipids	T	0.1 mL	2.0473 g	2.0869 g	0.0396 g		
570-33855-A-39-B	OB-05_20ET102_06 2320 EEL WB 20	Lipids	T	0.1 mL	2.0787 g	2.1253 g	0.0466 g		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83836 Batch Start Date: 07/28/20 10:00 Batch Analyst: Zhou, Weimin

Batch Method: Lipids Batch End Date: 07/28/20 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SampTare	ResDishWt	Residue		
570-33855-A-40-B	OB-01_20ET300_06 2420 EEL WB 01	Lipids	T	0.1 mL	2.0762 g	2.0781 g	0.0019 g		

Batch Notes	
Balance ID	BAL 70
Batch Comment	lipids/FV=0.1ml
MeCL2 ID	802367
Na2SO4 ID	551850

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Lipids

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Calscience Job No.: 570-33855-1

SDG No.: _____

Batch Number: 83837 Batch Start Date: 07/28/20 10:00 Batch Analyst: Zhou, Weimin

Batch Method: Lipids Batch End Date: 07/28/20 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	SampTare	ResDishWt	Residue		
MB 570-83832/1-A		Lipids		0.1 mL	2.1025 g	2.1028 g	0.0003 g		
570-33855-A-49-E DU	OB-05_20ET129_06 2320 EEL WB 01	Lipids	T	0.1 mL	2.0607 g	2.0732 g	0.0125 g		
570-33855-A-41-B	OB-01_20ET301_06 2420 EEL WB 02	Lipids	T	0.1 mL	2.0807 g	2.0867 g	0.006 g		
570-33855-A-42-B	OB-01_20ET365_06 2620 EEL WB 03	Lipids	T	0.1 mL	2.0826 g	2.0886 g	0.006 g		
570-33855-A-43-B	OB-01_20ET302_06 2420 EEL WB 04	Lipids	T	0.1 mL	2.0759 g	2.0865 g	0.0106 g		
570-33855-A-44-B	OB-01_20ET304_06 2420 EEL WB 05	Lipids	T	0.1 mL	2.0974 g	2.1502 g	0.0528 g		
570-33855-A-45-B	OB-01_20ET305_06 2420 EEL WB 06	Lipids	T	0.1 mL	2.0552 g	2.0573 g	0.0021 g		
570-33855-A-46-B	OB-01_20ET333_06 2520 EEL WB 07	Lipids	T	0.1 mL	2.1090 g	2.1105 g	0.0015 g		
570-33855-A-47-B	OB-01_20ET356_06 2520 EEL WB 08	Lipids	T	0.1 mL	2.1135 g	2.1254 g	0.0119 g		
570-33855-A-48-B	OB-01_20ET355_06 2520 EEL WB 09	Lipids	T	0.1 mL	2.0606 g	2.1299 g	0.0693 g		
570-33855-A-49-C	OB-05_20ET129_06 2320 EEL WB 01	Lipids	T	0.1 mL	2.0626 g	2.0763 g	0.0137 g		

Batch Notes	
Balance ID	BAL 70
Batch Comment	lipids/FV=0.1ml
MeCL2 ID	802367
Na2SO4 ID	551850

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

BALANCE CALIBRATION CHECK LOG

Eurofins Calscience

Date performed: 7/27/20 Initials: 1109

ID	Class 2 Weight (g)	Reading (g)	Acceptance Range	Pass? (circle one)	Comment (If not passed, note removal or corrective action)
53	0.1	0.10	0.08 - 0.12	(Y) N	Extractions
	1	1.00	0.98 - 1.02	(Y) N	
	100	100.01	98.00 - 102.00	(Y) N	
	500	500.10	490.00 - 510.00	(Y) N	
70	1	0.98	0.98 - 1.02	(Y) N	Extractions
	100	99.95	98.00 - 102.00	(Y) N	
	500	499.86	490.00 - 510.00	(Y) N	
57	100	100.0	98.0 - 102.0	(Y) N	Extractions
	1000	1000.0	980.0 - 1020.0	(Y) N	
	2000	2000.0	1960.0 - 2040.0	(Y) N	
52	0.002	0.0019	0.0015 - 0.0025	(Y) N	Extractions
	1	0.9998	0.9990 - 1.0010	(Y) N	
	100	99.9967	99.9000 - 100.1000	(Y) N	
15	1	1.00	0.98 - 1.02	(Y) N	LUFT
	100	99.99	98.00 - 102.00	(Y) N	
68	1	1.00	0.98 - 1.02	(Y) N	LUFT
	100	99.99	98.00 - 102.00	(Y) N	
37	1	1.00	0.98 - 1.02	(Y) N	IC Room
	100	99.99	98.00 - 102.00	(Y) N	
85	1	0.99	0.98 - 1.02	(Y) N	IC Room
	100	100.00	98.00-102.00	(Y) N	
72	0.002	0.0021	0.0015 - 0.0025	(Y) N	LUFT
	1	0.9997	0.9990 - 1.0010	(Y) N	
	100	99.9967	99.9000 - 100.1000	(Y) N	
75	1	1.0	0.98 - 1.02	Y N	LUFT
	100	100.0	98.0 - 102.0	Y N	
	1000	1000.0	980.0 - 1020.0	Y N	
	2000	2000.0	1960.0 - 2040.0	Y N	
79	1	0.99	0.98-1.02	(Y) N	Extractions
	100	100.00	98.00-102.00	(Y) N	

Comments:

WT SET ID USED: 2 mg	1000118065	WT SET ID USED: 1 kg	10887
WT SET ID USED: 10 mg - 100 g	4000013238	WT SET ID USED: 2 kg	10886
WT SET ID USED: 500 g	1000061096	COMMENT:	

BALANCE CALIBRATION CHECK LOG

Eurofins Calscience

Date performed: 7/20/20 Initials: 1109

ID	Class 2 Weight (g)	Reading (g)	Acceptance Range	Pass? (circle one)	Comment (If not passed, note removal or corrective action)
53	0.1	0.10	0.08 - 0.12	(Y) N	Extractions
	1	1.01	0.98 - 1.02	(Y) N	
	100	100.00	98.00 - 102.00	(Y) N	
	500	500.05	490.00 - 510.00	(Y) N	
70	1	1.01	0.98 - 1.02	(Y) N	Extractions
	100	99.84	98.00 - 102.00	(Y) N	
	500	499.78	490.00 - 510.00	(Y) N	
57	100	100.0	98.0 - 102.0	(Y) N	Extractions
	1000	1000.0	980.0 - 1020.0	(Y) N	
	2000	2000.0	1960.0 - 2040.0	(Y) N	
52	0.002	0.0020	0.0015 - 0.0025	(Y) N	Extractions
	1	0.9998	0.9990 - 1.0010	(Y) N	
	100	99.9964	99.9000 - 100.1000	(Y) N	
15	1	1.00	0.98 - 1.02	(Y) N	LUFT
	100	99.98	98.00 - 102.00	(Y) N	
68	1	1.00	0.98 - 1.02	(Y) N	LUFT
	100	99.99	98.00 - 102.00	(Y) N	
37	1	1.00	0.98 - 1.02	Y N	IC Room
	100	100.00	98.00 - 102.00	Y N	
85	1	0.99	0.98 - 1.02	(Y) N	IC Room
	100	99.99	98.00-102.00	(Y) N	
72	0.002	0.0019	0.0015 - 0.0025	(Y) N	LUFT
	1	1.001	0.9990 - 1.0010	(Y) N	
	100	99.9965	99.9000 - 100.1000	(Y) N	
75	1	1.0	0.98 - 1.02	(Y) N	LUFT
	100	100.0	98.0 - 102.0	(Y) N	
	1000	1000.0	980.0 - 1020.0	(Y) N	
	2000	2000.0	1960.0 - 2040.0	(Y) N	
79	1	1.00	0.98-1.02	(Y)	Extractions
	100	100.00	98.00-102.00	(Y)	
Comments:					
WT SET ID USED: 2 mg 1000118065			WT SET ID USED: 1 kg 10887		
WT SET ID USED: 10 mg - 100 g 4000013238			WT SET ID USED: 2 kg 10886		
WT SET ID USED: 500 g 1000061096			COMMENT:		

Shipping and Receiving Documents

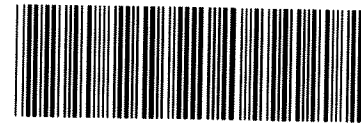
SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0G00004

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
 5755 8th Street East
 Tacoma, WA 98424
 Phone: (253) 922-2310
 Fax: (000) 000-0000
 Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Eurofins Calscience, LLC
 7440 Lincoln Way
 Garden Grove, CA 92841
 Phone :7148955494
 Fax: x



570-33855 Chain of Custody

Analysis	Due	Expires	Comments
Sample ID: BO-04_20ET204_062320_EEL_WB_01		1	Sampled: 23-Jun-20 11:11 MS/MSD
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:11	NOAA 1993a Lipids
Containers Supplied:		2	
Sample ID: BO-04_20ET204_062320_EEL_WB_02		2	Sampled: 23-Jun-20 11:11
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:11	NOAA 1993a Lipids
Containers Supplied:			
Sample ID: BO-04_20ET211_062320_EEL_WB_03		3	Sampled: 23-Jun-20 11:32
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:32	NOAA 1993a Lipids
Containers Supplied:			
Sample ID: BO-04_20ET215_062320_EEL_WB_04		4	Sampled: 23-Jun-20 11:46
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
Containers Supplied:			
Sample ID: BO-04_20ET215_062320_EEL_WB_05		5	Sampled: 23-Jun-20 11:46
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
Containers Supplied:			

JS
 Released By

7/20/2020
 Date

[Signature]
 Received By

7/21/2020 945
 Date

Released By

Date

Received By

Date

33855

SUBCONTRACT ORDER

Eurofins Frontier Global Sciences, LLC

0G00004

Analysis	Due	Expires	Comments
Sample ID: BO-04_20ET215_062320_EEL_WB_06		6	Sampled: 23-Jun-20 11:46
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET215_062320_EEL_WB_07		7	Sampled: 23-Jun-20 11:46
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET215_062320_EEL_WB_08		8	Sampled: 23-Jun-20 11:46
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET215_062320_EEL_WB_09		9	Sampled: 23-Jun-20 11:46
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET215_062320_EEL_WB_10		10	Sampled: 23-Jun-20 11:46
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET215_062320_EEL_WB_11		11	Sampled: 23-Jun-20 11:46
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET215_062320_EEL_WB_12		12	Sampled: 23-Jun-20 11:46
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Released By: MS Date: 7/20/2020 Received By: [Signature] Date: 7/21/2020 945

Released By _____ Date _____ Received By _____ Date _____

33855

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0G00004

Analysis	Due	Expires	Comments
Sample ID: BO-04_20ET215_062320_EEL_WB_13			
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET215_062320_EEL_WB_14			
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET215_062320_EEL_WB_15			
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 11:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET219_062320_EEL_WB_16			
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 12:01	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET228_062320_EEL_WB_17			
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 12:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET228_062320_EEL_WB_18			
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 12:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET225_062320_EEL_WB_19			
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 12:22	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

<i>MS</i>	<i>7/20/2020</i>	<i>[Signature]</i>	<i>7/21/2020</i>	<i>945</i>
Released By	Date	Received By	Date	
Released By	Date	Received By	Date	

33855

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0G00004



Analysis	Due	Expires	Comments
Sample ID: BO-04_20ET224_062320_EEL_WB_20 20		Sampled: 23-Jun-20 12:24	
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 12:24	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET127_062320_EEL_WB_02 21		Sampled: 23-Jun-20 09:30	
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:30	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET125_062320_EEL_WB_03 22		Sampled: 23-Jun-20 09:34	
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:34	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET125_062320_EEL_WB_04 23		Sampled: 23-Jun-20 09:34	
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:34	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET125_062320_EEL_WB_05 24		Sampled: 23-Jun-20 09:34	
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:34	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET119_062320_EEL_WB_06 25		Sampled: 23-Jun-20 09:44	
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:44	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET119_062320_EEL_WB_07 26		Sampled: 23-Jun-20 09:44	
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:44	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

<i>MS</i>	<i>7/20/2020</i>	<i>[Signature]</i>	<i>7/21/2020</i>	<i>945</i>
Released By	Date	Received By	Date	
Released By	Date	Received By	Date	

33855

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0G00004

Analysis	Due	Expires	Comments
Sample ID: OB-05_20ET117_062320_EEL_WB_08		27	Sampled: 23-Jun-20 09:51
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:51	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET115_062320_EEL_WB_09		28	Sampled: 23-Jun-20 09:58
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:58	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET115_062320_EEL_WB_10		29	Sampled: 23-Jun-20 09:58
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:58	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET100_062320_EEL_WB_11		30	Sampled: 23-Jun-20 10:01
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 10:01	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET100_062320_EEL_WB_12		31	Sampled: 23-Jun-20 10:01
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 10:01	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET100_062320_EEL_WB_13		32	Sampled: 23-Jun-20 10:01
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 10:01	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET100_062320_EEL_WB_14		33	Sampled: 23-Jun-20 10:01
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 10:01	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

	7/20/2020		7/21/2020
Released By	Date	Received By	Date
			945
Released By	Date	Received By	Date

33855

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0G00004

Analysis	Due	Expires	Comments
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Sample ID: OB-05_20ET100_062320_EEL_WB_15 34 **Sampled: 23-Jun-20 10:01**

Misc. Subcontract 1 30-Jul-20 19:00 21-Jul-20 10:01 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-05_20ET100_062320_EEL_WB_16 35 **Sampled: 23-Jun-20 10:01**

Misc. Subcontract 1 30-Jul-20 19:00 21-Jul-20 10:01 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-05_20ET100_062320_EEL_WB_17 36 **Sampled: 23-Jun-20 10:01**

Misc. Subcontract 1 30-Jul-20 19:00 21-Jul-20 10:01 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-05_20ET102_062320_EEL_WB_18 37 **Sampled: 23-Jun-20 10:11**

Misc. Subcontract 1 30-Jul-20 19:00 21-Jul-20 10:11 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-05_20ET102_062320_EEL_WB_19 38 **Sampled: 23-Jun-20 10:11**

Misc. Subcontract 1 30-Jul-20 19:00 21-Jul-20 10:11 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-05_20ET102_062320_EEL_WB_20 39 **Sampled: 23-Jun-20 10:11**

Misc. Subcontract 1 30-Jul-20 19:00 21-Jul-20 10:11 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-01_20ET300_062420_EEL_WB_01 40 **Sampled: 24-Jun-20 10:52** MS/MSD

Misc. Subcontract 1 30-Jul-20 19:00 22-Jul-20 10:52 NOAA 1993a Lipids
Containers Supplied:

OLS 7/20/2020 *[Signature]* 7/21/2020 945
 Released By Date Received By Date

Released By Date Received By Date

33855

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0G00004

Analysis	Due	Expires	Comments
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Sample ID: OB-01_20ET301_062420_EEL_WB_02 41 **Sampled: 24-Jun-20 10:55**

Misc. Subcontract 1 30-Jul-20 19:00 22-Jul-20 10:55 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-01_20ET365_062620_EEL_WB_03 42 **Sampled: 26-Jun-20 09:20**

Misc. Subcontract 1 30-Jul-20 19:00 24-Jul-20 09:20 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-01_20ET302_062420_EEL_WB_04 43 **Sampled: 24-Jun-20 10:58**

Misc. Subcontract 1 30-Jul-20 19:00 22-Jul-20 10:58 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-01_20ET304_062420_EEL_WB_05 44 **Sampled: 24-Jun-20 11:05**

Misc. Subcontract 1 30-Jul-20 19:00 22-Jul-20 11:05 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-01_20ET305_062420_EEL_WB_06 45 **Sampled: 24-Jun-20 11:09**

Misc. Subcontract 1 30-Jul-20 19:00 22-Jul-20 11:09 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-01_20ET333_062520_EEL_WB_07 46 **Sampled: 25-Jun-20 09:30**

Misc. Subcontract 1 30-Jul-20 19:00 23-Jul-20 09:30 NOAA 1993a Lipids
Containers Supplied:

Sample ID: OB-01_20ET356_062520_EEL_WB_08 47 **Sampled: 25-Jun-20 10:54**

Misc. Subcontract 1 30-Jul-20 19:00 23-Jul-20 10:54 NOAA 1993a Lipids
Containers Supplied:

<i>MS</i>	<i>7/20/2020</i>	<i>[Signature]</i>	<i>7/21/2020</i>
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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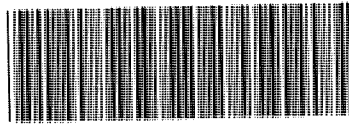
33855

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0G00004

Analysis	Due	Expires	Comments
Sample ID: OB-01_20ET355_062520_EEL_WB_09		48	Sampled: 25-Jun-20 10:57
Misc. Subcontract 1	30-Jul-20 19:00	23-Jul-20 10:57	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OB-05_20ET129_062320_EEL_WB_01		49	Sampled: 23-Jun-20 09:20 MS/MSD
Misc. Subcontract 1	30-Jul-20 19:00	21-Jul-20 09:20	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

MS
7/20/2020
[Signature]
7/21/2020
948

Released By _____ Date _____ Received By _____ Date _____



570-33855 Waybill

ORIGIN ID:TCMA (253) 922-2310
SAMPLE RECEIVING
TA- SEATTLE
5755 8TH ST E

SHIP DATE: 20JUL20
ACTWGT: 8.90 LB
CAD: 989746/CAFE3313

FIFE, WA 98424
UNITED STATES US

BILL THIRD PARTY

TO **CARLA LEE HOLLOWELL**
EUROFINS CALSCIENCE, LLC
7440 LINCOLN WAY

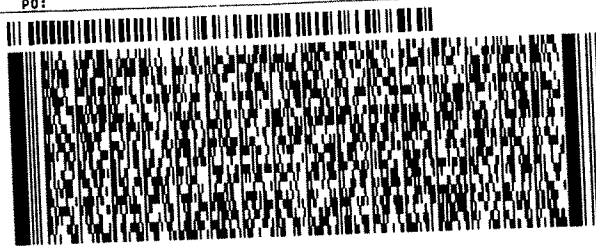
GARDEN GROVE CA 92841

(714) 895-5494

REF:

THU:
PO:

DEPT:



FedEx
Express



J191219082001

TUE - 21 JUL 10:30A
PRIORITY OVERNIGHT

TRK# 9004 4223 6914
0201

92 APVA

92841
CA-US **SNA**

Part # 158471-404 RITZ EXP 03/19 *



Login Sample Receipt Checklist

Client: Eurofins Frontier Global Sciences LLC

Job Number: 570-33855-1

Login Number: 33855

List Source: Eurofins Calscience

List Number: 1

Creator: Cruise, Noel

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		



Frontier Global Sciences

5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310

24 November 2020

Denise King
Wood - MA
271 Mill Road
Chelmsford, MA 01824
RE: Penobscot

Enclosed are the analytical results for samples received by Eurofins Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Patrick Garcia-Strickland". The signature is written in a cursive style with a large initial "P".

Patrick Garcia-Strickland
Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
L9-45_20LT001_091020_01_LOB_TA	0I00047-01	Tissue	10-Sep-20 07:59	16-Sep-20 07:55
L9-45_20LT002_091020_02_LOB_TA	0I00047-02	Tissue	10-Sep-20 07:59	16-Sep-20 07:55
L9-45_20LT004_091020_03_LOB_TA	0I00047-03	Tissue	10-Sep-20 08:07	16-Sep-20 07:55
L9-45_20LT004_091020_04_LOB_TA	0I00047-04	Tissue	10-Sep-20 08:07	16-Sep-20 07:55
L9-45_20LT005_091020_06_LOB_TA	0I00047-05	Tissue	10-Sep-20 08:14	16-Sep-20 07:55
L9-45_20LT005_091020_07_LOB_TA	0I00047-06	Tissue	10-Sep-20 08:14	16-Sep-20 07:55
L9-45_20LT005_091020_08_LOB_TA	0I00047-07	Tissue	10-Sep-20 08:14	16-Sep-20 07:55
L9-45_20LT006_091020_05_LOB_TA	0I00047-08	Tissue	10-Sep-20 08:14	16-Sep-20 07:55
L9-45_20LT007_091020_09_LOB_TA	0I00047-09	Tissue	10-Sep-20 08:20	16-Sep-20 07:55
L9-45_20LT009_091020_10_LOB_TA	0I00047-10	Tissue	10-Sep-20 08:26	16-Sep-20 07:55
L9-45_20LT009_091020_11_LOB_TA	0I00047-11	Tissue	10-Sep-20 08:26	16-Sep-20 07:55
L9-45_20LT009_091020_12_LOB_TA	0I00047-12	Tissue	10-Sep-20 08:26	16-Sep-20 07:55
CJ-04_20LT101_091020_01_LOB_TA	0I00047-13	Tissue	10-Sep-20 08:54	16-Sep-20 07:55
CJ-04_20LT101_091020_02_LOB_TA	0I00047-14	Tissue	10-Sep-20 08:54	16-Sep-20 07:55
CJ-04_20LT101_091020_03_LOB_TA	0I00047-15	Tissue	10-Sep-20 08:54	16-Sep-20 07:55
CJ-04_20LT104_091020_04_LOB_TA	0I00047-16	Tissue	10-Sep-20 09:05	16-Sep-20 07:55
CJ-04_20LT104_091020_05_LOB_TA	0I00047-17	Tissue	10-Sep-20 09:05	16-Sep-20 07:55
CJ-04_20LT105_091020_06_LOB_TA	0I00047-18	Tissue	10-Sep-20 09:11	16-Sep-20 07:55
L9-45_20LT009_091020_13_LOB_TA	0I00047-19	Tissue	10-Sep-20 08:26	16-Sep-20 07:55
L9-45_20LT009_091020_14_LOB_TA	0I00047-20	Tissue	10-Sep-20 08:26	16-Sep-20 07:55
OB-05_20ET001_091020_01_TOM_WB	0I00047-21	Tissue	10-Sep-20 09:05	16-Sep-20 07:55
OB-05_20ET001_091020_02_TOM_WB	0I00047-22	Tissue	10-Sep-20 09:05	16-Sep-20 07:55
OB-05_20ET001_091020_03_TOM_WB	0I00047-23	Tissue	10-Sep-20 09:05	16-Sep-20 07:55
OB-05_20ET003_091020_04_TOM_WB	0I00047-24	Tissue	10-Sep-20 09:15	16-Sep-20 07:55
CJ-04_20L108_091020_07_LOB_TA	0I00047-25	Tissue	10-Sep-20 09:17	16-Sep-20 07:55
CJ-04_20L108_091020_08_LOB_TA	0I00047-26	Tissue	10-Sep-20 09:17	16-Sep-20 07:55

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CJ-04_20L109_091020_09_LOB_TA	0I00047-27	Tissue	10-Sep-20 09:26	16-Sep-20 07:55
OB-05_20ET003_091020_05_TOM_WB	0I00047-28	Tissue	10-Sep-20 09:15	16-Sep-20 07:55
OB-05_20ET003_091020_06_TOM_WB	0I00047-29	Tissue	10-Sep-20 09:15	16-Sep-20 07:55
OB-05_20ET003_091020_07_TOM_WB	0I00047-30	Tissue	10-Sep-20 09:15	16-Sep-20 07:55
OB-05_20ET003_091020_08_TOM_WB	0I00047-31	Tissue	10-Sep-20 09:15	16-Sep-20 07:55
OB-05_20ET004_091020_09_TOM_WB	0I00047-32	Tissue	10-Sep-20 09:30	16-Sep-20 07:55
OB-05_20ET005_091020_10_TOM_WB	0I00047-33	Tissue	10-Sep-20 09:38	16-Sep-20 07:55
OB-05_20ET005_091020_11_TOM_WB	0I00047-34	Tissue	10-Sep-20 09:38	16-Sep-20 07:55
ES-FP_20LT201_091020_01_LOB_TA	0I00047-35	Tissue	10-Sep-20 09:40	16-Sep-20 07:55
ES-FP_20LT201_091020_02_LOB_TA	0I00047-36	Tissue	10-Sep-20 09:40	16-Sep-20 07:55
ES-FP_20LT201_091020_03_LOB_TA	0I00047-37	Tissue	10-Sep-20 09:40	16-Sep-20 07:55
ES-FP_20LT202_091020_04_LOB_TA	0I00047-38	Tissue	10-Sep-20 09:40	16-Sep-20 07:55
ES-FP_20LT202_091020_05_LOB_TA	0I00047-39	Tissue	10-Sep-20 09:40	16-Sep-20 07:55
ES-FP_20LT202_091020_06_LOB_TA	0I00047-40	Tissue	10-Sep-20 09:40	16-Sep-20 07:55
ES-FP_20LT202_091020_07_LOB_TA	0I00047-41	Tissue	10-Sep-20 09:40	16-Sep-20 07:55
ES-FP_20LT202_091020_08_LOB_TA	0I00047-42	Tissue	10-Sep-20 09:40	16-Sep-20 07:55
OB-05_20ET007_091020_12_TOM_WB	0I00047-43	Tissue	10-Sep-20 09:46	16-Sep-20 07:55
OB-05_20ET007_091020_13_TOM_WB	0I00047-44	Tissue	10-Sep-20 09:46	16-Sep-20 07:55
OB-05_20ET007_091020_14_TOM_WB	0I00047-45	Tissue	10-Sep-20 09:46	16-Sep-20 07:55
OB-05_20ET009_091020_15_TOM_WB	0I00047-46	Tissue	10-Sep-20 09:58	16-Sep-20 07:55
ES-FP_20LT203_091020_09_LOB_TA	0I00047-47	Tissue	10-Sep-20 10:06	16-Sep-20 07:55
ES-FP_20LT203_091020_10_LOB_TA	0I00047-48	Tissue	10-Sep-20 10:06	16-Sep-20 07:55
ES-FP_20LT203_091020_11_LOB_TA	0I00047-49	Tissue	10-Sep-20 10:06	16-Sep-20 07:55
ES-FP_20LT205_091020_12_LOB_TA	0I00047-50	Tissue	10-Sep-20 10:14	16-Sep-20 07:55
ES-FP_20LT205_091020_13_LOB_TA	0I00047-51	Tissue	10-Sep-20 10:14	16-Sep-20 07:55
ES-FP_20LT206_091020_14_LOB_TA	0I00047-52	Tissue	10-Sep-20 10:14	16-Sep-20 07:55

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ES-FP_20LT206_091020_15_LOB_TA	0I00047-53	Tissue	10-Sep-20 10:14	16-Sep-20 07:55
OB-05_20ET009_091020_16_TOM_WB	0I00047-54	Tissue	10-Sep-20 09:58	16-Sep-20 07:55
OB-05_20ET009_091020_17_TOM_WB	0I00047-55	Tissue	10-Sep-20 09:58	16-Sep-20 07:55
OB-05_20ET009_091020_18_TOM_WB	0I00047-56	Tissue	10-Sep-20 09:58	16-Sep-20 07:55
OB-05_20ET010_091020_19_TOM_WB	0I00047-57	Tissue	10-Sep-20 10:06	16-Sep-20 07:55
OB-05_20ET011_091020_20_TOM_WB	0I00047-58	Tissue	10-Sep-20 10:13	16-Sep-20 07:55
BO-04_20ET503_091020_01_TOM_WB	0I00047-59	Tissue	10-Sep-20 11:22	16-Sep-20 07:55
ES-FP_20LT207_091020_16_LOB_TA	0I00047-60	Tissue	10-Sep-20 10:26	16-Sep-20 07:55
ES-FP_20LT208_091020_17_LOB_TA	0I00047-61	Tissue	10-Sep-20 10:26	16-Sep-20 07:55
ES-FP_20LT208_091020_18_LOB_TA	0I00047-62	Tissue	10-Sep-20 10:26	16-Sep-20 07:55
ES-FP_20LT208_091020_19_LOB_TA	0I00047-63	Tissue	10-Sep-20 10:26	16-Sep-20 07:55
ES-FP_20LT209_091020_20_LOB_TA	0I00047-64	Tissue	10-Sep-20 10:41	16-Sep-20 07:55
OL-01_20LT301_091020_01_LOB_TA	0I00047-65	Tissue	10-Sep-20 10:58	16-Sep-20 07:55
OL-01_20LT301_091020_02_LOB_TA	0I00047-66	Tissue	10-Sep-20 10:58	16-Sep-20 07:55
OL-01_20LT302_091020_03_LOB_TA	0I00047-67	Tissue	10-Sep-20 10:58	16-Sep-20 07:55
OL-01_20LT304_091020_04_LOB_TA	0I00047-68	Tissue	10-Sep-20 11:10	16-Sep-20 07:55
OL-01_20LT304_091020_05_LOB_TA	0I00047-69	Tissue	10-Sep-20 11:10	16-Sep-20 07:55
OL-01_20LT304_091020_06_LOB_TA	0I00047-70	Tissue	10-Sep-20 11:10	16-Sep-20 07:55
BO-04_20ET503_091020_02_TOM_WB	0I00047-71	Tissue	10-Sep-20 11:22	16-Sep-20 07:55
BO-04_20ET506_091020_03_TOM_WB	0I00047-72	Tissue	10-Sep-20 11:35	16-Sep-20 07:55
BO-04_20ET506_091020_04_TOM_WB	0I00047-73	Tissue	10-Sep-20 11:35	16-Sep-20 07:55
BO-04_20ET506_091020_05_TOM_WB	0I00047-74	Tissue	10-Sep-20 11:35	16-Sep-20 07:55
BO-04_20ET506_091020_06_TOM_WB	0I00047-75	Tissue	10-Sep-20 11:35	16-Sep-20 07:55
BO-04_20ET507_091020_07_TOM_WB	0I00047-76	Tissue	10-Sep-20 11:45	16-Sep-20 07:55
BO-04_20ET508_091020_08_TOM_WB	0I00047-77	Tissue	10-Sep-20 11:48	16-Sep-20 07:55
OL-01_20LT305_091020_07_LOB_TA	0I00047-78	Tissue	10-Sep-20 11:24	16-Sep-20 07:55

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OL-01_20LT305_091020_08_LOB_TA	0I00047-79	Tissue	10-Sep-20 11:24	16-Sep-20 07:55
OL-01_20LT306_091020_09_LOB_TA	0I00047-80	Tissue	10-Sep-20 11:24	16-Sep-20 07:55
OL-01_20LT307_091020_10_LOB_TA	0I00047-81	Tissue	10-Sep-20 11:37	16-Sep-20 07:55
BO-04_20ET508_091020_09_TOM_WB	0I00047-82	Tissue	10-Sep-20 11:48	16-Sep-20 07:55
BO-04_20ET508_091020_10_TOM_WB	0I00047-83	Tissue	10-Sep-20 11:48	16-Sep-20 07:55
BO-04_20ET508_091020_11_TOM_WB	0I00047-84	Tissue	10-Sep-20 11:48	16-Sep-20 07:55
BO-04_20ET509_091020_12_TOM_WB	0I00047-85	Tissue	10-Sep-20 11:54	16-Sep-20 07:55
BO-04_20ET509_091020_13_TOM_WB	0I00047-86	Tissue	10-Sep-20 11:54	16-Sep-20 07:55
BO-04_20ET509_091020_14_TOM_WB	0I00047-87	Tissue	10-Sep-20 11:54	16-Sep-20 07:55
BO-04_20ET509_091020_15_TOM_WB	0I00047-88	Tissue	10-Sep-20 11:54	16-Sep-20 07:55
BO-04_20ET510_091020_16_TOM_WB	0I00047-89	Tissue	10-Sep-20 12:01	16-Sep-20 07:55
BO-04_20ET510_091020_17_TOM_WB	0I00047-90	Tissue	10-Sep-20 12:01	16-Sep-20 07:55
SVE-01_20LT401_091020_01_LOB_TA	0I00047-91	Tissue	10-Sep-20 12:02	16-Sep-20 07:55
SVE-01_20LT401_091020_02_LOB_TA	0I00047-92	Tissue	10-Sep-20 12:02	16-Sep-20 07:55
SVE-01_20LT401_091020_03_LOB_TA	0I00047-93	Tissue	10-Sep-20 12:02	16-Sep-20 07:55
BO-04_20ET511_091020_18_TOM_WB	0I00047-94	Tissue	10-Sep-20 12:05	16-Sep-20 07:55
BO-04_20ET511_091020_19_TOM_WB	0I00047-95	Tissue	10-Sep-20 12:05	16-Sep-20 07:55
BO-04_20ET513_091020_20_TOM_WB	0I00047-96	Tissue	10-Sep-20 12:11	16-Sep-20 07:55
SVE-01_20LT401_091020_04_LOB_TA	0I00047-97	Tissue	10-Sep-20 12:02	16-Sep-20 07:55
SVE-01_20LT402_091020_05_LOB_TA	0I00047-98	Tissue	10-Sep-20 12:02	16-Sep-20 07:55
SVE-01_20LT402_091020_06_LOB_TA	0I00047-99	Tissue	10-Sep-20 12:02	16-Sep-20 07:55
SVE-01_20LT402_091020_07_LOB_TA	0I00047-AA	Tissue	10-Sep-20 12:02	16-Sep-20 07:55
SVE-01_20LT402_091020_08_LOB_TA	0I00047-AB	Tissue	10-Sep-20 12:02	16-Sep-20 07:55
SVE-01_20LT403_091020_09_LOB_TA	0I00047-AC	Tissue	10-Sep-20 12:22	16-Sep-20 07:55
SVE-01_20LT403_091020_10_LOB_TA	0I00047-AD	Tissue	10-Sep-20 12:22	16-Sep-20 07:55
SVE-01_20LT404_091020_11_LOB_TA	0I00047-AE	Tissue	10-Sep-20 12:22	16-Sep-20 07:55

Eurofins Frontier Global Sciences, LLC

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SVE-01_20LT404_091020_12_LOB_TA	0I00047-AF	Tissue	10-Sep-20 12:22	16-Sep-20 07:55
CJ-04_20LT123_091220_12_LOB_TA	0I00047-AG	Tissue	12-Sep-20 08:41	16-Sep-20 07:55
L9-45_20L011_091220_15_LOB_TA	0I00047-AH	Tissue	12-Sep-20 08:03	16-Sep-20 07:55
L9-45_20L017_091220_16_LOB_TA	0I00047-AI	Tissue	12-Sep-20 08:20	16-Sep-20 07:55
L9-45_20L018_091220_17_LOB_TA	0I00047-AJ	Tissue	12-Sep-20 08:20	16-Sep-20 07:55
SVE-01_20LT405_091020_13_LOB_TA	0I00047-AK	Tissue	10-Sep-20 12:31	16-Sep-20 07:55
SVE-01_20LT405_091020_14_LOB_TA	0I00047-AL	Tissue	10-Sep-20 12:31	16-Sep-20 07:55
SVE-01_20LT405_091020_15_LOB_TA	0I00047-AM	Tissue	10-Sep-20 12:31	16-Sep-20 07:55
SVE-01_20LT405_091020_16_LOB_TA	0I00047-AN	Tissue	10-Sep-20 12:31	16-Sep-20 07:55
SVE-01_20LT405_091020_17_LOB_TA	0I00047-AO	Tissue	10-Sep-20 12:31	16-Sep-20 07:55
SVE-01_20LT406_091020_18_LOB_TA	0I00047-AP	Tissue	10-Sep-20 12:42	16-Sep-20 07:55
SVE-01_20LT406_091020_19_LOB_TA	0I00047-AQ	Tissue	10-Sep-20 12:42	16-Sep-20 07:55
SVE-01_20LT406_091020_20_LOB_TA	0I00047-AR	Tissue	10-Sep-20 12:42	16-Sep-20 07:55
CJ-04_20LT111_091220_14_LOB_TA	0I00047-AS	Tissue	12-Sep-20 08:48	16-Sep-20 07:55
CJ-04_20LT111_091220_15_LOB_TA	0I00047-AT	Tissue	12-Sep-20 08:48	16-Sep-20 07:55
CJ-04_20LT111_091220_16_LOB_TA	0I00047-AU	Tissue	12-Sep-20 08:48	16-Sep-20 07:55
CJ-04_20LT111_091220_17_LOB_TA	0I00047-AV	Tissue	12-Sep-20 08:48	16-Sep-20 07:55
CJ-04_20LT113_091220_18_LOB_TA	0I00047-AW	Tissue	12-Sep-20 08:59	16-Sep-20 07:55
CJ-04_20LT113_091220_19_LOB_TA	0I00047-AX	Tissue	12-Sep-20 08:59	16-Sep-20 07:55
CJ-04_20LT116_091220_20_LOB_TA	0I00047-AY	Tissue	12-Sep-20 09:07	16-Sep-20 07:55
CJ-04_20LT124_091220_13_LOB_TA	0I00047-AZ	Tissue	12-Sep-20 08:41	16-Sep-20 07:55
OL-01_20LT320_091220_13_LOB_TA	0I00047-BA	Tissue	12-Sep-20 10:01	16-Sep-20 07:55
OL-01_20LT321_091220_11_LOB_TA	0I00047-BB	Tissue	12-Sep-20 09:55	16-Sep-20 07:55
OL-01_20LT322_091220_12_LOB_TA	0I00047-BC	Tissue	12-Sep-20 09:55	16-Sep-20 07:55
OL-01_20LT323_091220_14_LOB_TA	0I00047-BD	Tissue	12-Sep-20 10:10	16-Sep-20 07:55
OB-01_20ET601_091320_01_TOM_WB	0I00047-BE	Tissue	13-Sep-20 10:11	16-Sep-20 07:55

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OB-01_20ET601_091320_02_TOM_WB	0I00047-BF	Tissue	13-Sep-20 10:11	16-Sep-20 07:55
OB-01_20ET603_091320_03_TOM_WB	0I00047-BG	Tissue	13-Sep-20 10:18	16-Sep-20 07:55
OB-01_20ET605_091320_04_TOM_WB	0I00047-BH	Tissue	13-Sep-20 10:27	16-Sep-20 07:55
OL-01_20LT313_091220_17_LOB_TA	0I00047-BI	Tissue	12-Sep-20 10:17	16-Sep-20 07:55
OL-01_20LT313_091220_18_LOB_TA	0I00047-BJ	Tissue	12-Sep-20 10:17	16-Sep-20 07:55
OL-01_20LT314_091220_19_LOB_TA	0I00047-BK	Tissue	12-Sep-20 10:17	16-Sep-20 07:55
OL-01_20LT314_091220_20_LOB_TA	0I00047-BL	Tissue	12-Sep-20 10:17	16-Sep-20 07:55
OL-01_20LT323_091220_15_LOB_TA	0I00047-BM	Tissue	12-Sep-20 10:10	16-Sep-20 07:55
OL-01_20LT324_091220_16_LOB_TA	0I00047-BN	Tissue	12-Sep-20 10:10	16-Sep-20 07:55
OB-01_20ET606_091320_05_TOM_WB	0I00047-BO	Tissue	13-Sep-20 10:30	16-Sep-20 07:55
OB-01_20ET607_091320_06_TOM_WB	0I00047-BP	Tissue	13-Sep-20 10:33	16-Sep-20 07:55
OB-01_20ET607_091320_07_TOM_WB	0I00047-BQ	Tissue	13-Sep-20 10:33	16-Sep-20 07:55
OB-01_20ET607_091320_08_TOM_WB	0I00047-BR	Tissue	13-Sep-20 10:33	16-Sep-20 07:55
OB-01_20ET607_091320_09_TOM_WB	0I00047-BS	Tissue	13-Sep-20 10:33	16-Sep-20 07:55
OB-01_20ET609_091320_10_TOM_WB	0I00047-BT	Tissue	13-Sep-20 10:43	16-Sep-20 07:55
OB-01_20ET609_091320_11_TOM_WB	0I00047-BU	Tissue	13-Sep-20 10:43	16-Sep-20 07:55
OB-01_20ET611_091320_12_TOM_WB	0I00047-BV	Tissue	13-Sep-20 10:51	16-Sep-20 07:55
OB-01_20ET613_091320_13_TOM_WB	0I00047-BW	Tissue	13-Sep-20 10:57	16-Sep-20 07:55
OB-01_20ET613_091320_14_TOM_WB	0I00047-BX	Tissue	13-Sep-20 10:57	16-Sep-20 07:55
OB-01_20ET613_091320_15_TOM_WB	0I00047-BY	Tissue	13-Sep-20 10:57	16-Sep-20 07:55
OB-01_20ET614_091320_16_TOM_WB	0I00047-BZ	Tissue	13-Sep-20 11:04	16-Sep-20 07:55
OB-01_20ET614_091320_17_TOM_WB	0I00047-CA	Tissue	13-Sep-20 11:04	16-Sep-20 07:55
OB-01_20ET616_091320_18_TOM_WB	0I00047-CB	Tissue	13-Sep-20 11:12	16-Sep-20 07:55
OB-01_20ET617_091320_19_TOM_WB	0I00047-CC	Tissue	13-Sep-20 11:15	16-Sep-20 07:55
OB-01_20ET617_091320_20_TOM_WB	0I00047-CD	Tissue	13-Sep-20 11:15	16-Sep-20 07:55
HERRING_091020_LOBSTER_BAIT	0I00047-CE	Tissue	10-Sep-20 12:58	16-Sep-20 07:55

Eurofins Frontier Global Sciences, LLC

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CJ-04_20LT109_091020_10_LOB_TA	0I00047-CG	Tissue	10-Sep-20 09:26	16-Sep-20 07:55
CJ-04_20LT109_091020_11_LOB_TA	0I00047-CH	Tissue	10-Sep-20 09:26	16-Sep-20 07:55

Eurofins Frontier Global Sciences, LLC

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Patrick Garcia-Strickland, Business Unit Manager

Wood - MA
271 Mill Road
Chelmsford MA, 01824Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King**Reported:**
24-Nov-20 15:28

SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 16-Sep-20 07:55. The samples were received intact, on-ice within a sealed cooler at

<u>Cooler</u>	<u>Temp C°</u>
Cooler 1	-2.6
Cooler 2	-3.5
Cooler 3	-8.1
Cooler 4	-8.4
Cooler 5	-12.5
Cooler 6	-10.5

SAMPLE PREPARATION AND ANALYSIS

Tissue samples were homogenized per EFGS SOP5141 prior to digestion.

Total mercury preparation and analysis was performed by flow injection atomic fluorescence spectrometry (FI-AFS) in accordance with EPA 1631B (EFGS SOP2822).

ANALYTICAL AND QUALITY CONTROL ISSUES

Method blanks were prepared for every preparation to assess possible blank contribution from the sample preparation procedure. The method blanks were carried through the entire analytical procedure. All blanks fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

Liquid spikes, certified reference material (CRM) or a quality control samples (QCS) were prepared for every preparation as a measure of accuracy. All liquid spikes, CRMs and/or QCS samples fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

As an additional measure of the accuracy of the methods used and to check for matrix interference, matrix spikes (MS) and matrix spike duplicates (MSD) were digested and analyzed. All of the matrix spike recoveries fell within the established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

Eurofins Frontier Global Sciences, LLC



The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

A reasonable measure of the precision of the analytical methods is the relative percent difference (RPD) between a matrix spike recovery and a matrix spike duplicate recovery and between laboratory control sample recovery and laboratory control sample duplicate recoveries. All of the relative percent differences established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

Sample Receipt Checklist

Client: Wood
 Matrix Tissue
 Project: Tissue

Date & Time Received: 9/12/2020 7:55 Date Labeled: 9/16/20 Labeled By: [Signature]
 Received By: [Signature] Label Verified By: _____

of Coolers Received: 9 Samples Arrived By: _____ Shipping Service _____ Courier _____ Hand _____ Other (Specify: _____)

Coolant: None/Ambient Loose Ice Gel Ice Dry Ice Coolant Required: (Y) N Temp Blank Used: (Y) N for Cooler(s): _____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y/N

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	<u>Y</u>	
Custody Seals are present and intact:	<u>Y</u>	
Custody seals signed:	<u>Y</u>	

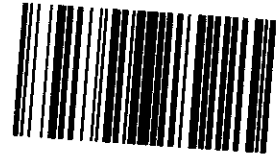
TID: <u>IR 8</u>	CF: <u>-0.5 °C</u>	Date/time: <u>9/12/2020 7:55</u>	By: <u>[Signature]</u>
Cooler 1: <u>-2.1 °C</u>	w/ CF: <u>-2.6 °C</u>	Cooler 4: <u>-8.3 °C</u>	w/ CF: <u>-8.8 °C</u>
Cooler 2: <u>-3.0 °C</u>	w/ CF: <u>-3.5 °C</u>	Cooler 5: <u>-11.0 °C</u>	w/ CF: <u>-11.5 °C</u>
Cooler 3: <u>-7.6 °C</u>	w/ CF: <u>-4.1 °C</u>	Cooler 6: <u>-4.9 °C</u>	w/ CF: <u>-5.4 °C</u>

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	<u>Y</u>	
Date and time of collection:	<u>Y</u>	
Sampled by:	<u>N</u>	
Preservation type:	<u>N</u>	
Requested analyses:	<u>Y</u>	
Required signatures:	<u>Y</u>	
Internal COC required:	<u>NA</u>	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	<u>Y</u>	
Sample labels are present and legible:	<u>Y</u>	
Sample ID on container/bag matches COC:	<u>Y</u>	
Correct sample containers used:	<u>Y</u>	
Samples received within holding times:	<u>Y</u>	
Sample volume sufficient for requested analyses:	<u>Y</u>	
Correct preservative used for requested analyses:	<u>NA</u>	

Anomalies/Non-conformances (attach additional pages if needed):

0100047



Sample Receipt Checklist

Client: _____ Date & Time Received: _____ Date Labeled: _____ Labeled By: _____

Project: _____ Received By: _____ Label Verified By: _____

of Coolers Received: _____ Samples Arrived By: _____ Shipping Service _____ Courier _____ Hand _____ Other (Specify: _____)

Coolant: None/Ambient Loose Ice Gel Ice Dry Ice Coolant Required: Y / N Temp Blank Used: Y/N for Cooler(s): _____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y/N

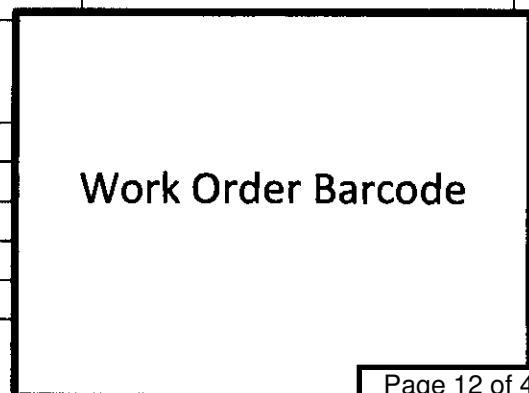
Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:		
Custody Seals are present and intact:		
Custody seals signed:		

TID:	CF:	Date/time:	By:
LR 8	-0.5°C	5/16/2017 7:55	[Signature]
Cooler 1: -7.9°C	w/ CF: -8.2°C	Cooler 4: °C	w/ CF: °C
Cooler 2: -12.0°C	w/ CF: -12.5°C	Cooler 5: °C	w/ CF: °C
Cooler 3: -10.0°C	w/ CF: -10.5°C	Cooler 6: °C	w/ CF: °C

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:		
Date and time of collection:		
Sampled by:		
Preservation type:		
Requested analyses:		
Required signatures:		
Internal COC required:		

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:		
Sample labels are present and legible:		
Sample ID on container/bag matches COC:		
Correct sample containers used:		
Samples received within holding times:		
Sample volume sufficient for requested analyses:		
Correct preservative used for requested analyses:		

Anomalies/Non-conformances (attach additional pages if needed):





Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins
5755 8th St E
Tacoma, WA, 98424
Attn: P. Garcia-Strickland
Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/15/20
COC #: _____
PAGE: 1 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.05 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH					
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg	Lipid	NOAA	1993a	STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	L9-45_20LT001_091020_01_LOB_TA	09/10/20 07:59	TIS	N	Y	X	X	EXTRA VOLUME FOR MS/MSD		X				1	
2	L9-45_20LT002_091020_02_LOB_TA	09/10/20 07:59	TIS	N	N	X	X			X				1	
3	L9-45_20LT004_091020_03_LOB_TA	09/10/20 08:07	TIS	N	N	X	X			X				1	
4	L9-45_20LT004_091020_04_LOB_TA	09/10/20 08:07	TIS	N	N	X	X			X				1	
5	L9-45_20LT005_091020_06_LOB_TA	09/10/20 08:14	TIS	N	N	X	X			X				1	
6	L9-45_20LT005_091020_07_LOB_TA	09/10/20 08:14	TIS	N	N	X	X			X				1	
7	L9-45_20LT005_091020_08_LOB_TA	09/10/20 08:14	TIS	N	N	X	X			X				1	
8	L9-45_20LT005_091020_05_LOB_TA	09/10/20 08:14	TIS	N	N	X	X			X				1	
9	L9-45_20LT007_091020_09_LOB_TA	09/10/20 08:20	TIS	N	N	X	X			X				1	
10	L9-45_20LT009_091020_10_LOB_TA	09/10/20 08:26	TIS	N	N	X	X			X				1	
11	L9-45_20LT009_091020_11_LOB_TA	09/10/20 08:26	TIS	N	N	X	X			X				1	
12	L9-45_20LT009_091020_12_LOB_TA	09/10/20 08:26	TIS	N	N	X	X			X				1	

Sampler's Signature: _____	Date: _____ Time: _____	For Lab Use		Comments:
Relinquished By/Affiliation: <u>C. LAUBACK, OF WOOD.</u>	Date: <u>9/15</u> Time: <u>10:25</u>	Does COC match samples:	Y or N	<u>X=Analyze H=Hold Analysis Request</u> <u>PO # C012906205</u> <u>Follow Project Specific</u> <u>CRAPP</u> <u>15 DAY TAT</u> <u>NUMBER OF COOLERS SENT: 4</u>
Received By: <u>emb</u>	Date: <u>9/16</u> Time: <u>9:12</u>	Broken Container:	Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	COC seal intact:	Y or N	
Received By:	Date: _____ Time: _____	Other problems:	Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	WSDOT contacted:	Y or N	
Received By (LAB):	Date: _____ Time: _____	Date contacted:	_____	
		Cooler Temperature at receipt:	_____ °C	

7715 3068 2071



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Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/15/20
COC #: _____
PAGE: 2 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.05.****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information							Methods for Analysis				RUSH	
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg/Date	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses	
1	CJ-04_20LT101_091020_01_LOB_TA	09/10/20 08:54	TIS	N	Y	X X	X			1		
2	CJ-04_20LT101_091020_02_LOB_TA	09/10/20 08:54	TIS	N	N	X X	X			1		
3	CJ-04_20LT101_091020_03_LOB_TA	09/10/20 08:54	TIS	N	N	X X	X			1		
4	CJ-04_20LT104_091020_04_LOB_TA	09/10/20 09:05	TIS	N	N	X X	X			1		
5	CJ-04_20LT104_091020_05_LOB_TA	09/10/20 09:05	TIS	N	N	X X	X			1		
6	CJ-04_20LT104_091020_06_LOB_TA	09/10/20 09:11	TIS	N	N	X X	X			1		
7	L9-45_20LT009_091020_13_LOB_TA	09/10/20 08:26	TIS	N	N	X X	X			1		
8	L9-45_20LT009_091020_14_LOB_TA	09/10/20 08:26	TIS	N	N	X X	X			1		
9	OB-05_20ET001_091020_01_TOM_WB	09/10/20 09:05	TIS	N	N	X X	X			1		
10	OB-05_20ET001_091020_02_TOM_WB	09/10/20 09:05	TIS	N	N	X X	X			1		
11	OB-05_20ET001_091020_03_TOM_WB	09/10/20 09:05	TIS	N	Y	X X	X			1		
12	OB-05_20ET003_091020_04_TOM_WB	09/10/20 09:15	TIS	N	N	X X	X			1		

Sampler's Signature:	Date: 9/15 Time: 16:25	For Lab Use		Comments: X=Analyze H=Hold Analysis Request PO # C012906205 FOLLOW PROJECT SPECIFIC QAPP IS DATA NUMBER OF COOLERS SENT: 9
Relinquished By/Affiliation: C. LAUBACK, W/ WOOD.	Date: 9/15 Time: 16:25	Does COC match samples:	Y or N	
Received By: ems	Date: 9/16 Time: 9:12	Broken Container:	Y or N	
Relinquished By/Affiliation:	Date:	COC seal intact:	Y or N	
Received By:	Date:	Other problems:	Y or N	
Relinquished By/Affiliation:	Date:	WSDOT contacted:	Y or N	
Received By (LAB):	Date:	Date contacted:		
		Cooler Temperature at receipt:	____ °C	



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Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/15/20
COC #: _____
PAGE: 4 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207488.05.****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information							Methods for Analysis				RUSH	
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg State 1631e Lipid NOAA 1993a	STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	ES-FP_20LT201_091020_01_LOB_TA	09/10/20 09:40	TIS	N	Y	X X EXTRA VOLUME FOR MS/MSD	X				1	
2	ES-FP_20LT201_091020_02_LOB_TA	09/10/20 09:40	TIS	N	N	X X	X				1	
3	ES-FP_20LT201_091020_03_LOB_TA	09/10/20 09:40	TIS	N	N	X X	X				1	
4	ES-FP_20LT202_091020_04_LOB_TA	09/10/20 09:40	TIS	N	N	X X	X				1	
5	ES-FP_20LT202_091020_05_LOB_TA	09/10/20 09:40	TIS	N	N	X X	X				1	
6	ES-FP_20LT202_091020_06_LOB_TA	09/10/20 09:40	TIS	N	N	X X	X				1	
7	ES-FP_20LT202_091020_07_LOB_TA	09/10/20 09:40	TIS	N	N	X X	X				1	
8	ES-FP_20LT202_091020_08_LOB_TA	09/10/20 09:40	TIS	N	N	X X	X				1	
9	OB-05_20ET007_091020_12_TOM_WB	09/10/20 09:46	TIS	N	N	X X	X				1	
10	OB-05_20ET007_091020_13_TOM_WB	09/10/20 09:46	TIS	N	N	X X	X				1	
11	OB-05_20ET007_091020_14_TOM_WB	09/10/20 09:46	TIS	N	N	X X	X				1	
12	OB-05_20ET009_091020_15_TOM_WB	09/10/20 09:58	TIS	N	N	X X	X				1	

Sampler's Signature: _____	Date: _____ Time: _____	For Lab Use		Comments: X=Analyze H=Hold Analysis Request PO # C012906205 FOLLOW PROJECT SPECIFIC QAP? 15 DAY TAT NUMBER OF COOLERS SENT: 4
Relinquished By/Affiliation: <u>C. LARIBACK</u>	Date: <u>9/15</u> Time: <u>16:25</u>	Does COC match samples:	Y or N	
Received By: <u>emb</u>	Date: <u>9/16</u> Time: <u>9:12</u>	Broken Container:	Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	COC seal intact:	Y or N	
Received By:	Date: _____ Time: _____	Other problems:	Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	WSDOT contacted:	Y or N	
Received By (LAB):	Date: _____ Time: _____	Date contacted:	_____	
		Cooler Temperature at receipt:	_____ °C	



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Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/15/20

COC #: _____

PAGE: 5 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207488.05.****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information							Methods for Analysis				RUSH	
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg 10044 10310 Lipid NOAA 1993a	STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	ES-FP_20LT203_091020_09_LOB_TA	09/10/20 10:06	TIS	N	N	X X	X				1	
2	ES-FP_20LT203_091020_10_LOB_TA	09/10/20 10:06	TIS	N	N	X X	X				1	
3	ES-FP_20LT203_091020_11_LOB_TA	09/10/20 10:06	TIS	N	N	X X	X				1	
4	ES-FP_20LT205_091020_12_LOB_TA	09/10/20 10:14	TIS	N	N	X X	X				1	
5	ES-FP_20LT205_091020_13_LOB_TA	09/10/20 10:14	TIS	N	N	X X	X				1	
6	ES-FP_20LT206_091020_14_LOB_TA	09/10/20 10:14	TIS	N	N	X X	X				1	
7	ES-FP_20LT206_091020_15_LOB_TA	09/10/20 10:14	TIS	N	N	X X	X				1	
8	OB-05_20ET009_091020_16_TOM_WB	09/10/20 09:58	TIS	N	N	X X	X				1	
9	OB-05_20ET009_091020_17_TOM_WB	09/10/20 09:58	TIS	N	N	X X	X				1	
10	OB-05_20ET009_091020_18_TOM_WB	09/10/20 09:58	TIS	N	N	X X	X				1	
11	OB-05_20ET010_091020_19_TOM_WB	09/10/20 10:06	TIS	N	N	X X	X				1	
12	OB-05_20ET011_091020_20_TOM_WB	09/10/20 10:13	TIS	N	N	X X	X				1	

Sampler's Signature: _____ Relinquished By/Affiliation: C. LINDBALK Received By: rmb Relinquished By/Affiliation: _____ Received By: _____ Relinquished By/Affiliation: _____ Received By (LAB): _____	Date: 9/15 Time: 10:25 Date: 9/14 Time: 9:12 Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____	For Lab Use Does COC match samples: Y or N Broken Container: Y or N COC seal intact: Y or N Other problems: Y or N WSDOT contacted: Y or N Date contacted: _____ Cooler Temperature at receipt: _____ °C	Comments: X=Analyze H=Hold Analysis Request PO # C012906205 Follow PROJECT SPECIFIC QAPP 15 DAY TNT NUMBER OF COOLERS SENT: 9
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Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/15/20
COC #: _____
PAGE: 6 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.05 ***	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis							
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg-1000e (C-314) Lipid NOAA 1993a	RUSH						
							STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses	
1	BO-04_20ET503_091020_01_TOM_WB	09/10/20 11:22	TIS	N	Y	X X	EXTRA VOLUME FOR MS/MSD	X				1	
2	ES-FP_20LT207_091020_16_LOB_TA	09/10/20 10:26	TIS	N	N	X X		X				1	
3	ES-FP_20LT208_091020_17_LOB_TA	09/10/20 10:26	TIS	N	N	X X		X				1	
4	ES-FP_20LT208_091020_18_LOB_TA	09/10/20 10:26	TIS	N	N	X X		X				1	
5	ES-FP_20LT208_091020_19_LOB_TA	09/10/20 10:26	TIS	N	N	X X		X				1	
6	ES-FP_20LT209_091020_20_LOB_TA	09/10/20 10:41	TIS	N	N	X X		X				1	
7	OL-01_20LT301_091020_01_LOB_TA	09/10/20 10:58	TIS	N	Y	X X	EXTRA VOLUME FOR MS/MSD	X				1	
8	OL-01_20LT301_091020_02_LOB_TA	09/10/20 10:58	TIS	N	N	X X		X				1	
9	OL-01_20LT302_091020_03_LOB_TA	09/10/20 10:58	TIS	N	N	X X		X				1	
10	OL-01_20LT304_091020_04_LOB_TA	09/10/20 11:10	TIS	N	N	X X		X				1	
11	OL-01_20LT304_091020_05_LOB_TA	09/10/20 11:10	TIS	N	N	X X		X				1	
12	OL-01_20LT304_091020_06_LOB_TA	09/10/20 11:10	TIS	N	N	X X		X				1	

Sampler's Signature: _____
Date: _____ Time: _____

Relinquished By/Affiliation: E. LAUBACK, W/ WOOD.
Date: 9/15 Time: 10:25

Received By: ems
Date: 9/16 Time: 9:12

Relinquished By/Affiliation: _____
Date: _____ Time: _____

Received By: _____
Date: _____ Time: _____

Relinquished By/Affiliation: _____
Date: _____ Time: _____

Received By (LAB): _____
Date: _____ Time: _____

For Lab Use

Does COC match samples: Y or N
Broken Container: Y or N
COC seal intact: Y or N
Other problems: Y or N
WSDOT contacted: Y or N
Date contacted: _____

Cooler Temperature at receipt: _____ °C

Comments:
X=Analyze H=Hold Analysis Request
PO # C012906205
FOLLOW PROJECT SPECIFIC QAPP
15 DAY TAT
NUMBER OF COOLERS SENT: 7

417



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CHAIN OF CUSTODY

DATE: 9/15/20
COC #: _____
PAGE: 7 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.05 ****	Phone Number: 508-789-1738	Address: 271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Biota Monitoring	City/State: Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis					
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	RUSH					
						STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	BO-04_20ET503_091020_02_TOM_WB	09/10/20 11:22	TIS	N	N	X	X			1	
2	BO-04_20ET506_091020_03_TOM_WB	09/10/20 11:35	TIS	N	N	X	X			1	
3	BO-04_20ET506_091020_04_TOM_WB	09/10/20 11:35	TIS	N	N	X	X			1	
4	BO-04_20ET506_091020_05_TOM_WB	09/10/20 11:35	TIS	N	N	X	X			1	
5	BO-04_20ET506_091020_06_TOM_WB	09/10/20 11:35	TIS	N	N	X	X			1	
6	BO-04_20ET507_091020_07_TOM_WB	09/10/20 11:45	TIS	N	N	X	X			1	
7	BO-04_20ET508_091020_08_TOM_WB	09/10/20 11:48	TIS	N	N	X	X			1	
8	OL-01_20LT305_091020_07_LOB_TA	09/10/20 11:24	TIS	N	N	X	X			1	
9	OL-01_20LT305_091020_08_LOB_TA	09/10/20 11:24	TIS	N	N	X	X			1	
10	OL-01_20LT306_091020_01_TOM_WB	09/10/20 11:24	TIS	N	Y	X	X	EXTRA VOLUME FOR MS/MSD			1
11	OL-01_20LT306_091020_09_LOB_TA	09/10/20 11:24	TIS	N	N	X	X			1	
12	OL-01_20LT307_091020_10_LOB_TA	09/10/20 11:37	TIS	N	N	X	X			1	

Sampler's Signature:	Date: _____ Time: _____	For Lab Use	
Relinquished By/Affiliation: C. LADBACK	Date: 9/15 Time: 10:25	Does COC match samples: Y or N	Comments: X=Analyze H=Hold Analysis Request PO # C012906205 FOLLOW PROJECT SPECIFIC QAPP 15 DAY TAT NUMBER OF COOLERS SENT: 1
Received By: emb	Date: 9/16 Time: 9:12	Broken Container: Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	COC seal intact: Y or N	
Received By:	Date: _____ Time: _____	Other problems: Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	WSDOT contacted: Y or N	
Received By (LAB):	Date: _____ Time: _____	Date contacted: _____	
		Cooler Temperature at receipt: _____ °C	



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CHAIN OF CUSTODY

DATE: 9/15/20
COC #: _____
PAGE: 8 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.05.****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH		
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg 4934e1 631c Lipid NOAA 1993a	STANDARD - 10 days	49 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	BO-04_20ET508_091020_09_TOM_WB	09/10/20 11:48	TIS	N	N	X X	X				1	
2	BO-04_20ET508_091020_10_TOM_WB	09/10/20 11:48	TIS	N	N	X X	X				1	
3	BO-04_20ET508_091020_11_TOM_WB	09/10/20 11:48	TIS	N	N	X X	X				1	
4	BO-04_20ET509_091020_12_TOM_WB	09/10/20 11:54	TIS	N	N	X X	X				1	
5	BO-04_20ET509_091020_13_TOM_WB	09/10/20 11:54	TIS	N	N	X X	X				1	
6	BO-04_20ET509_091020_14_TOM_WB	09/10/20 11:54	TIS	N	N	X X	X				1	
7	BO-04_20ET509_091020_15_TOM_WB	09/10/20 11:54	TIS	N	N	X X	X				1	
8	BO-04_20ET510_091020_16_TOM_WB	09/10/20 12:01	TIS	N	N	X X	X				1	
9	BO-04_20ET510_091020_17_TOM_WB	09/10/20 12:01	TIS	N	N	X X	X				1	
10	SVE-01_20LT401_091020_01_LOB_TA	09/10/20 12:02	TIS	N	Y	X X EXTRA VOLUME FOR MS/MSD	X				1	
11	SVE-01_20LT401_091020_02_LOB_TA	09/10/20 12:02	TIS	N	N	X X	X				1	
12	SVE-01_20LT401_091020_03_LOB_TA	09/10/20 12:02	TIS	N	N	X X	X				1	

Sampler's Signature:	Date:	Time:	For Lab Use		Comments:
Relinquished By/Affiliation:	Date:	Time:	Does COC match samples:	Y or N	X=Analyze H=Hold Analysis Request PO # C012906205 FOLLOW PROJECT SPECIFIC QAPP IS DAY TAT NUMBER OF COOLERS SENT: 9
Received By: <i>CLARACK, W/ WOOD, emb</i>	Date: <i>9/15</i>	Time: <i>10:25</i>	Broken Containers:	Y or N	
Relinquished By/Affiliation:	Date: <i>9/16</i>	Time: <i>9:12</i>	COC seal intact:	Y or N	
Received By:	Date:	Time:	Other problems:	Y or N	
Relinquished By/Affiliation:	Date:	Time:	WSDOT contacted:	Y or N	
Received By (LAB):	Date:	Time:	Date contacted:		Cooler Temperature at receipt: _____ °C



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Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/15/20

COC #: _____

PAGE: 9 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3817207486.05 ****	Phone Number: 508-789-1736	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information							Methods for Analysis					
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg4933e (31e) Lipid NOAA 1993a	STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analytes
1	BO-04_20ET511_091020_18_TOM_WB	09/10/20 12:05	TIS	N	N	X X	X				1	
2	BO-04_20ET511_091020_19_TOM_WB	09/10/20 12:05	TIS	N	N	X X	X				1	
3	BO-04_20ET513_091020_20_TOM_WB	09/10/20 12:11	TIS	N	N	X X	X				1	
4	SVE-01_20LT401_091020_04_LOB_TA	09/10/20 12:02	TIS	N	N	X X	X				1	
5	SVE-01_20LT402_091020_05_LOB_TA	09/10/20 12:02	TIS	N	N	X X	X				1	
6	SVE-01_20LT402_091020_06_LOB_TA	09/10/20 12:02	TIS	N	N	X X	X				1	
7	SVE-01_20LT402_091020_07_LOB_TA	09/10/20 12:02	TIS	N	N	X X	X				1	
8	SVE-01_20LT402_091020_08_LOB_TA	09/10/20 12:02	TIS	N	N	X X	X				1	
9	SVE-01_20LT403_091020_09_LOB_TA	09/10/20 12:22	TIS	N	N	X X	X				1	
10	SVE-01_20LT403_091020_10_LOB_TA	09/10/20 12:22	TIS	N	N	X X	X				1	
11	SVE-01_20LT404_091020_11_LOB_TA	09/10/20 12:22	TIS	N	N	X X	X				1	
12	SVE-01_20LT404_091020_12_LOB_TA	09/10/20 12:22	TIS	N	N	X X	X				1	

Relinquished By/Affiliation: <i>C. LAUBACK</i>	Date: <u>9/15</u> Time: <u>16:25</u>	<p>For Lab Use</p> <p>Does COC match samples: Y or N</p> <p>Broken Container: Y or N</p> <p>COC seal intact: Y or N</p> <p>Other problems: Y or N</p> <p>WSDOT contacted: Y or N</p> <p>Date contacted: _____</p> <p>Cooler Temperature at receipt: _____ °C</p>	<p>Comments:</p> <p>X=Analyze H=Hold Analysis Request</p> <p>PO # C012906205</p> <p>FOLLOW PROJECT SPECIFIC QAPP</p> <p>15 DAY TAT</p> <p>NUMBER OF COOLERS SENT: 7</p>
Received By: <i>emb</i>	Date: <u>9/15</u> Time: <u>9:12</u>		
Relinquished By/Affiliation:	Date: _____ Time: _____		
Received By:	Date: _____ Time: _____		
Relinquished By/Affiliation:	Date: _____ Time: _____		
Received By (LAB):	Date: _____ Time: _____		



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Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/15/20
9/20
COC #: _____
PAGE: 10 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486_05****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH					
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg 194a	194b	194c	194d	STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	CJ-04_20LT123_091220_12_LOB_TA	09/12/20 08:41	TIS	N	N	X	X			X				1	
2	L9-45_20LT011_091220_15_LOB_TA	09/12/20 08:03	TIS	N	N	X	X			X				1	
3	L9-45_20LT017_091220_16_LOB_TA	09/12/20 08:20	TIS	N	N	X	X			X				1	
4	L9-45_20LT018_091220_17_LOB_TA	09/12/20 08:20	TIS	N	N	X	X			X				1	
5	SVE-01_20LT405_091020_13_LOB_TA	09/10/20 12:31	TIS	N	N	X	X			X				1	
6	SVE-01_20LT405_091020_14_LOB_TA	09/10/20 12:31	TIS	N	N	X	X			X				1	
7	SVE-01_20LT405_091020_15_LOB_TA	09/10/20 12:31	TIS	N	N	X	X			X				1	
8	SVE-01_20LT405_091020_16_LOB_TA	09/10/20 12:31	TIS	N	N	X	X			X				1	
9	SVE-01_20LT405_091020_17_LOB_TA	09/10/20 12:31	TIS	N	N	X	X			X				1	
10	SVE-01_20LT406_091020_18_LOB_TA	09/10/20 12:42	TIS	N	N	X	X			X				1	
11	SVE-01_20LT406_091020_19_LOB_TA	09/10/20 12:42	TIS	N	N	X	X			X				1	
12	SVE-01_20LT406_091020_20_LOB_TA	09/10/20 12:42	TIS	N	N	X	X			X				1	

Sampler's Signature:	Date: _____ Time: _____	For Lab Use		Comments: X=Analyze H=Hold Analysis Request PO # C012906205 FOLLOW PROJECT SPECIFIC CAPS 15 DAY TWT NUMBER OF COOLERS SENT: 1
Relinquished By/Affiliation: C. CARBACK W/ WOOD.	Date: 9/15 Time: 10:25	Does COC match samples:	Y or N	
Received By: emb	Date: 9/16 Time: 9:12	Broken Containe:	Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	COC seal intact:	Y or N	
Received By:	Date: _____ Time: _____	Other problems:	Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	WSDOT contacted:	Y or N	
Received By (LAB):	Date: _____ Time: _____	Date contacted:	_____	
		Cooler Temperature at receipt:	_____ °C	



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CHAIN OF CUSTODY

DATE: 9/15/20

COC #: _____

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Project Name: Panobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.05.****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendleton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information							Methods for Analysis				RUSH	
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg 4931e1 6312 Lipid NOAA 1993a	STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	CJ-04_20LT111_091220_14_LOB_TA	09/12/20 08:48	TIS	N	N	X X	X				1	
2	CJ-04_20LT111_091220_15_LOB_TA	09/12/20 08:48	TIS	N	N	X X	X				1	
3	CJ-04_20LT111_091220_16_LOB_TA	09/12/20 08:48	TIS	N	N	X X	X				1	
4	CJ-04_20LT111_091220_17_LOB_TA	09/12/20 08:48	TIS	N	N	X X	X				1	
5	CJ-04_20LT113_091220_18_LOB_TA	09/12/20 08:59	TIS	N	N	X X	X				1	
6	CJ-04_20LT113_091220_19_LOB_TA	09/12/20 08:59	TIS	N	N	X X	X				1	
7	CJ-04_20LT116_091220_20_LOB_TA	09/12/20 09:07	TIS	N	N	X X	X				1	
8	CJ-04_20LT124_091220_13_LOB_TA	09/12/20 08:41	TIS	N	N	X X	X				1	
9	OL-01_20LT320_091220_13_LOB_TA	09/12/20 10:01	TIS	N	N	X X	X				1	
10	OL-01_20LT321_091220_11_LOB_TA	09/12/20 09:55	TIS	N	N	X X	X				1	
11	OL-01_20LT322_091220_12_LOB_TA	09/12/20 09:55	TIS	N	N	X X	X				1	
12	OL-01_20LT323_091220_14_LOB_TA	09/12/20 10:10	TIS	N	N	X X	X				1	

Sampler's Signature:	Date: _____ Time: _____	For Lab Use	
Relinquished By/Affiliation: C. LABACK w/ WOOD	Date: 9/15 Time: 16:25	Does COC match samples: Y or N	Comments: X=Analyze H=Hold Analysis Request PO # C012906205 FOLLOW PROJECT SPECIFIC APP IS DATA NUMBER OF COOLERS SENT: 9
Received By: emb	Date: 9/16 Time: 9:12	Broken Container: Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	COC seal intact: Y or N	
Received By:	Date: _____ Time: _____	Other problems: Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	WSDOT contacted: Y or N	
Received By (LAB):	Date: _____ Time: _____	Date contacted: _____	
		Cooler Temperature at receipt: _____ °C	



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Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/15/20

COC #: _____

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Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&S	Disposal Instructions: LAB
Project Number: 3817207486.05.****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendalton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH		
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg/fgate (6.312) Lipid NOAA 1993a	STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	ES-PP_20ET711_091320_01_TOM_WB	09/13/20 08:28	TIS	N	Y	X X	X				1	
2	ES-PP_20ET717_091320_02_TOM_WB	09/13/20 08:54	TIS	N	N	X X	X				1	
3	OB-01_20ET601_091320_01_TOM_WB	09/13/20 10:11	TIS	N	Y	X X	X				1	
4	OB-01_20ET601_091320_02_TOM_WB	09/13/20 10:11	TIS	N	N	X X	X				1	
5	OB-01_20ET603_091320_03_TOM_WB	09/13/20 10:18	TIS	N	N	X X	X				1	
6	OB-01_20ET605_091320_04_TOM_WB	09/13/20 10:27	TIS	N	N	X X	X				1	
7	OL-01_20LT313_091220_17_LOB_TA	09/12/20 10:17	TIS	N	N	X X	X				1	
8	OL-01_20LT313_091220_18_LOB_TA	09/12/20 10:17	TIS	N	N	X X	X				1	
9	OL-01_20LT314_091220_19_LOB_TA	09/12/20 10:17	TIS	N	N	X X	X				1	
10	OL-01_20LT314_091220_20_LOB_TA	09/12/20 10:17	TIS	N	N	X X	X				1	
11	OL-01_20LT323_091220_15_LOB_TA	09/12/20 10:10	TIS	N	N	X X	X				1	
12	OL-01_20LT324_091220_16_LOB_TA	09/12/20 10:10	TIS	N	N	X X	X				1	

Sampler's Signature:	Date: _____ Time: _____	For Lab Use	Comments:
Relinquished By/Affiliation: C. LAUBACK, W/ WOOD	Date: 9/15 Time: 10:25	Does COC match samples: Y or N	X=Analyze H=Hold Analysis Request PO # C012906205 FOLLOW PROJECT SPECIFIC QAPP IS DAY TAT NUMBER OF COOLERS SENT: 9
Received By: emb	Date: 9/16 Time: 9:12	Broken Container: Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	COC seal intact: Y or N	
Received By:	Date: _____ Time: _____	Other problems: Y or N	
Relinquished By/Affiliation:	Date: _____ Time: _____	WSDOT contacted: Y or N	
Received By (LAB):	Date: _____ Time: _____	Date contacted: _____	
		Cooler Temperature at receipt: _____ °C	



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CHAIN OF CUSTODY

DATE: 9/15/20

COC #: _____

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Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&S	Disposal Instructions: LAB
Project Number: 3817207486 05 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Cheimsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis							
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg-1993a-1631c	Lipid NOAA 1993a	STANDARD - 10 days	48 Hour	72 Hour	8 Days	TOTAL CONTAINERS	HOLD All Analyses
1	OB-01_20ET606_091320_05_TOM_WB	09/13/20 10:30	TIS	N	N	X	X	X				1	
2	OB-01_20ET607_091320_06_TOM_WB	09/13/20 10:33	TIS	N	N	X	X	X				1	
3	OB-01_20ET607_091320_07_TOM_WB	09/13/20 10:33	TIS	N	N	X	X	X				1	
4	OB-01_20ET607_091320_08_TOM_WB	09/13/20 10:33	TIS	N	N	X	X	X				1	
5	OB-01_20ET607_091320_09_TOM_WB	09/13/20 10:33	TIS	N	N	X	X	X				1	
6	OB-01_20ET609_091320_10_TOM_WB	09/13/20 10:43	TIS	N	N	X	X	X				1	
7	OB-01_20ET609_091320_11_TOM_WB	09/13/20 10:43	TIS	N	N	X	X	X				1	
8	OB-01_20ET611_091320_12_TOM_WB	09/13/20 10:51	TIS	N	N	X	X	X				1	
9	OB-01_20ET613_091320_13_TOM_WB	09/13/20 10:57	TIS	N	N	X	X	X				1	
10	OB-01_20ET613_091320_14_TOM_WB	09/13/20 10:57	TIS	N	N	X	X	X				1	
11	OB-01_20ET613_091320_15_TOM_WB	09/13/20 10:57	TIS	N	N	X	X	X				1	
12	OB-01_20ET614_091320_16_TOM_WB	09/13/20 11:04	TIS	N	N	X	X	X				1	

Sampler's Signature: _____	Date: _____ Time: _____	For Lab Use Does COC match samples: Y or N Broken Container: Y or N COC seal intact: Y or N Other problems: Y or N WSDOT contacted: Y or N Date contacted: _____ Cooler Temperature at receipt: _____ °C	Comments: X=Analyze H=Hold Analysis Request PO # C012906205 FOLLOW PROJECT SPECIAL QAPP 15 DAY RAT NUMBER OF COOLERS SENT: 1
Relinquished By/Affiliation: <u>emb</u>	Date: _____ Time: _____		
Received By: <u>emb</u>	Date: <u>9/16</u> Time: <u>9:12a</u>		
Relinquished By/Affiliation: _____	Date: _____ Time: _____		
Received By: _____	Date: _____ Time: _____		
Relinquished By/Affiliation: _____	Date: _____ Time: _____		
Received By (LAB): _____	Date: _____ Time: _____		



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CHAIN OF CUSTODY

DATE: 9/15/20
COC #: _____
PAGE: 14 OF 14

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.05.****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH			
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg+93a	Lipid NOAA 1993a	STANDARD - 10 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	OB-01_20ET614_091320_17_TOM_WB	09/13/20 11:04	TIS	N	N	X	X	X				1	
2	OB-01_20ET616_091320_18_TOM_WB	09/13/20 11:12	TIS	N	N	X	X	X				1	
3	OB-01_20ET617_091320_19_TOM_WB	09/13/20 11:15	TIS	N	N	X	X	X				1	
4	OB-01_20ET617_091320_20_TOM_WB	09/13/20 11:15	TIS	N	N	X	X	X				1	
5	HERRING_091020_LUBSTER_BAIT	09/10/20 1250	TIS	C	C	X		X				1	
6													
7													
8													
9													
10													
11													
12													

Sampler's Signature:	Date:	Time:	For Lab Use		Comments: X=Analyze H=Hold Analysis Request PO # C012906205 FOLLOW PROJECT SPECIFIC GAPP IS DAY TAT NUMBER OF COOLERS SENT: 9
Relinquished By/Affiliation: C. LALBACK, w/ WOOD.	Date: 9/15	Time: 16:25	Does COC match samples:	Y or N	
Received By: emb	Date: 9/15	Time: 9:12	Broken Container:	Y or N	
Relinquished By/Affiliation:	Date:	Time:	COC seal intact:	Y or N	
Received By:	Date:	Time:	Other problems:	Y or N	
Relinquished By/Affiliation:	Date:	Time:	WSDOT contacted:	Y or N	
Received By (LAB):	Date:	Time:	Date contacted:		
			Cooler Temperature at receipt:	____ °C	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**L9-45_20LT001_091020_01_LOB_TA
0100047-01**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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Sample Preparation: EPA 1631B

Mercury	43.8	-	3.74	ng/g	100	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	
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Wood - MA
271 Mill Road
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Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**L9-45_20LT002_091020_02_LOB_TA
0100047-02**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	434	-	15.4	ng/g	400	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**L9-45_20LT004_091020_03_LOB_TA
0100047-03**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	236	-	15.2	ng/g	400	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	

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Wood - MA
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Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**L9-45_20LT004_091020_04_LOB_TA
0100047-04**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	305	-	15.2	ng/g	400	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	

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Wood - MA
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Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**L9-45_20LT005_091020_06_LOB_TA
0100047-05**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	142	-	14.8	ng/g	400	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	



Wood - MA
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Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**L9-45_20LT005_091020_07_LOB_TA
0100047-06**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	259	-	15.7	ng/g	400	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	

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Wood - MA
271 Mill Road
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Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**L9-45_20LT005_091020_08_LOB_TA
0100047-07**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	356	-	14.8	ng/g	400	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	



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Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
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**L9-45_20LT006_091020_05_LOB_TA
0100047-08**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	262	-	15.3	ng/g	400	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**L9-45_20LT007_091020_09_LOB_TA
0100047-09**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	251	-	15.2	ng/g	400	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	

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Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**L9-45_20LT009_091020_10_LOB_TA
0100047-10**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	230	-	14.9	ng/g	400	F009375	22-Sep-20	0129015	28-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**L9-45_20LT009_091020_11_LOB_TA
0100047-11**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	157	-	15.9	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**L9-45_20LT009_091020_12_LOB_TA
0100047-12**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	284	-	14.9	ng/g	400	F009385	28-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20LT101_091020_01_LOB_TA
0100047-13**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	761	-	14.9	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20LT101_091020_02_LOB_TA
0100047-14**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	268	-	15.7	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20LT101_091020_03_LOB_TA
0100047-15**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	188	-	15.0	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20LT104_091020_04_LOB_TA
0100047-16**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	353	-	15.2	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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CJ-04_20LT104_091020_05_LOB_TA
0100047-17

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	175	-	15.2	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**CJ-04_20LT105_091020_06_LOB_TA
0100047-18**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	147	-	14.9	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**L9-45_20LT009_091020_13_LOB_TA
0100047-19**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	194	-	15.0	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**L9-45_20LT009_091020_14_LOB_TA
0100047-20**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	184	-	15.4	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET001_091020_01_TOM_WB
0100047-21

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	101	-	15.6	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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OB-05_20ET001_091020_02_TOM_WB
0100047-22

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	69.1	-	15.6	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET001_091020_03_TOM_WB
0100047-23

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	103	-	15.5	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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OB-05_20ET003_091020_04_TOM_WB
0100047-24

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	67.6	-	15.7	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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CJ-04_20L108_091020_07_LOB_TA
0100047-25

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	405	-	15.3	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20L108_091020_08_LOB_TA
0100047-26**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	137	-	14.8	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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CJ-04_20L109_091020_09_LOB_TA
0100047-27

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	193	-	15.6	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET003_091020_05_TOM_WB
0100047-28

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	102	-	15.7	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET003_091020_06_TOM_WB
0100047-29

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	78.5	-	15.2	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET003_091020_07_TOM_WB
0100047-30

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	127	-	15.1	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OB-05_20ET003_091020_08_TOM_WB
0100047-31**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	109	-	15.3	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET004_091020_09_TOM_WB
0100047-32

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	73.3	-	15.2	ng/g	400	F009376	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET005_091020_10_TOM_WB
0100047-33

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	61.2	-	15.3	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET005_091020_11_TOM_WB
0100047-34

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	75.3	-	15.6	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**ES-FP_20LT201_091020_01_LOB_TA
0100047-35**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	268	-	15.5	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**ES-FP_20LT201_091020_02_LOB_TA
0100047-36**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	210	-	15.4	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**ES-FP_20LT201_091020_03_LOB_TA
0100047-37**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	165	-	15.7	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**ES-FP_20LT202_091020_04_LOB_TA
0100047-38**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	180	-	15.2	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**ES-FP_20LT202_091020_05_LOB_TA
0100047-39**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	108	-	15.9	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**ES-FP_20LT202_091020_06_LOB_TA
0100047-40**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	564	-	15.1	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**ES-FP_20LT202_091020_07_LOB_TA
0100047-41**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	523	-	15.1	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**ES-FP_20LT202_091020_08_LOB_TA
0100047-42**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	252	-	15.0	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET007_091020_12_TOM_WB
0100047-43

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	70.9	-	15.7	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OB-05_20ET007_091020_13_TOM_WB
0100047-44**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	114	-	14.8	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET007_091020_14_TOM_WB
0100047-45

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	238	-	15.9	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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OB-05_20ET009_091020_15_TOM_WB
0100047-46

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	115	-	15.6	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**ES-FP_20LT203_091020_09_LOB_TA
0100047-47**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	129	-	15.0	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**ES-FP_20LT203_091020_10_LOB_TA
0100047-48**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	358	-	15.9	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ES-FP_20LT203_091020_11_LOB_TA
0100047-49

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	846	-	15.0	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

Eurofins Frontier Global Sciences, LLC

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**ES-FP_20LT205_091020_12_LOB_TA
0100047-50**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	214	-	14.8	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

Eurofins Frontier Global Sciences, LLC

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**ES-FP_20LT205_091020_13_LOB_TA
0100047-51**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	101	-	15.5	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

Eurofins Frontier Global Sciences, LLC

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**ES-FP_20LT206_091020_14_LOB_TA
0100047-52**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	175	-	14.9	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ES-FP_20LT206_091020_15_LOB_TA
0100047-53

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	181	-	15.2	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET009_091020_16_TOM_WB
0100047-54

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	102	-	15.9	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET009_091020_17_TOM_WB
0100047-55

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	82.7	-	15.4	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET009_091020_18_TOM_WB
0100047-56

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	78.4	-	15.9	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-05_20ET010_091020_19_TOM_WB
0100047-57

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	64.8	-	15.8	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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OB-05_20ET011_091020_20_TOM_WB
0100047-58

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	49.2	-	14.8	ng/g	400	F009379	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET503_091020_01_TOM_WB
0100047-59

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	201	-	14.8	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ES-FP_20LT207_091020_16_LOB_TA
0100047-60

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	140	-	16.0	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**ES-FP_20LT208_091020_17_LOB_TA
0100047-61**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	234	-	14.5	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ES-FP_20LT208_091020_18_LOB_TA
0100047-62

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	230	-	15.5	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

ES-FP_20LT208_091020_19_LOB_TA
0100047-63

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	240	-	14.8	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**ES-FP_20LT209_091020_20_LOB_TA
0100047-64**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	60.7	-	14.0	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OL-01_20LT301_091020_01_LOB_TA
0100047-65**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	971	-	38.6	ng/g	1000	F009384	29-Sep-20	0J08011	07-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT301_091020_02_LOB_TA
0100047-66**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	962	-	15.3	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OL-01_20LT302_091020_03_LOB_TA
0100047-67

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	435	-	15.7	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT304_091020_04_LOB_TA
0100047-68**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	284	-	14.5	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OL-01_20LT304_091020_05_LOB_TA
0100047-69

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	130	-	14.4	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OL-01_20LT304_091020_06_LOB_TA
0100047-70**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	142	-	15.1	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET503_091020_02_TOM_WB
0100047-71

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	65.3	-	15.1	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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BO-04_20ET506_091020_03_TOM_WB
0100047-72

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	108	-	15.4	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET506_091020_04_TOM_WB
0100047-73

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	63.1	-	15.9	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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BO-04_20ET506_091020_05_TOM_WB
0100047-74

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	78.8	-	15.1	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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BO-04_20ET506_091020_06_TOM_WB
0100047-75

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	119	-	15.1	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET507_091020_07_TOM_WB
0100047-76

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	106	-	15.4	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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BO-04_20ET508_091020_08_TOM_WB
0100047-77

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	117	-	15.1	ng/g	400	F009380	22-Sep-20	0I30011	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OL-01_20LT305_091020_07_LOB_TA
0100047-78**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	1870	-	36.7	ng/g	1000	F009380	22-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT305_091020_08_LOB_TA
0100047-79**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	540	-	15.7	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT306_091020_09_LOB_TA
0100047-80**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	554	-	15.7	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT307_091020_10_LOB_TA
0100047-81**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	335	-	15.9	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**BO-04_20ET508_091020_09_TOM_WB
0100047-82**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	142	-	15.8	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET508_091020_10_TOM_WB
0100047-83

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	73.9	-	15.9	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**BO-04_20ET508_091020_11_TOM_WB
0100047-84**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	123	-	15.7	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET509_091020_12_TOM_WB
0100047-85

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	241	-	15.9	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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BO-04_20ET509_091020_13_TOM_WB
0100047-86

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	166	-	15.1	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET509_091020_14_TOM_WB
0100047-87

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	133	-	15.7	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**BO-04_20ET509_091020_15_TOM_WB
0100047-88**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	83.7	-	15.0	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET510_091020_16_TOM_WB
0100047-89

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	109	-	15.4	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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BO-04_20ET510_091020_17_TOM_WB
0100047-90

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	91.6	-	15.0	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT401_091020_01_LOB_TA
0100047-91**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	171	-	15.1	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**SVE-01_20LT401_091020_02_LOB_TA
0100047-92**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	181	-	15.0	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT401_091020_03_LOB_TA
0100047-93**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	180	-	15.9	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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BO-04_20ET511_091020_18_TOM_WB
0100047-94

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	107	-	15.0	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET511_091020_19_TOM_WB
0100047-95

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	49.4	-	15.5	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

BO-04_20ET513_091020_20_TOM_WB
0100047-96

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	87.0	-	15.9	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT401_091020_04_LOB_TA
0100047-97**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	148	-	15.0	ng/g	400	F009381	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT402_091020_05_LOB_TA
0100047-98**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	372	-	15.5	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT402_091020_06_LOB_TA
0100047-99**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	212	-	15.5	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT402_091020_07_LOB_TA
0I00047-AA**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	113	-	14.8	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**SVE-01_20LT402_091020_08_LOB_TA
0I00047-AB**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	123	-	15.7	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT403_091020_09_LOB_TA
0I00047-AC**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	307	-	15.2	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT403_091020_10_LOB_TA
0I00047-AD**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	283	-	14.9	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT404_091020_11_LOB_TA
0I00047-AE**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	149	-	14.9	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT404_091020_12_LOB_TA
0I00047-AF**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	105	-	15.0	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20LT123_091220_12_LOB_TA
0I00047-AG**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	118	-	15.0	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**L9-45_20L011_091220_15_LOB_TA
0I00047-AH**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	130	-	15.9	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**L9-45_20L017_091220_16_LOB_TA
0100047-AI**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	140	-	15.7	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**L9-45_20L018_091220_17_LOB_TA
0I00047-AJ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	163	-	15.1	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**SVE-01_20LT405_091020_13_LOB_TA
0I00047-AK**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	228	-	15.7	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT405_091020_14_LOB_TA
0I00047-AL**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	752	-	15.5	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT405_091020_15_LOB_TA
0I00047-AM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	181	-	15.5	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT405_091020_16_LOB_TA
0I00047-AN**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	409	-	15.1	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT405_091020_17_LOB_TA
0I00047-AO**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	188	-	15.6	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT406_091020_18_LOB_TA
0I00047-AP**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	226	-	15.2	ng/g	400	F009382	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**SVE-01_20LT406_091020_19_LOB_TA
0I00047-AQ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	138	-	14.8	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**SVE-01_20LT406_091020_20_LOB_TA
0I00047-AR**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	1070	-	14.6	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**CJ-04_20LT111_091220_14_LOB_TA
0I00047-AS**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	260	-	14.9	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**CJ-04_20LT111_091220_15_LOB_TA
0I00047-AT**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	167	-	15.0	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**CJ-04_20LT111_091220_16_LOB_TA
0I00047-AU**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	169	-	15.7	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20LT111_091220_17_LOB_TA
0I00047-AV**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	1170	-	15.3	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20LT113_091220_18_LOB_TA
0I00047-AW**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	133	-	15.0	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**CJ-04_20LT113_091220_19_LOB_TA
0I00047-AX**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	571	-	14.5	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**CJ-04_20LT116_091220_20_LOB_TA
0I00047-AY**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	153	-	15.0	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20LT124_091220_13_LOB_TA
0I00047-AZ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	247	-	14.5	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT320_091220_13_LOB_TA
0I00047-BA**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	93.8	-	15.0	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT321_091220_11_LOB_TA
0I00047-BB**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	239	-	14.6	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OL-01_20LT322_091220_12_LOB_TA
0I00047-BC**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	113	-	14.8	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT323_091220_14_LOB_TA
0I00047-BD**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	135	-	14.2	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OB-01_20ET601_091320_01_TOM_WB
0I00047-BE**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	110	-	15.2	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OB-01_20ET601_091320_02_TOM_WB
0I00047-BF**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	46.4	-	16.0	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET603_091320_03_TOM_WB
0I00047-BG**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	86.0	-	15.4	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OB-01_20ET605_091320_04_TOM_WB
0I00047-BH**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	129	-	14.3	ng/g	400	F009383	29-Sep-20	0J01013	30-Sep-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OL-01_20LT313_091220_17_LOB_TA
0100047-BI**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	300	-	14.9	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT313_091220_18_LOB_TA
0100047-BJ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	304	-	15.5	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OL-01_20LT314_091220_19_LOB_TA
0I00047-BK**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	869	-	15.3	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT314_091220_20_LOB_TA
0I00047-BL**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	1210	-	15.6	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT323_091220_15_LOB_TA
0I00047-BM**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	437	-	14.9	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OL-01_20LT324_091220_16_LOB_TA
0I00047-BN**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	288	-	15.0	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OB-01_20ET606_091320_05_TOM_WB
0I00047-BO**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	146	-	15.1	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET607_091320_06_TOM_WB
0I00047-BP**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	102	-	15.2	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-01_20ET607_091320_07_TOM_WB
0I00047-BQ

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	242	-	15.7	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET607_091320_08_TOM_WB
0I00047-BR**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	121	-	14.9	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET607_091320_09_TOM_WB
0I00047-BS**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	88.7	-	15.4	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET609_091320_10_TOM_WB
0I00047-BT**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	122	-	15.0	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

OB-01_20ET609_091320_11_TOM_WB
0I00047-BU

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	196	-	15.3	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET611_091320_12_TOM_WB
0I00047-BV**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	109	-	14.8	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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OB-01_20ET613_091320_13_TOM_WB
0I00047-BW

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	150	-	15.3	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET613_091320_14_TOM_WB
0I00047-BX**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	123	-	14.9	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET613_091320_15_TOM_WB
0I00047-BY**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	106	-	15.1	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OB-01_20ET614_091320_16_TOM_WB
0I00047-BZ**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	161	-	15.9	ng/g	400	F009384	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET614_091320_17_TOM_WB
0I00047-CA**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	148	-	15.1	ng/g	400	F009385	28-Sep-20	0J05014	02-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

**OB-01_20ET616_091320_18_TOM_WB
0I00047-CB**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	137	-	15.8	ng/g	400	F009385	28-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OB-01_20ET617_091320_19_TOM_WB
0I00047-CC**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	47.5	-	15.4	ng/g	400	F009385	28-Sep-20	0J05014	02-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**OB-01_20ET617_091320_20_TOM_WB
0I00047-CD**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	58.7	-	15.6	ng/g	400	F009385	28-Sep-20	0J05014	02-Oct-20	EPA 1631B	

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The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

HERRING_091020_LOBSTER_BAIT
0I00047-CE

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	55.4	-	14.9	ng/g	400	F009385	28-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

CJ-04_20LT109_091020_10_LOB_TA
0I00047-CG

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	150	-	15.1	ng/g	400	F011318	16-Nov-20	0K19020	18-Nov-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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**CJ-04_20LT109_091020_11_LOB_TA
0I00047-CH**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	0.323	-	0.038	ng/g	1	F011318	16-Nov-20	0K19020	18-Nov-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0129015 - F009375											
Cal Standard (0129015-CAL1)					Prepared & Analyzed: 28-Sep-20						
Mercury	0.484	-		ng/L	0.50000		96.9				
Cal Standard (0129015-CAL2)					Prepared & Analyzed: 28-Sep-20						
Mercury	0.990	-		ng/L	1.0000		99.0				
Cal Standard (0129015-CAL3)					Prepared & Analyzed: 28-Sep-20						
Mercury	5.137	-		ng/L	5.0000		103				
Cal Standard (0129015-CAL4)					Prepared & Analyzed: 28-Sep-20						
Mercury	20.05	-		ng/L	20.000		100				
Cal Standard (0129015-CAL5)					Prepared & Analyzed: 28-Sep-20						
Mercury	40.44	-		ng/L	40.000		101				
Calibration Blank (0129015-CCB1)					Prepared & Analyzed: 28-Sep-20						
Mercury	0.016	-		ng/L							
Calibration Blank (0129015-CCB2)					Prepared & Analyzed: 28-Sep-20						
Mercury	0.241	-		ng/L							
Calibration Blank (0129015-CCB3)					Prepared & Analyzed: 28-Sep-20						
Mercury	0.142	-		ng/L							
Calibration Check (0129015-CCV1)					Prepared & Analyzed: 28-Sep-20						
Mercury	5.070	-		ng/L	4.9950		102	77-123			
Calibration Check (0129015-CCV2)					Prepared & Analyzed: 28-Sep-20						
Mercury	5.428	-		ng/L	4.9950		109	77-123			

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0129015 - F009375

Calibration Check (0129015-CCV3) Prepared & Analyzed: 28-Sep-20

Mercury	5.275	-		ng/L	4.9950		106	77-123			
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Instrument Blank (0129015-IBL1) Prepared & Analyzed: 28-Sep-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0129015-IBL2) Prepared & Analyzed: 28-Sep-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0129015-IBL3) Prepared & Analyzed: 28-Sep-20

Mercury	ND	-	0.040	ng/L							U
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Initial Cal Blank (0129015-ICB1) Prepared & Analyzed: 28-Sep-20

Mercury	0.148	-		ng/L							
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Initial Cal Blank (0129015-ICB2) Prepared & Analyzed: 28-Sep-20

Mercury	0.069	-		ng/L							
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Initial Cal Check (0129015-ICV1) Prepared & Analyzed: 28-Sep-20

Mercury	5.560	-		ng/L	4.9950		111	79-121			
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Initial Cal Check (0129015-ICV2) Prepared & Analyzed: 28-Sep-20

Mercury	5.136	-		ng/L	4.9950		103	79-121			
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Initial Cal Check (0129015-ICV3) Prepared & Analyzed: 28-Sep-20

Mercury	4.960	-		ng/L	4.9950		99.3	79-121			
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Batch 0130011 - F009380

Cal Standard (0130011-CAL1) Prepared & Analyzed: 30-Sep-20

Mercury	0.547	-		ng/L	0.50000		109				
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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0130011 - F009380											
Cal Standard (0130011-CAL2)											
Mercury	0.969	-		ng/L	1.0000		96.9				Prepared & Analyzed: 30-Sep-20
Cal Standard (0130011-CAL3)											
Mercury	4.947	-		ng/L	5.0000		98.9				Prepared & Analyzed: 30-Sep-20
Cal Standard (0130011-CAL4)											
Mercury	19.32	-		ng/L	20.000		96.6				Prepared & Analyzed: 30-Sep-20
Cal Standard (0130011-CAL5)											
Mercury	39.26	-		ng/L	40.000		98.2				Prepared & Analyzed: 30-Sep-20
Calibration Blank (0130011-CCB1)											
Mercury	0.452	-		ng/L							Prepared & Analyzed: 30-Sep-20
Calibration Blank (0130011-CCB2)											
Mercury	0.244	-		ng/L							Prepared & Analyzed: 30-Sep-20
Calibration Blank (0130011-CCB3)											
Mercury	0.327	-		ng/L							Prepared & Analyzed: 30-Sep-20
Calibration Blank (0130011-CCB4)											
Mercury	0.290	-		ng/L							Prepared & Analyzed: 30-Sep-20
Calibration Blank (0130011-CCB5)											
Mercury	0.146	-		ng/L							Prepared & Analyzed: 30-Sep-20
Calibration Blank (0130011-CCB6)											
Mercury	0.130	-		ng/L							Prepared & Analyzed: 30-Sep-20

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0I30011 - F009380											
Calibration Blank (0I30011-CCB7)											
Mercury	0.145	-		ng/L							Prepared & Analyzed: 30-Sep-20
Calibration Blank (0I30011-CCB8)											
Mercury	0.039	-		ng/L							Prepared & Analyzed: 30-Sep-20
Calibration Blank (0I30011-CCB9)											
Mercury	0.084	-		ng/L							Prepared & Analyzed: 30-Sep-20
Calibration Blank (0I30011-CCBA)											
Mercury	0.067	-		ng/L							Prepared & Analyzed: 30-Sep-20
Calibration Check (0I30011-CCV1)											
Mercury	5.291	-		ng/L	4.9950		106	77-123			Prepared & Analyzed: 30-Sep-20
Calibration Check (0I30011-CCV2)											
Mercury	4.951	-		ng/L	4.9950		99.1	77-123			Prepared & Analyzed: 30-Sep-20
Calibration Check (0I30011-CCV3)											
Mercury	5.237	-		ng/L	4.9950		105	77-123			Prepared & Analyzed: 30-Sep-20
Calibration Check (0I30011-CCV4)											
Mercury	5.178	-		ng/L	4.9950		104	77-123			Prepared & Analyzed: 30-Sep-20
Calibration Check (0I30011-CCV5)											
Mercury	4.711	-		ng/L	4.9950		94.3	77-123			Prepared & Analyzed: 30-Sep-20
Calibration Check (0I30011-CCV6)											
Mercury	4.456	-		ng/L	4.9950		89.2	77-123			Prepared & Analyzed: 30-Sep-20

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0I30011 - F009380

Calibration Check (0I30011-CCV7) Prepared & Analyzed: 30-Sep-20

Mercury	4.724	-		ng/L	4.9950		94.6	77-123			
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Calibration Check (0I30011-CCV8) Prepared & Analyzed: 30-Sep-20

Mercury	4.313	-		ng/L	4.9950		86.3	77-123			
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Calibration Check (0I30011-CCV9) Prepared & Analyzed: 30-Sep-20

Mercury	4.247	-		ng/L	4.9950		85.0	77-123			
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Calibration Check (0I30011-CCVA) Prepared & Analyzed: 30-Sep-20

Mercury	4.298	-		ng/L	4.9950		86.0	77-123			
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Instrument Blank (0I30011-IBL1) Prepared & Analyzed: 30-Sep-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0I30011-IBL2) Prepared & Analyzed: 30-Sep-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0I30011-IBL3) Prepared & Analyzed: 30-Sep-20

Mercury	ND	-	0.040	ng/L							U
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Initial Cal Blank (0I30011-ICB1) Prepared & Analyzed: 30-Sep-20

Mercury	0.201	-		ng/L							
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Initial Cal Check (0I30011-ICV1) Prepared & Analyzed: 30-Sep-20

Mercury	4.667	-		ng/L	4.9950		93.4	79-121			
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Batch 0J01013 - F009383

Cal Standard (0J01013-CAL1) Prepared & Analyzed: 30-Sep-20

Mercury	0.499	-		ng/L	0.50000		99.7				
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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J01013 - F009383											
Cal Standard (0J01013-CAL2)					Prepared & Analyzed: 30-Sep-20						
Mercury	1.023	-		ng/L	1.0000		102				
Cal Standard (0J01013-CAL3)					Prepared & Analyzed: 30-Sep-20						
Mercury	5.000	-		ng/L	5.0000		100				
Cal Standard (0J01013-CAL4)					Prepared & Analyzed: 30-Sep-20						
Mercury	19.56	-		ng/L	20.000		97.8				
Cal Standard (0J01013-CAL5)					Prepared & Analyzed: 30-Sep-20						
Mercury	40.06	-		ng/L	40.000		100				
Calibration Blank (0J01013-CCB1)					Prepared & Analyzed: 30-Sep-20						
Mercury	-0.136	-		ng/L							U
Calibration Blank (0J01013-CCB2)					Prepared & Analyzed: 30-Sep-20						
Mercury	-0.104	-		ng/L							U
Calibration Blank (0J01013-CCB3)					Prepared & Analyzed: 30-Sep-20						
Mercury	-0.108	-		ng/L							U
Calibration Blank (0J01013-CCB4)					Prepared & Analyzed: 30-Sep-20						
Mercury	-0.051	-		ng/L							U
Calibration Blank (0J01013-CCB5)					Prepared & Analyzed: 30-Sep-20						
Mercury	-0.127	-		ng/L							U
Calibration Blank (0J01013-CCB6)					Prepared & Analyzed: 30-Sep-20						
Mercury	-0.073	-		ng/L							U

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J01013 - F009383											
Calibration Blank (0J01013-CCB7) Prepared & Analyzed: 30-Sep-20											
Mercury	-0.130	-		ng/L							U
Calibration Blank (0J01013-CCB8) Prepared & Analyzed: 30-Sep-20											
Mercury	-0.156	-		ng/L							U
Calibration Blank (0J01013-CCB9) Prepared & Analyzed: 30-Sep-20											
Mercury	-0.048	-		ng/L							U
Calibration Blank (0J01013-CCBA) Prepared & Analyzed: 30-Sep-20											
Mercury	-0.022	-		ng/L							U
Calibration Blank (0J01013-CCBB) Prepared & Analyzed: 30-Sep-20											
Mercury	-0.087	-		ng/L							U
Calibration Blank (0J01013-CCBC) Prepared & Analyzed: 30-Sep-20											
Mercury	-0.078	-		ng/L							U
Calibration Blank (0J01013-CCBD) Prepared & Analyzed: 30-Sep-20											
Mercury	0.010	-		ng/L							U
Calibration Blank (0J01013-CCBE) Prepared & Analyzed: 30-Sep-20											
Mercury	-0.093	-		ng/L							U
Calibration Blank (0J01013-CCBF) Prepared & Analyzed: 30-Sep-20											
Mercury	-0.054	-		ng/L							U
Calibration Blank (0J01013-CCBG) Prepared & Analyzed: 30-Sep-20											
Mercury	-0.113	-		ng/L							U

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0J01013 - F009383

Calibration Check (0J01013-CCV1)											
Prepared & Analyzed: 30-Sep-20											
Mercury	5.115	-		ng/L	4.9950		102	77-123			
Calibration Check (0J01013-CCV2)											
Prepared & Analyzed: 30-Sep-20											
Mercury	5.272	-		ng/L	4.9950		106	77-123			
Calibration Check (0J01013-CCV3)											
Prepared & Analyzed: 30-Sep-20											
Mercury	5.202	-		ng/L	4.9950		104	77-123			
Calibration Check (0J01013-CCV4)											
Prepared & Analyzed: 30-Sep-20											
Mercury	5.084	-		ng/L	4.9950		102	77-123			
Calibration Check (0J01013-CCV5)											
Prepared & Analyzed: 30-Sep-20											
Mercury	4.985	-		ng/L	4.9950		99.8	77-123			
Calibration Check (0J01013-CCV6)											
Prepared & Analyzed: 30-Sep-20											
Mercury	5.135	-		ng/L	4.9950		103	77-123			
Calibration Check (0J01013-CCV7)											
Prepared & Analyzed: 30-Sep-20											
Mercury	5.051	-		ng/L	4.9950		101	77-123			
Calibration Check (0J01013-CCV8)											
Prepared & Analyzed: 30-Sep-20											
Mercury	4.780	-		ng/L	4.9950		95.7	77-123			
Calibration Check (0J01013-CCV9)											
Prepared & Analyzed: 30-Sep-20											
Mercury	5.218	-		ng/L	4.9950		104	77-123			
Calibration Check (0J01013-CCVA)											
Prepared & Analyzed: 30-Sep-20											
Mercury	5.193	-		ng/L	4.9950		104	77-123			

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J01013 - F009383											
Calibration Check (0J01013-CCVB)					Prepared & Analyzed: 30-Sep-20						
Mercury	4.972	-		ng/L	4.9950		99.5	77-123			
Calibration Check (0J01013-CCVC)					Prepared & Analyzed: 30-Sep-20						
Mercury	4.909	-		ng/L	4.9950		98.3	77-123			
Calibration Check (0J01013-CCVD)					Prepared & Analyzed: 30-Sep-20						
Mercury	4.970	-		ng/L	4.9950		99.5	77-123			
Calibration Check (0J01013-CCVE)					Prepared & Analyzed: 30-Sep-20						
Mercury	4.554	-		ng/L	4.9950		91.2	77-123			
Calibration Check (0J01013-CCVF)					Prepared & Analyzed: 30-Sep-20						
Mercury	4.820	-		ng/L	4.9950		96.5	77-123			
Calibration Check (0J01013-CCVG)					Prepared & Analyzed: 30-Sep-20						
Mercury	4.753	-		ng/L	4.9950		95.2	77-123			
Instrument Blank (0J01013-IBL1)					Prepared & Analyzed: 30-Sep-20						
Mercury	ND	-	0.040	ng/L							U
Instrument Blank (0J01013-IBL2)					Prepared & Analyzed: 30-Sep-20						
Mercury	ND	-	0.040	ng/L							U
Instrument Blank (0J01013-IBL3)					Prepared & Analyzed: 30-Sep-20						
Mercury	ND	-	0.040	ng/L							U
Initial Cal Blank (0J01013-ICB1)					Prepared & Analyzed: 30-Sep-20						
Mercury	-0.032	-		ng/L							U

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J01013 - F009383											
Initial Cal Check (0J01013-ICV1)					Prepared & Analyzed: 30-Sep-20						
Mercury	5.528	-		ng/L	4.9950		111	79-121			
Batch 0J02003 - F009415											
Cal Standard (0J02003-CAL1)					Prepared & Analyzed: 01-Oct-20						
Mercury	0.485	-		ng/L	0.50000		97.0				
Cal Standard (0J02003-CAL2)					Prepared & Analyzed: 01-Oct-20						
Mercury	0.973	-		ng/L	1.0000		97.3				
Cal Standard (0J02003-CAL3)					Prepared & Analyzed: 01-Oct-20						
Mercury	5.062	-		ng/L	5.0000		101				
Cal Standard (0J02003-CAL4)					Prepared & Analyzed: 01-Oct-20						
Mercury	20.67	-		ng/L	20.000		103				
Cal Standard (0J02003-CAL5)					Prepared & Analyzed: 01-Oct-20						
Mercury	40.45	-		ng/L	40.000		101				
Calibration Blank (0J02003-CCB1)					Prepared & Analyzed: 01-Oct-20						
Mercury	0.149	-		ng/L							
Calibration Blank (0J02003-CCB2)					Prepared & Analyzed: 01-Oct-20						
Mercury	0.075	-		ng/L							
Calibration Blank (0J02003-CCB3)					Prepared & Analyzed: 01-Oct-20						
Mercury	0.100	-		ng/L							

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J02003 - F009415											
Calibration Blank (0J02003-CCB4)											
Mercury	0.027	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCB5)											
Mercury	0.053	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCB6)											
Mercury	0.018	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCB7)											
Mercury	0.165	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCB8)											
Mercury	0.446	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCB9)											
Mercury	0.077	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCBA)											
Mercury	0.080	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCBB)											
Mercury	0.015	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCBC)											
Mercury	0.041	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCBD)											
Mercury	0.037	-		ng/L							Prepared & Analyzed: 01-Oct-20

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J02003 - F009415											
Calibration Blank (0J02003-CCBE)											
Prepared & Analyzed: 01-Oct-20											
Mercury	0.002	-		ng/L							
Calibration Check (0J02003-CCV1)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.370	-		ng/L	4.9950		107	77-123			
Calibration Check (0J02003-CCV2)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.541	-		ng/L	4.9950		111	77-123			
Calibration Check (0J02003-CCV3)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.528	-		ng/L	4.9950		111	77-123			
Calibration Check (0J02003-CCV4)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.277	-		ng/L	4.9950		106	77-123			
Calibration Check (0J02003-CCV5)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.772	-		ng/L	4.9950		116	77-123			
Calibration Check (0J02003-CCV7)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.446	-		ng/L	4.9950		109	77-123			
Calibration Check (0J02003-CCV8)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.049	-		ng/L	4.9950		101	77-123			
Calibration Check (0J02003-CCV9)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.029	-		ng/L	4.9950		101	77-123			
Calibration Check (0J02003-CCVA)											
Prepared & Analyzed: 01-Oct-20											
Mercury	4.948	-		ng/L	4.9950		99.1	77-123			

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0J02003 - F009415

Calibration Check (0J02003-CCVB)					Prepared & Analyzed: 01-Oct-20						
Mercury	4.814	-		ng/L	4.9950		96.4	77-123			
Calibration Check (0J02003-CCVC)					Prepared & Analyzed: 01-Oct-20						
Mercury	4.719	-		ng/L	4.9950		94.5	77-123			
Calibration Check (0J02003-CCVD)					Prepared & Analyzed: 01-Oct-20						
Mercury	5.036	-		ng/L	4.9950		101	77-123			
Calibration Check (0J02003-CCVE)					Prepared & Analyzed: 01-Oct-20						
Mercury	4.723	-		ng/L	4.9950		94.6	77-123			
Instrument Blank (0J02003-IBL1)					Prepared & Analyzed: 01-Oct-20						
Mercury	ND	-	0.040	ng/L							U
Instrument Blank (0J02003-IBL2)					Prepared & Analyzed: 01-Oct-20						
Mercury	ND	-	0.040	ng/L							U
Instrument Blank (0J02003-IBL3)					Prepared & Analyzed: 01-Oct-20						
Mercury	ND	-	0.040	ng/L							U
Initial Cal Blank (0J02003-ICB1)					Prepared & Analyzed: 01-Oct-20						
Mercury	0.108	-		ng/L							
Initial Cal Check (0J02003-ICV1)					Prepared & Analyzed: 01-Oct-20						
Mercury	5.171	-		ng/L	4.9950		104	79-121			

Batch 0J05014 - F009384

Cal Standard (0J05014-CAL1)					Prepared & Analyzed: 02-Oct-20						
Mercury	0.459	-		ng/L	0.50000		91.8				

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J05014 - F009384											
Cal Standard (0J05014-CAL2)					Prepared & Analyzed: 02-Oct-20						
Mercury	0.986	-		ng/L	1.0000		98.6				
Cal Standard (0J05014-CAL3)					Prepared & Analyzed: 02-Oct-20						
Mercury	5.135	-		ng/L	5.0000		103				
Cal Standard (0J05014-CAL4)					Prepared & Analyzed: 02-Oct-20						
Mercury	20.26	-		ng/L	20.000		101				
Cal Standard (0J05014-CAL5)					Prepared & Analyzed: 02-Oct-20						
Mercury	42.23	-		ng/L	40.000		106				
Calibration Blank (0J05014-CCB1)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.145	-		ng/L							U
Calibration Blank (0J05014-CCB2)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.165	-		ng/L							U
Calibration Blank (0J05014-CCB3)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.173	-		ng/L							U
Calibration Blank (0J05014-CCB4)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.228	-		ng/L							U
Calibration Blank (0J05014-CCB5)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.155	-		ng/L							U
Calibration Blank (0J05014-CCB6)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.248	-		ng/L							U

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J05014 - F009384											
Calibration Blank (0J05014-CCB7) Prepared & Analyzed: 02-Oct-20											
Mercury	-0.206	-		ng/L							U
Calibration Blank (0J05014-CCB8) Prepared & Analyzed: 02-Oct-20											
Mercury	-0.212	-		ng/L							U
Calibration Blank (0J05014-CCB9) Prepared & Analyzed: 02-Oct-20											
Mercury	-0.147	-		ng/L							U
Calibration Check (0J05014-CCV1) Prepared & Analyzed: 02-Oct-20											
Mercury	5.593	-		ng/L	4.9950		112	77-123			
Calibration Check (0J05014-CCV2) Prepared & Analyzed: 02-Oct-20											
Mercury	5.354	-		ng/L	4.9950		107	77-123			
Calibration Check (0J05014-CCV3) Prepared & Analyzed: 02-Oct-20											
Mercury	5.149	-		ng/L	4.9950		103	77-123			
Calibration Check (0J05014-CCV4) Prepared & Analyzed: 02-Oct-20											
Mercury	5.132	-		ng/L	4.9950		103	77-123			
Calibration Check (0J05014-CCV5) Prepared & Analyzed: 02-Oct-20											
Mercury	4.822	-		ng/L	4.9950		96.5	77-123			
Calibration Check (0J05014-CCV6) Prepared & Analyzed: 02-Oct-20											
Mercury	4.854	-		ng/L	4.9950		97.2	77-123			
Calibration Check (0J05014-CCV7) Prepared & Analyzed: 02-Oct-20											
Mercury	4.877	-		ng/L	4.9950		97.6	77-123			

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0J05014 - F009384

Calibration Check (0J05014-CCV8) Prepared & Analyzed: 02-Oct-20

Mercury	4.585	-		ng/L	4.9950		91.8	77-123			
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Calibration Check (0J05014-CCV9) Prepared & Analyzed: 02-Oct-20

Mercury	4.816	-		ng/L	4.9950		96.4	77-123			
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Instrument Blank (0J05014-IBL1) Prepared & Analyzed: 02-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J05014-IBL2) Prepared & Analyzed: 02-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J05014-IBL3) Prepared & Analyzed: 02-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Initial Cal Blank (0J05014-ICB1) Prepared & Analyzed: 02-Oct-20

Mercury	0.012	-		ng/L							
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Initial Cal Check (0J05014-ICV1) Prepared & Analyzed: 02-Oct-20

Mercury	5.620	-		ng/L	4.9950		113	79-121			
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Batch 0J07015 - F009413

Cal Standard (0J07015-CAL1) Prepared & Analyzed: 06-Oct-20

Mercury	0.555	-		ng/L	0.50000		111				
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Cal Standard (0J07015-CAL2) Prepared & Analyzed: 06-Oct-20

Mercury	0.966	-		ng/L	1.0000		96.6				
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J07015 - F009413											
Cal Standard (0J07015-CAL3)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.000	-		ng/L	5.0000		100				
Cal Standard (0J07015-CAL4)					Prepared & Analyzed: 06-Oct-20						
Mercury	19.19	-		ng/L	20.000		96.0				
Cal Standard (0J07015-CAL5)					Prepared & Analyzed: 06-Oct-20						
Mercury	38.53	-		ng/L	40.000		96.3				
Calibration Blank (0J07015-CCB1)					Prepared & Analyzed: 06-Oct-20						
Mercury	0.064	-		ng/L							
Calibration Blank (0J07015-CCB2)					Prepared & Analyzed: 06-Oct-20						
Mercury	0.054	-		ng/L							
Calibration Blank (0J07015-CCB3)					Prepared & Analyzed: 06-Oct-20						
Mercury	0.022	-		ng/L							
Calibration Blank (0J07015-CCB4)					Prepared & Analyzed: 06-Oct-20						
Mercury	0.044	-		ng/L							
Calibration Check (0J07015-CCV1)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.305	-		ng/L	4.9950		106	77-123			
Calibration Check (0J07015-CCV2)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.397	-		ng/L	4.9950		108	77-123			
Calibration Check (0J07015-CCV3)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.364	-		ng/L	4.9950		107	77-123			

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0J07015 - F009413

Calibration Check (0J07015-CCV4)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.608	-		ng/L	4.9950		112	77-123			
Instrument Blank (0J07015-IBL1)					Prepared & Analyzed: 06-Oct-20						
Mercury	ND	-	0.040	ng/L							U
Instrument Blank (0J07015-IBL2)					Prepared & Analyzed: 06-Oct-20						
Mercury	ND	-	0.040	ng/L							U
Instrument Blank (0J07015-IBL3)					Prepared & Analyzed: 06-Oct-20						
Mercury	ND	-	0.040	ng/L							U
Initial Cal Blank (0J07015-ICB1)					Prepared & Analyzed: 06-Oct-20						
Mercury	0.055	-		ng/L							
Initial Cal Check (0J07015-ICV1)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.495	-		ng/L	4.9950		110	79-121			

Batch 0J08011 - F009413

Cal Standard (0J08011-CAL1)					Prepared & Analyzed: 07-Oct-20						
Mercury	0.539	-		ng/L	0.50000		108				
Cal Standard (0J08011-CAL2)					Prepared & Analyzed: 07-Oct-20						
Mercury	1.003	-		ng/L	1.0000		100				
Cal Standard (0J08011-CAL3)					Prepared & Analyzed: 07-Oct-20						
Mercury	4.903	-		ng/L	5.0000		98.1				

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J08011 - F009413											
Cal Standard (0J08011-CAL4) Prepared & Analyzed: 07-Oct-20											
Mercury	18.82	-		ng/L	20.000		94.1				
Cal Standard (0J08011-CAL5) Prepared & Analyzed: 07-Oct-20											
Mercury	39.89	-		ng/L	40.000		99.7				
Calibration Blank (0J08011-CCB1) Prepared & Analyzed: 07-Oct-20											
Mercury	-0.013	-		ng/L							U
Calibration Blank (0J08011-CCB2) Prepared & Analyzed: 07-Oct-20											
Mercury	-0.044	-		ng/L							U
Calibration Blank (0J08011-CCB3) Prepared & Analyzed: 07-Oct-20											
Mercury	-0.041	-		ng/L							U
Calibration Blank (0J08011-CCB4) Prepared & Analyzed: 07-Oct-20											
Mercury	0.021	-		ng/L							
Calibration Check (0J08011-CCV1) Prepared & Analyzed: 07-Oct-20											
Mercury	5.202	-		ng/L	4.9950		104	77-123			
Calibration Check (0J08011-CCV2) Prepared & Analyzed: 07-Oct-20											
Mercury	5.176	-		ng/L	4.9950		104	77-123			
Calibration Check (0J08011-CCV3) Prepared & Analyzed: 07-Oct-20											
Mercury	5.063	-		ng/L	4.9950		101	77-123			
Calibration Check (0J08011-CCV4) Prepared & Analyzed: 07-Oct-20											
Mercury	4.846	-		ng/L	4.9950		97.0	77-123			

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0J08011 - F009413

Instrument Blank (0J08011-IBL1) Prepared & Analyzed: 07-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J08011-IBL2) Prepared & Analyzed: 07-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J08011-IBL3) Prepared & Analyzed: 07-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Initial Cal Blank (0J08011-ICB1) Prepared & Analyzed: 07-Oct-20

Mercury	0.074	-		ng/L							
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Initial Cal Check (0J08011-ICV1) Prepared & Analyzed: 07-Oct-20

Mercury	5.359	-		ng/L	4.9950		107	79-121			
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Batch 0K19020 - F011318

Cal Standard (0K19020-CAL1) Prepared & Analyzed: 18-Nov-20

Mercury	0.471	-		ng/L	0.50000		94.1				
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Cal Standard (0K19020-CAL2) Prepared & Analyzed: 18-Nov-20

Mercury	1.048	-		ng/L	1.0000		105				
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Cal Standard (0K19020-CAL3) Prepared & Analyzed: 18-Nov-20

Mercury	4.810	-		ng/L	5.0000		96.2				
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Cal Standard (0K19020-CAL4) Prepared & Analyzed: 18-Nov-20

Mercury	19.78	-		ng/L	20.000		98.9				
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0K19020 - F011318											
Cal Standard (0K19020-CAL5)					Prepared & Analyzed: 18-Nov-20						
Mercury	42.37	-		ng/L	40.000		106				
Calibration Blank (0K19020-CCB1)					Prepared & Analyzed: 18-Nov-20						
Mercury	0.207	-		ng/L							
Calibration Blank (0K19020-CCB2)					Prepared & Analyzed: 18-Nov-20						
Mercury	0.156	-		ng/L							
Calibration Check (0K19020-CCV1)					Prepared & Analyzed: 18-Nov-20						
Mercury	5.035	-		ng/L	4.9950		101	77-123			
Calibration Check (0K19020-CCV2)					Prepared & Analyzed: 18-Nov-20						
Mercury	5.464	-		ng/L	4.9950		109	77-123			
Instrument Blank (0K19020-IBL1)					Prepared & Analyzed: 18-Nov-20						
Mercury	ND	-	0.040	ng/L							U
Instrument Blank (0K19020-IBL2)					Prepared & Analyzed: 18-Nov-20						
Mercury	ND	-	0.040	ng/L							U
Instrument Blank (0K19020-IBL3)					Prepared & Analyzed: 18-Nov-20						
Mercury	ND	-	0.040	ng/L							U
Initial Cal Blank (0K19020-ICB1)					Prepared & Analyzed: 18-Nov-20						
Mercury	0.240	-		ng/L							
Initial Cal Check (0K19020-ICV1)					Prepared & Analyzed: 18-Nov-20						
Mercury	5.051	-		ng/L	4.9950		101	79-121			



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009375 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009375-BLK1)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F009375-BLK2)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F009375-BLK3)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F009375-BLK4)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	ND	-	0.749	ng/g							U
Blank (F009375-BLK5)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	ND	-	0.749	ng/g							U
Blank (F009375-BLK6)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	ND	-	0.771	ng/g							U
Blank (F009375-BLK7)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	ND	-	0.794	ng/g							U
LCS (F009375-BS1)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	8.510	-	0.800	ng/g	8.0000		106	75-125			
LCS Dup (F009375-BSD1)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	8.240	-	0.800	ng/g	8.0000		103	75-125	3.23	24	
Matrix Spike (F009375-MS1)					Prepared: 22-Sep-20 Analyzed: 28-Sep-20						
Mercury	566.1	-	15.0	ng/g	375.85	43.75	139	71-125			QM-05

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009375 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix Spike (F009375-MS2)		Source: 0100033-02		Prepared: 22-Sep-20 Analyzed: 28-Sep-20							
Mercury	381.0	-	15.0	ng/g	375.14	35.90	92.0	71-125			
Matrix Spike Dup (F009375-MSD1)		Source: 0100047-01		Prepared: 22-Sep-20 Analyzed: 28-Sep-20							
Mercury	531.3	-	15.2	ng/g	379.13	43.75	129	71-125	7.76	24	QM-05
Matrix Spike Dup (F009375-MSD2)		Source: 0100033-02		Prepared: 22-Sep-20 Analyzed: 28-Sep-20							
Mercury	379.1	-	15.9	ng/g	396.27	35.90	86.6	71-125	6.03	24	

Batch F009376 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009376-BLK1)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009376-BLK2)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009376-BLK3)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
LCS (F009376-BS1)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	7.829	-	0.800	ng/g	8.0000		97.9	75-125			
LCS Dup (F009376-BSD1)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	7.846	-	0.800	ng/g	8.0000		98.1	75-125	0.217	24	
Matrix Spike (F009376-MS1)		Source: 0100047-13		Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	1092	-	15.0	ng/g	374.02	761.4	88.5	71-125			



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data


Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009376 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix Spike (F009376-MS2)		Source: 0100047-14		Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	602.7	-	15.2	ng/g	379.42	267.6	88.3	71-125			
Matrix Spike Dup (F009376-MSD1)		Source: 0100047-13		Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	1082	-	15.6	ng/g	390.23	761.4	82.0	71-125	7.59	24	
Matrix Spike Dup (F009376-MSD2)		Source: 0100047-14		Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	578.7	-	14.8	ng/g	370.14	267.6	84.0	71-125	4.96	24	

Batch F009379 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009379-BLK1)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009379-BLK2)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009379-BLK3)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
LCS (F009379-BS1)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	7.868	-	0.800	ng/g	8.0000		98.3	75-125			
LCS Dup (F009379-BSD1)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	7.792	-	0.800	ng/g	8.0000		97.4	75-125	0.971	24	
Matrix Spike (F009379-MS1)		Source: 0100047-23		Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	420.4	-	14.9	ng/g	372.21	103.1	85.3	71-125			



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009379 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix Spike (F009379-MS2)		Source: 0100047-35		Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	590.8	-	14.9	ng/g	372.34	268.1	86.7	71-125			
Matrix Spike Dup (F009379-MSD1)		Source: 0100047-23		Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	417.1	-	16.0	ng/g	399.44	103.1	78.6	71-125	8.11	24	
Matrix Spike Dup (F009379-MSD2)		Source: 0100047-35		Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	605.6	-	15.9	ng/g	397.85	268.1	84.9	71-125	2.12	24	

Batch F009380 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009380-BLK1)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009380-BLK2)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009380-BLK3)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
LCS (F009380-BS1)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	7.723	-	0.800	ng/g	8.0000		96.5	75-125			
LCS Dup (F009380-BSD1)				Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	7.807	-	0.800	ng/g	8.0000		97.6	75-125	1.08	24	
Matrix Spike (F009380-MS1)		Source: 0100047-36		Prepared: 22-Sep-20 Analyzed: 30-Sep-20							
Mercury	518.5	-	15.6	ng/g	390.85	210.5	78.8	71-125			





Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009380 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix Spike (F009380-MS2)		Source: 0100047-37			Prepared: 22-Sep-20 Analyzed: 30-Sep-20						
Mercury	505.9	-	15.9	ng/g	396.43	165.0	86.0	71-125			
Matrix Spike Dup (F009380-MSD1)		Source: 0100047-36			Prepared: 22-Sep-20 Analyzed: 30-Sep-20						
Mercury	521.6	-	14.4	ng/g	359.35	210.5	86.6	71-125	9.38	24	
Matrix Spike Dup (F009380-MSD2)		Source: 0100047-37			Prepared: 22-Sep-20 Analyzed: 30-Sep-20						
Mercury	504.0	-	14.6	ng/g	365.00	165.0	92.9	71-125	7.71	24	

Batch F009381 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009381-BLK1)					Prepared: 29-Sep-20 Analyzed: 30-Sep-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F009381-BLK2)					Prepared: 29-Sep-20 Analyzed: 30-Sep-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F009381-BLK3)					Prepared: 29-Sep-20 Analyzed: 30-Sep-20						
Mercury	ND	-	0.800	ng/g							U
LCS (F009381-BS1)					Prepared: 29-Sep-20 Analyzed: 30-Sep-20						
Mercury	7.837	-	0.800	ng/g	8.0000		98.0	75-125			
LCS Dup (F009381-BSD1)					Prepared: 29-Sep-20 Analyzed: 30-Sep-20						
Mercury	7.778	-	0.800	ng/g	8.0000		97.2	75-125	0.756	24	
Matrix Spike (F009381-MS1)		Source: 0100047-38			Prepared: 29-Sep-20 Analyzed: 30-Sep-20						
Mercury	569.5	-	15.7	ng/g	393.31	180.2	99.0	71-125			

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009381 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix Spike (F009381-MS2)		Source: 0100047-39		Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	401.1	-	15.0	ng/g	374.02	107.9	78.4	71-125			
Matrix Spike Dup (F009381-MSD1)		Source: 0100047-38		Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	557.4	-	15.2	ng/g	380.28	180.2	99.2	71-125	0.205	24	
Matrix Spike Dup (F009381-MSD2)		Source: 0100047-39		Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	443.3	-	15.7	ng/g	391.15	107.9	85.8	71-125	8.97	24	

Batch F009382 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009382-BLK1)				Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009382-BLK2)				Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009382-BLK3)				Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	ND	-	0.800	ng/g							U
LCS (F009382-BS1)				Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	7.612	-	0.800	ng/g	8.0000		95.2	75-125			
LCS Dup (F009382-BSD1)				Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	7.854	-	0.800	ng/g	8.0000		98.2	75-125	3.12	24	
Matrix Spike (F009382-MS1)		Source: 0100047-40		Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	886.7	-	15.3	ng/g	381.88	564.1	84.5	71-125			



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009382 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix Spike (F009382-MS2)		Source: 0100047-41		Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	848.7	-	15.0	ng/g	374.44	523.3	86.9	71-125			
Matrix Spike Dup (F009382-MSD1)		Source: 0100047-40		Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	918.9	-	15.1	ng/g	376.70	564.1	94.2	71-125	10.9	24	
Matrix Spike Dup (F009382-MSD2)		Source: 0100047-41		Prepared: 29-Sep-20 Analyzed: 30-Sep-20							
Mercury	949.8	-	15.0	ng/g	373.46	523.3	114	71-125	27.1	24	QM-05

Batch F009383 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009383-BLK1)		Prepared: 17-Sep-20 Analyzed: 30-Sep-20									
Mercury	ND	-	0.800	ng/g							U
Blank (F009383-BLK2)		Prepared: 17-Sep-20 Analyzed: 30-Sep-20									
Mercury	ND	-	0.800	ng/g							U
Blank (F009383-BLK3)		Prepared: 17-Sep-20 Analyzed: 30-Sep-20									
Mercury	ND	-	0.800	ng/g							U
LCS (F009383-BS1)		Prepared: 17-Sep-20 Analyzed: 30-Sep-20									
Mercury	6.426	-	0.800	ng/g	8.0000		80.3	75-125			
LCS Dup (F009383-BSD1)		Prepared: 17-Sep-20 Analyzed: 30-Sep-20									
Mercury	7.060	-	0.800	ng/g	8.0000		88.2	75-125	9.41	24	
Matrix Spike (F009383-MS1)		Source: 0100047-42		Prepared: 17-Sep-20 Analyzed: 30-Sep-20							
Mercury	665.0	-	14.6	ng/g	363.93	252.0	113	71-125			



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009383 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix Spike (F009383-MS2)		Source: 0100047-59		Prepared: 17-Sep-20 Analyzed: 30-Sep-20							
Mercury	444.5	-	15.3	ng/g	383.35	200.6	63.6	71-125			QM-05
Matrix Spike Dup (F009383-MSD1)		Source: 0100047-42		Prepared: 17-Sep-20 Analyzed: 30-Sep-20							
Mercury	748.4	-	14.8	ng/g	369.73	252.0	134	71-125	16.8	24	QM-05
Matrix Spike Dup (F009383-MSD2)		Source: 0100047-59		Prepared: 17-Sep-20 Analyzed: 30-Sep-20							
Mercury	490.3	-	15.5	ng/g	387.21	200.6	74.8	71-125	16.2	24	

Batch F009384 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009384-BLK1)		Prepared: 29-Sep-20 Analyzed: 01-Oct-20									
Mercury	ND	-	0.800	ng/g							U
Blank (F009384-BLK2)		Prepared: 29-Sep-20 Analyzed: 01-Oct-20									
Mercury	ND	-	0.800	ng/g							U
Blank (F009384-BLK3)		Prepared: 29-Sep-20 Analyzed: 01-Oct-20									
Mercury	ND	-	0.800	ng/g							U
LCS (F009384-BS1)		Prepared: 29-Sep-20 Analyzed: 01-Oct-20									
Mercury	6.844	-	0.800	ng/g	8.0000		85.6	75-125			
LCS Dup (F009384-BSD1)		Prepared: 29-Sep-20 Analyzed: 01-Oct-20									
Mercury	7.189	-	0.800	ng/g	8.0000		89.9	75-125	4.91	24	
Matrix Spike (F009384-MS1)		Source: 0100047-65		Prepared: 29-Sep-20 Analyzed: 01-Oct-20							
Mercury	1388	-	15.1	ng/g	377.98	1249	36.8	71-125			E-01, QM-07





Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009384 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix Spike (F009384-MS2)		Source: 0100047-91		Prepared: 29-Sep-20 Analyzed: 01-Oct-20							
Mercury	492.8	-	15.4	ng/g	385.86	171.3	83.3	71-125			
Matrix Spike (F009384-MS5)		Source: 0100047-65RE3		Prepared: 29-Sep-20 Analyzed: 07-Oct-20							
Mercury	1282	-	37.8	ng/g	377.98	971.0	82.3	71-125			
Matrix Spike Dup (F009384-MSD1)		Source: 0100047-65		Prepared: 29-Sep-20 Analyzed: 01-Oct-20							
Mercury	1472	-	15.3	ng/g	383.35	1249	58.2	71-125	45.2	24	QM-07
Matrix Spike Dup (F009384-MSD2)		Source: 0100047-91		Prepared: 29-Sep-20 Analyzed: 01-Oct-20							
Mercury	577.2	-	15.1	ng/g	377.27	171.3	108	71-125	25.4	24	QM-07
Matrix Spike Dup (F009384-MSD5)		Source: 0100047-65RE3		Prepared: 29-Sep-20 Analyzed: 07-Oct-20							
Mercury	1288	-	38.4	ng/g	383.35	971.0	82.8	71-125	0.550	24	

Batch F009385 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009385-BLK1)				Prepared: 28-Sep-20 Analyzed: 02-Oct-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009385-BLK2)				Prepared: 28-Sep-20 Analyzed: 02-Oct-20							
Mercury	ND	-	0.800	ng/g							U
Blank (F009385-BLK3)				Prepared: 28-Sep-20 Analyzed: 02-Oct-20							
Mercury	ND	-	0.800	ng/g							U
LCS (F009385-BS1)				Prepared: 28-Sep-20 Analyzed: 02-Oct-20							
Mercury	8.381	-	0.800	ng/g	8.0000		105	75-125			

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Patrick Garcia-Strickland, Business Unit Manager

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009385 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

LCS Dup (F009385-BSD1)					Prepared: 28-Sep-20 Analyzed: 02-Oct-20						
Mercury	8.180	-	0.800	ng/g	8.0000		102	75-125	2.43	24	
Matrix Spike (F009385-MS1)					Source: 0100047-12 Prepared: 28-Sep-20 Analyzed: 02-Oct-20						
Mercury	627.3	-	14.9	ng/g	371.79	284.2	92.3	71-125			
Matrix Spike Dup (F009385-MSD1)					Source: 0100047-12 Prepared: 28-Sep-20 Analyzed: 02-Oct-20						
Mercury	612.8	-	15.5	ng/g	386.61	284.2	85.0	71-125	8.19	24	

Batch F011318 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F011318-BLK1)					Prepared: 16-Nov-20 Analyzed: 18-Nov-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F011318-BLK2)					Prepared: 16-Nov-20 Analyzed: 18-Nov-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F011318-BLK3)					Prepared: 16-Nov-20 Analyzed: 18-Nov-20						
Mercury	ND	-	0.800	ng/g							U
LCS (F011318-BS1)					Prepared: 16-Nov-20 Analyzed: 18-Nov-20						
Mercury	7.901	-	0.800	ng/g	8.0000		98.8	75-125			
LCS (F011318-BS2)					Prepared: 16-Nov-20 Analyzed: 18-Nov-20						
Mercury	8.204	-	0.800	ng/g	8.0000		103	75-125			
LCS (F011318-BS3)					Prepared: 16-Nov-20 Analyzed: 18-Nov-20						
Mercury	9.584	-	0.800	ng/g	8.0000		120	75-125			

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Patrick Garcia-Strickland, Business Unit Manager

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: Penobscot Sediments Hg Project Manager: Denise King	Reported: 24-Nov-20 15:28
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F011318 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

LCS Dup (F011318-BSD1)		Prepared: 16-Nov-20 Analyzed: 18-Nov-20									
Mercury	7.439	-	0.800	ng/g	8.0000		93.0	75-125	6.02	24	
Matrix Spike (F011318-MS1)		Source: 0100047-CG Prepared: 16-Nov-20 Analyzed: 18-Nov-20									
Mercury	533.3	-	15.4	ng/g	385.57	150.4	99.3	71-125			
Matrix Spike Dup (F011318-MSD1)		Source: 0100047-CG Prepared: 16-Nov-20 Analyzed: 18-Nov-20									
Mercury	456.1	-	15.1	ng/g	376.98	150.4	81.1	71-125	20.2	24	

Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: Penobscot Sediments Hg
Project Manager: Denise King

Reported:
24-Nov-20 15:28

Notes and Definitions

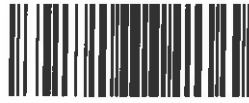
- U Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
- QM-05 The spike recovery was outside acceptance limits for the MS/MSD and or AS/ASD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- E-01 Sample was preceded by a sample exceeding the calibration curve and was reanalyzed for confirmation.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the method detection limit if reported to the MDL or above the reporting limit if reported to the MRL.
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



0129016
Attached

ANALYSIS SEQUENCE

0129015



QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: PCS
Analyzed: 9/28/2020

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0129015-IBL1	QC	1			
0129015-IBL2	QC	2			
0129015-IBL3	QC	3			
0129015-CAL1	QC	4	2002064		
0129015-CAL2	QC	5	2002065		
0129015-CAL3	QC	6	2002220		
0129015-CAL4	QC	7	2002221		
0129015-CAL5	QC	8	2002222		
0129015-ICV1	QC	9	2001809		
0129015-ICB1	QC	10			
0129015-ICV2	QC	11	2001809		
0129015-ICV3	QC	12	2001809		
0129015-ICB2	QC	13			
F009375-BS1	QC	14			
F009375-BSD1	QC	15			
F009375-BLK1	QC	16			
F009375-BLK2	QC	17			
F009375-BLK3	QC	18			
F009375-BLK4	QC	19			
F009375-BLK5	QC	20			
F009375-BLK6	QC	21			
F009375-BLK7	QC	22			
0100047-01	Hg-CVAFS-T-7030	23			
0129015-CCV1	QC	24	2001809		
0129015-CCB1	QC	25			
F009375-MS1	QC	26			
F009375-MSD1	QC	27			
0100033-02	Hg-CVAFS-T-7030	28			
F009375-MS2	QC	29			
F009375-MSD2	QC	30			
0100010-01	Hg-CVAFS-T-7030	31			Scan all data for level IV report
0100032-01	Hg-CVAFS-T-7030	32			Scan all data for level IV report
0100033-01	Hg-CVAFS-T-7030	33			
0100033-03	Hg-CVAFS-T-7030	34			
0100033-04	Hg-CVAFS-T-7030	35			
0129015-CCV2	QC	36	2001809		

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/28/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I29015-CCB2	QC	37			
0I00047-02	Hg-CVAFS-T-7030	38			
0I00047-03	Hg-CVAFS-T-7030	39			
0I00047-04	Hg-CVAFS-T-7030	40			
0I00047-05	Hg-CVAFS-T-7030	41			
0I00047-06	Hg-CVAFS-T-7030	42			
0I00047-07	Hg-CVAFS-T-7030	43			
0I00047-08	Hg-CVAFS-T-7030	44			
0I00047-09	Hg-CVAFS-T-7030	45			
0I00047-10	Hg-CVAFS-T-7030	46			
0I00051-01	Hg-CVAFS-T-7030	47			Scan all data for level IV report
0I29015-CCV3	QC	48	2001809		
0I29015-CCB3	QC	49			



Samples Loaded By

9/29/20

Date



Data Processed By

9/29/20

Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>EMB</u>	Sequence(s) #: <u>0129015</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200928-2</u>
Date: <u>9/29/2020</u>	WO (s) #: _____
Batch #(s): <u>F009375</u>	

• Select the correct preparation method.

Analyte	Prep Method	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest Air/Gas
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest Sed/Soil
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb Sed/Soil
<input checked="" type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest Tissue
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation Air/Gas
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric Tissue
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation Water
<input type="checkbox"/> Hg0	NA	NA Water
<input type="checkbox"/> Inorg Hg	NA	NA Water

Analyst Initials: AMB 9/29/20 Reviewer Initials: PGS

- | | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | | | |
| (b) Check 5% of transcription from Instrument print-out and Excel file | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | | | |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 50 ml / aliquot = Excel dilution value | | | |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): _____ | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>EMB</u>	Sequence(s) #: <u>0129015</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200928-2</u>
Date: <u>9/29/2020</u>	WO (s) #: <u>0</u>
Batch #(s): <u>F009375</u>	_____

Analyst Initials EMB 9/29/20 **Reviewer Initials** PGS

- | | | | | |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------|-----------------------------------------|--------------------------|
| 5b. Has the B/C section data been uploaded? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| QA/QC Data Checked | | | | |
| 6. RSD CF (≤ 15%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 7. The calibration curve included a minimum of 5 Standards | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| 9. ICV and CCV % Recoveries EPA 1631E (77-123%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 10. Do all calibration points pass acceptance criteria? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 11. Are qualifiers consistent with the data review flowcharts? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 12. Explain any items on the failed data report from Element | | | | |
| Comments: _____ | | | | |
| 13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit: | | | | |
| (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (c) Was a BrCl Blank analyzed for each preservation level? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (d) Are Preparation Blanks summarized on QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 14. Filtration Blank Prepared (if yes, use FB qualifier) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> |
| (a) Filtration Blank prep date same as associated samples' prep date | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 18. Is the correct 'Source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 19. For digested preps: was there a spike witness signature & date on the prep bench sheet? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	EMB	Sequence(s) #:	0129015
Reviewer:		Dataset ID(s):	THg26003-200928-2
Date:	9/29/2020	WO (s) #:	0
Batch #(s):	F009375		

Analyst Initials AMB 9/29/20 Reviewer Initials PGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|-----------------------------------------|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| Comments: _____ | | | |
| 22. Are the samples run at the correct dilution level for the method? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| Comments: _____ | | | |
| 23. Dissolved < Total (if applicable) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 24. Effluent < Influent (visually confirm if needed) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 25. Are re-runs noted with reason? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 27. Is the B trap <5% A Traps | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 28. Are spiked trap recoveries 75-125% of true value? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 30. Have re-extracts been created for non-reportable samples? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 32. Does the data set need scanning? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A |
| 33. Does the dataset have an LOQ/LOQ or DOC? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A |
| 34. Water samples: has the preservation log been included in dataset for final volume verification? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 35. Water samples-is the final volume correct in the sequence? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

- | | | | | |
|---------------------------------------------------------------|----------------------------------|-----------------------------------------|----------------------------------------|--------------------------|
| 36. Date of analyst IDOC/CDOC: <u>11/31/20</u> | IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: <u>12/25/19</u> | Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 38. Date of LOD: <u>1/30/20</u> | LOD within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 39. Date of LOQ: <u>1/30/20</u> | LOQ within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |

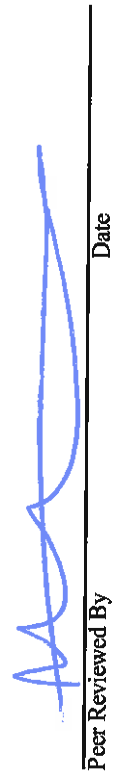
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0129015

Sample ID Analysis Result MRL Dup Source True Units % Rec. Rec. Rec. RPD RPD Over Cal Failure Qualifier


Analyst Reviewed By

9/29/20
Date


Peer Reviewed By

Date

PREPARATION BENCH SHEET

F009375

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009375-BLK1	Blank	0.25	20					
F009375-BLK2	Blank	0.25	20					
F009375-BLK3	Blank	0.25	20					
F009375-BLK4	Filter Blank 0100010-02	0.267	20					Filter Blank [0100010-02]
F009375-BLK5	Filter Blank 0100032-02	0.2671	20					
F009375-BLK6	Filter Blank 0100051-02	0.2594	20					
F009375-BLK7	Equipment Blank for WO 0100047	0.2519	20					Equipment Blank
F009375-BS1	LCS	0.25	20	2002032	20		0	
F009375-BSD1	LCS Dup	0.25	20	2002032	20		0	
F009375-MS1	Matrix Spike [0100047-01]	0.2658	20	2001204	100			
F009375-MS2	Matrix Spike [0100033-02]	0.2663	20	2001204	100			
F009375-MSD1	Matrix Spike Dup [0100047-01]	0.2635	20	2001204	100			
F009375-MSD2	Matrix Spike Dup [0100033-02]	0.2521	20	2001204	100			

Standard ID(s):

2001204
2002032

Description:

THg 1,000ng/mL Secondary Spiking Standard
THg 100ng/mL Primary Spiking Standard

Expiration:

05-Nov-20 00:00
05-Nov-20 00:00

Reagent ID(s):

2001276
2001977
2001978
2001979
2002050
2002190
2002218
2002263

Description:

25% Hydroxylamine-HCl working solution
THg Dilute 1% BrCl
THg 2% BrCl
THg Washstation (0.5% BrCl)
Boiling Chips for ICPMS
70/30 Digestion Acid
3% SnCl2 THg reductant
5% BrCl

Expiration:

03-Oct-20 00:00
07-Feb-21 00:00
03-Oct-20 00:00
20-Feb-21 00:00
08-Sep-21 00:00
09-Feb-21 00:00
07-Feb-21 00:00

PREPARATION BENCH SHEET

F009375

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/22/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100010-01	OL-3546-01	0.1254	20	-	-	010301	Jar pre filter weight - 89.4519g. Jar pos	
0100032-01	OL-3551-01	0.1253	20	-	-	241201	Scan all data for level IV report	
0100033-01	710-2020-13787001	0.2517	20	-	-	210101	Dreinkantmuschel	
0100033-02	710-2020-13787002	0.2681	20	-	-	210101	Dreinkantmuschel	
0100033-03	710-2020-13787003	0.253	20	-	-	210101	Dreinkantmuschel	
0100033-04	710-2020-13787004	0.2615	20	-	-	210101	Dreinkantmuschel	
0100047-01	L9-45_20LT001_091020_01_LOB_TA	0.2677	20	QC	-	140204	MS/MSD	
0100047-02	L9-45_20LT002_091020_02_LOB_TA	0.239	20	-	-	140204		
0100047-03	L9-45_20LT004_091020_03_LOB_TA	0.2632	20	-	-	140204		
0100047-04	L9-45_20LT004_091020_04_LOB_TA	0.2639	20	-	-	140204		
0100047-05	L9-45_20LT005_091020_06_LOB_TA	0.2695	20	-	-	140204		
0100047-06	L9-45_20LT005_091020_07_LOB_TA	0.2554	20	-	-	140204		
0100047-07	L9-45_20LT005_091020_08_LOB_TA	0.2699	20	-	-	140204		
0100047-08	L9-45_20LT006_091020_05_LOB_TA	0.2618	20	-	-	140204		
0100047-09	L9-45_20LT007_091020_09_LOB_TA	0.2626	20	-	-	140204		
0100047-10	L9-45_20LT009_091020_10_LOB_TA	0.2687	20	-	-	140204		
0100051-01	OL-3555-01	0.1273	20	-	-	120303	Jar Pre Weight - 86.5787g. Post Weight	

PREPARATION BENCH SHEET

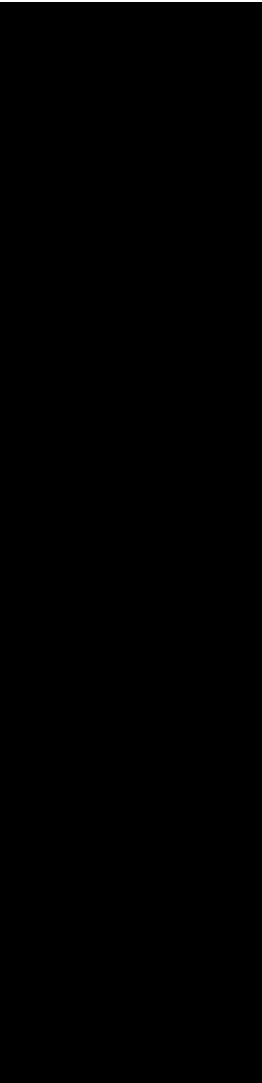
F009375

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep) 9/22/2020
Upload/Date: MGS (Data Entry) 9/24/2020

Samples to lab: NA
Reviewer/Date: EMB 9/24/20

Batch #: F009375

EFGS Preparation Method			
<input type="checkbox"/> SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS	<input type="checkbox"/> AFS
<input type="checkbox"/> SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2840	Modified Aqua Regia		
<input type="checkbox"/> SOP2820	RP		
<input type="checkbox"/> SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2993	Oven Digestion (As, Se Speciation)		
<input type="checkbox"/> SOP5145	Microwave Digestion (Nutraceuticals)		
<input type="checkbox"/> SOP5145	Microwave Digestion (3051)		
<input checked="" type="checkbox"/>	NA Other: EFAPS, I-AFS-SOP2795 Tissues - THg 70:30 Hot plate		

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019
Comments: _____		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

Reviewer Initials: EMB 9/24/20 Tertiary Review: ZCIA 9/24/2020

1. Is any SOP/DOC expiring within one week of Submission Date?
Data cannot be reported without a current IDOC/CDOC. YES NO
2. Check prep method no 9/25/2020
(a) For Cericals: Is correct Hg code being used in LIMS? ICPMS CV-AFS 70:30
3. Compare sample ID & container ID with benchsheet & in LIMS YES
4. Check for transcription errors from benchsheet
 - (a) Check and compare initial and final volumes YES N/A
 - (b) Check and compare mass YES N/A
 - (c) Has the number of pills been documented (Special Info 5 in benchsheet)? YES N/A
 - (d) Have assay logbook copies been attached & avg masses entered? YES N/A
 - (e) For re-digests, have e-mails been attached and verified? YES N/A
 - (f) Benchsheet prep date MUST match actual prep date YES
5. Samples per Batch? Check QC Requirements
 - (a) PBs per batch? ≤ 20 ≤ 10
 - (b) Are pre and post homogenization blanks in batch? Equipment BLK 9/25/2020 3 PBs 2 PBs 1 PBs
 - (c) BS, BS/BSD or CRM in batch? BS BS/BSD CRM
 - (d) MS/MSD in batch? YES N/A
 - (e) MD in batch? YES N/A
 - (f) Is there at least one duplicate QC source in batch? YES N/A
 - (g) Are there any client specific requests, QC requests, etc? YES N/A
- Document: 020047-01
- (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? YES N/A
- (i) Correct 'source' designated for MD/MS/MSD? YES N/A
- (j) For EFGS-filtered samples, was a filtration blank included? YES N/A
6. Special prep requirements?
 - (a) For 1638: Have samples sat for 48 hours after preservation? YES N/A
 - (b) For 200.8: Have samples sat for 16 hours after preservation? YES N/A
 - (c) For DOD have pipettes been calibrated day of prep? YES N/A
7. Are the samples appropriately spiked?
 - (a) Is the spike and amount used appropriate and entered into LIMS? YES N/A
 - (b) For all spiking was there a witness? (Initials must be in logbook) YES N/A
 - (c) Spikes added: YES

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: NA

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
<u>THg-BS</u>	<u>2002032</u>	<u>20</u>			
<u>THg-MS</u>	<u>2001204</u>	<u>100</u>			

PREPARATION BENCH SHEET

F009375

Eurofins Frontier Global Sciences, LLC

1508
Prepared: 9/22/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009375-BLK1	Blank	0.25	20					
F009375-BLK2	Blank	0.25	20					
F009375-BLK3	Blank	0.25	20					
F009375-BLK4	Filter Blank 0100010-02	0.267	20					Filter Blank [0100010-02]
F009375-BLK5	Filter Blank 0100032-02	0.2671	20					
F009375-BLK6	Filter Blank 0100051-02	0.2594	20					
F009375-BLK7	Equipment Blank for WO 0100047	0.2519	20					Equipment Blank
F009375-BS1	LCS	0.25	20	2002032	20			
F009375-BSD1	LCS Dup	0.25	20	2002032	20			
F009375-MS1	Matrix Spike [0100047-01]	0.2658	20	2001204	100			
F009375-MS2	Matrix Spike [0100033-02]	0.2663	20	2001204	100			
F009375-MSD1	Matrix Spike Dup [0100047-01]	0.2635	20	2001204	100			
F009375-MSD2	Matrix Spike Dup [0100033-02]	0.2521	20	2001204	100			

Standard ID(s)	Description:	Reagent ID(s)	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
2002032	THg 100ng/mL Primary Spiking Standard	2002190	70/30 Digestion Acid	08-Sep-21 00:00
		2002263	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009375

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100010-01	OL-3546-01	0.1254	20	-	-	010301	Jar pre filter weight - 89.4519g. Jar pos	
0100032-01	OL-3551-01	0.1253	20	-	-	241201	Scan all data for level IV report	
0100033-01	710-2020-13787001	0.2517	20	-	-	210101	Dreinkantmuschel	
0100033-02	710-2020-13787002	0.2681	20	-	-	210101	Dreinkantmuschel	
0100033-03	710-2020-13787003	0.253	20	-	-	210101	Dreinkantmuschel	
0100033-04	710-2020-13787004	0.2615	20	-	-	210101	Dreinkantmuschel	
0100047-01	L9-45_20LT001_091020_01_LOB_TA	0.2677	20	QC	-	140204	MS/MSD	
0100047-02	L9-45_20LT002_091020_02_LOB_TA	0.259	20	-	-	140204		
0100047-03	L9-45_20LT004_091020_03_LOB_TA	0.2632	20	-	-	140204		
0100047-04	L9-45_20LT004_091020_04_LOB_TA	0.2639	20	-	-	140204		
0100047-05	L9-45_20LT005_091020_06_LOB_TA	0.2695	20	-	-	140204		
0100047-06	L9-45_20LT005_091020_07_LOB_TA	0.2554	20	-	-	140204		
0100047-07	L9-45_20LT005_091020_08_LOB_TA	0.2699	20	-	-	140204		
0100047-08	L9-45_20LT006_091020_05_LOB_TA	0.2618	20	-	-	140204		
0100047-09	L9-45_20LT007_091020_09_LOB_TA	0.2626	20	-	-	140204		
0100047-10	L9-45_20LT009_091020_10_LOB_TA	0.2687	20	-	-	140204		
0100051-01	OL-3555-01	0.1273	20	-	-	010106	Jar Pre Weight - 86.5787g. Post Weight	

PREPARATION BENCH SHEET

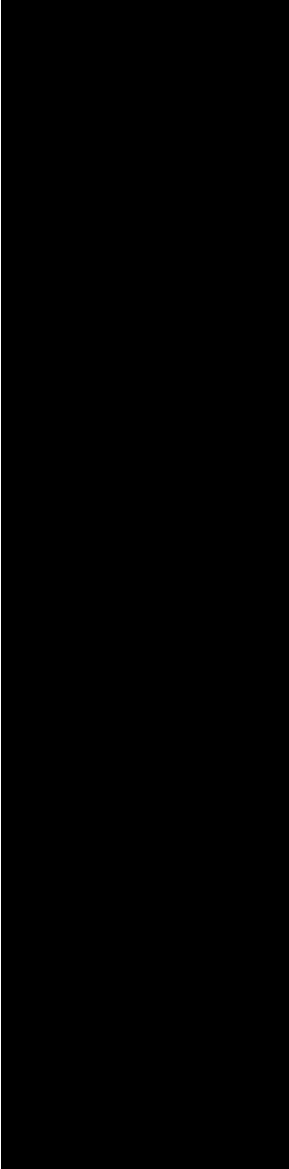
F009375

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020



Technician: 2011/MS 9/18/20 Batch#: F009375 Date: 9/18/2020
Disested 9/22/20 - MFS
 EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: D/N
 Vial Type: Glass Teflon
 Balance#: 23/19 Calibrated? Yes No
 Therm.#: 146418012 Calibrated? Yes No
 *Time in: 1502 Actual Temp. (raw): 71.6 °C w/ CF: 70.1 °C *Time in can't begin before target temperature is reached
 Time out: 1708 Actual Temp. (raw): 78.6 °C w/ CF: 77.1 °C

Final vol.: 20 mL (LIMS ID: 2002063) BS Spike vol.: 26 µL (LIMS ID: 2062032)
 Spike Witness: MS 9/22/20 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2061764)
 HCl LIMS ID: N/A Pipette SN#: 068732 Calibration Date: 20200305
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2052190 Dispenser SN#: 19681607 Calibration Date: Yes No
 Other Acid LIMS ID: 2062063 (5% BrCl) Dispenser #: 19337296 Calibration Date: Yes No
 Glass Vial # 60037092 Boiling Chip lot # 2008050 *Hotblock Position: HME

**logbook updated 9/15/2020
 MFS 9/24/2020*

Vial #	Sample ID Number	Container ID	Sample Size mL/g	Vial #	Sample ID Number	Container ID	Sample Size mL/g	CRM LIMS ID
1	F009375-BS1	A	0.2525	19	0I00051-01	B	0.1273	NA
2	F009375-BS01	A	0.2489	20	0I00033-03	A	0.2530	
3	F009375-BIK1	A	0.2638	21	0I00033-04 2020042020	A	0.2615	
4	F009375-BIK2	A	0.2589	22	0I00033-4703	C	0.2590	
5	F009375-BIK3	A	0.2633	23	0I00047-03	C	0.2630	
6	F009375-BIK4	A	0.2670	24	0I00047-04	C	0.2639	
7	F009375-BIK5	A	0.2671	25	0I00047-05	C	0.2695	
8	F009375-BIK6	A	0.2591	26	0I00047-06	C	0.2554	
9	F009375-BIK7	A	0.2519	27	0I00047-07	C	0.2699	
10	0I00047-01 (SRC MS/MSD)	A	0.2677	28	0I00047-08	C	0.2616	
11	F009375-MS1	A	0.2658	29	0I00047-09	C	0.2626	
12	F009375-MSD1	A	0.2635	30	0I00047-10	C	0.2680, 0.2657	
13	0I00033-02 (SRC MS/MSD2)	A	0.2681	31				
14	F009375-MS2	A	0.2663	32				
15	F009375-MSD2	A	0.2521	33				
16	0I00010-01	C	0.1254	34				
17	0I00033-01	B	0.1253	35				
18	0I00033-01	A	0.2517	36				

Comments
 Vials 1-9 weighed
 9/18/20 by MFS on scale
 - MFS 9/18/20
 Vials 20-30 weighed
 on scale 23 on 9/12/20
 by MFS
 - MFS 9/12/20
 *Redigest needed
 due to mess lost
 during digestion
 - MFS 9/19/20

Technician: ZKA/MFS Batch #: F009375 Date: 9/18/2020

- EF-AFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EF-AFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EF-AFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EF-AFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

copy of logbook
transcribed
9/24/20
-ZKA 9/24/20

Other: Glass Teflon
 Balance #: 2319* Calibrated? Yes No
 Therm. #: _____ Calibrated? Yes No
 *Time in: _____ °C w/ CF: _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ °C w/ CF: _____ °C

Final vol.: 20 mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # 60037092 Boiling Chip lot # 2008050 *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size □ mL □ µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL □ µg	CRM LIMS ID <input type="checkbox"/> NA
1	F009375-BS1	A	0.2575	19	OI00051-01	B	0.273	
2	F009375-BSD1	A	0.2489	20	OI00033-03	A	0.2536	
3	F009375-BLK1	A	0.2628	21	OI00033-04	A	0.2615	
4	F009375-BLK2	A	0.2589	22	OI00047-07	C	0.2590	
5	F009375-BLK3	A	0.2633	23	OI00047-03	C	0.2632	
6	F009375-BLK4	A	0.2670	24	OI00047-04	C	0.2639	
7	F009375-BLK5	A	0.2671	25	OI00047-05	C	0.2695	
8	F009375-BLK6	A	0.2591	26	OI00047-06	C	0.2554	
9	F009375-BLK7	A	0.2519	27	OI00047-07	C	0.2699	
10	OI00047-01 (spike)	A	0.2671	28	OI00047-08	C	0.2618	
11	F009375-MS1	A	0.2058	29	OI00047-09	C	0.2626	
12	F009375-MSD1	A	0.2635	30	OI00047-10	C	0.2607	
13	OI00033-02	A	0.2681	31				
14	F009375-MS2	A	0.2663	32				
15	F009375-MSD2	A	0.2521	33				
16	OI00010-01	C	0.1754	34				
17	OI00032-01	B	0.1783	35				
18	OI00033-01	F	0.2517	36				

Comments
 Vials 1-19 weighed
 9/18/20 by MFS.
 - MFS 9/18/20
 4 vials 20-30 weighed
 on Scale 23 on 9/22/20
 by MFS
 - MFS 9/22/20
 *Redigest needed
 due to mass loss
 during digestion

PREPARATION BENCH SHEET

F009375

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/16/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009375-BLK1	Blank	0.5	40					
F009375-BLK2	Blank	0.5	40					
F009375-BLK3	Blank	0.5	40					
F009375-BLK4	Filter: Blank 0100010-02	0.5	40					Filter Blank [0100010-02]
F009375-BLK5	Filter: Blank 0100032-02	0.5	40					
F009375-BLK6	Filter: Blank 0100051-02	0.5	40					
F009375-BLK7	Equipment Blank 0100047-CF	0.5	40					Equipment Blank
F009375-BS1	LCS	0.5	40					
F009375-BSD1	LCS Dup	0.5	40					
F009375-MS1	Matrix Spike [0100047-01]	0.5	40					
F009375-MS2	Matrix Spike [0100033-02]	0.5	40					
F009375-MSD1	Matrix Spike Dup [0100047-01]	0.5	40					
F009375-MSD2	Matrix Spike Dup [0100033-02]	0.5	40					

Standard ID(s): Description: Expiration:

PREPARATION BENCH SHEET

F009375

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/16/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100010-01	OL-3546-01	0.5	40	-	-	120303	Jar pre filter weight - 89.4519g. Jar pos	
0100018-01	AR-1 Sed	0.5	40	-	-	010203		
0100018-02	AR-3A Sed	0.5	40	-	-	010203		
0100018-03	AR-3B Sed	0.5	40	-	-	010203		
0100032-01	OL-3551-01	0.5	40	-	-	241201	Sediments. Updated to AR digestion - MFB 9/18/20 Scan all data for level IV report	
0100033-01	710-2020-13787001	0.5	40	-	-	eezer 23	Dreinkantmuschel	
0100033-02	710-2020-13787002	0.5	40	-	-	eezer 23	Dreinkantmuschel	
0100033-03	710-2020-13787003	0.5	40	-	-	eezer 23	Dreinkantmuschel	
0100033-04	710-2020-13787004	0.5	40	-	-	eezer 23	Dreinkantmuschel	
0100047-01	L9-45_20LT001_091020_01_LOB_TA	0.5	40	QC	-	eezer 23	Dreinkantmuschel	
0100047-02	L9-45_20LT002_091020_02_LOB_TA	0.5	40	-	-	eezer 23	MS/MSD	
0100047-03	L9-45_20LT004_091020_03_LOB_TA	0.5	40	-	-	eezer 23		
0100047-04	L9-45_20LT004_091020_04_LOB_TA	0.5	40	-	-	eezer 23		
0100047-05	L9-45_20LT005_091020_06_LOB_TA	0.5	40	-	-	eezer 23		
0100047-06	L9-45_20LT005_091020_07_LOB_TA	0.5	40	-	-	eezer 23		
0100047-07	L9-45_20LT005_091020_08_LOB_TA	0.5	40	-	-	eezer 23		
0100047-08	L9-45_20LT006_091020_05_LOB_TA	0.5	40	-	-	eezer 23		
0047-09	L9-45_20LT007_091020_09_LOB_TA	0.5	40	-	-	eezer 23		
0047-10	L9-45_20LT009_091020_10_LOB_TA	0.5	40	-	-	eezer 23		

PREPARATION BENCH SHEET

F009375

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/16/2020

0100051-01	OL-3555-01	0.5	40	-	-	010106	Jar Pre Weight - 86.5787g, Post Weight
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Work Order	Client	Project
0100010	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0100018	GEI Consultants, Inc.	Mercury Analysis 2018
0100032	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake
0100033	Eurofins GFA Lab Service GmbH	180616 Eurofins GFA MMHg In Tissues
0100047	Wood - MA	Penobscot
0100051	Parsons - Syracuse NY	Honeywell 2020 Onondaga Lake



Analysis Datasheet for Total Mercury

Date of Analysis: September 28, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #:

Analyst:
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	164.43 units	328.87	97.85 units	195.71	96.9 %Rec
SEQ-CAL2	1	1.00 ng/L	266.66 units	266.66	200.08 units	200.08	99.0 %Rec
SEQ-CAL3	1	5.00 ng/L	1104.55 units	220.91	1037.97 units	207.59	102.7 %Rec
SEQ-CAL4	1	20.00 ng/L	4118.36 units	205.92	4051.78 units	202.59	100.3 %Rec
SEQ-CAL5	1	40.00 ng/L	8236.96 units	205.92	8170.38 units	204.26	101.1 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 202.05 Corr. St. Dev RF +/- 4.47 Corr. RSD CF 2.2% RSD Uncorr. Mean RF 245.66

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-TBL	3	66.58 units	±1.08	0.27 ng/L	±0.00

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	7	1.780 ng/L	±1.368
BLK	2	3	18.051 ng/L	±4.903
BLK	3	3	15.924 ng/L	±8.291
BLK	4	3	15.996 ng/L	±17.702
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	9/28/2020 11:16:06	3951-1.RAW	11:16:06 AM	67.17			0.6	0.003	0.003	ng/L	
Hg2600-3	00	CAL	SEQ-HL2	1	9/28/2020 11:20:14	3952-1.RAW	11:20:14 AM	65.33			-1.2	-0.006	-0.006	ng/L	
Hg2600-3	00	CAL	SEQ-HL3	1	9/28/2020 11:24:23	3953-1.RAW	11:24:23 AM	67.23			0.7	0.003	0.003	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	9/28/2020 11:28:31	3954-1.RAW	11:28:31 AM	164.43			200.1	0.990	0.990	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	9/28/2020 11:32:40	3955-1.RAW	11:32:40 AM	266.66			1038.0	5.137	5.137	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	9/28/2020 11:36:49	3956-1.RAW	11:36:49 AM	1104.55			4051.8	20.054	20.054	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	9/28/2020 11:40:58	3957-1.RAW	11:40:58 AM	4118.36			8170.4	40.438	40.438	ng/L	
Hg2600-3	00	CAL	SEQ-ICV1	1	9/28/2020 11:45:07	3958-1.RAW	11:45:07 AM	8236.96			29.9	0.148	0.148	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	9/28/2020 11:49:17	3959-1.RAW	11:49:17 AM	1189.89			1037.7	5.136	5.136	ng/L	
Hg2600-3	00	CAL	SEQ-ICV2	1	9/28/2020 11:53:26	3960-1.RAW	11:53:26 AM	96.47			1002.2	4.960	4.960	ng/L	
Hg2600-3	00	CAL	SEQ-ICV3	1	9/28/2020 12:01:46	3962-1.RAW	12:01:46 PM	1068.80			13.9	0.069	0.069	ng/L	
Hg2600-3	00	CAL	SEQ-ICB2	1	9/28/2020 12:05:54	3963-1.RAW	12:05:54 PM	80.49			1092.7	5.319	5.319	ng/L	
Hg2600-3	00	SAM	F009375-BB1	20	9/28/2020 12:10:03	3964-1.RAW	12:10:03 PM	1159.24			1058.5	5.150	5.150	ng/L	
Hg2600-3	00	BLK	F009375-BLK1	20	9/28/2020 12:14:12	3965-1.RAW	12:14:12 PM	1125.07			33.5	0.166	0.166	ng/L	
Hg2600-3	00	BLK	F009375-BLK2	20	9/28/2020 12:18:22	3966-1.RAW	12:18:22 PM	100.07			25.4	0.126	0.126	ng/L	
Hg2600-3	00	BLK	F009375-BLK3	20	9/28/2020 12:22:31	3967-1.RAW	12:22:31 PM	91.98			37.4	0.185	0.185	ng/L	
Hg2600-3	00	BLK	F009375-BLK4	20	9/28/2020 12:26:40	3968-1.RAW	12:26:40 PM	103.98			9.4	0.046	0.046	ng/L	
Hg2600-3	00	BLK	F009375-BLK5	20	9/28/2020 12:30:50	3969-1.RAW	12:30:50 PM	75.95			5.5	0.027	0.027	ng/L	
Hg2600-3	00	BLK	F009375-BLK6	20	9/28/2020 12:34:59	3970-1.RAW	12:34:59 PM	72.08			4.3	0.021	0.021	ng/L	
Hg2600-3	00	BLK	F009375-BLK7	20	9/28/2020 12:39:08	3971-1.RAW	12:39:08 PM	70.88			10.5	0.052	0.052	ng/L	
Hg2600-3	00	SAM	F000047-01	100	9/28/2020 12:43:17	3972-1.RAW	12:43:17 PM	77.03			1186.9	5.856	5.856	ng/L	
Hg2600-3	00	SAM	F000047-02	1	9/28/2020 12:47:27	3973-1.RAW	12:47:27 PM	1253.47			5.070	5.070	5.070	ng/L	
Hg2600-3	00	CAL	SEQ-CCB1	1	9/28/2020 12:51:36	3974-1.RAW	12:51:36 PM	1091.06			3.2	0.016	0.016	ng/L	
Hg2600-3	00	CAL	SEQ-CCB2	1	9/28/2020 12:55:46	3975-1.RAW	12:55:46 PM	69.75			3801.0	18.808	18.808	ng/L	
Hg2600-3	00	SAM	F009375-MS1	400	9/28/2020 12:59:55	3976-1.RAW	12:59:55 PM	3867.57			3536.6	17.499	17.499	ng/L	
Hg2600-3	00	SAM	F009375-MSD1	400	9/28/2020 13:04:04	3977-1.RAW	1:04:04 PM	3603.16			24.063	24.063	24.063	ng/L	
Hg2600-3	00	SAM	F000033-02	20	9/28/2020 13:08:14	3978-1.RAW	1:08:14 PM	4948.48			2563.7	12.684	12.684	ng/L	
Hg2600-3	00	SAM	F009375-MS2	400	9/28/2020 13:12:24	3979-1.RAW	1:12:24 PM	2650.29			2414.9	11.948	11.948	ng/L	
Hg2600-3	00	SAM	F009375-MSD2	400	9/28/2020 13:16:33	3980-1.RAW	1:16:33 PM	2481.44			4297.5	21.181	21.181	ng/L	
Hg2600-3	00	SAM	F000010-01	20	9/28/2020 13:20:43	3981-1.RAW	1:20:43 PM	4364.11			2637.8	12.966	12.966	ng/L	
Hg2600-3	00	SAM	F000033-01	20	9/28/2020 13:24:52	3982-1.RAW	1:24:52 PM	2704.39			32.742	32.742	32.742	ng/L	
Hg2600-3	00	SAM	F000033-02	20	9/28/2020 13:28:02	3983-1.RAW	1:28:02 PM	4972.23			25.313	25.313	25.313	ng/L	
Hg2600-3	00	SAM	F000033-03	20	9/28/2020 13:33:11	3984-1.RAW	1:33:11 PM	6699.94			5.428	5.428	5.428	ng/L	
Hg2600-3	00	CAL	SEQ-CCV2	1	9/28/2020 13:37:21	3985-1.RAW	1:37:21 PM	5199.08			48.6	0.241	0.241	ng/L	
Hg2600-3	00	CAL	SEQ-CCB2	1	9/28/2020 13:41:31	3986-1.RAW	1:41:31 PM	1163.21			2840.8	14.056	14.056	ng/L	
Hg2600-3	00	SAM	F000047-02	1	9/28/2020 13:45:40	3987-1.RAW	1:45:40 PM	115.21			1567.1	7.751	7.751	ng/L	
Hg2600-3	00	SAM	F000047-03	400	9/28/2020 13:49:50	3988-1.RAW	1:49:50 PM	2807.41			10.055	10.055	10.055	ng/L	
Hg2600-3	00	SAM	F000047-04	400	9/28/2020 13:54:00	3989-1.RAW	1:54:00 PM	1633.64			4.785	4.785	4.785	ng/L	
Hg2600-3	00	SAM	F000047-05	400	9/28/2020 13:58:09	3990-1.RAW	1:58:09 PM	2099.06			1668.5	8.254	8.254	ng/L	
Hg2600-3	00	SAM	F000047-06	400	9/28/2020 14:02:19	3991-1.RAW	2:02:19 PM	1034.22			2424.5	11.995	11.995	ng/L	
Hg2600-3	00	SAM	F000047-07	400	9/28/2020 14:06:28	3992-1.RAW	2:06:28 PM	1735.06			1736.0	8.588	8.588	ng/L	
Hg2600-3	00	SAM	F000047-08	400	9/28/2020 14:10:38	3993-1.RAW	2:10:38 PM	2491.08			1666.1	8.242	8.242	ng/L	
Hg2600-3	00	SAM	F000047-09	400	9/28/2020 14:14:48	3994-1.RAW	2:14:48 PM	1602.58			1559.4	7.714	7.714	ng/L	
Hg2600-3	00	SAM	F000047-10	400	9/28/2020 14:18:58	3995-1.RAW	2:18:58 PM	1732.68			954.2	4.634	4.634	ng/L	
Hg2600-3	00	SAM	F000047-11	400	9/28/2020 14:23:07	3996-1.RAW	2:23:07 PM	1626.02			1065.7	5.275	5.275	ng/L	
Hg2600-3	00	CAL	SEQ-CCV3	1	9/28/2020 14:27:17	3997-1.RAW	2:27:17 PM	1020.79			1065.7	5.275	5.275	ng/L	
Hg2600-3	00	CAL	SEQ-CCB3	1	9/28/2020 14:31:27	3998-1.RAW	2:31:27 PM	1132.92			28.7	0.142	0.142	ng/L	
Hg2600-3	00	SAM	F009409-BS1	400	9/28/2020 14:35:37	3999-1.RAW	2:35:37 PM	96.30			1005.1	4.930	4.930	ng/L	
Hg2600-3	00	SAM	F009409-BSD1	400	9/28/2020 14:39:46	4000-1.RAW	2:39:46 PM	1071.69			957.3	4.693	4.693	ng/L	
Hg2600-3	00	BLK	F009409-BLK1	100	9/28/2020 14:43:56	4001-1.RAW	2:43:56 PM	1023.91			0.143	0.143	0.143	ng/L	
Hg2600-3	00	BLK	F009409-BLK2	100	9/28/2020 14:48:06	4002-1.RAW	2:48:06 PM	95.56			47.7	0.236	0.236	ng/L	
Hg2600-3	00	BLK	F009409-BLK3	100	9/28/2020 14:52:16	4003-1.RAW	2:52:16 PM	114.28			32.7	0.162	0.162	ng/L	
Hg2600-3	00	BLK	F009409-BLK4	100	9/28/2020 14:56:25	4004-1.RAW	2:56:25 PM	99.30			16.197	16.197	16.197	ng/L	
Hg2600-3	00	SAM	F000064-01B	100	9/28/2020 15:00:35	4005-1.RAW	3:00:35 PM	134.25			15.442	15.442	15.442	ng/L	
Hg2600-3	00	SAM	F000064-02B	100	9/28/2020 15:04:45	4006-1.RAW	3:04:45 PM	115.11			0.060	0.060	0.060	ng/L	
Hg2600-3	00	SAM	F000065-01B	100	9/28/2020 15:08:55	4007-1.RAW	3:08:55 PM	79.24			12.7	-0.118	-11.786	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0100065-02B	100	9/28/2020 15:13:05	4008-1.RAW	3:13:05 PM	77.41	2		10.8	-0.127	-12.690	ng/L	
Hg2600-3	00	SAM	0100065-03B	100	9/28/2020 15:17:15	4009-1.RAW	3:17:15 PM	88.31	2			-0.073	-7.297	ng/L	
Hg2600-3	00	CAL	SEQ-CCV4	1	9/28/2020 16:21:25	4010-1.RAW	3:21:25 PM	1056.06			988.5	4.892	4.892	ng/L	
Hg2600-3	00	SAM	0100065-04B	100	9/28/2020 15:26:35	4011-1.RAW	3:26:35 PM	74.28	2		7.7	0.038	0.038	ng/L	
Hg2600-3	00	SAM	0100065-01C	2500	9/28/2020 15:29:45	4012-1.RAW	3:29:45 PM	95.96	2		2015.1	-0.035	-3.514	ng/L	
Hg2600-3	00	SAM	0100065-02C	2500	9/28/2020 15:33:55	4013-1.RAW	3:33:55 PM	2081.68	2		27.4	9.966	24915.495	ng/L	
Hg2600-3	00	SAM	0100065-03C	2500	9/28/2020 15:38:05	4014-1.RAW	3:38:05 PM	93.98	2		1969.5	9.741	24351.793	ng/L	
Hg2600-3	00	SAM	0100065-04C	2500	9/28/2020 15:42:16	4015-1.RAW	3:42:16 PM	2098.12	2		2362.7	11.687	29216.763	ng/L	
Hg2600-3	00	SAM	0100064-01C	10000	9/28/2020 15:46:28	4016-1.RAW	3:46:28 PM	3032.74	2		2966.2	14.679	146787.318	ng/L	
Hg2600-3	00	SAM	0100084-01C	10000	9/28/2020 15:50:38	4017-1.RAW	3:50:38 PM	2686.190224	2		2568.6	12.711	127108.138	ng/L	
Hg2600-3	00	SAM	0100065-01A	2500	9/28/2020 15:59:56	4019-1.RAW	3:59:56 PM	510.31	2		324.9	2.189	5472.366	ng/L	
Hg2600-3	00	SAM	0100065-02A	2500	9/28/2020 16:03:06	4020-1.RAW	4:03:06 PM	391.47	2		1.601	4001.951	4001.951	ng/L	
Hg2600-3	00	SAM	0100065-03A	2500	9/28/2020 16:07:16	4021-1.RAW	4:07:16 PM	473.23	2		2.005	5013.638	5013.638	ng/L	
Hg2600-3	00	CAL	SEQ-CCV5	1	9/28/2020 16:11:26	4022-1.RAW	4:11:26 PM	1089.36			1022.8	5.062	5.062	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	9/28/2020 16:15:38	4023-1.RAW	4:15:38 PM	87.00			20.4	0.101	0.101	ng/L	
Hg2600-3	00	SAM	0100065-04A	2500	9/28/2020 16:19:46	4024-1.RAW	4:19:46 PM	408.01	2		341.4	1.683	4206.543	ng/L	
Hg2600-3	00	SAM	0100064-01A	10000	9/28/2020 16:23:57	4025-1.RAW	4:23:57 PM	1478.95	2		1412.4	6.989	69885.136	ng/L	
Hg2600-3	00	SAM	0100066-02A	10000	9/28/2020 16:28:07	4026-1.RAW	4:28:07 PM	1825.69	2		1759.1	8.705	87046.258	ng/L	
Hg2600-3	00	SAM	F009410-BS1	400	9/28/2020 16:32:17	4027-1.RAW	4:32:17 PM	1019.74	3		953.2	4.678	1871.074	ng/L	
Hg2600-3	00	SAM	F009410-BSD1	400	9/28/2020 16:36:28	4028-1.RAW	4:36:28 PM	1019.84	3		953.3	4.678	1871.270	ng/L	
Hg2600-3	00	BLK	F009410-BLK1	100	9/28/2020 16:40:38	4029-1.RAW	4:40:38 PM	109.17	3		42.6	0.211	21.078	ng/L	
Hg2600-3	00	BLK	F009410-BLK2	100	9/28/2020 16:44:48	4030-1.RAW	4:44:48 PM	79.43	3		12.9	0.064	6.360	ng/L	
Hg2600-3	00	BLK	F009410-BLK3	100	9/28/2020 16:48:58	4031-1.RAW	4:48:58 PM	107.66	3		41.1	0.203	20.333	ng/L	
Hg2600-3	00	SAM	0100070-01B	100	9/28/2020 16:53:08	4032-1.RAW	4:53:08 PM	176.14	3		109.6	0.383	38.303	ng/L	
Hg2600-3	00	SAM	0100070-02B	100	9/28/2020 16:57:19	4033-1.RAW	4:57:19 PM	144.21	3		77.6	0.225	22.500	ng/L	
Hg2600-3	00	CAL	SEQ-CCV6	1	9/28/2020 17:01:30	4034-1.RAW	5:01:30 PM	1099.49			1032.9	5.112	5.112	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	9/28/2020 17:05:40	4035-1.RAW	5:05:40 PM	82.72			16.1	0.080	0.080	ng/L	
Hg2600-3	00	SAM	0100070-03B	100	9/28/2020 17:09:50	4036-1.RAW	5:09:50 PM	236.68	3		170.1	0.683	68.264	ng/L	
Hg2600-3	00	SAM	0100070-04B	100	9/28/2020 17:14:01	4037-1.RAW	5:14:01 PM	108.91	3		42.3	0.050	5.029	ng/L	
Hg2600-3	00	SAM	0100070-05B	100	9/28/2020 17:18:11	4038-1.RAW	5:18:11 PM	180.16	3		113.6	0.403	40.290	ng/L	
Hg2600-3	00	SAM	0100070-06B	100	9/28/2020 17:22:22	4039-1.RAW	5:22:22 PM	127.84	3		61.3	0.144	14.396	ng/L	
Hg2600-3	00	SAM	0100070-07B	100	9/28/2020 17:26:32	4040-1.RAW	5:26:32 PM	203.69	3		137.1	0.519	51.935	ng/L	
Hg2600-3	00	SAM	0100070-08B	100	9/28/2020 17:30:42	4041-1.RAW	5:30:42 PM	119.30	3		52.7	0.102	10.169	ng/L	
Hg2600-3	00	SAM	0100070-01A	2500	9/28/2020 17:34:52	4042-1.RAW	5:34:52 PM	1832.73	3		1766.1	8.735	21837.230	ng/L	
Hg2600-3	00	SAM	0100070-02A	2500	9/28/2020 17:39:02	4043-1.RAW	5:39:02 PM	896.45	3		829.9	4.101	10252.385	ng/L	
Hg2600-3	00	SAM	0100070-03A	2500	9/28/2020 17:43:13	4044-1.RAW	5:43:13 PM	2114.45	3		2047.9	10.129	25323.033	ng/L	
Hg2600-3	00	SAM	0100070-04A	2500	9/28/2020 17:47:23	4045-1.RAW	5:47:23 PM	809.46	3		742.9	3.670	9175.949	ng/L	
Hg2600-3	00	CAL	SEQ-CCV7	1	9/28/2020 17:51:33	4046-1.RAW	5:51:33 PM	1088.14			1021.6	5.056	5.056	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	9/28/2020 17:55:43	4047-1.RAW	5:55:43 PM	84.83			18.2	0.090	0.090	ng/L	
Hg2600-3	00	SAM	0100070-05A	2500	9/28/2020 17:59:53	4048-1.RAW	5:59:53 PM	1828.34	3		1761.8	8.713	21782.931	ng/L	
Hg2600-3	00	SAM	0100070-06A	2500	9/28/2020 18:04:03	4049-1.RAW	6:04:03 PM	812.21	3		745.6	3.684	9210.080	ng/L	
Hg2600-3	00	SAM	0100070-07A	2500	9/28/2020 18:08:13	4050-1.RAW	6:08:13 PM	1684.75	3		1618.2	8.002	20006.222	ng/L	
Hg2600-3	00	SAM	0100070-08B	2500	9/28/2020 18:12:23	4051-1.RAW	6:12:23 PM	559.61	3		493.0	2.434	6084.573	ng/L	
Hg2600-3	00	SAM	0100065-02CRE1	2500	9/28/2020 18:16:33	4052-1.RAW	6:16:33 PM	77.84	2		11.3	0.049	121.333	ng/L	
Hg2600-3	00	SAM	F009402-BS1	400	9/28/2020 18:20:43	4053-1.RAW	6:20:43 PM	4390.22	4		4323.6	21.359	8543.669	ng/L	
Hg2600-3	00	SAM	F009402-BSD1	400	9/28/2020 18:24:53	4054-1.RAW	6:24:53 PM	4473.33	4		4406.7	21.770	8708.189	ng/L	
Hg2600-3	00	BLK	F009402-BLK1	100	9/28/2020 18:29:03	4055-1.RAW	6:29:03 PM	139.56	4		73.0	0.361	36.120	ng/L	
Hg2600-3	00	BLK	F009402-BLK2	100	9/28/2020 18:33:13	4056-1.RAW	6:33:13 PM	84.84	4		18.3	0.090	9.039	ng/L	
Hg2600-3	00	BLK	F009402-BLK3	100	9/28/2020 18:37:23	4057-1.RAW	6:37:23 PM	72.30	4		5.7	0.028	2.830	ng/L	
Hg2600-3	00	CAL	SEQ-CCV8	1	9/28/2020 18:41:33	4058-1.RAW	6:41:33 PM	1092.42			1025.8	5.077	5.077	ng/L	
Hg2600-3	00	CAL	SEQ-CCB8	1	9/28/2020 18:45:43	4059-1.RAW	6:45:43 PM	87.39			20.8	0.103	0.103	ng/L	
Hg2600-3	00	SAM	0100057-01B	100	9/28/2020 18:49:53	4060-1.RAW	6:49:53 PM	141.24	4		74.7	0.210	20.955	ng/L	
Hg2600-3	00	SAM	0100057-02B	100	9/28/2020 18:54:03	4061-1.RAW	6:54:03 PM	59.84	4		-6.7	-0.193	-19.333	ng/L	
Hg2600-3	00	SAM	0100057-03B	100	9/28/2020 18:58:13	4062-1.RAW	6:58:13 PM	62.35	4		-4.2	-0.181	-18.087	ng/L	
Hg2600-3	00	SAM	0100057-01C	2500	9/28/2020 18:02:23	4063-1.RAW	7:02:23 PM	3425.96	4		3359.4	16.620	41550.745	ng/L	
Hg2600-3	00	SAM	0100057-02C	2500	9/28/2020 18:06:33	4064-1.RAW	7:06:33 PM	98.67	4		32.1	0.152	381.058	ng/L	
Hg2600-3	00	SAM	0100057-03C	2500	9/28/2020 19:10:43	4065-1.RAW	7:10:43 PM	75.30	4		8.7	0.037	91.883	ng/L	

Total Mercury
EPA1631

Operat: EMB BlankS 66.579 Calib Eqn: Conc = (Area-66.57 Run Date: 9/28/2020 Blank SD: 1.07792808
 Worksl THq2601 CalibFa 202.05 Status: QC Warnings:5/QC f Run Time: 10:56:39 Blank RSD%: 1.618827059
 Method #### R: 1 R#: 1 CF SD: 4.471385409
 Descr: THq26003-200928-2 CF RSD%: 2.213037837

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (ref)	Flags	RunCount	Comment
Clean				0.00	0.03					3947-1.RAW	10:59:31	6.54	Clean	OK	1	
WS				66.58	0.00					3948-1.RAW	11:03:40	54.06	Sample	OK	1	
WS				66.58	0.00					3949-1.RAW	11:07:48	43.16	Sample	OK	1	
WS				66.58	0.00					3950-1.RAW	11:11:57	41.71	Sample	OK	1	
SEQ-IBL1	A1		1	0.00	0.33					3951-1.RAW	11:16:06	67.17	Sample	OK	1	
SEQ-IBL2	A2		1	0.00	0.32					3952-1.RAW	11:20:14	65.33	Sample	OK	1	
SEQ-IBL3	A3		1	0.00	0.33					3953-1.RAW	11:24:23	67.23	Sample	OK	1	
SEQ-CAL1	A4		1	66.58	0.48		86.86			3954-1.RAW	11:28:31	184.43	Sample	OK	1	
SEQ-CAL2	A5		1	66.58	0.99		98.03			3955-1.RAW	11:32:40	286.66	Sample	OK	1	
SEQ-CAL3	A6		1	66.58	5.14		102.75			3956-1.RAW	11:36:49	1104.55	Sample	OK	1	
SEQ-CAL4	A7		1	66.58	20.05		100.27			3957-1.RAW	11:40:58	4118.36	Sample	OK	1	
SEQ-CAL5	A8		1	66.58	40.44		101.09			3958-1.RAW	11:45:07	8236.96	Sample	OK	1	
SEQ-ICV1	A9		1	66.58	5.66		111.19			3959-1.RAW	11:49:17	1189.89	Sample	OK	1	
SEQ-ICB1	A10		1	66.58	0.15		0.00			3960-1.RAW	11:53:26	96.47	Sample	OK	1	
SEQ-ICV2	B19		1	66.58	5.14		102.72			3961-1.RAW	11:57:35	1104.30	Sample	OK	1	
SEQ-ICV3	B20		1	66.58	4.96		89.21			3962-1.RAW	12:01:45	1068.80	Sample	OK	1	
SEQ-ICB2	B21		1	66.58	0.07		0.00			3963-1.RAW	12:05:54	80.49	Sample	OK	1	
F009375-BS1	A11		20	66.58	108.16					3964-1.RAW	12:10:03	1159.24	Sample	OK	1	
F009375-BS1	A12		20	66.58	104.78					3965-1.RAW	12:14:12	1125.07	Sample	OK	1	
F009375-BLK1	A13		20	66.58	3.32					3966-1.RAW	12:18:22	100.07	Sample	OK	1	
F009375-BLK2	A14		20	66.58	2.51					3967-1.RAW	12:22:31	91.96	Sample	OK	1	
F009375-BLK3	A15		20	66.58	3.70					3968-1.RAW	12:26:40	103.98	Sample	OK	1	
F009375-BLK4	A16		20	66.58	0.93					3969-1.RAW	12:30:50	75.95	Sample	OK	1	
F009375-BLK5	A17		20	66.58	0.54					3970-1.RAW	12:34:59	72.08	Sample	OK	1	
F009375-BLK6	A18		20	66.58	0.43					3971-1.RAW	12:39:08	70.88	Sample	OK	1	
F009375-BLK7	A19		20	66.58	1.03					3972-1.RAW	12:43:17	77.03	Sample	OK	1	
0I00047-01	A20		100	66.58	587.43					3973-1.RAW	12:47:27	1253.47	Sample	OK	1	
SEQ-CCV1	A21		1	66.58	5.07		101.41			3974-1.RAW	12:51:36	1091.06	Sample	OK	1	
SEQ-CCB1	B1		1	66.58	0.02		0.00			3975-1.RAW	12:55:46	69.75	Sample	OK	1	
F009375-MS1	B2		400	66.58	7524.96		740850.07			3976-1.RAW	12:59:55	3967.57	Sample	OK	1	
F009375-MSD1	B3		400	66.58	7001.50					3977-1.RAW	13:04:04	3603.16	Sample	OK	1	
0I00033-02	B4		20	66.58	483.05					3978-1.RAW	13:08:14	4946.48	Sample	OK	1	
F009375-MS2	B5		400	66.58	5075.46		1046.39			3979-1.RAW	13:12:24	2830.29	Sample	OK	1	
F009375-MSD2	B6		400	66.58	4780.79					3980-1.RAW	13:16:33	2481.44	Sample	OK	1	
0I00010-01	B7		20	66.58	425.40					3981-1.RAW	13:20:43	4364.11	Sample	OK	1	
0I00032-01	B8		20	66.58	261.11					3982-1.RAW	13:24:52	2704.39	Sample	OK	1	
0I00033-01	B9		20	66.58	485.59					3983-1.RAW	13:29:02	4972.23	Sample	OK	1	
0I00033-03	B10		20	66.58	658.81					3984-1.RAW	13:33:11	6699.94	Sample	OK	1	
0I00033-04	B11		20	66.58	508.05					3985-1.RAW	13:37:21	5199.08	Sample	OK	1	
SEQ-CCV2	B12		1	66.58	5.43		108.55			3986-1.RAW	13:41:31	1163.21	Sample	OK	1	
SEQ-CCB2	B13		1	66.58	0.24		0.00			3987-1.RAW	13:45:40	115.21	Sample	OK	1	
0I00047-02	B14		400	66.58	5624.09					3988-1.RAW	13:49:50	2907.41	Sample	OK	1	
0I00047-03	B15		400	66.58	3102.37					3989-1.RAW	13:54:00	1633.64	Sample	OK	1	
0I00047-04	B16		400	66.58	4023.76					3990-1.RAW	13:58:09	2099.06	Sample	OK	1	
0I00047-05	B17		400	66.58	1915.67					3991-1.RAW	14:02:19	1034.22	Sample	OK	1	
0I00047-06	B18		400	66.58	3303.18					3992-1.RAW	14:06:28	1735.08	Sample	OK	1	
0I00047-07	C1		400	66.58	4798.86					3993-1.RAW	14:10:38	2491.08	Sample	OK	1	
0I00047-08	C2		400	66.58	3436.83					3994-1.RAW	14:14:48	1802.58	Sample	OK	1	
0I00047-09	C3		400	66.58	3298.44					3995-1.RAW	14:18:58	1732.68	Sample	OK	1	
0I00047-10	C4		400	66.58	3087.28					3996-1.RAW	14:23:07	1626.02	Sample	OK	1	
0I00051-01	C5		20	66.58	94.45					3997-1.RAW	14:27:17	1020.79	Sample	OK	1	
SEQ-CCV3	C6		1	66.58	5.27		105.49			3998-1.RAW	14:31:27	1132.32	Sample	OK	1	
SEQ-CCB3	C7		1	66.58	0.14		0.00			3999-1.RAW	14:35:37	95.30	Sample	OK	1	
F009409-BS1	C8		400	66.58	1989.86					4000-1.RAW	14:39:46	1071.69	Sample	OK	1	
F009409-BS1	C9		400	66.58	1895.26					4001-1.RAW	14:43:56	1023.91	Sample	OK	1	
F009409-BLK1	C10		100	66.58	14.35					4002-1.RAW	14:48:06	95.56	Sample	OK	1	
F009409-BLK2	C11		100	66.58	23.61					4003-1.RAW	14:52:16	114.28	Sample	OK	1	
F009409-BLK3	C12		100	66.58	16.20					4004-1.RAW	14:56:25	99.30	Sample	OK	1	
0I00064-01B	C13		100	66.58	33.49					4005-1.RAW	15:00:35	134.25	Sample	OK	1	
0I00064-02B	C14		100	66.58	24.02					4006-1.RAW	15:04:45	115.11	Sample	OK	1	
0I00065-01B	C15		100	66.58	6.26					4007-1.RAW	15:08:55	79.24	Sample	OK	1	
0I00065-02B	C16		100	66.58	5.36					4008-1.RAW	15:13:05	77.41	Sample	OK	1	
0I00065-03B	C17		100	66.58	10.75					4009-1.RAW	15:17:15	86.31	Sample	OK	1	
SEQ-CCV4	C18		1	66.58	4.89		97.85			4010-1.RAW	15:21:25	1056.06	Sample	OK	1	
SEQ-CCB4	C19		1	66.58	0.04		0.00			4011-1.RAW	15:25:35	74.28	Sample	OK	1	
0I00065-04B	C20		100	66.58	14.54					4012-1.RAW	15:29:45	96.95	Sample	OK	1	
0I00065-01C	C21		2500	66.58	24933.55					4013-1.RAW	15:33:55	2081.68	Sample	OK	1	
0I00065-02C	A1		2500	66.58	339.04					4014-1.RAW	15:38:05	93.98	Sample	OK	1	
0I00065-03C	A2		2500	66.58	24369.84					4015-1.RAW	15:42:16	2036.12	Sample	OK	1	
0I00065-04C	A3		2500	66.58	29234.81					4016-1.RAW	15:46:26	2429.31	Sample	OK	1	
0I00064-01C	A4		10000	66.58	146805.37					4017-1.RAW	15:50:36	3032.74	Sample	OK	1	
0I00064-01C	A5		10000	66.58	127126.19					4018-1.RAW	15:54:46	2635.13	Sample	OK	1	
0I00065-01A	A6		2500	66.58	5490.42					4019-1.RAW	15:58:56	510.31	Sample	OK	1	
0I00065-02A	A7		2500	66.58	4020.00					4020-1.RAW	16:03:06	391.47	Sample	OK	1	
0I00065-03A	A8		2500	66.58	5031.69					4021-1.RAW	16:07:16	473.23	Sample	OK	1	
SEQ-CCV5	A9		1	66.58	5.06		101.24			4022-1.RAW	16:11:26	1089.36	Sample	OK	1	
SEQ-CCB5	A10		1	66.58	0.10		0.00			4023-1.RAW	16:15:36	87.00	Sample	OK	1	
0I00065-04A	A11		2500	66.58	4224.59					4024-1.RAW	16:19:46	408.01	Sample	OK	1	
0I00064-01A	A12		10000	66.58	69903.19					4025-1.RAW	16:23:57	1478.95	Sample	OK	1	
0I00064-02A	A13		10000	66.58	87064.31					4026-1.RAW	16:28:07	1826.69	Sample	OK	1	
F009410-BS1	A14		400	66.58	1887.00					4027-1.RAW	16:32:17	1019.74	Sample	OK	1	
F009410-BS1	A15		400	66.58	1887.19					4028-1.RAW	16:36:28	1019.84	Sample	OK	1	
F009410-BLK1	A16		100	66.58	21.08					4029-1.RAW	16:40:38	109.17	Sample	OK	1	
F009410-BLK2	A17		100	66.58	6.36					4030-1.RAW	16:44:48	79.43	Sample	OK	1	
F009410-BLK3	A18		100	66.58	20.33					4031-1.RAW	16:48:58	107.66	Sample	OK	1	
0I00070-01B	A19		100	66.58	54.23					4032-1.RAW	16:53:08	176.14	Sample	OK	1	
0I00070-02B	A20		100	66.58	38.42					4033-1.RAW	16:57:19	144.21	Sample	OK	1	
SEQ-CCV6	A21		1	66.58	5.11		102.24			4034-1.RAW	17:01:30	1069.49	Sample	OK	1	
SEQ-CCB6	B1		1	66.58	0.08		0.00			4035-1.RAW	17:05:40	82.72	Sample	OK	1	
0I00070-03B	B2		100	66.58	84.19					4036-1.RAW						

0100070-08B	B7	100	66.58	26.09		4041-1.RAW	17:30:42	119.30	Sample	OK	1
0100070-01A	B8	2500	66.58	21853.15		4042-1.RAW	17:34:52	1832.73	Sample	OK	1
0100070-02A	B9	2500	66.58	10268.31		4043-1.RAW	17:39:02	895.45	Sample	OK	1
0100070-03A	B10	2500	66.58	25338.96		4044-1.RAW	17:43:13	2114.45	Sample	OK	1
0100070-04A	B11	2500	66.58	9191.87		4045-1.RAW	17:47:23	809.46	Sample	OK	1
SEQ-CCV7	B12	1	66.58	5.06	101.12	4046-1.RAW	17:51:33	1088.14	Sample	OK	1
SEQ-CCB7	B13	1	66.58	0.09	0.00	4047-1.RAW	17:55:43	84.83	Sample	OK	1
0100070-05A	B14	2500	66.58	21798.85		4048-1.RAW	17:59:53	1828.34	Sample	OK	1
0100070-06A	B15	2500	66.58	9226.00		4049-1.RAW	18:04:03	812.21	Sample	OK	1
0100070-07A	B16	2500	66.58	20022.15		4050-1.RAW	18:08:13	1684.75	Sample	OK	1
0100070-08B	B17	2500	66.58	8100.50		4051-1.RAW	18:12:23	559.61	Sample	OK	1
0100085-02CRE1	B18	2500	66.58	139.38		4052-1.RAW	18:16:33	77.84	Sample	OK	1
F009402-BS1	B19	400	66.58	8559.87		4053-1.RAW	18:20:43	4390.22	Sample	OK	1
F009402-BSD1	B20	400	66.58	8724.19		4054-1.RAW	18:24:53	4473.33	Sample	OK	1
F009402-BLK1	B21	100	66.58	36.12		4055-1.RAW	18:29:03	139.56	Sample	OK	1
F009402-BLK2	C1	100	66.58	9.04		4056-1.RAW	18:33:13	84.84	Sample	OK	1
F009402-BLK3	C2	100	66.58	2.83		4057-1.RAW	18:37:23	72.30	Sample	OK	1
SEQ-CCV8	C3	1	66.58	5.08	101.54	4058-1.RAW	18:41:33	1092.42	Sample	OK	1
SEQ-CCB8	C4	1	66.58	0.10	0.00	4059-1.RAW	18:45:43	87.39	Sample	OK	1
0100057-01B	C5	100	66.58	38.95		4060-1.RAW	18:49:53	141.24	Sample	OK	1
0100057-02B	C6	100	66.58	0.00		4061-1.RAW	18:54:03	59.84	Sample	OK	1
0100057-03B	C7	100	66.58	0.00		4062-1.RAW	18:58:13	62.35	Sample	OK	1
0100057-01C	C8	2500	66.58	41566.74		4063-1.RAW	19:02:23	3425.96	Sample	OK	1
0100057-02C	C9	2500	66.58	397.05		4064-1.RAW	19:06:33	98.67	Sample	OK	1
0100057-03C	C10	2500	66.58	107.88		4065-1.RAW	19:10:43	75.30	Sample	OK	1

SEQ-IBL1	A1	0I00010-01	B7	SEQ-CCB4	C19		
SEQ-IBL2	A2	0I00032-01	B8	0I00065-04B	C20		
SEQ-IBL3	A3	0I00033-01	B9	0I00065-01C	C21		
SEQ-CAL1	A4	0I00033-03	B10	0I00065-02C	A1		
SEQ-CAL2	A5	0I00033-04	B11	0I00065-03C	A2		
SEQ-CAL3	A6	SEQ-CCV2	B12	0I00065-04C	A3	0I00070-08B	B7
SEQ-CAL4	A7	SEQ-CCB2	B13	0I00064-01C	A4	0I00070-01A	B8
SEQ-CAL5	A8	0I00047-02	B14	0I00064-01C	A5	0I00070-02A	B9
SEQ-ICV1	A9	0I00047-03	B15	0I00065-01A	A6	0I00070-03A	B10
SEQ-ICB1	A10	0I00047-04	B16	0I00065-02A	A7	0I00070-04A	B11
SEQ-ICV2	B19	0I00047-05	B17	0I00065-03A	A8	SEQ-CCV7	B12
SEQ-ICV3	B20	0I00047-06	B18	SEQ-CCV5	A9	SEQ-CCB7	B13
SEQ-ICB2	B21	0I00047-07	C1	SEQ-CCB5	A10	0I00070-05A	B14
F009375-BS1	A11	0I00047-08	C2	0I00065-04A	A11	0I00070-06A	B15
F009375-BSD1	A12	0I00047-09	C3	0I00064-01A	A12	0I00070-07A	B16
F009375-BLK1	A13	0I00047-10	C4	0I00064-02A	A13	0I00070-08B	B17
F009375-BLK2	A14	0I00051-01	C5	F009410-BS1	A14	0I00065-02CRE1	B18
F009375-BLK3	A15	SEQ-CCV3	C6	F009410-BSD1	A15	F009402-BS1	B19
F009375-BLK4	A16	SEQ-CCB3	C7	F009410-BLK1	A16	F009402-BSD1	B20
F009375-BLK5	A17	F009409-BS1	C8	F009410-BLK2	A17	F009402-BLK1	B21
F009375-BLK6	A18	F009409-BSD1	C9	F009410-BLK3	A18	F009402-BLK2	C1
F009375-BLK7	A19	F009409-BLK1	C10	0I00070-01B	A19	F009402-BLK3	C2
0I00047-01	A20	F009409-BLK2	C11	0I00070-02B	A20	SEQ-CCV8	C3
SEQ-CCV1	A21	F009409-BLK3	C12	SEQ-CCV6	A21	SEQ-CCB8	C4
SEQ-CCB1	B1	0I00064-01B	C13	SEQ-CCB6	B1	0I00057-01B	C5
F009375-MS1	B2	0I00064-02B	C14	0I00070-03B	B2	0I00057-02B	C6
F009375-MSD1	B3	0I00065-01B	C15	0I00070-04B	B3	0I00057-03B	C7
0I00033-02	B4	0I00065-02B	C16	0I00070-05B	B4	0I00057-01C	C8
F009375-MS2	B5	0I00065-03B	C17	0I00070-06B	B5	0I00057-02C	C9
F009375-MSD2	B6	SEQ-CCV4	C18	0I00070-07B	B6	0I00057-03C	C10

VERIFIED BY:

R 9/29/2020

ANALYSIS SEQUENCE

0I30011

0I3009/0I3010
Attached

Instrument: Hg2600-3



Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I30011-IBL1	QC	1			
0I30011-IBL2	QC	2			
0I30011-IBL3	QC	3			
0I30011-CAL1	QC	4	2002064		QUALITY ASSURANCE
0I30011-CAL2	QC	5	2002065		PEER-REVIEWED
0I30011-CAL3	QC	6	2002220		INITIALS: PCS
0I30011-CAL4	QC	7	2002221		
0I30011-CAL5	QC	8	2002222		
0I30011-ICV1	QC	9	2001809		
0I30011-ICB1	QC	10			
0I30011-CCV1	QC	11	2001809		
0I30011-CCB1	QC	12			
F009376-BS1	QC	13			
F009376-BSD1	QC	14			
F009379-BS1	QC	15			
F009379-BSD1	QC	16			
F009380-BS1	QC	17			
F009380-BSD1	QC	18			
F009376-BLK1	QC	19			
F009376-BLK2	QC	20			
F009376-BLK3	QC	21			
F009379-BLK1	QC	22			
0I30011-CCV2	QC	23	2001809		
0I30011-CCB2	QC	24			
F009379-BLK2	QC	25			
F009379-BLK3	QC	26			
F009380-BLK1	QC	27			
F009380-BLK2	QC	28			
F009380-BLK3	QC	29			
0I00047-13	Hg-CVAFS-T-7030	30			
F009376-MS1	QC	31			
F009376-MSD1	QC	32			
0I00047-14	Hg-CVAFS-T-7030	33			
F009376-MS2	QC	34			
0I30011-CCV3	QC	35	2001809		
0I30011-CCB3	QC	36			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
F009376-MSD2	QC	37			
0I00047-23	Hg-CVAFS-T-7030	38			
F009379-MS1	QC	39			
F009379-MSD1	QC	40			
0I00047-35	Hg-CVAFS-T-7030	41			
F009379-MS2	QC	42			
F009379-MSD2	QC	43			
0I00047-36	Hg-CVAFS-T-7030	44			
F009380-MS1	QC	45			
F009380-MSD1	QC	46			
0I30011-CCV4	QC	47	2001809		
0I30011-CCB4	QC	48			
0I00047-37	Hg-CVAFS-T-7030	49			
F009380-MS2	QC	50			
F009380-MSD2	QC	51			
0I00047-11	Hg-CVAFS-T-7030	52			
0I00047-15	Hg-CVAFS-T-7030	53			
0I00047-16	Hg-CVAFS-T-7030	54			
0I00047-17	Hg-CVAFS-T-7030	55			
0I00047-18	Hg-CVAFS-T-7030	56			
0I00047-19	Hg-CVAFS-T-7030	57			
0I00047-20	Hg-CVAFS-T-7030	58			
0I30011-CCV5	QC	59	2001809		
0I30011-CCB5	QC	60			
0I00047-21	Hg-CVAFS-T-7030	61			
0I00047-22	Hg-CVAFS-T-7030	62			
0I00047-24	Hg-CVAFS-T-7030	63			
0I00047-25	Hg-CVAFS-T-7030	64			
0I00047-26	Hg-CVAFS-T-7030	65			
0I00047-27	Hg-CVAFS-T-7030	66			
0I00047-28	Hg-CVAFS-T-7030	67			
0I00047-29	Hg-CVAFS-T-7030	68			
0I00047-30	Hg-CVAFS-T-7030	69			
0I00047-31	Hg-CVAFS-T-7030	70			
0I30011-CCV6	QC	71	2001809		
0I30011-CCB6	QC	72			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

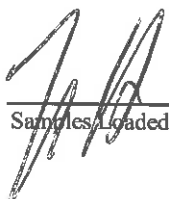
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00047-32	Hg-CVAFS-T-7030	73			
0I00047-33	Hg-CVAFS-T-7030	74			
0I00047-34	Hg-CVAFS-T-7030	75			
0I00047-43	Hg-CVAFS-T-7030	76			
0I00047-44	Hg-CVAFS-T-7030	77			
0I00047-45	Hg-CVAFS-T-7030	78			
0I00047-46	Hg-CVAFS-T-7030	79			
0I00047-47	Hg-CVAFS-T-7030	80			
0I00047-48	Hg-CVAFS-T-7030	81			
0I00047-49	Hg-CVAFS-T-7030	82			
0I30011-CCV7	QC	83	2001809		
0I30011-CCB7	QC	84			
0I00047-50	Hg-CVAFS-T-7030	85			
0I00047-51	Hg-CVAFS-T-7030	86			
0I00047-52	Hg-CVAFS-T-7030	87			
0I00047-53	Hg-CVAFS-T-7030	88			
0I00047-54	Hg-CVAFS-T-7030	89			
0I00047-55	Hg-CVAFS-T-7030	90			
0I00047-56	Hg-CVAFS-T-7030	91			
0I00047-57	Hg-CVAFS-T-7030	92			
0I00047-58	Hg-CVAFS-T-7030	93			
0I00047-60	Hg-CVAFS-T-7030	94			
0I30011-CCV8	QC	95	2001809		
0I30011-CCB8	QC	96			
0I00047-61	Hg-CVAFS-T-7030	97			
0I00047-62	Hg-CVAFS-T-7030	98			
0I00047-63	Hg-CVAFS-T-7030	99			
0I00047-64	Hg-CVAFS-T-7030	100			
0I00047-66	Hg-CVAFS-T-7030	101			
0I00047-67	Hg-CVAFS-T-7030	102			
0I00047-68	Hg-CVAFS-T-7030	103			
0I00047-69	Hg-CVAFS-T-7030	104			
0I00047-70	Hg-CVAFS-T-7030	105			
0I00047-71	Hg-CVAFS-T-7030	106			
0I30011-CCV9	QC	107	2001809		
0I30011-CCB9	QC	108			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00047-72	Hg-CVAFS-T-7030	109			
0I00047-73	Hg-CVAFS-T-7030	110			
0I00047-74	Hg-CVAFS-T-7030	111			
0I00047-75	Hg-CVAFS-T-7030	112			
0I00047-76	Hg-CVAFS-T-7030	113			
0I00047-77	Hg-CVAFS-T-7030	114			
0I00047-78	Hg-CVAFS-T-7030	115			
0I30011-CCVA	QC	116	2001809		
0I30011-CCBA	QC	117			



Samples Loaded By

9/30/2020

Date



Data Processed By

9/20/2020

Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>ZKH</u>	Sequence(s) #: <u>0130011</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200929-2</u>
Date: <u>9/30/2020</u>	WO (s) #: <u>0100047</u>
Batch #(s): <u>F009376, F009379, F009380</u>	

• Select the correct preparation method.

Analyte	Prep Method	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest Air/Gas
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest Sed/Soil
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb Sed/Soil
<input checked="" type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest Tissue
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation Air/Gas
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric Tissue
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation Water
<input type="checkbox"/> Hg ⁰	NA	NA Water
<input type="checkbox"/> Inorg Hg	NA	NA Water

Analyst Initials: ZKH Reviewer Initials: PGS

- | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|------------------------------|--------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description?
Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (b) Check 5% of transcription from Instrument print-out and Excel file
Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (e) Check & compare initial & final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel?
50 ml / aliquot = Excel dilution value | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): _____ | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: ZKH	Sequence(s) #: 0130011
Reviewer:	Dataset ID(s): THg26003-200929-2
Date: 9/30/2020	WO (s) #: 0100047
Batch #(s): F009376, F009379, F009380	

Analyst Initials ZKH **Reviewer Initials** PGS

- | | | | | |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------|-----------------------------------------|--------------------------|
| 5b. Has the B/C section data been uploaded? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| QA/QC Data Checked | | | | |
| 6. RSD CF (≤ 15%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 7. The calibration curve included a minimum of 5 Standards | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| 9. ICV and CCV % Recoveries EPA 1631E (77-123%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 10. Do all calibration points pass acceptance criteria? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 11. Are qualifiers consistent with the data review flowcharts? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 12. Explain any items on the failed data report from Element | | | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit: | | | | |
| (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (c) Was a BrCI Blank analyzed for each preservation level? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (d) Are Preparation Blanks summarized on QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 14. Filtration Blank Prepared (if yes, use FB qualifier) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> |
| (a) Filtration Blank prep date same as associated samples' prep date | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 18. Is the correct 'Source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 19. For digested preps: was there a spike witness signature & date on the prep bench sheet? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>ZKH</u>	Sequence(s) #: <u>0130011</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200929-2</u>
Date: <u>9/30/2020</u>	WO (s) #: <u>0100047</u>
Batch #(s): <u>F009376, F009379, F009380</u>	_____

Analyst Initials ZKH Reviewer Initials DGS

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? YES NO
- Comments: _____
21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
 Comments: 0100047-78 OVERCALIB ZKH 9/30/2020
22. Are the samples run at the correct dilution level for the method? YES NO
- Comments: _____
23. Dissolved < Total (if applicable) YES NO N/A
- Comments: _____
24. Effluent < Influent (visually confirm if needed) YES NO N/A
- Comments: _____
25. Are re-runs noted with reason? YES NO N/A
- Comments: _____
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
- Comments: _____
27. Is the B trap <5% A Traps YES NO N/A
- Comments: _____
28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
- Comments: _____
29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
- Comments: _____
30. Have re-extracts been created for non-reportable samples? YES NO N/A
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
32. Does the data set need scanning? YES N/A
33. Does the dataset have an LOQ/LOQ or DOC? YES N/A
34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
35. Water samples-is the final volume correct in the sequence? YES NO N/A
- Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs**
36. Date of analyst IDOC/CDOC: _____ IDOC/CDOC within last 12 months? YES NO
37. Date of analyst's SOP reading for method: _____ Current SOP revision read? YES NO
38. Date of LOD: 10/29/2017 LOD within last 3 months? YES NO
39. Date of LOQ: 10/29/2015 LOQ within last 3 months? YES NO

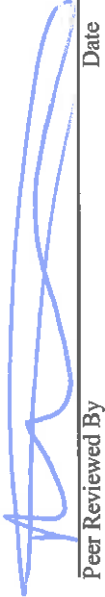
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0I30011

Sample ID Analysis Result MRL Dup Result Source True Value Units % Rec. LCL Rec. UCL RPD RPD Limit Over Cal Failure Qualifier


Analyst Reviewed By

9/30/2020
Date


Peer Reviewed By

Date

PREPARATION BENCH SHEET

F009376

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Prepared: 9/22/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009376-BLK1	Blank	0.25	20					
F009376-BLK2	Blank	0.25	20					
F009376-BLK3	Blank	0.25	20					
F009376-BS1	LCS	0.25	20	2002032	20			
F009376-BSD1	LCS Dup	0.25	20	2002032	20			
F009376-MS1	Matrix Spike [0100047-13]	0.2671	20	2001204	100			
F009376-MS2	Matrix Spike [0100047-14]	0.2633	20	2001204	100			
F009376-MSD1	Matrix Spike Dup [0100047-13]	0.256	20	2001204	100			
F009376-MSD2	Matrix Spike Dup [0100047-14]	0.2699	20	2001204	100			

Standard ID(s)	Description:	Expiration:	Reagent ID(s)	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002290	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009376

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-11	L9-45_20LT009_091020_11_LOB_TA	0.2515	20	-	-	eezer 23		
0100047-13	CJ-04_20LT101_091020_01_LOB_TA	0.2682	20	QC	-	eezer 23	MS/MSD	
0100047-14	CJ-04_20LT101_091020_02_LOB_TA	0.254	20	QC	-	eezer 23	MS/MSD	
0100047-15	CJ-04_20LT101_091020_03_LOB_TA	0.2668	20	-	-	eezer 23		
0100047-16	CJ-04_20LT104_091020_04_LOB_TA	0.2634	20	-	-	eezer 23		
0100047-17	CJ-04_20LT104_091020_05_LOB_TA	0.2628	20	-	-	eezer 23		
0100047-18	CJ-04_20LT105_091020_06_LOB_TA	0.2683	20	-	-	eezer 23		
0100047-19	L9-45_20LT009_091020_13_LOB_TA	0.2658	20	-	-	eezer 23		
0100047-20	L9-45_20LT009_091020_14_LOB_TA	0.2602	20	-	-	eezer 23		
0100047-21	0B-05_20ET001_091020_01_TOM_WB	0.2563	20	-	-	eezer 23		
0100047-22	0B-05_20ET001_091020_02_TOM_WB	0.2557	20	-	-	eezer 23		
0100047-24	0B-05_20ET003_091020_04_TOM_WB	0.2543	20	-	-	eezer 23		
0100047-25	CJ-04_20L108_091020_07_LOB_TA	0.2616	20	-	-	eezer 23		
0100047-26	CJ-04_20L108_091020_08_LOB_TA	0.2698	20	-	-	eezer 23		
0100047-27	CJ-04_20L109_091020_09_LOB_TA	0.2572	20	-	-	eezer 23		
0100047-28	0B-05_20ET003_091020_05_TOM_WB	0.2548	20	-	-	eezer 23		
0100047-29	0B-05_20ET003_091020_06_TOM_WB	0.2639	20	-	-	eezer 23		
0100047-30	0B-05_20ET003_091020_07_TOM_WB	0.2641	20	-	-	eezer 23		
0100047-31	0B-05_20ET003_091020_08_TOM_WB	0.2611	20	-	-	eezer 23		

PREPARATION BENCH SHEET

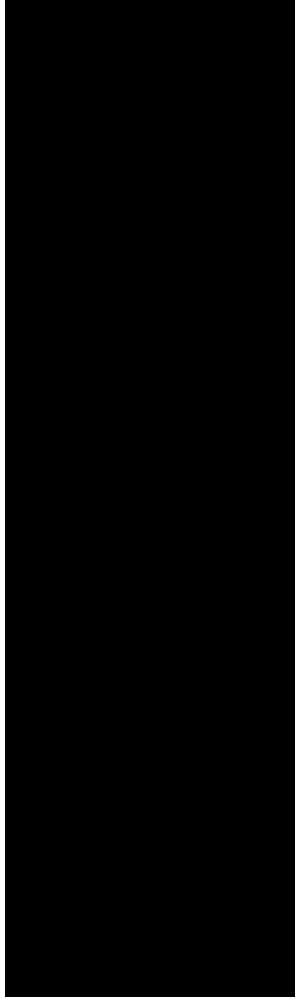
F009376

Eurofins Frontier Global Sciences, LLC

Prepared: 9/22/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

0100047-32	0B-05_20ET004_091020_09_TOM_WB	0.2636	20	-	-	eczet 23	
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Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep) 9/22/2020
Upload/Date: MGS (Data Entry) 9/25/2020

Samples to lab: NA Batch #: F009376
Reviewer/Date: emb 9/29/20

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (Nutraceuticals)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA Other:	EFAFS-1-AFS SOP2795 Issues - THg/7030 Hotplate	

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019

Comments: _____

Conditionally formatted training files located at:
\\us34fil\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

Reviewer Initials: emb 9/28/20 Tertiary Review: ZCH 9/29/2020

- Is any SOP/DOC expiring within one week of Submission Date? YES NO
Data cannot be reported without a current IDOC/CDOC. If YES, notify supervisor and technician immediately.
- Check prep method MS
(a) For Ceuticals: Is correct Hg code being used in LIMS? ICPMS CV-AFS 70:30 N/A
- Compare sample ID & container ID with benchsheet & in LIMS YES N/A
- Check for transcription errors from benchsheet
(a) Check and compare initial and final volumes YES N/A
(b) Check and compare mass YES N/A
(c) Has the number of pills been documented (Special Info 5 in benchsheet)? YES N/A
(d) Have assay logbook copies been attached & avg masses entered? YES N/A
(e) For re-digests, have e-mails been attached and verified? YES N/A
(f) Benchsheet prep date MUST match actual prep date YES
- Samples per Batch? Check QC Requirements
(a) PBs per batch? ≤ 20 ≤ 10 3 PBs 2 PBs 1 PBs
(b) Are pre and post homogenization blanks in batch? YES N/A
(c) BS, BS/BSD or CRM in batch? BS BS/BSD CRM
(d) MS/MSD in batch? YES N/A
(e) MD in batch? YES N/A
(f) Is there at least one duplicate QC source in batch? YES N/A
(g) Are there any client specific requests, QC requests, etc? YES N/A
- Document: 0700047/14 + 0100047-13 ZCH 9/29/2020
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? YES N/A
(i) Correct 'source' designated for MD/MS/MSD? YES N/A
(j) For EFGS-filtered samples, was a filtration blank included? YES N/A
- Special prep requirements?
(a) For 1638: Have samples sat for 48 hours after preservation? YES N/A
(b) For 200.8: Have samples sat for 16 hours after preservation? YES N/A
(c) For DOD have pipettes been calibrated day of prep? YES N/A
- Are the samples appropriately spiked?
(a) Is the spike and amount used appropriate and entered into LIMS? YES N/A
(b) For all spiking was there a witness? (Initials must be in logbook) YES N/A
(c) Spikes added: YES

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.
Spike LIMS ID: NA

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
<u>THg-BS</u>	<u>2002032</u>	<u>20</u>			
<u>THg-MS</u>	<u>2001204</u>	<u>100</u>			

Technician: SM/MS Batch#: F009376 Date: 9/18/2020
Digested 9/22/20 MFS

- EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon
 Balance#: 23 Calibrated? Yes No Therm.#: 14041802 Calibrated? Yes No
 *Time in: 1500 Actual Temp. (raw): 73.9 °C w/ CF: 72.9 °C *Time in can't begin before target temperature is reached
 Time out: 1705 Actual Temp. (raw): 78.4 °C w/ CF: 77.1 °C

Final vol.: 20 mL (LIMS ID: 2002290) BS Spike vol.: 20 µL (LIMS ID: 2002037)
 Spike Witness: VA 922200 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2001704)

HCl LIMS ID: N/A Pipette SN#: 0007852 Calibration Date: 9/15/20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2002290 Dispenser #: 19181607 Calibrated? Yes No
 Other Acid LIMS ID: 2002290 (Sy.Br.c1) Dispenser #: 19157225 Calibrated? Yes No
 Glass Vial # 00074092 Boiling Chip lot # 2002050 *Hotblock Position: H0

Vial #	Sample ID Number	Container ID	Sample Size mL/g	Vial #	Sample ID Number	Container ID	Sample Size mL/g	CRM LIMS ID
1	F009376-BLK1	A	0.252	19	OT00047-21	C	0.2563	
2	F009376-BLK2	A	0.2507	20	OT00047-22	C	0.2557	
3	F009376-BLK3	A	0.2541	21	OT00047-24	C	0.2543	
4	F009376-BL1	A	0.2506	22	OT00047-25	C	0.2616	
5	F009376-BSP1	A	0.2650	23	OT00047-26	C	0.2618	
6	OT00047-13 (MSI)	C	0.2682	24	OT00047-27	C	0.2572	OT00047-13 C = MSI SRC
7	OT00047-MS1	C	0.2671	25	OT00047-28	C	0.2548	
8	OT00047-MSD1	C	0.2586	26	OT00047-29	C	0.2637	OT00047-14 C = MSD
9	OT00047-MS2	C	0.2633	27	OT00047-30	C	0.2641	
10	OT00047-MSDA	C	0.2699	28	OT00047-31	C	0.2611	
11	OT00047-14 (MSD)	C	0.2540	29	OT00047-32	C	0.2636	
12	OT00047-11	C	0.2575	30				
13	OT00047-15	C	0.2668	31				
14	OT00047-16	C	0.2634	32				
15	OT00047-17	C	0.2628	33				
16	OT00047-18	C	0.2673	34				
17	OT00047-19	C	0.2658	35				
18	OT00047-20	C	0.2602	36				

PREPARATION BENCH SHEET

F009379

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

Matrix: Tissue

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009379-BLK1	Blank	0.25	20					
F009379-BLK2	Blank	0.25	20					
F009379-BLK3	Blank	0.25	20					
F009379-BS1	LCS	0.25	20	2002032	20			
F009379-BSD1	LCS Dup	0.25	20	2002032	20			
F009379-MS1	Matrix Spike [0100047-23]	0.2684	20	2001204	100			
F009379-MS2	Matrix Spike [0100047-35]	0.2683	20	2001204	100			
F009379-MSD1	Matrix Spike Dup [0100047-23]	0.2501	20	2001204	100			
F009379-MSD2	Matrix Spike Dup [0100047-35]	0.2511	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002290	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009379

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-23	0B-05_20ET001_091020_03_TOM_WB	0.2579	20	QC	-	eezer 23	MS/MSD	
0100047-33	0B-05_20ET005_091020_10_TOM_WB	0.2609	20	-	-	eezer 23		
0100047-34	0B-05_20ET005_091020_11_TOM_WB	0.2558	20	-	-	eezer 23		
0100047-35	ES-FP_20LT201_091020_01_LOB_TA	0.2583	20	QC	-	eezer 23	MS/MSD	
0100047-43	0B-05_20ET007_091020_12_TOM_WB	0.2549	20	-	-	eezer 23		
0100047-44	0B-05_20ET007_091020_13_TOM_WB	0.2696	20	-	-	eezer 23		
0100047-45	0B-05_20ET007_091020_14_TOM_WB	0.2518	20	-	-	eezer 23		
0100047-46	0B-05_20ET009_091020_15_TOM_WB	0.2569	20	-	-	eezer 23		
0100047-47	ES-FP_20LT203_091020_09_LOB_TA	0.2675	20	-	-	eezer 23		
0100047-48	ES-FP_20LT203_091020_10_LOB_TA	0.2515	20	-	-	eezer 23		
0100047-49	ES-FP_20LT203_091020_11_LOB_TA	0.2666	20	-	-	eezer 23		
0100047-50	ES-FP_20LT205_091020_12_LOB_TA	0.2695	20	-	-	eezer 23		
0100047-51	ES-FP_20LT205_091020_13_LOB_TA	0.2579	20	-	-	eezer 23		
0100047-52	ES-FP_20LT206_091020_14_LOB_TA	0.2683	20	-	-	eezer 23		
0100047-53	ES-FP_20LT206_091020_15_LOB_TA	0.2629	20	-	-	eezer 23		
0100047-54	0B-05_20ET009_091020_16_TOM_WB	0.2516	20	-	-	eezer 23		
0100047-55	0B-05_20ET009_091020_17_TOM_WB	0.2605	20	-	-	eezer 23		
0100047-56	0B-05_20ET009_091020_18_TOM_WB	0.2518	20	-	-	eezer 23		
0100047-57	0B-05_20ET010_091020_19_TOM_WB	0.2539	20	-	-	eezer 23		

PREPARATION BENCH SHEET

F009379

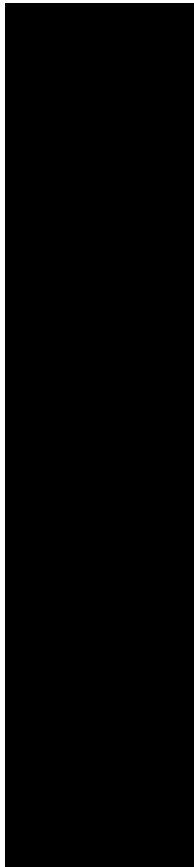
Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

Matrix: Tissue

0100047-58	0B-05_20ET011_091020_20_TOM_WB	0.2694	20	-	-	cezet 23	
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Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep) 9/22/2020
Upload/Date: MGS (Data Entry) 9/25/2020

Samples to lab: NA
Reviewer/Date: pmf 9/29/20

Batch #: F009379

EFGS Preparation Method			
<input type="checkbox"/> SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS	<input type="checkbox"/> AFS
<input type="checkbox"/> SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2840	Modified Aqua Regia		
<input type="checkbox"/> SOP2820	RP		
<input type="checkbox"/> SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS
<input type="checkbox"/> SOP2893	Oven Digestion (As, Se Speciation)		
<input type="checkbox"/> SOP5145	Microwave Digestion (Nutraceuticals)		
<input type="checkbox"/> SOP5145	Microwave Digestion (3051)		
<input checked="" type="checkbox"/>	NA Other: <u>EFAFS-T-AFS-SOP2795 Tissues - THg 70:30 Hot plate</u>		

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

- | | | | | |
|--|--|-------------------|------------------|------------|
| | | Reviewer Initials | Tertiary Review | |
| | | <u>pmf</u> | <u>9/29/2020</u> | <u>TCU</u> |
1. Is any SOP/DOC expiring within one week of Submission Date? YES NO
Data cannot be reported without a current IDOC/CDOC.
 2. Check prep method NA
(a) For ~~For~~ Ceuticals: Is correct Hg code being used in LIMS? ICPMS CV-AFS 70:30 N/A
 3. Compare sample ID & container ID with benchsheet & in LIMS YES N/A
 4. Check for transcription errors from benchsheet YES N/A
 - (a) Check and compare initial and final volumes YES N/A
 - (b) Check and compare mass YES N/A
 - (c) Has the number of pills been documented (Special Info 5 in benchsheet)? YES N/A
 - (d) Have assay logbook copies been attached & avg masses entered? YES N/A
 - (e) For re-digests, have e-mails been attached and verified? YES N/A
 - (f) Benchsheet prep date MUST match actual prep date YES N/A
 5. Samples per Batch? Check QC Requirements ≤ 20 ≤ 10
 - (a) PBs per batch? 3 PBs 2 PBs 1 PBs N/A
 - (b) Are pre and post homogenization blanks in batch? BS BS/BSD CRM N/A
 - (c) BS, BS/BSD or CRM in batch? BS BS/BSD CRM N/A
 - (d) MS/MSD in batch? YES N/A
 - (e) MD in batch? YES N/A
 - (f) Is there at least one duplicate QC source in batch? YES N/A
 - (g) Are there any client specific requests, QC requests, etc? YES N/A
 - Document: 0100047-35 d-23
 - (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? YES N/A
 - (i) Correct 'source' designated for MD/MS/MSD? YES N/A
 - (j) For EFGS-filtered samples, was a filtration blank included? YES N/A
 6. Special prep requirements? YES N/A
 - (a) For 1638: Have samples sat for 48 hours after preservation? YES N/A
 - (b) For 200.8: Have samples sat for 16 hours after preservation? YES N/A
 - (c) For DOD have pipettes been calibrated day of prep? YES N/A
 7. Are the samples appropriately spiked? YES N/A
 - (a) Is the spike and amount used appropriate and entered into LIMS? YES N/A
 - (b) For all spiking was there a witness? (Initials must be in logbook) YES N/A
 - (c) Spikes added: YES N/A

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: NA

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>THg-BS</u>	<u>2002032</u>	<u>20</u>			
<u>THg-MS</u>	<u>2001204</u>	<u>100</u>			

Technician: UN/MFS Batch #: F009379 Date: 9-18-2020

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol - Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A
 Vial Type: Glass Teflon
 Balance #: 25 Calibrated? Yes No
 Therm. #: 1075090 Calibrated? Yes No
 *Time in: 1330 °C w/ CF: 76.5 °C *Time in can't begin before target temperature is reached
 Time out: 1739 °C w/ CF: 77.3 °C

Final vol.: 20 mL (LIMS ID: 2002290) BS Spike vol.: 20 µL (LIMS ID: 2002032)
 Spike Witness: UN 9-22-20 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2001704)

HCl LIMS ID: N/A Pipette SN#: 0007852 Calibration Date: 9/15/20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2002190 Dispenser #: 192081661 Calibrated? Yes No
 Other Acid LIMS ID: 2002290 Dispenser #: 19337095
 Glass Vial # 00677092 Boiling Chip lot # 2002050 *Hotblock Position: H5

Vial #	Sample ID Number	Container ID	Sample Size µL	Vial #	Sample ID Number	Container ID	Sample Size µL	CRM LIMS ID
1	F009379-B1K1	A	0.2672	19	0I00047-40	C	0.2515	N/A
2	F009379-B1K2	A	0.2704	20	0I00047-49	C	0.2606	
3	F009379-B1K3	A	0.2601	21	0I00047-50	C	0.2693	
4	F009379-B51	A	0.2600	22	0I00047-51	C	0.2579	
5	F009379-B5D1	A	0.2553	23	0I00047-52	C	0.2603	
6	0I00047-73	C	0.2579	24	0I00047-53	C	0.2629	
7	F009379-M51	C	0.2604	25	0I00047-54	C	0.2516	
8	F009379-M5D1	C	0.2501	26	0I00047-55	C	0.2605	
9	0I00047-35	C	0.2583	27	0I00047-56	C	0.2510	
10	F009379-M52	C	0.2683	28	0I00047-57	C	0.2539	
11	F009379-M5D2	C	0.2511	29	0I00047-58	C	0.2694	
12	0I00047-33	C	0.2604	30				
13	0I00047-34	C	0.2580	31				
14	0I00047-43	C	0.2549	32				
15	0I00047-44	C	0.2696	33				
16	0I00047-45	C	0.2516	34				
17	0I00047-46	C	0.2559	35				
18	0I00047-47	C	0.2675	36				

Comments:
 0 I00047-25: STD
 0 I00047-35: STD
 *limited Volume

PREPARATION BENCH SHEET

F009380

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spikel ID	µl Spikel	Spike2 ID	µl Spike2	Extraction Comments
F009380-BLK1	Blank	0.25	20					
F009380-BLK2	Blank	0.25	20					
F009380-BLK3	Blank	0.25	20					
F009380-BS1	LCS	0.25	20	2002032	20			
F009380-BSD1	LCS Dup	0.25	20	2002032	20			
F009380-MS1	Matrix Spike [0100047-36]	0.2556	20	2001204	100			
F009380-MS2	Matrix Spike [0100047-37]	0.252	20	2001204	100			
F009380-MSD1	Matrix Spike Dup [0100047-36]	0.278	20	2001204	100			
F009380-MSD2	Matrix Spike Dup [0100047-37]	0.2737	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002290	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009380

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-36	ES-FP_20LT201_091020_02_LOB_TA	0.2599	20	QC	-	eezer 23	MS/MSD	
0100047-37	ES-FP_20LT201_091020_03_LOB_TA	0.2548	20	QC	-	eezer 23	MS/MSD	
0100047-60	ES-FP_20LT207_091020_16_LOB_TA	0.2502	20	-	-	eezer 23		
0100047-61	ES-FP_20LT208_091020_17_LOB_TA	0.2763	20	-	-	eezer 23		
0100047-62	ES-FP_20LT208_091020_18_LOB_TA	0.2588	20	-	-	eezer 23		
0100047-63	ES-FP_20LT208_091020_19_LOB_TA	0.2704	20	-	-	eezer 23		
0100047-64	ES-FP_20LT209_091020_20_LOB_TA	0.2851	20	-	-	eezer 23		
0100047-66	OL-01_20LT301_091020_02_LOB_TA	0.2621	20	-	-	eezer 23		
0100047-67	OL-01_20LT302_091020_03_LOB_TA	0.2547	20	-	-	eezer 23		
0100047-68	OL-01_20LT304_091020_04_LOB_TA	0.2767	20	-	-	eezer 23		
0100047-69	OL-01_20LT304_091020_05_LOB_TA	0.2771	20	-	-	eezer 23		
0100047-70	OL-01_20LT304_091020_06_LOB_TA	0.2641	20	-	-	eezer 23		
0100047-71	BO-04_20ET503_091020_02_TOM_WB	0.2651	20	-	-	eezer 23		
0100047-72	BO-04_20ET506_091020_03_TOM_WB	0.2597	20	-	-	eezer 23		
0100047-73	BO-04_20ET506_091020_04_TOM_WB	0.2515	20	-	-	eezer 23		
0100047-74	BO-04_20ET506_091020_05_TOM_WB	0.2652	20	-	-	eezer 23		
0100047-75	BO-04_20ET506_091020_06_TOM_WB	0.2649	20	-	-	eezer 23		
0100047-76	BO-04_20ET507_091020_07_TOM_WB	0.26	20	-	-	eezer 23		
0100047-77	BO-04_20ET508_091020_08_TOM_WB	0.2651	20	-	-	eezer 23		

PREPARATION BENCH SHEET

F009380

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

0100047-78	OL-01_20LT305_091020_07_LOB_TA	0.2727	20	-	-	eezer 23	
0100047-78RE1	OL-01_20LT305_091020_07_LOB_TA	0.2727	20	-	-	eezer 23	RR @ 1000X - ZKH 9/30/2020



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep) 9/22/2020
 Upload/Date: MGS (Data Entry) 9/25/2020

Samples to lab: NA
 Reviewer/Date: emb 9/29/20

Batch #: F009380

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (Nutraceuticals)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA Other:	EFAFS-AFS SOP2795 Tissues - THg 70:30 Hot plate	

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019

Comments: _____

Conditionally formatted training files located at:
 \\us34file\General and Admin\Quality Assurance\Training\Training Master
 (Contact QA for any problems regarding these training files.)

Analytes: TAG

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| <p>1. Is any SOP/DOC expiring within one week of Submission Date?
 Data cannot be reported without a current IDOC/CDOC. <input checked="" type="checkbox"/> YES</p> <p>2. Check prep method <u>MFS</u>
 (a) For Ceuticals: Is correct Hg code being used in LIMS? <input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30</p> <p>3. Compare sample ID & container ID with benchsheet & in LIMS <input checked="" type="checkbox"/> YES</p> <p>4. Check for transcription errors from benchsheet
 (a) Check and compare initial and final volumes <input checked="" type="checkbox"/> YES
 (b) Check and compare mass <input checked="" type="checkbox"/> YES
 (c) Has the number of pills been documented (Special Info 5 in benchsheet)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A
 (d) Have assay logbook copies been attached & avg masses entered? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A
 (e) For re-digests, have e-mails been attached and verified? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A
 (f) Benchsheet prep date MUST match actual prep date <input checked="" type="checkbox"/> YES</p> <p>5. Samples per Batch? Check QC Requirements
 (a) PBs per batch? <input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10 <input type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs
 (b) Are pre and post homogenization blanks in batch? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A
 (c) BS, BS/BSD or CRM in batch? <input type="checkbox"/> BS <input type="checkbox"/> BS/BSD <input type="checkbox"/> CRM
 (d) MS/MSD in batch? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A
 (e) MD in batch? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A
 (f) Is there at least one duplicate QC source in batch? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A
 (g) Are there any client specific requests, QC requests, etc? <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> <p>Document: <u>0100047-36/37</u></p> <p>(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>(i) Correct 'source' designated for MD/MS/MSD? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>(j) For EFGS-filtered samples, was a filtration blank included? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>6. Special prep requirements?
 (a) For 1638: Have samples sat for 48 hours after preservation? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A
 (b) For 200.8: Have samples sat for 16 hours after preservation? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A
 (c) For DOD have pipettes been calibrated day of prep? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A</p> <p>7. Are the samples appropriately spiked?
 (a) Is the spike and amount used appropriate and entered into LIMS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A
 (b) For all spiking was there a witness? (Initials must be in logbook) <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A
 (c) Spikes added: <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A</p> | <p>Reviewer Initials: <u>emb</u> 9/28/20
 <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES</p> <p>Tertiary Review: <u>emb</u> 9/29/20
 <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: N/A

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>TAG-BS</u>	<u>2002032</u>	<u>20</u>			
<u>TAG-MS</u>	<u>2001204</u>	<u>100</u>			

PREPARATION BENCH SHEET

F009380

Eurofins Frontier Global Sciences, LLC

1530
Prepared: 9/22/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spikel ID	µl Spike1	Spikel ID	µl Spike2	Extraction Comments
F009380-BLK1	Blank	0.25	20					
F009380-BLK2	Blank	0.25	20					
F009380-BLK3	Blank	0.25	20					
F009380-BS1	LCS	0.25	20	2002032	20			
F009380-BSD1	LCS Dup	0.25	20	2002032	20			
F009380-MS1	Matrix Spike [0100047-36]	0.2556	20	2001204	100			
F009380-MS2	Matrix Spike [0100047-37]	0.252	20	2001204	100			
F009380-MSD1	Matrix Spike Dup [0100047-36]	0.278	20	2001204	100			
F009380-MSD2	Matrix Spike Dup [0100047-37]	0.2737	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002290	5% BFCI	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009380

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Prepared: 9/22/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-36	ES-FP_20LT201_091020_02_LOB_TA	0.2599	20	QC	-	eezer 23	MS/MSD	
0100047-37	ES-FP_20LT201_091020_03_LOB_TA	0.2548	20	QC	-	eezer 23	MS/MSD	
0100047-60	ES-FP_20LT207_091020_16_LOB_TA	0.2502	20	-	-	eezer 23		
0100047-61	ES-FP_20LT208_091020_17_LOB_TA	0.2763	20	-	-	eezer 23		
0100047-62	ES-FP_20LT208_091020_18_LOB_TA	0.2588	20	-	-	eezer 23		
0100047-63	ES-FP_20LT208_091020_19_LOB_TA	0.2704	20	-	-	eezer 23		
0100047-64	ES-FP_20LT209_091020_20_LOB_TA	0.2851	20	-	-	eezer 23		
0100047-66	OL-01_20LT301_091020_02_LOB_TA	0.2621	20	-	-	eezer 23		
0100047-67	OL-01_20LT302_091020_03_LOB_TA	0.2547	20	-	-	eezer 23		
0100047-68	OL-01_20LT304_091020_04_LOB_TA	0.2767	20	-	-	eezer 23		
0100047-69	OL-01_20LT304_091020_05_LOB_TA	0.2771	20	-	-	eezer 23		
0100047-70	OL-01_20LT304_091020_06_LOB_TA	0.2641	20	-	-	eezer 23		
0100047-71	BO-04_20ET503_091020_02_TOM_WB	0.2651	20	-	-	eezer 23		
0100047-72	BO-04_20ET506_091020_03_TOM_WB	0.2597	20	-	-	eezer 23		
0100047-73	BO-04_20ET506_091020_04_TOM_WB	0.2515	20	-	-	eezer 23		
0100047-74	BO-04_20ET506_091020_05_TOM_WB	0.2652	20	-	-	eezer 23		
0100047-75	BO-04_20ET506_091020_06_TOM_WB	0.2649	20	-	-	eezer 23		
0100047-76	BO-04_20ET507_091020_07_TOM_WB	0.26	20	-	-	eezer 23		
0100047-77	BO-04_20ET508_091020_08_TOM_WB	0.2651	20	-	-	eezer 23		

PREPARATION BENCH SHEET

F009380

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/22/2020

0100047-78	OL-01_20LT305_091020_07_LOB_TA	0.2727	20	-	-	eezr 23		
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Work Order

Client

Project

0100047

Wood - MA

Panobscot

Weighed on 09/18/2020

Technician: CVA/MS Batch #: FO093830 Date: 9/18/20 Sm to after
 EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A
 Balance #: 25 Calibrated? Yes No
 *Time in: 1536 Actual Temp. (raw): 77.4 °C w/ CF: 76.5 °C *Time in can't begin before target temperature is reached
 Time out: 1737 Actual Temp. (raw): 78.2 °C w/ CF: 77.3 °C
 Final vol.: 20 mL (LIMS ID: 2002290) Spike vol.: 20 µL (LIMS ID: 2002032)
 Spike Witness: MS (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2001704)
 HCl LIMS ID: N/A Pipette SN #: 2000782 Calibration Date: 9/15/20
 HNO₃ LIMS ID: N/A Pipette SN #: NA Calibration Date: NA
 70/30 LIMS ID: 2002196 Dispenser #: 19231607 Calibrated? Yes No
 Other Acid LIMS ID: 2002290 Dispenser #: NA Calibrated? Yes No
 Glass Vial # 00077042 Boiling Chip lot # 2000050 *Hotblock Position: H5

Vial #	Sample ID Number	Container ID	Sample Size mL µg	Vial #	Sample ID Number	Container ID	Sample Size mL µg	CRM LIMS ID	Comments
1	FO09286-BUK1	NA	0.2831	19	0100047-68	C	0.2707		
2	FO09380-BIV2	NA	0.2610	20	0100047-69	C	0.2777		
3	FO09380-BUK3	NA	0.2578	21	0100047-70	C	0.2647		
4	FO09380-BS1	NA	0.2637	22	0100047-71	C	0.2651		
5	FO09380-BSD1	NA	0.2638	23	0100047-72	C	0.2597		
6	0100047-36C	C	0.2599	24	0100047-73	C	0.2515		
7	FO09380-MS1	C	0.2556	25	0100047-74	C	0.2652		
8	FO09380-MSD1	C	0.2780	26	0100047-75	C	0.2649		
9	0100047-37	C	0.2581	27	0100047-76	C	0.2600		
10	FO09380-MS2	C	0.2520	28	0100047-77	C	0.2651		
11	FO09380-MSD2	C	0.2737	29	0100047-78	C	0.2707		
12	0100047-60	C	0.2520	30					
13	0100047-61	C	0.2703	31					
14	0100047-62	C	0.2588	32					
15	0100047-63	C	0.2704	33					
16	0100047-64	C	0.2857	34					
17	0100047-65	C	0.2681	35					
18	0100047-67	C	0.2547	36					

*Transcribed
 by ZKH
 9/24/2020
 -ZKH 9/24/20

ZKH
 9/24/2020

Technician: emb Batch#: F009380 Date: 9/18/20

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: _____
 Balance#: _____ Vial Type: Glass Teflon
 *Time in: _____ Calibrated? Yes No
 Therm.#: _____
 Time out: _____ Actual Temp. (raw): _____ °C w/ CF: _____
 °C *Time in can't begin before target temperature is reached
 °C w/ CF: _____

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____
 HNO₃ LIMS ID: _____
 70/30 LIMS ID: _____
 Other Acid LIMS ID: _____
 Glass Vial # _____ Boiling Chip lot # _____
 *Hotblock Position: _____

Pipette SN#: _____ Calibration Date: _____
 Pipette SN#: _____ Calibration Date: _____
 Dispenser #: _____ Calibrated? Yes No
 Dispenser #: _____

Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID
1	F009380-BLK1	NA	0.2831	19	F00047-608	C	0.2767	NA
2	F009380-BLK2	NA	0.2612	20	F00047-609	C	0.2771	
3	F009380-BLK3	NA	0.2578	21	F00047-70	C	0.2604	
4	F009380-BS1	NA	0.2637	22	F00047-71	C	0.2651	
5	F009380-BS2	NA	0.2626	23	F00047-72	C	0.2597	
6	F00047-310 C	C	0.2599	24	F00047-73	C	0.2515	
7	F009380-MS1	C	0.2556	25	F00047-74	C	0.2652	
8	F009380-MS2	C	0.2780	26	F00047-75	C	0.2649	
9	F00047-37	C	0.2548	27	F00047-76	C	0.2600	
10	F009380-MS2	C	0.2520	28	F00047-77	C	0.2651	
11	F009380-MS2	C	0.2737	29	F00047-78	C	0.2727	
12	F00047-60	C	0.2502	30				
13	F00047-61	C	0.2763	31				
14	F00047-62	C	0.2588	32				
15	F00047-63	C	0.2704	33				
16	F00047-64	C	0.2851	34				
17	F00047-66	C	0.2621	35				
18	F00047-67	C	0.2547	36				

Analysis Datasheet for Total Mercury

Date of Analysis: September 30, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 0130009, 0130010, 0130011

Analyst: ZKH
 Units: ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	197.71 units	395.42	117.94 units	235.88	109.4 %Rec
SEQ-CAL2	1	1.00 ng/L	288.78 units	288.78	209.01 units	209.01	96.9 %Rec
SEQ-CAL3	1	5.00 ng/L	1146.66 units	229.33	1066.90 units	213.38	98.9 %Rec
SEQ-CAL4	1	20.00 ng/L	4245.58 units	212.28	4165.81 units	208.29	96.6 %Rec
SEQ-CAL5	1	40.00 ng/L	8546.20 units	213.65	8466.43 units	211.66	98.2 %Rec
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF: 215.64 Corr. St Dev RF: +/- 11.50 Corr. RSD CF: 5.3% NSD Uncorr. Mean RF: 267.89

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-1BL	3	79.77 units	±3.74	0.30 ng/L	±0.01

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	0	0.000 ng/L	
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	ZKH	CAL	SEQ-IBL1	1	9/30/2020 13:20:23	4084-1.RAW	1:20:23 PM	84.08	1		4.3	0.020	0.020	ng/L	
Hg2600-3	ZKH	CAL	SEQ-IBL2	1	9/30/2020 13:24:31	4085-1.RAW	1:24:31 PM	77.94			-1.8	-0.008	-0.008	ng/L	
Hg2600-3	ZKH	CAL	SEQ-IBL3	1	9/30/2020 13:28:40	4086-1.RAW	1:28:40 PM	77.29			-2.5	-0.012	-0.012	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL1	1	9/30/2020 13:32:49	4087-1.RAW	1:32:49 PM	197.71			117.9	0.547	0.547	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL2	1	9/30/2020 13:36:58	4088-1.RAW	1:36:58 PM	288.78			209.0	0.969	0.969	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL3	1	9/30/2020 13:41:06	4089-1.RAW	1:41:06 PM	1146.66			1066.9	4.947	4.947	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL4	1	9/30/2020 13:45:15	4090-1.RAW	1:45:15 PM	4245.58			4165.8	19.318	19.318	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL5	1	9/30/2020 13:49:24	4091-1.RAW	1:49:24 PM	8546.20			8466.4	39.261	39.261	ng/L	
Hg2600-3	ZKH	CAL	SEQ-ICB1	1	9/30/2020 13:53:34	4092-1.RAW	1:53:34 PM	1086.28			1006.5	4.667	4.667	ng/L	93.48891214
Hg2600-3	ZKH	CAL	SEQ-ICB2	1	9/30/2020 13:57:43	4093-1.RAW	1:57:43 PM	123.14			43.4	0.201	0.201	ng/L	
Hg2600-3	ZKH	SAM	0100065-02REZ	100	9/30/2020 14:01:52	4094-1.RAW	2:01:52 PM	129324.78	1		129245.0	599.343	59934.344	ng/L	F009409
Hg2600-3	ZKH	SAM	WS		9/30/2020 14:11:38	4095-1.RAW	2:11:38 PM	620.01			540.2	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS		9/30/2020 14:16:47	4096-1.RAW	2:16:47 PM	415.10			335.3	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	0100057-01RE1B	100	9/30/2020 14:19:56	4097-1.RAW	2:19:56 PM	516.02	2		436.3	2.023	202.302	ng/L	F009402
Hg2600-3	ZKH	SAM	0100057-02RE1B	100	9/30/2020 14:24:05	4098-1.RAW	2:24:05 PM	430.36	2		350.6	1.626	162.573	ng/L	F009402
Hg2600-3	ZKH	SAM	0100057-03RE1B	100	9/30/2020 14:28:14	4099-1.RAW	2:28:14 PM	375.97	2		296.2	1.374	137.356	ng/L	F009402
Hg2600-3	ZKH	SAM	0100057-01RE1A	2600	9/30/2020 14:32:24	4100-1.RAW	2:32:24 PM	3548.07	2		3468.3	16.083	40208.627	ng/L	F009402
Hg2600-3	ZKH	SAM	0100057-02RE1A	100	9/30/2020 14:36:33	4101-1.RAW	2:36:33 PM	265.02	2		185.2	0.859	85.905	ng/L	F009402
Hg2600-3	ZKH	SAM	0100044-32RE1A	100	9/30/2020 14:40:42	4102-1.RAW	2:40:42 PM	245.57	2		165.8	0.769	76.888	ng/L	F009402
Hg2600-3	ZKH	SAM	0100044-33RE1A	20000	9/30/2020 14:44:52	4103-1.RAW	2:44:52 PM	598.56	3		518.8	2.406	48115.858	ng/L	F009398
Hg2600-3	ZKH	SAM	0100044-33RE1B	10000	9/30/2020 14:49:01	4104-1.RAW	2:49:01 PM	476.61	3		396.8	1.840	18402.768	ng/L	F009398
Hg2600-3	ZKH	SAM	0100065-02RE3	2500	9/30/2020 14:53:10	4105-1.RAW	2:53:10 PM	173.22	1		93.4	0.433	1083.342	ng/L	F009409
Hg2600-3	ZKH	CAL	SEQ-CCV1	1	9/30/2020 14:57:19	4106-1.RAW	2:57:19 PM	1220.82	1		1141.1	5.291	5.291	ng/L	105.8273726
Hg2600-3	ZKH	CAL	SEQ-CCB1	1	9/30/2020 15:01:29	4107-1.RAW	3:01:29 PM	1177.27	1		97.5	0.452	0.452	ng/L	
Hg2600-3	ZKH	SAM	F009376-BS1	20	9/30/2020 15:05:39	4108-1.RAW	3:05:39 PM	1197.95	4		1118.2	4.893	97.866	ng/L	F009376
Hg2600-3	ZKH	SAM	WS		9/30/2020 15:09:48	4109-1.RAW	3:09:48 PM	162.56			82.8	Error	#VALUE!	ng/L	NO SMP_Loc
Hg2600-3	ZKH	SAM	F009376-BSD1	20	9/30/2020 15:13:58	4110-1.RAW	3:13:58 PM	1200.24	4		1120.5	4.904	98.079	ng/L	F009376
Hg2600-3	ZKH	SAM	F009376-BS1	20	9/30/2020 15:18:07	4111-1.RAW	3:18:07 PM	1189.37	5		1109.6	4.917	98.346	ng/L	F009379
Hg2600-3	ZKH	SAM	F009379-BSD1	20	9/30/2020 15:22:17	4112-1.RAW	3:22:17 PM	1179.12	5		1099.3	4.870	97.395	ng/L	F009379
Hg2600-3	ZKH	SAM	F009380-BS1	20	9/30/2020 15:26:26	4113-1.RAW	3:26:26 PM	1163.49	6		1083.7	4.827	96.542	ng/L	F009380
Hg2600-3	ZKH	SAM	F009380-BSD1	20	9/30/2020 15:30:35	4114-1.RAW	3:30:35 PM	1174.77	6		1095.0	4.879	97.588	ng/L	F009380
Hg2600-3	ZKH	BLK	F009376-BLK1	20	9/30/2020 15:34:45	4115-1.RAW	3:34:45 PM	163.00	4		83.2	0.386	7.720	ng/L	F009376
Hg2600-3	ZKH	BLK	F009376-BLK2	20	9/30/2020 15:38:54	4116-1.RAW	3:38:54 PM	136.88	4		60.1	0.279	5.575	ng/L	F009376
Hg2600-3	ZKH	BLK	F009379-BLK1	20	9/30/2020 15:43:04	4117-1.RAW	3:43:04 PM	125.32	4		45.5	0.211	4.224	ng/L	F009376
Hg2600-3	ZKH	BLK	F009379-BLK1	20	9/30/2020 15:47:13	4118-1.RAW	3:47:13 PM	138.36	5		58.6	0.272	5.436	ng/L	F009379
Hg2600-3	ZKH	CAL	SEQ-CCV2	1	9/30/2020 15:51:23	4119-1.RAW	3:51:23 PM	1147.46	5		1067.7	4.951	4.951	ng/L	99.02370151
Hg2600-3	ZKH	CAL	SEQ-CCB2	1	9/30/2020 15:55:32	4120-1.RAW	3:55:32 PM	132.35	5		52.6	0.244	0.244	ng/L	
Hg2600-3	ZKH	BLK	F009379-BLK2	20	9/30/2020 15:59:42	4121-1.RAW	3:59:42 PM	128.09	5		48.3	0.224	4.482	ng/L	F009379
Hg2600-3	ZKH	BLK	F009379-BLK3	20	9/30/2020 16:03:51	4122-1.RAW	4:03:51 PM	120.46	5		40.7	0.189	3.774	ng/L	F009379
Hg2600-3	ZKH	BLK	F009380-BLK1	20	9/30/2020 16:08:00	4123-1.RAW	4:08:00 PM	115.05	6		35.3	0.164	3.272	ng/L	F009380
Hg2600-3	ZKH	BLK	F009380-BLK2	20	9/30/2020 16:12:10	4124-1.RAW	4:12:10 PM	131.67	6		51.9	0.241	4.813	ng/L	F009380
Hg2600-3	ZKH	BLK	F009380-BLK3	20	9/30/2020 16:16:19	4125-1.RAW	4:16:19 PM	120.96	6		41.2	0.191	3.820	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-13	400	9/30/2020 16:20:29	4126-1.RAW	4:20:29 PM	5687.61	4		5507.8	25.527	10210.681	ng/L	F009376
Hg2600-3	ZKH	SAM	F009376-MS1	400	9/30/2020 16:24:38	4127-1.RAW	4:24:38 PM	7948.40	4		7868.6	36.474	14589.733	ng/L	F009376
Hg2600-3	ZKH	SAM	F009379-MSD1	400	9/30/2020 16:28:47	4128-1.RAW	4:28:47 PM	7546.40	4		7466.6	34.610	13844.057	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-14	400	9/30/2020 16:32:57	4129-1.RAW	4:32:57 PM	1915.40	4		1835.6	8.498	3399.091	ng/L	F009376
Hg2600-3	ZKH	SAM	F009379-MS2	400	9/30/2020 16:37:07	4130-1.RAW	4:37:07 PM	4360.40	4		4280.6	19.836	7934.322	ng/L	F009376
Hg2600-3	ZKH	CAL	SEQ-CCV3	1	9/30/2020 16:41:16	4131-1.RAW	4:41:16 PM	1208.16	4		1129.4	5.237	5.237	ng/L	104.7457948
Hg2600-3	ZKH	CAL	SEQ-CCB3	1	9/30/2020 16:45:25	4132-1.RAW	4:45:25 PM	150.36	4		70.6	0.327	0.327	ng/L	
Hg2600-3	ZKH	SAM	F009379-MSD2	400	9/30/2020 16:49:35	4133-1.RAW	4:49:35 PM	4292.86	4		4213.1	19.523	7809.050	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-23	400	9/30/2020 16:53:45	4134-1.RAW	4:53:45 PM	798.87	5		719.1	3.323	1329.309	ng/L	F009379
Hg2600-3	ZKH	SAM	F009379-MS1	400	9/30/2020 16:57:55	4135-1.RAW	4:57:55 PM	3124.06	5		3044.3	14.106	5642.309	ng/L	F009379
Hg2600-3	ZKH	SAM	F009379-MS2	400	9/30/2020 17:02:05	4136-1.RAW	5:02:05 PM	2894.34	5		2814.6	13.040	5216.196	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-35	400	9/30/2020 17:06:15	4137-1.RAW	5:06:15 PM	1948.66	5		1868.8	8.655	3461.871	ng/L	F009379
Hg2600-3	ZKH	SAM	F009379-MS2	400	9/30/2020 17:10:24	4138-1.RAW	5:10:24 PM	4354.76	5		4275.0	19.813	7925.137	ng/L	F009379
Hg2600-3	ZKH	SAM	F009379-MSD2	400	9/30/2020 17:14:35	4139-1.RAW	5:14:35 PM	4181.43	5		4101.7	19.009	7603.633	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-36	400	9/30/2020 17:18:45	4140-1.RAW	5:18:45 PM	1556.51	6		1476.7	6.838	2735.257	ng/L	F009380

Instrument	Analyst	Sample Type	LabNumber	Duration	Analized	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Connection?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	ZKH	SAM	F009380-MS1	400	9/30/2020 17:22:55	4141-1.RAW	5:22:55 PM	3654.40	6		3574.6	16.567	6626.637	ng/L	F009380
Hg2600-3	ZKH	SAM	F009380-MSD1	400	9/30/2020 17:27:04	4142-1.RAW	5:27:04 PM	3990.26	6		3910.5	18.124	7249.626	ng/L	F009380
Hg2600-3	ZKH	CAL	SEQ-CCV4	1	9/30/2020 17:31:14	4143-1.RAW	5:31:14 PM	1196.44			1116.7	5.178	5.178	ng/L	103-5658577
Hg2600-3	ZKH	CAL	SEQ-CCB4	1	9/30/2020 17:35:25	4144-1.RAW	5:35:25 PM	142.21			62.4	0.290	0.290	ng/L	
Hg2600-3	ZKH	SAM	0100047-37	400	9/30/2020 17:39:35	4145-1.RAW	5:39:35 PM	1214.83	6		1135.2	5.254	2101.644	ng/L	F009380
Hg2600-3	ZKH	SAM	F009380-MS2	400	9/30/2020 17:43:45	4146-1.RAW	5:43:45 PM	3518.31	6		3438.5	15.936	6374.205	ng/L	F009380
Hg2600-3	ZKH	SAM	F009380-MSD2	400	9/30/2020 17:47:55	4147-1.RAW	5:47:55 PM	3800.40	6		3720.6	17.244	6897.450	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-11	400	9/30/2020 17:52:05	4148-1.RAW	5:52:05 PM	1150.54	4		1070.8	4.951	1980.331	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-15	400	9/30/2020 17:56:15	4149-1.RAW	5:56:15 PM	1433.43	4		1353.7	6.263	2505.077	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-16	400	9/30/2020 18:00:25	4150-1.RAW	6:00:25 PM	2590.47	4		2510.7	11.628	4651.266	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-17	400	9/30/2020 18:04:35	4151-1.RAW	6:04:35 PM	1322.417451	4		1242.6	5.748	2299.156	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-18	400	9/30/2020 18:08:45	4152-1.RAW	6:08:45 PM	1143.76	4		1064.0	4.919	1967.786	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-19	400	9/30/2020 18:12:55	4153-1.RAW	6:12:55 PM	1470.83	4		1391.1	6.436	2574.451	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-20	400	9/30/2020 18:17:05	4154-1.RAW	6:17:05 PM	1372.88	4		1293.1	5.982	2392.759	ng/L	F009376
Hg2600-3	ZKH	CAL	SEQ-CCV5	1	9/30/2020 18:21:16	4155-1.RAW	6:21:16 PM	1095.65			1015.9	4.711	4.711	ng/L	94-2183348
Hg2600-3	ZKH	CAL	SEQ-CCB5	1	9/30/2020 18:25:26	4156-1.RAW	6:25:26 PM	111.19			31.4	0.146	0.146	ng/L	
Hg2600-3	ZKH	SAM	0100047-21	400	9/30/2020 18:29:36	4157-1.RAW	6:29:36 PM	779.26	4		699.5	3.229	1291.652	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-22	400	9/30/2020 18:33:46	4158-1.RAW	6:33:46 PM	558.86	4		479.1	2.207	882.831	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-24	400	9/30/2020 18:37:56	4159-1.RAW	6:37:56 PM	546.05	4		466.3	2.148	859.058	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-25	400	9/30/2020 18:42:06	4160-1.RAW	6:42:06 PM	2942.33	4		2862.6	13.260	5303.934	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-26	400	9/30/2020 18:46:16	4161-1.RAW	6:46:16 PM	1079.27	4		999.5	4.620	1848.135	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-27	400	9/30/2020 18:50:26	4162-1.RAW	6:50:26 PM	1417.60	4		1337.8	6.189	2475.719	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-28	400	9/30/2020 18:54:36	4163-1.RAW	6:54:36 PM	782.61	4		702.8	3.245	1297.872	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-29	400	9/30/2020 18:58:46	4164-1.RAW	6:58:46 PM	641.55	4		561.8	2.591	1036.217	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-30	400	9/30/2020 19:02:56	4165-1.RAW	7:02:56 PM	987.20	4		907.4	4.193	1677.353	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-31	400	9/30/2020 19:07:07	4166-1.RAW	7:07:07 PM	846.84	4		767.1	3.543	1417.004	ng/L	F009376
Hg2600-3	ZKH	CAL	SEQ-CCB6	1	9/30/2020 19:11:30	4167-1.RAW	7:11:30 PM	1040.77			961.0	4.456	4.456	ng/L	89-12821994
Hg2600-3	ZKH	CAL	SEQ-CCV6	1	9/30/2020 19:15:41	4168-1.RAW	7:15:41 PM	107.88			28.1	0.130	0.130	ng/L	
Hg2600-3	ZKH	SAM	0100047-32	400	9/30/2020 19:19:50	4169-1.RAW	7:19:50 PM	603.70	4		523.9	2.415	966.001	ng/L	F009376
Hg2600-3	ZKH	SAM	0100047-33	400	9/30/2020 19:24:01	4170-1.RAW	7:24:01 PM	512.58	5		432.8	1.996	798.256	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-34	400	9/30/2020 19:28:10	4171-1.RAW	7:28:10 PM	601.64	5		521.9	2.409	963.450	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-43	400	9/30/2020 19:32:21	4172-1.RAW	7:32:21 PM	569.51	5		489.7	2.260	903.857	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-44	400	9/30/2020 19:36:31	4173-1.RAW	7:36:31 PM	908.99	5		829.2	3.834	1533.562	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-45	400	9/30/2020 19:40:41	4174-1.RAW	7:40:41 PM	1695.80	5		1616.0	7.483	2993.026	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-46	400	9/30/2020 19:44:51	4175-1.RAW	7:44:51 PM	879.04	5		799.3	3.695	1478.004	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-47	400	9/30/2020 19:49:01	4176-1.RAW	7:49:01 PM	1010.71	5		930.9	4.306	1722.249	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-48	400	9/30/2020 19:53:11	4177-1.RAW	7:53:11 PM	2511.64	5		2431.9	11.266	4506.330	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-49	400	9/30/2020 19:57:22	4178-1.RAW	7:57:22 PM	6160.16	5		6080.4	28.185	11273.988	ng/L	F009379
Hg2600-3	ZKH	CAL	SEQ-CCV7	1	9/30/2020 20:01:32	4179-1.RAW	8:01:32 PM	1098.58			1018.8	4.724	4.724	ng/L	94-48995119
Hg2600-3	ZKH	CAL	SEQ-CCB7	1	9/30/2020 20:05:42	4180-1.RAW	8:05:42 PM	111.06			31.3	0.145	0.145	ng/L	
Hg2600-3	ZKH	SAM	0100047-50	400	9/30/2020 20:09:52	4181-1.RAW	8:09:52 PM	1639.64	5		1559.9	7.222	2888.853	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-51	400	9/30/2020 20:14:03	4182-1.RAW	8:14:03 PM	787.72	5		707.9	3.272	1308.615	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-52	400	9/30/2020 20:18:13	4183-1.RAW	8:18:13 PM	1347.67	5		1267.9	5.868	2347.265	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-53	400	9/30/2020 20:22:23	4184-1.RAW	8:22:23 PM	1363.57	5		1283.8	5.942	2376.771	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-54	400	9/30/2020 20:26:33	4185-1.RAW	8:26:33 PM	770.91	5		691.1	3.194	1277.447	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-55	400	9/30/2020 20:30:43	4186-1.RAW	8:30:43 PM	662.91	5		583.1	2.693	1077.103	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-56	400	9/30/2020 20:34:53	4187-1.RAW	8:34:53 PM	614.51	5		534.7	2.468	987.327	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-57	400	9/30/2020 20:39:04	4188-1.RAW	8:39:04 PM	525.75	5		446.0	2.057	822.696	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-58	400	9/30/2020 20:43:13	4189-1.RAW	8:43:13 PM	439.63	5		359.9	1.657	662.935	ng/L	F009379
Hg2600-3	ZKH	SAM	0100047-59	400	9/30/2020 20:47:23	4190-1.RAW	8:47:23 PM	1024.88	6		945.1	4.373	1749.117	ng/L	F009379
Hg2600-3	ZKH	CAL	SEQ-CCV8	1	9/30/2020 20:51:34	4191-1.RAW	8:51:34 PM	1009.82			930.0	4.313	4.313	ng/L	86-25742883
Hg2600-3	ZKH	CAL	SEQ-CCB8	1	9/30/2020 20:55:44	4192-1.RAW	8:55:44 PM	88.26			8.5	0.039	0.039	ng/L	
Hg2600-3	ZKH	SAM	0100047-61	400	9/30/2020 20:59:54	4193-1.RAW	8:59:54 PM	1821.52	6		1741.7	8.067	3226.813	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-62	400	9/30/2020 21:04:05	4194-1.RAW	9:04:05 PM	1688.14	6		1608.4	7.449	2979.403	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-63	400	9/30/2020 21:08:15	4195-1.RAW	9:08:15 PM	1829.06	6		1749.3	8.102	3240.800	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-64	400	9/30/2020 21:12:25	4196-1.RAW	9:12:25 PM	548.33	6		468.6	2.163	865.160	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-65	400	9/30/2020 21:16:36	4197-1.RAW	9:16:36 PM	6877.53	6		6797.8	31.513	12605.249	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-66	400	9/30/2020 21:20:46	4198-1.RAW	9:20:46 PM	3070.34	6		2990.6	13.858	5543.265	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-68	400	9/30/2020 21:24:56	4199-1.RAW	9:24:56 PM	2202.26	6		2122.5	9.833	3933.045	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-69	400	9/30/2020 21:29:07	4200-1.RAW	9:29:07 PM	1056.54	6		976.8	4.520	1807.843	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-70	400	9/30/2020 21:33:17	4201-1.RAW	9:33:17 PM	1092.85	6		1013.1	4.688	1875.210	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-71	400	9/30/2020 21:37:27	4202-1.RAW	9:37:27 PM	548.24	6		468.5	2.162	864.997	ng/L	F009380
Hg2600-3	ZKH	CAL	SEQ-CCV9	1	9/30/2020 21:41:38	4203-1.RAW	9:41:38 PM	995.55			915.8	4.247	4.247	ng/L	84-93395819
Hg2600-3	ZKH	CAL	SEQ-CCB9	1	9/30/2020 21:45:48	4204-1.RAW	9:45:48 PM	97.92			18.1	0.084	0.084	ng/L	
Hg2600-3	ZKH	S													

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	ZKH	SAM	0100047-73	400	9/30/2020 21:54:08	4206-1.RAW	9:54:06 PM	510.01	6		430.2	1.985	794.083	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-74	400	9/30/2020 21:58:19	4207-1.RAW	9:58:19 PM	645.48	6		565.7	2.613	1045.381	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-75	400	9/30/2020 22:02:29	4208-1.RAW	10:02:29 PM	932.12	6		852.3	3.943	1577.056	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-76	400	9/30/2020 22:06:39	4209-1.RAW	10:06:39 PM	827.73	6		748.0	3.459	1383.420	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-77	400	9/30/2020 22:10:49	4210-1.RAW	10:10:49 PM	916.06	6		836.3	3.868	1547.271	ng/L	F009380
Hg2600-3	ZKH	SAM	0100047-78	400	9/30/2020 22:14:59	4211-1.RAW	10:14:59 PM	9580.84	6		9501.1	44.049	17619.629	ng/L	F009380
Hg2600-3	ZKH	CAL	SEQ-CCVA	1000	9/30/2020 22:19:10	4212-1.RAW	10:19:10 PM	147.96	1		68.2	0.316	316.229	ng/L	F009409
Hg2600-3	ZKH	CAL	SEQ-CCBA	1	9/30/2020 22:23:20	4213-1.RAW	10:23:20 PM	1006.65	1		926.9	4.298	4.298	ng/L	85.96394629
Hg2600-3	ZKH	CAL	SEQ-CCBA	1	9/30/2020 22:27:30	4214-1.RAW	10:27:30 PM	94.25	1		14.5	0.067	0.067	ng/L	

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SampleID	Location	RunSeq	Blank	Conc (ppt)	Rec%	QA	RunDate	RunEnd	Peak (Raw)	Control (eff)	Flags	RunCount	Comment
WS			0.00	0.01			12:55:30		2.77	Clean	OK	1	
WS			79.77	0.11			12:59:39		102.55	Sample	OK	1	
WS			79.77	0.00			13:03:47		74.86	Sample	OK	1	
WS			79.77	0.29			13:07:56		143.04	Sample	OK	1	
WS			79.77	0.00			13:12:05		74.13	Sample	OK	1	
SEQ-IBL1	A1		0.00	0.39			13:16:14		60.32	Sample	OK	1	
SEQ-IBL2	A2		0.00	0.36			13:20:23		84.08	Sample	OK	1	
SEQ-IBL3	A3		0.00	0.36			13:24:31		77.94	Sample	OK	1	
SEQ-CAL1	A4		0.00	0.55			13:28:40		77.29	Sample	OK	1	
SEQ-CAL2	A5		79.77	0.97	109.39		13:32:49		197.71	Sample	OK	1	
SEQ-CAL3	A6		79.77	0.92	96.92		13:36:58		288.78	Sample	OK	1	
SEQ-CAL4	A7		79.77	4.95	98.95		13:41:06		1146.66	Sample	OK	1	
SEQ-CAL5	A8		79.77	19.32	96.59		13:45:15		4245.58	Sample	OK	1	
SEQ-ICV1	A9		79.77	39.26	98.15		13:49:24		8546.20	Sample	OK	1	
SEQ-ICB1	A10		79.77	4.67	93.35		13:53:34		1086.28	Sample	OK	1	
0100065-02RE2	A11	100	79.77	59934.34	0.00		13:57:43		123.14	Sample	OK	1	
WS			79.77	2.51			14:01:52		129324.78	Sample	OLFB	1	F009409
WS			79.77	1.56			14:11:38		620.01	Sample	OK	1	
0100057-01RE1B	A12	100	79.77	202.30			14:15:47		415.10	Sample	OK	1	
0100057-02RE1B	A13	100	79.77	162.57			14:19:56		516.02	Sample	OK	1	F009402
0100057-03RE1B	A14	100	79.77	137.36			14:24:05		430.35	Sample	OK	1	F009402
0100057-01RE1A	A15	2500	79.77	40208.63			14:28:14		375.97	Sample	OK	1	F009402
0100057-02RE1A	A16	100	79.77	85.91			14:32:24		3548.07	Sample	OK	1	F009402
0100057-03RE1A	A17	100	79.77	78.89			14:36:33		265.02	Sample	OK	1	F009402
0100044-32RE1	A18	20000	79.77	48115.86			14:40:42		245.57	Sample	OK	1	F009402
0100044-33RE1	A19	10000	79.77	18402.77			14:44:52		598.56	Sample	OK	1	F009398
0100065-02RE3	A20	2500	79.77	1083.34			14:49:01		476.61	Sample	OK	1	F009409
SEQ-CCV1	A21	1	79.77	5.29	105.83		14:53:10		173.22	Sample	OK	1	
SEQ-CCB1	B1	1	79.77	0.45	0.00		15:01:29		177.27	Sample	OK	1	
F009376-BS1	B2	20	79.77	103.71			15:05:39		1197.95	Sample	OK	1	F009376
WS			79.77	0.38			15:09:48		162.56	Sample	OK	1	NO SMPL LOC
F009376-BSD1	B3	20	79.77	103.92			15:13:58		1200.24	Sample	OK	1	F009376
F009379-BS1	B4	20	79.77	102.91			15:18:07		1189.37	Sample	OK	1	F009379
F009379-BSD1	B5	20	79.77	101.96			15:22:17		1178.12	Sample	OK	1	F009379
F009390-BS1	B6	20	79.77	100.51			15:26:26		1163.49	Sample	OK	1	F009390
F009380-BSD1	B7	20	79.77	101.56			15:30:35		1174.77	Sample	OK	1	F009380
F009376-BLK1	B8	20	79.77	7.72			15:34:45		163.00	Sample	OK	1	F009376
F009376-BLK2	B9	20	79.77	5.58			15:38:54		139.88	Sample	OK	1	F009376
F009376-BLK3	B10	20	79.77	4.22			15:43:04		125.32	Sample	OK	1	F009376
F009379-BLK1	B11	20	79.77	5.44			15:47:13		136.38	Sample	OK	1	F009379
SEQ-CCV2	B12	1	79.77	4.95	99.02		15:51:23		1147.46	Sample	OK	1	
SEQ-CCB2	B13	1	79.77	0.24	0.00		15:55:32		132.35	Sample	OK	1	
F009379-BLK2	B14	20	79.77	4.48			15:59:42		128.09	Sample	OK	1	F009379
F009379-BLK3	B15	20	79.77	3.77			16:03:51		120.46	Sample	OK	1	F009379
F009380-BLK1	B16	20	79.77	3.27			16:08:00		115.05	Sample	OK	1	F009380
F009380-BLK2	B17	20	79.77	4.81			16:12:10		131.67	Sample	OK	1	F009380
F009380-BLK3	B18	20	79.77	3.82			16:16:19		120.96	Sample	OK	1	F009380
0100047-13	B19	400	79.77	10216.52			16:20:29		5587.61	Sample	OK	1	F009376
F009376-MS1	B20	400	79.77	14595.57			16:24:38		7948.40	Sample	OK	1	F009376
F009376-MSD1	B21	400	79.77	13849.90	142.85		16:28:47		7546.40	Sample	OK	1	F009376
0100047-14	C1	400	79.77	3404.93			16:32:57		1915.40	Sample	OK	1	F009376

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F009376	1	OK	4360.40 Sample	16:37:07	4130-1.RAW	233.06	7940.16	400	79.77	C2	F009376-MS2
F009376	1	OK	1209.16 Sample	16:41:16	4131-1.RAW	104.75	5.24	1	79.77	C3	SEQ-CCV3
F009379	1	OK	150.36 Sample	16:45:25	4132-1.RAW	0.00	0.33	1	79.77	C4	SEQ-CCB3
F009379	1	OK	4292.86 Sample	16:49:35	4133-1.RAW		7814.89	400	79.77	C5	F009376-MSD2
F009379	1	OK	798.87 Sample	16:53:45	4134-1.RAW		1333.87	400	79.77	C6	0I00047-23
F009379	1	OK	3124.06 Sample	16:57:55	4135-1.RAW	423.03	5646.87	400	79.77	C7	F009379-MS1
F009379	1	OK	2894.34 Sample	17:02:05	4136-1.RAW		5220.76	400	79.77	C8	F009379-MSD1
F009379	1	OK	1948.56 Sample	17:06:15	4137-1.RAW		3466.44	400	79.77	C9	0I00047-35
F009379	1	OK	4354.76 Sample	17:10:24	4138-1.RAW	228.62	7929.70	400	79.77	C10	F009379-MS2
F009379	1	OK	4181.43 Sample	17:14:35	4139-1.RAW		7608.20	400	79.77	C11	F009379-MSD2
F009380	1	OK	1556.51 Sample	17:18:45	4140-1.RAW		2739.23	400	79.77	C12	0I00047-36
F009380	1	OK	3654.40 Sample	17:22:55	4141-1.RAW	241.97	6630.61	400	79.77	C13	F009380-MS1
F009380	1	OK	3990.26 Sample	17:27:04	4142-1.RAW		7253.59	400	79.77	C14	F009380-MSD1
F009380	1	OK	1196.44 Sample	17:31:14	4143-1.RAW	103.57	5.18	1	79.77	C15	SEQ-CCV4
F009380	1	OK	142.21 Sample	17:35:25	4144-1.RAW	0.00	0.29	1	79.77	C16	SEQ-CCB4
F009380	1	OK	1214.93	17:39:35	4145-1.RAW		2105.61	400	79.77	C17	0I00047-37
F009380	1	OK	3518.31 Sample	17:43:45	4146-1.RAW	302.63	6378.17	400	79.77	C18	F009380-MS2
F009380	1	OK	3800.40 Sample	17:47:55	4147-1.RAW		6901.42	400	79.77	C19	F009380-MSD2
F009376	1	OK	1150.54 Sample	17:52:05	4148-1.RAW		1988.17	400	79.77	C20	0I00047-11
F009376	1	OK	1433.43 Sample	17:56:15	4149-1.RAW		2510.92	400	79.77	C21	0I00047-15
F009376	1	OK	2590.47 Sample	18:00:25	4150-1.RAW		4657.11	400	79.77	A1	0I00047-16
F009376	1	OK	1322.42 Sample	18:04:35	4151-1.RAW		2305.00	400	79.77	A2	0I00047-17
F009376	1	OK	1143.76 Sample	18:08:45	4152-1.RAW		1973.61	400	79.77	A3	0I00047-18
F009376	1	OK	1470.83 Sample	18:12:55	4153-1.RAW		2580.29	400	79.77	A4	0I00047-19
F009376	1	OK	1372.88 Sample	18:17:05	4154-1.RAW		2398.60	400	79.77	A5	0I00047-20
F009376	1	OK	1095.65 Sample	18:21:16	4155-1.RAW	94.22	4.71	1	79.77	A6	SEQ-CCV5
F009376	1	OK	111.19 Sample	18:25:26	4156-1.RAW	0.00	0.15	1	79.77	A7	SEQ-CCB5
F009376	1	OK	779.28 Sample	18:29:36	4157-1.RAW		1297.49	400	79.77	A8	0I00047-21
F009376	1	OK	558.86 Sample	18:33:46	4158-1.RAW		888.67	400	79.77	A9	0I00047-22
F009376	1	OK	546.05 Sample	18:37:56	4159-1.RAW		864.90	400	79.77	A10	0I00047-24
F009376	1	OK	2942.33 Sample	18:42:06	4160-1.RAW		5309.77	400	79.77	A11	0I00047-25
F009376	1	OK	1079.27 Sample	18:46:16	4161-1.RAW		1853.97	400	79.77	A12	0I00047-26
F009376	1	OK	1417.60 Sample	18:50:26	4162-1.RAW		2481.56	400	79.77	A13	0I00047-27
F009376	1	OK	782.61 Sample	18:54:36	4163-1.RAW		1303.71	400	79.77	A14	0I00047-28
F009376	1	OK	641.55 Sample	18:58:46	4164-1.RAW		1042.06	400	79.77	A15	0I00047-29
F009376	1	OK	987.20 Sample	19:02:56	4165-1.RAW		1683.19	400	79.77	A16	0I00047-30
F009376	1	OK	846.84 Sample	19:07:20	4166-1.RAW		1422.84	400	79.77	A17	0I00047-31
F009376	1	OK	1040.77 Sample	19:11:30	4167-1.RAW	89.13	4.46	1	79.77	A18	SEQ-CCV6
F009376	1	OK	107.88 Sample	19:15:41	4168-1.RAW	0.00	0.13	1	79.77	A19	SEQ-CCB6
F009379	1	OK	603.70 Sample	19:19:50	4169-1.RAW		971.84	400	79.77	A20	0I00047-32
F009379	1	OK	512.58 Sample	19:24:01	4170-1.RAW		802.82	400	79.77	A21	0I00047-33
F009379	1	OK	601.84 Sample	19:28:10	4171-1.RAW		988.01	400	79.77	B1	0I00047-34
F009379	1	OK	589.51 Sample	19:32:21	4172-1.RAW		908.42	400	79.77	B2	0I00047-43
F009379	1	OK	908.99 Sample	19:36:31	4173-1.RAW		1538.13	400	79.77	B3	0I00047-44
F009379	1	OK	1695.80 Sample	19:40:41	4174-1.RAW		2987.59	400	79.77	B4	0I00047-45
F009379	1	OK	879.04 Sample	19:44:51	4175-1.RAW		1482.57	400	79.77	B5	0I00047-46
F009379	1	OK	1010.71 Sample	19:49:01	4176-1.RAW		1726.81	400	79.77	B6	0I00047-47
F009379	1	OK	2511.64 Sample	19:53:11	4177-1.RAW		4510.89	400	79.77	B7	0I00047-48
F009379	1	OK	6160.16 Sample	19:57:22	4178-1.RAW	94.49	11278.55	400	79.77	B8	0I00047-49
F009379	1	OK	1098.58 Sample	20:01:32	4179-1.RAW	0.00	4.72	1	79.77	B9	SEQ-CCV7
F009379	1	OK	111.06 Sample	20:05:42	4180-1.RAW		0.15	1	79.77	B10	SEQ-CCB7
F009379	1	OK	1639.84 Sample	20:09:52	4181-1.RAW		2893.42	400	79.77	B11	0I00047-50
F009379	1	OK	787.72 Sample	20:14:03	4182-1.RAW		1313.18	400	79.77	B12	0I00047-51
F009379	1	OK	1347.67 Sample	20:18:13	4183-1.RAW		2351.83	400	79.77	B13	0I00047-52
F009379	1	OK	1363.57 Sample	20:22:23	4184-1.RAW		2381.33	400	79.77	B14	0I00047-53
F009378	1	OK	770.91 Sample	20:26:33	4185-1.RAW		1282.01	400	79.77	B15	0I00047-54
F009379	1	OK	662.91 Sample	20:30:43	4186-1.RAW		1061.57	400	78.77	B16	0I00047-55

0100047-56	B17	400	79.77	951.89	4187-1.RAW	20:34:53	614.51 Sample	OK	1	F009379
0100047-57	B18	400	79.77	827.26	4188-1.RAW	20:39:04	525.75 Sample	OK	1	F009379
0100047-58	B19	400	79.77	667.50	4189-1.RAW	20:43:13	439.63 Sample	OK	1	F009379
0100047-60	B20	400	79.77	1753.08	4190-1.RAW	20:47:23	1024.88 Sample	OK	1	F009380
SEQ-CCV8	B21	1	79.77	4.31	4191-1.RAW	20:51:34	1009.82 Sample	OK	1	F009380
SEQ-CCBB	C1	1	79.77	0.04	4192-1.RAW	20:55:44	88.26 Sample	OK	1	F009380
0100047-61	C2	400	79.77	3230.78	4193-1.RAW	20:59:54	1821.52 Sample	OK	1	F009380
0100047-62	C3	400	79.77	2983.37	4194-1.RAW	21:04:05	1688.14 Sample	OK	1	F009380
0100047-63	C4	400	79.77	3244.77	4195-1.RAW	21:08:15	1829.06 Sample	OK	1	F009380
0100047-64	C5	400	79.77	869.13	4196-1.RAW	21:12:25	548.33 Sample	OK	1	F009380
0100047-66	C6	400	79.77	12609.22	4197-1.RAW	21:16:36	6677.53 Sample	OK	1	F009380
0100047-67	C7	400	79.77	5547.23	4198-1.RAW	21:20:46	3070.34 Sample	OK	1	F009380
0100047-68	C8	400	79.77	3937.01	4199-1.RAW	21:24:56	2202.26 Sample	OK	1	F009380
0100047-69	C9	400	79.77	1811.81	4200-1.RAW	21:29:07	1056.54 Sample	OK	1	F009380
0100047-70	C10	400	79.77	1879.18	4201-1.RAW	21:33:17	1092.85 Sample	OK	1	F009380
0100047-71	C11	400	79.77	868.97	4202-1.RAW	21:37:27	548.24 Sample	OK	1	F009380
SEQ-CCV9	C12	1	79.77	4.25	4203-1.RAW	21:41:38	995.55 Sample	OK	1	F009380
SEQ-CCB9	C13	1	79.77	0.08	4204-1.RAW	21:45:48	97.92 Sample	OK	1	F009380
0100047-72	C14	400	79.77	1407.97	4205-1.RAW	21:49:58	838.82 Sample	OK	1	F009380
0100047-73	C15	400	79.77	798.05	4206-1.RAW	21:54:08	510.01 Sample	OK	1	F009380
0100047-74	C16	400	79.77	1049.35	4207-1.RAW	21:58:19	645.48 Sample	OK	1	F009380
0100047-75	C17	400	79.77	1581.02	4208-1.RAW	22:02:29	932.12 Sample	OK	1	F009380
0100047-76	C18	400	79.77	1387.39	4209-1.RAW	22:06:39	827.73 Sample	OK	1	F009380
0100047-77	C19	400	79.77	1551.24	4210-1.RAW	22:10:49	916.06 Sample	OK	1	F009380
0100047-78	C20	400	79.77	17623.60	4211-1.RAW	22:14:59	9560.84 Sample	OK	1	F009380
0100065 02RE4C C21		1000	79.77	316.23	4212-1.RAW	22:19:10	147.96 Sample	OK	1	F009380
SEQ-CCVA	A1	1	79.77	4.30	4213-1.RAW	22:23:20	1006.65 Sample	OK	1	F009409
SEQ-CCBA	A2	1	79.77	0.07	4214-1.RAW	22:27:30	94.25 Sample	OK	1	F009409

RUN LOG THg26003-200929-2

SEQ-IBL1	A1	F009379-BLK2	B14	0100047-22	A9		
SEQ-IBL2	A2	F009379-BLK3	B15	0100047-24	A10		
SEQ-IBL3	A3	F009380-BLK1	B16	0100047-25	A11		
SEQ-CAL1	A4	F009380-BLK2	B17	0100047-26	A12		
SEQ-CAL2	A5	F009380-BLK3	B18	0100047-27	A13		
SEQ-CAL3	A6	0100047-13	B19	0100047-28	A14		
SEQ-CAL4	A7	F009376-MS1	B20	0100047-29	A15		
SEQ-CAL5	A8	F009376-MSD1	B21	0100047-30	A16		
SEQ-ICV1	A9	0100047-14	C1	0100047-31	A17		
SEQ-ICB1	A10	F009376-MS2	C2	SEQ-CCV6	A18		
0100065-02RE2	A11	SEQ-CCV3	C3	SEQ-CCB6	A19		
WS		SEQ-CCB3	C4	0100047-32	A20		
WS		F009376-MSD2	C5	0100047-33	A21		
0100057-01RE1	A12	0100047-23	C6	0100047-34	B1		
0100057-02RE1	A13	F009379-MS1	C7	0100047-43	B2		
0100057-03RE1	A14	F009379-MSD1	C8	0100047-44	B3		
0100057-01RE1	A15	0100047-35	C9	0100047-45	B4		
0100057-02RE1	A16	F009379-MS2	C10	0100047-46	B5	0100047-63	C4
0100057-03RE1	A17	F009379-MSD2	C11	0100047-47	B6	0100047-64	C5
0100044-32RE1	A18	0100047-36	C12	0100047-48	B7	0100047-66	C6
0100044-33RE1	A19	F009380-MS1	C13	0100047-49	B8	0100047-67	C7
0100065-02RE3	A20	F009380-MSD1	C14	SEQ-CCV7	B9	0100047-68	C8
SEQ-CCV1	A21	SEQ-CCV4	C15	SEQ-CCB7	B10	0100047-69	C9
SEQ-CCB1	B1	SEQ-CCB4	C16	0100047-50	B11	0100047-70	C10
F009376-BS1	B2	0100047-37	C17	0100047-51	B12	0100047-71	C11
WS		F009380-MS2	C18	0100047-52	B13	SEQ-CCV9	C12
F009376-BSD1	B3	F009380-MSD2	C19	0100047-53	B14	SEQ-CCB9	C13
F009379-BS1	B4	0100047-11	C20	0100047-54	B15	0100047-72	C14
F009379-BSD1	B5	0100047-15	C21	0100047-55	B16	0100047-73	C15
F009380-BS1	B6	0100047-16	A1	0100047-56	B17	0100047-74	C16
F009380-BSD1	B7	0100047-17	A2	0100047-57	B18	0100047-75	C17
F009376-BLK1	B8	0100047-18	A3	0100047-58	B19	0100047-76	C18
F009376-BLK2	B9	0100047-19	A4	0100047-60	B20	0100047-77	C19
F009376-BLK3	B10	0100047-20	A5	SEQ-CCV8	B21	0100047-78	C20
F009379-BLK1	B11	SEQ-CCV5	A6	SEQ-CCB8	C1	0100065-02RE4	C21
SEQ-CCV2	B12	SEQ-CCB5	A7	0100047-61	C2	SEQ-CCVA	A1
SEQ-CCB2	B13	0100047-21	A8	0100047-62	C3	SEQ-CCBA	A2

VERIFIED BY: *emb 9/30/20*

PGS 10/22/20
0J01013
Attached

ANALYSIS SEQUENCE

0J01013

QUALITY ASSURANCE

PEER-REVIEWED

INITIALS: PGS

Analyzed: 9/30/2020

Instrument: Hg2600-3

Calibration ID: UNASSIGNED



Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J01013-IBL1	QC	1			
0J01013-IBL2	QC	2			
0J01013-IBL3	QC	3			
0J01013-CAL1	QC	4	2002064		
0J01013-CAL2	QC	5	2002065		
0J01013-CAL3	QC	6	2002220		
0J01013-CAL4	QC	7	2002221		
0J01013-CAL5	QC	8	2002222		
0J01013-ICV1	QC	9	2001809		
0J01013-ICB1	QC	10			
0J01013-CCV1	QC	11	2001809		
0J01013-CCB1	QC	12			
0J01013-CCV2	QC	13	2001809		
0J01013-CCB2	QC	14			
0J01013-CCV3	QC	15	2001809		
0J01013-CCB3	QC	16			
0I00047-78RE1	Hg-CVAFS-T-7030	17			Added 9/30/2020 by ZKH
0J01013-CCV4	QC	18	2001809		
0J01013-CCB4	QC	19			
0J01013-CCV5	QC	20	2001809		
0J01013-CCB5	QC	21			
0J01013-CCV6	QC	22	2001809		
0J01013-CCB6	QC	23			
F009381-BS1	QC	24			
F009381-BSD1	QC	25			
F009382-BS1	QC	26			
F009382-BSD1	QC	27			
F009383-BS1	QC	28			
F009383-BSD1	QC	29			
F009381-BLK1	QC	30			
F009381-BLK2	QC	31			
F009381-BLK3	QC	32			
F009382-BLK1	QC	33			
0J01013-CCV7	QC	34	2001809		
0J01013-CCB7	QC	35			
F009382-BLK2	QC	36			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
F009382-BLK3	QC	37			
F009383-BLK1	QC	38			
F009383-BLK2	QC	39			
F009383-BLK3	QC	40			
OJ01013-CCV8	QC	41	2001809		
OJ01013-CCB8	QC	42			
OI00047-38	Hg-CVAFS-T-7030	43			
F009381-MS1	QC	44			
F009381-MSD1	QC	45			
OI00047-39	Hg-CVAFS-T-7030	46			
OJ01013-CCV9	QC	47	2001809		
OJ01013-CCB9	QC	48			
F009381-MS2	QC	49			
F009381-MSD2	QC	50			
OI00047-40	Hg-CVAFS-T-7030	51			
F009382-MS1	QC	52			
F009382-MSD1	QC	53			
OI00047-41	Hg-CVAFS-T-7030	54			
F009382-MS2	QC	55			
F009382-MSD2	QC	56			
OI00047-42	Hg-CVAFS-T-7030	57			
F009383-MS1	QC	58			
OJ01013-CCVA	QC	59	2001809		
OJ01013-CCBA	QC	60			
F009383-MSD1	QC	61			
OI00047-59	Hg-CVAFS-T-7030	62			
F009383-MS2	QC	63			
F009383-MSD2	QC	64			
OI00047-79	Hg-CVAFS-T-7030	65			
OI00047-80	Hg-CVAFS-T-7030	66			
OI00047-81	Hg-CVAFS-T-7030	67			
OI00047-82	Hg-CVAFS-T-7030	68			
OI00047-83	Hg-CVAFS-T-7030	69			
OI00047-84	Hg-CVAFS-T-7030	70			
OI00047-85	Hg-CVAFS-T-7030	71			
OI00047-86	Hg-CVAFS-T-7030	72			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00047-87	Hg-CVAFS-T-7030	73			
0J01013-CCVB	QC	74	2001809		
0J01013-CCBB	QC	75			
0I00047-88	Hg-CVAFS-T-7030	76			
0I00047-89	Hg-CVAFS-T-7030	77			
0I00047-90	Hg-CVAFS-T-7030	78			
0I00047-92	Hg-CVAFS-T-7030	79			
0I00047-93	Hg-CVAFS-T-7030	80			
0I00047-94	Hg-CVAFS-T-7030	81			
0J01013-CCVC	QC	82	2001809		
0J01013-CCBC	QC	83			
0I00047-95	Hg-CVAFS-T-7030	84			
0I00047-96	Hg-CVAFS-T-7030	85			
0I00047-97	Hg-CVAFS-T-7030	86			
0I00047-98	Hg-CVAFS-T-7030	87			
0I00047-99	Hg-CVAFS-T-7030	88			
0I00047-AA	Hg-CVAFS-T-7030	89			
0I00047-AB	Hg-CVAFS-T-7030	90			
0I00047-AC	Hg-CVAFS-T-7030	91			
0I00047-AD	Hg-CVAFS-T-7030	92			
0I00047-AE	Hg-CVAFS-T-7030	93			
0J01013-CCVD	QC	94	2001809		
0J01013-CCBD	QC	95			
0I00047-AF	Hg-CVAFS-T-7030	96			
0I00047-AG	Hg-CVAFS-T-7030	97			
0I00047-AH	Hg-CVAFS-T-7030	98			
0I00047-AI	Hg-CVAFS-T-7030	99			
0I00047-AJ	Hg-CVAFS-T-7030	100			
0I00047-AK	Hg-CVAFS-T-7030	101			
0I00047-AL	Hg-CVAFS-T-7030	102			
0I00047-AM	Hg-CVAFS-T-7030	103			
0I00047-AN	Hg-CVAFS-T-7030	104			
0I00047-AO	Hg-CVAFS-T-7030	105			
0J01013-CCVE	QC	106	2001809		
0J01013-CCBE	QC	107			
0I00047-AP	Hg-CVAFS-T-7030	108			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00047-AQ	Hg-CVAFS-T-7030	109			
0I00047-AR	Hg-CVAFS-T-7030	110			
0I00047-AS	Hg-CVAFS-T-7030	111			
0I00047-AT	Hg-CVAFS-T-7030	112			
0I00047-AU	Hg-CVAFS-T-7030	113			
0I00047-AV	Hg-CVAFS-T-7030	114			
0I00047-AW	Hg-CVAFS-T-7030	115			
0I00047-AX	Hg-CVAFS-T-7030	116			
0I00047-AY	Hg-CVAFS-T-7030	117			
0J01013-CCVF	QC	118	2001809		
0J01013-CCBF	QC	119			
0I00047-AZ	Hg-CVAFS-T-7030	120			
0I00047-BA	Hg-CVAFS-T-7030	121			
0I00047-BB	Hg-CVAFS-T-7030	122			
0I00047-BC	Hg-CVAFS-T-7030	123			
0I00047-BD	Hg-CVAFS-T-7030	124			
0I00047-BE	Hg-CVAFS-T-7030	125			
0I00047-BF	Hg-CVAFS-T-7030	126			
0I00047-BG	Hg-CVAFS-T-7030	127			
0I00047-BH	Hg-CVAFS-T-7030	128			
0J01013-CCVG	QC	129	2001809		
0J01013-CCBG	QC	130			

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

ANALYSIS SEQUENCE

0J01013



Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J01013-IBL1	QC	1			
0J01013-IBL2	QC	2			
0J01013-IBL3	QC	3			
0J01013-CAL1	QC	4	2002064		
0J01013-CAL2	QC	5	2002065		
0J01013-CAL3	QC	6	2002220		
0J01013-CAL4	QC	7	2002221		
0J01013-CAL5	QC	8	2002222		
0J01013-ICV1	QC	9	2001809		
0J01013-ICB1	QC	10			
0J01013-CCV1	QC	11	2001809		
0J01013-CCB1	QC	12			
0J01013-CCV2	QC	13	2001809		
0J01013-CCB2	QC	14			
0J01013-CCV3	QC	15	2001809		
0J01013-CCB3	QC	16			
0I00047-78RE1	Hg-CVAFS-T-7030	17			Added 9/30/2020 by ZKH
0J01013-CCV4	QC	18	2001809		
0J01013-CCB4	QC	19			
0J01013-CCV5	QC	20	2001809		
0J01013-CCB5	QC	21			
0J01013-CCV6	QC	22	2001809		
0J01013-CCB6	QC	23			
F009381-BS1	QC	24			
F009381-BSD1	QC	25			
F009382-BS1	QC	26			
F009382-BSD1	QC	27			
F009383-BS1	QC	28			
F009383-BSD1	QC	29			
F009381-BLK1	QC	30			
F009381-BLK2	QC	31			
F009381-BLK3	QC	32			
F009382-BLK1	QC	33			
0J01013-CCV7	QC	34	2001809		
0J01013-CCB7	QC	35			
F009382-BLK2	QC	36			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
F009382-BLK3	QC	37			
F009383-BLK1	QC	38			
F009383-BLK2	QC	39			
F009383-BLK3	QC	40			
OJ01013-CCV8	QC	41	2001809		
OJ01013-CCB8	QC	42			
OI00047-38	Hg-CVAFS-T-7030	43			
F009381-MS1	QC	44			
F009381-MSD1	QC	45			
OI00047-39	Hg-CVAFS-T-7030	46			
OJ01013-CCV9	QC	47	2001809		
OJ01013-CCB9	QC	48			
F009381-MS2	QC	49			
F009381-MSD2	QC	50			
OI00047-40	Hg-CVAFS-T-7030	51			
F009382-MS1	QC	52			
F009382-MSD1	QC	53			
OI00047-41	Hg-CVAFS-T-7030	54			
F009382-MS2	QC	55			
F009382-MSD2	QC	56			
OI00047-42	Hg-CVAFS-T-7030	57			
F009383-MS1	QC	58			
OJ01013-CCVA	QC	59	2001809		
OJ01013-CCBA	QC	60			
F009383-MSD1	QC	61			
OI00047-59	Hg-CVAFS-T-7030	62			
F009383-MS2	QC	63			
F009383-MSD2	QC	64			
OI00047-79	Hg-CVAFS-T-7030	65			
OI00047-80	Hg-CVAFS-T-7030	66			
OI00047-81	Hg-CVAFS-T-7030	67			
OI00047-82	Hg-CVAFS-T-7030	68			
OI00047-83	Hg-CVAFS-T-7030	69			
OI00047-84	Hg-CVAFS-T-7030	70			
OI00047-85	Hg-CVAFS-T-7030	71			
OI00047-86	Hg-CVAFS-T-7030	72			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 9/30/2020

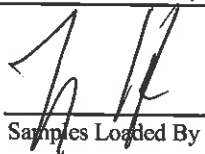
Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00047-87	Hg-CVAFS-T-7030	73			
0J01013-CCVB	QC	74	2001809		
0J01013-CCBB	QC	75			
0I00047-88	Hg-CVAFS-T-7030	76			
0I00047-89	Hg-CVAFS-T-7030	77			
0I00047-90	Hg-CVAFS-T-7030	78			
0I00047-92	Hg-CVAFS-T-7030	79			
0I00047-93	Hg-CVAFS-T-7030	80			
0I00047-94	Hg-CVAFS-T-7030	81			
0J01013-CCVC	QC	82	2001809		
0J01013-CCBC	QC	83			
0I00047-95	Hg-CVAFS-T-7030	84			
0I00047-96	Hg-CVAFS-T-7030	85			
0I00047-97	Hg-CVAFS-T-7030	86			
0I00047-98	Hg-CVAFS-T-7030	87			
0I00047-99	Hg-CVAFS-T-7030	88			
0I00047-AA	Hg-CVAFS-T-7030	89			
0I00047-AB	Hg-CVAFS-T-7030	90			
0I00047-AC	Hg-CVAFS-T-7030	91			
0I00047-AD	Hg-CVAFS-T-7030	92			
0I00047-AE	Hg-CVAFS-T-7030	93			
0J01013-CCVD	QC	94	2001809		
0J01013-CCBD	QC	95			
0I00047-AF	Hg-CVAFS-T-7030	96			
0I00047-AG	Hg-CVAFS-T-7030	97			
0I00047-AH	Hg-CVAFS-T-7030	98			
0I00047-AI	Hg-CVAFS-T-7030	99			
0I00047-AJ	Hg-CVAFS-T-7030	100			
0I00047-AK	Hg-CVAFS-T-7030	101			
0I00047-AL	Hg-CVAFS-T-7030	102			
0I00047-AM	Hg-CVAFS-T-7030	103			
0I00047-AN	Hg-CVAFS-T-7030	104			
0I00047-AO	Hg-CVAFS-T-7030	105			
0J01013-CCVE	QC	106	2001809		
0J01013-CCBE	QC	107			
0I00047-AP	Hg-CVAFS-T-7030	108			

Instrument: Hg2600-3

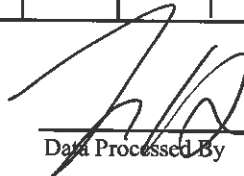
Calibration ID: UNASSIGNED

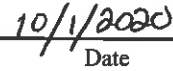
Analyzed: 9/30/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00047-AQ	Hg-CVAFS-T-7030	109			
0I00047-AR	Hg-CVAFS-T-7030	110			
0I00047-AS	Hg-CVAFS-T-7030	111			
0I00047-AT	Hg-CVAFS-T-7030	112			
0I00047-AU	Hg-CVAFS-T-7030	113			
0I00047-AV	Hg-CVAFS-T-7030	114			
0I00047-AW	Hg-CVAFS-T-7030	115			
0I00047-AX	Hg-CVAFS-T-7030	116			
0I00047-AY	Hg-CVAFS-T-7030	117			
0J01013-CCVF	QC	118	2001809		
0J01013-CCBF	QC	119			
0I00047-AZ	Hg-CVAFS-T-7030	120			
0I00047-BA	Hg-CVAFS-T-7030	121			
0I00047-BB	Hg-CVAFS-T-7030	122			
0I00047-BC	Hg-CVAFS-T-7030	123			
0I00047-BD	Hg-CVAFS-T-7030	124			
0I00047-BE	Hg-CVAFS-T-7030	125			
0I00047-BF	Hg-CVAFS-T-7030	126			
0I00047-BG	Hg-CVAFS-T-7030	127			
0I00047-BH	Hg-CVAFS-T-7030	128			
0J01013-CCVG	QC	129	2001809		
0J01013-CCBG	QC	130			


Samples Loaded By


Date


Data Processed By


Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>ZKH</u>	Sequence(s) #: <u>0J01013</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200930-1_PART 2</u>
Date: <u>10/1/2020</u>	WO (s) #: <u>0I00047</u>
Batch #(s): <u>F009380, F009381, F009382, F009383</u>	

• Select the correct preparation method.

Analyte	Prep Method	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb
<input checked="" type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation
<input type="checkbox"/> Hg0	NA	NA
<input type="checkbox"/> Inorg Hg	NA	NA

Analyst Initials: ZKH **Reviewer Initials:** PCS

- | | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | | | |
| (b) Check 5% of transcription from Instrument print-out and Excel file | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | | | |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 50 ml / aliquot = Excel dilution value | | | |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): _____ | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>ZKH</u>	Sequence(s) #: <u>OJ01013</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-200930-1 PART 2</u>
Date: <u>10/1/2020</u>	WO (s) #: <u>0100047</u>
Batch #(s): <u>F009380, F009381, F009382, F009383</u>	

Analyst Initials ZKH Reviewer Initials PGS

5b. Has the B/C section data been uploaded?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
QA/QC Data Checked				
6. RSD CF ($\leq 15\%$)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
Comments: _____				
7. The calibration curve included a minimum of 5 Standards	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
Comments: _____				
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
9. ICV and CCV % Recoveries EPA 1631E (77-123%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
Comments: _____				
10. Do all calibration points pass acceptance criteria?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
Comments: _____				
11. Are qualifiers consistent with the data review flowcharts?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/>
Comments: _____				
12. Explain any items on the failed data report from Element				<input type="checkbox"/>
Comments: _____				
13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
(a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit:				
(b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
(c) Was a BrCl Blank analyzed for each preservation level?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(d) Are Preparation Blanks summarized on QC page?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
14. Filtration Blank Prepared (if yes, use FB qualifier)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		<input type="checkbox"/>
(a) Filtration Blank prep date same as associated samples' prep date	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(b) Filtration Blank absolute value < PQL or <2.2xMDL for WI	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L?	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
Comments: _____				
16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI?	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
Comments: _____				
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
18. Is the correct 'Source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
19. For digested preps: was there a spike witness signature & date on the prep bench sheet?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/>

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: ZKH	Sequence(s) #: 0J01013
Reviewer:	Dataset ID(s): THg26003-200930-1 PART 2
Date: 10/1/2020	WO (s) #: 0I00047
Batch #(s): F009380, F009381, F009382, F009383	

Analyst Initials ZKH Reviewer Initials PGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|-----------------------------------------|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| Comments: _____ | | | |
| 22. Are the samples run at the correct dilution level for the method? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 23. Dissolved < Total (if applicable) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 24. Effluent < Influent (visually confirm if needed) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 25. Are re-runs noted with reason? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| Comments: _____ | | | |
| 26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 27. Is the B trap <5% A Traps | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 28. Are spiked trap recoveries 75-125% of true value? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| Comments: _____ | | | |
| 30. Have re-extracts been created for non-reportable samples? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 32. Does the data set need scanning? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 33. Does the dataset have an LOQ/LOQ or DOC? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 34. Water samples: has the preservation log been included in dataset for final volume verification? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 35. Water samples-is the final volume correct in the sequence? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |

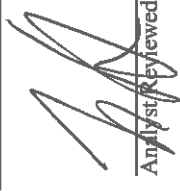
Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

- | | | | | |
|-----------------------------------------------------|----------------------------------------|-----------------------------------------|----------------------------------------|--------------------------|
| 36. Date of analyst IDOC/CDOC: _____ | _____ IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: _____ | _____ Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 38. Date of LOD: _____ | LOD within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 39. Date of LOQ: _____ | LOQ within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |


Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0J01013

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
F009382-MSD2	Hg-CVAFS-T-7030	949.8	15.0	848.7482523	3189	373.46	ng/g	114	71.00	125.00	27.1	24.00	PASS-OVER	FAIL-MSD (RPD)	QM-05
F009383-MSD1	Hg-CVAFS-T-7030	748.4	14.8	665.0346252	0087	369.73	ng/g	134	71.00	125.00	16.8	24.00	PASS-OVER	FAIL-MSD (Rec.)	QM-05
F009383-MS2	Hg-CVAFS-T-7030	444.5	15.3	200.5994	383.35		ng/g	63.6	71.00	125.00			PASS-OVER	FAIL-MS	QM-05



 Analyst/Reviewed By _____ Date 10/1/2020



 Peer Reviewed By _____ Date _____

PREPARATION BENCH SHEET

F009380

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using:** Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion **Prepared:** 9/22/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009380-BLK1	Blank	0.25	20					
F009380-BLK2	Blank	0.25	20					
F009380-BLK3	Blank	0.25	20					
F009380-BS1	LCS	0.25	20	2002032	20			
F009380-BSD1	LCS Dup	0.25	20	2002032	20			
F009380-MS1	Matrix Spike [0100047-36]	0.2556	20	2001204	100			
F009380-MS2	Matrix Spike [0100047-37]	0.252	20	2001204	100			
F009380-MSD1	Matrix Spike Dup [0100047-36]	0.278	20	2001204	100			
F009380-MSD2	Matrix Spike Dup [0100047-37]	0.2737	20	2001204	100			

Standard ID(s):

2001204 THg 1,000ng/mL Secondary Spiking Standard
 2002032 THg 100ng/mL Primary Spiking Standard

Expiration:

05-Nov-20 00:00
 05-Nov-20 00:00

Reagent ID(s):

2001276 2.5% Hydroxylamine-HCl working solution
 2001977 THg Dilute 1% BrCl
 2001978 THg 2% BrCl
 2001979 THg Washstation (0.5% BrCl)
 2002050 Boiling Chips for ICPMS
 2002190 70/30 Digestion Acid
 2002218 3% SnCl2 THg reductant
 2002290 5% BrCl

Expiration:

03-Oct-20 00:00
 07-Feb-21 00:00
 03-Oct-20 00:00
 20-Feb-21 00:00
 08-Sep-21 00:00
 09-Feb-21 00:00
 07-Feb-21 00:00

PREPARATION BENCH SHEET

F009380

Eurofins Frontier Global Sciences, LLC

Prepared: 9/22/2020

Matrix: Tissue Prepared using: Trace Metals - EFCS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-36	ES-FP_20LT201_091020_02_LOB_TA	0.2599	20	QC	-	eezer 23	MS/MSD	
0100047-37	ES-FP_20LT201_091020_03_LOB_TA	0.2548	20	QC	-	eezer 23	MS/MSD	
0100047-60	ES-FP_20LT207_091020_16_LOB_TA	0.2502	20	-	-	eezer 23		
0100047-61	ES-FP_20LT208_091020_17_LOB_TA	0.2763	20	-	-	eezer 23		
0100047-62	ES-FP_20LT208_091020_18_LOB_TA	0.2588	20	-	-	eezer 23		
0100047-63	ES-FP_20LT208_091020_19_LOB_TA	0.2704	20	-	-	eezer 23		
0100047-64	ES-FP_20LT209_091020_20_LOB_TA	0.2851	20	-	-	eezer 23		
0100047-66	OL-01_20LT301_091020_02_LOB_TA	0.2621	20	-	-	eezer 23		
0100047-67	OL-01_20LT302_091020_03_LOB_TA	0.2547	20	-	-	eezer 23		
0100047-68	OL-01_20LT304_091020_04_LOB_TA	0.2767	20	-	-	eezer 23		
0100047-69	OL-01_20LT304_091020_05_LOB_TA	0.2771	20	-	-	eezer 23		
0100047-70	OL-01_20LT304_091020_06_LOB_TA	0.2641	20	-	-	eezer 23		
0100047-71	BO-04_20ETS03_091020_02_TOM_WB	0.2651	20	-	-	eezer 23		
0100047-72	BO-04_20ETS06_091020_03_TOM_WB	0.2597	20	-	-	eezer 23		
0100047-73	BO-04_20ETS06_091020_04_TOM_WB	0.2515	20	-	-	eezer 23		
0100047-74	BO-04_20ETS06_091020_05_TOM_WB	0.2652	20	-	-	eezer 23		
0100047-75	BO-04_20ETS06_091020_06_TOM_WB	0.2649	20	-	-	eezer 23		
0100047-76	BO-04_20ETS07_091020_07_TOM_WB	0.26	20	-	-	eezer 23		
0100047-77	BO-04_20ETS08_091020_08_TOM_WB	0.2651	20	-	-	eezer 23		

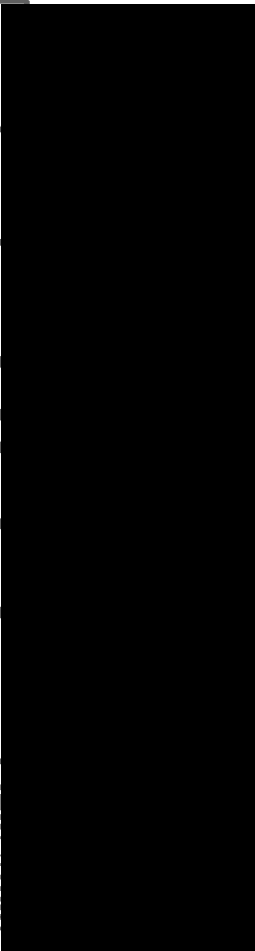
PREPARATION BENCH SHEET

F009380

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/22/2020

0100047-78	OL-01_20LT305_091020_07_LOB_TA	0.2727	20	-	-	eezer 23		
0100047-78RE1	OL-01_20LT305_091020_07_LOB_TA	0.2727	20	-	-	eezer 23	Added 9/30/2020 by ZKH	RR @ 1000X - ZKH 9/30/2020



PREPARATION BENCH SHEET

F009381

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/29/2020**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009381-BLK1	Blank	0.25	20					
F009381-BLK2	Blank	0.25	20					
F009381-BLK3	Blank	0.25	20					
F009381-BS1	LCS	0.25	20	2002032	20			
F009381-BSD1	LCS Dup	0.25	20	2002032	20			
F009381-MS1	Matrix Spike [0100047-38]	0.254	20	2001204	100			
F009381-MS2	Matrix Spike [0100047-39]	0.2671	20	2001204	100			
F009381-MSD1	Matrix Spike Dup [0100047-38]	0.2627	20	2001204	100			
F009381-MSD2	Matrix Spike Dup [0100047-39]	0.2554	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002290	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009381

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-38	ES-FP_20LT202_091020_04_LOB_TA	0.2623	20	QC	-	eezer 23	MS/MSD	
0100047-39	ES-FP_20LT202_091020_05_LOB_TA	0.2516	20	QC	-	eezer 23	MS/MSD	
0100047-79	OL-01_20LT305_091020_08_LOB_TA	0.2555	20	-	-	S&R		
0100047-80	OL-01_20LT306_091020_09_LOB_TA	0.2555	20	-	-	S&R		
0100047-81	OL-01_20LT307_091020_10_LOB_TA	0.2519	20	-	-	S&R		
0100047-82	BO-04_20ETS08_091020_09_TOM_WB	0.2524	20	-	-	S&R		
0100047-83	BO-04_20ETS08_091020_10_TOM_WB	0.2523	20	-	-	S&R		
0100047-84	BO-04_20ETS08_091020_11_TOM_WB	0.2545	20	-	-	S&R		
0100047-85	BO-04_20ETS09_091020_12_TOM_WB	0.2521	20	-	-	S&R		
0100047-86	BO-04_20ETS09_091020_13_TOM_WB	0.2657	20	-	-	S&R		
0100047-87	BO-04_20ETS09_091020_14_TOM_WB	0.2547	20	-	-	S&R		
0100047-88	BO-04_20ETS09_091020_15_TOM_WB	0.2674	20	-	-	S&R		
0100047-89	BO-04_20ETS10_091020_16_TOM_WB	0.2603	20	-	-	S&R		
0100047-90	BO-04_20ETS10_091020_17_TOM_WB	0.2658	20	-	-	S&R		
0100047-92	SVE-01_20LT401_091020_02_LOB_TA	0.2662	20	-	-	S&R		
0100047-93	SVE-01_20LT401_091020_03_LOB_TA	0.2514	20	-	-	S&R		
0100047-94	BO-04_20ETS11_091020_18_TOM_WB	0.2675	20	-	-	S&R		
0100047-95	BO-04_20ETS11_091020_19_TOM_WB	0.2581	20	-	-	S&R		
0100047-96	BO-04_20ETS13_091020_20_TOM_WB	0.2523	20	-	-	S&R		

PREPARATION BENCH SHEET

F009381

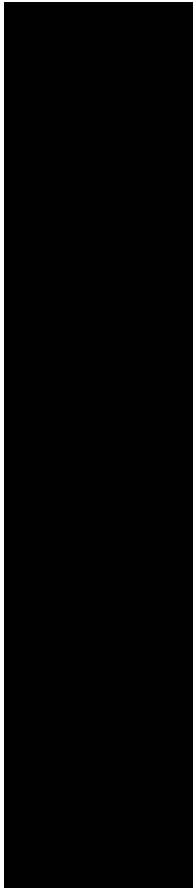
Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

0100047-97	SVE-01_20LT40I_091020_04_LOB_TA	0.2666	20	-	-	S&R	
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Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS 9/29/20
Upload/Date: MFS 10/1/20

Samples to lab: N/A
Reviewer/Date: ZKH 10/31/2020

Batch #: F009381

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (Nutraceuticals)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA	Other: <u>SOP 2837 2993 200830</u> <u>MFS 10/1/20</u>	

Initials	SOP Date	DOC Date
<u>MFS</u>	<u>10/28/19</u>	<u>11/15/19</u>

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: TRG

- | | | | | |
|-----------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------|-----------------------------------------|-----------------------------------------|
| 1. Is any SOP/DOC expiring within one week of Submission Date? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | Reviewer Initials: <u>ZKH</u> | Tertiary Review: <u>IFA</u> |
| Data cannot be reported without a current IDOC/CDOC. | | | | |
| 2. Check prep method | If YES, notify supervisor and technician immediately. | | | |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> ICPMS | <input type="checkbox"/> CV-AFS | <input type="checkbox"/> 70:30 | <input checked="" type="checkbox"/> N/A |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A |
| 4. Check for transcription errors from benchsheet | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A |
| (b) Check and compare mass | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A |
| (e) For re-digests, have e-mails been attached and verified? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A |
| 5. Samples per Batch? Check QC Requirements | <input checked="" type="checkbox"/> ≤ 20 | <input type="checkbox"/> ≤ 10 | | |
| (a) PBs per batch? | <input checked="" type="checkbox"/> 3 PBs | <input type="checkbox"/> 2 PBs | <input type="checkbox"/> 1 PBs | |
| (b) Are pre and post homogenization blanks in batch? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | |
| (c) BS, BS/BSD or CRM in batch? | <input type="checkbox"/> BS | <input checked="" type="checkbox"/> BS/BSD | <input type="checkbox"/> CRM | |
| (d) MS/MSD in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | |
| (e) MD in batch? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | |
| (f) Is there at least one duplicate QC source in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | |
| (g) Are there any client specific requests, QC requests, etc? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | |
| Document: <u>WO 0500047-38/31</u> | | | | |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | |
| (i) Correct 'source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | |
| 6. Special prep requirements? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | |
| (b) For all spiking was there a witness? (Initials must be in logbook) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | |
| (c) Spikes added: | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: N/A

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
<u>TRG 100ng/mL</u>	<u>2007082</u>	<u>20</u>			
<u>TRG 100ng/mL</u>	<u>2007204</u>	<u>100</u>			

Technician: MFS / VFL Batch #: FO09381 Date: 9/22/18
Digested 9/29/20 by MFS

EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon
 Balance #: 23 Calibrated? Yes No Therm. #: 170756 090 Calibrated? Yes No
 *Time in: 135.6 Actual Temp. (raw): 74.9 °C w/ CF: 74.0 °C *Time in can't begin before target temperature is reached
 Time out: 135.8 Actual Temp. (raw): 75.9 °C w/ CF: 75.6 °C

Final vol.: 20 mL (LIMS ID: 2002290) BS Spike vol.: 20 µL (LIMS ID: 2002032)
 Spike Witness: W 9.29.2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2002011)
 HCl LIMS ID: N/A Pipette SN#: 0007853 Calibration Date: 9-29-20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2002190 Dispenser #: 19581057 Calibrated? Yes No
 Other Acid LIMS ID: 2002290 (57.8cc) Dispenser #: 19537295 Calibrated? Yes No
 Glass Vial # 00077092 Boiling Chip lot # 2002056 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	CRM LIMS ID
1	FO09381-BLK1	A	0.2562	19	0I00047-86	C	0.2657	<input checked="" type="checkbox"/> NA
2	FO09381-BLK2	A	0.2558	20	0I00047-87	C	0.2517	
3	FO09381-BLK3	A	0.2549	21	0I00047-88	C	0.2674	
4	FO09381-B51	A	0.2678	22	0I00047-89	C	0.2603	
5	FO09381-B5D1	A	0.2594	23	0I00047-90	C	0.2658	
6	0I00047-88 (25.0 µg)	C	0.2673	24	0I00047-92	C	0.2662	
7	FO09381-M51	C	0.2510	25	0I00047-93	C	0.2511	
8	FO09381-M5D1	C	0.2607	26	0I00047-91	C	0.2675	
9	0I00047-21 (25.0 µg)	C	0.2510	27	0I00047-95	C	0.2581	
10	FO09381-M52	C	0.2671	28	0I00047-96	C	0.2523	
11	FO09381-M5D2	C	0.2554	29	0I00047-97	C	0.2666	
12	0I00047-79	C	0.2555	30				
13	0I00047-80	C	0.2555	31				
14	0I00047-81	C	0.2519	32				
15	0I00047-82	C	0.2524	33				
16	0I00047-83	C	0.2523	34				
17	0I00047-84	C	0.2545	35				
18	0I00047-85	C	0.2521	36				

PREPARATION BENCH SHEET

F009382

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009382-BLK1	Blank	0.25	20					
F009382-BLK2	Blank	0.25	20					
F009382-BLK3	Blank	0.25	20					
F009382-BS1	LCS	0.25	20	2002032	20			
F009382-BSD1	LCS Dup	0.25	20	2002032	20			
F009382-MS1	Matrix Spike [0100047-40]	0.2616	20	2001204	100			
F009382-MS2	Matrix Spike [0100047-41]	0.2668	20	2001204	100			
F009382-MSD1	Matrix Spike Dup [0100047-40]	0.2652	20	2001204	100			
F009382-MSD2	Matrix Spike Dup [0100047-41]	0.2675	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002290	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009382

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-40	ES-FP_20LT202_091020_06_LOB_TA	0.2649	20	QC	-	cezer 23	MS/MSD	
0100047-41	ES-FP_20LT202_091020_07_LOB_TA	0.2657	20	QC	-	cezer 23	MS/MSD	
0100047-98	SVE-01_20LT402_091020_05_LOB_TA	0.2582	20	-	-	S&R		
0100047-99	SVE-01_20LT402_091020_06_LOB_TA	0.2573	20	-	-	S&R		
0100047-AA	SVE-01_20LT402_091020_07_LOB_TA	0.2702	20	-	-	S&R		
0100047-AB	SVE-01_20LT402_091020_08_LOB_TA	0.2553	20	-	-	S&R		
0100047-AC	SVE-01_20LT403_091020_09_LOB_TA	0.2638	20	-	-	S&R		
0100047-AD	SVE-01_20LT403_091020_10_LOB_TA	0.268	20	-	-	S&R		
0100047-AE	SVE-01_20LT404_091020_11_LOB_TA	0.2691	20	-	-	S&R		
0100047-AF	SVE-01_20LT404_091020_12_LOB_TA	0.2668	20	-	-	S&R		
0100047-AG	CJ-04_20LT123_091020_12_LOB_TA	0.2667	20	-	-	S&R		
0100047-AH	L9-45_20L011_091020_15_LOB_TA	0.252	20	-	-	S&R		
0100047-AI	L9-45_20L017_091020_16_LOB_TA	0.2544	20	-	-	S&R		
0100047-AJ	L9-45_20L018_091020_17_LOB_TA	0.2642	20	-	-	S&R		
0100047-AK	SVE-01_20LT405_091020_13_LOB_TA	0.2549	20	-	-	S&R		
0100047-AL	SVE-01_20LT405_091020_14_LOB_TA	0.2579	20	-	-	S&R		
0100047-AM	SVE-01_20LT405_091020_15_LOB_TA	0.2587	20	-	-	S&R		
0100047-AN	SVE-01_20LT405_091020_16_LOB_TA	0.2641	20	-	-	S&R		
0100047-AO	SVE-01_20LT405_091020_17_LOB_TA	0.2569	20	-	-	S&R		

PREPARATION BENCH SHEET

F009382

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

0100047-AP	SVE-01_20LT406_091020_18_LOB_TA	0.2632	20	-	-	S&R	
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Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS 9/29/20
Upload/Date: MFS 10/1/20

Samples to lab: N/A
Reviewer/Date: ZRH 10/13/2020

Batch #: F009382

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2893	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (Nutraceuticals)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA	Other: <u>SOP 2795, 2830</u>	

Initials	SOP Date	DOC Date
<u>MFS</u>	<u>10/28/20</u>	<u>11/18/19</u>

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

1. Is any SOP/DOC expiring within one week of Submission Date?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Data cannot be reported without a current IDOC/CDOC.					
If YES, notify supervisor and technician immediately.					
2. Check prep method	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(a) For Ceuticals: Is correct Hg code being used in LIMS?	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CV-AFS	<input type="checkbox"/> 70:30	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> ≤ 20	<input type="checkbox"/> ≤ 10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(a) PBs per batch?	<input checked="" type="checkbox"/> 3 PBs	<input type="checkbox"/> 2 PBs	<input type="checkbox"/> 1 PBs	<input type="checkbox"/>	<input type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input type="checkbox"/>	<input type="checkbox"/> YES	<input type="checkbox"/>	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(c) BS, BS/BSD or CRM in batch?	<input type="checkbox"/> BS	<input checked="" type="checkbox"/> BS/BSD	<input type="checkbox"/> CRM	<input type="checkbox"/>	<input type="checkbox"/>
(d) MS/MSD in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
(e) MD in batch?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
Document: <u>60010047 - 40/41</u>					
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Special prep requirements?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input type="checkbox"/>
(c) Spikes added:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID: N/A

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
THg 100ng/mL	2002032	20			
THg 100g	2001704	100			

Technician: MRS Batch #: F009382 Date: 9/22/20 Disked 9/29/20 by MRS

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon
 Balance #: 23 Calibrated? Yes No Therm. #: 17675090 Calibrated? Yes No
 *Time in: 123 Actual Temp. (raw): 71.7 °C w/ CF: 70.8 °C *Time in can't begin before target temperature is reached
 Time out: 1338 Actual Temp. (raw): 75.9 °C w/ CF: 75.0 °C

Final vol.: 26 mL (LIMS ID: 2002290) BS Spike vol.: 20 µL (LIMS ID: 2002032)
 Spike Witness: NA 9.29.2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2002034)

HCl LIMS ID: N/A Pipette SN#: 0007863 Calibration Date: 9-29-20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2092196 Dispenser #: 19281607 Calibrated? Yes No
 Other Acid LIMS ID: 2002290 (5x br.c) Dispenser #: 19337296 Calibrated? Yes No
 Glass Vial # 60077092 Boiling Chip lot # 2002050 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input type="checkbox"/> µg <input checked="" type="checkbox"/>	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input type="checkbox"/> µg <input checked="" type="checkbox"/>	CRM LIMS ID
1	F009382-BLK1	A	0.2622	19	0T00047-AF	C	0.2622	2002032
2	F009382-BLK2	A	0.2568	20	0T00047-AG	C	0.2568	2002032
3	F009382-BLK3	A	0.2535	21	0T00047-AH	C	0.2535	2002032
4	F009382-BLK1	A	0.2606	22	0T00047-AJ	C	0.2606	2002032
5	F009382-BSD1	A	0.2519	23	0T00047-AK	C	0.2519	2002032
6	F009382-0T00047-AC (5x br.c)	C	0.2649	24	0T00047-AL	C	0.2649	2002032
7	F009382-MS1	C	0.2666	25	0T00047-AM	C	0.2666	2002032
8	F009382-MS2	C	0.2652	26	0T00047-AN	C	0.2652	2002032
9	0T00047-41 (MS2002032)	C	0.2657	27	0T00047-AO	C	0.2657	2002032
10	F009382-MS2 (5x br.c)	C	0.2668	28	0T00047-AP	C	0.2668	2002032
11	F009382-MS2	C	0.2675	29	0T00047-AQ	C	0.2675	2002032
12	0T00047-98	C	0.2582	30				
13	0T00047-99	C	0.2673	31				
14	0T00047-AP	C	0.2707	32				
15	0T00047-AB	C	0.2553	33				
16	0T00047-AC	C	0.2638	34				
17	0T00047-AD	C	0.2680	35				
18	0T00047-AE	C	0.2651	36				

PREPARATION BENCH SHEET

F009383

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009383-BLK1	Blank	0.25	20					
F009383-BLK2	Blank	0.25	20					
F009383-BLK3	Blank	0.25	20					
F009383-BS1	LCS	0.25	20	2002032	20			
F009383-BSD1	LCS Dup	0.25	20	2002032	20			
F009383-MS1	Matrix Spike [0100047-42]	0.2745	20	2001204	100			
F009383-MS2	Matrix Spike [0100047-59]	0.2606	20	2001204	100			
F009383-MSD1	Matrix Spike Dup [0100047-42]	0.2702	20	2001204	100			
F009383-MSD2	Matrix Spike Dup [0100047-59]	0.258	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002290	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009383

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-42	ES-FP_20LT202_091020_08_LOB_TA	0.2671	20	QC	-	eezer 23	MS/MSD	
0100047-59	OB-04_20ET503_091020_01_TOM_WB	0.2694	20	QC	-	eezer 23	MS/MSD	
0100047-AQ	SVE-01_20LT406_091020_19_LOB_TA	0.2706	20	-	-	S&R		
0100047-AR	SVE-01_20LT406_091020_20_LOB_TA	0.274	20	-	-	S&R		
0100047-AS	CJ-04_20LT111_091020_14_LOB_TA	0.2678	20	-	-	S&R		
0100047-AT	CJ-04_20LT111_091020_15_LOB_TA	0.2672	20	-	-	S&R		
0100047-AU	CJ-04_20LT111_091020_16_LOB_TA	0.2554	20	-	-	S&R		
0100047-AV	CJ-04_20LT111_091020_17_LOB_TA	0.2613	20	-	-	S&R		
0100047-AW	CJ-04_20LT113_091020_18_LOB_TA	0.2659	20	-	-	S&R		
0100047-AX	CJ-04_20LT113_091020_19_LOB_TA	0.2757	20	-	-	S&R		
0100047-AY	CJ-04_20LT116_091020_20_LOB_TA	0.2672	20	-	-	S&R		
0100047-AZ	CJ-04_20LT124_091020_13_LOB_TA	0.2768	20	-	-	S&R		
0100047-BA	OL-01_20LT320_091020_13_LOB_TA	0.2675	20	-	-	S&R		
0100047-BB	OL-01_20LT321_091020_11_LOB_TA	0.2739	20	-	-	S&R		
0100047-BC	OL-01_20LT322_091020_12_LOB_TA	0.2694	20	-	-	S&R		
0100047-BD	OL-01_20LT323_091020_14_LOB_TA	0.282	20	-	-	S&R		
0100047-BE	OB-01_20ET601_091020_01_TOM_WB	0.2623	20	-	-	S&R		
0100047-BF	OB-01_20ET601_091020_02_TOM_WB	0.2503	20	-	-	S&R		
0100047-BG	OB-01_20ET603_091020_03_TOM_WB	0.2601	20	-	-	S&R		

PREPARATION BENCH SHEET

F009383

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

0100047-BH	OB-01_20ET605_091020_04_TOM_WB	0.2796	20	-	-	S&R	
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Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS 9/29/20
Upload/Date: MFS 10/1/20

Samples to lab: N/A
Reviewer/Date: ZKH 10/3/2020

Batch #: F009303

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (Nutraceuticals)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA	Other: <u>SOP 2795 70:30</u>	

Initials	SOP Date	DOC Date
<u>MFS</u>	<u>10/28/19</u>	<u>11/18/19</u>
Comments: _____		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	Reviewer Initials <u>ZKH</u>	Tertiary Review <u>ZKH</u>	<input checked="" type="checkbox"/>
2. Check prep method	If YES, notify supervisor and technician immediately.				
(a) For Ceuticals: Is correct Hg code being used in LIMS?	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CV-AFS	<input type="checkbox"/> 70:30	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> ≤ 20	<input type="checkbox"/> ≤ 10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) PBs per batch?	<input checked="" type="checkbox"/> 3 PBs	<input type="checkbox"/> 2 PBs	<input type="checkbox"/> 1 PBs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) BS, BS/BSD or CRM in batch?	<input type="checkbox"/> BS	<input checked="" type="checkbox"/> BS/BSD	<input type="checkbox"/> CRM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(d) MS/MSD in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(e) MD in batch?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc? Document: <u>WO 0100047-4/2/59</u>	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Special prep requirements?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Spikes added:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : N/A

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>THg 100 ng/mL</u>	<u>2008032</u>	<u>70</u>			
<u>THg 100 ng/mL</u>	<u>2007004</u>	<u>100</u>			

Technician: emb Batch#: F009383 Date: 9/22/20
Described 9/29/20 by RFS
 EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KB/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A
 Vial Type: Glass Teflon
 Balance#: 74 Calibrated? Yes No
 Therm.#: 176756031 Calibrated? Yes No
 *Time In: 12:08 Actual Temp. (raw): 72.1 °C w/ CF: 77.5 °C *Time in can't begin before target temperature is reached
 Time out: 14:00 Actual Temp. (raw): 71.9 °C w/ CF: 77.3 °C

Final vol.: 20 mL (LIMS ID: 2002290) BS Spike vol.: 20 µL (LIMS ID: 2002082)
 Spike Witness: emb 9/29/20 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2002204)
 HCl LIMS ID: N/A Pipette SN#: 0007853 Calibration Date: 9/29/20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2002196 Dispenser #: 19281607 Calibrated? Yes No
 Other Acid LIMS ID: 2002290 (SIB-0) Dispenser #: 19137295 Calibrated? Yes No
 Glass Vial # 00071082 Boiling Chip lot # 2002080 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size [] mL [x] µg	Vial #	Sample ID Number	Container ID	Sample Size [] mL [x] µg	CRM LIMS ID
1	F009383-B81	<u>N/A</u>	<u>0.2666</u>	<u>29</u>	<u>0100047-AX</u>	<u>C</u>	<u>0.2757</u>	<u>N/A</u>
2	F009383-B801	<u>N/A</u>	<u>0.2501</u>	<u>30</u>	<u>0100047-AY</u>	<u>C</u>	<u>0.2672</u>	
3	F009383-BUK1	<u>N/A</u>	<u>0.2006</u>	<u>31</u>	<u>0100047-AZ</u>	<u>C</u>	<u>0.2768</u>	
4	F009383-BUK2	<u>N/A</u>	<u>0.2501</u>	<u>32</u>	<u>0100047-BA</u>	<u>C</u>	<u>0.2675</u>	
5	F009383-BUK3	<u>N/A</u>	<u>0.2529</u>	<u>33</u>	<u>0100047-BB</u>	<u>C</u>	<u>0.2739</u>	
6	0100047-42C	<u>C</u>	<u>0.2071</u>	<u>34</u>	<u>0100047-BU</u>	<u>C</u>	<u>0.2694</u>	
7	F009383-MS1	<u>N/A</u>	<u>0.2745</u>	<u>35</u>	<u>0100047-BD</u>	<u>C</u>	<u>0.2870</u>	
8	F009383-MSD1	<u>N/A</u>	<u>0.2702</u>	<u>36</u>	<u>0100047-BE</u>	<u>C</u>	<u>0.2693</u>	
9	0100047-59C	<u>C</u>	<u>0.2694</u>	<u>37</u>	<u>0100047-BF</u>	<u>C</u>	<u>0.2505</u>	
10	F009383-MS2	<u>IC</u>	<u>0.2606</u>	<u>38</u>	<u>0100047-BG</u>	<u>C</u>	<u>0.2001</u>	
11	F009383-MSD2	<u>C</u>	<u>0.2580</u>	<u>39</u>	<u>0100047-BH</u>	<u>C</u>	<u>0.2790</u>	
12	0100047-AQ	<u>C</u>	<u>0.2706</u>	<u>40</u>				
13	0100047-AE	<u>C</u>	<u>0.2740</u>	<u>41</u>				
14	0100047-AS	<u>C</u>	<u>0.2678</u>	<u>42</u>				
15	0100047-AT	<u>C</u>	<u>0.2677</u>	<u>43</u>				
16	0100047-AU	<u>C</u>	<u>0.2613</u>	<u>44</u>				
17	0100047-AV	<u>C</u>	<u>0.2613</u>	<u>45</u>				
18	0100047-AW	<u>C</u>	<u>0.2659</u>	<u>46</u>				

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Frontier Global Sciences

THg26003-200930-1_PART 2

Analysis Datasheet for Total Mercury

Date of Analysis: September 30, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 0101013

Analyst: ZKH
 Units: ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	200.25 units	400.50	102.82 units	205.65	99.7 %Rec
SEQ-CAL2	1	1.00 ng/L	308.43 units	308.43	211.01 units	211.01	102.3 %Rec
SEQ-CAL3	1	5.00 ng/L	1128.60 units	225.72	1031.18 units	206.24	100.0 %Rec
SEQ-CAL4	1	20.00 ng/L	4131.26 units	206.56	4033.83 units	201.69	97.8 %Rec
SEQ-CAL5	1	40.00 ng/L	8359.28 units	208.98	8261.85 units	206.55	100.2 %Rec
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 206.23 Corr. St Dev RF +/- 3.31 Corr. RSD CF 1.6% RSD Uncorr. Mean RF 270.04

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-BL	3	97.43 units	±8.13	0.36 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	0	0.000 ng/L	
BLK	2	3	-1.050 ng/L	±0.807
BLK	3	3	-1.622 ng/L	±0.491
BLK	4	3	-1.718 ng/L	±0.973
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Responses	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	ZKH	CAL	SEQ-IBL1	1	9/30/2020 11:06:24	4219-1.RAW	11:06:24 AM	105.58			8.2	0.040	0.040	ng/L	
Hg2600-3	ZKH	CAL	SEQ-IBL2	1	9/30/2020 11:10:33	4220-1.RAW	11:10:33 AM	87.38			0.0	0.000	0.000	ng/L	
Hg2600-3	ZKH	CAL	SEQ-IBL3	1	9/30/2020 11:14:42	4221-1.RAW	11:14:42 AM	89.32			-8.1	-0.039	-0.039	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL1	1	9/30/2020 11:18:51	4222-1.RAW	11:18:51 AM	200.25			102.8	0.499	0.499	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL2	1	9/30/2020 11:22:59	4223-1.RAW	11:22:59 AM	308.43			103.2	1.023	1.023	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL3	1	9/30/2020 11:27:09	4224-1.RAW	11:27:09 AM	1128.60			1031.2	5.000	5.000	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL4	1	9/30/2020 11:31:18	4225-1.RAW	11:31:18 AM	4131.26			4033.8	19.560	19.560	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL5	1	9/30/2020 11:35:27	4226-1.RAW	11:35:27 AM	8359.28			8261.8	40.062	40.062	ng/L	
Hg2600-3	ZKH	CAL	SEQ-ICV1	1	9/30/2020 11:39:37	4227-1.RAW	11:39:37 AM	1237.43			1140.0	5.528	5.528	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CB1	1	9/30/2020 11:43:46	4228-1.RAW	11:43:46 AM	90.81			-6.6	-0.032	-0.032	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CV1	1	9/30/2020 12:28:29	4239-1.RAW	12:28:29 PM	1152.20			1054.8	5.115	5.115	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CB4	1	9/30/2020 12:33:38	4240-1.RAW	12:33:38 PM	69.42			-28.0	-0.136	-0.136	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CV2	1	9/30/2020 13:23:31	4252-1.RAW	1:23:31 PM	1184.68			1087.3	5.272	5.272	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CB2	1	9/30/2020 14:09:16	4263-1.RAW	1:23:31 PM	75.89			-21.5	-0.104	-0.104	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CV3	1	9/30/2020 14:13:25	4264-1.RAW	2:09:16 PM	1170.30			1072.9	5.202	5.202	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CB3	1	9/30/2020 14:50:52	4273-1.RAW	2:13:25 PM	75.08			-22.3	-0.108	-0.108	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CV4	1000	9/30/2020 14:58:11	4275-1.RAW	2:50:52 PM	5847.79	1		5250.4	25.459	25.459	ng/L	F009380
Hg2600-3	ZKH	CAL	SEQ-CV4	1	9/30/2020 15:03:21	4276-1.RAW	2:59:11 PM	1145.85			1048.4	5.084	5.084	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CB4	1	9/30/2020 15:49:09	4287-1.RAW	3:03:21 PM	87.00			-10.4	-0.051	-0.051	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CB5	1	9/30/2020 15:58:19	4288-1.RAW	3:49:08 PM	1125.36			1027.9	4.985	4.985	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CV6	1	9/30/2020 16:38:08	4299-1.RAW	3:53:19 PM	71.26			1027.9	4.985	4.985	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CB6	1	9/30/2020 16:43:18	4300-1.RAW	4:39:08 PM	1156.31			1058.9	5.135	5.135	ng/L	
Hg2600-3	ZKH	SAM	F009381-BS1	20	9/30/2020 16:47:28	4301-1.RAW	4:43:18 PM	82.42			-15.0	-0.073	-0.073	ng/L	
Hg2600-3	ZKH	SAM	F009381-BSD1	20	9/30/2020 16:51:38	4302-1.RAW	4:47:26 PM	1096.75	2		999.3	97.965	97.965	ng/L	F009381
Hg2600-3	ZKH	SAM	F009382-BS1	20	9/30/2020 16:55:48	4303-1.RAW	4:51:38 PM	1089.14	2		991.7	97.227	97.227	ng/L	F009381
Hg2600-3	ZKH	SAM	F009382-BSD1	20	9/30/2020 16:59:58	4304-1.RAW	4:55:48 PM	1061.87	3		964.4	4.758	4.758	ng/L	F009382
Hg2600-3	ZKH	SAM	F009383-BS1	20	9/30/2020 17:04:08	4305-1.RAW	4:59:58 PM	1092.99	3		995.6	98.173	98.173	ng/L	F009382
Hg2600-3	ZKH	SAM	F009383-BSD1	20	9/30/2020 17:08:18	4306-1.RAW	5:04:08 PM	907.91	4		810.5	80.370	80.370	ng/L	F009385
Hg2600-3	ZKH	BLK	F009381-BLK1	20	9/30/2020 17:12:28	4307-1.RAW	5:08:18 PM	989.67	4		892.2	88.249	88.249	ng/L	F009383
Hg2600-3	ZKH	BLK	F009381-BLK2	20	9/30/2020 17:16:38	4308-1.RAW	5:12:28 PM	85.07	2		-12.4	-0.060	-0.060	ng/L	F009381
Hg2600-3	ZKH	BLK	F009381-BLK3	20	9/30/2020 17:20:48	4309-1.RAW	5:16:38 PM	95.59	2		-1.8	-0.009	-0.009	ng/L	F009381
Hg2600-3	ZKH	BLK	F009382-BLK1	20	9/30/2020 17:24:58	4310-1.RAW	5:20:48 PM	79.16	2		-18.3	-0.869	-0.869	ng/L	F009381
Hg2600-3	ZKH	CAL	SEQ-CV7	20	9/30/2020 17:29:08	4311-1.RAW	5:24:58 PM	84.36	3		-13.1	-1.772	-1.772	ng/L	F009382
Hg2600-3	ZKH	CAL	SEQ-CB7	1	9/30/2020 17:33:18	4312-1.RAW	5:29:08 PM	1139.05			1041.6	5.051	5.051	ng/L	
Hg2600-3	ZKH	BLK	F009382-BLK2	20	9/30/2020 17:37:29	4313-1.RAW	5:33:18 PM	70.59			-26.8	-0.130	-0.130	ng/L	
Hg2600-3	ZKH	BLK	F009382-BLK3	20	9/30/2020 17:41:39	4314-1.RAW	5:37:29 PM	74.93	3		-22.5	-1.182	-1.182	ng/L	F009382
Hg2600-3	ZKH	BLK	F009383-BLK1	20	9/30/2020 17:45:49	4315-1.RAW	5:41:39 PM	82.83	3		-14.6	-0.071	-0.071	ng/L	F009382
Hg2600-3	ZKH	BLK	F009383-BLK2	20	9/30/2020 17:49:59	4316-1.RAW	5:45:49 PM	86.91	4		-10.5	-0.051	-0.051	ng/L	F009383
Hg2600-3	ZKH	BLK	F009383-BLK3	20	9/30/2020 17:54:09	4317-1.RAW	5:49:59 PM	83.97	4		-13.5	-0.065	-0.065	ng/L	F009383
Hg2600-3	ZKH	CAL	SEQ-CV8	1	9/30/2020 18:16:10	4323-1.RAW	5:54:09 PM	68.25	4		-29.2	-0.141	-0.141	ng/L	F009383
Hg2600-3	ZKH	CAL	SEQ-CB8	1	9/30/2020 18:23:20	4324-1.RAW	6:19:10 PM	1083.24			985.8	4.780	4.780	ng/L	
Hg2600-3	ZKH	SAM	I000047-38	400	9/30/2020 18:32:32	4331-1.RAW	6:23:20 PM	65.23			-32.2	-0.156	-0.156	ng/L	
Hg2600-3	ZKH	SAM	F009381-MS1	400	9/30/2020 18:36:42	4332-1.RAW	6:52:32 PM	1315.14	2		1217.7	5.907	2362.943	ng/L	F009381
Hg2600-3	ZKH	SAM	F009381-MSD1	400	9/30/2020 18:40:53	4333-1.RAW	6:56:42 PM	3825.84	2		3728.4	18.082	7232.761	ng/L	F009381
Hg2600-3	ZKH	SAM	I000047-39	400	9/30/2020 19:00:53	4334-1.RAW	7:00:53 PM	3871.49	2		3774.1	18.303	7321.301	ng/L	F009381
Hg2600-3	ZKH	CAL	SEQ-CV9	1	9/30/2020 19:05:04	4334-1.RAW	7:05:04 PM	796.44	2		699.0	3.392	1356.866	ng/L	F009381
Hg2600-3	ZKH	CAL	SEQ-CB9	1	9/30/2020 19:13:25	4336-1.RAW	7:09:14 PM	1173.45			1076.0	5.218	5.218	ng/L	
Hg2600-3	ZKH	SAM	F009381-MS2	400	9/30/2020 19:17:35	4337-1.RAW	7:13:25 PM	87.62			-9.8	-0.048	-0.048	ng/L	
Hg2600-3	ZKH	SAM	I000047-40	400	9/30/2020 19:21:45	4338-1.RAW	7:17:35 PM	2858.27	2		2760.8	13.390	5356.040	ng/L	F009381
Hg2600-3	ZKH	SAM	F009382-MS1	400	9/30/2020 19:25:56	4339-1.RAW	7:21:45 PM	3015.33	2		2917.9	14.152	5660.679	ng/L	F009381
Hg2600-3	ZKH	SAM	F009382-MSD1	400	9/30/2020 19:30:06	4340-1.RAW	7:25:56 PM	3948.64	3		3851.2	18.679	7471.514	ng/L	F009382
Hg2600-3	ZKH	SAM	I000047-41	400	9/30/2020 19:34:17	4341-1.RAW	7:30:06 PM	6075.91	3		5978.5	28.994	11597.620	ng/L	F009382
Hg2600-3	ZKH	SAM	I000047-42	400	9/30/2020 19:38:27	4342-1.RAW	7:34:17 PM	6378.74	3		6281.3	30.462	12184.986	ng/L	F009382
Hg2600-3	ZKH	SAM	F009382-MS2	400	9/30/2020 19:42:37	4343-1.RAW	7:38:27 PM	3680.94	3		3583.5	17.381	6952.291	ng/L	F009382
Hg2600-3	ZKH	SAM	F009382-MSD2	400	9/30/2020 19:46:48	4344-1.RAW	7:42:37 PM	5933.97	3		5836.5	28.306	11322.300	ng/L	F009382
Hg2600-3	ZKH	SAM	I000047-42	400	9/30/2020 19:50:58	4345-1.RAW	7:46:48 PM	6645.90	3		6548.5	31.758	12703.193	ng/L	F009382
Hg2600-3	ZKH	SAM	I000047-42	400	9/30/2020 19:55:58	4345-1.RAW	7:50:58 PM	1831.71	4		1734.3	8.414	3365.575	ng/L	F009383

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	ZKH	SAM	F009383-MS1	400	9/30/2020 19:55:08	4346-1.RAW	7:55:08 PM	4802.41	4		4705.0	22.819	9127.600	ng/L	F009383
Hg2600-3	ZKH	CAL	SEQ-C3VA	1	9/30/2020 18:59:19	4347-1.RAW	7:59:19 PM	1168.36			1070.9	5.193	5.193	ng/L	
Hg2600-3	ZKH	CAL	SEQ-C3BA	1	9/30/2020 20:03:29	4348-1.RAW	8:03:29 PM	92.85			-4.6	-0.022	-0.022	ng/L	
Hg2600-3	ZKH	SAM	F009383-MSD1	400	9/30/2020 20:07:40	4349-1.RAW	8:07:40 PM	5309.60	4		5212.2	25.278	2702.074	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-59	400	9/30/2020 20:11:50	4350-1.RAW	8:11:50 PM	1489.63	4		1392.2	6.755	6.755	ng/L	F009383
Hg2600-3	ZKH	SAM	F009383-MS2	400	9/30/2020 20:16:01	4351-1.RAW	8:16:01 PM	3082.31	4		2984.9	14.478	5791.264	ng/L	F009383
Hg2600-3	ZKH	SAM	F009383-MSD2	400	9/30/2020 20:20:11	4352-1.RAW	8:20:11 PM	3357.70	4		3260.3	15.814	6325.408	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-79	400	9/30/2020 20:24:21	4353-1.RAW	8:24:21 PM	3651.88	2		3554.5	17.238	6895.351	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-80	400	9/30/2020 20:28:32	4354-1.RAW	8:28:32 PM	3744.63	2		3647.2	17.688	7075.236	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-81	400	9/30/2020 20:32:42	4355-1.RAW	8:32:42 PM	2269.74	2		2172.3	10.536	4214.516	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-82	400	9/30/2020 20:36:52	4356-1.RAW	8:36:52 PM	1022.83	2		925.4	4.490	1795.979	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-83	400	9/30/2020 20:41:03	4357-1.RAW	8:41:03 PM	577.34	2		479.9	2.330	931.902	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-84	400	9/30/2020 20:45:13	4358-1.RAW	8:45:13 PM	905.43	2		808.0	3.921	1568.264	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-85	400	9/30/2020 20:49:24	4359-1.RAW	8:49:24 PM	1660.84	2		1563.4	7.584	3033.472	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-86	400	9/30/2020 20:53:34	4360-1.RAW	8:53:34 PM	1233.17	2		1135.7	5.510	2203.972	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-87	400	9/30/2020 20:57:44	4361-1.RAW	8:57:44 PM	968.80	2		871.4	4.228	1691.179	ng/L	F009381
Hg2600-3	ZKH	CAL	SEQ-C3VB	1	9/30/2020 21:01:55	4362-1.RAW	9:01:55 PM	1122.86			1025.4	4.972	4.972	ng/L	F009381
Hg2600-3	ZKH	CAL	SEQ-C3BB	1	9/30/2020 21:06:08	4363-1.RAW	9:06:08 PM	79.40			-18.0	-0.087	-0.087	ng/L	
Hg2600-3	ZKH	SAM	0100047-88	400	9/30/2020 21:10:19	4364-1.RAW	9:10:19 PM	673.68	2		576.3	2.797	1118.760	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-89	400	9/30/2020 21:14:31	4365-1.RAW	9:14:31 PM	828.24	2		730.8	3.546	1418.543	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-90	400	9/30/2020 21:18:42	4366-1.RAW	9:18:42 PM	724.28	2		626.9	3.042	1216.902	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-91	400	9/30/2020 21:22:53	4367-1.RAW	9:22:53 PM	1342.12	2		1244.7	6.038	2415.293	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-92	400	9/30/2020 21:27:04	4368-1.RAW	9:27:04 PM	1285.87	2		1168.4	5.668	2267.382	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-93	400	9/30/2020 21:31:15	4369-1.RAW	9:31:15 PM	833.71	2		736.3	3.573	1429.155	ng/L	F009381
Hg2600-3	ZKH	CAL	SEQ-C3VC	1	9/30/2020 21:35:28	4370-1.RAW	9:35:28 PM	1109.88			1012.4	4.909	4.909	ng/L	F009381
Hg2600-3	ZKH	CAL	SEQ-C3CB	1	9/30/2020 21:39:37	4371-1.RAW	9:39:37 PM	81.37			-16.1	-0.078	-0.078	ng/L	
Hg2600-3	ZKH	SAM	0100047-95	400	9/30/2020 21:43:48	4372-1.RAW	9:43:48 PM	425.37	2		327.9	1.593	637.127	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-96	400	9/30/2020 21:47:59	4373-1.RAW	9:47:59 PM	662.54	2		565.1	2.743	1097.164	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-97	400	9/30/2020 21:52:10	4374-1.RAW	9:52:10 PM	1114.29	2		1016.9	4.933	1973.386	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-98	400	9/30/2020 21:56:21	4375-1.RAW	9:56:21 PM	2573.24	3		2475.8	12.009	4803.755	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-99	400	9/30/2020 22:00:31	4376-1.RAW	10:00:31 PM	1499.73	3		1402.3	6.804	2721.568	ng/L	F009381
Hg2600-3	ZKH	SAM	0100047-AA	400	9/30/2020 22:04:42	4377-1.RAW	10:04:42 PM	887.09	3		789.7	3.833	1533.270	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AB	400	9/30/2020 22:08:53	4378-1.RAW	10:08:53 PM	903.74	3		806.3	3.914	1565.562	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AC	400	9/30/2020 22:13:04	4379-1.RAW	10:13:04 PM	2181.74	3		2084.3	10.111	4044.392	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AD	400	9/30/2020 22:17:15	4380-1.RAW	10:17:15 PM	2053.06	3		1955.6	9.487	3794.811	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AE	400	9/30/2020 22:21:26	4381-1.RAW	10:21:26 PM	1130.73	3		1024.9	4.970	2005.848	ng/L	F009382
Hg2600-3	ZKH	CAL	SEQ-C3VD	1	9/30/2020 22:25:36	4382-1.RAW	10:25:36 PM	1122.32			2.0	0.010	0.010	ng/L	F009382
Hg2600-3	ZKH	CAL	SEQ-C3CD	1	9/30/2020 22:29:47	4383-1.RAW	10:29:47 PM	98.44			722.1	3.506	1402.216	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AF	400	9/30/2020 22:33:58	4384-1.RAW	10:33:58 PM	818.52	3		812.7	3.945	1578.004	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AG	400	9/30/2020 22:38:09	4385-1.RAW	10:38:09 PM	943.37	3		845.9	4.106	1642.429	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AH	400	9/30/2020 22:42:20	4386-1.RAW	10:42:20 PM	1012.49	3		915.1	4.441	1776.496	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AI	400	9/30/2020 22:46:30	4387-1.RAW	10:46:30 PM	1012.49	3		1108.5	5.379	2151.729	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AJ	400	9/30/2020 22:50:41	4388-1.RAW	10:50:41 PM	1205.85	3		1496.5	7.260	2904.170	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AK	400	9/30/2020 22:54:52	4389-1.RAW	10:54:52 PM	1593.88	3		4995.8	24.248	9699.375	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AL	400	9/30/2020 22:59:03	4390-1.RAW	10:59:03 PM	5097.24	3		1208.6	5.865	2345.838	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AM	400	9/30/2020 23:03:14	4391-1.RAW	11:03:14 PM	1306.02	3		2785.4	13.511	5404.276	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AN	400	9/30/2020 23:07:25	4392-1.RAW	11:07:25 PM	2882.8	3		1246.3	6.047	2418.978	ng/L	F009382
Hg2600-3	ZKH	CAL	SEQ-C3VE	1	9/30/2020 23:11:36	4393-1.RAW	11:11:36 PM	1343.7			4.554	4.554	4.554	ng/L	F009382
Hg2600-3	ZKH	CAL	SEQ-C3BE	1	9/30/2020 23:15:47	4394-1.RAW	11:15:47 PM	1036.6			-19.1	-0.093	-0.093	ng/L	
Hg2600-3	ZKH	SAM	0100047-AP	400	9/30/2020 23:19:58	4395-1.RAW	11:19:58 PM	78.3			1530.7	7.427	2970.618	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AQ	400	9/30/2020 23:24:09	4396-1.RAW	11:24:09 PM	1628.1	3		963.9	4.678	1871.177	ng/L	F009382
Hg2600-3	ZKH	SAM	0100047-AR	400	9/30/2020 23:28:19	4397-1.RAW	11:28:19 PM	1061.3	3		7530.6	36.520	14608.140	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-AS	400	9/30/2020 23:32:30	4398-1.RAW	11:32:30 PM	7628.0	4		1797.1	8.718	3487.328	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-AT	400	9/30/2020 23:36:41	4399-1.RAW	11:36:41 PM	1894.5	4		1146.5	5.564	2225.585	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-AU	400	9/30/2020 23:40:52	4400-1.RAW	11:40:52 PM	1244.0	4		1112.8	5.400	2160.080	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-AV	400	9/30/2020 23:45:03	4401-1.RAW	11:45:03 PM	1210.2	4		7876.5	38.198	15279.071	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-AW	400	9/30/2020 23:49:14	4402-1.RAW	11:49:14 PM	7973.9	4		910.6	4.420	1767.989	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-AX	400	9/30/2020 23:53:24	4403-1.RAW	11:53:24 PM	1008.1	4		4056.3	19.673	7869.312	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-AY	400	9/30/2020 23:57:35	4404-1.RAW	11:57:35 PM	4153.7	4		1053.5	5.113	2045.165	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-AZ	400	9/30/2020 0:01:46	4405-1.RAW	12:01:46 AM	1151.0	4		994.0	4.820	4.820	ng/L	F009383
Hg2600-3	ZKH	CAL	SEQ-C3VF	1	9/30/2020 0:05:57	4406-1.RAW	12:05:57 AM	1091.5			-11.1	-0.054	-0.054	ng/L	
Hg2600-3	ZKH	CAL	SEQ-C3BF	1	9/30/2020 0:10:08	4407-1.RAW	12:10:08 AM	86.3			1761.8	8.547	3418.931	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-AA	400	9/30/2020 0:14:19	4408-1.RAW	12:14:19 AM	1859.2	4		645.9	3.136	1254.429	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-BA	400	9/30/2020 0:18:30	4409-1.RAW	12:18:30 AM	743.3	4		1686.1	8.180	3272.046	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-BB	400	9/30/2020 0										

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	ZKH	SAM	0100047-BC	400	9/30/2020 0:26:52	4411-1.RAW	12:26:52 AM	881.3	41		783.9	3.805	1522.182	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-BD	400	9/30/2020 0:31:02	4412-1.RAW	12:31:02 AM	1078.3	41		980.9	4.761	1904.317	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-BE	400	9/30/2020 0:35:13	4413-1.RAW	12:35:13 AM	837.0	41		739.6	3.591	1436.304	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-BF	400	9/30/2020 0:39:24	4414-1.RAW	12:39:24 AM	396.0	41		298.6	1.452	580.918	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-BG	400	9/30/2020 0:43:35	4415-1.RAW	12:43:35 AM	672.9	41		575.5	2.795	1117.885	ng/L	F009383
Hg2600-3	ZKH	SAM	0100047-BH	400	9/30/2020 0:47:46	4416-1.RAW	12:47:46 AM	1024.8	41		927.4	4.501	1800.494	ng/L	F009383
Hg2600-3	ZKH	CAL	SEQ-CCVG	1	9/30/2020 0:51:57	4417-1.RAW	12:51:57 AM	1077.6	41		980.2	4.753	4.753	ng/L	F009383
Hg2600-3	ZKH	CAL	SEQ-CCBG	1	9/30/2020 0:56:08	4418-1.RAW	12:56:08 AM	74.0	41		-23.4	-0.113	-0.113	ng/L	

TotalMercury
 EPA1631
 Operati ZKH
 Worksh THg2600
 Method ###
 Descrip THg26003-200930-1

BlankS: 97.427
 Calib Eqn: Conc = (Area-97.42
 Run Date: 9/30/2020
 Blank SD:
 QC Warnings:9/QC E Run Time: 10:46:56
 Blank RSD%:
 CF SD:
 CF RSD%:

SampleID	Lab	Lot	Blank	Conc (ppb)	RP%	FinalCunc	Rec%	QA	RawData	RunE_j	Peak (flow)	Coactr (eff)	Flags	RunCunt	Comment
Clean				0.00	6.19				4215-1.RAW	10:49:49	1277.15	Clean	OK	1	
WS				97.43	0.00				4216-1.RAW	10:53:57	63.46	Sample	OK	1	
WS				97.43	0.00				4217-1.RAW	10:58:06	62.79	Sample	OK	1	
SEQ-IBL1	A1		1	0.00	0.51				4218-1.RAW	11:02:15	86.10	Sample	OK	1	
SEQ-IBL2	A2		1	0.00	0.47				4219-1.RAW	11:06:24	105.56	Sample	OK	1	
SEQ-IBL3	A3		1	0.00	0.43				4220-1.RAW	11:10:33	97.38	Sample	OK	1	
SEQ-CAL1	A4		1	97.43	0.50		99.72		4221-1.RAW	11:14:42	89.32	Sample	OK	1	
SEQ-CAL2	A5		1	97.43	1.02		102.32		4222-1.RAW	11:18:51	200.25	Sample	OK	1	
SEQ-CAL3	A6		1	97.43	5.00		100.00		4223-1.RAW	11:22:59	308.43	Sample	OK	1	
SEQ-CAL4	A7		1	97.43	19.56		97.80		4224-1.RAW	11:27:09	1128.60	Sample	OK	1	
SEQ-CAL5	A8		1	97.43	40.06		100.16		4225-1.RAW	11:31:18	4131.26	Sample	OK	1	
SEQ-ICV1	A9		1	97.43	5.53		110.56		4226-1.RAW	11:35:27	8359.28	Sample	OK	1	
SEQ-ICB1	A10		1	97.43	0.00		0.00		4227-1.RAW	11:39:37	1237.43	Sample	OK	1	
F009399-BLK1	A11		50	97.43	14.83				4228-1.RAW	11:43:46	90.81	Sample	OK	1	F009399
F009399-BLK2	A12		50	97.43	16.34				4229-1.RAW	11:47:55	158.58	Sample	OK	1	F009399
F009399-BLK3	A13		50	97.43	1.01				4230-1.RAW	11:52:05	164.81	Sample	OK	1	F009399
F009400-BLK1	A14		20	97.43	0.00				4231-1.RAW	11:56:14	101.60	Sample	OK	1	F009400
F009400-BLK2	A15		20	97.43	1.24				4232-1.RAW	12:00:24	92.01	Sample	OK	1	F009400
F009400-BLK3	A16		20	97.43	6.70				4233-1.RAW	12:04:33	110.22	Sample	OK	1	F009400
WS				97.43	0.00				4234-1.RAW	12:08:42	186.53	Sample	OK	1	
WS				97.43	0.00				4235-1.RAW	12:12:51	35.06	Sample	OK	1	
WS				97.43	0.00				4236-1.RAW	12:17:01	35.11	Sample	OK	1	AWAITING SAMPLES
WS				97.43	0.00				4237-1.RAW	12:21:10	37.82	Sample	OK	1	
SEQ-CCV1	A21		1	97.43	5.11		102.29		4238-1.RAW	12:25:20	31.77	Sample	OK	1	
SEQ-CCB1	B1		1	97.43	0.00		0.00		4239-1.RAW	12:29:29	1152.20	Sample	OK	1	
0100044-01	B2		10000	97.43	49865.47				4240-1.RAW	12:33:38	69.42	Sample	OK	1	
0100044-04	B3		10000	97.43	71222.25				4241-1.RAW	12:37:47	1125.78	Sample	OK	1	
0100044-07	B4		10000	97.43	79703.43				4242-1.RAW	12:41:57	1566.21	Sample	OK	1	
0100044-10	B5		10000	97.43	95385.83				4243-1.RAW	12:46:06	1741.12	Sample	OK	1	
0100044-13	B6		10000	97.43	84408.97				4244-1.RAW	12:50:15	2064.53	Sample	OK	1	
0100044-16	B7		10000	97.43	88277.42				4245-1.RAW	12:54:25	1836.12	Sample	OK	1	
0100044-19	B8		10000	97.43	94295.89				4246-1.RAW	12:58:35	1917.93	Sample	OK	1	
0100044-22	B9		10000	97.43	89769.69				4247-1.RAW	13:02:44	2042.05	Sample	OK	1	
0100044-25	B10		10000	97.43	71614.73				4248-1.RAW	13:06:53	1948.71	Sample	OK	1	
0100044-28	B11		10000	97.43	50331.94				4249-1.RAW	13:11:03	1574.31	Sample	OK	1	
SEQ-CCV2	B12		1	97.43	5.27		105.44		4250-1.RAW	13:15:12	1135.40	Sample	OK	1	
SEQ-CCB2	B13		1	97.43	0.00		0.00		4251-1.RAW	13:19:22	1184.68	Sample	OK	1	
0100044-31	B14		10000	97.43	153135.86				4252-1.RAW	13:23:31	75.89	Sample	OK	1	
0100044-32	B15		20000	97.43	5584.00				4253-1.RAW	13:27:40	413.23	Sample	OK	1	
0100044-33	B16		10000	97.43	5771.98				4254-1.RAW	13:31:50	103.18	Sample	OK	1	
0100044-01	B17		10000	97.43	30353.35				4255-1.RAW	13:35:59	109.33	Sample	OK	1	
0100044-04	B18		10000	97.43	39885.21				4256-1.RAW	13:40:08	723.39	Sample	OK	1	
0100044-07	B19		10000	97.43	53734.39				4257-1.RAW	13:44:18	919.96	Sample	OK	1	
0100044-10	B20		10000	97.43	62898.66				4258-1.RAW	13:48:28	1205.57	Sample	OK	1	
0100044-13	B21		10000	97.43	52851.10				4259-1.RAW	13:52:37	1390.43	Sample	OK	1	
0100044-16	C1		10000	97.43	38737.38				4260-1.RAW	13:56:47	1189.41	Sample	OK	1	
0100044-19	C2		10000	97.43	50068.94				4261-1.RAW	14:00:56	896.29	Sample	OK	1	
SEQ-CCV3	C3		1	97.43	5.20		104.05		4262-1.RAW	14:05:06	1129.98	Sample	OK	1	
SEQ-CCB3	C4		1	97.43	0.00		0.00		4263-1.RAW	14:09:16	1170.30	Sample	OK	1	
0100044-22	C5		10000	97.43	45441.10				4264-1.RAW	14:13:25	75.08	Sample	OK	1	
0100044-25	C6		10000	97.43	36601.57				4265-1.RAW	14:17:35	1034.54	Sample	OK	1	
0100044-28	C7		10000	97.43	37600.82				4266-1.RAW	14:21:44	852.25	Sample	OK	1	
									4267-1.RAW	14:25:54	872.85	Sample	OK	1	

Sample ID	Sample Name	Quantity	Weight	Value	Time	Time	Time	Status	Sample ID
0100044-31	C8	10000	97.43	222981.25	14:30:04	4286-1.RAW	101.88	OK	F009400
0100044-32	C9	20000	97.43	31390.25	14:34:13	4286-1.RAW	0.00	OK	F009400
0100044-33	C10	10000	97.43	0.00	14:38:23	4270-1.RAW	0.00	OK	F009400
0100044-32RE1	C11	20000	97.43	43549.35	14:42:33	4271-1.RAW	0.00	OK	F009399
0100044-33RE1	C12	10000	97.43	23006.86	14:46:42	4272-1.RAW	0.00	OK	F009399
0100047-78RE1	C13	1000	97.43	25459.29	14:50:52	4273-1.RAW	0.00	OK	F009380
F009401-BLK1	C14	50	97.43	0.00	14:55:01	4274-1.RAW	0.00	OK	F009401
SEQ-CCV4	C15	1	97.43	5.08	14:58:11	4275-1.RAW	101.88	OK	F009401
SEQ-CCB4	C16	1	97.43	0.00	15:03:21	4276-1.RAW	0.00	OK	F009401
F009401-BLK2	C17	50	97.43	0.00	15:07:31	4277-1.RAW	0.00	OK	F009401
F009401-BLK3	C18	50	97.43	0.00	15:11:40	4278-1.RAW	0.00	OK	F009401
0100044-32RE1	C19	20000	97.43	65552.29	15:15:50	4279-1.RAW	0.00	OK	F009400
0100044-33RE1	C20	10000	97.43	481.97	15:20:00	4280-1.RAW	0.00	OK	F009400
0100044-01	C21	10000	97.43	0.00	15:24:10	4281-1.RAW	0.00	OK	F009401
0100044-04	A1	10000	97.43	0.00	15:28:19	4282-1.RAW	0.00	OK	F009401
0100944-07	A2	10000	97.43	0.00	15:32:30	4283-1.RAW	0.00	OK	F009401
0100044-10	A3	10000	97.43	0.00	15:36:39	4284-1.RAW	0.00	OK	F009401
0100044-13	A4	10000	97.43	0.00	15:40:49	4285-1.RAW	0.00	OK	F009401
0100044-16	A5	10000	97.43	0.00	15:44:59	4286-1.RAW	0.00	OK	F009401
SEQ-CCV5	A6	1	97.43	4.98	15:49:09	4287-1.RAW	98.69	OK	F009401
SEQ-CCB5	A7	1	97.43	0.00	15:53:19	4288-1.RAW	0.00	OK	F009401
0100044-19	A8	10000	97.43	0.00	15:57:28	4289-1.RAW	0.00	OK	F009401
0100044-22	A9	10000	97.43	0.00	16:01:38	4290-1.RAW	0.00	OK	F009401
0100044-25	A10	10000	97.43	0.00	16:05:48	4291-1.RAW	0.00	OK	F009401
0100044-28	A11	10000	97.43	0.00	16:09:58	4292-1.RAW	0.00	OK	F009401
WS					16:14:08	4293-1.RAW	0.00	OK	F009401
WS					16:18:18	4294-1.RAW	0.00	OK	F009401
0100044-01RE1	A12	100	97.43	0.00	16:22:28	4295-1.RAW	0.00	OK	F009401
WS					16:26:38	4296-1.RAW	0.00	OK	F009401
WS					16:30:48	4297-1.RAW	0.00	OK	F009401
SEQ-CCV6	A18	1	97.43	0.00	16:34:58	4298-1.RAW	102.69	OK	F009381
SEQ-CCB6	A19	1	97.43	5.13	16:39:08	4299-1.RAW	0.00	OK	F009381
F009381-BS1	A20	20	97.43	96.92	16:43:18	4300-1.RAW	0.00	OK	F009382
F009381-BSD1	B1	20	97.43	96.18	16:47:28	4301-1.RAW	0.00	OK	F009382
F009382-BS1	B2	20	97.43	93.53	16:51:38	4302-1.RAW	0.00	OK	F009382
F009382-BSD1	B3	20	97.43	96.56	16:55:48	4303-1.RAW	0.00	OK	F009382
F009383-BS1	B4	20	97.43	78.60	16:59:58	4304-1.RAW	0.00	OK	F009383
F009383-BSD1	B5	20	97.43	86.53	17:04:08	4305-1.RAW	0.00	OK	F009383
F009381-BLK1	B6	20	97.43	0.00	17:08:18	4306-1.RAW	0.00	OK	F009381
F009381-BLK2	B7	20	97.43	0.00	17:12:28	4307-1.RAW	0.00	OK	F009381
F009381-BLK3	B8	20	97.43	0.00	17:16:38	4308-1.RAW	0.00	OK	F009381
F009382-BLK1	B9	20	97.43	0.00	17:20:48	4309-1.RAW	0.00	OK	F009382
SEQ-CCV7	B10	1	97.43	5.05	17:24:58	4310-1.RAW	101.02	OK	F009382
SEQ-CCB7	B11	1	97.43	0.00	17:29:08	4311-1.RAW	0.00	OK	F009382
F009382-BLK2	B12	20	97.43	0.00	17:33:18	4312-1.RAW	0.00	OK	F009382
F009382-BLK3	B13	20	97.43	0.00	17:37:28	4313-1.RAW	0.00	OK	F009382
F009383-BLK1	B14	20	97.43	0.00	17:41:39	4314-1.RAW	0.00	OK	F009383
F009383-BLK2	B15	20	97.43	0.00	17:45:49	4315-1.RAW	0.00	OK	F009383
F009383-BLK3	B16	20	97.43	0.00	17:49:59	4316-1.RAW	0.00	OK	F009383
0100044-01RE2	B17	50	97.43	0.00	17:54:09	4317-1.RAW	0.00	OK	F009383
0100044-04RE1	B18	50	97.43	15.49	17:58:19	4318-1.RAW	0.00	OK	F009401
0100044-07RE1	B19	50	97.43	9.11	18:02:29	4319-1.RAW	0.00	OK	F009401
0100044-10RE1	B20	50	97.43	27.33	18:06:39	4320-1.RAW	0.00	OK	F009401
0100044-13RE1	B21	50	97.43	3.17	18:10:50	4321-1.RAW	0.00	OK	F009401
SEQ-CCV8	B22	1	97.43	4.78	18:15:00	4322-1.RAW	95.61	OK	F009401
SEQ-CCB8	C1	1	97.43	0.00	18:19:10	4323-1.RAW	0.00	OK	F009401
0100044-16RE1	C2	50	97.43	0.00	18:23:20	4324-1.RAW	0.00	OK	F009401
					18:27:31	4325-1.RAW	0.00	OK	F009401

WAITING FOR SAMPLES

0100044-19RE1	C3	50	97.43	53.47	4326-1.RAW	18:31:41	317.97	Sample	OK	1	F009381
0100044-22RE1	C4	50	97.43	3.30	4327-1.RAW	18:35:51	111.04	Sample	OK	1	F009401
0100044-25RE1	C5	50	97.43	11.61	4328-1.RAW	18:40:01	145.33	Sample	OK	1	F009401
0100044-28RE1	C6	50	97.43	8.59	4329-1.RAW	18:44:12	132.87	Sample	OK	1	F009401
0100044-33RE2	C7	1000	97.43	2413.34	4330-1.RAW	18:48:22	595.12	Sample	OK	1	F009400
0100047-38	C8	400	97.43	2361.89	4331-1.RAW	18:52:32	1315.14	Sample	OK	1	F009381
F009381-MS1	C9	400	97.43	7231.71	4332-1.RAW	18:56:42	3825.84		OK	1	F009381
F009381-MSD1	C10	400	97.43	7320.25	4333-1.RAW	19:00:53	3871.49	Sample	OK	1	F009381
0100047-39	C11	400	97.43	1355.82	4334-1.RAW	19:05:04	796.44	Sample	OK	1	F009381
SEQ-CCV9	C12	1	97.43	5.22	4335-1.RAW	19:09:14	1173.45	Sample	OK	1	F009381
SEQ-CCB9	C13	1	97.43	0.00	4336-1.RAW	18:13:25	87.82	Sample	OK	1	F009381
F009381-MS2	C14	400	97.43	5354.99	4337-1.RAW	19:17:35	2658.27	Sample	OK	1	F009381
F009381-MSD2	C15	400	97.43	5659.63	4338-1.RAW	19:21:45	3015.53	Sample	OK	1	F009382
0100047-40	C16	400	97.43	7469.89	4339-1.RAW	19:25:56	3948.64	Sample	OK	1	F009382
F009382-MS1	C17	400	97.43	11596.00	4340-1.RAW	19:30:06	6075.91	Sample	OK	1	F009382
F009382-MSD1	C18	400	97.43	12183.36	4341-1.RAW	19:34:17	6378.74	Sample	OK	1	F009382
0100047-41	C19	400	97.43	6950.67	4342-1.RAW	19:38:27	3680.94	Sample	OK	1	F009382
F009382-MS2	C20	400	97.43	11320.66	4343-1.RAW	19:42:37	5933.97	Sample	OK	1	F009382
F009382-MSD2	C21	400	97.43	12701.57	4344-1.RAW	19:46:46	6645.90	Sample	OK	1	F009382
0100047-42	A1	400	97.43	3363.86	4345-1.RAW	19:50:58	1831.71	Sample	OK	1	F009383
F009383-MS1	A2	400	97.43	9125.88	4346-1.RAW	19:55:08	4802.41	Sample	OK	1	F009383
SEQ-COVA	A3	1	97.43	5.19	4347-1.RAW	19:59:19	1168.36	Sample	OK	1	F009383
SEQ-CCBA	A4	1	97.43	0.00	4348-1.RAW	20:03:29	92.85	Sample	OK	1	F009383
F009383-MSD1	A5	400	97.43	10109.64	4349-1.RAW	20:07:40	5309.60	Sample	OK	1	F009383
0100047-59	A6	400	97.43	2700.36	4350-1.RAW	20:11:50	1489.63	Sample	OK	1	F009383
F009383-MS2	A7	400	97.43	5789.55	4351-1.RAW	20:16:01	3082.31	Sample	OK	1	F009383
F009383-MSD2	A8	400	97.43	6323.69	4352-1.RAW	20:20:11	3357.70	Sample	OK	1	F009383
0100047-79	A9	400	97.43	6894.30	4353-1.RAW	20:24:21	3651.88	Sample	OK	1	F009381
0100047-80	A10	400	97.43	7074.19	4354-1.RAW	20:28:32	3744.63	Sample	OK	1	F009381
0100047-81	A11	400	97.43	4213.47	4355-1.RAW	20:32:42	2269.74	Sample	OK	1	F009381
0100047-82	A12	400	97.43	1794.93	4356-1.RAW	20:36:52	1022.83	Sample	OK	1	F009381
0100047-83	A13	400	97.43	930.85	4357-1.RAW	20:41:03	577.34	Sample	OK	1	F009381
0100047-84	A14	400	97.43	1567.21	4358-1.RAW	20:45:13	905.43	Sample	OK	1	F009381
0100047-85	A15	400	97.43	3032.42	4359-1.RAW	20:49:24	1660.84	Sample	OK	1	F009381
0100047-86	A16	400	97.43	2202.92	4360-1.RAW	20:53:34	1233.17	Sample	OK	1	F009381
0100047-87	A17	400	97.43	1690.13	4361-1.RAW	20:57:44	988.80	Sample	OK	1	F009381
SEQ-CCVB	A18	1	97.43	4.97	4362-1.RAW	21:01:55	1122.86	Sample	OK	1	F009381
SEQ-CCBB	A19	1	97.43	0.00	4363-1.RAW	21:06:06	79.40	Sample	OK	1	F009381
0100047-88	A20	400	97.43	1117.71	4364-1.RAW	21:10:19	673.68	Sample	OK	1	F009381
0100047-89	A21	400	97.43	1417.49	4365-1.RAW	21:14:31	828.24	Sample	OK	1	F009381
0100047-90	B1	400	97.43	1215.85	4366-1.RAW	21:18:42	724.28	Sample	OK	1	F009381
0100047-92	B2	400	97.43	2414.24	4367-1.RAW	21:22:53	1342.12	Sample	OK	1	F009381
0100047-93	B3	400	97.43	2266.33	4368-1.RAW	21:27:04	1265.87	Sample	OK	1	F009381
0100047-94	B4	400	97.43	1428.11	4369-1.RAW	21:31:15	833.71	Sample	OK	1	F009381
SEQ-CCVC	B5	1	97.43	4.91	4370-1.RAW	21:35:26	1109.88	Sample	OK	1	F009381
SEQ-CCBC	B6	1	97.43	0.00	4371-1.RAW	21:39:37	81.37	Sample	OK	1	F009381
0100047-95	B7	400	97.43	636.08	4372-1.RAW	21:43:48	425.37	Sample	OK	1	F009381
0100047-96	B8	400	97.43	1096.11	4373-1.RAW	21:47:59	662.54	Sample	OK	1	F009381
0100047-97	B9	400	97.43	1972.34	4374-1.RAW	21:52:10	1114.29	Sample	OK	1	F009381
0100047-98	B10	400	97.43	4802.13	4375-1.RAW	21:56:21	2573.24	Sample	OK	1	F009382
0100047-99	B11	400	97.43	2719.95	4376-1.RAW	22:00:31	1469.73	Sample	OK	1	F009382
0100047-AA	B12	400	97.43	1531.65	4377-1.RAW	22:04:42	887.09	Sample	OK	1	F009382
0100047-AB	B13	400	97.43	1563.94	4378-1.RAW	22:08:53	903.74	Sample	OK	1	F009382
0100047-AC	B14	400	97.43	4042.77	4379-1.RAW	22:13:04	2181.74	Sample	OK	1	F009382
0100047-AD	B15	400	97.43	3793.19	4380-1.RAW	22:17:15	2053.06	Sample	OK	1	F009382
0100047-AE	B16	400	97.43	2004.23	4381-1.RAW	22:21:26	1130.73	Sample	OK	1	F009382
SEQ-CCVD	B17	1	97.43	4.97	4382-1.RAW	22:25:36	1122.32	Sample	OK	1	F009382
SEQ-CCBD	B18	1	97.43	0.01	4383-1.RAW	22:29:47	99.44	Sample	OK	1	F009382

0100047-AF	B19	400	97.43	1400.59	4384-1.RAW	22:33:58	819.52	Sample	OK	1	F009382
0100047-AG	B20	400	97.43	1576.38	4385-1.RAW	22:38:09	910.15	Sample	OK	1	F009382
0100047-AH	B21	400	97.43	1640.81	4386-1.RAW	22:42:20	943.37	Sample	OK	1	F009382
0100047-AI	C1	400	97.43	1774.87	4387-1.RAW	22:46:30	1012.49	Sample	OK	1	F009382
0100047-AJ	C2	400	97.43	2150.11	4388-1.RAW	22:50:41	1205.95	Sample	OK	1	F009382
0100047-AK	C3	400	97.43	2902.55	4389-1.RAW	22:54:52	1593.88	Sample	OK	1	F009382
0100047-AL	C4	400	97.43	9697.75	4390-1.RAW	22:59:03	5097.24	Sample	OK	1	F009382
0100047-AM	C5	400	97.43	2344.22	4391-1.RAW	23:03:14	1306.02	Sample	OK	1	F009382
0100047-AN	C6	400	97.43	5402.65	4392-1.RAW	23:07:25	2882.84	Sample	OK	1	F009382
0100047-AO	C7	400	97.43	2417.36	4393-1.RAW	23:11:36	1343.73	Sample	OK	1	F009382
SEQ-CCBE	C8	1	97.43	4.55	4394-1.RAW	23:15:47	1036.64	Sample	OK	1	F009382
SEQ-CCBE	C9	1	97.43	0.00	4395-1.RAW	23:19:58	78.29	Sample	OK	1	F009382
0100047-AP	C10	400	97.43	2969.00	4396-1.RAW	23:24:09	1628.14	Sample	OK	1	F009382
0100047-AQ	C11	400	97.43	1868.56	4397-1.RAW	23:28:19	1061.30	Sample	OK	1	F009382
0100047-AR	C12	400	97.43	14606.42	4398-1.RAW	23:32:30	7627.98	Sample	OK	1	F009382
0100047-AS	C13	400	97.43	3485.81	4399-1.RAW	23:36:41	1894.48	Sample	OK	1	F009382
0100047-AT	C14	400	97.43	2223.87	4400-1.RAW	23:40:52	1243.97	Sample	OK	1	F009382
0100047-AU	C15	400	97.43	2158.38	4401-1.RAW	23:45:03	1210.20	Sample	OK	1	F009382
0100047-AV	C16	400	97.43	15277.35	4402-1.RAW	23:49:14	7973.88	Sample	OK	1	F009382
0100047-AW	C17	400	97.43	1766.27	4403-1.RAW	23:53:24	1008.05	Sample	OK	1	F009382
0100047-AX	C18	400	97.43	7867.59	4404-1.RAW	23:57:35	4153.68	Sample	OK	1	F009382
0100047-AY	C19	400	97.43	2043.45	4405-1.RAW	0:01:46	1150.96	Sample	OK	1	F009382
SEQ-CCVF	C20	1	97.43	4.82	4406-1.RAW	0:05:57	1091.47	Sample	OK	1	F009382
SEQ-CCBF	C21	1	97.43	0.00	4407-1.RAW	0:10:08	86.29	Sample	OK	1	F009382
0100047-AZ	A1	400	97.43	3417.21	4408-1.RAW	0:14:19	1859.22	Sample	OK	1	F009382
0100047-BA	A2	400	97.43	1252.71	4409-1.RAW	0:18:30	743.28	Sample	OK	1	F009382
0100047-BB	A3	400	97.43	3270.33	4410-1.RAW	0:22:41	1783.49	Sample	OK	1	F009382
0100047-BC	A4	400	97.45	1520.46	4411-1.RAW	0:26:52	881.32	Sample	OK	1	F009382
0100047-BD	A5	400	97.43	1902.60	4412-1.RAW	0:31:02	1078.34	Sample	OK	1	F009382
0100047-BE	A6	400	97.43	1434.59	4413-1.RAW	0:35:13	837.05	Sample	OK	1	F009382
0100047-BF	A7	400	97.43	579.20	4414-1.RAW	0:39:24	396.04	Sample	OK	1	F009382
0100047-BG	A8	400	97.43	1116.17	4415-1.RAW	0:43:35	672.88	Sample	OK	1	F009382
0100047-BH	A9	400	97.43	1798.78	4416-1.RAW	0:47:46	1024.81	Sample	OK	1	F009382
SEQ-CCVG	A10	1	97.43	4.75	4417-1.RAW	0:51:57	1077.64	Sample	OK	1	F009382
SEQ-CCBG	A11	1	97.43	0.00	4418-1.RAW	0:56:08	74.04	Sample	OK	1	F009382

0100047-AH	B21
0100047-AI	C1
0100047-AJ	C2
0100047-AK	C3
0100047-AL	C4
0100047-AM	C5
0100047-AN	C6
0100047-AO	C7
SEQ-CCVE	C8
SEQ-CCBE	C9
0100047-AP	C10
0100047-AQ	C11
0100047-AR	C12
0100047-AS	C13
0100047-AT	C14
0100047-AU	C15
0100047-AV	C16
0100047-AW	C17
0100047-AX	C18
0100047-AY	C19
SEQ-CCVF	C20
SEQ-CCBF	C21
0100047-AZ	A1
0100047-BA	A2
0100047-BB	A3
0100047-BC	A4
0100047-BD	A5
0100047-BE	A6
0100047-BF	A7
0100047-BG	A8
0100047-BH	A9
SEQ-CCVG	A10
SEQ-CCBG	A11

OJ02002
Attached

ANALYSIS SEQUENCE

OJ02003



QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: PGS

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/1/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OJ02003-IBL1	QC	1			
OJ02003-IBL2	QC	2			
OJ02003-IBL3	QC	3			
OJ02003-CAL1	QC	4	2002064		
OJ02003-CAL2	QC	5	2002065		
OJ02003-CAL3	QC	6	2002220		
OJ02003-CAL4	QC	7	2002221		
OJ02003-CAL5	QC	8	2002222		
OJ02003-ICV1	QC	9	2001809		
OJ02003-ICB1	QC	10			
F009414-BS1	QC	11			
F009414-BSD1	QC	12			
F009414-BLK1	QC	13			
F009414-BLK2	QC	14			
F009414-BLK3	QC	15			
OI00078-12	Hg-CVAFS-T-7030	16			
F009414-MS1	QC	17			
F009414-MSD1	QC	18			
OI00078-16	Hg-CVAFS-T-7030	19			
F009414-MS2	QC	20			
OJ02003-CCV1	QC	21	2001809		
OJ02003-CCB1	QC	22			
F009414-MSD2	QC	23			
OI00078-24	Hg-CVAFS-T-7030	24			
OI00078-25	Hg-CVAFS-T-7030	25			
OI00078-26	Hg-CVAFS-T-7030	26			
OI00078-27	Hg-CVAFS-T-7030	27			
OI00078-28	Hg-CVAFS-T-7030	28			
OI00078-29	Hg-CVAFS-T-7030	29			
OI00078-30	Hg-CVAFS-T-7030	30			
OI00078-32	Hg-CVAFS-T-7030	31			
OI00078-33	Hg-CVAFS-T-7030	32			
OJ02003-CCV2	QC	33	2001809		
OJ02003-CCB2	QC	34			
OI00078-34	Hg-CVAFS-T-7030	35			
OI00078-35	Hg-CVAFS-T-7030	36			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/1/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00078-36	Hg-CVAFS-T-7030	37			
0I00078-37	Hg-CVAFS-T-7030	38			
0I00078-38	Hg-CVAFS-T-7030	39			
0I00078-39	Hg-CVAFS-T-7030	40			
0I00078-40	Hg-CVAFS-T-7030	41			
0I00078-41	Hg-CVAFS-T-7030	42			
0I00078-42	Hg-CVAFS-T-7030	43			
0J02003-CCV3	QC	44	2001809		
0J02003-CCB3	QC	45			
0J02003-CCV4	QC	46	2001809		
0J02003-CCB4	QC	47			
0J02003-CCV5	QC	48	2001809		
0J02003-CCB5	QC	49			
0J02003-CCB6	QC	50			
F009384-BS1	QC	51			
F009384-BSD1	QC	52			
F009384-BLK1	QC	53			
F009384-BLK2	QC	54			
F009384-BLK3	QC	55			
0I00047-65	Hg-CVAFS-T-7030	56			
F009384-MS1	QC	57			
F009384-MSD1	QC	58			
0I00047-91	Hg-CVAFS-T-7030	59			
0J02003-CCV7	QC	60	2001809		
0J02003-CCB7	QC	61			
F009384-MS2	QC	62			
F009384-MSD2	QC	63			
0I00047-BI	Hg-CVAFS-T-7030	64			
0I00047-BJ	Hg-CVAFS-T-7030	65			
0I00047-BK	Hg-CVAFS-T-7030	66			
0I00047-BL	Hg-CVAFS-T-7030	67			
0I00047-BM	Hg-CVAFS-T-7030	68			
0I00047-BN	Hg-CVAFS-T-7030	69			
0I00047-BO	Hg-CVAFS-T-7030	70			
0I00047-BP	Hg-CVAFS-T-7030	71			
0J02003-CCV8	QC	72	2001809		

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/1/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J02003-CCB8	QC	73			
0I00047-BQ	Hg-CVAFS-T-7030	74			
0I00047-BR	Hg-CVAFS-T-7030	75			
0I00047-BS	Hg-CVAFS-T-7030	76			
0I00047-BT	Hg-CVAFS-T-7030	77			
0I00047-BU	Hg-CVAFS-T-7030	78			
0I00047-BV	Hg-CVAFS-T-7030	79			
0I00047-BW	Hg-CVAFS-T-7030	80			
0I00047-BX	Hg-CVAFS-T-7030	81			
0I00047-BY	Hg-CVAFS-T-7030	82			
0I00047-BZ	Hg-CVAFS-T-7030	83			
0J02003-CCV9	QC	84	2001809		
0J02003-CCB9	QC	85			
0J02003-CCVA	QC	86	2001809		
0J02003-CCBA	QC	87			
0J02003-CCVB	QC	88	2001809		
0J02003-CCBB	QC	89			
F009415-BS1	QC	90			
F009415-BSD1	QC	91			
F009415-BLK1	QC	92			
F009415-BLK2	QC	93			
F009415-BLK3	QC	94			
F009415-BLK4	QC	95			
0I00078-18	Hg-CVAFS-T-7030	96			
F009415-MS1	QC	97			
F009415-MSD1	QC	98			
0I00078-31	Hg-CVAFS-T-7030	99			
0J02003-CCVC	QC	100	2001809		
0J02003-CCBC	QC	101			
F009415-MS2	QC	102			
F009415-MSD2	QC	103			
0I00078-43	Hg-CVAFS-T-7030	104			
0I00078-44	Hg-CVAFS-T-7030	105			
0I00078-45	Hg-CVAFS-T-7030	106			
0I00078-46	Hg-CVAFS-T-7030	107			
0I00078-47	Hg-CVAFS-T-7030	108			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/1/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00078-48	Hg-CVAFS-T-7030	109			
0I00078-49	Hg-CVAFS-T-7030	110			
0I00078-50	Hg-CVAFS-T-7030	111			
0J02003-CCVD	QC	112	2001809		
0J02003-CCBD	QC	113			
0I00078-51	Hg-CVAFS-T-7030	114			
0I00078-52	Hg-CVAFS-T-7030	115			
0I00078-53	Hg-CVAFS-T-7030	116			
0I00078-54	Hg-CVAFS-T-7030	117			
0I00078-55	Hg-CVAFS-T-7030	118			
0I00078-56	Hg-CVAFS-T-7030	119			
0I00078-57	Hg-CVAFS-T-7030	120			
0I00078-58	Hg-CVAFS-T-7030	121			
0I00078-59	Hg-CVAFS-T-7030	122			
0J02003-CCVE	QC	123	2001809		
0J02003-CCBE	QC	124			

Samples Loaded By

Date

10/2/20

Data Processed By

Date

10/2/20

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>EMB</u>	Sequence(s) #: <u>10/2/2020</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-201001-1</u>
Date: <u>10/2/2020</u>	WO (s) #: _____
Batch #(s): <u>F009414, F009415, F009384</u>	

• Select the correct preparation method.

Analyte	Prep Method	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb
<input checked="" type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation
<input type="checkbox"/> Hg0	NA	NA
<input type="checkbox"/> Inorg Hg	NA	NA

Analyst Initials: emb 10/2/20 **Reviewer Initials:** PGS

- | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description?
Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (b) Check 5% of transcription from Instrument print-out and Excel file
Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel?
50 ml / aliquot = Excel dilution value | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): _____ | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |

Peer Review Check List for THg by 2800 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>EMB</u>	Sequence(s) #: <u>44106</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-201001-1</u>
Date: <u>10/2/2020</u>	WO (s) #: <u>0</u>
Batch #(s): <u>F009414, F009415, F009384</u>	_____

Analyst Initials EMB 10/2/20 Reviewer Initials PLS

5b. Has the B/C section data been uploaded?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
QA/QC Data Checked				
6. RSD CF ($\leq 15\%$)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
Comments: _____				
7. The calibration curve included a minimum of 5 Standards	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
Comments: _____				
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
9. ICV and CCV % Recoveries EPA 1631E (77-123%)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
Comments: _____				
10. Do all calibration points pass acceptance criteria?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
Comments: _____				
11. Are qualifiers consistent with the data review flowcharts?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/>
Comments: _____				
12. Explain any items on the failed data report from Element				<input type="checkbox"/>
Comments: <u>QM-07, E, E-01</u>				
13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list)	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
(a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit:				
(b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
(c) Was a BrCl Blank analyzed for each preservation level?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(d) Are Preparation Blanks summarized on QC page?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		<input type="checkbox"/>
14. Filtration Blank Prepared (if yes, use FB qualifier)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		<input type="checkbox"/>
(a) Filtration Blank prep date same as associated samples' prep date	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(b) Filtration Blank absolute value < PQL or <2.2xMDL for WI	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L?	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
Comments: _____				
16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI?	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL		<input type="checkbox"/>
Comments: _____				
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
18. Is the correct 'Source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/>
19. For digested preps: was there a spike witness signature & date on the prep bench sheet?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> N/A	<input type="checkbox"/>

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: EMB	Sequence(s) #: 44106
Reviewer:	Dataset ID(s): THg26003-201001-1
Date: 10/2/2020	WO (s) #: 0
Batch #(s): F009414, F009415, F009384	

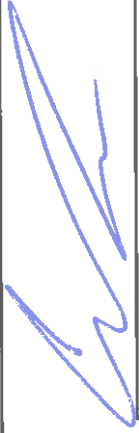
Analyst Initials PMB 10/2/20 Reviewer Initials PGS

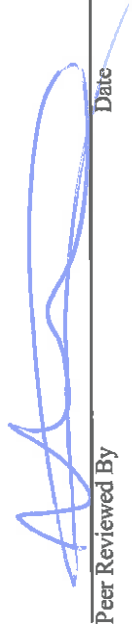
20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? YES NO
- Comments: _____
21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
- Comments: _____
22. Are the samples run at the correct dilution level for the method? YES NO
- Comments: _____
23. Dissolved < Total (if applicable) YES NO N/A
- Comments: _____
24. Effluent < Influent (visually confirm if needed) YES NO N/A
- Comments: _____
25. Are re-runs noted with reason? YES NO N/A
- Comments: _____
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
- Comments: _____
27. Is the B trap <5% A Traps YES NO N/A
- Comments: _____
28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
- Comments: _____
29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
- Comments: _____
30. Have re-extracts been created for non-reportable samples? YES NO N/A
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
32. Does the data set need scanning? YES NO N/A
33. Does the dataset have an LOQ/LOQ or DOC? YES NO N/A
34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
35. Water samples-is the final volume correct in the sequence? YES NO N/A
- Files located at:** \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs
36. Date of analyst IDOC/CDOC: _____ 11/3/12 _____ IDOC/CDOC within last 12 months? YES NO
37. Date of analyst's SOP reading for method: _____ 12/25/19 _____ Current SOP revision read? YES NO
38. Date of LOD: _____ 11/30/20 _____ LOD within last 3 months? YES NO
39. Date of LOQ: _____ 11/30/20 _____ LOQ within last 3 months? YES NO

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0J02003

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD Limit	Over Cal	Failure	Qualifier	
0J00047-65	Hg-CVAFS-T-7030	1250	15.4				ng/g					FAIL-OVER	PASS	E	
F009414-MSD2	Hg-CVAFS-T-7030	476.3	15.6	589.4081107.1975	388.56	388.56	ng/g	95.0	71.00	125.00	25.8	24.00	PASS-OVER	FAIL-MSD (RPD)	QM-07
F009384-MS1	Hg-CVAFS-T-7030	1388	15.1	1248.991	377.98	377.98	ng/g	36.8	71.00	125.00			FAIL-OVER	FAIL-MS	QM-07,E-01
F009384-MSD1	Hg-CVAFS-T-7030	1472	15.3	1387.9251248.991	383.35	383.35	ng/g	58.2	71.00	125.00	45.2	24.00	FAIL-OVER	FAIL-MSD (Rec. and RPD)	QM-07
F009384-MSD2	Hg-CVAFS-T-7030	577.2	15.1	492.8121171.2851	377.27	377.27	ng/g	108	71.00	125.00	25.4	24.00	PASS-OVER	FAIL-MSD (RPD)	QM-07


 Analyst Reviewed By _____
 Date 10/2/20


 Peer Reviewed By _____
 Date _____

PREPARATION BENCH SHEET

F009414

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009414-BLK1	Blank	0.25	20					
F009414-BLK2	Blank	0.25	20					
F009414-BLK3	Blank	0.25	20					
F009414-BS1	LCS	0.25	20	2002032	20			
F009414-BSD1	LCS Dup	0.25	20	2002032	20			
F009414-MS1	Matrix Spike [0100078-12]	0.2638	20	2001204	100			
F009414-MS2	Matrix Spike [0100078-16]	0.2551	20	2001204	100			
F009414-MSD1	Matrix Spike Dup [0100078-12]	0.2607	20	2001204	100			
F009414-MSD2	Matrix Spike Dup [0100078-16]	0.2571	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009414

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-12	OL-01_20LT306_091020_01_TOM_WB	0.2664	20	QC	-	S&R	MS/MSD	
0100078-16	ES-02_20ET938_091820_04_TOM_WB	0.2576	20	QC	-	S&R	MS/MSD	
0100078-24	OL-01_20ET866_091820_03_TOM_WB	0.2619	20	-	-	S&R		
0100078-25	FRB-01_20LT629_092020_05_LOB_TA	0.2623	20	-	-	S&R		
0100078-26	FRB-01_20LT633_092020_06_LOB_TA	0.2647	20	-	-	S&R		
0100078-27	FRB-01_20LT633_092020_07_LOB_TA	0.2618	20	-	-	S&R		
0100078-28	FRB-01_20LT635_092020_08_LOB_TA	0.2678	20	-	-	S&R		
0100078-29	FRB-01_20LT639_092020_09_LOB_TA	0.2696	20	-	-	S&R		
0100078-30	FRB-01_20LT639_092020_10_LOB_TA	0.2638	20	-	-	S&R		
0100078-32	SVE-01_20ET048_092120_03_TOM_WB	0.2638	20	-	-	S&R		
0100078-33	SVE-01_20ET048_092120_04_TOM_WB	0.2597	20	-	-	S&R		
0100078-34	SVE-01_20ET048_092120_05_TOM_WB	0.2546	20	-	-	S&R		
0100078-35	SVE-01_20ET048_092120_06_TOM_WB	0.2622	20	-	-	S&R		
0100078-36	SVE-01_20ET056_092120_02_TOM_WB	0.26	20	-	-	S&R		
0100078-37	ES-02_20ET952_092120_06_TOM_WB	0.2698	20	-	-	S&R		
0100078-38	ES-02_20ET962_092120_07_TOM_WB	0.2699	20	-	-	S&R		
0100078-39	ES-02_20ET964_092120_08_TOM_WB	0.2665	20	-	-	S&R		
078-40	ES-02_20ET967_092120_09_TOM_WB	0.2606	20	-	-	S&R		
078-41	ES-02_20ET968_092120_10_TOM_WB	0.261	20	-	-	S&R		

PREPARATION BENCH SHEET

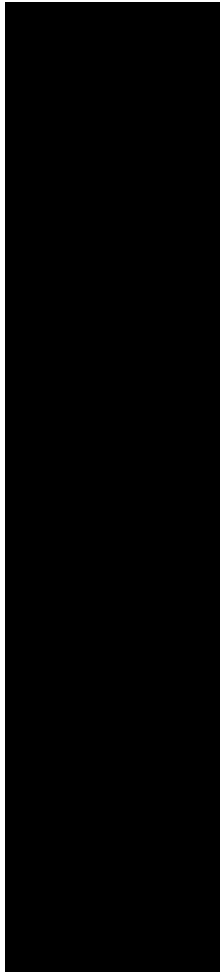
F009414

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

0100078-42	ES-02_20ET970_092120_11_TOM_WB	0.2693	20	-	-	S&R	
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Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep)
Upload/Date: MGS (Data Entry)

9/29/2020
10/2/2020

Samples to lab: NA
Reviewer/Date: EMB 10/2/20

Batch #: F009414

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input checked="" type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (Nitric Acid)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA Other	EFAFS, AFS, SOP2705 Tissues - THg 70:30 Hot plate	

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019
Comments: _____		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

1. Is any SOP/DOC expiring within one week of Submission Date?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	Reviewer Initials: <u>WZLW</u> <u>EMB</u>	Tertiary Review: <u>WZLW</u> <u>EMB</u>
Data cannot be reported without a current IDOC/CDOC.				
If YES, notify supervisor and technician immediately.				
2. Check prep method	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) For Ceuticals: Is correct Hg code being used in LIMS?	<input type="checkbox"/> ICPMS	<input checked="" type="checkbox"/> CV-AFS	<input type="checkbox"/> 70:30	<input type="checkbox"/> N/A
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> ≤ 20	<input type="checkbox"/> ≤ 10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) PBs per batch?	<input checked="" type="checkbox"/> 3 PBs	<input type="checkbox"/> 2 PBs	<input type="checkbox"/> 1 PBs	<input checked="" type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) BS, BS/BSO or CRM in batch?	<input type="checkbox"/> BS	<input checked="" type="checkbox"/> BS/BSO	<input type="checkbox"/> CRM	<input checked="" type="checkbox"/>
(d) MS/MSD in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(e) MD in batch?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Document: <u>see benchsheet</u>				
(h) Correct LIMS spike ID included for BS, BS/BSO and/or MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Special prep requirements?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) For all spiking was there a witness? (Initials must be in logbook)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Spikes added:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : NA

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
THg-BS	2002032	20			
THg-MS	2001204	100			

Technician: Mn Batch #: F009414 Date: 7/26/2020
Requested 9/29/20 by MS
 EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon
 Balance #: 19 Calibrated? Yes No
 *Time in: 1425 Actual Temp. (raw): 25.0 °C *Time in can't begin before target temperature is reached
 Time out: 1656 Actual Temp. (raw): 21.7 °C
 °C/W/ CF: 24.6 °C *Time in can't begin before target temperature is reached
 °C/W/ CF: 16.8 °C

Final vol.: 20 mL (LIMS ID: 2002305) BS Spike vol.: 20 µL (LIMS ID: 2002032)
 Spike Witness: JA 2020020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2001744)

HCl LIMS ID: N/A Pipette SN#: 0007853 Calibration Date: 9-29-20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2002190 Dispenser #: 19081007 Calibrated? Yes No
 Other Acid LIMS ID: 2002206 Dispenser #: 1937295 Calibrated? Yes No
 Glass Vial # 00077092 Boiling Chip lot # 2002020 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size mL µg	Vial #	Sample ID Number	Container ID	Sample Size mL µg	CRM LIMS ID
1	F009414 BLE1	A	0.2701	19	OP00078-32	C	0.2672	NA
2	F009414 BLE2	A	0.2663	20	OP00078-33	C	0.2577	
3	F009414 BLE3	A	0.2666	21	OP00078-34	C	0.2546	
4	F009414 BS2	A	0.2643	22	OP00078-35	C	0.2622	
5	F009414 BS01	A	0.2577	23	OP00078-36	C	0.2600	
6	OP00078-12	C	0.2664	24	OP00078-37	C	0.2678	OP00078-12.13 Washer MS/MST2
7	F009414-MS1	C	0.2532	25	OP00078-38	C	0.2677	
8	F009414-MS01	C	0.2607	26	OP00078-37	C	0.2665	OP00078-16.15 washer for MS/MST2
9	OP00078-16	C	0.2576	27	OP00078-40	C	0.2626	
10	F009414-MS2	C	0.2551	28	OP00078-41	C	0.2610	
11	F009414-MS02	C	0.2571	29	OP00078-42	C	0.2673	
12	OP00078-24	C	0.2619	30				
13	OP00078-25	C	0.2627	31				
14	OP00078-26	C	0.2647	32				
15	OP00078-27	C	0.2618	33				
16	OP00078-28	C	0.2678	34				
17	OP00078-29	C	0.2696	35				
18	OP00078-30	C	0.2638	36				MS101120

Technician: MM Batch#: F009414 Date: 9/25/2020

EFAPS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAPS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAPS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAPS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: Glass Teflon
 Balance #: 19 Calibrated? Yes No
 *Time in: Actual Temp. (raw): °C w/ CF: °C
 Time out: Actual Temp. (raw): °C w/ CF: °C
 Final vol.: mL (LIMS ID:) BS Spike vol.: µL (LIMS ID:)
 Spike Witness: (initial and date) MS Spike vol.: µL (LIMS ID:)

HCl LIMS ID: Pipette SN#: Calibration Date:
 HNO₃ LIMS ID: Pipette SN#: Calibration Date:
 70/30 LIMS ID: Dispenser #: Calibrated? Yes No
 Other Acid LIMS ID: Dispenser #:
 Glass Vial # 00071092 Boiling Chip lot # 2002050 *Hotblock Position:

Vial #	Sample ID Number	Container ID	Sample Size mL [g]	Vial #	Sample ID Number	Container ID	Sample Size mL [g]	CRM LIMS ID <input type="checkbox"/> NA
1	F009414 BLK1	A	0.2701	19	0100078-32	C	0.2638	
2	F009414 BLK2	A	0.2663	20	0100078-33	C	0.2597	
3	F009414 BLK3	A	0.2606	21	0100078-34	C	0.2546	
4	F009414 BS1	A	0.2643	22	0100078-35	C	0.2622	
5	F009414 BSAD1	A	0.2593	23	0100078-36	C	0.2600	0100078-12 is used used for MS/MSD
6	0100078-12	C	0.2664	24	0100078-37	C	0.2698	
7	F009414-MS1	A	0.2638	25	0100078-38	C	0.2697	
8	F009414-MS02	A	0.2607	26	0100078-39	C	0.2665	0100078-16 is used for MS/MSD
9	0100078-16	C	0.2576	27	0100078-40	C	0.2606	
10	F009414-MS2	A	0.2557	28	0100078-41	C	0.2610	
11	F009414-MSD	A	0.2571	29	0100078-42	C	0.2693	
12	0100078-12	C	0.2619	30				
13	0100078-25	C	0.2623	31				
14	0100078-26	C	0.2647	32				
15	0100078-27	C	0.2618	33				
16	0100078-28	C	0.2678	34				
17	0100078-29	C	0.2696	35				
18	0100078-30	C	0.2638	36				

Technician: M Batch #: F009414 Date: 12/07/2020

- EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: _____
 Balance #: 19 Calibrated? Yes No Vial Type: Glass Teflon
 *Time in: _____ Actual Temp. (raw): _____ °C w/ CF: _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ Actual Temp. (raw): _____ °C w/ CF: _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibration Date: _____
 Other Acid LIMS ID: _____ Dispenser #: _____ Calibration Date: _____
 Glass Vial # 00077092 Boiling Chip lot # 200202 *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size mL µg	Vial #	Sample ID Number	Container ID	Sample Size mL µg	CRM LIMS ID
1	F009414 BLK1	A	0.2701	19	OT00078-32	C	0.2678	NA
2	F009414 BLK2	A	0.2663	20	OT00078-33	C	0.2571	
3	F009414 BLK3	A	0.2606	21	OT00078-34	C	0.2541	
4	F009414 BS1	A	0.2643	22	OT00078-35	C	0.2622	
5	F009414 BS01	A	0.2573	23	OT00078-36	C	0.2600	
6	OT00078-12	C	0.2664	24	OT00078-37	C	0.2678	
7	F009414 MS1	C	0.2638	25	OT00078-38	C	0.2671	
8	F009414 MS01	C	0.2607	26	OT00078-39	C	0.2665	
9	OT00078-16	C	0.2576	27	OT00078-40	C	0.2606	
10	F009414 MS2	C	0.2551	28	OT00078-41	C	0.2610	
11	F009414 MS02	C	0.2571	29	OT00078-42	C	0.2673	
12	OT00078-24	C	0.2619	30				
13	OT00078-25	C	0.2627	31				
14	OT00078-26	C	0.2647	32				
15	OT00078-27	C	0.2618	33				
16	OT00078-28	C	0.2678	34				
17	OT00078-29	C	0.2690	35				
18	OT00078-30	C	0.2638	36				

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.5	40					E-01, RR OF MS1 @ 400X. EMB 10/2/20
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			

Standard ID(s):

2001204
2002032

Description:

THg 1,000ng/mL Secondary Spiking Standard
THg 100ng/mL Primary Spiking Standard

Expiration:

05-Nov-20 00:00
05-Nov-20 00:00

Reagent ID(s):

2001276
2001977
2001978
2001979
2002050
2002190
2002218
2002305

Description:

25% Hydroxylamine-HCl working solution
THg Dilute 1% BrCl
THg 2% BrCl
THg Washstation (0.5% BrCl)
Boiling Chips for ICPMS
70/30 Digestion Acid
3% SnCl2 THg reductant
5% BrCl

Expiration:

03-Oct-20 00:00
07-Feb-21 00:00
03-Oct-20 00:00
20-Feb-21 00:00
08-Sep-21 00:00
09-Feb-21 00:00
07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		
0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R		
0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R		

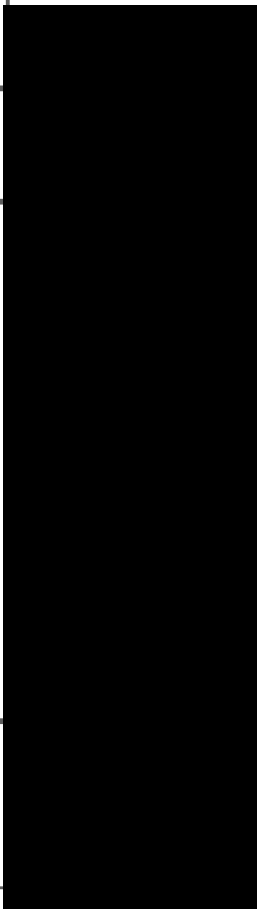
PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/29/2020**

0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R	
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R	



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep)
Upload/Date: MGS (Data Entry)

9/29/2020
10/2/2020

Samples to lab: NA
Reviewer/Date: amb 10/2/20

Batch #: F009384

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input checked="" type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input checked="" type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA Other	EPA Method 1631	

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

- | | | | | |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------|-----------------------------|
| 1. Is any SOP/DOC expiring within one week of Submission Date? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | Reviewer Initials: <u>amb</u> | Tertiary Review: <u>WJL</u> |
| Data cannot be reported without a current IDOC/CDOC. | | | | |
| If YES, notify supervisor and technician immediately. | | | | |
| 2. Check prep method | <input checked="" type="checkbox"/> YES | | | |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS | <input type="checkbox"/> 70:30 <input checked="" type="checkbox"/> N/A | | |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | | |
| 4. Check for transcription errors from benchsheet | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | | |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | | |
| (b) Check and compare mass | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | | |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | |
| (e) For re-digests, have e-mails been attached and verified? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | | |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> YES | | | |
| 5. Samples per Batch? Check QC Requirements | <input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10 | | | |
| (a) PBs per batch? | <input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs | | | |
| (b) Are pre and post homogenization blanks in batch? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (c) BS, BS/BSD or CRM in batch? | <input checked="" type="checkbox"/> BS <input type="checkbox"/> BS/BSD <input type="checkbox"/> CRM | | | |
| (d) MS/MSD in batch? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | | | |
| (e) MD in batch? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (f) Is there at least one duplicate QC source in batch? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | | | |
| (g) Are there any client specific requests, QC requests, etc? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | | | |
| Document: | <u>see benchsheet</u> | | | |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (i) Correct 'source' designated for MD/MS/MSD? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| 6. Special prep requirements? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (b) For all spiking was there a witness? (Initials must be in logbook) | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |
| (c) Spikes added: | <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | | | |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : NA

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
THg-BS	2002032	20			
THg-MS	2001204	100			

Reviewer Initials: amb Tertiary Review: WJL
10/2/20
10/2/20

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/29/2020

Matrix: Tissue

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spiket1 ID	µl Spiket1	Spiket2 ID	µl Spiket2	Extraction Comments
F009384-BLK1	Blank	0.5	20					
F009384-BLK2	Blank	0.5	20					
F009384-BLK3	Blank	0.5	20					
F009384-BS1	LCS	0.5	20	2002032	20			
F009384-BSD1	LCS Dup	0.5	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20			2001204	100	
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20			2001204	100	
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20			2001204	100	
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20			2001204	100	

** updated LMS accordingly MS 10/2/2020*

Standard ID(s): 2002032
 Description: THg 100ng/mL Primary Spiking Standard
 Expiration: 05-Nov-20 00:00

Reagent ID(s): 2002050, 2002190, 2002305
 Description: Boiling Chips for ICPMS, 70/30 Digestion Acid, 5% BrCl
 Expiration: 20-Feb-21 00:00, 08-Sep-21 00:00, 07-Feb-21 00:00

Technician: LEL/MS Batch #: FA9384 Date: 9/25/20 Displaced 9/29/20 by MS

EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.

EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.

EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).

EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: PLK Vial Type: Glass Teflon

Balance #: 23 Calibrated? Yes No Therm. #: NOT USED Calibrated? Yes No

*Time in: 12.10 Actual Temp. (raw): 20.9 °C w/ CF: 20.713 °C *Time in can't begin before target temperature is reached

Time out: 17.29 Actual Temp. (raw): 21.9 °C w/ CF: 21.733 °C

Final vol.: 20 mL (LIMS ID: 2002305) BS Spike vol.: 20 µL (LIMS ID: 2002032)

Spike Witness: SMV 9/29/20 (initial and date) MS Spike vol.: 160 µL (LIMS ID: 2002024)

HCl LIMS ID: N/A Pipette SN #: 0007853 Calibration Date: 9/29/20

HNO₃ LIMS ID: N/A Pipette SN #: N/A Calibration Date: N/A

70/30 LIMS ID: 2002190 Dispenser SN #: 19151607 Calibrated? Yes No

Other Acid LIMS ID: 2002305 (57.86 u) Dispenser #: 19137295 Calibrated? Yes No

Glass Vial # 0007097 Boiling Chip lot # 2002050 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	CRM LIMS ID
1	F009384-BIK1	B	0.2564	19	F0100047-BP	C	0.2634	<input checked="" type="checkbox"/> NA
2	F009384-BIK2	B	0.2576	20	OT00047-BG	C	0.2551	
3	F009384-BIK3	B	0.2731	21	OT00047-BL	C	0.2677	
4	F009384-B61	B	0.2603	22	OT00047-BS	C	0.2599	
5	F009384-BSD1	B	0.2545	23	OT00047-BT	C	0.2672	
6	OT00047-65 (SOURCE MS1/MS2)	C	0.2591	24	OT00047-BU	C	0.2621	
7	OT00047-384-MS1	C	0.2643	25	OT00047-BV	C	0.2704	
8	OT00047-91 (SOURCE MS1/MS2)	C	0.2606	26	OT00047-BW	C	0.2617	
9	OT00047-91 (SOURCE MS1/MS2)	C	0.2640	27	OT00047-BX	C	0.2691	
10	F009384-MSA	C	0.2589	28	OT00047-BY	C	0.2645	
11	F009384-MSDZ	C	0.2645	29	OT00047-BZ	C	0.2570	
12	OT00047-BJ	C	0.2691	30				
13	OT00047-BK	C	0.2573	31				
14	OT00047-BL	C	0.2622	32				
15	OT00047-BM	C	0.2557	33				
16	OT00047-BN	C	0.2688	34				
17	OT00047-BO	C	0.2660	35				
18	OT00047-BP	C	0.2644	36				

Technician: LEL/MS Batch#: FA0284 Date: 2/25/20

- EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KB/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: _____
 Balance#: 23 Calibrated? Yes No Vial Type: Glass Teflon
 Therm.#: _____ Calibrated? Yes No
 *Time in: _____ Actual Temp. (raw): _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ Actual Temp. (raw): _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # 007097 Boiling Chip lot # 2002050 *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size µL/g	Vial #	Sample ID Number	Container ID	Sample Size µL/g	CRM LIMS ID
1	F009384-BLK1	B	0.2564	19	F0100047-BP	C	0.2634	NA
2	F009384-BLK2	B	0.2576	20	0100047-BG	C	0.2551	
3	F009384-BLK3	B	0.2731	21	0100047-BL	C	0.2677	
4	F009384-BL1	B	0.2603	22	0100047-BS	C	0.2599	
5	F009384-BL1	B	0.2545	23	0100047-BT	C	0.2672	
6	0100047-05 (Sediment)	C	0.2591	24	0100047-BU	C	0.2621	
7	0100047-05 (Sediment)	C	0.2643	25	0100047-BV	C	0.2704	
8	0100047-05 (Sediment)	C	0.2606	26	0100047-BW	C	0.2617	
9	0100047-91 (Sediment)	C	0.2646	27	0100047-BX	C	0.2691	
10	F009384-MS1	C	0.2589	28	0100047-BY	C	0.2645	
11	F009384-MSD2	C	0.2648	29	0100047-BZ	C	0.2520	
12	0100047-BJ	C	0.2691	30				
13	0100047-BJ	C	0.2573	31				
14	0100047-BK	C	0.2622	32				
15	0100047-BL	C	0.2557	33				
16	0100047-BM	C	0.2688	34				
17	0100047-BN	C	0.2600	35				
18	0100047-BO	C	0.2644	36				

PREPARATION BENCH SHEET

F009415

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/29/2020**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009415-BLK1	Blank	0.25	20					
F009415-BLK2	Blank	0.25	20					
F009415-BLK3	Blank	0.25	20					
F009415-BLK4	Filter Blank 0100076-02	0.2637	20					
F009415-BS1	LCS	0.25	20	2002032	20			
F009415-BSD1	LCS Dup	0.25	20	2002032	20			
F009415-MS1	Matrix Spike [0100078-18]	0.2665	20	2001204	100			
F009415-MS2	Matrix Spike [0100078-31]	0.2643	20	2001204	100			
F009415-MSD1	Matrix Spike Dup [0100078-18]	0.2648	20	2001204	100			
F009415-MSD2	Matrix Spike Dup [0100078-31]	0.264	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009415

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-18	FRB-01_2017206_091720_01_LOB_TA	0.265	20	QC	-	S&R	MS/MSD	
0100078-31	SVE-01_20ET033_092120_01_TOM_WB	0.2655	20	QC	-	S&R	MS/MSD	
0100078-43	SVE-01_20ET048_092120_07_TOM_WB	0.2599	20	-	-	S&R		
0100078-44	SVE-01_20ET050_092120_08_TOM_WB	0.2649	20	-	-	S&R		
0100078-45	SVE-01_20ET051_092120_09_TOM_WB	0.2622	20	-	-	S&R		
0100078-46	SVE-01_20ET052_092120_10_TOM_WB	0.2692	20	-	-	S&R		
0100078-47	SVE-01_20ET053_092120_11_TOM_WB	0.2668	20	-	-	S&R		
0100078-48	SVE-01_20ET059_092120_12_TOM_WB	0.2554	20	-	-	S&R		
0100078-49	ES-02_20ET973_092120_12_TOM_WB	0.2656	20	-	-	S&R		
0100078-50	ES-02_20ET974_092120_13_TOM_WB	0.2576	20	-	-	S&R		
0100078-51	ES-02_20ET978_092120_14_TOM_WB	0.2686	20	-	-	S&R		
0100078-52	SVE-01_20ET077_092220_13_TOM_WB	0.2578	20	-	-	S&R		
0100078-53	SVE-01_20ET082_092220_14_TOM_WB	0.2696	20	-	-	S&R		
0100078-54	SVE-01_20ET083_092220_15_TOM_WB	0.2612	20	-	-	S&R		
0100078-55	SVE-01_20ET083_092220_16_TOM_WB	0.2678	20	-	-	S&R		
0100078-56	SVE-01_20ET083_092220_17_TOM_WB	0.2697	20	-	-	S&R		
0100078-57	SVE-01_20ET087_092220_18_TOM_WB	0.2566	20	-	-	S&R		
0100078-58	SVE-01_20ET089_092220_19_TOM_WB	0.2689	20	-	-	S&R		
0100078-59	SVE-01_20ET089_092220_20_TOM_WB	0.2579	20	-	-	S&R		

PREPARATION BENCH SHEET

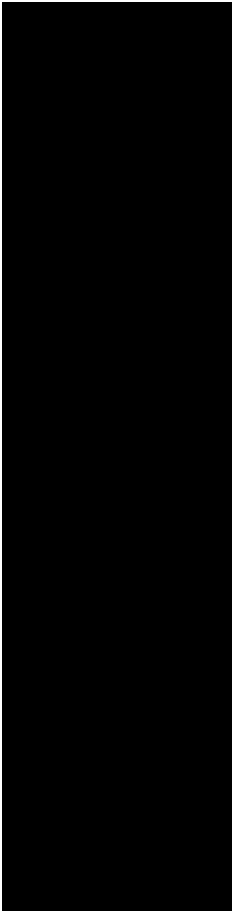
F009415

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/29/2020



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep) 9/29/2020
Upload/Date: MGS (Data Entry) 10/2/2020

Samples to lab: NA
Reviewer/Date: PMB 10/2/20

Batch #: F009415

EFGS Preparation Method			
<input type="checkbox"/> SOP2836 Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS	<input type="checkbox"/> AFS	
<input type="checkbox"/> SOP2837 Tissue Nitric Digestion	<input checked="" type="checkbox"/> ICPMS	<input checked="" type="checkbox"/> CVAFS	
<input type="checkbox"/> SOP2840 Modified Aqua Regia			
<input type="checkbox"/> SOP2820 RP			
<input type="checkbox"/> SOP2821 HF Bomb Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS	
<input type="checkbox"/> SOP2825 Nitric Bomb Digestion	<input checked="" type="checkbox"/> ICPMS	<input checked="" type="checkbox"/> CVAFS	
<input type="checkbox"/> SOP2993 Oven Digestion (As, Se Speciation)			
<input checked="" type="checkbox"/> SOP5145 Microwave Digestion (Nutraceuticals)			
<input type="checkbox"/> SOP5145 Microwave Digestion (3051)			
<input checked="" type="checkbox"/> NA Other: <u>EFAPS-AFS SOP2795 Tissues - THg 70:30 30 plate</u>			

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019
Comments: _____		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analyses: THg

		Reviewer Initials <u>10/2/20 PMB</u>	Tertiary Review	<u>Full</u>
1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, notify supervisor and technician immediately.				
2. Check prep method	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) For Ceuticals: Is correct Hg code being used in LIMS?	<input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AES <input type="checkbox"/> 70:30 <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) PBs per batch?	<input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) BS, BS/BSO or CRM in batch?	<input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSO <input type="checkbox"/> CRM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(d) MS/MSD in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(e) MD in batch?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc? Document: <u>See benchsheet</u>	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Correct LIMS spike ID included for BS, BS/BSO and/or MS/MSD?	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Special prep requirements?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Spikes added:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : NA

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
THg-BS	2002032	20			
THg-MS	2001204	100			

Technician: YMA Batch #: Fee9415 Date: 9/25/2020
Checked: MFG 9/29/20
 EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon
 Balance #: 19 Calibrated? Yes No Therm. #: 120750090 Calibrated? Yes No
 *Time in: 1425 Actual Temp. (raw): 28.0 °C w/ CF: 74.1 °C *Time in can't begin before target temperature is reached
 Time out: 1655 Actual Temp. (raw): 27.7 °C w/ CF: 76.8 °C

Final vol.: 20 mL (LIMS ID: 2002305) BS Spike vol.: 20 µL (LIMS ID: 2002032)
 Spike Witness: N/A 9-25-2020 (initial and date) MS Spike vol.: 0.0 µL (LIMS ID: 2002001)
 HCl LIMS ID: N/A Pipette SN#: 0207553 Calibration Date: 9/29/20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2002090 Dispenser SN#: 191811007 Calibrated? Yes No
 Other Acid LIMS ID: 2002006 Dispenser #: 19237295 Calibrated? Yes No
 Glass Vial # 00077092 Boiling Chip lot # 2002050 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input type="checkbox"/> NA
1	F009415 BLK1	A	0.2637	19	0200078-48	C	0.2574	Comments WD 0200076-04 BR MMTg only MFG 10/12/20 70.2879 MFG 10/12/20 MFG 10/12/20
2	F009415 BLK2	A	0.2581	20	0200078-49	C	0.2658	
3	F009415 BLK3	A	0.2642	21	0200078-50	C	0.2576	
4	F009415 BLK4	C	0.2637	22	0200078-51	C	0.2686	
5	F009415 BS1	A	0.2577	23	0200078-52	C	0.2578	
6	F009415 BS01	A	0.2765	24	0200078-53	C	0.2696	
7	0200078-18	C	0.2650	25	0200078-54	C	0.2612	
8	F009415-MS1	C	0.2665	26	0200078-55	C	0.2678	
9	F009415-MS07	C	0.2648	27	0200078-56	C	0.2697	
10	0200078-31	C	0.2655	28	0200078-57	C	0.2566	
11	F009415-MS2	C	0.2643	29	0200078-58	C	0.2689	
12	F009415-MS02	C	0.2640	30	0200078-59	C	0.2577	
13	0200076-01	B	0.1006	31				
14	0200077-43	C	0.2577	32				
15	0200078-44	C	0.2647	33				
16	0200078-45	C	0.2622	34				
17	0200077-46	C	0.2612	35				
18	0200078-47	C	0.2668	36				

Technician: Ma Batch#: F009415 Date: 11/25/2020

- EF-AFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EF-AFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EF-AFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EF-AFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: Glass Teflon
 Balance #: 19 Calibrated? Yes No
 *Time in: _____ Actual Temp. (raw): _____ °C, w/ CF: _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ Actual Temp. (raw): _____ °C, w/ CF: _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # 0007092 Boiling Chip lot # 2002050 *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input type="checkbox"/> NA
1	F009415 BLK1	A	0.2637	19	0100078-48	C	0.2554	
2	F009415 BLK2	A	0.2581	20	0100078-49	C	0.2650	
3	F009415 BLK3	A	0.2648	21	0100078-50	C	0.2576	
4	F009415 BLK4	C	0.2637	22	0100078-51	C	0.2686	
5	F009415 BSD1	A	0.2547	23	0100078-52	C	0.2578	
6	F009415 BSD2	A	0.2765	24	0100078-53	C	0.2646	
7	0100078-18	C	0.2650	25	0100078-54	C	0.2612	
8	F009415-MS1	C	0.2665	26	0100078-55	C	0.2678	
9	F009415-MS07	C	0.2648	27	0100078-56	C	0.2697	
10	0100078-31	C	0.2655	28	0100078-57	C	0.2566	
11	F009415-MS2	C	0.2643	29	0100078-58	C	0.2687	
12	F009415-MSD2	C	0.2640	30	0100078-59	C	0.2507	
13	0100078-01	B	0.1006	31				
14	0100078-43	C	0.2577	32				
15	0100078-44	C	0.2647	33				
16	0100078-45	C	0.2622	34				
17	0100078-46	C	0.2692	35				
18	0100078-47	C	0.2668	36				

Technician: Ma

Batch #: F009415

Date: 9/25/2020

- EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: _____
 Balance #: 19 Calibrated? Yes No
 *Time in: _____ Actual Temp. (raw): _____ °C w/ CF:
 Time out: _____ Actual Temp. (raw): _____ °C w/ CF:

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # 00071992 Boiling Chip lot # 2002050 *Hotblock Position: _____

Vial Type: Glass Teflon
 Calibrated? Yes No
 Therm. #: _____ °C
 *Time in can't begin before target temperature is reached

Vial #	Sample ID Number	Container ID	Sample Size mL <input type="checkbox"/> µL <input checked="" type="checkbox"/>	Vial #	Sample ID Number	Container ID	Sample Size mL <input type="checkbox"/> µL <input checked="" type="checkbox"/>	CRM LIMS ID <input type="checkbox"/> NA
1	F009415 BLK1	A	0.2637	19	OT00078-48	C	0.2554	
2	F009415 BLK2	A	0.2581	20	OT00078-49	C	0.2656	
3	F009415 BLK3	A	0.2648	21	OT00078-50	C	0.2576	
4	F009415 BLK4	C	0.2637	22	OT00078-51	C	0.2686	
5	F009415 BS1	A	0.2547	23	OT00078-52	C	0.2579	
6	F009415 BS02	A	0.2765	24	OT00078-53	C	0.2696	
7	OT00078-18	C	0.2650	25	OT00078-54	C	0.2612	
8	F009415-MS1	C MS waste	0.2665	26	OT00078-55	C	0.2678	
9	F009415-MS02	C	0.2648	27	OT00078-56	C	0.2697	
10	OT00078-31	C	0.2685	28	OT00078-57	C	0.2566	
11	F009415-MS2	C	0.2643	29	OT00078-58	C	0.2684	
12	F009415-MS02	C	0.2640	30	OT00078-59	C	0.2579	
13	OT00076-01 MS waste	B	0.1006	31				
14	OT00078-18-43	C	0.2599	32				
15	OT00078-44	C	0.2649	33				
16	OT00078-45	C	0.2622	34				
17	OT00078-46	C	0.2698	35				
18	OT00078-47	C	0.2668	36				

Analysis Datasheet for Total Mercury

Date of Analysis: October 01, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #:

Analyst:
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	126.43 units	252.85	74.05 units	148.10	97.0 %Rec
SEQ-CAL2	1	1.00 ng/L	201.00 units	201.00	148.62 units	148.62	97.3 %Rec
SEQ-CAL3	1	5.00 ng/L	825.37 units	165.07	773.00 units	154.60	101.2 %Rec
SEQ-CAL4	1	20.00 ng/L	3209.04 units	160.45	3156.66 units	157.83	103.4 %Rec
SEQ-CAL5	1	40.00 ng/L	6228.90 units	155.72	6176.52 units	154.41	101.1 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF Corr. St Dev RF Corr. RSD CF Uncorr. Mean RF
 152.71 +/- 4.20 2.8% RSD 187.02

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	52.38 units	±4.53	0.28 ng/L	±0.02

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	-0.331 ng/L	±0.806
BLK	2	5	0.004 ng/L	±0.072
BLK	3	3	0.978 ng/L	±0.495
BLK	4	3	0.046 ng/L	±0.040
BLK	5	4	-0.654 ng/L	±0.543
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	10/1/2020 10:11:12	4423-1.RAW	10:11:12 AM	58.71			4.3	0.028	0.028	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	10/1/2020 10:15:21	4424-1.RAW	10:15:21 AM	52.75			4.7	0.002	0.002	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	10/1/2020 10:19:30	4425-1.RAW	10:19:30 AM	47.87			74.0	-0.031	-0.031	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	10/1/2020 10:23:38	4426-1.RAW	10:23:38 AM	126.43			148.6	0.485	0.485	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	10/1/2020 10:27:47	4427-1.RAW	10:27:47 AM	201.00			773.0	0.973	0.973	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	10/1/2020 10:31:56	4428-1.RAW	10:31:56 AM	3208.04			3156.7	5.062	5.062	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	10/1/2020 10:36:05	4429-1.RAW	10:36:05 AM	6228.90			6176.5	20.671	20.671	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	10/1/2020 10:40:14	4430-1.RAW	10:40:14 AM	842.02			789.6	40.445	40.445	ng/L	
Hg2600-3	00	CAL	SEQ-ICV1	1	10/1/2020 10:44:24	4431-1.RAW	10:44:24 AM	88.90			16.5	5.171	5.171	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	10/1/2020 10:48:33	4432-1.RAW	10:48:33 AM	882.52			830.1	0.108	0.108	ng/L	
Hg2600-3	00	SAM	F009414-BS1	20	10/1/2020 10:52:42	4433-1.RAW	10:52:42 AM	882.52			830.1	5.452	109.050	ng/L	
Hg2600-3	00	SAM	F009414-MSD1	20	10/1/2020 10:56:52	4434-1.RAW	10:56:52 AM	882.52			800.6	5.259	105.179	ng/L	
Hg2600-3	00	BLK	F009414-BLK1	20	10/1/2020 11:01:01	4435-1.RAW	11:01:01 AM	56.94			4.6	0.030	0.030	ng/L	
Hg2600-3	00	BLK	F009414-BLK2	20	10/1/2020 11:05:10	4436-1.RAW	11:05:10 AM	46.87			5.7	-0.037	-0.037	ng/L	
Hg2600-3	00	BLK	F009414-BLK3	20	10/1/2020 11:09:20	4437-1.RAW	11:09:20 AM	46.94			6.4	-0.042	-0.042	ng/L	
Hg2600-3	00	SAM	0100078-12	400	10/1/2020 11:13:29	4438-1.RAW	11:13:29 AM	490.39			438.0	2.869	1147.621	ng/L	
Hg2600-3	00	SAM	F009414-MS1	400	10/1/2020 11:17:38	4439-1.RAW	11:17:38 AM	2374.06			2321.7	15.204	6081.495	ng/L	
Hg2600-3	00	SAM	F009414-MSD1	400	10/1/2020 11:21:47	4440-1.RAW	11:21:47 AM	2390.28			2337.9	15.310	6123.972	ng/L	
Hg2600-3	00	SAM	0100078-16	400	10/1/2020 11:25:58	4441-1.RAW	11:25:58 AM	578.38			527.0	3.452	1380.704	ng/L	
Hg2600-3	00	SAM	F009414-MS2	400	10/1/2020 11:34:15	4442-1.RAW	11:34:15 AM	2922.45			2870.1	18.795	7517.900	ng/L	
Hg2600-3	00	CAL	SEQ-CCV1	1	10/1/2020 11:38:24	4443-1.RAW	11:38:24 AM	872.38			820.0	5.370	5.370	ng/L	
Hg2600-3	00	CAL	SEQ-CCB1	1	10/1/2020 11:42:34	4444-1.RAW	11:42:34 AM	2389.87			22.8	0.149	0.149	ng/L	
Hg2600-3	00	SAM	F009414-MSD2	400	10/1/2020 11:46:43	4445-1.RAW	11:46:43 AM	343.44			2337.5	15.307	6122.906	ng/L	
Hg2600-3	00	SAM	0100078-24	400	10/1/2020 11:50:53	4446-1.RAW	11:50:53 AM	161.3			291.1	1.907	762.719	ng/L	
Hg2600-3	00	SAM	0100078-25	400	10/1/2020 11:55:02	4447-1.RAW	11:55:02 AM	177.01			161.3	1.057	422.859	ng/L	
Hg2600-3	00	SAM	0100078-26	400	10/1/2020 11:59:11	4448-1.RAW	11:59:11 AM	186.45			124.6	0.817	326.793	ng/L	
Hg2600-3	00	SAM	0100078-27	400	10/1/2020 12:03:20	4449-1.RAW	12:03:20 PM	287.91			134.1	0.879	351.501	ng/L	
Hg2600-3	00	SAM	0100078-28	400	10/1/2020 12:07:30	4450-1.RAW	12:07:30 PM	289.37			235.5	1.543	617.252	ng/L	
Hg2600-3	00	SAM	0100078-29	400	10/1/2020 12:11:40	4451-1.RAW	12:11:40 PM	256.52			204.1	1.553	621.088	ng/L	
Hg2600-3	00	SAM	0100078-30	400	10/1/2020 12:15:49	4452-1.RAW	12:15:49 PM	400.82			204.1	1.338	535.044	ng/L	
Hg2600-3	00	SAM	0100078-32	400	10/1/2020 12:19:58	4453-1.RAW	12:19:58 PM	403.99			2.282	2.282	912.999	ng/L	
Hg2600-3	00	CAL	SEQ-CCV2	1	10/1/2020 12:24:08	4454-1.RAW	12:24:08 PM	888.50			351.6	2.303	921.321	ng/L	
Hg2600-3	00	CAL	SEQ-CCB2	1	10/1/2020 12:28:17	4455-1.RAW	12:28:17 PM	63.78			846.1	5.541	5.541	ng/L	
Hg2600-3	00	SAM	0100078-34	400	10/1/2020 12:32:27	4456-1.RAW	12:32:27 PM	489.66			11.4	0.075	0.075	ng/L	
Hg2600-3	00	SAM	0100078-35	400	10/1/2020 12:36:36	4457-1.RAW	12:36:36 PM	421.85			447.5	2.931	1172.430	ng/L	
Hg2600-3	00	SAM	0100078-36	400	10/1/2020 12:40:46	4458-1.RAW	12:40:46 PM	1201.71			369.3	2.419	967.578	ng/L	
Hg2600-3	00	SAM	0100078-37	400	10/1/2020 12:44:56	4459-1.RAW	12:44:56 PM	523.93			1149.3	7.527	3010.766	ng/L	
Hg2600-3	00	SAM	0100078-38	400	10/1/2020 12:49:05	4460-1.RAW	12:49:05 PM	861.60			790.9	5.180	2071.927	ng/L	
Hg2600-3	00	SAM	0100078-39	400	10/1/2020 12:53:15	4461-1.RAW	12:53:15 PM	861.60			471.6	3.089	1235.473	ng/L	
Hg2600-3	00	SAM	0100078-40	400	10/1/2020 12:57:24	4462-1.RAW	12:57:24 PM	517.41			809.2	5.300	2119.919	ng/L	
Hg2600-3	00	SAM	0100078-41	400	10/1/2020 13:01:34	4463-1.RAW	13:01:34 PM	885.09			332.7	2.180	871.807	ng/L	
Hg2600-3	00	CAL	SEQ-CCV3	1	10/1/2020 13:05:43	4464-1.RAW	13:05:43 PM	567.66			465.0	3.046	1218.394	ng/L	
Hg2600-3	00	CAL	SEQ-CCB3	1	10/1/2020 13:09:53	4465-1.RAW	13:09:53 PM	896.58			515.3	3.375	1350.018	ng/L	
Hg2600-3	00	SAM	F010331-BS1	1	10/1/2020 13:13:42	4466-1.RAW	13:13:42 PM	67.64			15.3	0.100	0.100	ng/L	
Hg2600-3	00	SAM	F010331-MSD1	1	10/1/2020 13:17:52	4467-1.RAW	13:17:52 PM	786.66			734.3	4.804	4.804	ng/L	
Hg2600-3	00	BLK	F010331-BLK1	1	10/1/2020 13:22:02	4468-1.RAW	13:22:02 PM	776.95			4.740	4.740	4.740	ng/L	
Hg2600-3	00	BLK	F010331-BLK2	1	10/1/2020 13:26:12	4469-1.RAW	13:26:12 PM	56.37			4.0	0.026	0.026	ng/L	
Hg2600-3	00	BLK	F010331-BLK3	1	10/1/2020 13:30:22	4470-1.RAW	13:30:22 PM	47.57			4.8	-0.031	-0.031	ng/L	
Hg2600-3	00	BLK	F010331-BLK4	1	10/1/2020 13:34:31	4471-1.RAW	13:34:31 PM	38.92			1.3	0.009	0.009	ng/L	
Hg2600-3	00	BLK	F010331-BLK5	1	10/1/2020 13:38:40	4472-1.RAW	13:38:40 PM	88.68			13.5	-0.088	-0.088	ng/L	
Hg2600-3	00	SAM	0100105-06	1	10/1/2020 13:42:50	4473-1.RAW	13:42:50 PM	89.14			16.3	0.107	0.107	ng/L	
Hg2600-3	00	SAM	F010331-MS1	1	10/1/2020 13:47:00	4474-1.RAW	13:47:00 PM	837.14			6.1	-0.045	-0.045	ng/L	
Hg2600-3	00	SAM	F010331-MSD1	1	10/1/2020 13:51:10	4475-1.RAW	13:51:10 PM	871.00			784.8	5.134	5.134	ng/L	
Hg2600-3	00	CAL	SEQ-CCV4	1	10/1/2020 13:55:19	4476-1.RAW	13:55:19 PM	858.28			818.6	5.356	5.356	ng/L	
Hg2600-3	00	CAL	SEQ-CCB4	1	10/1/2020 13:59:29	4477-1.RAW	13:59:29 PM	56.45			805.9	5.277	5.277	ng/L	
Hg2600-3	00	CAL	SEQ-CCB4	1	10/1/2020 14:03:39	4478-1.RAW	14:03:39 PM	56.45			4.1	0.027	0.027	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0100091-02	1	10/1/2020 14:08:09	4480-1.RAW	2:08:09 PM	49.22	2		-3.2	-0.025	-0.075	ng/L	
Hg2600-3	00	SAM	F010331-MS2	1	10/1/2020 14:12:19	4481-1.RAW	2:12:19 PM	852.84	2		800.5	5.237	5.237	ng/L	
Hg2600-3	00	SAM	F010331-MSD2	1	10/1/2020 14:16:28	4482-1.RAW	2:16:28 PM	873.42	2		821.0	5.372	5.372	ng/L	
Hg2600-3	00	SAM	0100088-01	1	10/1/2020 14:20:38	4483-1.RAW	2:20:38 PM	615.57	2		563.2	3.683	3.683	ng/L	
Hg2600-3	00	SAM	0100088-02	1	10/1/2020 14:24:48	4484-1.RAW	2:24:48 PM	54.67	2		2.3	0.011	0.011	ng/L	
Hg2600-3	00	SAM	0100088-03	1	10/1/2020 14:28:58	4485-1.RAW	2:28:58 PM	72.74	2		20.4	0.129	0.129	ng/L	
Hg2600-3	00	SAM	0100091-01	10	10/1/2020 14:33:08	4486-1.RAW	2:33:08 PM	224.75	2		172.4	1.128	1.128	ng/L	
Hg2600-3	00	SAM	0100097-01	10	10/1/2020 14:37:18	4487-1.RAW	2:37:18 PM	179.79	2		0.834	8.339	8.339	ng/L	
Hg2600-3	00	SAM	0100097-02	1	10/1/2020 14:41:28	4488-1.RAW	2:41:28 PM	210.28	2		157.9	1.029	1.029	ng/L	
Hg2600-3	00	SAM	0100097-03	1	10/1/2020 14:45:38	4489-1.RAW	2:45:38 PM	451.84	2		399.5	2.611	2.611	ng/L	
Hg2600-3	00	CAL	SEQ-CCV5	1	10/1/2020 14:49:48	4490-1.RAW	2:49:48 PM	933.818802	2		881.4	5.772	5.772	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	10/1/2020 14:53:58	4491-1.RAW	2:53:58 PM	60.40	2		8.0	0.053	0.053	ng/L	
Hg2600-3	00	SAM	0100097-04	1	10/1/2020 14:58:08	4492-1.RAW	2:58:08 PM	547.86	2		495.5	3.240	3.240	ng/L	
Hg2600-3	00	SAM	0100104-01	1	10/1/2020 15:02:18	4493-1.RAW	3:02:18 PM	57.08	2		4.7	0.026	0.026	ng/L	
Hg2600-3	00	SAM	0100104-02	1	10/1/2020 15:06:28	4494-1.RAW	3:06:28 PM	63.14	2		10.8	0.066	0.066	ng/L	
Hg2600-3	00	SAM	0100104-03	1	10/1/2020 15:10:38	4495-1.RAW	3:10:38 PM	96.21	2		43.8	0.283	0.283	ng/L	
Hg2600-3	00	SAM	0100104-04	1	10/1/2020 15:14:48	4496-1.RAW	3:14:48 PM	87.88	2		35.5	0.228	0.228	ng/L	
Hg2600-3	00	SAM	0100105-01	1	10/1/2020 15:18:58	4497-1.RAW	3:18:58 PM	95.09	2		42.7	0.275	0.275	ng/L	
Hg2600-3	00	SAM	0100105-02	1	10/1/2020 15:23:08	4498-1.RAW	3:23:08 PM	550.97	2		498.6	3.261	3.261	ng/L	
Hg2600-3	00	SAM	0100105-03	1	10/1/2020 15:27:17	4499-1.RAW	3:27:17 PM	51.49	2		-0.9	-0.010	-0.010	ng/L	
Hg2600-3	00	SAM	0100105-04	1	10/1/2020 15:31:27	4500-1.RAW	3:31:27 PM	696.60	2		644.2	4.214	4.214	ng/L	
Hg2600-3	00	CAL	SEQ-CCV6	1	10/1/2020 15:35:37	4501-1.RAW	3:35:37 PM	50.49	2		-1.9	-0.017	-0.017	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	10/1/2020 15:39:47	4502-1.RAW	3:39:47 PM	836.54	2		784.2	5.135	5.135	ng/L	
Hg2600-3	00	SAM	0100105-05	10	10/1/2020 15:43:58	4503-1.RAW	3:43:58 PM	55.19	2		2.8	0.018	0.018	ng/L	
Hg2600-3	00	SAM	F009384-BS1	20	10/1/2020 15:48:09	4504-1.RAW	3:48:09 PM	375.91	2		323.5	2.118	2.118	ng/L	
Hg2600-3	00	SAM	F009384-BSD1	20	10/1/2020 15:52:20	4505-1.RAW	3:52:20 PM	713.11	3		660.7	4.278	4.278	ng/L	
Hg2600-3	00	BLK	F009384-BLK1	20	10/1/2020 15:56:30	4506-1.RAW	3:56:30 PM	745.98	3		3.8	0.025	0.025	ng/L	
Hg2600-3	00	BLK	F009384-BLK2	20	10/1/2020 16:00:41	4507-1.RAW	4:00:41 PM	56.19	3		11.4	0.074	0.074	ng/L	
Hg2600-3	00	BLK	F009384-BLK3	20	10/1/2020 16:04:52	4508-1.RAW	4:04:52 PM	63.74	3		7.2	0.047	0.047	ng/L	
Hg2600-3	00	SAM	0100047-65	400	10/1/2020 16:09:02	4509-1.RAW	4:09:02 PM	59.60	3		6177.9	40.452	16180.672	ng/L	
Hg2600-3	00	SAM	F009384-MS1	400	10/1/2020 16:13:13	4510-1.RAW	4:13:13 PM	6230.25	3		7002.8	45.854	18341.425	ng/L	
Hg2600-3	00	SAM	F009384-MSD1	400	10/1/2020 16:17:23	4511-1.RAW	4:17:23 PM	7055.19	3		7323.5	47.954	19181.527	ng/L	
Hg2600-3	00	CAL	SEQ-CCV7	400	10/1/2020 16:21:33	4512-1.RAW	4:21:33 PM	917.91	3		865.5	5.665	2266.102	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	400	10/1/2020 16:25:44	4513-1.RAW	4:25:44 PM	917.91	3		831.6	5.446	5.446	ng/L	
Hg2600-3	00	CAL	SEQ-CCV8	400	10/1/2020 16:29:54	4514-1.RAW	4:29:54 PM	883.98	3		25.2	0.165	0.165	ng/L	
Hg2600-3	00	SAM	F009384-MS2	400	10/1/2020 16:34:05	4515-1.RAW	4:34:05 PM	77.58	3		2435.9	15.949	6379.452	ng/L	
Hg2600-3	00	SAM	F009384-MSD2	400	10/1/2020 16:38:16	4516-1.RAW	4:38:16 PM	2488.31	3		2918.2	19.107	7642.660	ng/L	
Hg2600-3	00	SAM	0100047-81	400	10/1/2020 16:42:28	4517-1.RAW	4:42:28 PM	2970.59	3		1539.1	10.076	4030.317	ng/L	
Hg2600-3	00	SAM	0100047-82	400	10/1/2020 16:46:38	4518-1.RAW	4:46:38 PM	1591.46	3		1493.4	9.777	3910.747	ng/L	
Hg2600-3	00	SAM	0100047-83	400	10/1/2020 16:50:47	4519-1.RAW	4:50:47 PM	1545.81	3		4348.8	28.475	11389.925	ng/L	
Hg2600-3	00	SAM	0100047-84	400	10/1/2020 16:54:57	4520-1.RAW	4:54:57 PM	4401.23	3		5903.1	36.653	15461.064	ng/L	
Hg2600-3	00	SAM	0100047-85	400	10/1/2020 16:59:09	4521-1.RAW	4:59:09 PM	5955.52	3		2243.7	14.690	5875.970	ng/L	
Hg2600-3	00	SAM	0100047-86	400	10/1/2020 17:03:20	4522-1.RAW	5:03:20 PM	2296.09	3		1465.1	9.951	3836.431	ng/L	
Hg2600-3	00	SAM	0100047-87	400	10/1/2020 17:07:32	4523-1.RAW	5:07:32 PM	1517.43	3		4.830	3.372	1348.627	ng/L	
Hg2600-3	00	SAM	0100047-88	400	10/1/2020 17:11:42	4524-1.RAW	5:11:42 PM	790.34	3		771.0	5.049	5.049	ng/L	
Hg2600-3	00	CAL	SEQ-CCV8	400	10/1/2020 17:15:54	4525-1.RAW	5:15:54 PM	567.63	3		68.0	0.446	0.446	ng/L	
Hg2600-3	00	CAL	SEQ-CCB8	400	10/1/2020 17:20:05	4526-1.RAW	5:20:05 PM	823.39	3		7.710	0.446	0.446	ng/L	
Hg2600-3	00	SAM	0100047-89	400	10/1/2020 17:24:16	4527-1.RAW	5:24:16 PM	120.41	3		1177.8	7.710	3084.146	ng/L	
Hg2600-3	00	SAM	0100047-90	400	10/1/2020 17:28:26	4528-1.RAW	5:28:26 PM	1230.22	3		618.7	4.049	1619.495	ng/L	
Hg2600-3	00	SAM	0100047-91	400	10/1/2020 17:32:38	4529-1.RAW	5:32:38 PM	671.05	3		440.6	2.882	1152.971	ng/L	
Hg2600-3	00	SAM	0100047-92	400	10/1/2020 17:36:49	4530-1.RAW	5:36:49 PM	492.93	3		563.9	3.690	1476.019	ng/L	
Hg2600-3	00	SAM	0100047-93	400	10/1/2020 17:40:59	4531-1.RAW	5:40:59 PM	1033.59	3		629.7	4.121	1959.646	ng/L	
Hg2600-3	00	SAM	0100047-94	400	10/1/2020 17:45:15	4532-1.RAW	5:45:15 PM	676.21	3		534.1	3.495	1648.385	ng/L	
Hg2600-3	00	SAM	0100047-95	400	10/1/2020 17:49:28	4533-1.RAW	5:49:28 PM	616.27	3		5029	5.079	2031.441	ng/L	
Hg2600-3	00	SAM	0100047-96	400	10/1/2020 17:53:39	4534-1.RAW	5:53:39 PM	800.91	3		11.8	0.077	0.077	ng/L	
Hg2600-3	00	SAM	0100047-97	400	10/1/2020 17:57:50	4535-1.RAW	5:57:50 PM	682.07	3		0.077	0.077	0.077	ng/L	
Hg2600-3	00	SAM	0100047-98	400	10/1/2020 18:02:00	4536-1.RAW	6:02:00 PM	586.45	3		4.721	4.721	4.721	ng/L	
Hg2600-3	00	CAL	SEQ-CCV9	400	10/1/2020 18:06:11	4537-1.RAW	6:06:11 PM	828.32	3		4.901	4.901	4.901	ng/L	
Hg2600-3	00	CAL	SEQ-CCB9	400	10/1/2020 18:10:22	4538-1.RAW	6:10:22 PM	820.42	3		0.091	0.091	0.091	ng/L	
Hg2600-3	00	SAM	F010332-BS1	1	10/1/2020 18:14:32	4539-1.RAW	6:14:32 PM	64.20	4		14.0	0.091	0.091	ng/L	
Hg2600-3	00	SAM	F010332-BSD1	1	10/1/2020 18:18:43	4540-1.RAW	6:18:43 PM	780.28	4		4.5	0.030	0.030	ng/L	
Hg2600-3	00	BLK	F010332-BLK1	1	10/1/2020 18:22:54	4541-1.RAW	6:22:54 PM	66.33	4		2.4	0.016	0.016	ng/L	
Hg2600-3	00	BLK	F010332-BLK2	1	10/1/2020 18:27:05	4542-1.RAW	6:27:05 PM	66.33	4					ng/L	
Hg2600-3	00	BLK	F010332-BLK3	1	10/1/2020 18:31:15	4543-1.RAW	6:31:15 PM	56.93	4					ng/L	
Hg2600-3	00	BLK	F010332-BLK4	1	10/1/2020 18:35:26	4544-1.RAW	6:35:26 PM	54.81	4					ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0100104-09	1	10/1/2020 18:39:36	4545-1.RAW	6:39:36 PM	89.02	4		36.6	0.194	0.194	ng/L	
Hg2600-3	00	SAM	F010332-MS1	1	10/1/2020 18:43:47	4546-1.RAW	6:43:47 PM	745.41	4		693.0	4.492	4.492	ng/L	
Hg2600-3	00	SAM	F010332-MSD1	1	10/1/2020 18:47:59	4547-1.RAW	6:47:59 PM	777.53	4		725.2	4.703	4.703	ng/L	
Hg2600-3	00	SAM	0100104-06	1	10/1/2020 18:52:09	4548-1.RAW	6:52:09 PM	105.04	4		52.7	0.299	0.299	ng/L	
Hg2600-3	00	SAM	0100104-07	1	10/1/2020 18:56:20	4549-1.RAW	6:56:20 PM	90.61	4		38.2	0.205	0.205	ng/L	
Hg2600-3	00	CAL	SEQ-CCVA	1	10/1/2020 18:00:31	4550-1.RAW	7:00:31 PM	808.03			755.7	4.948	4.948	ng/L	
Hg2600-3	00	CAL	SEQ-CCVA	1	10/1/2020 19:04:41	4551-1.RAW	7:04:41 PM	64.65			12.3	0.080	0.080	ng/L	
Hg2600-3	00	SAM	0100104-08	1	10/1/2020 19:08:52	4552-1.RAW	7:08:52 PM	86.46	4		34.1	0.177	0.177	ng/L	
Hg2600-3	00	SAM	0100104-10	1	10/1/2020 19:13:03	4553-1.RAW	7:13:03 PM	126.89	4		38.4	0.206	0.206	ng/L	
Hg2600-3	00	SAM	0100104-11	1	10/1/2020 19:17:14	4554-1.RAW	7:17:14 PM	173.76	4		74.5	0.442	0.442	ng/L	
Hg2600-3	00	SAM	0100104-12	1	10/1/2020 19:21:25	4555-1.RAW	7:21:25 PM	143.15	4		121.4	0.749	0.749	ng/L	
Hg2600-3	00	CAL	SEQ-LCV1	1	10/1/2020 19:25:35	4556-1.RAW	7:25:35 PM	143.15	4		37.8	0.248	0.248	ng/L	
Hg2600-3	00	CAL	SEQ-LCV2	1	10/1/2020 19:29:46	4557-1.RAW	7:29:46 PM	143.15	4		90.8	0.594	0.594	ng/L	
Hg2600-3	00	CAL	SEQ-CVVB	1	10/1/2020 19:33:56	4558-1.RAW	7:33:56 PM	787.57			735.2	4.814	4.814	ng/L	
Hg2600-3	00	CAL	SEQ-CVBB	1	10/1/2020 19:38:07	4559-1.RAW	7:38:07 PM	54.69			2.3	0.015	0.015	ng/L	
Hg2600-3	00	SAM	F009415-BS1	20	10/1/2020 19:42:18	4560-1.RAW	7:42:18 PM	765.91	5		713.5	4.705	4.705	ng/L	
Hg2600-3	00	SAM	F009415-BSD1	20	10/1/2020 19:46:29	4561-1.RAW	7:46:29 PM	717.92	5		665.5	4.391	4.391	ng/L	
Hg2600-3	00	BLK	F009415-BLK1	20	10/1/2020 19:50:39	4562-1.RAW	7:50:39 PM	48.39	5		-4.0	-0.026	-0.522	ng/L	
Hg2600-3	00	BLK	F009415-BLK2	20	10/1/2020 19:54:50	4563-1.RAW	7:54:50 PM	44.37	5		-8.0	-0.052	-1.048	ng/L	
Hg2600-3	00	BLK	F009415-BLK3	20	10/1/2020 19:59:01	4564-1.RAW	7:59:01 PM	43.94	5		-8.4	-0.055	-1.105	ng/L	
Hg2600-3	00	BLK	F009415-BLK4	20	10/1/2020 20:03:11	4565-1.RAW	8:03:11 PM	52.83	5		0.5	0.003	0.059	ng/L	
Hg2600-3	00	SAM	0100078-18	400	10/1/2020 20:07:22	4566-1.RAW	8:07:22 PM	226.02	5		173.6	1.139	455.466	ng/L	
Hg2600-3	00	SAM	F009415-MS1	400	10/1/2020 20:11:33	4567-1.RAW	8:11:33 PM	181.12	5		175.8	11.518	4607.315	ng/L	
Hg2600-3	00	SAM	F009415-MSD1	400	10/1/2020 20:15:44	4568-1.RAW	8:15:44 PM	1918.98	5		1856.6	12.225	4889.842	ng/L	
Hg2600-3	00	SAM	0100078-31	400	10/1/2020 20:19:54	4569-1.RAW	8:19:54 PM	425.39	5		373.0	2.444	977.683	ng/L	
Hg2600-3	00	CAL	SEQ-CVVC	1	10/1/2020 20:24:05	4570-1.RAW	8:24:05 PM	773.02			720.6	4.719	4.719	ng/L	
Hg2600-3	00	CAL	SEQ-CVBC	1	10/1/2020 20:28:16	4571-1.RAW	8:28:16 PM	58.60			6.2	0.041	0.041	ng/L	
Hg2600-3	00	SAM	F009415-MS2	400	10/1/2020 20:32:26	4572-1.RAW	8:32:26 PM	2061.10	5		2008.7	13.155	5262.073	ng/L	
Hg2600-3	00	SAM	F009415-MSD2	400	10/1/2020 20:36:37	4573-1.RAW	8:36:37 PM	2088.63	5		2036.3	13.335	5334.199	ng/L	
Hg2600-3	00	SAM	0100078-43	400	10/1/2020 20:40:47	4574-1.RAW	8:40:47 PM	452.71	5		400.3	2.623	1049.236	ng/L	
Hg2600-3	00	SAM	0100078-44	400	10/1/2020 20:44:58	4575-1.RAW	8:44:58 PM	317.50	5		265.1	1.738	695.081	ng/L	
Hg2600-3	00	SAM	0100078-45	400	10/1/2020 20:49:09	4576-1.RAW	8:49:09 PM	369.21	5		316.8	2.076	830.543	ng/L	
Hg2600-3	00	SAM	0100078-46	400	10/1/2020 20:53:19	4577-1.RAW	8:53:19 PM	553.73	5		501.4	3.285	1313.845	ng/L	
Hg2600-3	00	SAM	0100078-47	400	10/1/2020 20:57:30	4578-1.RAW	8:57:30 PM	486.71	5		434.3	2.846	1138.308	ng/L	
Hg2600-3	00	SAM	0100078-48	400	10/1/2020 21:01:41	4579-1.RAW	9:01:41 PM	297.56	5		245.2	1.607	642.849	ng/L	
Hg2600-3	00	SAM	0100078-49	400	10/1/2020 21:05:52	4580-1.RAW	9:05:52 PM	422.47	5		370.1	2.425	970.037	ng/L	
Hg2600-3	00	CAL	SEQ-CVVD	1	10/1/2020 21:10:02	4581-1.RAW	9:10:02 PM	314.24	5		261.9	1.716	686.549	ng/L	
Hg2600-3	00	CAL	SEQ-CVDD	1	10/1/2020 21:14:13	4582-1.RAW	9:14:13 PM	821.44			769.1	5.036	5.036	ng/L	
Hg2600-3	00	CAL	SEQ-CVBD	1	10/1/2020 21:18:24	4583-1.RAW	9:18:24 PM	58.04			5.7	0.037	0.037	ng/L	
Hg2600-3	00	SAM	0100078-51	400	10/1/2020 21:22:34	4584-1.RAW	9:22:34 PM	338.13	5		285.8	1.873	749.117	ng/L	
Hg2600-3	00	SAM	0100078-52	400	10/1/2020 21:26:45	4585-1.RAW	9:26:45 PM	369.65	5		317.3	2.079	831.690	ng/L	
Hg2600-3	00	SAM	0100078-53	400	10/1/2020 21:30:56	4586-1.RAW	9:30:56 PM	306.06	5		253.7	1.663	665.135	ng/L	
Hg2600-3	00	SAM	0100078-54	400	10/1/2020 21:35:07	4587-1.RAW	9:35:07 PM	462.37	5		410.0	2.686	1074.539	ng/L	
Hg2600-3	00	SAM	0100078-55	400	10/1/2020 21:39:17	4588-1.RAW	9:39:17 PM	269.46	5		217.1	1.423	569.257	ng/L	
Hg2600-3	00	SAM	0100078-56	400	10/1/2020 21:43:28	4589-1.RAW	9:43:28 PM	395.85	5		341.5	2.238	895.028	ng/L	
Hg2600-3	00	SAM	0100078-57	400	10/1/2020 21:47:39	4590-1.RAW	9:47:39 PM	544.72	5		492.3	3.226	1290.242	ng/L	
Hg2600-3	00	SAM	0100078-58	400	10/1/2020 21:51:49	4591-1.RAW	9:51:49 PM	401.82	5		349.4	2.290	915.947	ng/L	
Hg2600-3	00	SAM	0100078-59	400	10/1/2020 21:56:00	4592-1.RAW	9:56:00 PM	374.12	5		321.7	2.109	843.401	ng/L	
Hg2600-3	00	CAL	SEQ-CVVE	1	10/1/2020 22:00:11	4593-1.RAW	10:00:11 PM	773.67			721.3	4.723	4.723	ng/L	
Hg2600-3	00	CAL	SEQ-CVBE	1	10/1/2020 22:04:22	4594-1.RAW	10:04:22 PM	52.67			0.3	0.002	0.002	ng/L	

TotalMercury
EPA1631

Operat: EMB BlankSI 52.376 Callb Eqn: Conc = (Area-52.37 Run Date: 10/1/2020 Blank SD: 4.533749893
Worksh THg2600 CalibFa 152.71 Status: QC Warnings:11/QC Run Time: 9:51:46 Blank RSD%: 8.656085529
Method ##### R: 0.9999 R2: 0.9999 CF SD: 4.203938197
Descrip THg26003-201001-1 CF RSD%: 2.752834401

SampleID	Location	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (eif)	Flags	RunCount
Clean				0.00	5.67					4419-1.RAW	9:54:38	866.50	Clean	OK	1
WS				52.38	0.00					4420-1.RAW	9:58:46	38.80	Sample	OK	1
WS				52.38	0.00					4421-1.RAW	10:02:55	37.41	Sample	OK	1
WS				52.38	0.00					4422-1.RAW	10:07:03	33.97	Sample	OK	1
SEQ-IBL1	A1			0.00	0.37					4423-1.RAW	10:11:12	56.71	Sample	OK	1
SEQ-IBL2	A2			0.00	0.35					4424-1.RAW	10:15:21	52.75	Sample	OK	1
SEQ-IBL3	A3			0.00	0.31					4425-1.RAW	10:19:30	47.87	Sample	OK	1
SEQ-CAL1	A4			52.38	0.48			96.98		4426-1.RAW	10:23:38	126.43	Sample	OK	1
SEQ-CAL2	A5			52.38	0.97			97.32		4427-1.RAW	10:27:47	201.00	Sample	OK	1
SEQ-CAL3	A6			52.38	5.06			101.24		4428-1.RAW	10:31:56	825.37	Sample	OK	1
SEQ-CAL4	A7			52.38	20.67			103.35		4429-1.RAW	10:36:05	3209.04	Sample	OK	1
SEQ-CAL5	A8			52.38	40.45			101.11		4430-1.RAW	10:40:14	6228.90	Sample	OK	1
SEQ-ICV1	A9			52.38	5.17			103.41		4431-1.RAW	10:44:24	842.02	Sample	OK	1
SEQ-ICB1	A10			52.38	0.11			0.00		4432-1.RAW	10:48:33	68.90	Sample	OK	1
F009414-BS1	A11		20	52.38	108.72					4433-1.RAW	10:52:42	882.52	Sample	OK	1
F009414-BSD1	A12		20	52.38	104.85					4434-1.RAW	10:56:52	852.96	Sample	OK	1
F009414-BLK1	A13		20	52.38	0.60					4435-1.RAW	11:01:01	56.94	Sample	OK	1
F009414-BLK2	A14		20	52.38	0.00					4436-1.RAW	11:05:10	46.67	Sample	OK	1
F009414-BLK3	A15		20	52.38	0.00					4437-1.RAW	11:09:20	45.94	Sample	OK	1
0100078-12	A16		400	52.38	1147.29					4438-1.RAW	11:13:29	490.39	Sample	OK	1
F009414-MS1	A17		400	52.38	6081.16			529.58		4439-1.RAW	11:17:38	2374.06	Sample	OK	1
F009414-MSD1	A18		400	52.38	6123.64					4440-1.RAW	11:21:47	2390.28	Sample	OK	1
0100078-16	A19		400	52.38	1380.37					4441-1.RAW	11:25:56	579.38	Sample	OK	1
F009414-MS2	A20		400	52.38	7517.57			543.82		4442-1.RAW	11:30:06	2922.45	Sample	OK	1
SEQ-CCV1	A21		1	52.38	5.37			107.39		4443-1.RAW	11:34:15	872.38	Sample	OK	1
SEQ-CCB1	B1		1	52.38	0.15			0.00		4444-1.RAW	11:38:24	75.16	Sample	OK	1
F009414-MSD2	B2		400	52.38	6122.58					4445-1.RAW	11:42:34	2389.87	Sample	OK	1
0100078-24	B3		400	52.38	762.39					4446-1.RAW	11:46:43	343.44	Sample	OK	1
0100078-25	B4		400	52.38	422.53					4447-1.RAW	11:50:53	213.69	Sample	OK	1
0100078-26	B5		400	52.38	326.46					4448-1.RAW	11:55:02	177.01	Sample	OK	1
0100078-27	B6		400	52.38	351.17					4449-1.RAW	11:59:11	186.45	Sample	OK	1
0100078-28	B7		400	52.38	616.92					4450-1.RAW	12:03:20	287.91	Sample	OK	1
0100078-29	B8		400	52.38	620.76					4451-1.RAW	12:07:30	289.37	Sample	OK	1
0100078-30	B9		400	52.38	534.71					4452-1.RAW	12:11:40	256.52	Sample	OK	1
0100078-32	B10		400	52.38	912.67					4453-1.RAW	12:15:49	400.82	Sample	OK	1
0100078-33	B11		400	52.38	920.99					4454-1.RAW	12:19:59	403.99	Sample	OK	1
SEQ-CCV2	B12		1	52.38	5.54			110.81		4455-1.RAW	12:24:08	898.50	Sample	OK	1
SEQ-CCB2	B13		1	52.38	0.07			0.00		4456-1.RAW	12:28:17	63.78	Sample	OK	1
0100078-34	B14		400	52.38	1172.10					4457-1.RAW	12:32:27	499.86	Sample	OK	1
0100078-35	B15		400	52.38	967.25					4458-1.RAW	12:36:36	421.65	Sample	OK	1
0100078-36	B16		400	52.38	3010.44					4459-1.RAW	12:40:46	1201.71	Sample	OK	1
0100078-37	B17		400	52.38	2071.60					4460-1.RAW	12:44:56	843.28	Sample	OK	1
0100078-38	B18		400	52.38	1235.14					4461-1.RAW	12:49:05	523.93	Sample	OK	1
0100078-39	B19		400	52.38	2119.59					4462-1.RAW	12:53:15	861.60	Sample	OK	1
0100078-40	B20		400	52.38	871.48					4463-1.RAW	12:57:24	385.09	Sample	OK	1
0100078-41	B21		400	52.38	1218.06					4464-1.RAW	13:01:34	517.41	Sample	OK	1
0100078-42	C1		400	52.38	1349.69					4465-1.RAW	13:05:43	567.66	Sample	OK	1
SEQ-CCV3	C2		1	52.38	5.53			110.56		4466-1.RAW	13:09:53	896.59	Sample	OK	1
SEQ-CCB3	C3		1	52.38	0.10			0.00		4467-1.RAW	13:14:03	67.64	Sample	OK	1
F010331-BS1	C4		1	52.38	4.81					4468-1.RAW	13:18:12	786.66	Sample	OK	1
F010331-BSD1	C5		1	52.38	4.74					4469-1.RAW	13:22:22	776.95	Sample	OK	1
F010331-BLK1	C6		1	52.38	0.03					4470-1.RAW	13:26:32	56.37	Sample	OK	1
F010331-BLK2	C7		1	52.38	0.00					4471-1.RAW	13:30:41	47.57	Sample	OK	1
F010331-BLK3	C8		1	52.38	0.01					4472-1.RAW	13:34:51	53.72	Sample	OK	1
F010331-BLK4	C9		1	52.38	0.00					4473-1.RAW	13:39:00	38.92	Sample	OK	1
F010331-BLK5	C10		1	52.38	0.11					4474-1.RAW	13:43:10	68.68	Sample	OK	1
0100105-06	C11		1	52.38	0.00					4475-1.RAW	13:47:20	46.25	Sample	OK	1
F010331-MS1	C12		1	52.38	5.14			513.88		4476-1.RAW	13:51:30	837.14	Sample	OK	1
F010331-MSD1	C13		1	52.38	5.36					4477-1.RAW	13:55:39	871.00	Sample	OK	1
SEQ-CCV4	C14		1	52.38	5.28			105.54		4478-1.RAW	13:59:49	858.26	Sample	OK	1
SEQ-CCB4	C15		1	52.38	0.03			0.00		4479-1.RAW	14:03:59	56.45	Sample	OK	1
0100091-02	C16		1	52.38	0.00					4480-1.RAW	14:08:09	49.22	Sample	OK	1
F010331-MS2	C17		1	52.38	5.24			262.08		4481-1.RAW	14:12:19	852.84	Sample	OK	1
F010331-MSD2	C18		1	52.38	5.38					4482-1.RAW	14:16:28	873.42	Sample	OK	1
0100088-01	C19		1	52.38	3.69					4483-1.RAW	14:20:38	615.57	Sample	OK	1
0100088-02	C20		1	52.38	0.02					4484-1.RAW	14:24:48	54.67	Sample	OK	1
0100088-03	C21		1	52.38	0.13					4485-1.RAW	14:28:58	72.74	Sample	OK	1
0100091-01	A1		10	52.38	11.29					4486-1.RAW	14:33:08	224.75	Sample	OK	1
0100097-01	A2		10	52.38	8.34					4487-1.RAW	14:37:18	179.79	Sample	OK	1
0100097-02	A3		1	52.38	1.03					4488-1.RAW	14:41:28	210.26	Sample	OK	1
0100097-03	A4		1	52.38	2.62					4489-1.RAW	14:45:38	451.84	Sample	OK	1
SEQ-CCV5	A5		1	52.38	5.77			115.44		4490-1.RAW	14:49:48	933.82	Sample	OK	1
SEQ-CCB5	A6		1	52.38	0.05			0.00		4491-1.RAW	14:53:58	60.40	Sample	OK	1
0100097-04	A7		1	52.38	3.24					4492-1.RAW	14:58:08	57.08	Sample	OK	1
0100104-01	A8		1	52.38	0.03					4493-1.RAW	15:02:18	57.08	Sample	OK	1
0100104-02	A9		1	52.38	0.07					4494-1.RAW	15:06:28	63.14	Sample	OK	1
0100104-03	A10		1	52.38	0.29					4495-1.RAW	15:10:38	96.21	Sample	OK	1
0100104-04	A11		1	52.38	0.23					4496-1.RAW	15:14:48	87.88	Sample	OK	1
0100104-05	A12		1	52.38	0.28					4497-1.RAW	15:18:58	95.09	Sample	OK	1
0100105-01	A13		1	52.38	3.26					4498-1.RAW	15:23:08	550.97	Sample	OK	1
0100105-02	A14		1	52.38	0.00					4499-1.RAW	15:27:17	51.49	Sample	OK	1
0100105-03	A15		1	52.38	4.22					4500-1.RAW	15:31:27	696.60	Sample	OK	1
0100105-04	A16		1	52.38	0.00					4501-1.RAW	15:35:37	50.49	Sample	OK	1
SEQ-CCV6	A17		1	52.38	5.13			102.70		4502-1.RAW	15:39:47	836.54	Sample	OK	1
SEQ-CCB6	A18		1	52.38	0.02			0.00		4503-1.RAW	15:43:57	55.19	Sample	OK	1
0100105-05	A19		10	52.38	21.19					4504-1.RAW	15:48:07	375.91	Sample	OK	1
F009384-BS1	A20		20	52.38	86.53					4505-1.RAW	15:52:17	713.11	Sample	OK	1
F009384-BSD1	A21		20	52.38	90.84					4506-1.RAW	15:56:27	745.98	Sample	OK	1
F009384-BLK1	B1		20	52.38	0.50					4507-1.RAW	16:00:37	58.19	Sample	OK	1

SEQ-IBL1	A1 ✓	0100078-35	B15 ✓	0100104-01	A8 ✓	0100047-BQ	C1 ✓
SEQ-IBL2	A2 ✓	0100078-36	B16 ✓	0100104-02	A9 ✓	0100047-BR	C2 ✓
SEQ-IBL3	A3 ✓	0100078-37	B17 ✓	0100104-03	A10 ✓	0100047-BS	C3 ✓
SEQ-CAL1	A4 ✓	0100078-38	B18 ✓	0100104-04	A11 ✓	0100047-BT	C4 ✓
SEQ-CAL2	A5 ✓	0100078-39	B19 ✓	0100104-05	A12 ✓	0100047-BU	C5 ✓
SEQ-CAL3	A6 ✓	0100078-40	B20 ✓	0100105-01	A13 ✓	0100047-BV	C6 ✓
SEQ-CAL4	A7 ✓	0100078-41	B21 ✓	0100105-02	A14 ✓	0100047-BW	C7 ✓
SEQ-CAL5	A8 ✓	0100078-42	C1 ✓	0100105-03	A15 ✓	0100047-BX	C8 ✓
SEQ-ICV1	A9 ✓	SEQ-CCV3	C2 ✓	0100105-04	A16 ✓	0100047-BY	C9 ✓
SEQ-ICB1	A10 ✓	SEQ-CCB3	C3 ✓	SEQ-CCV6	A17 ✓	0100047-BZ	C10 ✓
F009414-BS1	A11 ✓	F010331-BS1	C4 ✓	SEQ-CCB6	A18 ✓	SEQ-CCV9	C11 ✓
F009414-BSD1	A12 ✓	F010331-BSD1	C5 ✓	0100105-05	A19 ✓	SEQ-CCB9	C12 ✓
F009414-BLK1	A13 ✓	F010331-BLK1	C6 ✓	F009384-BS1	A20 ✓	F010332-BS1	C13 ✓
F009414-BLK2	A14 ✓	F010331-BLK2	C7 ✓	F009384-BSD1	A21 ✓	F010332-BSD1	C14 ✓
F009414-BLK3	A15 ✓	F010331-BLK3	C8 ✓	F009384-BLK1	B1 ✓	F010332-BLK1	C15 ✓
0100078-12	A16 ✓	F010331-BLK4	C9 ✓	F009384-BLK2	B2 ✓	F010332-BLK2	C16 ✓
F009414-MS1	A17 ✓	F010331-BLK5	C10 ✓	F009384-BLK3	B3 ✓	F010332-BLK3	C17 ✓
F009414-MSD1	A18 ✓	0100105-06	C11 ✓	0100047-65	B4 ✓	0100104-09	C18 ✓
0100078-16	A19 ✓	F010331-MS1	C12 ✓	F009384-MS1	B5 ✓	F010332-MS1	C19 ✓
F009414-MS2	A20 ✓	F010331-MSD1	C13 ✓	F009384-MSD1	B6 ✓	F010332-MSD1	C20 ✓
SEQ-CCV1	A21 ✓	SEQ-CCV4	C14 ✓	0100047-91	B7 ✓	0100104-06	C21 ✓
SEQ-CCB1	B1 ✓	SEQ-CCB4	C15 ✓	SEQ-CCV7	B8 ✓	0100104-07	A1
F009414-MSD2	B2 ✓	0100091-02	C16 ✓	SEQ-CCB7	B9 ✓	SEQ-CCVA	A2
0100078-24	B3 ✓	F010331-MS2	C17 ✓	F009384-MS2	B10 ✓	SEQ-CCBA	A3
0100078-25	B4 ✓	F010331-MSD2	C18 ✓	F009384-MSD2	B11 ✓	0100104-08	A4
0100078-26	B5 ✓	0100088-01	C19 ✓	0100047-BI	B12 ✓	0100104-10	A5
0100078-27	B6 ✓	0100088-02	C20 ✓	0100047-BJ	B13 ✓	0100104-11	A6
0100078-28	B7 ✓	0100088-03	C21 ✓	0100047-BK	B14 ✓	0100104-12	A7
0100078-29	B8 ✓	0100091-01	A1 ✓	0100047-BL	B15 ✓	SEQ-LCV1	A8
0100078-30	B9 ✓	0100097-01	A2 ✓	0100047-BM	B16 ✓	SEQ-LCV2	A9
0100078-32	B10 ✓	0100097-02	A3 ✓	0100047-BN	B17 ✓	SEQ-CCVB	A10
0100078-33	B11 ✓	0100097-03	A4 ✓	0100047-BO	B18 ✓	SEQ-CCBB	A11
SEQ-CCV2	B12 ✓	SEQ-CCV5	A5 ✓	0100047-BP	B19 ✓	F009415-BS1	A12
SEQ-CCB2	B13 ✓	SEQ-CCB5	A6 ✓	SEQ-CCV8	B20 ✓	F009415-BSD1	A13
0100078-34	B14 ✓	0100097-04	A7 ✓	SEQ-CCB8	B21 ✓	F009415-BLK1	A14

A1-C21

ver by ver 10.2-2020

second A1-C21 ver. by ZCH 10/2/2020

third A1-C4 ver. by MFS 10/2/2020

F009415-BLK2	A15
F009415-BLK3	A16
F009415-BLK4	A17
0100078-18	A18
F009415-MS1	A19
-----	-----
F009415-MSD1	A20
0100078-31	A21
SEQ-CCVC	B1
SEQ-CCBC	B2
F009415-MS2	B3
-----	-----
F009415-MSD2	B4
0100078-43	B5
0100078-44	B6
0100078-45	B7
0100078-46	B8
0100078-47	B9
0100078-48	B10
0100078-49	B11
0100078-50	B12
SEQ-CCVD	B13
SEQ-CCBD	B14
0100078-51	B15
0100078-52	B16
0100078-53	B17
0100078-54	B18
0100078-55	B19
0100078-56	B20
0100078-57	B21
0100078-58	C1
0100078-59	C2
SEQ-CCVE	C3
SEQ-CCBE	C4

ANALYSIS SEQUENCE

0J05014

Analyzed w/
0J05013
MFS 10/5/20

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/2/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J05014-IBL1	QC	1			
0J05014-IBL2	QC	2			
0J05014-IBL3	QC	3			
0J05014-CAL1	QC	4	2002064		
0J05014-CAL2	QC	5	2002065		
0J05014-CAL3	QC	6	2002220		
0J05014-CAL4	QC	7	2002221		
0J05014-CAL5	QC	8	2002222		
0J05014-ICV1	QC	9	2001809		
0J05014-ICB1	QC	10			
0J05014-CCV1	QC	11	2001809		
0J05014-CCB1	QC	12			
0J05014-CCV2	QC	13	2001809		
0J05014-CCB2	QC	14			
0J05014-CCV3	QC	15	2001809		
0J05014-CCB3	QC	16			
F009413-BS1	QC	17			
F009413-BSD1	QC	18			
F009413-BLK1	QC	19			
F009413-BLK2	QC	20			
F009413-BLK3	QC	21			
F009413-BLK4	QC	22			
F009413-BLK5	QC	23			
F009413-BLK6	QC	24			
0I00078-04	Hg-CVAFS-T-7030	25			
F009413-MS1	QC	26			
0J05014-CCV4	QC	27	2001809		
0J05014-CCB4	QC	28			
F009413-MSD1	QC	29			
0I00078-06	Hg-CVAFS-T-7030	30			
F009413-MS2	QC	31			
F009413-MSD2	QC	32			
0I00078-01	Hg-CVAFS-T-7030	33			
0I00078-02	Hg-CVAFS-T-7030	34			
0I00078-03	Hg-CVAFS-T-7030	35			
0I00078-05	Hg-CVAFS-T-7030	36			

QUALITY ASSURANCE
PEER REVIEWED
INITIALS: PES

ANALYSIS SEQUENCE

0J05014

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/2/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00078-07	Hg-CVAFS-T-7030	37			
0I00078-08	Hg-CVAFS-T-7030	38			
0J05014-CCV5	QC	39	2001809		
0J05014-CCB5	QC	40			
0I00078-09	Hg-CVAFS-T-7030	41			
0I00078-10	Hg-CVAFS-T-7030	42			
0I00078-11	Hg-CVAFS-T-7030	43			
0I00078-13	Hg-CVAFS-T-7030	44			
0I00078-14	Hg-CVAFS-T-7030	45			
0I00078-15	Hg-CVAFS-T-7030	46			
0I00078-17	Hg-CVAFS-T-7030	47			
0I00078-19	Hg-CVAFS-T-7030	48			
0I00078-20	Hg-CVAFS-T-7030	49			
0I00078-21	Hg-CVAFS-T-7030	50			
0J05014-CCV6	QC	51	2001809		
0J05014-CCB6	QC	52			
0I00078-22	Hg-CVAFS-T-7030	53			
0I00078-23	Hg-CVAFS-T-7030	54			
F009385-BS1	QC	55			
F009385-BSD1	QC	56			
F009385-BLK1	QC	57			
F009385-BLK2	QC	58			
F009385-BLK3	QC	59			
0I00047-12	Hg-CVAFS-T-7030	60			
F009385-MS1	QC	61			
F009385-MSD1	QC	62			
0J05014-CCV7	QC	63	2001809		
0J05014-CCB7	QC	64			
0I00033-01RE1	Hg-CVAFS-T-7030	65			Re-digest in 40mL Vial (FV=20mL) due to mass lost during digest - MFS 9/22/2020
0I00033-02RE1	Hg-CVAFS-T-7030	66			Re-digest in 40mL Vial (FV=20mL) due to mass lost during digest - MFS 9/22/2020
0I00033-03RE1	Hg-CVAFS-T-7030	67			Re-digest in 40mL Vial (FV=20mL) due to mass lost during digest - MFS 9/22/2020
0I00033-04RE1	Hg-CVAFS-T-7030	68			Re-digest in 40mL Vial (FV=20mL) due to mass lost during digest - MFS 9/22/2020
0I00047-CA	Hg-CVAFS-T-7030	69			
0I00047-CB	Hg-CVAFS-T-7030	70			
0I00047-CC	Hg-CVAFS-T-7030	71			

ANALYSIS SEQUENCE

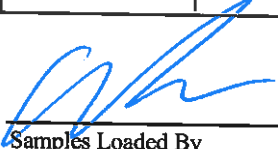
0J05014

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/2/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00047-CD	Hg-CVAFS-T-7030	72			
0I00047-CE	Hg-CVAFS-T-7030	73			
0J05014-CCV8	QC	74	2001809		
0J05014-CCB8	QC	75			
F009384-MSD3	QC	76			
0I00047-65RE1	Hg-CVAFS-T-7030	77			Added 10/2/2020 by EMB
F009384-MS3	QC	78			
0J05014-CCV9	QC	79	2001809		
0J05014-CCB9	QC	80			

 _____
 Samples Loaded By 10/5/20
Date

 _____
 Data Processed By 10/5/20
Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	EMB/ MFS(DATA ENTRY)	Sequence(s) #:	0J05014
Reviewer:		Dataset ID(s):	THg26003-201002-1
Date:	10/5/2020	WO (s) #:	Multiple
Batch #(s):	F009413, F009385, F009384		

• Select the correct preparation method.

Analyte	Prep Method	Matrix	
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest	Air/Gas
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia	Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest	Sed/Soil
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb	Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest	Tissue
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation	Air/Gas
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric	Tissue
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation	Water
<input type="checkbox"/> Hg ⁰	NA	NA	Water
<input type="checkbox"/> Inorg Hg	NA	NA	Water

Analyst Initials: MFS Reviewer Initials: PGS

1. Compare Sample ID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) YES NO
2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data YES NO
 - (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description? YES NO
 Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1
 - (b) Check 5% of transcription from Instrument print-out and Excel file YES NO
 Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel
 - (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). YES NO N/A
 - (d) Check and compare masses (review prep benchsheet) YES NO N/A
 - (e) Check & compare initial & final volumes YES NO N/A
 - (f) Do aliquots and dilutions written on benchsheet match those in Excel? YES NO N/A
 50 ml / aliquot = Excel dilution value
 - (g) Is the sequence #, analyst, date, and instrument # on the QC page? YES NO
 - (h) Is the analysis status correct? (analyzed/initial review/reviewed) YES NO
 - (i) Original prep bench sheet added to data package? YES NO
 - (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) YES NO
3. High QA? WO#(s)/Client(s): _____ YES NO
4. Client specific QC? (if Yes, refer to Project Notes/LIMS) YES NO
 - (a) Have the QC requirements been met for all WO#s? YES NO
 - (b) Prep blanks corrections/assigned property YES NO
- 5a. 20 or fewer samples in batch? YES NO
 - (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? YES NO
 - (ii) 1 CCV and 1 CCB every 10 analytical runs? YES NO

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	EMB/ MFS(DATA ENTRY)	Sequence(s) #:	0J05014
Reviewer:		Dataset ID(s):	THg26003-201002-1
Date:	10/5/2020	WO (s) #:	Multiple
Batch #(s):	F009413, F009385, F009384		

Analyst Initials MFS Reviewer Initials PFS

- 5b. Has the B/C section data been uploaded? YES NO N/A
- QA/QC Data Checked**
6. RSD CF (≤ 15%) PASS FAIL
 Comments: _____
7. The calibration curve included a minimum of 5 Standards YES NO
 Comments: _____
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) PASS FAIL
9. ICV and CCV % Recoveries EPA 1631E (77-123%) PASS FAIL
 Comments: _____
10. Do all calibration points pass acceptance criteria? YES NO
 Comments: _____
11. Are qualifiers consistent with the data review flowcharts? YES NO N/A
 Comments: _____
12. Explain any items on the failed data report from Element
 Comments: _____
13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) PASS FAIL
 (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit:
 (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? YES NO
 (c) Was a BrCl Blank analyzed for each preservation level? YES NO N/A
 (d) Are Preparation Blanks summarized on QC page? YES NO
14. Filtration Blank Prepared (if yes, use FB qualifier) YES NO
 (a) Filtration Blank prep date same as associated samples' prep date YES NO N/A
 (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI YES NO N/A
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? PASS FAIL
 Comments: _____
16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? PASS FAIL
 Comments: _____
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) YES NO N/A
18. Is the correct 'Source' designated for MD/MS/MSD? YES NO
19. For digested preps: was there a spike witness signature & date on the prep bench sheet? YES NO N/A

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: EMB/ MFS(DATA ENTRY)	Sequence(s) #: 0J05014
Reviewer:	Dataset ID(s): THg26003-201002-1
Date: 10/5/2020	WO (s) #: Multiple
Batch #(s): F009413, F009385, F009384	

Analyst Initials MFS **Reviewer Initials** PGS

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? YES NO
- Comments: _____
21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
- Comments: _____
22. Are the samples run at the correct dilution level for the method? YES NO
- Comments: _____
23. Dissolved < Total (if applicable) YES NO N/A
- Comments: _____
24. Effluent < Influent (visually confirm if needed) YES NO N/A
- Comments: _____
25. Are re-runs noted with reason? YES NO N/A
- Comments: _____
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
- Comments: _____
27. Is the B trap <5% A Traps YES NO N/A
- Comments: _____
28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
- Comments: _____
29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
- Comments: _____
30. Have re-extracts been created for non-reportable samples? YES NO N/A
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
32. Does the data set need scanning? YES N/A
33. Does the dataset have an LOQ/LOQ or DOC? YES N/A
34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
35. Water samples-is the final volume correct in the sequence? YES NO N/A
- Files located at:** \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs
36. Date of analyst IDOC/CDOC: 11/30/20 IDOC/CDOC within last 12 months? YES NO
37. Date of analyst's SOP reading for method: 12/25/29 Current SOP revision read? YES NO
38. Date of LOD: 12/29/19 LOD within last 3 months? YES NO
39. Date of LOQ: 12/29/19 LOQ within last 3 months? YES NO

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0J05014

Sample ID Analysis Result MRL Dup Source True Units % Rec. Rec. Rec. RPD RPD Over Cal Failure Qualifier

3.7
Analyst Reviewed By _____ Date 10/5/7e

Peer Reviewed By _____ Date _____

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep) 9/30/2020
Upload/Date: MGS (Data Entry) 10/2/2020

Samples to lab: NA
Reviewer/Date: MFS 10/5/20

Batch #: F009413

- EFGS Preparation Method**
- SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS
 - SOP2837 Tissue Nitric Digestion ICPMS CVAFS
 - SOP2840 Modified Aqua Regia
 - SOP2820 RP
 - SOP2821 HF Bomb Digestion ICPMS CVAFS
 - SOP2828 Nitric Bomb Digestion ICPMS CVAFS
 - SOP2993 Oven Digestion (As, Se Speciation)
 - SOP314 Nitric Bomb Digestion (Pharmaceuticals)
 - SOP5145 Microwave Digestion (3051)
- NA Other: EAFS, ICPMS, SOP2795, Tissues - THg 70:30 Hot plate

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

- | | | | Reviewer Initials | Tertiary Review |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------|--------------------------|
| 1. Is any SOP/DOC expiring within one week of Submission Date?
Data cannot be reported without a current IDOC/CDOC. | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <u>MFS</u> | <input type="checkbox"/> |
| If YES, notify supervisor and technician immediately. | | | | |
| 2. Check prep method | | | | |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS | <input type="checkbox"/> 70:30 <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Check for transcription errors from benchsheet | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (b) Check and compare mass | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (e) For re-digests, have e-mails been attached and verified? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5. Samples per Batch? Check QC Requirements | <input checked="" type="checkbox"/> < 20 | <input type="checkbox"/> ≤ 10 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (a) PBs per batch? | <input checked="" type="checkbox"/> 3 PBs | <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (b) Are pre and post homogenization blanks in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (c) BS, BS/BSD or CRM in batch? | <input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSD <input type="checkbox"/> CRM | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (d) MS/MSD in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (e) MD in batch? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (f) Is there at least one duplicate QC source in batch? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (g) Are there any client specific requests, QC requests, etc? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Document: <u>see benchsheet</u> | <input type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (i) Correct 'source' designated for MD/MS/MSD? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6. Special prep requirements? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (c) Spikes added: | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : NA

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
THg-BS	2002032	20			
THg-MS	2001204	100			

PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using:** Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion **Prepared:** 9/30/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009413-BLK1	Blank	0.25	20					
F009413-BLK2	Blank	0.25	20					
F009413-BLK3	Blank	0.25	20					
F009413-BLK4	Pre-homogenization blank 092320	0.2508	20					WO 0100078-60
F009413-BLK5	Post-homogenization blank 092320	0.2579	20					WO 0100078-61
F009413-BLK6	Post-homogenization Blank 092420	0.2851	20					WO 0100078-62
F009413-BS1	LCS	0.25	20	2002032	20			
F009413-BSD1	LCS Dup	0.25	20	2002032	20			
F009413-MS1	Matrix Spike [0100078-04]	0.2678	20	2001204	100			
F009413-MS2	Matrix Spike [0100078-06]	0.1376	10	2001204	100			
F009413-MSD1	Matrix Spike Dup [0100078-04]	0.2594	20	2001204	100			
F009413-MSD2	Matrix Spike Dup [0100078-06]	0.1383	10	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002304	5% BrCl	30-Mar-21 00:00
			2002305		07-Feb-21 00:00

PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/30/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-01	ES-FP_20ET711_091020_01_TOM_WB	0.259	20	-	-	S&R		
0100078-02	ES-FP_20ET717_091020_02_TOM_WB	0.2607	20	-	-	S&R		
0100078-03	ES-FP_20ET741_091520_03_TOM_WB	0.2656	20	-	-	S&R		
0100078-04	ES-FP_20ET755_091520_04_TOM_WB	0.2548	20	QC	-	S&R	MS/MSD	
0100078-05	ES-FP_20ET756_091520_05_TOM_WB	0.2691	20	-	-	S&R		
0100078-06	ES-FP_20SN001_091120_01_RAS_WB	0.1294	10	QC	-	S&R	MS/MSD	
0100078-07	ES-FP_20SN001_091120_02_RAS_WB	0.2573	20	-	-	S&R		
0100078-08	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R		
0100078-09	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R		
0100078-10	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R		
0100078-11	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R		
0100078-13	ES-02_20ET909_091620_01_TOM_WB	0.2629	20	-	-	S&R		
0100078-14	ES-02_20ET924_091820_02_TOM_WB	0.2576	20	-	-	S&R		
0100078-15	ES-02_20ET934_091820_03_TOM_WB	0.2553	20	-	-	S&R		
0100078-17	ES-02_20ET941_091820_05_TOM_WB	0.2643	20	-	-	S&R		
0100078-19	FRB-01_20LT620_091720_02_LOB_TA	0.2539	20	-	-	S&R		
0100078-20	FRB-01_20LT621_092020_03_LOB_TA	0.2634	20	-	-	S&R		
0100078-21	FRB-01_20LT627_092020_04_LOB_TA	0.258	20	-	-	S&R		
0100078-22	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R		

PREPARATION BENCH SHEET

F009413

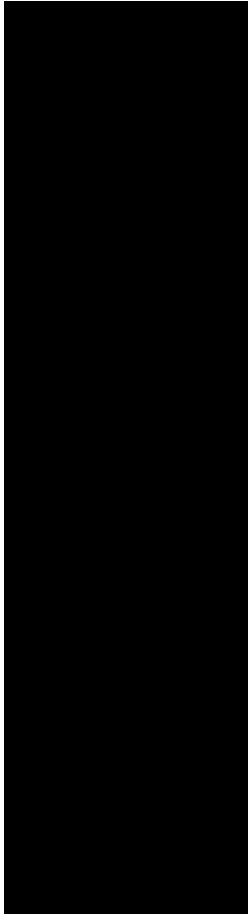
Eurofins Frontier Global Sciences, LLC

Prepared: 9/30/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

0100078-23	OL-01_20ET866_091820_02_TOM_WB	0.2302	20	-	-	S&R	
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Technician: WJ Batch#: F009413 Date: 9-24-2020

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: NA
 Balance#: 23 Calibrated? Yes No
 *Time in: 144 Actual Temp. (raw): 17.9 °C w/ CF: 17.3 °C *Time in can't begin before target temperature is reached
 Time out: 1443 Actual Temp. (raw): 17.4 °C w/ CF: 17.4 °C

Final vol.: 20 mL (LIMS ID: 20020370) BS Spike vol.: 20 µL (LIMS ID: 20020370)
 Spike Witness: ZKH 9/30/2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 20012020)

HCl LIMS ID: N/A Pipette SN#: 0001853 Calibration Date: 9/29/20
 HNO₃ LIMS ID: N/A Pipette SN#: P03325 Calibration Date: 9/28/20
 70/30 LIMS ID: 20020304 (2002304*) Dispenser #: 19281607 Calibrated? Yes No
 Other Acid LIMS ID: 2002304 (SA Brc) Dispenser #: 19287245
 Glass Vial # 00017092 Boiling Chip lot # 2002050 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	CRM LIMS ID
1	204343880 F009413-B1K1	A	0.2703	19	0100078-10	C	0.2548	<input checked="" type="checkbox"/> NA
2	F009413-B1K2	A	0.2683	20	0100078-11	C	0.2568	
3	F009413-B1K3	B	0.2922	21	0100078-13	C	0.2679	
4	F009413-B51	B	0.2620	22	0100078-14	C	0.2576	
5	F009413-B501	B	0.2763	23	0100078-15	C	0.2553	A 15 weighed 9.24.2020
6	0100078-04(SRC1)	C	0.2548	24	0100078-17	C	0.2643	
7	F009413-MS1	C	0.2678	25	0100078-19	C	0.2539	9-11: Limited Volume
8	F009413-MSD1	C	0.2594	26	0100078-20	C	0.2634	F009413-B1K4 10/20/2020
9	0100078-06(SRC2)	C	0.1794	27	0100078-21	C	0.2580	F009413-B1K5: 0100078-61
10	F009413-MS2	C	0.1376	28	0100078-22	C	0.2650	F009413-B1K6: 0100078-62
11	F009413-MSD2	C	0.1393	29	0100078-23	C	0.2502	F009413-B1K7: 0100078-62
12	0100078-01	C	0.2590	30	F009413-B1K4	A	0.2508	08 brought to F.U. = 10m
13	0100078-02	C	0.2607	31	F009413-B1K5	A	0.2577	* vials 15-32 10/2/2020
14	0100078-03	C	0.2656	32	F009413-B1K6	A	0.2551	
15	0100078-05	C	0.2691	33				
16	0100078-07	C	0.2573	34				
17	0100078-08	C	0.2536	35				
18	0100078-09	C	0.2556	36				

Verified By: ZKH 9/1/2020
 *Hotblock diagram located in back of logbook
 Page 16 of 59

Technician: USA Batch #: F009413 Date: 9-26-2020

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: NA
 Balance #: 23 Vial Type: Glass Teflon
 *Time in: _____ Calibrated? Yes No
 Time out: _____ Actual Temp. (raw): _____ °C w/ CF: _____ °C *Time in can't begin before target temperature is reached
 _____ Actual Temp. (raw): _____ °C w/ CF: _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)
 HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibration Date: _____
 Other Acid LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Glass Vial # _____ Boiling Chip lot # _____ *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input type="checkbox"/> NA
1	0100078-09	A	0.2703	19	0100078-10	C	0.2548	
2	F009413-BIK2	A	0.2683	20	0100078-11	C	0.2568	
3	F009413-BIK3	B	0.2922	21	0100078-13	C	0.2679	
4	F009413-BS1	B	0.2620	22	0100078-14	C	0.2576	
5	F009413-BS01	B	0.2763	23	0100078-15	C	0.2553	A 15 weighed 9.24.2020
6	0100078-04 (SRC1)	C	0.2548	24	0100078-17	C	0.2643	
7	F009413-MS1	C	0.2678	25	0100078-19	C	0.2539	9-11: Limited Volume
8	F009413-MSD1	C	0.2594	26	0100078-20	C	0.2634	
9	0100078-06 (SRC2)	C	0.1794	27	0100078-21	C	0.2580	F009413-BIK4 05/20/20
10	F009413-MS2	C	0.1376	28	0100078-22	C	0.2650	F009413-BIK5 05/20/20
11	F009413-MSD2	C	0.1383	29	0100078-23	C	0.2502	F009413-BIK6 05/20/20
12	0100078-01	C	0.2590	30	F009413-BIK4	A	0.2508	
13	0100078-02	C	0.2607	31	F009413-BIK5	A	0.2579	
14	0100078-03	C	0.2656	32	F009413-BIK6	A	0.2551	
15	0100078-05	C	0.2691	33				
16	0100078-07	C	0.2573	34				
17	0100078-08	C	0.2536	35				
18	0100078-09	C	0.2556	36				

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep)
Upload/Date: MGS (Data Entry)

9/28/2020
10/2/2020

Samples to lab: NA
Reviewer/Date: MFS 10/5/20

Batch #: F009385

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (Nutraceuticals)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA - Other	EPA 821-R-03-005 SOP 2705 Tissues - THg 70:30 plate	

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analyses: THg

- Is any SOP/DOC expiring within one week of Submission Date? YES NO Tertiary Review
Data cannot be reported without a current IDOC/CDOC. If YES, notify supervisor and technician immediately.
- Check prep method ICPMS CV-AFS 70:30 N/A YES NO Tertiary Review
(a) For Ceuticals: Is correct Hg code being used in LIMS? ICPMS CV-AFS 70:30 N/A YES NO Tertiary Review
- Compare sample ID & container ID with benchsheet & in LIMS YES NO Tertiary Review
- Check for transcription errors from benchsheet YES NO Tertiary Review
(a) Check and compare initial and final volumes YES N/A YES NO Tertiary Review
(b) Check and compare mass YES N/A YES NO Tertiary Review
(c) Has the number of pills been documented (Special Info 5 in benchsheet)? YES N/A YES NO Tertiary Review
(d) Have assay logbook copies been attached & avg masses entered? YES N/A YES NO Tertiary Review
(e) For re-digests, have e-mails been attached and verified? YES N/A YES NO Tertiary Review
(f) Benchsheet prep date MUST match actual prep date YES N/A YES NO Tertiary Review
- Samples per Batch? Check QC Requirements ≤ 20 ≤ 10 Tertiary Review
(a) PBs per batch? 3 PBs 2 PBs 1 PBs N/A YES NO Tertiary Review
(b) Are pre and post homogenization blanks in batch? BS BS/BSD CRM N/A YES NO Tertiary Review
(c) BS, BS/BSD or CRM in batch? BS BS/BSD CRM N/A YES NO Tertiary Review
(d) MS/MSD in batch? YES N/A YES NO Tertiary Review
(e) MD in batch? YES N/A YES NO Tertiary Review
(f) Is there at least one duplicate QC source in batch? YES N/A YES NO Tertiary Review
(g) Are there any client specific requests, QC requests, etc? YES N/A YES NO Tertiary Review
Document: See bench sheet
- Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? YES N/A YES NO Tertiary Review
(i) Correct 'source' designated for MD/MS/MSD? YES N/A YES NO Tertiary Review
(j) For EFGS-filtered samples, was a filtration blank included? YES N/A YES NO Tertiary Review
- Special prep requirements? YES N/A YES NO Tertiary Review
(a) For 1638: Have samples sat for 48 hours after preservation? YES N/A YES NO Tertiary Review
(b) For 200.8: Have samples sat for 16 hours after preservation? YES N/A YES NO Tertiary Review
(c) For DOD have pipettes been calibrated day of prep? YES N/A YES NO Tertiary Review
- Are the samples appropriately spiked? YES N/A YES NO Tertiary Review
(a) Is the spike and amount used appropriate and entered into LIMS? YES N/A YES NO Tertiary Review
(b) For all spiking was there a witness? (Initials must be in logbook) YES N/A YES NO Tertiary Review
(c) Spikes added: YES NO Tertiary Review

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : NA

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
THg-BS	2002032	20			
THg-MS	2001204	100			

PREPARATION BENCH SHEET

F009385

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/28/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009385-BLK1	Blank	0.25	20					
F009385-BLK2	Blank	0.25	20					
F009385-BLK3	Blank	0.25	20					
F009385-BS1	LCS	0.25	20	2002032	20			
F009385-BSD1	LCS Dup	0.25	20	2002032	20			
F009385-MS1	Matrix Spike [0100047-12]	0.2687	20	2001204	100			
F009385-MSD1	Matrix Spike Dup [0100047-12]	0.2584	20	2001204	100			

Standard ID(s):

2001204
2002032

Description:

THg 1,000ng/mL Secondary Spiking Standard
THg 100ng/mL Primary Spiking Standard

Expiration:

05-Nov-20 00:00
05-Nov-20 00:00

Reagent ID(s):

2002050
2002190
2002305

Description:

Boiling Chips for ICPMS
70/30 Digestion Acid
5% BrCl

Expiration:

20-Feb-21 00:00
08-Sep-21 00:00
07-Feb-21 00:00

PREPARATION BENCH SHEET

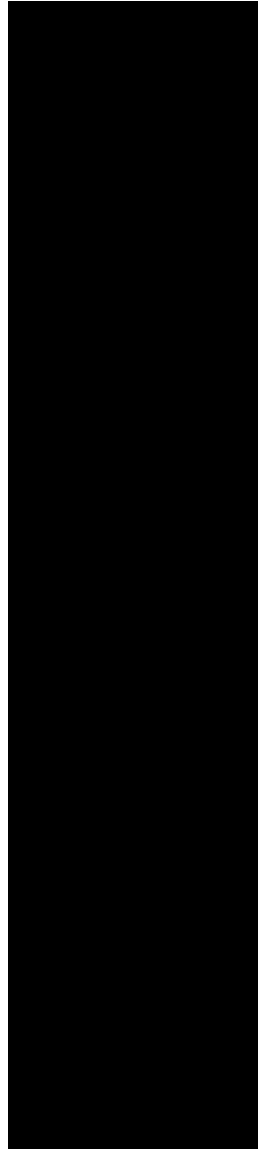
F009385

Eurofins Frontier Global Sciences, LLC

Prepared: 9/28/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100033-01RE1	710-2020-13787001	0.2545	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-02RE1	710-2020-13787002	0.253	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-03RE1	710-2020-13787003	0.2678	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-04RE1	710-2020-13787004	0.2883 0.256 MES 10/15/20	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100047-12	L9-45_20LT009_091020_12_LOB_TA	0.2684	20	-	-	eezer 23		
0100047-CA	0B-01_20ET614_091020_17_TOM_WB	0.2654	20	-	-	S&R		
0100047-CB	0B-01_20ET616_091020_18_TOM_WB	0.253	20	-	-	S&R		
0100047-CC	0B-01_20ET617_091020_19_TOM_WB	0.2599	20	-	-	S&R		
0100047-CD	0B-01_20ET617_091020_20_TOM_WB	0.2568 9+15 0.15.2	20	-	-	S&R		
0100047-CE	HERRING_091020_LOBSTER_BAIT	0.269	20	-	-	fms Cals		



Technician: LEL/MPB Batch #: FO09385 Date: assigned 9/25/20

- EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon
 Balance #: 26 Calibrated? Yes No Therm. #: 10750091 Calibrated? Yes No
 *Time in: 1417 Actual Temp. (raw): 21.8 °C w/ CF: 12.2 °C *Time in can't begin before target temperature is reached
 Time out: 1443 Actual Temp. (raw): 22.0 °C w/ CF: 12.4 °C

Final vol.: 20 mL (LIMS ID: 20012505) BS Spike vol.: 20 µL (LIMS ID: 2000082)
 Spike Witness: ZKH 9/30/2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2002001)

HCl LIMS ID: N/A Pipette SN#: 0201853 Calibration Date: 9-29-20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70:30 LIMS ID: 2002190 Dispenser SN#: 19060007 Calibrated? Yes No
 Other Acid LIMS ID: 2002205 (578001) Dispenser #: 19032245 Calibrated? Yes No
 Glass Vial # 60021092 Boiling Chip lot # 2002050 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size mL	Vial #	Sample ID Number	Container ID	Sample Size mL	CRM LIMS ID
1	FO09385-B1K1	B	0.2543	19				
2	FO09385-B1K2	B	0.2735	20				
3	FO09385-B1K3	B	0.2717	21				
4	FO09385-B51	B	0.2614	22				
5	FO09385-B5D1	B	0.2673	23				
6	0100047-12 (B57/Presol)	C	0.2684	24				
7	FO09385-M51	C	0.2687	25				
8	FO09385-M5D1	C	0.2584	26				
9	0100047-CA	C	0.2654	27				
10	0100047-CB	C	0.2530	28				
11	0100047-CC	C	0.2599	29				
12	0100047-CD	C	0.2690	30				
13	0100047-CE	C	0.2545	31				
14	0100033-01RE1	A	0.2543	32				
15	0100033-02RE1	A	0.2530	33				
16	0100033-03RE1	A	0.2676	34				
17	0100033-04RE1	A	0.2583	35				
18			N/A	36				

Comments:
 1 Digested in 40mL vial, rinsed w/ diluent into same vial
 2 added 0.1492g Boiling chips (BC) to vial
 3 added 0.2289g BC to vial
 4 added 0.1586g BC to vial
 5 added 0.1386g BC to vial
 6 transcribed 9-30-2020
 18 N/A 9-30-2020

Technician: RA/MS Batch #: FO09385 Date: _____

- EFAPS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAPS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAPS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAPS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: _____ Vial Type: Glass Teflon
 Balance #: 25 Calibrated? Yes No Calibrated? Yes No
 *Time in: _____ Actual Temp. (raw): _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ Actual Temp. (raw): _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # _____ Boiling Chip lot # _____ *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size mL/g	Vial #	Sample ID Number	Container ID	Sample Size mL/g	CRM LIMS ID <input type="checkbox"/> NA	Comments
1	FO09385-BIK1	B	0.2543	19					
2	FO09385-BIK2	B	0.2735	20					
3	FO09385-BIK3	B	0.2717	21					
4	FO09385-BS1	B	0.2614	22					
5	FO09385-BSD1	B	0.2673	23					
6	OT00047-12 (MSI/MSD)	C	0.2684	24					① Digested in 40 mL vial. Rinsed with Diluent in to 20 mL vial.
7	FO09385-MS1	C	0.2687	25					② Added 0.1492g Boiling Chips to vial
8	FO09385-MSD1	C	0.2584	26					③ Added 0.2289g Boiling Chips to vial
9	OT00047-CA	C	0.2694	27					④ Added 0.1518g Boiling Chips to vial
10	OT00047-CE	C	0.2530	28					⑤ Added 0.1388g Boiling Chips to vial
11	OT00047-CC	C	0.2599	29					
12	OT00047-CD	C	0.2569	30					
13	OT00047-CE	C	0.2690	31					
14	OT00033-01 RE1	A	0.2545	32					
15	OT00033-02 RE1	A	0.2530	33					
16	OT00033-03 RE1	A	0.2678	34					
17	OT00033-04 RE1	A	0.2583	35					
18				36					

225

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

emb
2000-3
10/11/20

patency

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.5	40					E-01, RR OF MSI @ 400X, EMB 10/2/20
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		
0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R		
0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R		

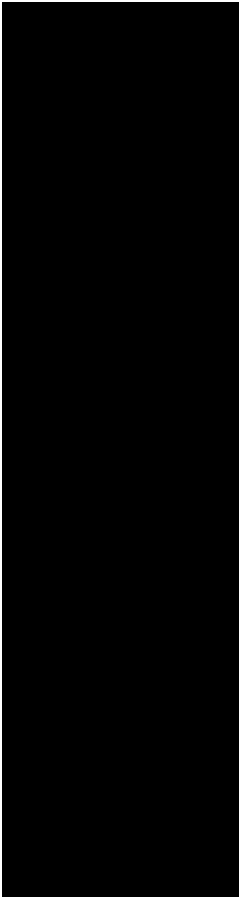
PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R	
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R	



PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Prepared: 9/30/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-01	ES-FP_20ET711_091020_01_TOM_WB	0.259	20	-	-	S&R		
0100078-02	ES-FP_20ET717_091020_02_TOM_WB	0.2607	20	-	-	S&R		
0100078-03	ES-FP_20ET741_091520_03_TOM_WB	0.2656	20	-	-	S&R		
0100078-04	ES-FP_20ET755_091520_04_TOM_WB	0.2548	20	QC	-	S&R	MS/MSD	
0100078-05	ES-FP_20ET756_091520_05_TOM_WB	0.2691	20	-	-	S&R		
0100078-06	ES-FP_20SN001_091120_01_RAS_WB	0.1294	10	QC	-	S&R	MS/MSD	
0100078-07	ES-FP_20SN001_091120_02_RAS_WB	0.2573	20	-	-	S&R		
0100078-08	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R		
0100078-09RE1	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-09	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R		
0100078-09RE1	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-10	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R		
0100078-10RE1	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-11	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R		
0100078-11RE1	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-13	ES-02_20ET909_091620_01_TOM_WB	0.2629	20	-	-	S&R		
078-14	ES-02_20ET924_091820_02_TOM_WB	0.2576	20	-	-	S&R		
078-15	ES-02_20ET934_091820_03_TOM_WB	0.2553	20	-	-	S&R		
078-17	ES-02_20ET941_091820_05_TOM_WB	0.2643	20	-	-	S&R		

PREPARATION BENCH SHEET

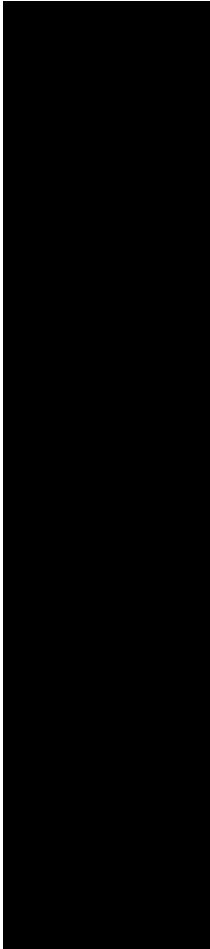
F009413

Eurofins Frontier Global Sciences, LLC

Prepared: 9/30/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

0100078-19	FRB-01_20LT620_091720_02_LOB_TA	0.2539	20	-	-	S&R	
0100078-20	FRB-01_20LT621_092020_03_LOB_TA	0.2634	20	-	-	S&R	
0100078-21	FRB-01_20LT627_092020_04_LOB_TA	0.258	20	-	-	S&R	
0100078-22	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	
0100078-22REF1	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Added 10/5/2020 by MFS Undercurve: RR@20X MFS 10/5/20
0100078-23	OL-01_20ET866_091820_02_TOM_WB	0.2302	20	-	-	S&R	



PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/30/2020**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009413-BLK1	Blank	0.25	20					
F009413-BLK2	Blank	0.25	20					
F009413-BLK3	Blank	0.25	20					
F009413-BLK4	Pre-homogenization blank 092320	0.2508	20					WO 0100078-60
F009413-BLK5	Post-homogenization blank 092320	0.2579	20					WO 0100078-61
F009413-BLK6	Post-homogenization Blank 092420	0.2851	20					WO 0100078-62
F009413-BS1	LCS	0.25	20	2002032	20			
F009413-BSD1	LCS Dup	0.25	20	2002032	20			
F009413-MS1	Matrix Spike [0100078-04]	0.2678	20	2001204	100			
F009413-MS2	Matrix Spike [0100078-06]	0.1376	10	2001204	100			
F009413-MSD1	Matrix Spike Dup [0100078-04]	0.2594	20	2001204	100			
F009413-MSD2	Matrix Spike Dup [0100078-06]	0.1383	10	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002304	70/30 Digestion Acid	30-Mar-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009385

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/28/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009385-BLK1	Blank	0.25	20					
F009385-BLK2	Blank	0.25	20					
F009385-BLK3	Blank	0.25	20					
F009385-BS1	LCS	0.25	20	2002032	20			
F009385-BSD1	LCS Dup	0.25	20	2002032	20			
F009385-MS1	Matrix Spike [0100047-12]	0.2687	20	2001204	100			
F009385-MSD1	Matrix Spike Dup [0100047-12]	0.2584	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009385

Eurofins Frontier Global Sciences, LLC

Prepared: 9/28/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100033-01RE1	710-2020-13787001	0.2545	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-02RE1	710-2020-13787002	0.253	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-03RE1	710-2020-13787003	0.2678	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-04RE1	710-2020-13787004	0.2883	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100047-12	L9-45_20LT009_091020_12_LOB_TA	0.2684	20	-	-	eezer 23		
0100047-CA	0B-01_20ET614_091020_17_TOM_WB	0.2654	20	-	-	S&R		
0100047-CB	0B-01_20ET616_091020_18_TOM_WB	0.253	20	-	-	S&R		
0100047-CC	0B-01_20ET617_091020_19_TOM_WB	0.2599	20	-	-	S&R		
0100047-CD	0B-01_20ET617_091020_20_TOM_WB	0.2568	20	-	-	S&R		
0100047-CE	HERRING_091020_LOBSTER_BAIT	0.269	20	-	-	fins Cals		

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.2643	20					E-01, RR OF MS1 @ 400X. EMB 10/2/20
F009384-MS4	Matrix Spike [0100047-65]RE2	0.2643	20	2001204	100			RR MS1 @ 1000X MFS 10/5/2020
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			
F009384-MSD3	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			Added 10/5/2020 by MFS
F009384-MSD4	Matrix Spike Dup [0100047-65]RE2	0.2606	20	2001204	100			RR MS1 @ 1000X MFS 10/5/2020

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-65RE2	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD RR @ 1000X. EMB 10/2/20	E-01: RR@400X MFS 10/5/20
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		
0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R		

PREPARATION BENCH SHEET

F009384

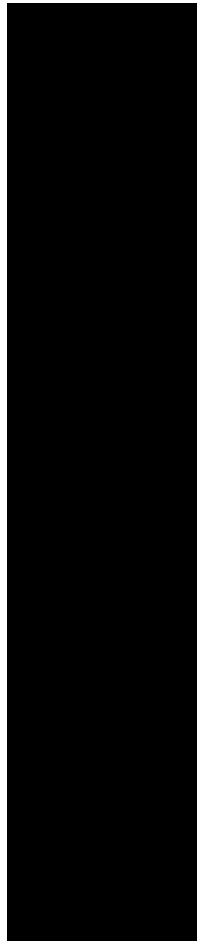
Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R	
0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R	
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R	





Frontier Global Sciences

THg26003-201002-1

Analysis Datasheet for Total Mercury

Date of Analysis: October 02, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 0105013, 0105014

Analyst: **EMZ**
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	222.68 units	445.36	104.37 units	208.74	91.8 %Rec
SEQ-CAL2	1	1.00 ng/L	342.36 units	342.36	224.05 units	224.05	98.6 %Rec
SEQ-CAL3	1	5.00 ng/L	1285.51 units	257.10	1167.20 units	233.44	102.7 %Rec
SEQ-CAL4	1	20.00 ng/L	4722.53 units	236.13	4604.23 units	230.21	101.3 %Rec
SEQ-CAL5	1	40.00 ng/L	9717.01 units	242.93	9598.70 units	239.97	105.6 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 227.28 Corr. St Dev RF +/- 11.85 Corr. RSD CF 5.2% RSD Uncorr. Mean RF 304.77

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-BL	3	118.31 units	±8.91	0.39 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	-0.035 ng/L	±0.121
BLK	2	6	-4.619 ng/L	±0.340
BLK	3	3	-5.481 ng/L	±0.236
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	10/2/2020 10:47:32	4599-1.RAW	10:47:32 AM	127.49			9.2	0.040	0.040	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	10/2/2020 10:51:41	4600-1.RAW	10:51:41 AM	117.74			-0.6	-0.003	-0.003	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	10/2/2020 10:55:49	4601-1.RAW	10:55:49 AM	109.70			-8.6	-0.038	-0.038	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	10/2/2020 10:59:58	4602-1.RAW	10:59:58 AM	222.68			224.1	0.986	0.986	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	10/2/2020 11:04:06	4603-1.RAW	11:04:06 AM	342.36			224.1	0.986	0.986	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	10/2/2020 11:08:15	4604-1.RAW	11:08:15 AM	1285.51			1167.2	5.135	5.135	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	10/2/2020 11:12:24	4605-1.RAW	11:12:24 AM	4722.53			4604.2	20.258	20.258	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	10/2/2020 11:16:33	4606-1.RAW	11:16:33 AM	9717.01			9598.7	42.232	42.232	ng/L	
Hg2600-3	00	CAL	SEQ-ICV1	1	10/2/2020 11:20:43	4607-1.RAW	11:20:43 AM	1395.71			2.7	5.620	5.620	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	10/2/2020 11:24:52	4608-1.RAW	11:24:52 AM	120.99			0.012	0.012	0.012	ng/L	F010333
Hg2600-3	00	SAM	F010333-BS1	1	10/2/2020 11:29:02	4609-1.RAW	11:29:02 AM	1256.90			5.044	5.044	5.044	ng/L	F010333
Hg2600-3	00	SAM	F010333-BSD1	1	10/2/2020 11:33:11	4610-1.RAW	11:33:11 AM	1265.88			5.084	5.084	5.084	ng/L	F010333
Hg2600-3	00	BLK	F010333-BLK1	1	10/2/2020 11:37:20	4611-1.RAW	11:37:20 AM	120.68			2.4	0.010	0.010	ng/L	F010333
Hg2600-3	00	BLK	F010333-BLK2	1	10/2/2020 11:41:30	4612-1.RAW	11:41:30 AM	79.38			0.057	0.057	0.057	ng/L	F010333
Hg2600-3	00	BLK	F010333-BLK3	1	10/2/2020 11:45:39	4613-1.RAW	11:45:39 AM	79.38			-38.9	-0.171	-0.171	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS1	1	10/2/2020 11:49:48	4614-1.RAW	11:49:48 AM	95.50			-22.8	-0.066	-0.066	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 11:53:58	4615-1.RAW	11:53:58 AM	1273.35			5.117	5.117	5.117	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD1	1	10/2/2020 11:58:07	4616-1.RAW	11:58:07 AM	1328.82			1210.5	5.361	5.361	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:02:16	4617-1.RAW	12:02:16 PM	440.42			322.1	1.452	1.452	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 12:06:25	4618-1.RAW	12:06:25 PM	1610.58			6.600	6.600	6.600	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCV1	1	10/2/2020 12:10:35	4619-1.RAW	12:10:35 PM	1389.58			1271.3	5.593	5.593	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCB1	1	10/2/2020 12:14:44	4620-1.RAW	12:14:44 PM	85.26			-33.0	-0.145	-0.145	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD1	1	10/2/2020 12:18:53	4621-1.RAW	12:18:53 PM	1578.77			7316.4	32.225	32.225	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:23:02	4622-1.RAW	12:23:02 PM	7494.67			4655.2	20.516	20.516	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD1	1	10/2/2020 12:27:11	4623-1.RAW	12:27:11 PM	4773.48			0.042	0.042	0.042	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:31:20	4624-1.RAW	12:31:20 PM	120.11			1.8	0.037	0.037	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS1	1	10/2/2020 12:35:30	4625-1.RAW	12:35:30 PM	118.87			0.6	0.037	0.037	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 12:39:39	4626-1.RAW	12:39:39 PM	116.75			-1.6	0.028	0.028	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS1	1	10/2/2020 12:43:48	4627-1.RAW	12:43:48 PM	103.75			-14.6	-0.030	-0.030	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 12:47:57	4628-1.RAW	12:47:57 PM	82.08			-36.2	-0.125	-0.125	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS1	1	10/2/2020 12:52:07	4629-1.RAW	12:52:07 PM	114.01			-4.3	0.016	0.016	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 12:56:16	4630-1.RAW	12:56:16 PM	268.87			150.6	0.697	0.697	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCV2	1	10/2/2020 13:00:26	4631-1.RAW	1:00:26 PM	1395.24			37.5	-0.165	-0.165	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCB2	1	10/2/2020 13:04:35	4632-1.RAW	1:04:35 PM	80.83			8.6	0.073	0.073	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS1	1	10/2/2020 13:08:45	4633-1.RAW	1:08:45 PM	128.96			-0.003	-0.003	-0.003	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 13:12:54	4634-1.RAW	1:12:54 PM	108.73			102.3	0.485	0.485	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS1	1	10/2/2020 13:17:04	4635-1.RAW	1:17:04 PM	220.64			134.4	0.626	0.626	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 13:21:13	4636-1.RAW	1:21:13 PM	252.74			88.5	0.424	0.424	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS1	1	10/2/2020 13:25:23	4637-1.RAW	1:25:23 PM	206.82			905.5	4.019	4.019	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 13:29:33	4638-1.RAW	1:29:33 PM	1023.84			-41.2	-0.160	-0.160	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS1	1	10/2/2020 13:33:43	4639-1.RAW	1:33:43 PM	74.09			225.6	1.027	1.027	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 13:37:52	4640-1.RAW	1:37:52 PM	343.86			1170.4	5.149	5.149	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCV3	1	10/2/2020 13:42:02	4641-1.RAW	1:42:02 PM	1288.68			-39.3	-0.173	-0.173	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCB3	1	10/2/2020 13:46:12	4642-1.RAW	1:46:12 PM	78.05			1216.0	5.581	5.581	ng/L	F009413
Hg2600-3	00	SAM	F009413-BS1	20	10/2/2020 13:50:21	4643-1.RAW	1:50:21 PM	1334.33			1195.6	5.491	5.491	ng/L	F009413
Hg2600-3	00	SAM	F009413-BSD1	20	10/2/2020 13:54:31	4644-1.RAW	1:54:31 PM	1313.91			-2.24	-0.490	-0.490	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK1	20	10/2/2020 13:58:40	4645-1.RAW	1:58:40 PM	67.28			-53.9	-4.742	-4.742	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK2	20	10/2/2020 14:02:50	4646-1.RAW	2:02:50 PM	64.42			-229	-4.580	-4.580	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK3	20	10/2/2020 14:07:00	4647-1.RAW	2:07:00 PM	66.26			-52.1	-5.234	-5.234	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK4	20	10/2/2020 14:11:09	4648-1.RAW	2:11:09 PM	58.83			-49.8	-4.379	-4.379	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK5	20	10/2/2020 14:15:19	4649-1.RAW	2:15:19 PM	69.54			261.0	464.019	464.019	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK6	20	10/2/2020 14:19:28	4650-1.RAW	2:19:28 PM	69.54			3012.6	5306.562	5306.562	ng/L	F009413
Hg2600-3	00	SAM	F009413-MS1	400	10/2/2020 14:23:38	4651-1.RAW	2:23:38 PM	379.94			13266	5.132	5.132	ng/L	F009413
Hg2600-3	00	SAM	F009413-MS2	400	10/2/2020 14:27:49	4652-1.RAW	2:27:49 PM	3130.91			-228	-0.228	-0.228	ng/L	F009413
Hg2600-3	00	CAL	SEQ-CCV4	1	10/2/2020 14:31:59	4653-1.RAW	2:31:59 PM	1284.66						ng/L	
Hg2600-3	00	CAL	SEQ-CCB4	1	10/2/2020 14:36:08	4654-1.RAW	2:36:08 PM	86.53						ng/L	
Hg2600-3	00	CAL	SEQ-CCV4	1	10/2/2020 14:40:18	4655-1.RAW	2:40:18 PM	86.53						ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	F009413-MSD1	400	10/2/2020 14:44:28	4656-1.RAW	2:44:28 PM	2914.10	2		2795.8	12.312	4924.991	ng/L	F009413
Hg2600-3	00	SAM	01000778-06	400	10/2/2020 14:48:38	4687-1.RAW	2:48:38 PM	484.15	2		365.8	1.621	648.474	ng/L	F009413
Hg2600-3	00	SAM	F009413-MS2	400	10/2/2020 14:52:47	4658-1.RAW	2:52:47 PM	5603.77	2		5385.5	23.707	9482.614	ng/L	F009413
Hg2600-3	00	SAM	F009413-MSD2	400	10/2/2020 14:56:57	4659-1.RAW	2:56:57 PM	6262.57	2		6144.3	27.045	10818.054	ng/L	F009413
Hg2600-3	00	SAM	01000778-01	400	10/2/2020 15:01:06	4660-1.RAW	3:01:08 PM	442.72	2		324.4	1.439	575.567	ng/L	F009413
Hg2600-3	00	SAM	01000778-02	400	10/2/2020 15:05:18	4661-1.RAW	3:05:18 PM	567.00	2		456.3	1.986	794.285	ng/L	F009413
Hg2600-3	00	SAM	01000778-03	400	10/2/2020 15:09:28	4662-1.RAW	3:09:28 PM	574.64	2		456.3	2.019	807.722	ng/L	F009413
Hg2600-3	00	SAM	01000778-05	400	10/2/2020 15:13:38	4663-1.RAW	3:13:38 PM	801.25	2		682.9	3.016	1206.539	ng/L	F009413
Hg2600-3	00	SAM	01000778-07	400	10/2/2020 15:17:46	4664-1.RAW	3:17:46 PM	447.43	2		329.1	1.460	583.843	ng/L	F009413
Hg2600-3	00	SAM	01000778-08	400	10/2/2020 15:21:56	4665-1.RAW	3:21:56 PM	182.16	2		63.9	0.293	117.000	ng/L	F009413
Hg2600-3	00	CAL	SEQ-CCV5	1	10/2/2020 15:26:08	4666-1.RAW	3:26:08 PM	1214.207024	2		1095.9	4.822	4.822	ng/L	F009413
Hg2600-3	00	CAL	SEQ-CCB5	1	10/2/2020 15:30:18	4667-1.RAW	3:30:18 PM	83.08	2		-35.2	-0.155	-0.155	ng/L	F009413
Hg2600-3	00	SAM	01000778-09	400	10/2/2020 15:34:28	4668-1.RAW	3:34:28 PM	128.33	2		10.0	0.056	22.265	ng/L	F009413
Hg2600-3	00	SAM	01000778-10	400	10/2/2020 15:38:38	4669-1.RAW	3:38:38 PM	121.56	2		3.3	0.026	10.340	ng/L	F009413
Hg2600-3	00	SAM	01000778-11	400	10/2/2020 15:42:48	4670-1.RAW	3:42:48 PM	207.00	2		88.7	0.402	86.971	ng/L	F009413
Hg2600-3	00	SAM	01000778-14	400	10/2/2020 15:46:58	4671-1.RAW	3:46:58 PM	602.62	2		484.3	2.142	856.971	ng/L	F009413
Hg2600-3	00	SAM	01000778-15	400	10/2/2020 15:51:09	4672-1.RAW	3:51:09 PM	386.81	2		268.5	1.193	477.157	ng/L	F009413
Hg2600-3	00	SAM	01000778-15	400	10/2/2020 15:55:19	4673-1.RAW	3:55:19 PM	443.21	2		324.9	1.441	576.423	ng/L	F009413
Hg2600-3	00	SAM	01000778-17	400	10/2/2020 15:59:29	4674-1.RAW	3:59:29 PM	864.00	2		745.7	3.292	1316.980	ng/L	F009413
Hg2600-3	00	SAM	01000778-19	400	10/2/2020 16:03:39	4675-1.RAW	4:03:39 PM	311.82	2		193.5	0.863	345.186	ng/L	F009413
Hg2600-3	00	SAM	01000778-20	400	10/2/2020 16:07:50	4676-1.RAW	4:07:50 PM	316.84	2		198.5	0.885	354.017	ng/L	F009413
Hg2600-3	00	SAM	01000778-21	400	10/2/2020 16:12:00	4677-1.RAW	4:12:00 PM	283.21	2		164.9	0.737	294.837	ng/L	F009413
Hg2600-3	00	CAL	SEQ-CCV6	1	10/2/2020 16:16:10	4678-1.RAW	4:16:10 PM	1221.64	2		1103.3	4.854	4.854	ng/L	F009413
Hg2600-3	00	SAM	01000778-22	400	10/2/2020 16:20:20	4679-1.RAW	4:20:20 PM	62.01	2		-56.3	-0.248	-0.248	ng/L	F009413
Hg2600-3	00	SAM	01000778-23	400	10/2/2020 16:24:31	4680-1.RAW	4:24:31 PM	160.83	2		160.83	0.199	79.460	ng/L	F009413
Hg2600-3	00	SAM	F009385-B51	20	10/2/2020 16:28:41	4681-1.RAW	4:28:41 PM	364.57	3		246.3	1.095	498.022	ng/L	F009385
Hg2600-3	00	SAM	F009385-B5D1	20	10/2/2020 16:32:52	4682-1.RAW	4:32:52 PM	1246.56	3		1128.3	5.238	104.763	ng/L	F009385
Hg2600-3	00	BLK	F009385-BLK1	20	10/2/2020 16:37:02	4683-1.RAW	4:37:02 PM	1217.98	3		1099.7	5.112	102.248	ng/L	F009385
Hg2600-3	00	BLK	F009385-BLK2	20	10/2/2020 16:41:13	4684-1.RAW	4:41:13 PM	58.56	3		-59.7	-0.263	-5.257	ng/L	F009385
Hg2600-3	00	BLK	F009385-BLK3	20	10/2/2020 16:45:23	4685-1.RAW	4:45:23 PM	56.27	3		-62.0	-0.273	-5.459	ng/L	F009385
Hg2600-3	00	SAM	0100047-12	400	10/2/2020 16:49:33	4686-1.RAW	4:49:33 PM	53.22	3		2163.9	9.535	3813.851	ng/L	F009385
Hg2600-3	00	SAM	F009385-M51	400	10/2/2020 16:53:44	4687-1.RAW	4:53:44 PM	2282.25	3		4785.3	21.068	8427.199	ng/L	F009385
Hg2600-3	00	SAM	F009385-M5D1	400	10/2/2020 16:57:56	4688-1.RAW	4:57:56 PM	4903.58	3		4496.0	19.795	7918.011	ng/L	F009385
Hg2600-3	00	CAL	SEQ-CCV7	1	10/2/2020 17:02:06	4689-1.RAW	5:02:06 PM	4614.26	3		1108.5	4.877	4.877	ng/L	F009385
Hg2600-3	00	CAL	SEQ-CCB7	1	10/2/2020 17:06:15	4690-1.RAW	5:06:15 PM	1226.80	3		-46.8	-0.206	-0.206	ng/L	F009385
Hg2600-3	00	SAM	0100033-01RE1	20	10/2/2020 17:10:25	4691-1.RAW	5:10:25 PM	71.49	3		4945.8	22.035	440.690	ng/L	F009385
Hg2600-3	00	SAM	0100033-02RE1	20	10/2/2020 17:14:36	4692-1.RAW	5:14:36 PM	5064.08	3		5165.1	23.000	459.994	ng/L	F009385
Hg2600-3	00	SAM	0100033-03RE1	20	10/2/2020 17:18:46	4693-1.RAW	5:18:46 PM	5283.45	3		7212.5	32.008	640.151	ng/L	F009385
Hg2600-3	00	SAM	0100033-04RE1	20	10/2/2020 17:22:57	4694-1.RAW	5:22:57 PM	7330.78	3		5518.8	24.556	1961.802	ng/L	F009385
Hg2600-3	00	SAM	0100047-CA	400	10/2/2020 17:27:07	4695-1.RAW	5:27:07 PM	5637.09	3		1111.6	4.905	1732.251	ng/L	F009385
Hg2600-3	00	SAM	0100047-CB	400	10/2/2020 17:31:17	4696-1.RAW	5:31:17 PM	1229.90	3		981.2	4.331	1732.251	ng/L	F009385
Hg2600-3	00	SAM	0100047-CC	400	10/2/2020 17:35:27	4697-1.RAW	5:35:27 PM	1099.47	3		348.0	1.545	617.904	ng/L	F009385
Hg2600-3	00	SAM	0100047-CD	400	10/2/2020 17:39:38	4698-1.RAW	5:39:38 PM	466.29	3		420.5	1.884	753.429	ng/L	F009385
Hg2600-3	00	SAM	0100047-CE	400	10/2/2020 17:43:48	4699-1.RAW	5:43:48 PM	543.30	3		420.5	1.864	745.570	ng/L	F009385
Hg2600-3	00	SAM	HYD. BLK TEST	1	10/2/2020 17:52:08	4700-1.RAW	5:52:08 PM	538.83	3		-60.6	Error	#VALUE!	ng/L	F009385
Hg2600-3	00	CAL	SEQ-CCB8	1	10/2/2020 17:56:18	4702-1.RAW	5:56:18 PM	57.66	2		1042.1	4.585	4.585	ng/L	F009385
Hg2600-3	00	CAL	SEQ-CCB8	1	10/2/2020 18:00:29	4703-1.RAW	6:00:29 PM	1160.36	2		-48.2	-0.212	-0.212	ng/L	F009385
Hg2600-3	00	SAM	F009384-M5D3	400	10/2/2020 18:04:39	4704-1.RAW	6:04:39 PM	9553.57	4		9435.3	41.513	16605.335	ng/L	F009384
Hg2600-3	00	SAM	0100047-65RE1	400	10/2/2020 18:08:49	4705-1.RAW	6:08:49 PM	2923.83	4		2805.5	12.344	4937.497	ng/L	F009384
Hg2600-3	00	SAM	F009384-M53	1000	10/2/2020 18:12:59	4706-1.RAW	6:12:59 PM	9370.51	4		9252.2	40.708	40707.943	ng/L	F009384
Hg2600-3	00	CAL	SEQ-CCV9	1	10/2/2020 18:17:10	4707-1.RAW	6:17:10 PM	1212.93	2		1094.6	4.816	4.816	ng/L	F009384
Hg2600-3	00	CAL	SEQ-CCB9	1	10/2/2020 18:21:20	4708-1.RAW	6:21:20 PM	85.00	2		-33.3	-0.147	-0.147	ng/L	F009384

SEQ-IBL1	A1	QJ00001-10	B11	0I00078-02	C21		
SEQ-IBL2	A2	SEQ-CCV2	B12	0I00078-03	A1		
SEQ-IBL3	A3	SEQ-CCB2	B13	0I00078-05	A2		
SEQ-CAL1	A4	QJ00001-11	B14	0I00078-07	A3		
SEQ-CAL2	A5	QJ00001-12	B15	0I00078-08	A4		
SEQ-CAL3	A6	QJ00002-01	B16	SEQ-CCV5	A5		
SEQ-CAL4	A7	QJ00002-02	B17	SEQ-CCB5	A6		
SEQ-CAL5	A8	QJ00002-03	B18	0I00078-09	A7		
SEQ-ICV1	A9	QJ00002-05	B19	0I00078-10	A8		
SEQ-ICB1	A10	QJ00005-01	B20	0I00078-11	A9		
F010333-BS1	A11	QJ00005-03	B21	0I00078-13	A10		
F010333-BSD1	A12	QJ00005-05	C1	0I00078-14	A11		
F010333-BLK1	A13	SEQ-CCV3	C2	0I00078-15	A12		
F010333-BLK2	A14	SEQ-CCB3	C3	0I00078-17	A13		
F010333-BLK3	A15	F009413-BS1	C4	0I00078-19	A14	0I00033-01RE1	B10
QJ00001-04	A16	F009413-BSD1	C5	0I00078-20	A15	0I00033-02RE1	B11
F010333-MS1	A17	F009413-BLK1	C6	0I00078-21	A16	0I00033-03RE1	B12
F010333-MSD1	A18	F009413-BLK2	C7	SEQ-CCV6	A17	0I00033-04RE1	B13
QJ00002-04	A19	F009413-BLK3	C8	SEQ-CCB6	A18	0I00047-CA	B14
F010333-MS2	A20	F009413-BLK4	C9	0I00078-22	A19	0I00047-CB	B15
SEQ-CCV1	A21	F009413-BLK5	C10	0I00078-23	A20	0I00047-CC	B16
SEQ-CCB1	B1	F009413-BLK6	C11	F009385-BS1	A21	0I00047-CD	B17
F010333-MSD2	B2	0I00078-04	C12	F009385-BSD1	B1	0I00047-CE	B18
QJ00001-01	B3	F009413-MS1	C13	F009385-BLK1	B2	HYD. BLK TEST	B19
QJ00001-02	B4	SEQ-CCV4	C14	F009385-BLK2	B3	SEQ-CCV8	B20
QJ00001-03	B5	SEQ-CCB4	C15	F009385-BLK3	B4	SEQ-CCB8	B21
QJ00001-05	B6	F009413-MSD1	C16	0I00047-12	B5	F009384-MS3	C1
QJ00001-06	B7	0I00078-06	C17	F009385-MS1	B6	F009384-MSD3	C2
QJ00001-07	B8	F009413-MS2	C18	F009385-MSD1	B7	0I00047-65RE1	C3
QJ00001-08	B9	F009413-MSD2	C19	SEQ-CCV7	B8	SEQ-CCV9	C4
QJ00001-09	B10	0I00078-01	C20	SEQ-CCB7	B9	SEQ-CCB9	C5

- 9384-MSD3
47-65RE1
- 0I00047-65RE1 10/5/20
- F009384 MS3

Verified by:

Total Mercury
 EPA1631
 Operate# 118.31
 Blanks# 118.31
 CalibEqn: Conc = (Area-118.3 Run Date: 10/2/2020 Blank SD: 8.907767179
 Worksh THg260(CalibFa 227.28 Status: QC Warnings:9/QC E Run Time: 10:28:06 Blank RSD%: 7.529295025
 Method ### R: 0.9998 R2: 0.9996
 Descrpt THg26003-201002-1
 CF SD: 11.8496357
 CF RSD%: 5.213613938

SampleID	Location	Run#	Blank	Conc (ppb)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Conc:ref (eff)	Flags	RunCount
Clean			0.00	3.82					4595-1.RAW	10:30:58	869.23	Clean	OK	1
WS			118.31	0.52					4596-1.RAW	10:35:06	236.23	Sample	OK	1
WS			118.31	0.09					4597-1.RAW	10:39:15	139.78	Sample	OK	1
WS			118.31	0.00					4598-1.RAW	10:43:23	114.73	Sample	OK	1
SEQ-IBL1	A1	1	0.00	0.56					4599-1.RAW	10:47:32	127.49	Sample	OK	1
SEQ-IBL2	A2	1	0.00	0.52					4600-1.RAW	10:51:41	117.74	Sample	OK	1
SEQ-IBL3	A3	1	0.00	0.48					4601-1.RAW	10:55:49	109.70	Sample	OK	1
SEQ-CAL1	A4	1	118.31	0.46	91.84				4602-1.RAW	10:59:58	222.68	Sample	OK	1
SEQ-CAL2	A5	1	118.31	0.99	98.58				4603-1.RAW	11:04:06	342.36	Sample	OK	1
SEQ-CAL3	A6	1	118.31	5.14	102.71				4604-1.RAW	11:08:15	1285.51	Sample	OK	1
SEQ-CAL4	A7	1	118.31	20.26	101.29				4605-1.RAW	11:12:24	4722.53	Sample	OK	1
SEQ-CAL5	A8	1	118.31	42.23	105.58				4606-1.RAW	11:16:33	9717.01	Sample	OK	1
SEQ-ICV1	A9	1	118.31	5.62	112.41				4607-1.RAW	11:20:43	1395.71	Sample	OK	1
SEQ-ICB1	A10	1	118.31	0.01	0.00				4608-1.RAW	11:24:52	120.99	Sample	OK	1
F010333-BS1	A11	1	118.31	5.01					4609-1.RAW	11:29:02	1256.90	Sample	OK	1
F010333-BSD1	A12	1	118.31	5.05					4610-1.RAW	11:33:11	1265.88	Sample	OK	1
F010333-BLK1	A13	1	118.31	0.01					4611-1.RAW	11:37:20	120.68	Sample	OK	1
F010333-BLK2	A14	1	118.31	0.06					4612-1.RAW	11:41:30	131.32	Sample	OK	1
F010333-BLK3	A15	1	118.31	0.00					4613-1.RAW	11:45:39	79.38	Sample	OK	1
OJ00001-04	A16	1	118.31	0.00					4614-1.RAW	11:49:48	95.50	Sample	OK	1
F010333-MS1	A17	1	118.31	5.08	508.20				4615-1.RAW	11:53:58	1273.35	Sample	OK	1
F010333-MSD1	A18	1	118.31	5.33					4616-1.RAW	11:58:07	1328.82	Sample	OK	1
OJ00002-04	A19	1	118.31	1.42					4617-1.RAW	12:02:16	440.42	Sample	OK	1
F010333-MS2	A20	1	118.31	6.57	192.14				4618-1.RAW	12:06:25	1610.58	Sample	OK	1
SEQ-CCV1	A21	1	118.31	5.59	111.87				4619-1.RAW	12:10:35	1389.58	Sample	OK	1
SEQ-CCB1	B1	1	118.31	0.00					4620-1.RAW	12:14:44	85.26	Sample	OK	1
F010333-MSD2	B2	1	118.31	6.43					4621-1.RAW	12:18:53	1578.77	Sample	OK	1
OJ00001-01	B3	1	118.31	32.19					4622-1.RAW	12:23:02	7494.67	Sample	OK	1
OJ00001-02	B4	1	118.31	20.48					4623-1.RAW	12:27:11	4773.48	Sample	OK	1
OJ00001-03	B5	1	118.31	0.01					4624-1.RAW	12:31:20	120.11	Sample	OK	1
OJ00001-05	B6	1	118.31	0.00					4625-1.RAW	12:35:30	118.87	Sample	OK	1
OJ00001-06	B7	1	118.31	0.00					4626-1.RAW	12:39:39	116.75	Sample	OK	1
OJ00001-07	B8	1	118.31	0.00					4627-1.RAW	12:43:48	103.75	Sample	OK	1
OJ00001-08	B9	1	118.31	0.00					4628-1.RAW	12:47:57	82.08	Sample	OK	1
OJ00001-09	B10	1	118.31	0.00					4629-1.RAW	12:52:07	114.01	Sample	OK	1
OJ00001-10	B11	1	118.31	0.66					4630-1.RAW	12:56:16	268.87	Sample	OK	1
SEQ-CCV2	B12	1	118.31	5.35	107.09				4631-1.RAW	13:00:26	1335.24	Sample	OK	1
SEQ-CCB2	B13	1	118.31	0.00					4632-1.RAW	13:04:35	80.83	Sample	OK	1
OJ00001-11	B14	1	118.31	0.04					4633-1.RAW	13:08:45	126.96	Sample	OK	1
OJ00001-12	B15	1	118.31	0.00					4634-1.RAW	13:12:54	109.73	Sample	OK	1
OJ00002-01	B16	1	118.31	0.45					4635-1.RAW	13:17:04	220.64	Sample	OK	1
OJ00002-02	B17	1	118.31	0.59					4636-1.RAW	13:21:13	252.74	Sample	OK	1
OJ00002-03	B18	1	118.31	0.39					4637-1.RAW	13:25:23	206.82	Sample	OK	1
OJ00002-05	B19	1	118.31	3.98					4638-1.RAW	13:29:33	1023.84	Sample	OK	1

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0J00005-01	B20	1	118.31	0.00	4639-1.RAW	13:33:43	74.09	Sample	OK	1
0J00005-03	B21	1	118.31	0.00	4640-1.RAW	13:37:52	101.66	Sample	OK	1
0J00005-05	C1	1	118.31	0.99	4641-1.RAW	13:42:02	343.88	Sample	OK	1
SEQ-CCV3	C2	1	118.31	5.15	4642-1.RAW	13:46:12	1288.68	Sample	OK	1
SEQ-CCB3	C3	1	118.31	0.00	4643-1.RAW	13:50:21	79.05	Sample	OK	1
F009413-BS1	C4	20	118.31	107.01	4644-1.RAW	13:54:31	1334.33	Sample	OK	1
F009413-BSD1	C5	20	118.31	105.21	4645-1.RAW	13:58:40	1313.91	Sample	OK	1
F009413-BLK1	C6	20	118.31	0.00	4646-1.RAW	14:02:50	67.28	Sample	OK	1
F009413-BLK2	C7	20	118.31	0.00	4647-1.RAW	14:07:00	64.42	Sample	OK	1
F009413-BLK3	C8	20	118.31	0.00	4648-1.RAW	14:11:09	66.26	Sample	OK	1
F009413-BLK4	C9	20	118.31	0.00	4649-1.RAW	14:15:19	58.83	Sample	OK	1
F009413-BLK5	C10	20	118.31	0.00	4650-1.RAW	14:19:28	68.54	Sample	OK	1
F009413-BLK6	C11	20	118.31	0.00	4651-1.RAW	14:23:39	69.54	Sample	OK	1
0I00078-04	C12	400	118.31	459.40	4652-1.RAW	14:27:49	379.34	Sample	OK	1
F009413-MS1	C13	400	118.31	5301.94	4653-1.RAW	14:31:59	3130.91	Sample	OK	1
SEQ-CCV4	C14	1	118.31	5.13	4654-1.RAW	14:36:08	1284.68	Sample	OK	1
SEQ-CCB4	C15	1	118.31	0.00	4655-1.RAW	14:40:18	66.53	Sample	OK	1
F009413-MSD1	C16	400	118.31	4920.37	4656-1.RAW	14:44:28	2914.10	Sample	OK	1
0I00078-06	C17	400	118.31	643.85	4657-1.RAW	14:48:38	484.15	Sample	OK	1
F009413-MS2	C18	400	118.31	9477.99	4658-1.RAW	14:52:47	5503.77	Sample	OK	1
F009413-MSD2	C19	400	118.31	10813.43	4659-1.RAW	14:56:57	6282.57	Sample	OK	1
0I00078-01	C20	400	118.31	570.95	4660-1.RAW	15:01:08	442.72	Sample	OK	1
0I00078-02	C21	400	118.31	789.67	4661-1.RAW	15:05:18	567.00	Sample	OK	1
0I00078-03	A1	400	118.31	803.10	4662-1.RAW	15:09:28	574.64	Sample	OK	1
0I00078-05	A2	400	118.31	1201.92	4663-1.RAW	15:13:38	801.25	Sample	OK	1
0I00078-07	A3	400	118.31	578.22	4664-1.RAW	15:17:48	447.43	Sample	OK	1
0I00078-08	A4	400	118.31	112.38	4665-1.RAW	15:21:58	182.16	Sample	OK	1
SEQ-CCV5	A5	1	118.31	4.82	4666-1.RAW	15:26:08	1214.21	Sample	OK	1
SEQ-CCB5	A6	1	118.31	0.00	4667-1.RAW	15:30:18	83.08	Sample	OK	1
0I00078-09	A7	400	118.31	17.65	4668-1.RAW	15:34:28	128.33	Sample	OK	1
0I00078-10	A8	400	118.31	5.72	4669-1.RAW	15:38:38	121.56	Sample	OK	1
0I00078-11	A9	400	118.31	156.10	4670-1.RAW	15:42:48	207.00	Sample	OK	1
0I00078-13	A10	400	118.31	852.35	4671-1.RAW	15:46:58	602.62	Sample	OK	1
0I00078-14	A11	400	118.31	472.54	4672-1.RAW	15:51:09	386.81	Sample	OK	1
0I00078-15	A12	400	118.31	571.80	4673-1.RAW	15:55:19	443.21	Sample	OK	1
0I00078-17	A13	400	118.31	1312.36	4674-1.RAW	15:59:29	864.00	Sample	OK	1
0I00078-19	A14	400	118.31	340.57	4675-1.RAW	16:03:39	311.82	Sample	OK	1
0I00078-20	A15	400	118.31	349.40	4676-1.RAW	16:07:50	316.84	Sample	OK	1
0I00078-21	A16	400	118.31	290.22	4677-1.RAW	16:12:00	283.21	Sample	OK	1
SEQ-CCV6	A17	1	118.31	4.85	4678-1.RAW	16:16:10	1221.64	Sample	OK	1
SEQ-CCB6	A18	1	118.31	0.00	4679-1.RAW	16:20:20	62.01	Sample	OK	1
0I00078-22	A19	400	118.31	74.84	4680-1.RAW	16:24:31	160.83	Sample	OK	1
0I00078-23	A20	400	118.31	433.40	4681-1.RAW	16:28:41	364.57	Sample	OK	1
F009385-BS1	A21	20	118.31	99.28	4682-1.RAW	16:32:52	1246.56	Sample	OK	1
F009385-BSD1	B1	20	118.31	96.77	4683-1.RAW	16:37:02	1217.98	Sample	OK	1
F009385-BLK1	B2	20	118.31	0.00	4684-1.RAW	16:41:13	58.56	Sample	OK	1
F009385-BLK2	B3	20	118.31	0.00	4685-1.RAW	16:45:23	56.27	Sample	OK	1
F009385-BLK3	B4	20	118.31	0.00	4686-1.RAW	16:49:33	53.22	Sample	OK	1
0I00047-12	B5	400	118.31	3808.37	4687-1.RAW	16:53:44	2282.25	Sample	OK	1

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F009385-MS1	B6	400	118.31	8421.72	221.08	4688-1.RAW	16:57:55	4903.58	Sample	OK	1
F009385-MSD1	B7	400	118.31	7912.53		4689-1.RAW	17:02:05	4614.26	Sample	OK	1
SEQ-CCV7	B8	1	118.31	4.88	97.54	4690-1.RAW	17:06:15	1226.80	Sample	OK	1
SEQ-CCB7	B9	1	118.31	0.00	0.00	4691-1.RAW	17:10:25	71.49	Sample	OK	1
0100033-01RE1	B10	20	118.31	435.21		4692-1.RAW	17:14:36	5064.08	Sample	OK	1
0100033-02RE1	B11	20	118.31	454.51		4693-1.RAW	17:18:46	5283.45	Sample	OK	1
0100033-03RE1	B12	20	118.31	634.67		4694-1.RAW	17:22:57	7330.78	Sample	OK	1
0100033-04RE1	B13	20	118.31	485.63		4695-1.RAW	17:27:07	5637.09	Sample	OK	1
0100047-CA	B14	400	118.31	1956.32		4696-1.RAW	17:31:17	1229.90	Sample	OK	1
0100047-CB	B15	400	118.31	1726.77		4697-1.RAW	17:35:27	1099.47	Sample	OK	1
0100047-CC	B16	400	118.31	612.42		4698-1.RAW	17:39:38	466.29	Sample	OK	1
0100047-CD	B17	400	118.31	747.95		4699-1.RAW	17:43:48	543.30	Sample	OK	1
0100047-CE	B18	400	118.31	740.09		4700-1.RAW	17:47:58	538.83	Sample	OK	1
HYD. BLK TEST	B19	1	118.31	0.00		4701-1.RAW	17:52:08	57.66	Sample	OK	1
SEQ-CCV8	B20	1	118.31	4.58	91.70	4702-1.RAW	17:56:18	1160.36	Sample	OK	1
SEQ-CCB8	B21	1	118.31	0.00	0.00	4703-1.RAW	18:00:29	70.14	Sample	OK	1
F009384-MS3	C1	400	118.31	16605.33	553511.16	4704-1.RAW	18:04:39	9553.57	Sample	OK	1
F009384-MSD3	C2	400	118.31	4937.50		4705-1.RAW	18:08:49	2923.83	Sample	OK	1
0100047-65RE1	C3	1000	118.31	40707.94		4706-1.RAW	18:12:59	9370.51	Sample	OK	1
SEQ-CCV9	C4	1	118.31	4.82	96.32	4707-1.RAW	18:17:10	1212.93	Sample	OK	1
SEQ-CCB9	C5	1	118.31	0.00	0.00	4708-1.RAW	18:21:20	85.00	Sample	OK	1

C1 = F009384-MSD3
 C2 = 0100047-65RE1
 C3 = F009384-MS3
 MPS 10/15/20
 MPS 10/15/20

ANALYSIS SEQUENCE

0J07015

*Analyzed with
0J07014 and 0J07016
MFS 10/7/20*

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/6/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J07015-IBL1	QC	1			
0J07015-IBL2	QC	2			
0J07015-IBL3	QC	3			
0J07015-CAL1	QC	4	2002064		QUALITY ASSURANCE PEER-REVIEWED INITIALS: <u> PFS </u>
0J07015-CAL2	QC	5	2002065		
0J07015-CAL3	QC	6	2002220		
0J07015-CAL4	QC	7	2002221		
0J07015-CAL5	QC	8	2002222		
0J07015-ICV1	QC	9	2001809		
0J07015-ICB1	QC	10			
0J07015-CCV1	QC	11	2001809		
0J07015-CCB1	QC	12			
0J07015-CCV2	QC	13	2001809		
0J07015-CCB2	QC	14			
0J07015-CCV3	QC	15	2001809		
0J07015-CCB3	QC	16			
0J07015-CCV4	QC	17	2001809		
0J07015-CCB4	QC	18			
0J07015-CCV5	QC	19	2001809		
0J07015-CCB5	QC	20			
0I00047-65RE2	Hg-CVAFS-T-7030	21			RR @ 1000X. EMB 10/2/20
F009384-MS4	QC	22			
F009384-MSD4	QC	23			
0I00078-08RE1	Hg-CVAFS-T-7030	24			Added 10/5/2020 by MFS
0I00078-09RE1	Hg-CVAFS-T-7030	25			Added 10/5/2020 by MFS
0I00078-10RE1	Hg-CVAFS-T-7030	26			Added 10/5/2020 by MFS
0I00078-11RE1	Hg-CVAFS-T-7030	27			Added 10/5/2020 by MFS
0I00078-22RE1	Hg-CVAFS-T-7030	28			Added 10/5/2020 by MFS
0J07015-CCV6	QC	29	2001809		
0J07015-CCB6	QC	30			

 [Signature] 10/7/20
 Samples Loaded By Date

 [Signature] 10/7/20
 Data Processed By Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: MFS	Sequence(s) #: 0J07015
Reviewer:	Dataset ID(s): THg26003-201006-1
Date: 10/7/2020	WO (s) #: 0100047, 0100078
Batch #(s): F009384, F009413	

Analyst Initials MFS

Reviewer Initials PGE

- 5b. Has the B/C section data been uploaded? YES NO N/A
- QA/QC Data Checked**
6. RSD CF ($\leq 15\%$) PASS FAIL
 Comments: _____
7. The calibration curve included a minimum of 5 Standards YES NO
 Comments: _____
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) PASS FAIL
9. ICV and CCV % Recoveries EPA 1631E (77-123%) PASS FAIL
 Comments: _____
10. Do all calibration points pass acceptance criteria? YES NO
 Comments: _____
11. Are qualifiers consistent with the data review flowcharts? YES NO N/A
 Comments: _____
12. Explain any items on the failed data report from Element
 Comments: _____
13. Are the individual Preparation Blanks $< PQL$ or $< 2.2xMDL$ for WI (refer to appropriate prep method PQL list) PASS FAIL
 (a) If not $< PQL$ or $< 2.2xMDL$ for WI, note which PB(s) are above control limit:
 (b) Is the mean PB $< PQL$ or $< 2.2xMDL$ for WI (for appropriate qualification)? YES NO
 (c) Was a BrCl Blank analyzed for each preservation level? YES NO N/A
 (d) Are Preparation Blanks summarized on QC page? YES NO
14. Filtration Blank Prepared (if yes, use FB qualifier) YES NO
 (a) Filtration Blank prep date same as associated samples' prep date YES NO N/A
 (b) Filtration Blank absolute value $< PQL$ or $< 2.2xMDL$ for WI YES NO N/A
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L PASS FAIL
 Comments: _____
16. CCBs individually < 0.50 ng/L or $2.2 \times MDL$ for WI? PASS FAIL
 Comments: _____
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) YES NO N/A
18. Is the correct 'Source' designated for MD/MS/MSD? YES NO
19. For digested preps: was there a spike witness signature & date on the prep bench sheet? YES NO N/A

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: MFS	Sequence(s) #: 0J07015
Reviewer:	Dataset ID(s): THg26003-201006-1
Date: 10/7/2020	WO (s) #: 0I00047, 0I00078
Batch #(s): F009384, F009413	

Analyst Initials MFS **Reviewer Initials** PGS

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? YES NO
- Comments: _____
21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
- Comments: _____
22. Are the samples run at the correct dilution level for the method? YES NO
- Comments: _____
23. Dissolved < Total (if applicable) YES NO N/A
- Comments: _____
24. Effluent < Influent (visually confirm if needed) YES NO N/A
- Comments: _____
25. Are re-runs noted with reason? YES NO N/A
- Comments: _____
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
- Comments: _____
27. Is the B trap <5% A Traps YES NO N/A
- Comments: _____
28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
- Comments: _____
29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
- Comments: _____
30. Have re-extracts been created for non-reportable samples? YES NO N/A
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
32. Does the data set need scanning? YES N/A
33. Does the dataset have an LOQ/LOQ or DOC? YES N/A
34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
35. Water samples-is the final volume correct in the sequence? YES NO N/A
- Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs
36. Date of analyst IDOC/CDOC: _____ IDOC/CDOC within last 12 months? 3/2/20 YES NO
37. Date of analyst's SOP reading for method: _____ Current SOP revision read? 3/2/20 YES NO
38. Date of LOD: _____ LOD within last 3 months? 12/29/19 YES NO
39. Date of LOQ: _____ LOQ within last 3 months? 12/29/19 YES NO

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0J07015

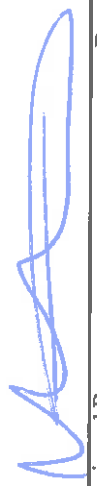
Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
0J07015-CCV5	Hg-CVAFS-T-7030	6.725	1.000			4.9950	ng/L	135	77.00	123.00			PASS-OVER	FAIL-CCV	



 Analyst Reviewed By

10/17/08

 Date



 Peer Reviewed By

Date

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.2643	20					E-01, RR OF MS1 @ 400X. EMB 10/2/20
F009384-MS4	Matrix Spike [0100047-65RE2]	0.2643	20	2001204	100			RR MS1@1000x MFS 10/5/2020
F009384-MS5	Matrix Spike [0100047-65RE3]	0.2643	40	2001204	100			CCV Fail: RR MS1 @ 1000x MFS 10/7/2020
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			
F009384-MSD3	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			Added 10/5/2020 by MFS
F009384-MSD4	Matrix Spike Dup [0100047-65RE2]	0.2606	20	2001204	100			RR MSD1@1000x MFS 10/5/2020
F009384-MSD5	Matrix Spike Dup [0100047-65RE3]	0.2606	40	2001204	100			CCV Fail: RR MSD1 @ 1000x MFS 10/7/2020

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00
			2002353	25% Hydroxylamine-HCl working solution	01-Apr-21 00:00
			2002354	THg Washstation (0.5% BrCl)	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-65RE2	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD RR @ 1000X. EMB 10/2/20	E-01: RR@400X MFS 10/5/20
0100047-65RE3	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD E-01: RR@400X MFS 10/5/20	CCV Fail: RR@1000x MFS 10/7/2020
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		

PREPARATION BENCH SHEET

F009384

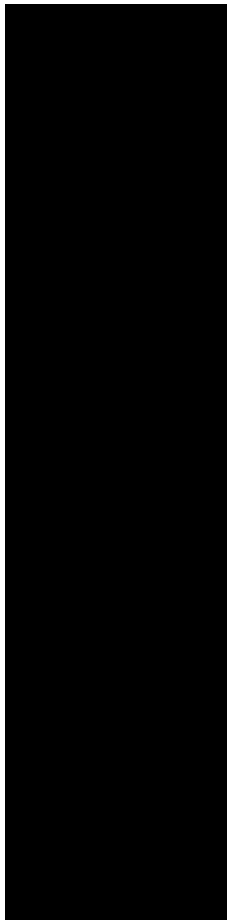
Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R	
0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R	
0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R	
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R	



PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/30/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009413-BLK1	Blank	0.25	20					
F009413-BLK2	Blank	0.25	20					
F009413-BLK3	Blank	0.25	20					
F009413-BLK4	Pre-homogenization blank 092320	0.2508	20					WO 0100078-60
F009413-BLK5	Post-homogenization blank 092320	0.2579	20					WO 0100078-61
F009413-BLK6	Post-homogenization Blank 092420	0.2851	20					WO 0100078-62
F009413-BS1	LCS	0.25	20	2002032	20			
F009413-BSD1	LCS Dup	0.25	20	2002032	20			
F009413-MS1	Matrix Spike [0100078-04]	0.2678	20	2001204	100			
F009413-MS2	Matrix Spike [0100078-06]	0.1376	10	2001204	100			
F009413-MSD1	Matrix Spike Dup [0100078-04]	0.2594	20	2001204	100			
F009413-MSD2	Matrix Spike Dup [0100078-06]	0.1383	10	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	2.5% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002304	70/30 Digestion Acid	30-Mar-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00
			2002353	2.5% Hydroxylamine-HCl working solution	01-Apr-21 00:00
			2002354	THg Washstation (0.5% BrCl)	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Prepared: 9/30/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-01	ES-FP_20ET711_091020_01_TOM_WB	0.259	20	-	-	S&R		
0100078-02	ES-FP_20ET717_091020_02_TOM_WB	0.2607	20	-	-	S&R		
0100078-03	ES-FP_20ET741_091520_03_TOM_WB	0.2656	20	-	-	S&R		
0100078-04	ES-FP_20ET755_091520_04_TOM_WB	0.2548	20	QC	-	S&R	MS/MSD	
0100078-05	ES-FP_20ET756_091520_05_TOM_WB	0.2691	20	-	-	S&R		
0100078-06	ES-FP_20SN001_091120_01_RAS_WB	0.1294	10	QC	-	S&R	MS/MSD	
0100078-07	ES-FP_20SN001_091120_02_RAS_WB	0.2573	20	-	-	S&R		
0100078-08	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R		
0100078-08RE1	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-08RE2	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-09	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R		
0100078-09RE1	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-09RE2	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-10	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R		
0100078-10RE1	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-10RE2	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-11	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R		
0100078-11RE1	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-11RE2	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20

PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/30/2020

0100078-13	ES-02_20ET909_091620_01_TOM_WB	0.2629	20	-	-	S&R	
0100078-14	ES-02_20ET924_091820_02_TOM_WB	0.2576	20	-	-	S&R	
0100078-15	ES-02_20ET934_091820_03_TOM_WB	0.2553	20	-	-	S&R	
0100078-17	ES-02_20ET941_091820_05_TOM_WB	0.2643	20	-	-	S&R	
0100078-19	FRB-01_20LT620_091720_02_LOB_TA	0.2539	20	-	-	S&R	
0100078-20	FRB-01_20LT621_092020_03_LOB_TA	0.2634	20	-	-	S&R	
0100078-21	FRB-01_20LT627_092020_04_LOB_TA	0.258	20	-	-	S&R	
0100078-22	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	
0100078-22RE1	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20
0100078-22RE2	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20
0100078-23	OL-01_20ET866_091820_02_TOM_WB	0.2302	20	-	-	S&R	Undercurve: RR@20X MFS 10/7/20



Analysis Datasheet for Total Mercury

Date of Analysis: October 06, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 0107014, 0107015, 0107016

Analyst: **MS**
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	201.66 units	403.33	136.70 units	273.41	111.1 %Rec
SEQ-CAL2	1	1.00 ng/L	302.84 units	302.84	237.88 units	237.88	96.6 %Rec
SEQ-CAL3	1	5.00 ng/L	1295.89 units	259.18	1230.93 units	246.19	100.0 %Rec
SEQ-CAL4	1	20.00 ng/L	4790.01 units	239.50	4725.05 units	236.25	96.0 %Rec
SEQ-CAL5	1	40.00 ng/L	9549.26 units	238.73	9484.30 units	237.11	96.3 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 246.17 **Corr. St Dev RF** +/- 15.74 **Corr. RSD CF** 6.4% RSD **Uncorr. Mean RF** 288.72

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	64.96 units	±9.73	0.22 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	2.455 ng/L	±1.185
BLK	2	3	1.174 ng/L	±1.505
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	3	-2.236 ng/L	±2.388
BLK	6	3	0.240 ng/L	±0.270

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	10/6/2020 11:30:22	4835-1.RAW	11:30:22 AM	80.01			-4.9	-0.020	-0.020	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	10/6/2020 11:34:31	4836-1.RAW	11:34:31 AM	76.17			11.2	0.046	0.046	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	10/6/2020 11:38:39	4837-1.RAW	11:38:39 AM	58.70			-6.3	-0.025	-0.025	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	10/6/2020 11:42:48	4838-1.RAW	11:42:48 AM	201.66			136.7	0.555	0.555	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	10/6/2020 11:46:57	4839-1.RAW	11:46:57 AM	302.84			237.9	0.966	0.966	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	10/6/2020 11:51:06	4840-1.RAW	11:51:06 AM	1285.89			1230.9	5.000	5.000	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	10/6/2020 11:55:14	4841-1.RAW	11:55:14 AM	4780.01			4725.1	19.195	19.195	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	10/6/2020 11:59:24	4842-1.RAW	11:59:24 AM	9549.26			9484.3	38.528	38.528	ng/L	
Hg2600-3	00	CAL	SEQ-HCV1	1	10/6/2020 12:03:33	4843-1.RAW	12:03:33 PM	1417.57			1352.6	5.495	5.495	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	10/6/2020 12:07:43	4844-1.RAW	12:07:43 PM	78.53			13.6	0.055	0.055	ng/L	
Hg2600-3	00	SAM	F009418-BS1	10	10/6/2020 12:11:52	4845-1.RAW	12:11:52 PM	10280.18	1		10215.2	41.252	41.252	ng/L	F004818
Hg2600-3	00	SAM	F009418-BSD1	10	10/6/2020 12:16:01	4846-1.RAW	12:16:01 PM	10593.65	1		10528.7	42.525	42.525	ng/L	F004818
Hg2600-3	00	BLK	F009418-BLK1	10	10/6/2020 12:20:10	4847-1.RAW	12:20:10 PM	128.83	1		63.9	0.259	0.259	ng/L	F004818
Hg2600-3	00	BLK	F009418-BLK2	10	10/6/2020 12:24:18	4848-1.RAW	12:24:18 PM	94.68	1		29.7	0.121	0.121	ng/L	F004818
Hg2600-3	00	BLK	F009418-BLK3	10	10/6/2020 12:28:29	4849-1.RAW	12:28:29 PM	152.69	1		87.7	0.356	0.356	ng/L	F004818
Hg2600-3	00	SAM	0100073-42	50	10/6/2020 12:32:38	4850-1.RAW	12:32:38 PM	4576.42	1		4451.5	18.034	18.034	ng/L	F004818
Hg2600-3	00	SAM	0100073-43	400	10/6/2020 12:36:47	4851-1.RAW	12:36:47 PM	3031.88	1		2966.9	12.046	12.046	ng/L	F004818
Hg2600-3	00	SAM	0100073-44	400	10/6/2020 12:40:56	4852-1.RAW	12:40:56 PM	3211.69	1		3146.7	12.777	12.777	ng/L	F004818
Hg2600-3	00	SAM	0100073-45	50	10/6/2020 12:45:08	4853-1.RAW	12:45:08 PM	3871.17	1		3806.2	15.413	15.413	ng/L	F004818
Hg2600-3	00	SAM	0100073-46	50	10/6/2020 12:49:15	4854-1.RAW	12:49:15 PM	4333.44	1		4268.5	17.291	17.291	ng/L	F004818
Hg2600-3	00	CAL	SEQ-CCV1	1	10/6/2020 12:53:24	4855-1.RAW	12:53:24 PM	1370.85			1305.9	5.305	5.305	ng/L	F004818
Hg2600-3	00	CAL	SEQ-CCB1	1	10/6/2020 12:57:34	4856-1.RAW	12:57:34 PM	80.61			15.6	0.064	0.064	ng/L	F004818
Hg2600-3	00	SAM	0100073-47	50	10/6/2020 13:01:43	4857-1.RAW	1:01:43 PM	4531.08	1		4466.1	18.094	18.094	ng/L	F004818
Hg2600-3	00	SAM	0100073-48	50	10/6/2020 13:05:52	4858-1.RAW	1:05:52 PM	293.24	1		168.3	0.635	0.635	ng/L	F004818
Hg2600-3	00	SAM	0100073-49	50	10/6/2020 13:10:02	4859-1.RAW	1:10:02 PM	281.38	1		196.4	0.749	0.749	ng/L	F004818
Hg2600-3	00	SAM	0100073-50	50	10/6/2020 13:14:11	4860-1.RAW	1:14:11 PM	276.52	1		211.6	0.810	0.810	ng/L	F004818
Hg2600-3	00	SAM	0100073-51	50	10/6/2020 13:18:20	4861-1.RAW	1:18:20 PM	3363.07	1		3298.1	13.349	13.349	ng/L	F004818
Hg2600-3	00	SAM	0100073-52	50	10/6/2020 13:22:30	4862-1.RAW	1:22:30 PM	4271.12	1		4206.2	17.038	17.038	ng/L	F004818
Hg2600-3	00	SAM	0100073-53	50	10/6/2020 13:26:39	4863-1.RAW	1:26:39 PM	6488.21	1		6423.2	26.044	26.044	ng/L	F004818
Hg2600-3	00	SAM	0100073-54	50	10/6/2020 13:30:49	4864-1.RAW	1:30:49 PM	5870.39	1		5805.4	23.534	23.534	ng/L	F004818
Hg2600-3	00	SAM	0100073-55	50	10/6/2020 13:34:58	4865-1.RAW	1:34:58 PM	3522.54	1		3457.6	13.997	13.997	ng/L	F004818
Hg2600-3	00	SAM	0100073-56	50	10/6/2020 13:39:08	4866-1.RAW	1:39:08 PM	3826.09	1		3761.1	15.230	15.230	ng/L	F004818
Hg2600-3	00	CAL	SEQ-CCV2	1	10/6/2020 13:43:17	4867-1.RAW	1:43:17 PM	1393.49			1328.5	5.397	5.397	ng/L	F004818
Hg2600-3	00	CAL	SEQ-CCB2	1	10/6/2020 13:47:27	4868-1.RAW	1:47:27 PM	78.14			13.2	0.054	0.054	ng/L	F004818
Hg2600-3	00	SAM	0100073-58	50	10/6/2020 13:51:36	4869-1.RAW	1:51:36 PM	5486.51	1		5421.6	21.975	21.975	ng/L	F004818
Hg2600-3	00	SAM	0100073-59	50	10/6/2020 13:55:46	4870-1.RAW	1:55:46 PM	450.79	1		385.8	1.518	1.518	ng/L	F004818
Hg2600-3	00	SAM	0100073-60	50	10/6/2020 13:59:55	4871-1.RAW	1:59:55 PM	1297.21	1		1232.2	4.957	4.957	ng/L	F004818
Hg2600-3	00	SAM	F009419-BS1	10	10/6/2020 14:04:04	4872-1.RAW	2:04:04 PM	10381.26	2		10296.3	41.709	41.709	ng/L	F004819
Hg2600-3	00	SAM	F009419-BSD1	10	10/6/2020 14:08:14	4873-1.RAW	2:08:14 PM	8968.81	2		8901.8	36.044	36.044	ng/L	F004819
Hg2600-3	00	BLK	F009419-BLK1	10	10/6/2020 14:12:23	4874-1.RAW	2:12:23 PM	138.08	2		71.1	0.289	0.289	ng/L	F004819
Hg2600-3	00	BLK	F009419-BLK2	10	10/6/2020 14:16:33	4875-1.RAW	2:16:33 PM	78.69	2		13.9	0.057	0.057	ng/L	F004819
Hg2600-3	00	BLK	F009419-BLK3	10	10/6/2020 14:20:42	4876-1.RAW	2:20:42 PM	66.65	2		1.7	0.007	0.007	ng/L	F004819
Hg2600-3	00	SAM	0100073-61	50	10/6/2020 14:24:52	4877-1.RAW	2:24:52 PM	1464.23	2		1399.3	5.661	5.661	ng/L	F004819
Hg2600-3	00	SAM	F009419-MS1	400	10/6/2020 14:29:01	4878-1.RAW	2:29:01 PM	3088.08	2		2993.1	12.156	12.156	ng/L	F004819
Hg2600-3	00	CAL	SEQ-CCV3	1	10/6/2020 14:33:11	4879-1.RAW	2:33:11 PM	1385.51			1320.5	5.364	5.364	ng/L	F004819
Hg2600-3	00	CAL	SEQ-CCB3	1	10/6/2020 14:37:21	4880-1.RAW	2:37:21 PM	70.42			5.5	0.022	0.022	ng/L	F004819
Hg2600-3	00	SAM	F009419-MSD1	400	10/6/2020 14:41:30	4881-1.RAW	2:41:30 PM	1768.85	2		1721.9	6.992	6.992	ng/L	F004819
Hg2600-3	00	SAM	0100073-67	50	10/6/2020 14:45:40	4882-1.RAW	2:45:40 PM	4399.04	2		4304.1	17.461	17.461	ng/L	F004819
Hg2600-3	00	SAM	F009419-MS2	400	10/6/2020 14:49:50	4883-1.RAW	2:49:50 PM	2799.55	2		2734.6	11.106	11.106	ng/L	F004819
Hg2600-3	00	SAM	F009419-MSD2	400	10/6/2020 14:53:59	4884-1.RAW	2:53:59 PM	3145.98	2		3081.0	12.513	12.513	ng/L	F004819
Hg2600-3	00	SAM	0100073-63	50	10/6/2020 14:58:09	4885-1.RAW	2:58:09 PM	2183.37	2		2118.4	8.582	8.582	ng/L	F004819
Hg2600-3	00	SAM	0100073-64	50	10/6/2020 15:02:19	4886-1.RAW	3:02:19 PM	3156.40	2		3091.4	12.535	12.535	ng/L	F004819
Hg2600-3	00	SAM	0100073-65	50	10/6/2020 15:06:28	4887-1.RAW	3:06:28 PM	5680.21	2		5495.3	22.300	22.300	ng/L	F004819
Hg2600-3	00	SAM	0100073-66	50	10/6/2020 15:10:38	4888-1.RAW	3:10:38 PM	3141.70	2		3076.7	12.475	12.475	ng/L	F004819
Hg2600-3	00	SAM	0100073-68	50	10/6/2020 15:14:47	4889-1.RAW	3:14:47 PM	3875.90	2		3810.9	15.458	15.458	ng/L	F004819
Hg2600-3	00	SAM	0100073-69	50	10/6/2020 15:18:57	4890-1.RAW	3:18:57 PM	3492.82	2		3427.9	13.901	13.901	ng/L	F004819
Hg2600-3	00	CAL	SEQ-CCV4	1	10/6/2020 15:23:07	4891-1.RAW	3:23:07 PM	1445.35			1380.4	5.608	5.608	ng/L	F004819

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	Initial Result	Final Result	Initial Units	Comments
Hg2600-3	00	CAL	SEQ-CCB4	1	10/6/2020 15:27:16	4892-1.RAW	3:27:16 PM	75.76			10.8	0.044	0.044	ng/L	
Hg2600-3	00	SAM	0100073-70	50	10/6/2020 15:31:26	4893-1.RAW	3:31:26 PM	3743.92	2		3679.0	14.921	746.075	ng/L	F004819
Hg2600-3	00	SAM	0100073-71	50	10/6/2020 15:35:36	4894-1.RAW	3:35:36 PM	5477.14	2		5412.2	21.962	1098.118	ng/L	F004819
Hg2600-3	00	SAM	0100073-72	50	10/6/2020 15:39:45	4895-1.RAW	3:39:45 PM	3022.16	2		2957.2	11.990	599.475	ng/L	F004819
Hg2600-3	00	SAM	0100073-73	50	10/6/2020 15:43:55	4896-1.RAW	3:43:55 PM	2640.26	2		2775.3	11.251	562.536	ng/L	F004819
Hg2600-3	00	SAM	0100073-74	50	10/6/2020 15:48:05	4897-1.RAW	3:48:05 PM	3463.84	2		3398.9	13.784	689.188	ng/L	F004819
Hg2600-3	00	SAM	0100073-75	50	10/6/2020 15:52:14	4898-1.RAW	3:52:14 PM	3604.84	2		3539.7	14.356	717.786	ng/L	F004819
Hg2600-3	00	SAM	0100073-76	50	10/6/2020 15:56:24	4899-1.RAW	3:56:24 PM	4099.55	2		4034.6	16.366	818.308	ng/L	F004819
Hg2600-3	00	SAM	0100073-77	50	10/6/2020 16:00:34	4900-1.RAW	4:00:34 PM	3510.55	2		3445.6	13.973	698.674	ng/L	F004819
Hg2600-3	00	SAM	0100073-78	50	10/6/2020 16:04:45	4901-1.RAW	4:04:45 PM	5111.09	2		5046.1	20.475	1023.767	ng/L	F004819
Hg2600-3	00	SAM	0100073-79	50	10/6/2020 16:08:55	4902-1.RAW	4:08:55 PM	3976.9169	2		3911.4	15.866	793.294	ng/L	F004819
Hg2600-3	00	CAL	SEQ-CCV5	1	10/6/2020 16:13:04	4903-1.RAW	4:13:04 PM	1720.45			1655.5	6.725	6.725	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	10/6/2020 16:17:14	4904-1.RAW	4:17:14 PM	79.96			15.0	0.061	0.061	ng/L	
Hg2600-3	00	SAM	0100073-80	50	10/6/2020 16:21:24	4905-1.RAW	4:21:24 PM	6330.07	2		6265.1	25.427	1271.359	ng/L	F004819
Hg2600-3	00	SAM	0100073-81	50	10/6/2020 16:25:34	4906-1.RAW	4:25:34 PM	3370.05	2		3305.1	13.403	670.136	ng/L	F004819
Hg2600-3	00	SAM	0100047-55RE2	1000	10/6/2020 16:29:44	4907-1.RAW	4:29:44 PM	3469.95	3		3405.0	13.832	1383.063	ng/L	F009384
Hg2600-3	00	SAM	F009384-M54	1000	10/6/2020 16:33:54	4908-1.RAW	4:33:54 PM	4837.66	3		4772.7	19.388	1938.088	ng/L	F009384
Hg2600-3	00	SAM	F009384-M54	1000	10/6/2020 16:38:05	4909-1.RAW	4:38:05 PM	4851.44	3		4786.5	19.444	1944.045	ng/L	F009384
Hg2600-3	00	SAM	0100078-08RE1	20	10/6/2020 16:42:14	4910-1.RAW	4:42:14 PM	3050.39	4		2985.4	12.128	242.553	ng/L	F009413
Hg2600-3	00	SAM	0100078-08RE1	20	10/6/2020 16:46:24	4911-1.RAW	4:46:24 PM	1745.26	4		1680.3	6.826	136.517	ng/L	F009413
Hg2600-3	00	SAM	0100078-10RE1	20	10/6/2020 16:50:34	4912-1.RAW	4:50:34 PM	1986.30	4		1921.3	7.805	156.100	ng/L	F009413
Hg2600-3	00	SAM	0100078-11RE1	20	10/6/2020 16:54:44	4913-1.RAW	4:54:44 PM	2911.62	4		2846.7	11.564	231.279	ng/L	F009413
Hg2600-3	00	SAM	0100078-22RE1	20	10/6/2020 16:58:54	4914-1.RAW	4:58:54 PM	3378.96	4		3314.0	13.462	269.248	ng/L	F009413
Hg2600-3	00	CAL	SEQ-CCV6	1	10/6/2020 17:03:04	4915-1.RAW	5:03:04 PM	1425.72			1360.8	5.528	5.528	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	10/6/2020 17:07:14	4916-1.RAW	5:07:14 PM	69.71			4.7	0.019	0.019	ng/L	
Hg2600-3	00	SAM	F010335-B51	400	10/6/2020 17:11:24	4917-1.RAW	5:11:24 PM	1345.19	5		1280.2	5.206	2082.500	ng/L	F010335
Hg2600-3	00	SAM	F010335-B5D1	400	10/6/2020 17:15:33	4918-1.RAW	5:15:33 PM	1380.43	5		1315.5	5.349	2139.764	ng/L	F010335
Hg2600-3	00	BLK	F010335-BLK1	100	10/6/2020 17:19:43	4919-1.RAW	5:19:43 PM	66.23	5		1.3	0.005	0.515	ng/L	F010335
Hg2600-3	00	BLK	F010335-BLK2	100	10/6/2020 17:23:53	4920-1.RAW	5:23:53 PM	56.50	5		-8.5	-0.034	-3.439	ng/L	F010335
Hg2600-3	00	BLK	F010335-BLK3	100	10/6/2020 17:28:03	4921-1.RAW	5:28:03 PM	55.65	5		-9.3	-0.038	-3.784	ng/L	F010335
Hg2600-3	00	SAM	0100112-01	100	10/6/2020 17:32:13	4922-1.RAW	5:32:13 PM	730.05	5		665.1	2.724	272.413	ng/L	F010335
Hg2600-3	00	SAM	0100112-02	100	10/6/2020 17:36:23	4923-1.RAW	5:36:23 PM	806.32	5		741.4	3.034	303.397	ng/L	F010335
Hg2600-3	00	SAM	0100112-03	100	10/6/2020 17:40:33	4924-1.RAW	5:40:33 PM	512.51	5		447.6	1.840	184.044	ng/L	F010335
Hg2600-3	00	SAM	0100112-04	100	10/6/2020 17:44:43	4925-1.RAW	5:44:43 PM	561.01	5		496.1	2.037	203.747	ng/L	F010335
Hg2600-3	00	SAM	0100112-06	100	10/6/2020 17:48:53	4926-1.RAW	5:48:53 PM	620.36	5		555.4	2.279	227.857	ng/L	F010335
Hg2600-3	00	CAL	SEQ-CCV7	1	10/6/2020 17:53:02	4927-1.RAW	5:53:02 PM	1355.04			1290.1	5.241	5.241	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	10/6/2020 17:57:12	4928-1.RAW	5:57:12 PM	52.08			-12.9	-0.052	-0.052	ng/L	
Hg2600-3	00	SAM	F009420-B51	20	10/6/2020 18:01:22	4929-1.RAW	6:01:22 PM	3858.12	6		3793.2	15.397	307.938	ng/L	F009420
Hg2600-3	00	SAM	F009420-B5D1	20	10/6/2020 18:05:33	4930-1.RAW	6:05:33 PM	4286.35	6		4221.4	17.136	342.730	ng/L	F009420
Hg2600-3	00	BLK	F009420-BLK1	10	10/6/2020 18:09:44	4931-1.RAW	6:09:44 PM	77.89	6		12.9	0.053	0.525	ng/L	F009420
Hg2600-3	00	BLK	F009420-BLK2	10	10/6/2020 18:13:54	4932-1.RAW	6:13:54 PM	70.06	6		5.1	0.021	0.207	ng/L	F009420
Hg2600-3	00	BLK	F009420-BLK3	10	10/6/2020 18:18:04	4933-1.RAW	6:18:04 PM	64.65	6		-0.3	-0.001	-0.013	ng/L	F009420
Hg2600-3	00	SAM	0100073-82	50	10/6/2020 18:22:15	4934-1.RAW	6:22:15 PM	3706.22	6		3641.3	14.787	739.352	ng/L	F009420
Hg2600-3	00	SAM	0100073-83	400	10/6/2020 18:26:26	4935-1.RAW	6:26:26 PM	2169.25	6		2104.3	8.548	3419.054	ng/L	F009420
Hg2600-3	00	SAM	F009420-M5D1	400	10/6/2020 18:30:36	4936-1.RAW	6:30:36 PM	1931.96	6		1867.0	7.584	3033.483	ng/L	F009420
Hg2600-3	00	SAM	0100073-84	50	10/6/2020 18:34:47	4937-1.RAW	6:34:47 PM	6016.98	6		5952.0	24.174	1208.701	ng/L	F009420
Hg2600-3	00	SAM	F009420-M52	400	10/6/2020 18:38:57	4938-1.RAW	6:38:57 PM	2289.96	6		2205.0	8.957	3582.695	ng/L	F009420
Hg2600-3	00	CAL	SEQ-CCV8	1	10/6/2020 18:43:08	4939-1.RAW	6:43:08 PM	1358.84			1293.9	5.256	5.256	ng/L	
Hg2600-3	00	CAL	SEQ-CCB8	1	10/6/2020 18:47:18	4940-1.RAW	6:47:18 PM	56.29			-8.7	-0.035	-0.035	ng/L	
Hg2600-3	00	SAM	F009420-M5D2	400	10/6/2020 18:51:29	4941-1.RAW	6:51:29 PM	2367.83	6		2302.9	9.354	3741.721	ng/L	F009420
Hg2600-3	00	SAM	0100073-85	50	10/6/2020 18:55:39	4942-1.RAW	6:55:39 PM	1618.65	6		1553.7	6.307	315.337	ng/L	F009420
Hg2600-3	00	SAM	0100073-86	50	10/6/2020 18:59:50	4943-1.RAW	6:59:50 PM	2785.90	6		2720.9	11.048	552.422	ng/L	F009420
Hg2600-3	00	SAM	0100073-87	50	10/6/2020 19:04:00	4944-1.RAW	7:04:00 PM	2055.38	6		1990.4	8.081	404.042	ng/L	F009420
Hg2600-3	00	SAM	0100073-88	50	10/6/2020 19:08:10	4945-1.RAW	7:08:10 PM	2252.44	6		2187.5	8.881	444.069	ng/L	F009420
Hg2600-3	00	SAM	0100073-89	50	10/6/2020 19:12:20	4946-1.RAW	7:12:20 PM	2713.29	6		2648.3	10.753	537.673	ng/L	F009420
Hg2600-3	00	SAM	0100073-90	50	10/6/2020 19:16:30	4947-1.RAW	7:16:30 PM	1694.35	6		1629.4	6.614	330.713	ng/L	F009420
Hg2600-3	00	SAM	0100073-91	50	10/6/2020 19:20:41	4948-1.RAW	7:20:41 PM	2727.85	6		1662.9	6.750	337.517	ng/L	F009420
Hg2600-3	00	SAM	0100073-92	50	10/6/2020 19:24:51	4949-1.RAW	7:24:51 PM	2442.05	6		2377.1	9.652	482.581	ng/L	F009420
Hg2600-3	00	CAL	SEQ-CCV9	1	10/6/2020 19:29:01	4950-1.RAW	7:29:01 PM	5112.46			5047.5	20.500	1024.980	ng/L	F009420
Hg2600-3	00	CAL	SEQ-CCB9	1	10/6/2020 19:33:12	4951-1.RAW	7:33:12 PM	1389.58			1324.6	5.381	5.381	ng/L	
Hg2600-3	00	SAM	0100073-94	50	10/6/2020 19:37:22	4952-1.RAW	7:37:22 PM	62.81			-2.1	-0.009	-0.009	ng/L	
Hg2600-3	00	SAM	0100073-95	50	10/6/2020 19:41:32	4953-1.RAW	7:41:32 PM	4408.36	6		4343.4	17.639	881.956	ng/L	F009420
Hg2600-3	00	SAM	0100073-96	50	10/6/2020 19:45:43	4954-1.RAW	7:45:43 PM	3670.52	6		3605.6	14.642	732.100	ng/L	F009420
Hg2600-3	00	SAM	0100073-97	50	10/6/2020 19:49:53	4955-1.RAW	7:49:53 PM	2067.21	6		2002.2	8.129	406.445	ng/L	F009420
Hg2600-3	00	SAM	0100073-97	50	10/6										

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0100073-98	50	10/6/2020 19:58:14	4957-1.RAW	7:58:14 PM	1619.53	6		1554.6	6.310	315.514	ng/L	F009420
Hg2600-3	00	SAM	0100073-99	50	10/6/2020 20:02:24	4958-1.RAW	8:02:24 PM	1181.28	6		1116.3	4.530	226.501	ng/L	F009420
Hg2600-3	00	SAM	0100073-AA	50	10/6/2020 20:08:35	4959-1.RAW	8:06:35 PM	745.58	6		680.6	2.760	138.003	ng/L	F009420
Hg2600-3	00	SAM	0100073-AB	50	10/6/2020 20:10:45	4960-1.RAW	8:10:45 PM	2297.73	6		2232.8	9.085	453.267	ng/L	F009420
Hg2600-3	00	CAL	SEQ-CCVA	1	10/6/2020 20:14:55	4961-1.RAW	8:14:55 PM	1324.43			1259.5	5.116	5.116	ng/L	
Hg2600-3	00	CAL	SEQ-CCBA	1	10/6/2020 20:19:06	4962-1.RAW	8:19:06 PM	63.21			-1.8	-0.007	-0.007	ng/L	

P21

TotalMercury
EPA1631

Operator: MFS
Worksh: THg2600
Method: # R: 1
Description: THg26003-201006-1
BlankS: 64.96
CalibFa: 246.17
R: 1
Conc = (Area-64.96
QC Warnings: 7
QC E Run Time: 11:02:38
Blank SD: 15.74042944
CF SD: 6.394214281
CF RSD%: 15.74042944
CF RSD%: 6.394214281

9.730961601
14.97981523
15.74042944
6.394214281

SampleID	Location	Prng	Dilute	Blank	Conc (ppb)	MB%	FinalConc	Rec%	CA	RawData	R:inEnd	Peak (Raw)	Centrif (g)	Flags	RunCunt	Comment
Clean					0.00	4.86				4829-1.RAW	11:05:30	1195.41	Clean	OK	1	
WS					64.96	0.00				4830-1.RAW	11:09:39	22.24	Sample	OK	1	
WS					64.96	0.00				4831-1.RAW	11:13:47	19.77	Sample	OK	1	
WS					64.96	0.00				4832-1.RAW	11:17:56	20.52	Sample	OK	1	
WS					64.96	0.00				4833-1.RAW	11:22:04	43.93	Sample	OK	1	
WS					64.96	0.00				4834-1.RAW	11:26:13	45.99	Sample	OK	1	
SEQ-IBL1	A1		1		0.00	0.24				4835-1.RAW	11:30:22	60.01	Sample	OK	1	
SEQ-IBL2	A2		1		0.00	0.31				4836-1.RAW	11:34:31	76.17	Sample	OK	1	
SEQ-IBL3	A3		1		0.00	0.24				4837-1.RAW	11:38:39	58.70	Sample	OK	1	
SEQ-CAL1	A4		1		64.96	0.56		111.07		4838-1.RAW	11:42:48	201.86	Sample	OK	1	
SEQ-CAL2	A5		1		64.96	0.97		96.63		4839-1.RAW	11:46:57	302.84	Sample	OK	1	
SEQ-CAL3	A6		1		64.96	5.00		100.01		4840-1.RAW	11:51:06	1295.89	Sample	OK	1	
SEQ-CAL4	A7		1		64.96	19.19		95.97		4841-1.RAW	11:55:14	4790.01	Sample	OK	1	
SEQ-CAL5	A8		1		64.96	38.53		96.32		4842-1.RAW	11:59:24	9549.28	Sample	OK	1	
SEQ-ICV1	A9		1		64.96	5.49		109.89		4843-1.RAW	12:03:33	1417.57	Sample	OK	1	
SEQ-ICB1	A10		1		64.96	0.06		0.00		4844-1.RAW	12:07:43	78.53	Sample	OK	1	
F009418-BS1	A11		10		64.96	414.97				4845-1.RAW	12:11:52	10280.16	Sample	OK	1	F004818
F009418-BSD1	A12		10		64.96	427.71				4846-1.RAW	12:16:01	10593.65	Sample	OK	1	F004818
F009418-BLK1	A13		10		64.96	2.59				4847-1.RAW	12:20:10	128.83	Sample	OK	1	F004818
F009418-BLK2	A14		10		64.96	1.21				4848-1.RAW	12:24:19	94.66	Sample	OK	1	F004818
F009418-BLK3	A15		10		64.96	3.56				4849-1.RAW	12:28:29	152.89	Sample	OK	1	F004818
0100073-42	A16		50		64.96	904.16				4850-1.RAW	12:32:38	4516.42	Sample	OK	1	F004818
F009418-MS1	A17		400		64.96	4821.00		532.61		4851-1.RAW	12:36:47	3031.88	Sample	OK	1	F004818
F009418-MSD1	A18		400		64.96	5113.17				4852-1.RAW	12:40:56	3211.69	Sample	OK	1	F004818
0100073-43	A19		50		64.96	773.10				4853-1.RAW	12:45:06	3871.17	Sample	OK	1	F004818
0100073-45	A20		50		64.96	866.99				4854-1.RAW	12:49:15	4333.44	Sample	OK	1	F004818
SEQ-CCV1	A21		1		64.96	5.30		106.10		4855-1.RAW	12:53:24	1370.85	Sample	OK	1	F004818
SEQ-CCB1	B1		1		64.96	0.06		0.00		4856-1.RAW	12:57:34	80.61	Sample	OK	1	F004818
0100073-47	B2		50		64.96	907.13				4857-1.RAW	13:01:43	4531.08	Sample	OK	1	F004818
0100073-48	B3		50		64.96	34.18				4858-1.RAW	13:05:52	233.24	Sample	OK	1	F004818
0100073-49	B4		50		64.96	39.90				4859-1.RAW	13:10:02	261.38	Sample	OK	1	F004818
0100073-50	B5		50		64.96	42.97				4860-1.RAW	13:14:11	276.52	Sample	OK	1	F004818
0100073-51	B6		50		64.96	669.89				4861-1.RAW	13:18:20	3363.07	Sample	OK	1	F004818
0100073-53	B7		50		64.96	854.33				4862-1.RAW	13:22:30	4271.12	Sample	OK	1	F004818
0100073-54	B8		50		64.96	1304.65				4863-1.RAW	13:26:39	6486.21	Sample	OK	1	F004818
0100073-55	B9		50		64.96	1179.17				4864-1.RAW	13:30:49	5870.39	Sample	OK	1	F004818
0100073-56	B10		50		64.96	702.28				4865-1.RAW	13:34:58	3522.54	Sample	OK	1	F004818
0100073-57	B11		50		64.96	763.94				4866-1.RAW	13:39:08	3826.09	Sample	OK	1	F004818
SEQ-CCV2	B12		1		64.96	5.40		107.94		4867-1.RAW	13:43:17	1393.49	Sample	OK	1	F004818
SEQ-CCB2	B13		1		64.96	0.05		0.00		4868-1.RAW	13:47:27	78.14	Sample	OK	1	F004818
0100073-58	B14		50		64.96	1101.19				4869-1.RAW	13:51:36	5486.51	Sample	OK	1	F004818
0100073-59	B15		50		64.96	78.37				4870-1.RAW	13:55:46	450.79	Sample	OK	1	F004818
0100073-60	B16		50		64.96	250.29				4871-1.RAW	13:59:55	1297.21	Sample	OK	1	F004818
F009419-BS1	B17		10		64.96	418.27				4872-1.RAW	14:04:04	10361.26	Sample	OK	1	F004819
F009419-BSD1	B18		10		64.96	361.62				4873-1.RAW	14:08:14	8966.81	Sample	OK	1	F004819
F009419-BLK1	B19		10		64.96	2.89				4874-1.RAW	14:12:23	136.06	Sample	OK	1	F004819

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F009419-BLK2	B20	10	64.96	0.57	4875-1.RAW	14:16:33	78.89 Sample	OK	1	F004819
F009419-BLK3	B21	10	64.96	0.07	4876-1.RAW	14:20:42	66.65 Sample	OK	1	F004819
0100073-61	C1	50	64.96	284.21	4877-1.RAW	14:24:52	1484.23	OK	1	F004819
F009419-MS1	C2	400	64.96	4883.56	4878-1.RAW	14:29:01	3058.08 Sample	OK	1	F004819
SEQ-CCV3	C3	1	64.96	5.36	4879-1.RAW	14:33:11	1385.51 Sample	OK	1	F004819
SEQ-CCB3	C4	1	64.96	0.02	4880-1.RAW	14:37:21	70.42 Sample	OK	1	F004819
F009419-MSD1	C5	400	64.96	2797.92	4881-1.RAW	14:41:30	1786.85 Sample	OK	1	F004819
0100073-67	C6	50	64.96	874.22	4882-1.RAW	14:45:40	4369.04 Sample	OK	1	F004819
F009419-MS2	C7	400	64.96	4443.47	4883-1.RAW	14:49:50	2789.55 Sample	OK	1	F004819
F009419-MSD2	C8	400	64.96	5006.37	4884-1.RAW	14:53:59	3145.96 Sample	OK	1	F004819
0100073-63	C9	50	64.96	430.28	4885-1.RAW	14:58:09	2183.37 Sample	OK	1	F004819
0100073-64	C10	50	64.96	627.92	4886-1.RAW	15:02:19	3156.40 Sample	OK	1	F004819
0100073-65	C11	50	64.96	1116.16	4887-1.RAW	15:06:28	5560.21 Sample	OK	1	F004819
0100073-66	C12	50	64.96	624.93	4888-1.RAW	15:10:38	3141.70 Sample	OK	1	F004819
0100073-66	C13	50	64.96	774.06	4889-1.RAW	15:14:47	3875.90 Sample	OK	1	F004819
0100073-69	C14	50	64.96	696.25	4890-1.RAW	15:18:57	3492.82 Sample	OK	1	F004819
SEQ-CCV4	C15	1	64.96	5.61	4891-1.RAW	15:23:07	1445.35 Sample	OK	1	F004819
SEQ-CCB4	C16	1	64.96	0.04	4892-1.RAW	15:27:16	75.76 Sample	OK	1	F004819
0100073-70	C17	1	64.96	747.25	4893-1.RAW	15:31:26	3743.92 Sample	OK	1	F004819
0100073-71	C18	50	64.96	1099.29	4894-1.RAW	15:35:36	5477.14 Sample	OK	1	F004819
0100073-72	C19	50	64.96	600.65	4895-1.RAW	15:39:45	3022.16 Sample	OK	1	F004819
0100073-73	C20	50	64.96	563.71	4896-1.RAW	15:43:55	2840.29 Sample	OK	1	F004819
0100073-74	C21	50	64.96	690.36	4897-1.RAW	15:48:05	3463.84 Sample	OK	1	F004819
0100073-75	A1	50	64.96	718.96	4898-1.RAW	15:52:14	3604.64 Sample	OK	1	F004819
0100073-76	A2	50	64.96	819.48	4899-1.RAW	15:56:24	4099.55 Sample	OK	1	F004819
0100073-77	A3	50	64.96	699.85	4900-1.RAW	16:00:34	3510.55 Sample	OK	1	F004819
0100073-78	A4	50	64.96	1024.94	4901-1.RAW	16:04:45	5111.09 Sample	OK	1	F004819
0100073-79	A5	50	64.96	794.47	4902-1.RAW	16:08:55	3976.39 Sample	OK	1	F004819
SEQ-CCV5	A6	50	64.96	6.73	4903-1.RAW	16:13:04	1720.45 Sample	OK	1	F004819
SEQ-CCB5	A7	1	64.96	0.06	4904-1.RAW	16:17:14	79.96 Sample	OK	1	F004819
0100073-80	A8	50	64.96	1272.53	4905-1.RAW	16:21:24	6330.07 Sample	OK	1	F004819
0100073-81	A9	50	64.96	671.31	4906-1.RAW	16:25:34	3370.05 Sample	OK	1	F004819
F009384-MS4	A10	1000	64.96	19382.06	4907-1.RAW	16:29:44	3469.95 Sample	OK	1	F009384
F009384-MSD4	A11	1000	64.96	19388.09	4908-1.RAW	16:33:54	4837.66 Sample	OK	1	F009384
0100073-85RE2	A12	1000	64.96	19444.04	4909-1.RAW	16:38:05	4851.44 Sample	OK	1	F009384
0100078-08RE1	A13	20	64.96	242.55	4910-1.RAW	16:42:14	3050.39 Sample	OK	1	F009413
0100078-09RE1	A14	20	64.96	136.52	4911-1.RAW	16:46:24	1745.26 Sample	OK	1	F009413
0100078-10RE1	A15	20	64.96	156.10	4912-1.RAW	16:50:34	1986.30 Sample	OK	1	F009413
0100078-11RE1	A16	20	64.96	231.28	4913-1.RAW	16:54:44	2911.62 Sample	OK	1	F009413
0100078-22RE1	A17	20	64.96	269.25	4914-1.RAW	16:58:54	3378.96 Sample	OK	1	F009413
SEQ-CCV6	A18	1	64.96	5.53	4915-1.RAW	17:03:04	1425.72 Sample	OK	1	F009413
SEQ-CCB6	A19	1	64.96	0.02	4916-1.RAW	17:07:14	69.71 Sample	OK	1	F010335
F010335-BS1	A20	400	64.96	2080.26	4917-1.RAW	17:11:24	1345.19 Sample	OK	1	F010335
F010335-BSD1	A21	400	64.96	2137.53	4918-1.RAW	17:15:33	1380.43 Sample	OK	1	F010335
F010335-BLK1	B1	100	64.96	0.51	4919-1.RAW	17:19:43	66.23 Sample	OK	1	F010335
F010335-BLK2	B2	100	64.96	0.00	4920-1.RAW	17:23:53	56.50 Sample	OK	1	F010335
F010335-BLK3	B3	100	64.96	0.00	4921-1.RAW	17:28:03	55.65 Sample	OK	1	F010335
0100112-01	B4	100	64.96	270.18	4922-1.RAW	17:32:13	730.05 Sample	OK	1	F010335
0100112-02	B5	100	64.96	301.16	4923-1.RAW	17:36:23	806.32 Sample	OK	1	F010335
0100112-03	B6	100	64.96	181.81	4924-1.RAW	17:40:33	512.51 Sample	OK	1	F010335
0100112-04	B7	100	64.96	201.51	4925-1.RAW	17:44:43	561.01 Sample	OK	1	F010335

0100073-81
 F009384-MS4
 F009384-MSD4
 0100073-85RE2
 0100078-08RE1
 0100078-09RE1
 0100078-10RE1
 0100078-11RE1
 0100078-22RE1
 SEQ-CCV6
 SEQ-CCB6
 F010335-BS1
 F010335-BSD1
 F010335-BLK1
 F010335-BLK2
 F010335-BLK3
 0100112-01
 0100112-02
 0100112-03
 0100112-04

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0100112-06	B8	100	64.96	225.62	4926-1.RAW	17:48:53	620.36	Sample	OK	1	F010335
SEQ-CCV7	B9	1	64.96	5.24	4927-1.RAW	17:53:02	1355.04	Sample	OK	1	
SEQ-CCB7	B10	1	64.96	0.00	4928-1.RAW	17:57:12	52.08	Sample	OK	1	
F009420-BS1	B11	20	64.96	308.18	4929-1.RAW	18:01:22	3658.12	Sample	OK	1	F009420
F009420-BSD1	B12	20	64.96	342.97	4930-1.RAW	18:05:33	4286.35	Sample	OK	1	F009420
F009420-BLK1	B13	10	64.96	0.53	4931-1.RAW	18:09:44	77.89	Sample	OK	1	F009420
F009420-BLK2	B14	10	64.96	0.21	4932-1.RAW	18:13:54	70.06	Sample	OK	1	F009420
F009420-BLK3	B15	10	64.96	0.00	4933-1.RAW	18:18:04	64.65	Sample	OK	1	F009420
0100073-82	B16	50	64.96	739.59	4934-1.RAW	18:22:15	3706.22	Sample	OK	1	F009420
F009420-MS1	B17	400	64.96	3419.29	4935-1.RAW	18:26:25	2169.25	Sample	OK	1	F009420
F009420-MSD1	B18	400	64.96	3033.72	4936-1.RAW	18:30:36	1931.96	Sample	OK	1	F009420
0100073-83	B19	50	64.96	1208.94	4937-1.RAW	18:34:47	6016.98	Sample	OK	1	F009420
F009420-MS2	B20	50	64.96	3582.94	4938-1.RAW	18:38:57	2269.96	Sample	OK	1	F009420
SEQ-CCV8	B21	1	64.96	5.26	4939-1.RAW	18:43:08	1358.84	Sample	OK	1	F009420
SEQ-CCB8	C1	1	64.96	0.00	4940-1.RAW	18:47:18	56.29	Sample	OK	1	
F009420-MSD2	C2	400	64.96	3741.96	4941-1.RAW	18:51:29	2367.83	Sample	OK	1	F009420
0100073-84	C3	50	64.96	315.58	4942-1.RAW	18:55:39	1618.65	Sample	OK	1	F009420
0100073-85	C4	50	64.96	552.66	4943-1.RAW	18:59:50	2785.90	Sample	OK	1	F009420
0100073-86	C5	50	64.96	404.28	4944-1.RAW	19:04:00	2055.38	Sample	OK	1	F009420
0100073-87	C6	50	64.96	444.31	4945-1.RAW	19:08:10	2252.44	Sample	OK	1	F009420
0100073-88	C7	50	64.96	537.91	4946-1.RAW	19:12:20	2713.29	Sample	OK	1	F009420
0100073-89	C8	50	64.96	330.95	4947-1.RAW	19:16:30	1694.35	Sample	OK	1	F009420
0100073-90	C9	50	64.96	337.76	4948-1.RAW	19:20:41	1727.85	Sample	OK	1	F009420
0100073-91	C10	50	64.96	482.82	4949-1.RAW	19:24:51	2442.05	Sample	OK	1	F009420
0100073-92	C11	50	64.96	1025.22	4950-1.RAW	19:29:01	5112.46	Sample	OK	1	F009420
SEQ-CCV9	C12	1	64.96	5.38	4951-1.RAW	19:33:12	1389.58	Sample	OK	1	F009420
SEQ-CCB9	C13	1	64.96	0.00	4952-1.RAW	19:37:22	62.81	Sample	OK	1	
0100073-94	C14	50	64.96	882.21	4953-1.RAW	19:41:32	4408.36	Sample	OK	1	F009420
0100073-95	C15	50	64.96	732.34	4954-1.RAW	19:45:43	3670.52	Sample	OK	1	F009420
0100073-96	C16	50	64.96	406.68	4955-1.RAW	19:49:53	2087.21	Sample	OK	1	F009420
0100073-97	C17	50	64.96	516.27	4956-1.RAW	19:54:03	2606.74	Sample	OK	1	F009420
0100073-98	C18	50	64.96	315.75	4957-1.RAW	19:58:14	1619.53	Sample	OK	1	F009420
0100073-99	C19	50	64.96	226.74	4958-1.RAW	20:02:24	1181.28	Sample	OK	1	F009420
0100073-AA	C20	50	64.96	138.24	4959-1.RAW	20:06:35	745.58	Sample	OK	1	F009420
0100073-AB	C21	50	64.96	453.51	4960-1.RAW	20:10:45	2297.73	Sample	OK	1	F009420
SEQ-CCVA	A1	1	64.96	5.12	4961-1.RAW	20:14:55	1324.43	Sample	OK	1	
SEQ-CCBA	A2	1	64.96	0.00	4962-1.RAW	20:19:06	63.21	Sample	OK	1	

SEQ-IBL1	A1	0100073-57	B11	0100073-74	C21	SEQ-CCB7	B10
SEQ-IBL2	A2	SEQ-CCV2	B12	0100073-75	A1	F009420-BS1	B11
SEQ-IBL3	A3	SEQ-CCB2	B13	0100073-76	A2	F009420-BSD1	B12
SEQ-CAL1	A4	0100073-58	B14	0100073-77	A3	F009420-BLK1	B13
SEQ-CAL2	A5	0100073-59	B15	0100073-78	A4	F009420-BLK2	B14
SEQ-CAL3	A6	0100073-60	B16	0100073-79	A5	F009420-BLK3	B15
SEQ-CAL4	A7	F009419-BS1	B17	SEQ-CCV5	A6	0100073-82	B16
SEQ-CAL5	A8	F009419-BSD1	B18	SEQ-CCB5	A7	F009420-MS1	B17
SEQ-ICV1	A9	F009419-BLK1	B19	0100073-80	A8	F009420-MSD1	B18
SEQ-ICB1	A10	F009419-BLK2	B20	0100073-81	A9	0100073-83	B19
F009418-BS1	A11	F009419-BLK3	B21	F009384-MS4	A10	F009420-MS2	B20
F009418-BSD1	A12	0100073-61	C1	F009384-MSD4	A11	SEQ-CCV8	B21
F009418-BLK1	A13	F009419-MS1	C2	0100047-65RE2	A12	SEQ-CCB8	C1
F009418-BLK2	A14	SEQ-CCV3	C3	0100078-08RE1	A13	F009420-MSD2	C2
F009418-BLK3	A15	SEQ-CCB3	C4	0100078-09RE1	A14	0100073-84	C3
0100073-42	A16	F009419-MSD1	C5	0100078-10RE1	A15	0100073-85	C4
F009418-MS1	A17	0100073-67	C6	0100078-11RE1	A16	0100073-86	C5
F009418-MSD1	A18	F009419-MS2	C7	0100078-22RE1	A17	0100073-87	C6
0100073-43	A19	F009419-MSD2	C8	SEQ-CCV6	A18	0100073-88	C7
0100073-45	A20	0100073-63	C9	SEQ-CCB6	A19	0100073-89	C8
SEQ-CCV1	A21	0100073-64	C10	F010335-BS1	A20	0100073-90	C9
SEQ-CCB1	B1	0100073-65	C11	F010335-BSD1	A21	0100073-91	C10
0100073-47	B2	0100073-66	C12	F010335-BLK1	B1	0100073-92	C11
0100073-48	B3	0100073-68	C13	F010335-BLK2	B2	SEQ-CCV9	C12
0100073-49	B4	0100073-69	C14	F010335-BLK3	B3	SEQ-CCB9	C13
0100073-50	B5	SEQ-CCV4	C15	0100112-01	B4	0100073-94	C14
0100073-51	B6	SEQ-CCB4	C16	0100112-02	B5	0100073-95	C15
0100073-53	B7	0100073-70	C17	0100112-03	B6	0100073-96	C16
0100073-54	B8	0100073-71	C18	0100112-04	B7	0100073-97	C17
0100073-55	B9	0100073-72	C19	0100112-06	B8	0100073-98	C18
0100073-56	B10	0100073-73	C20	SEQ-CCV7	B9	0100073-99	C19

0100047-65RE2 : A10
 -MS4 : A11
 -MSD4 : A12

0100073-AA C20
 0100073-AB C21
 SEQ-CCVA A1
 SEQ-CCBA A2

Verified by:

JKL 10-7-2020

ANALYSIS SEQUENCE

0J08011

Analyzed with
0J08010
MFS 10/18/20

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/7/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J08011-IBL1	QC	1			
0J08011-IBL2	QC	2			
0J08011-IBL3	QC	3			
0J08011-CAL1	QC	4	2002064		QUALITY ASSURANCE PEER REVIEWED INITIALS: PJS
0J08011-CAL2	QC	5	2002065		
0J08011-CAL3	QC	6	2002220		
0J08011-CAL4	QC	7	2002221		
0J08011-CAL5	QC	8	2002222		
0J08011-ICV1	QC	9	2001809		
0J08011-ICB1	QC	10			
0J08011-CCV1	QC	11	2001809		
0J08011-CCB1	QC	12			
0J08011-CCV2	QC	13	2001809		
0J08011-CCB2	QC	14			
0I00047-65RE3	Hg-CVAFS-T-7030	15			E-01: RR@400X MFS 10/5/20
0J08011-CCV3	QC	16	2001809		
0J08011-CCB3	QC	17			
F009384-MS5	QC	18			
F009384-MSD5	QC	19			
0I00078-08RE2	Hg-CVAFS-T-7030	20			Undercurve: RR@20X MFS 10/5/20
0I00078-09RE2	Hg-CVAFS-T-7030	21			Undercurve: RR@20X MFS 10/5/20
0I00078-10RE2	Hg-CVAFS-T-7030	22			Undercurve: RR@20X MFS 10/5/20
0I00078-11RE2	Hg-CVAFS-T-7030	23			Undercurve: RR@20X MFS 10/5/20
0I00078-22RE2	Hg-CVAFS-T-7030	24			Undercurve: RR@20X MFS 10/5/20
0J08011-CCV4	QC	25	2001809		
0J08011-CCB4	QC	26			

[Signature] 10/18/20
 Samples Loaded By Date

[Signature] 10/18/20
 Data Processed By Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0J08011
Reviewer:		Dataset ID(s):	THg26003-201007-1
Date:	10/8/2020	WO (s) #:	0I00047, 0I00078
Batch #(s):	F009384, F009413		

• Select the correct preparation method.

Analyte	Prep Method	FSTM Trap	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest	Air/Gas
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia	Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest	Sed/Soil
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb	Sed/Soil
<input checked="" type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest	Tissue
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation	Air/Gas
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric	Tissue
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation	Water
<input type="checkbox"/> Hg0	NA	NA	Water
<input type="checkbox"/> Inorg Hg	NA	NA	Water

Analyst Initials: MFS Reviewer Initials: PGS

- | | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | | | |
| (b) Check 5% of transcription from Instrument print-out and Excel file | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | | | |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 50 ml / aliquot = Excel dilution value | | | |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): _____ | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0J08011
Reviewer:		Dataset ID(s):	THg26003-201007-1
Date:	10/8/2020	WO (s) #:	0I00047, 0I00078
Batch #(s):	F009384, F009413		

Analyst Initials MFS

Reviewer Initials PGS

- | | | | | |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------|-----------------------------------------|--------------------------|
| 5b. Has the B/C section data been uploaded? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| QA/QC Data Checked | | | | |
| 6. RSD CF ($\leq 15\%$) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 7. The calibration curve included a minimum of 5 Standards | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| 9. ICV and CCV % Recoveries EPA 1631E (77-123%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 10. Do all calibration points pass acceptance criteria? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 11. Are qualifiers consistent with the data review flowcharts? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 12. Explain any items on the failed data report from Element | | | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit: | | | | |
| (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (c) Was a BrCl Blank analyzed for each preservation level? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (d) Are Preparation Blanks summarized on QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 14. Filtration Blank Prepared (if yes, use FB qualifier) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> |
| (a) Filtration Blank prep date same as associated samples' prep date | | | | |
| (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| 18. Is the correct 'Source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 19. For digested preps: was there a spike witness signature & date on the prep bench sheet? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0J08011
Reviewer:		Dataset ID(s):	THg26003-201007-1
Date:	10/8/2020	WO (s) #:	0I00047, 0I00078
Batch #(s):	F009384, F009413		

Analyst Initials MFS Reviewer Initials RGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|-----------------------------------------|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| Comments: _____ | | | |
| 22. Are the samples run at the correct dilution level for the method? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 23. Dissolved < Total (if applicable) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 24. Effluent < Influent (visually confirm if needed) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 25. Are re-runs noted with reason? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| Comments: _____ | | | |
| 26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 27. Is the B trap <5% A Traps | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 28. Are spiked trap recoveries 75-125% of true value? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 30. Have re-extracts been created for non-reportable samples? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 32. Does the data set need scanning? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A |
| 33. Does the dataset have an LOQ/LOQ or DOC? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A |
| 34. Water samples: has the preservation log been included in dataset for final volume verification? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 35. Water samples-is the final volume correct in the sequence? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

- | | | | | | |
|-----------------------------------------------------|------------|----------------------------------|-----------------------------------------|----------------------------------------|--------------------------|
| 36. Date of analyst IDOC/CDOC: _____ | 3/2/20 | IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: _____ | 3/2/20 | Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 38. Date of LOD: _____ | 12/29/2019 | LOD within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 39. Date of LOQ: _____ | 12/29/2019 | LOQ within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0J08011

Sample ID Analysis Result MRL Dup Source True Units % Rec. Rec. Rec. RPD RPD Over Cal Failure Qualifier

[Signature] *[Signature]* 10/15/20 _____ _____
Analyst Reviewed By Date Peer Reviewed By Date

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/29/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.2643	20					E-01, RR OF MS1 @ 400X. EMB 10/2/20
F009384-MS4	Matrix Spike [0100047-65RE2]	0.2643	20	2001204	100			RR MS1@1000x MFS 10/5/2020
F009384-MS5	Matrix Spike [0100047-65RE3]	0.2643	20	2001204	100			CCV Fail: RR MS1 @1000x MFS 10/7/2020
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			
F009384-MSD3	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			Added 10/5/2020 by MFS
F009384-MSD4	Matrix Spike Dup [0100047-65RE2]	0.2606	20	2001204	100			RR MSD1@1000x MFS 10/5/2020
F009384-MSD5	Matrix Spike Dup [0100047-65RE3]	0.2606	20	2001204	100			CCV Fail: RR MSD1 @1000x MFS 10/7/2020

Standard ID(s):

2001204
2002032

Description:

THg 1,000ng/mL Secondary Spiking Standard
THg 100ng/mL Primary Spiking Standard

Expiration:

05-Nov-20 00:00
05-Nov-20 00:00

Reagent ID(s):

2001276
2001977
2001978
2001979
2002050
2002190
2002218
2002305
2002353
2002354

Description:

25% Hydroxylamine-HCl working solution
THg Dilute 1% BrCl
THg 2% BrCl
THg Washstation (0.5% BrCl)
Boiling Chips for Trace Metals
70/30 Digestion Acid
3% SnCl2 THg reductant
5% BrCl
25% Hydroxylamine-HCl working solution
THg Washstation (0.5% BrCl)

Expiration:

03-Oct-20 00:00
07-Feb-21 00:00
03-Oct-20 00:00
20-Feb-21 00:00
08-Sep-21 00:00
09-Feb-21 00:00
07-Feb-21 00:00
01-Apr-21 00:00
07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-65RE2	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD RR @ 1000X. EMB 10/2/20	E-01: RR@400X MFS 10/5/20
0100047-65RE3	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD E-01: RR@400X MFS 10/5/20	CCV Fail: RR@1000x MFS 10/7/2020
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		

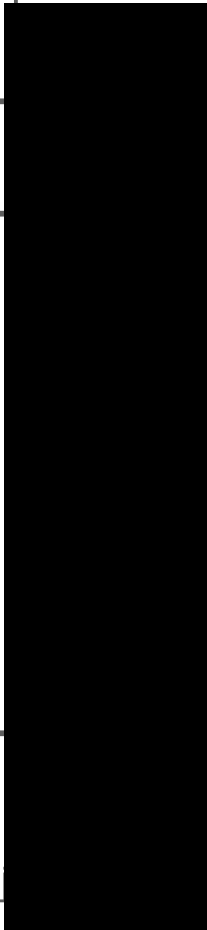
PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R
0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R
0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R



PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/30/2020**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009413-BLK1	Blank	0.25	20					
F009413-BLK2	Blank	0.25	20					
F009413-BLK3	Blank	0.25	20					
F009413-BLK4	Pre-homogenization blank 092320	0.2508	20					WO 0100078-60
F009413-BLK5	Post-homogenization blank 092320	0.2579	20					WO 0100078-61
F009413-BLK6	Post-homogenization Blank 092420	0.2851	20					WO 0100078-62
F009413-BS1	LCS	0.25	20	2002032	20			
F009413-BSD1	LCS Dup	0.25	20	2002032	20			
F009413-MS1	Matrix Spike [0100078-04]	0.2678	20	2001204	100			
F009413-MS2	Matrix Spike [0100078-06]	0.1376	10	2001204	100			
F009413-MSD1	Matrix Spike Dup [0100078-04]	0.2594	20	2001204	100			
F009413-MSD2	Matrix Spike Dup [0100078-06]	0.1383	10	2001204	100			

Standard ID(s):
2001204
2002032

Description:
THg 1,000ng/mL Secondary Spiking Standard
THg 100ng/mL Primary Spiking Standard

Expiration:
05-Nov-20 00:00
05-Nov-20 00:00

Reagent ID(s):

2001276 25% Hydroxylamine-HCl working solution
2001977 THg Dilute 1% BrCl
2001979 THg Washstation (0.5% BrCl)
2002050 Boiling Chips for Trace Metals
2002190 70/30 Digestion Acid
2002218 3% SnCl2 THg reductant
2002304 70/30 Digestion Acid
2002305 5% BrCl
2002353 25% Hydroxylamine-HCl working solution
2002354 THg Washstation (0.5% BrCl)

Expiration:

03-Oct-20 00:00
07-Feb-21 00:00
03-Oct-20 00:00
20-Feb-21 00:00
08-Sep-21 00:00
09-Feb-21 00:00
30-Mar-21 00:00
07-Feb-21 00:00
01-Apr-21 00:00
07-Feb-21 00:00

PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals – EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/30/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-01	ES-FP_20ET711_091020_01_TOM_WB	0.259	20	-	-	S&R		
0100078-02	ES-FP_20ET717_091020_02_TOM_WB	0.2607	20	-	-	S&R		
0100078-03	ES-FP_20ET741_091520_03_TOM_WB	0.2656	20	-	-	S&R		
0100078-04	ES-FP_20ET755_091520_04_TOM_WB	0.2548	20	QC	-	S&R	MS/MSD	
0100078-05	ES-FP_20ET756_091520_05_TOM_WB	0.2691	20	-	-	S&R		
0100078-06	ES-FP_20SN001_091120_01_RAS_WB	0.1294	10	QC	-	S&R	MS/MSD	
0100078-07	ES-FP_20SN001_091120_02_RAS_WB	0.2573	20	-	-	S&R		
0100078-08	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R		
0100078-08RE1	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-08RE2	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-09	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R		
0100078-09RE1	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-09RE2	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-10	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R		
0100078-10RE1	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-10RE2	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-11	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R		
078-11RE1	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
078-11RE2	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20

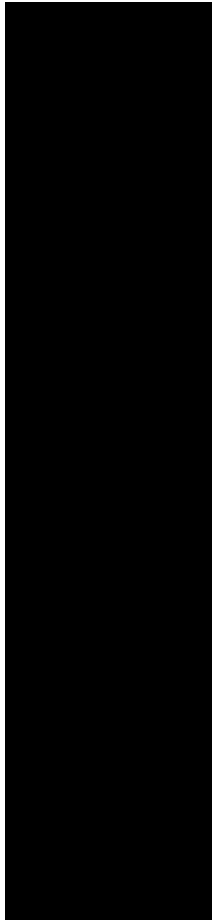
PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/30/2020

0100078-13	ES-02_20ET909_091620_01_TOM_WB	0.2629	20	-	-	S&R	
0100078-14	ES-02_20ET924_091820_02_TOM_WB	0.2576	20	-	-	S&R	
0100078-15	ES-02_20ET934_091820_03_TOM_WB	0.2553	20	-	-	S&R	
0100078-17	ES-02_20ET941_091820_05_TOM_WB	0.2643	20	-	-	S&R	
0100078-19	FRB-01_20LT620_091720_02_LOB_TA	0.2539	20	-	-	S&R	
0100078-20	FRB-01_20LT621_092020_03_LOB_TA	0.2634	20	-	-	S&R	
0100078-21	FRB-01_20LT627_092020_04_LOB_TA	0.258	20	-	-	S&R	
0100078-22	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	
0100078-22RE1	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20
0100078-22RE2	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Added 10/5/2020 by MFS Undercurve: RR@20X MFS 10/5/20
0100078-23	OL-01_20ET866_091820_02_TOM_WB	0.2302	20	-	-	S&R	Undercurve: RR@20X MFS 10/7/20





Frontier Global Sciences

Analysis Datasheet for Total Mercury

Date of Analysis: October 07, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 008010_008011

Analyst: MFS
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	187.63 units	375.27	123.94 units	247.88	107.8 %Rec
SEQ-CAL2	1	1.00 ng/L	294.11 units	294.11	230.42 units	230.42	100.3 %Rec
SEQ-CAL3	1	5.00 ng/L	1190.70 units	238.14	1127.01 units	225.40	98.1 %Rec
SEQ-CAL4	1	20.00 ng/L	4389.20 units	219.46	4325.50 units	216.28	94.1 %Rec
SEQ-CAL5	1	40.00 ng/L	9233.07 units	230.83	9169.38 units	229.23	99.7 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 229.84 Corr. St. Dev RF +/- 11.51 Corr. RSD CF 5.0% RSD Uncorr. Mean RF 271.56

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	63.69 units	±9.03	0.23 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	4.091 ng/L	±3.936
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	2	-0.523 ng/L	±0.005
BLK	5	3	0.809 ng/L	±1.424
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	10/7/2020 11:35:30 AM	4967-1.RAW	11:35:30 AM	62.78			-0.9	-0.004	-0.004	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	10/7/2020 11:39:36 AM	4968-1.RAW	11:39:36 AM	55.16			-8.5	-0.037	-0.037	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	10/7/2020 11:43:48 AM	4969-1.RAW	11:43:48 AM	73.14			9.4	0.041	0.041	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	10/7/2020 11:47:56 AM	4970-1.RAW	11:47:56 AM	187.63			123.9	0.539	0.539	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	10/7/2020 11:52:05 AM	4971-1.RAW	11:52:05 AM	294.11			1127.0	1.003	1.003	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	10/7/2020 11:56:13 AM	4972-1.RAW	11:56:13 AM	1190.70			4325.5	4.903	4.903	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	10/7/2020 12:00:22 PM	4973-1.RAW	12:00:22 PM	4389.20			39.894	39.894	39.894	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	10/7/2020 12:04:31 PM	4974-1.RAW	12:04:31 PM	9233.07			5.359	5.359	5.359	ng/L	
Hg2600-3	00	CAL	SEQ-ICV1	1	10/7/2020 12:08:41 PM	4975-1.RAW	12:08:41 PM	1295.48			17.1	0.074	0.074	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	10/7/2020 12:12:50 PM	4976-1.RAW	12:12:50 PM	80.79			17.1	0.074	0.074	ng/L	
Hg2600-3	00	SAM	F009421-BS1	20	10/7/2020 12:16:59 PM	4977-1.RAW	12:16:59 PM	4851.07			4851.07	386.383	386.383	ng/L	F009421
Hg2600-3	00	SAM	F009421-BSD1	20	10/7/2020 12:21:09 PM	4978-1.RAW	12:21:09 PM	4286.20			4232.5	364.205	364.205	ng/L	F009421
Hg2600-3	00	BLK	F009421-BLK1	10	10/7/2020 12:25:18 PM	4979-1.RAW	12:25:18 PM	133.86			70.2	3.053	3.053	ng/L	F009421
Hg2600-3	00	BLK	F009421-BLK2	10	10/7/2020 12:29:27 PM	4980-1.RAW	12:29:27 PM	257.73			194.0	0.844	0.844	ng/L	F009421
Hg2600-3	00	BLK	F009421-BLK3	10	10/7/2020 12:33:36 PM	4981-1.RAW	12:33:36 PM	81.59			0.078	0.779	0.779	ng/L	F009421
Hg2600-3	00	SAM	0100073-AC	50	10/7/2020 12:37:45 PM	4982-1.RAW	12:37:45 PM	1449.93			1386.2	5.949	5.949	ng/L	F009421
Hg2600-3	00	SAM	F009421-MS1	400	10/7/2020 12:41:55 PM	4983-1.RAW	12:41:55 PM	3058.73			2995.0	5208.235	5208.235	ng/L	F009421
Hg2600-3	00	SAM	F009421-MSD1	400	10/7/2020 12:46:04 PM	4984-1.RAW	12:46:04 PM	2462.61			10.427	4170.800	4170.800	ng/L	F009421
Hg2600-3	00	SAM	0100073-AD	50	10/7/2020 12:50:13 PM	4985-1.RAW	12:50:13 PM	694.40			630.7	133.114	133.114	ng/L	F009421
Hg2600-3	00	SAM	F009421-MS2	400	10/7/2020 12:54:22 PM	4986-1.RAW	12:54:22 PM	2181.01			2117.3	3680.728	3680.728	ng/L	F009421
Hg2600-3	00	CAL	SEQ-CCV1	1	10/7/2020 12:58:32 PM	4987-1.RAW	12:58:32 PM	1259.24			1195.5	5.202	5.202	ng/L	
Hg2600-3	00	CAL	SEQ-CCB1	1	10/7/2020 13:02:41 PM	4988-1.RAW	1:02:41 PM	80.73			-3.0	-0.013	-0.013	ng/L	
Hg2600-3	00	SAM	F009421-MSD2	400	10/7/2020 13:06:50 PM	4989-1.RAW	1:06:50 PM	2320.46			2256.8	3923.409	3923.409	ng/L	F009421
Hg2600-3	00	SAM	0100073-AE	50	10/7/2020 13:10:59 PM	4990-1.RAW	1:10:59 PM	1909.44			7.949	1845.7	1845.7	ng/L	F009421
Hg2600-3	00	SAM	0100073-AF	50	10/7/2020 13:15:09 PM	4991-1.RAW	1:15:09 PM	2490.59			2426.9	523.858	523.858	ng/L	F009421
Hg2600-3	00	SAM	0100073-AG	50	10/7/2020 13:19:18 PM	4992-1.RAW	1:19:18 PM	3477.44			3413.7	738.535	738.535	ng/L	F009421
Hg2600-3	00	SAM	0100073-AH	50	10/7/2020 13:23:27 PM	4993-1.RAW	1:23:27 PM	1076.38			1012.7	216.209	216.209	ng/L	F009421
Hg2600-3	00	SAM	0100073-AI	50	10/7/2020 13:27:36 PM	4994-1.RAW	1:27:36 PM	2817.06			2753.4	594.877	594.877	ng/L	F009421
Hg2600-3	00	SAM	0100073-AJ	50	10/7/2020 13:31:45 PM	4995-1.RAW	1:31:45 PM	3098.14			3029.4	654.936	654.936	ng/L	F009421
Hg2600-3	00	SAM	0100073-AK	50	10/7/2020 13:35:55 PM	4996-1.RAW	1:35:55 PM	3097.82			13.119	655.954	655.954	ng/L	F009421
Hg2600-3	00	SAM	0100073-AL	50	10/7/2020 13:40:04 PM	4997-1.RAW	1:40:04 PM	840.69			3.299	164.938	164.938	ng/L	F009421
Hg2600-3	00	SAM	0100073-AM	50	10/7/2020 13:44:14 PM	4998-1.RAW	1:44:14 PM	1280.57			1216.9	260.628	260.628	ng/L	F009421
Hg2600-3	00	CAL	SEQ-CCV2	1	10/7/2020 13:48:23 PM	4999-1.RAW	1:48:23 PM	1283.95			5.176	5.176	5.176	ng/L	
Hg2600-3	00	CAL	SEQ-CCB2	1	10/7/2020 13:52:32 PM	5000-1.RAW	1:52:32 PM	53.82			-10.1	-0.044	-0.044	ng/L	
Hg2600-3	00	SAM	0100073-AN	50	10/7/2020 13:56:42 PM	5001-1.RAW	1:56:42 PM	1107.93			1044.2	223.073	223.073	ng/L	F009421
Hg2600-3	00	SAM	0100073-AO	50	10/7/2020 14:00:53 PM	5002-1.RAW	2:00:53 PM	4101.79			4038.1	874.358	874.358	ng/L	F009421
Hg2600-3	00	SAM	0100073-AP	50	10/7/2020 14:05:02 PM	5003-1.RAW	2:05:02 PM	2981.99			12.615	630.757	630.757	ng/L	F009421
Hg2600-3	00	SAM	0100073-AQ	50	10/7/2020 14:09:12 PM	5004-1.RAW	2:09:12 PM	5302.59			22.712	1135.579	1135.579	ng/L	F009421
Hg2600-3	00	SAM	0100073-AR	50	10/7/2020 14:13:21 PM	5005-1.RAW	2:13:21 PM	1672.84			1608.9	345.920	345.920	ng/L	F009421
Hg2600-3	00	SAM	0100073-AS	50	10/7/2020 14:17:31 PM	5006-1.RAW	2:17:31 PM	2632.02			2568.3	554.623	554.623	ng/L	F009421
Hg2600-3	00	SAM	0100073-AT	50	10/7/2020 14:21:40 PM	5007-1.RAW	2:21:40 PM	2894.05			2830.4	611.626	611.626	ng/L	F009421
Hg2600-3	00	SAM	0100073-AU	50	10/7/2020 14:25:50 PM	5008-1.RAW	2:25:50 PM	194.95			131.3	24.463	24.463	ng/L	F009421
Hg2600-3	00	SAM	0100073-AV	50	10/7/2020 14:30:00 PM	5009-1.RAW	2:30:00 PM	182.83			0.489	21.826	21.826	ng/L	F009421
Hg2600-3	00	SAM	0100073-AW	50	10/7/2020 14:34:09 PM	5010-1.RAW	2:34:09 PM	2955.01			2891.3	12579.584	12579.584	ng/L	F009421
Hg2600-3	00	SAM	0100073-AX	1000	10/7/2020 14:38:19 PM	5011-1.RAW	2:38:19 PM	1227.42			1163.7	5.063	5.063	ng/L	F009384
Hg2600-3	00	CAL	SEQ-CCB3	1	10/7/2020 14:42:29 PM	5012-1.RAW	2:42:29 PM	54.33			-9.4	-0.041	-0.041	ng/L	
Hg2600-3	00	SAM	F009384-MS5	1000	10/7/2020 14:46:38 PM	5013-1.RAW	2:46:38 PM	3957.87			3894.2	16942.816	16942.816	ng/L	F009384
Hg2600-3	00	SAM	F009384-MSD5	1000	10/7/2020 14:50:48 PM	5014-1.RAW	2:50:48 PM	3921.79			16.786	16785.854	16785.854	ng/L	F009384
Hg2600-3	00	SAM	0100078-ORR2	20	10/7/2020 14:54:58 PM	5015-1.RAW	2:54:58 PM	2896.97			2633.3	229.138	229.138	ng/L	F009413
Hg2600-3	00	SAM	0100078-ORR2	20	10/7/2020 14:59:08 PM	5016-1.RAW	2:59:08 PM	1579.00			1515.3	131.856	131.856	ng/L	F009413
Hg2600-3	00	SAM	0100078-11R2	20	10/7/2020 15:03:18 PM	5017-1.RAW	3:03:18 PM	1332.33			1268.6	110.392	110.392	ng/L	F009413
Hg2600-3	00	SAM	0100078-22R2	20	10/7/2020 15:07:28 PM	5018-1.RAW	3:07:28 PM	2614.51			2550.8	221.962	221.962	ng/L	F009413
Hg2600-3	00	SAM	F009438-BS1	20	10/7/2020 15:11:38 PM	5019-1.RAW	3:11:38 PM	3028.68			12.891	257.826	257.826	ng/L	F009413
Hg2600-3	00	SAM	F009438-BS2	20	10/7/2020 15:15:48 PM	5020-1.RAW	3:15:48 PM	2046.97			8.655	173.100	173.100	ng/L	F009413
Hg2600-3	00	SAM	F009438-BS3	20	10/7/2020 15:19:58 PM	5021-1.RAW	3:19:58 PM	2040.52			8.627	172.539	172.539	ng/L	F009438
Hg2600-3	00	SAM	F009438-BS3	20	10/7/2020 15:24:07 PM	5022-1.RAW	3:24:07 PM	2117.36			2053.7	179.225	179.225	ng/L	F009438
Hg2600-3	00	CAL	SEQ-CCV4	1	10/7/2020 15:28:17 PM	5023-1.RAW	3:28:17 PM	1177.45			1113.9	4.846	4.846	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-CCB4	1	10/7/2020 15:32:27	5024-1.RAW	3:32:27 PM	68.48			4.8	0.021	0.021	ng/L	
Hg2600-3	00	SAM	F009438-B5A	20	10/7/2020 15:36:37	5025-1.RAW	3:36:37 PM	2109.86	4		2046.2	8.929	178.573	ng/L	F009438
Hg2600-3	00	SAM	0100098-01	10	10/7/2020 15:40:46	5026-1.RAW	3:40:46 PM	53.55	4		-10.1	0.008	0.082	ng/L	F009438
Hg2600-3	00	BLK	F009438-BLK2	10	10/7/2020 15:44:56	5027-1.RAW	3:44:56 PM	51.75	4		-11.9	0.052	-0.520	ng/L	F009438
Hg2600-3	00	BLK	F009438-BLK3	10	10/7/2020 15:49:06	5028-1.RAW	3:49:06 PM	51.58	4		-12.1	-0.053	-0.527	ng/L	F009438
Hg2600-3	00	SAM	F009442-B5T	20	10/7/2020 15:53:16	5029-1.RAW	3:53:16 PM	4389.17	5		4325.5	18.779	375.577	ng/L	F009442
Hg2600-3	00	SAM	F009442-B5D1	20	10/7/2020 15:57:26	5030-1.RAW	3:57:26 PM	4247.40	5		4183.7	18.162	363.241	ng/L	F009442
Hg2600-3	00	BLK	F009442-BLK1	10	10/7/2020 16:01:35	5031-1.RAW	4:01:35 PM	106.23	5		42.5	0.185	1.851	ng/L	F009442
Hg2600-3	00	BLK	F009442-BLK2	10	10/7/2020 16:05:45	5032-1.RAW	4:05:45 PM	95.65	5		32.0	0.139	1.390	ng/L	F009442
Hg2600-3	00	BLK	F009442-BLK3	10	10/7/2020 16:09:55	5033-1.RAW	4:09:55 PM	44.99	5		-18.7	-0.081	-0.814	ng/L	F009442
Hg2600-3	00	SAM	0100073-03	50	10/7/2020 16:14:05	5034-1.RAW	4:14:05 PM	5785.063857	5		5721.4	24.876	1243.818	ng/L	F009442
Hg2600-3	00	CAL	SEQ-CCV5	1	10/7/2020 16:18:15	5035-1.RAW	4:18:15 PM	1173.37			1109.7	4.828	4.828	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	10/7/2020 16:22:25	5036-1.RAW	4:22:25 PM	61.25			-2.4	-0.011	-0.011	ng/L	
Hg2600-3	00	SAM	F009442-MS1	400	10/7/2020 16:26:35	5037-1.RAW	4:26:35 PM	2674.33	5		2610.6	11.356	4542.544	ng/L	F009442
Hg2600-3	00	SAM	F009442-MSD1	400	10/7/2020 16:30:44	5038-1.RAW	4:30:44 PM	2834.15	5		2770.5	12.052	4820.687	ng/L	F009442
Hg2600-3	00	SAM	0100073-41	50	10/7/2020 16:34:54	5039-1.RAW	4:34:54 PM	3477.57	5		3413.9	14.857	741.846	ng/L	F009442
Hg2600-3	00	SAM	F009442-MS2	400	10/7/2020 16:39:04	5040-1.RAW	4:39:04 PM	2641.31	5		2577.6	11.213	4485.079	ng/L	F009442
Hg2600-3	00	SAM	F009442-MSD2	400	10/7/2020 16:43:14	5041-1.RAW	4:43:14 PM	2679.12	5		2615.4	11.377	4550.886	ng/L	F009442
Hg2600-3	00	SAM	0100073-04	50	10/7/2020 16:47:24	5042-1.RAW	4:47:24 PM	211.29	5		147.6	0.626	31.298	ng/L	F009442
Hg2600-3	00	SAM	0100073-07	50	10/7/2020 16:51:34	5043-1.RAW	4:51:34 PM	3040.37	5		2976.7	12.935	646.738	ng/L	F009442
Hg2600-3	00	SAM	0100073-09	50	10/7/2020 16:55:43	5044-1.RAW	4:55:43 PM	3406.84	5		3343.1	14.529	726.461	ng/L	F009442
Hg2600-3	00	SAM	0100073-10	50	10/7/2020 16:59:54	5045-1.RAW	4:59:54 PM	3986.25	5		3922.6	17.050	852.505	ng/L	F009442
Hg2600-3	00	SAM	0100073-11	50	10/7/2020 17:04:04	5046-1.RAW	5:04:04 PM	218.20	5		154.5	0.656	32.802	ng/L	F009442
Hg2600-3	00	CAL	SEQ-CCV6	1	10/7/2020 17:08:14	5047-1.RAW	5:08:14 PM	1134.20			1070.5	4.658	4.658	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	10/7/2020 17:12:24	5048-1.RAW	5:12:24 PM	57.78			-5.9	-0.026	-0.026	ng/L	
Hg2600-3	00	SAM	0100073-17	50	10/7/2020 17:16:34	5049-1.RAW	5:16:34 PM	2933.57	5		2869.9	12.470	623.505	ng/L	F009442
Hg2600-3	00	SAM	0100073-46	50	10/7/2020 17:20:44	5050-1.RAW	5:20:44 PM	3341.88	5		3278.2	14.247	712.330	ng/L	F009442
Hg2600-3	00	SAM	0100073-52	50	10/7/2020 17:24:54	5051-1.RAW	5:24:54 PM	2969.15	5		2903.5	12.625	631.246	ng/L	F009442
Hg2600-3	00	SAM	0100073-44	50	10/7/2020 17:28:04	5052-1.RAW	5:28:04 PM	1761.67	5		1698.0	7.371	368.570	ng/L	F009442
Hg2600-3	00	SAM	WS					39.36			Error	#VALUE!			
Hg2600-3	00	SAM	0100073-93	50	10/7/2020 17:33:15	5053-1.RAW	5:33:15 PM	3344.71	6		3281.0	14.275	713.755	ng/L	F009442
Hg2600-3	00	CAL	SEQ-CCV7	1	10/7/2020 17:37:25	5054-1.RAW	5:37:25 PM	1152.44			1088.7	4.737	4.737	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	10/7/2020 17:41:35	5055-1.RAW	5:41:35 PM	60.24			-3.4	-0.015	-0.015	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	10/7/2020 17:45:45	5056-1.RAW	5:45:45 PM	60.24			-3.4	-0.015	-0.015	ng/L	

PK

TotalMercury
EPA1631

Operator MFS
Worksh Thg2600
Method ### R:
Descrip Thg26003-201007-1

BlankSt 63.693
CalibFa 229.84
R: 0.9996
R2: 0.9992

Conc = (Area-63.69)
QC Warnings:7
QC E Run Time: 11:16:04

Blank SD:
CF SD:
CF RSD%:

10/7/2020
Run Date: 10/7/2020

Sample ID	Location	Phase	Dilute	Blank	Conc (ppb)	MS%	Final Conc	Rec%	QA	Raw File	Run Time	Peak (Raw)	Control (Std)	Flags	Run Count	Comment
Clean				0.00	5.23						11:18:56	1201.84	Clean	OK	1	
WS				63.69	0.00						11:23:04	46.42	Sample	OK	1	
WS				63.69	0.00						11:27:13	45.60	Sample	OK	1	
SEQ-IBL1	A1		1	0.00	0.27						11:31:21	42.42	Sample	OK	1	
SEQ-IBL2	A2		1	0.00	0.24						11:35:30	62.78	Sample	OK	1	
SEQ-IBL3	A3		1	0.00	0.32						11:39:38	55.16	Sample	OK	1	
SEQ-CAL1	A4		1	63.69	0.54			107.85			11:43:48	73.14	Sample	OK	1	
SEQ-CAL2	A5		1	63.69	1.00			100.25			11:47:56	187.63	Sample	OK	1	
SEQ-CAL3	A6		1	63.69	4.90			98.07			11:52:05	294.11	Sample	OK	1	
SEQ-CAL4	A7		1	63.69	18.82			94.10			11:56:13	1190.70	Sample	OK	1	
SEQ-CAL5	A8		1	63.69	39.89			99.74			12:00:22	4389.20	Sample	OK	1	
SEQ-ICV1	A9		1	63.69	5.36			107.19			12:04:31	9233.07	Sample	OK	1	
SEQ-ICB1	A10		1	63.69	0.07			0.00			12:08:41	1295.48	Sample	OK	1	
F009421-BS1	A11			63.69	19.52						12:12:50	80.79	Sample	OK	1	F009421
F009421-BSD1	A12			63.69	18.41						12:16:59	4551.07	Sample	OK	1	F009421
F009421-BLK1	A13			63.69	0.31						12:21:09	4296.20	Sample	OK	1	F009421
F009421-BLK2	A14			63.69	0.84						12:25:18	133.86	Sample	OK	1	F009421
F009421-BLK3	A15			63.69	0.08						12:29:27	257.73	Sample	OK	1	F009421
0100073-AC	A16			63.69	6.03						12:33:36	81.59	Sample	OK	1	F009421
F009421-MS1	A17			63.69	13.03			185.33			12:37:45	1449.93	Sample	OK	1	F009421
F009421-MSD1	A18			63.69	10.44						12:41:55	3058.73	Sample	OK	1	F009421
0100073-AD	A19			63.69	2.74						12:46:04	2462.61	Sample	OK	1	F009421
F009421-MS2	A20			63.69	9.21			194.18			12:50:13	694.40	Sample	OK	1	F009421
SEQ-CCV1	A21			63.69	5.20			104.03			12:54:22	2181.01	Sample	OK	1	F009421
SEQ-CCB1	B1			63.69	0.00			0.00			12:58:32	1259.24	Sample	OK	1	F009421
F009421-MSD2	B2			63.69	9.82						13:02:41	60.73	Sample	OK	1	F009421
SEQ-CCB1-AE	B3			63.69	8.03						13:06:50	2320.46	Sample	OK	1	F009421
0100073-AF	B4			63.69	10.56						13:10:59	1909.44	Sample	OK	1	F009421
0100073-AG	B5			63.69	14.85						13:15:09	2490.59	Sample	OK	1	F009421
0100073-AH	B6			63.69	4.41						13:19:18	3477.44	Sample	OK	1	F009421
0100073-AI	B7			63.69	11.98						13:23:27	1076.38	Sample	OK	1	F009421
0100073-AJ	B8			63.69	13.18						13:27:36	2817.06	Sample	OK	1	F009421
0100073-AK	B9			63.69	13.20						13:31:45	3093.14	Sample	OK	1	F009421
0100073-AM	B10			63.69	3.38						13:35:55	3097.82	Sample	OK	1	F009421
SEQ-CCV2	B11			63.69	5.28						13:40:04	840.69	Sample	OK	1	F009421
SEQ-CCB2	B12			63.69	5.18			103.52			13:44:14	1280.57	Sample	OK	1	F009421
0100073-AN	B13			63.69	0.00			0.00			13:48:23	1253.35	Sample	OK	1	F009421
0100073-AO	B14			63.69	4.54						13:52:32	53.62	Sample	OK	1	F009421
0100073-AP	B15			63.69	17.57						13:56:42	1107.93	Sample	OK	1	F009421
0100073-AQ	B16			63.69	12.70						14:00:53	4101.79	Sample	OK	1	F009421
0100073-AR	B17			63.69	22.79						14:05:02	2981.99	Sample	OK	1	F009421
0100073-AS	B18			63.69	7.00						14:09:12	5302.59	Sample	OK	1	F009421
0100073-AT	B19			63.69	11.17						14:13:21	1672.64	Sample	OK	1	F009421
0100073-AU	B20			63.69	12.31						14:17:31	2632.02	Sample	OK	1	F009421
	B21			63.69	0.57						14:21:40	2894.05	Sample	OK	1	F009421
											14:25:50	194.85	Sample	OK	1	F009421

P2

0100073-AV	C1	63.69	0.52	5009-1.RAW	14:30:00	182.83	Sample	OK	1	F009421
0100047-65RE3	C2	63.69	12.58	5010-1.RAW	14:34:09	2955.01	Sample	OK	1	F009384
SEQ-CCV3	C3	63.69	5.06	5011-1.RAW	14:38:19	1227.42	Sample	OK	1	
SEQ-CCB3	C4	63.69	0.00	5012-1.RAW	14:42:29	54.33	Sample	OK	1	
F009384-MS5	C5	63.69	16.94	5013-1.RAW	14:46:38	3957.87	Sample	OK	1	F009384
F009384-MSD5	C6	63.69	16.79	5014-1.RAW	14:50:48	3921.79	Sample	OK	1	F009384
0100078-08RE2	C7	63.69	11.46	5015-1.RAW	14:54:58	2696.97	Sample	OK	1	F009413
0100078-09RE2	C8	63.69	5.52	5016-1.RAW	14:59:08	1579.00	Sample	OK	1	F009413
0100078-10RE2	C9	63.69	5.52	5017-1.RAW	15:03:18	1332.33	Sample	OK	1	F009413
0100078-11RE2	C10	63.69	11.10	5018-1.RAW	15:07:28	2614.51	Sample	OK	1	F009413
0100078-22RE2	C11	63.69	12.89	5019-1.RAW	15:11:38	3026.66	Sample	OK	1	F009413
F009438-BS1	C12	63.69	8.63	5020-1.RAW	15:15:48	2048.97	Sample	OK	1	F009438
F009438-BS2	C13	63.69	8.60	5021-1.RAW	15:19:58	2040.52	Sample	OK	1	F009438
F009438-BS3	C14	63.69	8.94	5022-1.RAW	15:24:07	2117.36	Sample	OK	1	F009438
SEQ-CCV4	C15	63.69	4.85	5023-1.RAW	15:28:17	1177.45	Sample	OK	1	
SEQ-CCB4	C16	63.69	0.02	5024-1.RAW	15:32:27	88.48	Sample	OK	1	
F009438-BS4	C17	63.69	8.90	5025-1.RAW	15:36:37	2109.86	Sample	OK	1	F009438
0100096-01	C18	63.69	0.00	5026-1.RAW	15:40:48	53.55	Sample	OK	1	F009438
F009438-BLK2	C19	63.69	0.00	5027-1.RAW	15:44:56	51.75	Sample	OK	1	F009438
F009438-BLK3	C20	63.69	0.00	5028-1.RAW	15:49:06	51.58	Sample	OK	1	F009438
F009442-BS1	C21	63.69	18.82	5029-1.RAW	15:53:16	4389.17	Sample	OK	1	F009442
F009442-BLK1	A1	63.69	18.20	5030-1.RAW	15:57:28	4247.40	Sample	OK	1	F009442
F009442-BLK2	A2	63.69	0.19	5031-1.RAW	16:01:35	106.23	Sample	OK	1	F009442
F009442-BLK3	A3	63.69	0.00	5032-1.RAW	16:05:45	95.65	Sample	OK	1	F009442
0100073-03	A4	63.69	0.00	5033-1.RAW	16:09:55	44.99	Sample	OK	1	F009442
SEQ-CCV5	A5	63.69	24.89	5034-1.RAW	16:14:05	5785.05	Sample	OK	1	F009442
SEQ-CCB5	A6	63.69	4.83	5035-1.RAW	16:18:15	1173.37	Sample	OK	1	
F009442-MS1	A7	63.69	0.00	5036-1.RAW	16:22:25	61.25	Sample	OK	1	F009442
F009442-MSD1	A8	63.69	11.36	5037-1.RAW	16:26:35	2674.33	Sample	OK	1	F009442
0100073-41	A9	63.69	12.05	5038-1.RAW	16:30:44	2834.15	Sample	OK	1	F009442
F009442-MS2	A10	63.69	14.85	5039-1.RAW	16:34:54	3477.57	Sample	OK	1	F009442
F009442-MSD2	A11	63.69	11.21	5040-1.RAW	16:39:04	2641.31	Sample	OK	1	F009442
0100073-04	A12	63.69	11.38	5041-1.RAW	16:43:14	2678.12	Sample	OK	1	F009442
0100073-07	A13	63.69	0.64	5042-1.RAW	16:47:24	211.29	Sample	OK	1	F009442
0100073-09	A14	63.69	12.96	5043-1.RAW	16:51:34	3040.37	Sample	OK	1	F009442
0100073-10	A15	63.69	14.55	5044-1.RAW	16:55:43	3406.84	Sample	OK	1	F009442
0100073-11	A16	63.69	17.07	5045-1.RAW	16:59:54	3986.25	Sample	OK	1	F009442
SEQ-CCV6	A17	63.69	0.67	5046-1.RAW	17:04:04	218.20	Sample	OK	1	F009442
SEQ-CCB6	A18	63.69	4.86	5047-1.RAW	17:08:14	1134.20	Sample	OK	1	F009442
0100073-17	A19	63.69	0.00	5048-1.RAW	17:12:24	57.78	Sample	OK	1	
0100073-46	A20	63.69	12.49	5049-1.RAW	17:16:34	2933.57	Sample	OK	1	F009442
0100073-52	A21	63.69	14.26	5050-1.RAW	17:20:44	3341.88	Sample	OK	1	F009442
0100073-44	B1	63.69	12.84	5051-1.RAW	17:24:54	2969.15	Sample	OK	1	F009442
WS	B2	63.69	7.38	5052-1.RAW	17:29:04	1761.67	Sample	OK	1	F009442
0100073-93	B3	63.69	0.00	5053-1.RAW	17:33:15	39.36	Sample	OK	1	
SEQ-CCV7	B4	63.69	14.28	5054-1.RAW	17:37:25	3344.71	Sample	OK	1	F009420
SEQ-CCB7	B5	63.69	4.74	5055-1.RAW	17:41:35	1152.44	Sample	OK	1	
WS		63.69	0.00	5056-1.RAW	17:45:45	60.24	Sample	OK	1	
WS		63.69	0.00	5057-1.RAW	17:49:56	30.24	Sample	OK	1	
WS		63.69	0.00	5058-1.RAW	17:54:07	28.22	Sample	OK	1	
WS		63.69	0.00	5059-1.RAW	17:58:18	23.47	Sample	OK	1	

P43

WS
WS

5060-1.RAW
5061-1.RAW

18:02:28
18:06:39

20.43 Sample
21.49 Sample

OK OK
1 1

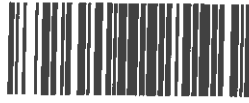
SEQ-IBL1	A1	SEQ-CCV2	B12		
SEQ-IBL2	A2	SEQ-CCB2	B13		
SEQ-IBL3	A3	OI00073-AN	B14		
SEQ-CAL1	A4	OI00073-AO	B15		
SEQ-CAL2	A5	OI00073-AP	B16		
SEQ-CAL3	A6	OI00073-AQ	B17		
SEQ-CAL4	A7	OI00073-AR	B18	F009442-BLK1	A2
SEQ-CAL5	A8	OI00073-AS	B19	F009442-BLK2	A3
SEQ-ICV1	A9	OI00073-AT	B20	F009442-BLK3	A4
SEQ-ICB1	A10	OI00073-AU	B21	OI00073-03	A5
F009421-BS1	A11	OI00073-AV	C1	SEQ-CCV5	A6
F009421-BSD1	A12	OI00047-65RE3	C2	SEQ-CCB5	A7
F009421-BLK1	A13	SEQ-CCV3	C3	F009442-MS1	A8
F009421-BLK2	A14	SEQ-CCB3	C4	F009442-MSD1	A9
F009421-BLK3	A15	F009384-MS5	C5	OI00073-41	A10
OI00073-AC	A16	F009384-MSD5	C6	F009442-MS2	A11
F009421-MS1	A17	OI00078-08RE2	C7	F009442-MSD2	A12
F009421-MSD1	A18	OI00078-09RE2	C8	OI00073-04	A13
OI00073-AD	A19	OI00078-10RE2	C9	OI00073-07	A14
F009421-MS2	A20	OI00078-11RE2	C10	OI00073-09	A15
SEQ-CCV1	A21	OI00078-22RE2	C11	OI00073-10	A16
SEQ-CCB1	B1	F009438-BS1	C12	OI00073-11	A17
F009421-MSD2	B2	F009438-BS2	C13	SEQ-CCV6	A18
OI00073-AE	B3	F009438-BS3	C14	SEQ-CCB6	A19
OI00073-AF	B4	SEQ-CCV4	C15	OI00073-17	A20
OI00073-AG	B5	SEQ-CCB4	C16	OI00073-46	A21
OI00073-AH	B6	F009438-BS4	C17	OI00073-52	B1
OI00073-AI	B7	OI00096-01	C18	OI00073-44	B2
OI00073-AJ	B8	F009438-BLK2	C19	WS	
OI00073-AK	B9	F009438-BLK3	C20	OI00073-93	B3
OI00073-AL	B10	F009442-BS1	C21	SEQ-CCV7	B4
OI00073-AM	B11	F009442-BSD1	A1	SEQ-CCB7	B5

Verified by: *[Signature]* 10/8/20

OK19021
Attached

ANALYSIS SEQUENCE

OK19020



QUALITY ASSURANCE
PEER - REVIEWED
INITIALS: PGS

Instrument: Hg2600-2

Calibration ID: UNASSIGNED

Analyzed: 11/18/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OK19020-IBL1	QC	1			
OK19020-IBL2	QC	2			
OK19020-IBL3	QC	3			
OK19020-CAL1	QC	4	2002597		
OK19020-CAL2	QC	5	2002598		
OK19020-CAL3	QC	6	2002774		
OK19020-CAL4	QC	7	2002775		
OK19020-CAL5	QC	8	2002776		
OK19020-ICV1	QC	9	2002777		
OK19020-ICB1	QC	10			
F011318-BS1	QC	11			
F011318-BSD1	QC	12			
F011318-BS2	QC	13			
F011318-BS3	QC	14			
F011318-BLK1	QC	15			
F011318-BLK2	QC	16			
F011318-BLK3	QC	17			
0I00047-CG	Hg-CVAFS-T-7030	18			
F011318-MS1	QC	19			
F011318-MSD1	QC	20			
OK19020-CCV1	QC	21	2002777		
OK19020-CCB1	QC	22			
0I00047-CH	Hg-CVAFS-T-7030	23			
OK00077-01	Hg-CVAFS-T-7030	24			
OK19020-CCV2	QC	25	2002777		
OK19020-CCB2	QC	26			

Samples Loaded By

11/19/2020
Date

Data Processed By

11/19/2020
Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>ZKH</u>	Sequence(s) #: <u>OK19020</u>
Reviewer:	Dataset ID(s): <u>THg26002-201118-2</u>
Date: <u>11/19/2020</u>	WO (s) #: <u>0100047, 0K00077</u>
Batch #(s): <u>F011318</u>	

Analyst Initials ZKH Reviewer Initials PGS

- 5b. Has the B/C section data been uploaded? YES NO N/A
- QA/QC Data Checked**
6. RSD CF ($\leq 15\%$) PASS FAIL
- Comments: _____
-
7. The calibration curve included a minimum of 5 Standards YES NO
- Comments: _____
-
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) PASS FAIL
9. ICV and CCV % Recoveries EPA 1631E (77-123%) PASS FAIL
- Comments: _____
10. Do all calibration points pass acceptance criteria? YES NO
- Comments: _____
-
11. Are qualifiers consistent with the data review flowcharts? YES NO N/A
- Comments: _____
-
12. Explain any items on the failed data report from Element
- Comments: _____
-
13. Are the individual Preparation Blanks $< PQL$ or $< 2.2 \times MDL$ for WI (refer to appropriate prep method PQL list) PASS FAIL
- (a) If not $< PQL$ or $< 2.2 \times MDL$ for WI, note which PB(s) are above control limit:
- (b) Is the mean PB $< PQL$ or $< 2.2 \times MDL$ for WI (for appropriate qualification)? YES NO
- (c) Was a BrCl Blank analyzed for each preservation level? YES NO N/A
- (d) Are Preparation Blanks summarized on QC page? YES NO
14. Filtration Blank Prepared (if yes, use FB qualifier) YES NO
- (a) Filtration Blank prep date same as associated samples' prep date YES NO N/A
- (b) Filtration Blank absolute value $< PQL$ or $< 2.2 \times MDL$ for WI YES NO N/A
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? PASS FAIL
- Comments: _____
-
16. CCBs individually < 0.50 ng/L or $2.2 \times MDL$ for WI? PASS FAIL
- Comments: _____
-
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) YES NO N/A
18. Is the correct 'Source' designated for MD/MS/MSD? YES NO
19. For digested preps: was there a spike witness signature & date on the prep bench sheet? YES NO N/A

ZKH
11/19/2020

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	ZKH	Sequence(s) #:	OK19020
Reviewer:		Dataset ID(s):	THg26002-201118-2
Date:	11/19/2020	WO (s) #:	0100047, 0K00077
Batch #(s):	F011318		

Analyst Initials

ZKH

Reviewer Initials

PCS

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? YES NO
- Comments: _____
21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
- Comments: _____
22. Are the samples run at the correct dilution level for the method? YES NO
- Comments: _____
23. Dissolved < Total (if applicable) YES NO N/A
- Comments: _____
24. Effluent < Influent (visually confirm if needed) YES NO N/A
- Comments: _____
25. Are re-runs noted with reason? YES NO N/A
- Comments: _____
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
- Comments: _____
27. Is the B trap <5% A Traps YES NO N/A
- Comments: _____
28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
- Comments: _____
29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
- Comments: _____
30. Have re-extracts been created for non-reportable samples? YES NO N/A
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
32. Does the data set need scanning? YES N/A
33. Does the dataset have an LOQ/LOQ or DOC? YES N/A
34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
35. Water samples-is the final volume correct in the sequence? YES NO N/A

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

36. Date of analyst IDOC/CDOC: _____ IDOC/CDOC within last 12 months? YES NO
37. Date of analyst's SOP reading for method: _____ Current SOP revision read? YES NO
38. Date of LOD: _____ LOD within last 3 months? YES NO
39. Date of LOQ: _____ LOQ within last 3 months? YES NO

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0K19020

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
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Analyst Reviewed By 

Date 11/19/2020

Peer Reviewed By _____ Date _____

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: UFL 11-16-2020
Upload/Date: UFL 11-18-2020

Samples to lab: 1513
Reviewer/Date: ZCH 11/19/2020

Batch #: F011318
MFS 11/19/20

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (Nutraceuticals)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input type="checkbox"/>	NA	Other: <u>SOP 2795 70:30</u>	

Initials	SOP Date	DOC Date
<u>UFL</u>	<u>11-16-2020</u>	<u>11-16-2020</u>

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: Hg

- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <p>1. Is any SOP/DOC expiring within one week of Submission Date?
Data cannot be reported without a current IDOC/CDOC.</p> <p>2. Check prep method
(a) For Ceuticals: Is correct Hg code being used in LIMS?</p> <p>3. Compare sample ID & container ID with benchsheet & in LIMS</p> <p>4. Check for transcription errors from benchsheet
(a) Check and compare initial and final volumes
(b) Check and compare mass
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?
(d) Have assay logbook copies been attached & avg masses entered?
(e) For re-digests, have e-mails been attached and verified?
(f) Benchsheet prep date MUST match actual prep date</p> <p>5. Samples per Batch? Check QC Requirements
(a) PBs per batch?
(b) Are pre and post homogenization blanks in batch?
(c) BS, BS/BSO or CRM in batch?
(d) MS/MSD in batch?
(e) MD in batch?
(f) Is there at least one duplicate QC source in batch?
(g) Are there any client specific requests, QC requests, etc?</p> <p>Document: _____</p> <p>(h) Correct LIMS spike ID included for BS, BS/BSO and/or MS/MSD?
(i) Correct 'source' designated for MD/MS/MSD?
(j) For EFGS-filtered samples, was a filtration blank included?</p> <p>6. Special prep requirements?
(a) For 1638: Have samples sat for 48 hours after preservation?
(b) For 200.8: Have samples sat for 16 hours after preservation?
(c) For DOD have pipettes been calibrated day of prep?</p> <p>7. Are the samples appropriately spiked?
(a) Is the spike and amount used appropriate and entered into LIMS?
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)
(c) Spikes added:</p> | <table border="0" style="width: 100%;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%;"><input type="checkbox"/> YES</td> <td style="width: 15%;"><input type="checkbox"/> NO</td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/> YES</td> <td><input checked="" type="checkbox"/> NO</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td><input type="checkbox"/> ICPMS</td> <td><input type="checkbox"/> CV-AFS</td> <td><input checked="" type="checkbox"/> 70:30</td> <td><input type="checkbox"/> N/A</td> <td></td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> N/A</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/> YES</td> <td><input type="checkbox"/> N/A</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/> YES</td> 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| | <input type="checkbox"/> YES | <input type="checkbox"/> NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | <input checked="" type="checkbox"/> ≤ 10 | <input type="checkbox"/> ≤ 20 | <input type="checkbox"/> 3 PBs | <input type="checkbox"/> 2 PBs | <input type="checkbox"/> 1 PBs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : _____

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
<u>1000¹Stal</u>	<u>2007561</u>	<u>20</u>			
<u>1000¹Stal</u>	<u>200755</u>	<u>100</u>			

PREPARATION BENCH SHEET

F011318

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

1304
Prepared: 11/16/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011318-BLK1	Blank	0.25	20					
F011318-BLK2	Blank	0.25	20					
F011318-BLK3	Blank	0.25	20					
F011318-BS1	LCS	0.25	20	2002561	20			
F011318-BS2	LCS	0.25	20	2002561	20			
F011318-BS3	LCS	0.25	20	2002561	20			
F011318-BSD1	LCS Dup	0.25	20	2002561	20			
F011318-MS1	Matrix Spike [0I00047-CG]	0.2591	20	2002758	100			
F011318-MSD1	Matrix Spike Dup [0I00047-CG]	0.265	20	2002758	100			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
2002561	THg 100ng/mL Primary Spiking Standard	16-Jan-21 00:00	2002376	Boiling Chips for Trace Metals	04-Apr-21 00:00
2002758	THg 1,000ng/mL Secondary Spiking Standard	04-May-21 00:00	2002602	70/30 Digestion Acid	20-Apr-21 00:00
			2002752	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F011318

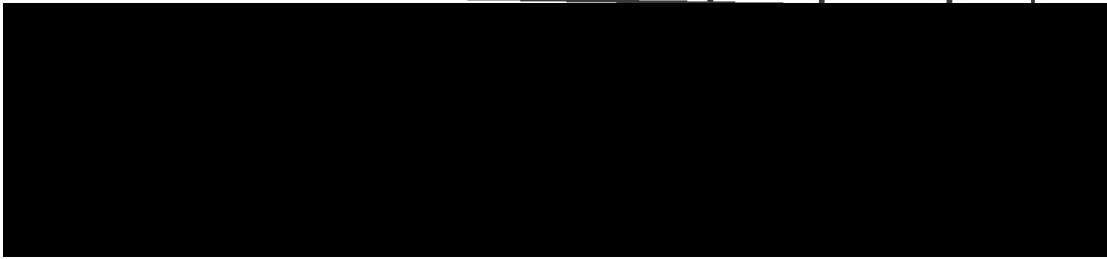
Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 11/16/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0I00047-CG	CJ-04_20LT109_091020_10_LOB_TA	0.2645	20	-	-	200302		
0I00047-CH	CJ-04_20LT109_091020_11_LOB_TA	0.2624	20	-	-	200302		
0K00077-01	LEL 70:30 DOC 2020	0.25	20	-	-	S&R		Shared as BLK1. LEL 11/16/2020



Technician: UPA Batch#: F011318 Batch Color ID: Purple Date: 11-16-2020

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: NA
 Balance#: 23 Calibrated? Yes No Vial Type: Glass Teflon
 *Time in: 1304 Actual Temp. (raw): 70.1 °C w/ CF: 70.5 °C Therm.#: 170756091 Calibrated? Yes No
 Time out: 1513 Actual Temp. (raw): 72.2 °C w/ CF: 72.6 °C *Time in can't begin before target temperature is reached

Final vol.: 20 mL (LIMS ID: 2002752) BS Spike vol.: 20 µL (LIMS ID: 2002757)
 Spike Witness: ZLH 11/16/2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2002758)

HCl LIMS ID: NA Pipette SN#: 12118325 Calibration Date: 11-14-2020
 HNO₃ LIMS ID: NA Pipette SN#: NA Calibration Date: NA
 70/30 LIMS ID: 2002662 (5mL) Dispenser #: 19661507 Calibrated? Yes No
 Other Acid LIMS ID: 2002752 (5% BrCl) Dispenser #: 19337295 Cal 7-21-2020
 Glass Vial # 00078010 Boiling Chip lot # 2002376 *Hotblock Position: NA

Vial #	Sample ID Number	Container ID	Sample Size	GRM/LIMS ID
1	F011318-BIK1	A	0.2503	19
2	F011318-BIK2	A	0.2900	20
3	F011318-BIK3	A	0.2597	21
4	F011318-BS17	A	0.2886	22
5	F011318-BSD1	A	0.2562	23
6	F011318-BS2	A	0.3051	24
7	F011318-BS3	A	0.2777	25
8	0100047-CL7	C	0.2645	26
9	F011318-MS1	A	0.2591	27
10	F011318-MSD1	A	0.2650	28
11	0100047-CH	C	0.2624	29
12				30
13				31
14				32
15				33
16				34
17				35
18				36

UPA 11-16-2020

Comment:
 OK 00077-01 Shared
 as BIK1 for DOC.
 via 11-16-2020
 0100047-CL7 SMC

PREPARATION BENCH SHEET

F011318

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 11/16/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F011318-BLK1	Blank	0.25	20					
F011318-BLK2	Blank	0.25	20					
F011318-BLK3	Blank	0.25	20					
F011318-BS1	LCS	0.25	20	2002561	20			
F011318-BS2	LCS	0.25	20	2002561	20			
F011318-BS3	LCS	0.25	20	2002561	20			
F011318-BSD1	LCS Dup	0.25	20	2002561	20			
F011318-MS1	Matrix Spike [0I00047-CG]	0.2591	20	2002758	100			
F011318-MSD1	Matrix Spike Dup [0I00047-CG]	0.265	20	2002758	100			

<u>Standard ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>	<u>Reagent ID(s):</u>	<u>Description:</u>	<u>Expiration:</u>
2002561	THg 100ng/mL Primary Spiking Standard	16-Jan-21 00:00	2002376	Boiling Chips for Trace Metals	04-Apr-21 00:00
2002758	THg 1,000ng/mL Secondary Spiking Standard	04-May-21 00:00	2002505	THg Dilute 1% BrCl	07-Mar-21 00:00
			2002506	THg 2% BrCl	
			2002602	70/30 Digestion Acid	20-Apr-21 00:00
			2002606	25% Hydroxylamine-HCl working solution	03-Apr-21 00:00
			2002607	THg Washstation (0.5% BrCl)	07-Mar-21 00:00
			2002752	5% BrCl	07-Feb-21 00:00
			2002773	3% SnCl2 THg reductant	03-May-21 00:00

PREPARATION BENCH SHEET

F011318

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 11/16/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-CG	CJ-04_20LT109_091020_10_LOB_TA	0.2645	20	-	-	200302		
0100047-CH	CJ-04_20LT109_091020_11_LOB_TA	0.2624	20	-	-	200302		
OK00077-01	LEL 70:30 DOC 2020	0.25	20	-	-	S&R		Shared as BLK1. LEL 11/16/2020



Analysis Datasheet for Total Mercury

Date of Analysis: November 18, 2020

Instrument #: Hg2600-3

LIMS Sequence #: 0K19020, 0K19021

Analyst: ZKH

Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	51.34 units	102.67	26.94 units	53.88	94.1 %Rec
SEQ-CAL2	1	1.00 ng/L	84.40 units	84.40	60.01 units	60.01	104.8 %Rec
SEQ-CAL3	1	5.00 ng/L	299.68 units	59.94	275.28 units	55.06	96.2 %Rec
SEQ-CAL4	1	20.00 ng/L	1156.65 units	57.83	1132.26 units	56.61	98.9 %Rec
SEQ-CAL5	1	40.00 ng/L	2449.29 units	61.23	2424.90 units	60.62	105.9 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 57.24 Corr. St Dev RF +/- 2.98 Corr. RSD CF 5.2% RSD Uncorr. Mean RF 73.22

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	24.40 units	±2.22	0.33 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	3.520 ng/L	±0.962
BLK	2	3	0.198 ng/L	±0.017
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	ZKH	CAL	SEQ-IBL1	1	11/18/2020 14:43:08	6948-1.RAW	2:43:08 PM	26.63			2.2	0.039	0.039	ng/L	
Hg2600-3	ZKH	CAL	SEQ-IBL2	1	11/18/2020 14:47:17	6949-1.RAW	2:47:17 PM	24.36			0.0	-0.001	-0.001	ng/L	
Hg2600-3	ZKH	CAL	SEQ-IBL3	1	11/18/2020 14:51:26	6950-1.RAW	2:51:26 PM	22.19			-2.2	-0.038	-0.038	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL1	1	11/18/2020 14:55:34	6951-1.RAW	2:55:34 PM	51.34			26.9	0.471	0.471	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL2	1	11/18/2020 14:59:44	6952-1.RAW	2:59:44 PM	84.40			60.0	1.048	1.048	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL3	1	11/18/2020 15:03:53	6953-1.RAW	3:03:53 PM	299.66			275.3	4.810	4.810	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL4	1	11/18/2020 15:08:02	6954-1.RAW	3:08:02 PM	1156.65			1132.3	19.782	19.782	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CAL5	1	11/18/2020 15:12:10	6955-1.RAW	3:12:10 PM	2449.29			2424.9	42.366	42.366	ng/L	
Hg2600-3	ZKH	CAL	SEQ-ICV1	1	11/18/2020 15:16:20	6956-1.RAW	3:16:20 PM	313.49			289.1	5.051	5.051	ng/L	
Hg2600-3	ZKH	CAL	SEQ-ICB1	1	11/18/2020 15:20:29	6957-1.RAW	3:20:29 PM	38.12			13.7	0.240	0.240	ng/L	
Hg2600-3	ZKH	SAM	F011318-BS1	20	11/18/2020 15:24:38	6958-1.RAW	3:24:38 PM	317.11	1		292.7	4.938	98.761	ng/L	
Hg2600-3	ZKH	SAM	F011318-BSD1	20	11/18/2020 15:28:47	6959-1.RAW	3:28:47 PM	300.58	1		276.2	4.649	92.988	ng/L	
Hg2600-3	ZKH	SAM	F011318-BS2	20	11/18/2020 15:32:55	6960-1.RAW	3:32:55 PM	327.95	1		303.6	5.127	102.550	ng/L	
Hg2600-3	ZKH	SAM	F011318-BS3	20	11/18/2020 15:37:04	6961-1.RAW	3:37:04 PM	377.30	1		352.9	5.990	119.795	ng/L	
Hg2600-3	ZKH	BLK	F011318-BLK1	20	11/18/2020 15:41:13	6962-1.RAW	3:41:13 PM	33.98	1		9.6	0.168	3.351	ng/L	
Hg2600-3	ZKH	BLK	F011318-BLK2	20	11/18/2020 15:45:23	6963-1.RAW	3:45:23 PM	37.43	1		13.0	0.228	4.556	ng/L	
Hg2600-3	ZKH	BLK	F011318-BLK3	20	11/18/2020 15:49:31	6964-1.RAW	3:49:31 PM	31.99	1		7.6	0.133	2.655	ng/L	
Hg2600-3	ZKH	SAM	0100047-CG	400	11/18/2020 15:53:41	6965-1.RAW	3:53:41 PM	309.50	1		285.1	4.972	1988.975	ng/L	
Hg2600-3	ZKH	SAM	F011318-MSD1	400	11/18/2020 15:57:50	6966-1.RAW	3:57:50 PM	1013.59	1		989.2	17.274	6909.523	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCV1	1	11/18/2020 16:01:59	6967-1.RAW	4:01:59 PM	869.67	1		865.3	15.109	6043.542	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCB1	1	11/18/2020 16:06:08	6968-1.RAW	4:06:08 PM	312.58	1		288.2	5.035	5.035	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 16:10:18	6969-1.RAW	4:10:18 PM	36.25	1		11.9	0.207	0.207	ng/L	
Hg2600-3	ZKH	SAM	0100047-CH	1	11/18/2020 16:14:27	6970-1.RAW	4:14:27 PM	14.90	1		-9.5	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	0K00077-01	1	11/18/2020 16:18:36	6971-1.RAW	4:18:36 PM	468.69	1		444.3	4.242	4.242	ng/L	
Hg2600-3	ZKH	SAM	F011330-BS1	1	11/18/2020 16:22:46	6972-1.RAW	4:22:46 PM	43.15	1		18.8	-3.193	-3.193	ng/L	
Hg2600-3	ZKH	SAM	F011330-BSD1	1	11/18/2020 16:26:55	6973-1.RAW	4:26:55 PM	319.85	2		295.5	4.964	4.964	ng/L	
Hg2600-3	ZKH	BLK	F011330-BLK1	1	11/18/2020 16:31:03	6974-1.RAW	4:31:03 PM	333.55	2		309.2	5.203	5.203	ng/L	
Hg2600-3	ZKH	BLK	F011330-BLK2	1	11/18/2020 16:35:11	6975-1.RAW	4:35:11 PM	34.78	2		10.4	0.181	0.181	ng/L	
Hg2600-3	ZKH	BLK	F011330-BLK3	1	11/18/2020 16:39:21	6976-1.RAW	4:39:21 PM	36.70	2		12.3	0.215	0.215	ng/L	
Hg2600-3	ZKH	SAM	0K00079-01	1	11/18/2020 16:43:29	6977-1.RAW	4:43:29 PM	35.77	2		11.4	0.199	0.199	ng/L	
Hg2600-3	ZKH	SAM	F011330-MS1	1	11/18/2020 16:47:38	6978-1.RAW	4:47:38 PM	357.88	2		333.5	5.628	5.628	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCV2	1	11/18/2020 16:51:48	6979-1.RAW	4:51:48 PM	659.02	2		634.6	10.889	10.889	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCB2	1	11/18/2020 16:55:58	6980-1.RAW	4:55:58 PM	337.16	2		312.8	5.464	5.464	ng/L	
Hg2600-3	ZKH	SAM	F011330-MSD1	1	11/18/2020 17:00:07	6981-1.RAW	5:00:07 PM	33.32	2		8.9	0.156	0.156	ng/L	
Hg2600-3	ZKH	SAM	0K00054-04RE1	1	11/18/2020 17:04:17	6982-1.RAW	5:04:17 PM	663.83	2		639.4	10.973	10.973	ng/L	
Hg2600-3	ZKH	SAM	F011330-MS2	1	11/18/2020 17:08:27	6983-1.RAW	5:08:27 PM	22.69	2		-1.7	-0.228	-0.228	ng/L	
Hg2600-3	ZKH	SAM	F011330-MSD2	1	11/18/2020 17:12:35	6984-1.RAW	5:12:35 PM	317.40	2		293.0	4.921	4.921	ng/L	
Hg2600-3	ZKH	SAM	0K00054-05RE1	1	11/18/2020 17:16:45	6985-1.RAW	5:16:45 PM	327.18	2		302.8	5.091	5.091	ng/L	
Hg2600-3	ZKH	SAM	0K00054-06RE1	1	11/18/2020 17:20:54	6986-1.RAW	5:20:54 PM	47.19	2		22.8	0.200	0.200	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 17:25:04	6987-1.RAW	5:25:04 PM	32.89	2		8.5	-0.050	-0.050	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 17:29:13	6988-1.RAW	5:29:13 PM	6.73	2		-17.7	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 17:33:21	6989-1.RAW	5:33:21 PM	7.62	2		-16.8	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 17:37:30	6990-1.RAW	5:37:30 PM	7.72	2		-16.7	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCV3	1	11/18/2020 17:41:39	6991-1.RAW	5:41:39 PM	3.20	2		-21.2	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCB3	1	11/18/2020 17:45:49	6992-1.RAW	5:45:49 PM	326.35	2		302.0	5.276	5.276	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 17:49:57	6993-1.RAW	5:49:57 PM	36.06	2		11.7	0.204	0.204	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 17:54:07	6994-1.RAW	5:54:07 PM	8.53	2		-15.9	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 17:58:15	6995-1.RAW	5:58:15 PM	6.44	2		-18.0	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 18:02:25	6996-1.RAW	6:02:25 PM	5.40	2		-19.0	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 18:06:33	6997-1.RAW	6:06:33 PM	5.56	2		-18.8	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 18:10:43	6998-1.RAW	6:10:43 PM	7.56	2		-16.8	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 18:14:53	6999-1.RAW	6:14:53 PM	5.60	2		-18.8	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 18:19:01	7000-1.RAW	6:19:01 PM	7.02	2		-17.4	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 18:23:10	7001-1.RAW	6:23:10 PM	6.26	2		-18.1	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 18:27:19	7002-1.RAW	6:27:19 PM	6.22	2		-18.2	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 18:31:29	7003-1.RAW	6:31:29 PM	4.49	2		-19.9	Error	#VALUE!	ng/L	
Hg2600-3	ZKH	SAM	WS	1	11/18/2020 18:35:38	7004-1.RAW	6:35:38 PM	6.98	2		-17.4	Error	#VALUE!	ng/L	

Instrument	Analyst	Sample		Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB		RESP	InitialResult	FinalResult	InitialUnits	Comments
		Type	LabNumber							Correction?						
Hg2600-3	ZKH	CAL	SEQ-CCV4	1	11/18/2020 18:39:48	7005-1.RAW	6:39:48 PM	309.44				285.0	4.980	4.980	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCB4	1	11/18/2020 18:43:57	7006-1.RAW	6:43:57 PM	39.61				15.2	0.266	0.266	ng/L	
Hg2600-3	ZKH	SAM	0K00054-07RE1	1	11/18/2020 18:48:07	7007-1.RAW	6:48:07 PM	15.10		2		-9.3	-0.361	-0.361	ng/L	
Hg2600-3	ZKH	SAM	0K00054-08RE1	1	11/18/2020 18:52:17	7008-1.RAW	6:52:17 PM	36.48		2		12.1	0.013	0.013	ng/L	
Hg2600-3	ZKH	SAM	0K00054-11RE1	1	11/18/2020 18:56:25	7009-1.RAW	6:56:25 PM	27.93		2		3.5	-0.137	-0.137	ng/L	
Hg2600-3	ZKH	SAM	0K00054-12RE1	1	11/18/2020 19:00:35	7010-1.RAW	7:00:35 PM	12.58		2		-11.8	-0.405	-0.405	ng/L	
Hg2600-3	ZKH	SAM	0K00054-13RE1	1	11/18/2020 19:04:43	7011-1.RAW	7:04:43 PM	21.41		2		-3.0	-0.250	-0.250	ng/L	
Hg2600-3	ZKH	SAM	0K00054-14RE1	10	11/18/2020 19:08:52	7012-1.RAW	7:08:52 PM	1794.42		2		1770.0	30.905	309.050	ng/L	
Hg2600-3	ZKH	SAM	0K00054-15RE1	1	11/18/2020 19:13:01	7013-1.RAW	7:13:01 PM	407.99		2		383.6	6.504	6.504	ng/L	
Hg2600-3	ZKH	SAM	0K00054-16RE1	1	11/18/2020 19:17:10	7014-1.RAW	7:17:10 PM	1183.60		2		1159.2	20.055	20.055	ng/L	
Hg2600-3	ZKH	SAM	0K00058-02RE1	1	11/18/2020 19:21:19	7015-1.RAW	7:21:19 PM	852.7996541		2		828.4	14.275	14.275	ng/L	
Hg2600-3	ZKH	SAM	0K00058-03RE1	1	11/18/2020 19:25:26	7016-1.RAW	7:25:26 PM	35.22		2		10.8	-0.009	-0.009	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCV5	1	11/18/2020 19:29:38	7017-1.RAW	7:29:38 PM	327.70				303.3	5.299	5.299	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCB5	1	11/18/2020 19:33:47	7018-1.RAW	7:33:47 PM	47.12				22.7	0.397	0.397	ng/L	
Hg2600-3	ZKH	SAM	0K00079-02	1	11/18/2020 19:37:57	7019-1.RAW	7:37:57 PM	38.79		2		14.4	0.053	0.053	ng/L	
Hg2600-3	ZKH	SAM	0K00079-03	1	11/18/2020 19:42:06	7020-1.RAW	7:42:06 PM	28.13		2		3.7	-0.133	-0.133	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCV6	1	11/18/2020 19:46:16	7021-1.RAW	7:46:16 PM	320.31				295.9	5.170	5.170	ng/L	
Hg2600-3	ZKH	CAL	SEQ-CCB6	1	11/18/2020 19:50:25	7022-1.RAW	7:50:25 PM	39.26				14.9	0.260	0.260	ng/L	

TotalMercury EPA1631
 Operat ZKH BlankS 24.395 Calib Eqn: Conc = (Area-24.39 Run Date: ##### Blank SD: 2.217014019
 Worksh THg2600 CalibFa 57.236 Status: QC Warnings:8/QC E Run Time: 14:23:38 Blank RSD%: 9.08792507
 Method #### R: 0.9995 R²: 0.9989 CF SD: 2.979790432
 Descrip THg26002-201118-4 CF RSD%: 5.206125084

Sample/ID	Location	Rinse	Dilute	Blank	Conc (ppb)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (ppb)	Flags	RunCount	Comment
Clean				0.00	0.04					6944-1.RAW	14:26:30	2.34	Clean	OK	1	
WS				24.40	0.00					6945-1.RAW	14:30:40	15.44	Sample	OK	1	
WS				24.40	0.00					6946-1.RAW	14:34:49	15.12	Sample	OK	1	
WS				24.40	0.00					6947-1.RAW	14:38:59	15.09	Sample	OK	1	
SEQ-IBL1	A1			0.00	0.47					6948-1.RAW	14:43:08	26.63	Sample	OK	1	
SEQ-IBL2	A2			0.00	0.43					6949-1.RAW	14:47:17	24.36	Sample	OK	1	
SEQ-IBL3	A3			0.00	0.39					6950-1.RAW	14:51:26	22.19	Sample	OK	1	
SEQ-CAL1	A4			24.40	0.47			94.14		6951-1.RAW	14:55:34	51.34	Sample	OK	1	
SEQ-CAL2	A5			24.40	1.05			104.84		6952-1.RAW	14:59:44	84.40	Sample	OK	1	
SEQ-CAL3	A6			24.40	4.81			96.19		6953-1.RAW	15:03:53	299.68	Sample	OK	1	
SEQ-CAL4	A7			24.40	19.78			98.91		6954-1.RAW	15:08:02	1156.65	Sample	OK	1	
SEQ-CAL5	A8			24.40	42.37			105.92		6955-1.RAW	15:12:10	2449.29	Sample	OK	1	
SEQ-ICV1	A9			24.40	5.05			101.02		6956-1.RAW	15:16:20	313.49	Sample	OK	1	
SEQ-ICB1	A10			24.40	0.24					6957-1.RAW	15:20:29	38.12	Sample	OK	1	
F011318-BS1	A11		20	24.40	102.28					6958-1.RAW	15:24:38	317.11	Sample	OK	1	F011318
F011318-BSD1	A12		20	24.40	96.51					6959-1.RAW	15:28:47	300.58	Sample	OK	1	F011318
F011318-BS2	A13		20	24.40	106.07					6960-1.RAW	15:32:55	327.95	Sample	OK	1	F011318
F011318-BS3	A14		20	24.40	123.31					6961-1.RAW	15:37:04	377.30	Sample	OK	1	F011318
F011318-BLK1	A15		20	24.40	3.35					6962-1.RAW	15:41:13	33.98	Sample	OK	1	F011318
F011318-BLK2	A16		20	24.40	4.56					6963-1.RAW	15:45:23	37.43	Sample	OK	1	F011318
F011318-BLK3	A17		20	24.40	2.65					6964-1.RAW	15:49:31	31.99	Sample	OK	1	F011318
0I00047-CG	A18		400	24.40	1992.49					6965-1.RAW	15:53:41	309.50	Sample	OK	1	F011318
F011318-MS1	A19		400	24.40	6913.04			346.78		6966-1.RAW	15:57:50	1013.59	Sample	OK	1	F011318
F011318-MSD1	A20		400	24.40	6047.06					6967-1.RAW	16:01:59	889.67	Sample	OK	1	F011318
SEQ-CCV1	A21			24.40	5.04			100.70		6968-1.RAW	16:06:08	312.58	Sample	OK	1	F011318
SEQ-CCB1	B1			24.40	0.21			0.00		6969-1.RAW	16:10:18	36.25	Sample	OK	1	
WS				24.40	0.00					6970-1.RAW	16:14:27	14.90	Sample	OK	1	
0I00047-CH	B2			24.40	7.76					6971-1.RAW	16:18:36	468.69	Sample	OK	1	
OK00077-01	B3			24.40	0.33					6972-1.RAW	16:22:46	43.15	Sample	OK	1	
F011330-BS1	B4			24.40	5.16					6973-1.RAW	16:26:55	319.85	Sample	OK	1	
F011330-BSD1	B5			24.40	5.40					6974-1.RAW	16:31:03	333.55	Sample	OK	1	
F011330-BLK1	B6			24.40	0.18					6975-1.RAW	16:35:11	34.78	Sample	OK	1	
F011330-BLK2	B7			24.40	0.21					6976-1.RAW	16:39:21	36.70	Sample	OK	1	
F011330-BLK3	B8			24.40	0.20					6977-1.RAW	16:43:29	35.77	Sample	OK	1	
OK00079-01	B9			24.40	5.83					6978-1.RAW	16:47:38	357.88	Sample	OK	1	
F011330-MS1	B10			24.40	11.09			162.43		6979-1.RAW	16:51:48	659.02	Sample	OK	1	
SEQ-CCV2	B11			24.40	5.46			109.29		6980-1.RAW	16:55:58	337.16	Sample	OK	1	
SEQ-CCB2	B12			24.40	0.16			0.00		6981-1.RAW	17:00:07	33.32	Sample	OK	1	
F011330-MSD1	B13			24.40	11.17					6982-1.RAW	17:04:17	663.83	Sample	OK	1	
OK00054-04RE1	B14			24.40	0.00					6983-1.RAW	17:08:27	22.69	Sample	OK	1	
F011330-MS2	B15			24.40	5.12			255.96		6984-1.RAW	17:12:35	317.40	Sample	OK	1	
F011330-MSD2	B16			24.40	5.29					6985-1.RAW	17:16:45	327.16	Sample	OK	1	
OK00054-05RE1	B17			24.40	0.40					6986-1.RAW	17:20:54	47.19	Sample	OK	1	
OK00054-06RE1	B18			24.40	0.15					6987-1.RAW	17:25:04	32.89	Sample	OK	1	
WS				24.40	0.00					6988-1.RAW	17:29:13	6.73	Sample	OK	1	
WS				24.40	0.00					6989-1.RAW	17:33:21	7.62	Sample	OK	1	

WS		24.40	0.00		6990-1.RAW	17:37:30	7.72	Sample	OK	1
WS		24.40	0.00		6991-1.RAW	17:41:39	3.20	Sample	OK	1
SEQ-CCV3	B19	24.40	5.28	105.51	6992-1.RAW	17:45:49	326.35	Sample	OK	1
SEQ-CCB3	B20	24.40	0.20	0.00	6993-1.RAW	17:49:57	36.06	Sample	OK	1
WS		24.40	0.00		6994-1.RAW	17:54:07	8.53	Sample	OK	1
WS		24.40	0.00		6995-1.RAW	17:58:15	6.44	Sample	OK	1
WS		24.40	0.00		6996-1.RAW	18:02:25	5.40	Sample	OK	1
WS		24.40	0.00		6997-1.RAW	18:06:33	5.56	Sample	OK	1
WS		24.40	0.00		6998-1.RAW	18:10:43	7.56	Sample	OK	1
WS		24.40	0.00		6999-1.RAW	18:14:53	5.60	Sample	OK	1
WS		24.40	0.00		7000-1.RAW	18:19:01	7.02	Sample	OK	1
WS		24.40	0.00		7001-1.RAW	18:23:10	6.26	Sample	OK	1
WS		24.40	0.00		7002-1.RAW	18:27:19	6.22	Sample	OK	1
WS		24.40	0.00		7003-1.RAW	18:31:29	4.49	Sample	OK	1
WS		24.40	0.00		7004-1.RAW	18:35:38	6.98	Sample	OK	1
SEQ-CCV4	B21	1 24.40	4.98	99.60	7005-1.RAW	18:39:48	309.44	Sample	OK	1
SEQ-CCB4	C1	1 24.40	0.27	0.00	7006-1.RAW	18:43:57	39.61	Sample	OK	1
OK00054-07RE1	C2	1 24.40	0.00		7007-1.RAW	18:48:07	15.10	Sample	OK	1
OK00054-08RE1	C3	1 24.40	0.21		7008-1.RAW	18:52:17	36.48	Sample	OK	1
OK00054-11RE1	C4	1 24.40	0.06		7009-1.RAW	18:56:25	27.93	Sample	OK	1
OK00054-12RE1	C5	1 24.40	0.00		7010-1.RAW	19:00:35	12.58	Sample	OK	1
OK00054-13RE1	C6	1 24.40	0.00		7011-1.RAW	19:04:43	21.41	Sample	OK	1
OK00054-14RE1	C7	10 24.40	309.25		7012-1.RAW	19:08:52	1794.42	Sample	OK	1
OK00054-15RE1	C8	1 24.40	6.70		7013-1.RAW	19:13:01	407.99	Sample	OK	1
OK00054-16RE1	C9	1 24.40	20.25		7014-1.RAW	19:17:10	1183.60	Sample	OK	1
OK00058-02RE1	C10	1 24.40	14.47		7015-1.RAW	19:21:19	852.80	Sample	OK	1
OK00058-03RE1	C11	1 24.40	0.19		7016-1.RAW	19:25:28	35.22	Sample	OK	1
SEQ-CCV5	C12	1 24.40	5.30	105.98	7017-1.RAW	19:29:38	327.70	Sample	OK	1
SEQ-CCB5	C13	1 24.40	0.40	0.00	7018-1.RAW	19:33:47	47.12	Sample	OK	1
OK00079-02	C14	1 24.40	0.25		7019-1.RAW	19:37:57	38.79	Sample	OK	1
OK00079-03	C15	1 24.40	0.07		7020-1.RAW	19:42:06	28.13	Sample	OK	1
SEQ-CCV6	C16	1 24.40	5.17	103.40	7021-1.RAW	19:46:16	320.31	Sample	OK	1
SEQ-CCB6	C17	1 24.40	0.26	0.00	7022-1.RAW	19:50:25	39.26	Sample	OK	1

26002-201118-4 RUN LOG

SEQ-HBL1	A1				
SEQ-HBL2	A2				
SEQ-HBL3	A3	SEQ-CCB1	B1		
SEQ-CAL1	A4	WS		SEQ-CCV4	B21
SEQ-CAL2	A5	0I00047-CH	B2	SEQ-CCB4	C1
SEQ-CAL3	A6	OK00077-01	B3	OK00054-07RE	C2
SEQ-CAL4	A7	F011330-BS1	B4	OK00054-08RE	C3
SEQ-CAL5	A8	F011330-BSD1	B5	OK00054-11RE	C4
SEQ-ICV1	A9	F011330-BLK1	B6	OK00054-12RE	C5
SEQ-ICB1	A10	F011330-BLK2	B7	OK00054-13RE	C6
F011318-BS1	A11	F011330-BLK3	B8	OK00054-14RE	C7
F011318-BSD1	A12	OK00079-01	B9	OK00054-15RE	C8
F011318-BS2	A13	F011330-MS1	B10	OK00054-16RE	C9
F011318-BS3	A14	SEQ-CCV2	B11	OK00058-02RE	C10
F011318-BLK1	A15	SEQ-CCB2	B12	OK00058-03RE	C11
F011318-BLK2	A16	F011330-MSD1	B13	SEQ-CCV5	C12
F011318-BLK3	A17	OK00054-04RE	B14	SEQ-CCB5	C13
0I00047-CG	A18	F011330-MS2	B15	OK00079-02	C14
F011318-MS1	A19	F011330-MSD2	B16	OK00079-03	C15
F011318-MSD1	A20	OK00054-05RE	B17	SEQ-CCV3	B19
SEQ-CCV1	A21	OK00054-06RE	B18	SEQ-CCB3	B20
				SEQ-CCV6	C16
				SEQ-CCB6	C17

Verified by:

n
n/ish



Frontier Global Sciences

5755 8th Street East
Tacoma, WA 98424
Phone: (253) 922-2310

26 October 2020

Denise King
Wood - MA
271 Mill Road
Chelmsford, MA 01824
RE: Penobscot

Enclosed are the analytical results for samples received by Eurofins Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Patrick Garcia-Strickland". The signature is written in a cursive style with a large initial "P".

Patrick Garcia-Strickland
Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ES-FP_20ET711_091020_01_TOM_WB	0I00078-01	Tissue	10-Sep-20 08:28	23-Sep-20 08:30
ES-FP_20ET717_091020_02_TOM_WB	0I00078-02	Tissue	10-Sep-20 08:54	23-Sep-20 08:30
ES-FP_20ET741_091520_03_TOM_WB	0I00078-03	Tissue	15-Sep-20 08:34	23-Sep-20 08:30
ES-FP_20ET755_091520_04_TOM_WB	0I00078-04	Tissue	15-Sep-20 09:02	23-Sep-20 08:30
ES-FP_20ET756_091520_05_TOM_WB	0I00078-05	Tissue	15-Sep-20 09:05	23-Sep-20 08:30
ES-FP_20SN001_091120_01_RAS_WB	0I00078-06	Tissue	11-Sep-20 09:15	23-Sep-20 08:30
ES-FP_20SN001_091120_02_RAS_WB	0I00078-07	Tissue	11-Sep-20 09:15	23-Sep-20 08:30
FRB-02_20ET653_091520_01_TOM_WB	0I00078-08	Tissue	15-Sep-20 18:55	23-Sep-20 08:30
FRB-02_20ET654_091520_02_TOM_WB	0I00078-09	Tissue	15-Sep-20 19:00	23-Sep-20 08:30
FRB-02_20ET659_091520_03_TOM_WB	0I00078-10	Tissue	15-Sep-20 19:05	23-Sep-20 08:30
FRB-02_20ET659_091520_04_TOM_WB	0I00078-11	Tissue	15-Sep-20 19:10	23-Sep-20 08:30
OL-01_20LT306_091020_01_TOM_WB	0I00078-12	Tissue	10-Sep-20 11:24	23-Sep-20 08:30
ES-02_20ET909_091620_01_TOM_WB	0I00078-13	Tissue	16-Sep-20 10:08	23-Sep-20 08:30
ES-02_20ET924_091820_02_TOM_WB	0I00078-14	Tissue	18-Sep-20 11:53	23-Sep-20 08:30
ES-02_20ET934_091820_03_TOM_WB	0I00078-15	Tissue	18-Sep-20 12:23	23-Sep-20 08:30
ES-02_20ET938_091820_04_TOM_WB	0I00078-16	Tissue	18-Sep-20 12:35	23-Sep-20 08:30
ES-02_20ET941_091820_05_TOM_WB	0I00078-17	Tissue	18-Sep-20 12:48	23-Sep-20 08:30
FRB-01_20LT606_091720_01_LOB_TA	0I00078-18	Tissue	17-Sep-20 12:32	23-Sep-20 08:30
FRB-01_20LT620_091720_02_LOB_TA	0I00078-19	Tissue	17-Sep-20 13:03	23-Sep-20 08:30
FRB-01_20LT621_092020_03_LOB_TA	0I00078-20	Tissue	20-Sep-20 11:02	23-Sep-20 08:30
FRB-01_20LT627_092020_04_LOB_TA	0I00078-21	Tissue	20-Sep-20 11:19	23-Sep-20 08:30
FRB-02_20ET662_091520_05_TOM_WB	0I00078-22	Tissue	15-Sep-20 19:15	23-Sep-20 08:30
OL-01_20ET866_091820_02_TOM_WB	0I00078-23	Tissue	18-Sep-20 09:50	23-Sep-20 08:30
OL-01_20ET866_091820_03_TOM_WB	0I00078-24	Tissue	18-Sep-20 09:50	23-Sep-20 08:30
FRB-01_20LT629_092020_05_LOB_TA	0I00078-25	Tissue	20-Sep-20 11:25	23-Sep-20 08:30
FRB-01_20LT633_092020_06_LOB_TA	0I00078-26	Tissue	20-Sep-20 11:37	23-Sep-20 08:30

Eurofins Frontier Global Sciences, LLC

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FRB-01_20LT633_092020_07_LOB_TA	0I00078-27	Tissue	20-Sep-20 11:37	23-Sep-20 08:30
FRB-01_20LT635_092020_08_LOB_TA	0I00078-28	Tissue	20-Sep-20 11:46	23-Sep-20 08:30
FRB-01_20LT639_092020_09_LOB_TA	0I00078-29	Tissue	20-Sep-20 11:56	23-Sep-20 08:30
FRB-01_20LT639_092020_10_LOB_TA	0I00078-30	Tissue	20-Sep-20 11:56	23-Sep-20 08:30
SVE-01_20ET033_092120_01_TOM_WB	0I00078-31	Tissue	21-Sep-20 08:22	23-Sep-20 08:30
SVE-01_20ET048_092120_03_TOM_WB	0I00078-32	Tissue	21-Sep-20 09:32	23-Sep-20 08:30
SVE-01_20ET048_092120_04_TOM_WB	0I00078-33	Tissue	21-Sep-20 09:32	23-Sep-20 08:30
SVE-01_20ET048_092120_05_TOM_WB	0I00078-34	Tissue	21-Sep-20 09:32	23-Sep-20 08:30
SVE-01_20ET048_092120_06_TOM_WB	0I00078-35	Tissue	21-Sep-20 09:32	23-Sep-20 08:30
SVE-01_20ET056_092120_02_TOM_WB	0I00078-36	Tissue	21-Sep-20 08:31	23-Sep-20 08:30
ES-02_20ET952_092120_06_TOM_WB	0I00078-37	Tissue	21-Sep-20 11:08	23-Sep-20 08:30
ES-02_20ET962_092120_07_TOM_WB	0I00078-38	Tissue	21-Sep-20 11:37	23-Sep-20 08:30
ES-02_20ET964_092120_08_TOM_WB	0I00078-39	Tissue	21-Sep-20 11:44	23-Sep-20 08:30
ES-02_20ET967_092120_09_TOM_WB	0I00078-40	Tissue	21-Sep-20 11:53	23-Sep-20 08:30
ES-02_20ET968_092120_10_TOM_WB	0I00078-41	Tissue	21-Sep-20 11:56	23-Sep-20 08:30
ES-02_20ET970_092120_11_TOM_WB	0I00078-42	Tissue	21-Sep-20 12:02	23-Sep-20 08:30
SVE-01_20ET048_092120_07_TOM_WB	0I00078-43	Tissue	21-Sep-20 09:32	23-Sep-20 08:30
SVE-01_20ET050_092120_08_TOM_WB	0I00078-44	Tissue	21-Sep-20 09:45	23-Sep-20 08:30
SVE-01_20ET051_092120_09_TOM_WB	0I00078-45	Tissue	21-Sep-20 09:48	23-Sep-20 08:30
SVE-01_20ET052_092120_10_TOM_WB	0I00078-46	Tissue	21-Sep-20 09:52	23-Sep-20 08:30
SVE-01_20ET053_092120_11_TOM_WB	0I00078-47	Tissue	21-Sep-20 09:56	23-Sep-20 08:30
SVE-01_20ET059_092120_12_TOM_WB	0I00078-48	Tissue	21-Sep-20 10:14	23-Sep-20 08:30
ES-02_20ET973_092120_12_TOM_WB	0I00078-49	Tissue	21-Sep-20 12:12	23-Sep-20 08:30
ES-02_20ET974_092120_13_TOM_WB	0I00078-50	Tissue	21-Sep-20 12:15	23-Sep-20 08:30
ES-02_20ET978_092120_14_TOM_WB	0I00078-51	Tissue	21-Sep-20 12:26	23-Sep-20 08:30
SVE-01_20ET077_092220_13_TOM_WB	0I00078-52	Tissue	22-Sep-20 09:08	23-Sep-20 08:30

Eurofins Frontier Global Sciences, LLC

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SVE-01_20ET082_092220_14_TOM_WB	0I00078-53	Tissue	22-Sep-20 09:19	23-Sep-20 08:30
SVE-01_20ET083_092220_15_TOM_WB	0I00078-54	Tissue	22-Sep-20 09:23	23-Sep-20 08:30
SVE-01_20ET083_092220_16_TOM_WB	0I00078-55	Tissue	22-Sep-20 09:23	23-Sep-20 08:30
SVE-01_20ET083_092220_17_TOM_WB	0I00078-56	Tissue	22-Sep-20 09:23	23-Sep-20 08:30
SVE-01_20ET087_092220_18_TOM_WB	0I00078-57	Tissue	22-Sep-20 09:34	23-Sep-20 08:30
SVE-01_20ET089_092220_19_TOM_WB	0I00078-58	Tissue	22-Sep-20 09:40	23-Sep-20 08:30
SVE-01_20ET089_092220_20_TOM_WB	0I00078-59	Tissue	22-Sep-20 09:40	23-Sep-20 08:30

Eurofins Frontier Global Sciences, LLC

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Patrick Garcia-Strickland, Business Unit Manager

Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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SAMPLE RECEIPT

Samples were received at Eurofins Frontier Global Sciences (EFGS) on 23-Sep-20 08:30. The samples were received intact, on-ice within a sealed cooler at

<u>Cooler</u>	<u>Temp C°</u>
Cooler 1	-26.2
Cooler 2	-46.4
Cooler 3	-46.4
Cooler 4	0.1
Cooler 5	-35.2
Cooler 6	-50.4

SAMPLE PREPARATION AND ANALYSIS

Tissue samples were homogenized per EFGS SOP5141 prior to digestion.

Total mercury preparation and analysis was performed by flow injection atomic fluorescence spectrometry (FI-AFS) in accordance with EPA 1631B (EFGS SOP2822).

ANALYTICAL AND QUALITY CONTROL ISSUES

Method blanks were prepared for every preparation to assess possible blank contribution from the sample preparation procedure. The method blanks were carried through the entire analytical procedure. All blanks fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

Liquid spikes, certified reference material (CRM) or a quality control samples (QCS) were prepared for every preparation as a measure of accuracy. All liquid spikes, CRMs and/or QCS samples fell within the established acceptance criteria with the exception of any items narrated above or flagged and described in the notes and definitions section of the report.

As an additional measure of the accuracy of the methods used and to check for matrix interference, matrix spikes (MS) and matrix spike duplicates (MSD) were digested and analyzed. All of the matrix spike recoveries fell within the established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

Eurofins Frontier Global Sciences, LLC



The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Patrick Garcia-Strickland, Business Unit Manager



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

A reasonable measure of the precision of the analytical methods is the relative percent difference (RPD) between a matrix spike recovery and a matrix spike duplicate recovery and between laboratory control sample recovery and laboratory control sample duplicate recoveries. All of the relative percent differences established acceptance criteria with the exception of any items flagged and described in the notes and definitions section of the report.

Sample Receipt Checklist

Client: Wood Date & Time Received: 2110 9/23/20 Date Labeled: 9/23/20 Labeled By: ELC
 Project: Soil/Sediment Received By: JR Label Verified By: JR
 # of Coolers Received: 6 Samples Arrived By: Shipping Service Courier Hand Other (Specify: _____)

Coolant: None/Ambient Loose Ice Gel Ice Dry Ice Coolant Required: Y / N Temp Blank Used: Y / N for Cooler(s): _____

Notify Project Manager if packages/coolers are received without coolant or with thawed coolant and at a temperature in excess of 6°C. PM notified: Y / N

Cooler Information:	Y/N/NA	Comments
The coolers do not appear to be tampered with:	Y	
Custody Seals are present and intact:	Y	
Custody seals signed:	Y	

TID:	CF:	°C	Date/time:	By:
Cooler 1:	°C	w/ CF:	°C	Cooler 4: °C w/ CF: °C
Cooler 2:	°C	w/ CF:	°C	Cooler 5: °C w/ CF: °C
Cooler 3:	°C	w/ CF:	°C	Cooler 6: °C w/ CF: °C

Chain of Custody:	Y/N/NA	Comments
Sample ID/Description:	Y	
Date and time of collection:	Y	
Sampled by:	N	
Preservation type:	N/A	
Requested analyses:	Y	
Required signatures:	Y	
Internal COC required:	N/A	

Sample Condition/Integrity:	Y/N/NA	Comments
Sample containers intact/present:	Y	
Sample labels are present and legible:	Y	
Sample ID on container/bag matches COC:	Y	
Correct sample containers used:	Y	
Samples received within holding times:	Y	
Sample volume sufficient for requested analyses:	Y	
Correct preservative used for requested analyses:	N/A	

Anomalies/Non-conformances (attach additional pages if needed):

Cooler # 2	-26°C	CF	-0.2 (-26.2)	5141122	Dry Ice
Cooler # 3	-42°C	CF	-0.1 (-42.1)	80187819	Dry Ice
Cooler # 3	-46°C	CF	-0.4 (-46.4)	80187819	Dry Ice
Cooler # 4	-0.40°C	CR	16.5 (0.1)	181139780	Loose Ice
Cooler # 5	-35°C	CF	-0.2 (-35.2)	51431122	Dry Ice
Cooler # 6	-50°C	CF	-0.4 (-50.4)	80187819	Dry Ice

0100078





Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins
5755 8th St E
Tacoma, WA, 98424
Atten: P. Garcia-Strickland
Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 1 OF 5

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.05 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH			
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg 1931e	Lipid NOAA 1993a	STANDARD - 14 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	ES-FP_20ET711_091020_01_TOM_WB	09/10/20 08:28	TIS	N	N	X	X	X				1	
2	ES-FP_20ET717_091020_02_TOM_WB	09/10/20 08:54	TIS	N	N	X	X	X				1	
3	ES-FP_20ET741_091520_03_TOM_WB	09/15/20 08:34	TIS	N	N	X	X	X				1	
4	ES-FP_20ET755_091520_04_TOM_WB	09/15/20 09:02	TIS	N	Y	X	X	X				1	
5	ES-FP_20ET756_091520_05_TOM_WB	09/15/20 09:05	TIS	N	N	X	X	X				1	
6	ES-FP_20SN001_091120_01_RAS_WB	09/11/20 09:15	TIS	N	Y	X	X	X				1	
7	ES-FP_20SN001_091120_02_RAS_WB	09/11/20 09:15	TIS	N	N	X	X	X				1	
8	FRB-02_20ET653_091520_01_TOM_WB	09/15/20 18:55	TIS	N	N	X	X	X				1	
9	FRB-02_20ET654_091520_02_TOM_WB	09/15/20 19:00	TIS	N	Y	X	X	X				1	
10	FRB-02_20ET659_091520_03_TOM_WB	09/15/20 19:05	TIS	N	N	X	X	X				1	
11	FRB-02_20ET659_091520_04_TOM_WB	09/15/20 19:10	TIS	N	N	X	X	X				1	
12	OL-01_20LT306_091020_01_TOM_WB	09/10/20 11:24	TIS	N	Y	X	X	X				1	

Sampler's Signature: <i>Caroline Godfrey</i>	Date: 9/22/20	Time: 15:45	For Lab Use Does COC match samples: Y or N Broken Container: Y or N COC seal intact: Y or N Other problems: Y or N WSDOT contacted: Y or N Date contacted: _____ Cooler Temperature at receipt: _____ °C	Comments: X=Analyze H=Hold Analysis Request <u>PO # C012906205</u> NUMBER OF COOLERS SENT: <u>2</u>
Relinquished By/Affiliation: <i>Caroline Godfrey Wood EIS</i>	Date: 9/22/20	Time: 17:00		
Received By: <i>FedEx</i>	Date: 9/22/20	Time: 17:00		
Relinquished By/Affiliation:	Date:	Time:		
Received By:	Date:	Time:		
Relinquished By/Affiliation:	Date:	Time:		
Received By (LAB):	Date:	Time:		



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins
5755 8th St E
Tacoma, WA, 98424
Atten: P. Garcia-Strickland
Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 2 OF 5

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486 05 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH			
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg 1931e	Lipid NOAA 1993a	STANDARD - 14 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	ES-02_20ET909_091620_01_TOM_WB	09/16/20 10:08	TIS	N	N	X	X	X				1	
2	ES-02_20ET924_091820_02_TOM_WB	09/18/20 11:53	TIS	N	N	X	X	X				1	
3	ES-02_20ET934_091820_03_TOM_WB	09/18/20 12:23	TIS	N	N	X	X	X				1	
4	ES-02_20ET938_091820_04_TOM_WB	09/18/20 12:35	TIS	N	Y	X	X	X				1	
5	ES-02_20ET941_091820_05_TOM_WB	09/18/20 12:48	TIS	N	N	X	X	X				1	
6	FRB-01_20LT606_091720_01_LOB_TA	09/17/20 12:32	TIS	N	Y	X	X	X				1	
7	FRB-01_20LT620_091720_02_LOB_TA	09/17/20 13:03	TIS	N	N	X	X	X				1	
8	FRB-01_20LT621_092020_03_LOB_TA	09/20/20 11:02	TIS	N	N	X	X	X				1	
9	FRB-01_20LT627_092020_04_LOB_TA	09/20/20 11:19	TIS	N	N	X	X	X				1	
10	FRB-02_20ET662_091520_05_TOM_WB	09/15/20 19:15	TIS	N	N	X	X	X				1	
11	OL-01_20ET866_091820_02_TOM_WB	09/18/20 09:50	TIS	N	N	X	X	X				1	
12	OL-01_20ET866_091820_03_TOM_WB	09/18/20 09:50	TIS	N	N	X	X	X				1	

Sampler's Signature: <i>Caroline Godfrey</i>	Date: 9/22/20	Time: 15:45	For Lab Use Does COC match samples: Y or N Broken Container: Y or N COC seal intact: Y or N Other problems: Y or N WSDOT contacted: Y or N Date contacted: _____ Cooler Temperature at receipt: _____ °C	Comments: X=Analyze H=Hold Analysis Request PO # C012906205 NUMBER OF COOLERS SENT: 2
Relinquished By/Affiliation: <i>Caroline Godfrey Wood EIS</i>	Date: 9/22/20	Time: 17:00		
Received By: <i>FedEx</i>	Date: 9/22/20	Time: 17:00		
Relinquished By/Affiliation:	Date:	Time:		
Received By:	Date:	Time:		
Relinquished By/Affiliation:	Date:	Time:		
Received By (LAB):	Date:	Time:		



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3387

SHIP TO:
Eurofins
5755 8th St E
Tacoma, WA, 98424
Atten: P. Garcia-Strickland
Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 3 OF 5

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486 05 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH			
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg 1931e	Lipid NOAA 1993a	STANDARD - 14 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	FRB-01_20LT629_092020_05_LOB_TA	09/20/20 11:25	TIS	N	N	X	X	X				1	
2	FRB-01_20LT633_092020_06_LOB_TA	09/20/20 11:37	TIS	N	N	X	X	X				1	
3	FRB-01_20LT633_092020_07_LOB_TA	09/20/20 11:37	TIS	N	N	X	X	X				1	
4	FRB-01_20LT635_092020_08_LOB_TA	09/20/20 11:46	TIS	N	N	X	X	X				1	
5	FRB-01_20LT639_092020_09_LOB_TA	09/20/20 11:56	TIS	N	N	X	X	X				1	
6	FRB-01_20LT639_092020_10_LOB_TA	09/20/20 11:56	TIS	N	N	X	X	X				1	
7	SVE-01_20ET033_092120_01_TOM_WB	09/21/20 08:22	TIS	N	Y	X	X	X				1	
8	SVE-01_20ET048_092120_03_TOM_WB	09/21/20 09:32	TIS	N	N	X	X	X				1	
9	SVE-01_20ET048_092120_04_TOM_WB	09/21/20 09:32	TIS	N	N	X	X	X				1	
10	SVE-01_20ET048_092120_05_TOM_WB	09/21/20 09:32	TIS	N	N	X	X	X				1	
11	SVE-01_20ET048_092120_06_TOM_WB	09/21/20 09:32	TIS	N	N	X	X	X				1	
12	SVE-01_20ET056_092120_02_TOM_WB	09/21/20 08:31	TIS	N	N	X	X	X				1	

EXTRA VOLUME FOR MS/MSD

Sampler's Signature: <i>Caroline Galtrey</i>	Date: 9/22/20 Time: 15:45	For Lab Use	Comments: X=Analyze H=Hold Analysis Request PO # C012906205
Relinquished By/Affiliation: <i>Caroline Galtrey Wood EIS</i>	Date: 9/22/20 Time: 17:00		
Received By: <i>Fed Ex</i>	Date: 9/22/20 Time: 17:00	Does COC match samples: Y or N	NUMBER OF COOLERS SENT: 2
Relinquished By/Affiliation:	Date: Time:	Broken Container: Y or N	
Received By:	Date: Time:	COC seal intact: Y or N	
Relinquished By/Affiliation:	Date: Time:	Other problems: Y or N	
Received By (LAB):	Date: Time:	WSDOT contacted: Y or N	
		Date contacted: _____	
		Cooler Temperature at receipt: _____ °C	



Wood E&S
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins
5755 8th St E
Tacoma, WA, 98424
Atten: P. Garcia-Strickland
Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 4 OF 5

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&S	Disposal Instructions: LAB
Project Number: 3617207486.05,****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH			
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg 1931e	Lipid NOAA 1993a	STANDARD - 14 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	ES-02_20ET952_092120_06_TOM_WB	09/21/20 11:08	TIS	N	N	X	X	X				1	
2	ES-02_20ET962_092120_07_TOM_WB	09/21/20 11:37	TIS	N	N	X	X	X				1	
3	ES-02_20ET964_092120_08_TOM_WB	09/21/20 11:44	TIS	N	N	X	X	X				1	
4	ES-02_20ET967_092120_09_TOM_WB	09/21/20 11:53	TIS	N	N	X	X	X				1	
5	ES-02_20ET968_092120_10_TOM_WB	09/21/20 11:56	TIS	N	N	X	X	X				1	
6	ES-02_20ET970_092120_11_TOM_WB	09/21/20 12:02	TIS	N	N	X	X	X				1	
7	SVE-01_20ET048_092120_07_TOM_WB	09/21/20 09:32	TIS	N	N	X	X	X				1	
8	SVE-01_20ET050_092120_08_TOM_WB	09/21/20 09:45	TIS	N	N	X	X	X				1	
9	SVE-01_20ET051_092120_09_TOM_WB	09/21/20 09:48	TIS	N	N	X	X	X				1	
10	SVE-01_20ET052_092120_10_TOM_WB	09/21/20 09:52	TIS	N	N	X	X	X				1	
11	SVE-01_20ET053_092120_11_TOM_WB	09/21/20 09:56	TIS	N	N	X	X	X				1	
12	SVE-01_20ET059_092120_12_TOM_WB	09/21/20 10:14	TIS	N	N	X	X	X				1	

Sampler's Signature: <i>Caroline Godfrey</i>	Date: 9/22/20	Time: 15:45	For Lab Use Does COC match samples: Y or N Broken Container: Y or N COC seal intact: Y or N Other problems: Y or N WSDOT contacted: Y or N Date contacted: _____ Cooler Temperature at receipt: _____ °C	Comments: X=Analyze H=Hold Analysis Request PO # C012906205 NUMBER OF COOLERS SENT: 2
Relinquished By/Affiliation: <i>Caroline Godfrey Wood E&S</i>	Date: 9/22/20	Time: 17:00		
Received By: <i>Fed Ex</i>	Date: 9/22/20	Time: 17:00		
Relinquished By/Affiliation:	Date:	Time:		
Received By:	Date:	Time:		
Relinquished By/Affiliation:	Date:	Time:		
Received By (LAB):	Date:	Time:		



Wood E&IS
511 Congress Street
Portland, ME 04101
(207) 828-3367

SHIP TO:
Eurofins
5755 8th St E
Tacoma, WA, 98424
Atten: P. Garcia-Strickland
Lab Phone# 206-351-9522

CHAIN OF CUSTODY

DATE: 9/22/2020
COC #: _____
PAGE: 5 OF 5

Project Name: Penobscot River 2020	Project Contact: Denise King	Bill To: Denise King, Wood E&IS	Disposal Instructions: LAB
Project Number: 3617207486.05 ****	Phone Number: 508-789-1738	271 Mill Rd	Shipment Method: FED EX
Project Manager: Rod Pendelton	Project Phase: Biota Monitoring	Chelmsford, MA 01824	Waybill Number: N/A

Sample Information						Methods for Analysis				RUSH			
No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	Total Hg 1931e	Lipid NOAA 1993a	STANDARD - 14 days	48 Hour	72 Hour	5 Days	TOTAL CONTAINERS	HOLD All Analyses
1	ES-02_20ET973_092120_12_TOM_WB	09/21/20 12:12	TIS	N	N	X	X	X				1	
2	ES-02_20ET974_092120_13_TOM_WB	09/21/20 12:15	TIS	N	N	X	X	X				1	
3	ES-02_20ET978_092120_14_TOM_WB	09/21/20 12:26	TIS	N	N	X	X	X				1	
4	SVE-01_20ET077_092220_13_TOM_WB	09/22/20 09:08	TIS	N	N	X	X	X				1	
5	SVE-01_20ET082_092220_14_TOM_WB	09/22/20 09:19	TIS	N	N	X	X	X				1	
6	SVE-01_20ET083_092220_15_TOM_WB	09/22/20 09:23	TIS	N	N	X	X	X				1	
7	SVE-01_20ET083_092220_16_TOM_WB	09/22/20 09:23	TIS	N	N	X	X	X				1	
8	SVE-01_20ET083_092220_17_TOM_WB	09/22/20 09:23	TIS	N	N	X	X	X				1	
9	SVE-01_20ET087_092220_18_TOM_WB	09/22/20 09:38	TIS	N	N	X	X	X				1	
10	SVE-01_20ET089_092220_19_TOM_WB	09/22/20 09:40	TIS	N	N	X	X	X				1	
11	SVE-01_20ET089_092220_20_TOM_WB	09/22/20 09:40	TIS	N	N	X	X	X				1	
12													

Sampler's Signature: <i>Caroline Godfrey</i>	Date: 9/22/20	Time: 15:45	For Lab Use	Comments: X=Analyze H=Hold Analysis Request PO # C012906205
Relinquished By/Affiliation: <i>Caroline Godfrey Wood EIS</i>	Date: 9/22/20	Time: 17:00		
Received By: <i>Fed Ex</i>	Date: 9/22/20	Time: 17:00	Cooler Temperature at receipt: _____ °C	NUMBER OF COOLERS SENT: 2
Relinquished By/Affiliation:	Date:	Time:		
Received By (LAB):	Date:	Time:		



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-FP_20ET711_091020_01_TOM_WB
0100078-01

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
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Sample Preparation: EPA 1631B

Mercury	44.4	-	15.4	ng/g	400	F009413	30-Sep-20	OJ05014	02-Oct-20	EPA 1631B	
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**ES-FP_20ET717_091020_02_TOM_WB
0100078-02**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	60.9	-	15.3	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-FP_20ET741_091520_03_TOM_WB
0100078-03

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	60.8	-	15.1	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**ES-FP_20ET755_091520_04_TOM_WB
0100078-04**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	36.4	-	15.7	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**ES-FP_20ET756_091520_05_TOM_WB
0100078-05**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	89.7	-	14.9	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

ES-FP_20SN001_091120_01_RAS_WB
0100078-06

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	50.1	-	15.5	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-FP_20SN001_091120_02_RAS_WB
0100078-07

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	45.4	-	15.5	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-02_20ET653_091520_01_TOM_WB
0100078-08**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	18.1	-	0.789	ng/g	20	F009413	30-Sep-20	0J08011	07-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-02_20ET654_091520_02_TOM_WB
0100078-09**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	10.3	-	0.782	ng/g	20	F009413	30-Sep-20	0J08011	07-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

FRB-02_20ET659_091520_03_TOM_WB
0100078-10

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	8.66	-	0.785	ng/g	20	F009413	30-Sep-20	0J08011	07-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

**FRB-02_20ET659_091520_04_TOM_WB
0100078-11**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	17.3	-	0.779	ng/g	20	F009413	30-Sep-20	0J08011	07-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**OL-01_20LT306_091020_01_TOM_WB
0100078-12**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	86.2	-	15.0	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

ES-02_20ET909_091620_01_TOM_WB
0100078-13

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	65.2	-	15.2	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**ES-02_20ET924_091820_02_TOM_WB
0100078-14**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	37.0	-	15.5	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

ES-02_20ET934_091820_03_TOM_WB
0100078-15

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	45.2	-	15.7	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

ES-02_20ET938_091820_04_TOM_WB
0100078-16

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	107	-	15.5	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-02_20ET941_091820_05_TOM_WB
0100078-17

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	99.7	-	15.1	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-01_20LT606_091720_01_LOB_TA
0100078-18**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	34.4	-	15.1	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-01_20LT620_091720_02_LOB_TA
0100078-19**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	27.2	-	15.8	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-01_20LT621_092020_03_LOB_TA
0100078-20**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	26.9	-	15.2	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-01_20LT627_092020_04_LOB_TA
0100078-21**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	22.9	-	15.5	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-02_20ET662_091520_05_TOM_WB
0100078-22**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	19.5	-	0.755	ng/g	20	F009413	30-Sep-20	0J08011	07-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

OL-01_20ET866_091820_02_TOM_WB
0100078-23

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	38.1	-	17.4	ng/g	400	F009413	30-Sep-20	0J05014	02-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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OL-01_20ET866_091820_03_TOM_WB
0100078-24

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	58.2	-	15.3	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-01_20LT629_092020_05_LOB_TA
0100078-25**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	32.2	-	15.2	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

FRB-01_20LT633_092020_06_LOB_TA
0100078-26

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	24.7	-	15.1	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-01_20LT633_092020_07_LOB_TA
0100078-27**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	26.9	-	15.3	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-01_20LT635_092020_08_LOB_TA
0100078-28**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	46.1	-	14.9	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-01_20LT639_092020_09_LOB_TA
0100078-29**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	46.1	-	14.8	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**FRB-01_20LT639_092020_10_LOB_TA
0100078-30**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	40.6	-	15.2	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET033_092120_01_TOM_WB
0100078-31**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	73.6	-	15.1	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET048_092120_03_TOM_WB
0100078-32**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	69.2	-	15.2	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET048_092120_04_TOM_WB
0100078-33**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	71.0	-	15.4	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

**SVE-01_20ET048_092120_05_TOM_WB
0100078-34**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	92.1	-	15.7	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET048_092120_06_TOM_WB
0100078-35**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	73.8	-	15.3	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

SVE-01_20ET056_092120_02_TOM_WB
0100078-36

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	232	-	15.4	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

ES-02_20ET952_092120_06_TOM_WB
0100078-37

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	154	-	14.8	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-02_20ET962_092120_07_TOM_WB
0100078-38

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	91.6	-	14.8	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

ES-02_20ET964_092120_08_TOM_WB
0100078-39

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	159	-	15.0	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-02_20ET967_092120_09_TOM_WB
0100078-40

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	66.9	-	15.3	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-02_20ET968_092120_10_TOM_WB
0100078-41

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	93.4	-	15.3	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-02_20ET970_092120_11_TOM_WB
0100078-42

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	100	-	14.9	ng/g	400	F009414	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET048_092120_07_TOM_WB
0100078-43**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	80.7	-	15.4	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET050_092120_08_TOM_WB
0100078-44**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	52.5	-	15.1	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

**SVE-01_20ET051_092120_09_TOM_WB
0100078-45**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	63.4	-	15.3	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

SVE-01_20ET052_092120_10_TOM_WB
0100078-46

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	97.6	-	14.9	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET053_092120_11_TOM_WB
0100078-47**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	85.3	-	15.0	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Patrick Garcia-Strickland, Business Unit Manager



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET059_092120_12_TOM_WB
0100078-48**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	50.3	-	15.7	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-02_20ET973_092120_12_TOM_WB
0100078-49

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	73.0	-	15.1	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-02_20ET974_092120_13_TOM_WB
0100078-50

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	53.3	-	15.5	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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ES-02_20ET978_092120_14_TOM_WB
0100078-51

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	55.8	-	14.9	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET077_092220_13_TOM_WB
0100078-52**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	64.5	-	15.5	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET082_092220_14_TOM_WB
0100078-53**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	49.3	-	14.8	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET083_092220_15_TOM_WB
0100078-54**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	82.3	-	15.3	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET083_092220_16_TOM_WB
0100078-55**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	42.5	-	14.9	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

SVE-01_20ET083_092220_17_TOM_WB
0100078-56

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	66.4	-	14.8	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

SVE-01_20ET087_092220_18_TOM_WB
0100078-57

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	101	-	15.6	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET089_092220_19_TOM_WB
0100078-58**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	68.1	-	14.9	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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**SVE-01_20ET089_092220_20_TOM_WB
0100078-59**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
Sample Preparation: EPA 1631B											
Mercury	65.4	-	15.5	ng/g	400	F009415	29-Sep-20	0J02003	01-Oct-20	EPA 1631B	



Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J02003 - F009415											
Cal Standard (0J02003-CAL1) Prepared & Analyzed: 01-Oct-20											
Mercury	0.485	-		ng/L	0.50000		97.0				
Cal Standard (0J02003-CAL2) Prepared & Analyzed: 01-Oct-20											
Mercury	0.973	-		ng/L	1.0000		97.3				
Cal Standard (0J02003-CAL3) Prepared & Analyzed: 01-Oct-20											
Mercury	5.062	-		ng/L	5.0000		101				
Cal Standard (0J02003-CAL4) Prepared & Analyzed: 01-Oct-20											
Mercury	20.67	-		ng/L	20.000		103				
Cal Standard (0J02003-CAL5) Prepared & Analyzed: 01-Oct-20											
Mercury	40.45	-		ng/L	40.000		101				
Calibration Blank (0J02003-CCB1) Prepared & Analyzed: 01-Oct-20											
Mercury	0.149	-		ng/L							
Calibration Blank (0J02003-CCB2) Prepared & Analyzed: 01-Oct-20											
Mercury	0.075	-		ng/L							
Calibration Blank (0J02003-CCB3) Prepared & Analyzed: 01-Oct-20											
Mercury	0.100	-		ng/L							
Calibration Blank (0J02003-CCB4) Prepared & Analyzed: 01-Oct-20											
Mercury	0.027	-		ng/L							
Calibration Blank (0J02003-CCB5) Prepared & Analyzed: 01-Oct-20											
Mercury	0.053	-		ng/L							

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J02003 - F009415											
Calibration Blank (0J02003-CCB6)											
Mercury	0.018	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCB7)											
Mercury	0.165	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCB8)											
Mercury	0.446	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCB9)											
Mercury	0.077	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCBA)											
Mercury	0.080	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCBB)											
Mercury	0.015	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCBC)											
Mercury	0.041	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCBD)											
Mercury	0.037	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Blank (0J02003-CCBE)											
Mercury	0.002	-		ng/L							Prepared & Analyzed: 01-Oct-20
Calibration Check (0J02003-CCV1)											
Mercury	5.370	-		ng/L	4.9950		107	77-123			

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J02003 - F009415											
Calibration Check (0J02003-CCV2)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.541	-		ng/L	4.9950		111	77-123			
Calibration Check (0J02003-CCV3)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.528	-		ng/L	4.9950		111	77-123			
Calibration Check (0J02003-CCV4)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.277	-		ng/L	4.9950		106	77-123			
Calibration Check (0J02003-CCV5)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.772	-		ng/L	4.9950		116	77-123			
Calibration Check (0J02003-CCV7)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.446	-		ng/L	4.9950		109	77-123			
Calibration Check (0J02003-CCV8)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.049	-		ng/L	4.9950		101	77-123			
Calibration Check (0J02003-CCV9)											
Prepared & Analyzed: 01-Oct-20											
Mercury	5.029	-		ng/L	4.9950		101	77-123			
Calibration Check (0J02003-CCVA)											
Prepared & Analyzed: 01-Oct-20											
Mercury	4.948	-		ng/L	4.9950		99.1	77-123			
Calibration Check (0J02003-CCVB)											
Prepared & Analyzed: 01-Oct-20											
Mercury	4.814	-		ng/L	4.9950		96.4	77-123			
Calibration Check (0J02003-CCVC)											
Prepared & Analyzed: 01-Oct-20											
Mercury	4.719	-		ng/L	4.9950		94.5	77-123			

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0J02003 - F009415

Calibration Check (0J02003-CCVD) Prepared & Analyzed: 01-Oct-20

Mercury	5.036	-		ng/L	4.9950		101	77-123			
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Calibration Check (0J02003-CCVE) Prepared & Analyzed: 01-Oct-20

Mercury	4.723	-		ng/L	4.9950		94.6	77-123			
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Instrument Blank (0J02003-IBL1) Prepared & Analyzed: 01-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J02003-IBL2) Prepared & Analyzed: 01-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J02003-IBL3) Prepared & Analyzed: 01-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Initial Cal Blank (0J02003-ICB1) Prepared & Analyzed: 01-Oct-20

Mercury	0.108	-		ng/L							
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Initial Cal Check (0J02003-ICV1) Prepared & Analyzed: 01-Oct-20

Mercury	5.171	-		ng/L	4.9950		104	79-121			
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Batch 0J05014 - F009384

Cal Standard (0J05014-CAL1) Prepared & Analyzed: 02-Oct-20

Mercury	0.459	-		ng/L	0.50000		91.8				
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Cal Standard (0J05014-CAL2) Prepared & Analyzed: 02-Oct-20

Mercury	0.986	-		ng/L	1.0000		98.6				
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J05014 - F009384											
Cal Standard (0J05014-CAL3)					Prepared & Analyzed: 02-Oct-20						
Mercury	5.135	-		ng/L	5.0000		103				
Cal Standard (0J05014-CAL4)					Prepared & Analyzed: 02-Oct-20						
Mercury	20.26	-		ng/L	20.000		101				
Cal Standard (0J05014-CAL5)					Prepared & Analyzed: 02-Oct-20						
Mercury	42.23	-		ng/L	40.000		106				
Calibration Blank (0J05014-CCB1)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.145	-		ng/L							U
Calibration Blank (0J05014-CCB2)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.165	-		ng/L							U
Calibration Blank (0J05014-CCB3)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.173	-		ng/L							U
Calibration Blank (0J05014-CCB4)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.228	-		ng/L							U
Calibration Blank (0J05014-CCB5)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.155	-		ng/L							U
Calibration Blank (0J05014-CCB6)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.248	-		ng/L							U
Calibration Blank (0J05014-CCB7)					Prepared & Analyzed: 02-Oct-20						
Mercury	-0.206	-		ng/L							U



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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J05014 - F009384											
Calibration Blank (0J05014-CCB8)											
Prepared & Analyzed: 02-Oct-20											
Mercury	-0.212	-		ng/L							U
Calibration Blank (0J05014-CCB9)											
Prepared & Analyzed: 02-Oct-20											
Mercury	-0.147	-		ng/L							U
Calibration Check (0J05014-CCV1)											
Prepared & Analyzed: 02-Oct-20											
Mercury	5.593	-		ng/L	4.9950		112	77-123			
Calibration Check (0J05014-CCV2)											
Prepared & Analyzed: 02-Oct-20											
Mercury	5.354	-		ng/L	4.9950		107	77-123			
Calibration Check (0J05014-CCV3)											
Prepared & Analyzed: 02-Oct-20											
Mercury	5.149	-		ng/L	4.9950		103	77-123			
Calibration Check (0J05014-CCV4)											
Prepared & Analyzed: 02-Oct-20											
Mercury	5.132	-		ng/L	4.9950		103	77-123			
Calibration Check (0J05014-CCV5)											
Prepared & Analyzed: 02-Oct-20											
Mercury	4.822	-		ng/L	4.9950		96.5	77-123			
Calibration Check (0J05014-CCV6)											
Prepared & Analyzed: 02-Oct-20											
Mercury	4.854	-		ng/L	4.9950		97.2	77-123			
Calibration Check (0J05014-CCV7)											
Prepared & Analyzed: 02-Oct-20											
Mercury	4.877	-		ng/L	4.9950		97.6	77-123			
Calibration Check (0J05014-CCV8)											
Prepared & Analyzed: 02-Oct-20											
Mercury	4.585	-		ng/L	4.9950		91.8	77-123			

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0J05014 - F009384

Calibration Check (0J05014-CCV9) Prepared & Analyzed: 02-Oct-20

Mercury	4.816	-		ng/L	4.9950		96.4	77-123			
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Instrument Blank (0J05014-IBL1) Prepared & Analyzed: 02-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J05014-IBL2) Prepared & Analyzed: 02-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J05014-IBL3) Prepared & Analyzed: 02-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Initial Cal Blank (0J05014-ICB1) Prepared & Analyzed: 02-Oct-20

Mercury	0.012	-		ng/L							
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Initial Cal Check (0J05014-ICV1) Prepared & Analyzed: 02-Oct-20

Mercury	5.620	-		ng/L	4.9950		113	79-121			
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Batch 0J07015 - F009413

Cal Standard (0J07015-CAL1) Prepared & Analyzed: 06-Oct-20

Mercury	0.555	-		ng/L	0.50000		111				
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Cal Standard (0J07015-CAL2) Prepared & Analyzed: 06-Oct-20

Mercury	0.966	-		ng/L	1.0000		96.6				
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Cal Standard (0J07015-CAL3) Prepared & Analyzed: 06-Oct-20

Mercury	5.000	-		ng/L	5.0000		100				
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J07015 - F009413											
Cal Standard (0J07015-CAL4)					Prepared & Analyzed: 06-Oct-20						
Mercury	19.19	-		ng/L	20.000		96.0				
Cal Standard (0J07015-CAL5)					Prepared & Analyzed: 06-Oct-20						
Mercury	38.53	-		ng/L	40.000		96.3				
Calibration Blank (0J07015-CCB1)					Prepared & Analyzed: 06-Oct-20						
Mercury	0.064	-		ng/L							
Calibration Blank (0J07015-CCB2)					Prepared & Analyzed: 06-Oct-20						
Mercury	0.054	-		ng/L							
Calibration Blank (0J07015-CCB3)					Prepared & Analyzed: 06-Oct-20						
Mercury	0.022	-		ng/L							
Calibration Blank (0J07015-CCB4)					Prepared & Analyzed: 06-Oct-20						
Mercury	0.044	-		ng/L							
Calibration Check (0J07015-CCV1)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.305	-		ng/L	4.9950		106	77-123			
Calibration Check (0J07015-CCV2)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.397	-		ng/L	4.9950		108	77-123			
Calibration Check (0J07015-CCV3)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.364	-		ng/L	4.9950		107	77-123			
Calibration Check (0J07015-CCV4)					Prepared & Analyzed: 06-Oct-20						
Mercury	5.608	-		ng/L	4.9950		112	77-123			

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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0J07015 - F009413

Instrument Blank (0J07015-IBL1) Prepared & Analyzed: 06-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J07015-IBL2) Prepared & Analyzed: 06-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Instrument Blank (0J07015-IBL3) Prepared & Analyzed: 06-Oct-20

Mercury	ND	-	0.040	ng/L							U
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Initial Cal Blank (0J07015-ICB1) Prepared & Analyzed: 06-Oct-20

Mercury	0.055	-		ng/L							
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Initial Cal Check (0J07015-ICV1) Prepared & Analyzed: 06-Oct-20

Mercury	5.495	-		ng/L	4.9950		110	79-121			
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Batch 0J08011 - F009413

Cal Standard (0J08011-CAL1) Prepared & Analyzed: 07-Oct-20

Mercury	0.539	-		ng/L	0.50000		108				
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Cal Standard (0J08011-CAL2) Prepared & Analyzed: 07-Oct-20

Mercury	1.003	-		ng/L	1.0000		100				
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Cal Standard (0J08011-CAL3) Prepared & Analyzed: 07-Oct-20

Mercury	4.903	-		ng/L	5.0000		98.1				
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Cal Standard (0J08011-CAL4) Prepared & Analyzed: 07-Oct-20

Mercury	18.82	-		ng/L	20.000		94.1				
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J08011 - F009413											
Cal Standard (0J08011-CAL5)					Prepared & Analyzed: 07-Oct-20						
Mercury	39.89	-		ng/L	40.000		99.7				
Calibration Blank (0J08011-CCB1)					Prepared & Analyzed: 07-Oct-20						
Mercury	-0.013	-		ng/L							U
Calibration Blank (0J08011-CCB2)					Prepared & Analyzed: 07-Oct-20						
Mercury	-0.044	-		ng/L							U
Calibration Blank (0J08011-CCB3)					Prepared & Analyzed: 07-Oct-20						
Mercury	-0.041	-		ng/L							U
Calibration Blank (0J08011-CCB4)					Prepared & Analyzed: 07-Oct-20						
Mercury	0.021	-		ng/L							
Calibration Check (0J08011-CCV1)					Prepared & Analyzed: 07-Oct-20						
Mercury	5.202	-		ng/L	4.9950		104	77-123			
Calibration Check (0J08011-CCV2)					Prepared & Analyzed: 07-Oct-20						
Mercury	5.176	-		ng/L	4.9950		104	77-123			
Calibration Check (0J08011-CCV3)					Prepared & Analyzed: 07-Oct-20						
Mercury	5.063	-		ng/L	4.9950		101	77-123			
Calibration Check (0J08011-CCV4)					Prepared & Analyzed: 07-Oct-20						
Mercury	4.846	-		ng/L	4.9950		97.0	77-123			
Instrument Blank (0J08011-IBL1)					Prepared & Analyzed: 07-Oct-20						
Mercury	ND	-	0.040	ng/L							U



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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 0J08011 - F009413

Instrument Blank (0J08011-IBL2)					Prepared & Analyzed: 07-Oct-20						
Mercury	ND	-	0.040	ng/L							U
Instrument Blank (0J08011-IBL3)					Prepared & Analyzed: 07-Oct-20						
Mercury	ND	-	0.040	ng/L							U
Initial Cal Blank (0J08011-ICB1)					Prepared & Analyzed: 07-Oct-20						
Mercury	0.074	-		ng/L							
Initial Cal Check (0J08011-ICV1)					Prepared & Analyzed: 07-Oct-20						
Mercury	5.359	-		ng/L	4.9950		107	79-121			

Batch F009413 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009413-BLK1)					Prepared: 30-Sep-20 Analyzed: 02-Oct-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F009413-BLK2)					Prepared: 30-Sep-20 Analyzed: 02-Oct-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F009413-BLK3)					Prepared: 30-Sep-20 Analyzed: 02-Oct-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F009413-BLK4)					Prepared: 30-Sep-20 Analyzed: 02-Oct-20						
Mercury	ND	-	0.797	ng/g							U
Blank (F009413-BLK5)					Prepared: 30-Sep-20 Analyzed: 02-Oct-20						
Mercury	ND	-	0.775	ng/g							U

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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009413 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009413-BLK6) Prepared: 30-Sep-20 Analyzed: 02-Oct-20

Mercury	ND	-	0.702	ng/g							U
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LCS (F009413-BS1) Prepared: 30-Sep-20 Analyzed: 02-Oct-20

Mercury	8.930	-	0.800	ng/g	8.0000		112	75-125			
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LCS Dup (F009413-BSD1) Prepared: 30-Sep-20 Analyzed: 02-Oct-20

Mercury	8.786	-	0.800	ng/g	8.0000		110	75-125	1.62	24	
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Matrix Spike (F009413-MS1) Source: 0100078-04 Prepared: 30-Sep-20 Analyzed: 02-Oct-20

Mercury	396.3	-	14.9	ng/g	373.04	36.42	96.5	71-125			
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Matrix Spike (F009413-MS2) Source: 0100078-06 Prepared: 30-Sep-20 Analyzed: 02-Oct-20

Mercury	689.1	-	14.5	ng/g	726.02	50.11	88.0	71-125			
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Matrix Spike Dup (F009413-MSD1) Source: 0100078-04 Prepared: 30-Sep-20 Analyzed: 02-Oct-20

Mercury	379.7	-	15.4	ng/g	385.12	36.42	89.1	71-125	7.90	24	
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Matrix Spike Dup (F009413-MSD2) Source: 0100078-06 Prepared: 30-Sep-20 Analyzed: 02-Oct-20

Mercury	782.2	-	14.5	ng/g	722.34	50.11	101	71-125	14.1	24	
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Batch F009414 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009414-BLK1) Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	ND	-	0.800	ng/g							U
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Blank (F009414-BLK2) Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	ND	-	0.800	ng/g							U
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009414 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009414-BLK3) Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	ND	-	0.800	ng/g							U
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LCS (F009414-BS1) Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	8.724	-	0.800	ng/g	8.0000		109	75-125			
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LCS Dup (F009414-BSD1) Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	8.414	-	0.800	ng/g	8.0000		105	75-125	3.61	24	
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Matrix Spike (F009414-MS1) Source: 0100078-12 Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	461.1	-	15.2	ng/g	378.70	86.16	99.0	71-125			
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Matrix Spike (F009414-MS2) Source: 0100078-16 Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	589.4	-	15.7	ng/g	391.61	107.2	123	71-125			
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Matrix Spike Dup (F009414-MSD1) Source: 0100078-12 Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	469.8	-	15.3	ng/g	383.20	86.16	100	71-125	1.12	24	
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Matrix Spike Dup (F009414-MSD2) Source: 0100078-16 Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	476.3	-	15.6	ng/g	388.56	107.2	95.0	71-125	25.8	24	QM-07
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Batch F009415 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009415-BLK1) Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	ND	-	0.800	ng/g							U
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Blank (F009415-BLK2) Prepared: 29-Sep-20 Analyzed: 01-Oct-20

Mercury	ND	-	0.800	ng/g							U
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Wood - MA 271 Mill Road Chelmsford MA, 01824	Project: Penobscot Project Number: 3617207486.03 Project Manager: Denise King	Reported: 26-Oct-20 12:16
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Quality Control Data

Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch F009415 - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Blank (F009415-BLK3)					Prepared: 29-Sep-20 Analyzed: 01-Oct-20						
Mercury	ND	-	0.800	ng/g							U
Blank (F009415-BLK4)					Prepared: 29-Sep-20 Analyzed: 01-Oct-20						
Mercury	ND	-	0.758	ng/g							U
LCS (F009415-BS1)					Prepared: 29-Sep-20 Analyzed: 01-Oct-20						
Mercury	7.528	-	0.800	ng/g	8.0000		94.1	75-125			
LCS Dup (F009415-BSD1)					Prepared: 29-Sep-20 Analyzed: 01-Oct-20						
Mercury	7.025	-	0.800	ng/g	8.0000		87.8	75-125	6.91	24	
Matrix Spike (F009415-MS1)					Source: 0100078-18 Prepared: 29-Sep-20 Analyzed: 01-Oct-20						
Mercury	345.8	-	15.0	ng/g	374.86	34.37	83.1	71-125			
Matrix Spike (F009415-MS2)					Source: 0100078-31 Prepared: 29-Sep-20 Analyzed: 01-Oct-20						
Mercury	398.2	-	15.1	ng/g	377.98	73.65	85.9	71-125			
Matrix Spike Dup (F009415-MSD1)					Source: 0100078-18 Prepared: 29-Sep-20 Analyzed: 01-Oct-20						
Mercury	369.3	-	15.1	ng/g	377.27	34.37	88.8	71-125	6.65	24	
Matrix Spike Dup (F009415-MSD2)					Source: 0100078-31 Prepared: 29-Sep-20 Analyzed: 01-Oct-20						
Mercury	404.1	-	15.2	ng/g	378.41	73.65	87.3	71-125	1.69	24	

Wood - MA
271 Mill Road
Chelmsford MA, 01824

Project: Penobscot
Project Number: 3617207486.03
Project Manager: Denise King

Reported:
26-Oct-20 12:16

Notes and Definitions

- U Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on LCS and LCSD recoveries within control limits and, when analysis permits, acceptable AS/ASD.
- E-01 Sample was preceded by a sample exceeding the calibration curve and was reanalyzed for confirmation.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the method detection limit if reported to the MDL or above the reporting limit if reported to the MRL.
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



OJ02002
Attached

ANALYSIS SEQUENCE

OJ02003

QUALITY ASSURANCE

PEER - REVIEWED

INITIALS: PGS

Instrument: Hg2600-3



Calibration ID: UNASSIGNED

Analyzed: 10/1/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
OJ02003-IBL1	QC	1			
OJ02003-IBL2	QC	2			
OJ02003-IBL3	QC	3			
OJ02003-CAL1	QC	4	2002064		
OJ02003-CAL2	QC	5	2002065		
OJ02003-CAL3	QC	6	2002220		
OJ02003-CAL4	QC	7	2002221		
OJ02003-CAL5	QC	8	2002222		
OJ02003-ICV1	QC	9	2001809		
OJ02003-ICB1	QC	10			
F009414-BS1	QC	11			
F009414-BSD1	QC	12			
F009414-BLK1	QC	13			
F009414-BLK2	QC	14			
F009414-BLK3	QC	15			
OI00078-12	Hg-CVAFS-T-7030	16			
F009414-MS1	QC	17			
F009414-MSD1	QC	18			
OI00078-16	Hg-CVAFS-T-7030	19			
F009414-MS2	QC	20			
OJ02003-CCV1	QC	21	2001809		
OJ02003-CCB1	QC	22			
F009414-MSD2	QC	23			
OI00078-24	Hg-CVAFS-T-7030	24			
OI00078-25	Hg-CVAFS-T-7030	25			
OI00078-26	Hg-CVAFS-T-7030	26			
OI00078-27	Hg-CVAFS-T-7030	27			
OI00078-28	Hg-CVAFS-T-7030	28			
OI00078-29	Hg-CVAFS-T-7030	29			
OI00078-30	Hg-CVAFS-T-7030	30			
OI00078-32	Hg-CVAFS-T-7030	31			
OI00078-33	Hg-CVAFS-T-7030	32			
OJ02003-CCV2	QC	33	2001809		
OJ02003-CCB2	QC	34			
OI00078-34	Hg-CVAFS-T-7030	35			
OI00078-35	Hg-CVAFS-T-7030	36			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/1/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00078-36	Hg-CVAFS-T-7030	37			
0I00078-37	Hg-CVAFS-T-7030	38			
0I00078-38	Hg-CVAFS-T-7030	39			
0I00078-39	Hg-CVAFS-T-7030	40			
0I00078-40	Hg-CVAFS-T-7030	41			
0I00078-41	Hg-CVAFS-T-7030	42			
0I00078-42	Hg-CVAFS-T-7030	43			
0J02003-CCV3	QC	44	2001809		
0J02003-CCB3	QC	45			
0J02003-CCV4	QC	46	2001809		
0J02003-CCB4	QC	47			
0J02003-CCV5	QC	48	2001809		
0J02003-CCB5	QC	49			
0J02003-CCB6	QC	50			
F009384-BS1	QC	51			
F009384-BSD1	QC	52			
F009384-BLK1	QC	53			
F009384-BLK2	QC	54			
F009384-BLK3	QC	55			
0I00047-65	Hg-CVAFS-T-7030	56			
F009384-MS1	QC	57			
F009384-MSD1	QC	58			
0I00047-91	Hg-CVAFS-T-7030	59			
0J02003-CCV7	QC	60	2001809		
0J02003-CCB7	QC	61			
F009384-MS2	QC	62			
F009384-MSD2	QC	63			
0I00047-BI	Hg-CVAFS-T-7030	64			
0I00047-BJ	Hg-CVAFS-T-7030	65			
0I00047-BK	Hg-CVAFS-T-7030	66			
0I00047-BL	Hg-CVAFS-T-7030	67			
0I00047-BM	Hg-CVAFS-T-7030	68			
0I00047-BN	Hg-CVAFS-T-7030	69			
0I00047-BO	Hg-CVAFS-T-7030	70			
0I00047-BP	Hg-CVAFS-T-7030	71			
0J02003-CCV8	QC	72	2001809		

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/1/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J02003-CCB8	QC	73			
0I00047-BQ	Hg-CVAFS-T-7030	74			
0I00047-BR	Hg-CVAFS-T-7030	75			
0I00047-BS	Hg-CVAFS-T-7030	76			
0I00047-BT	Hg-CVAFS-T-7030	77			
0I00047-BU	Hg-CVAFS-T-7030	78			
0I00047-BV	Hg-CVAFS-T-7030	79			
0I00047-BW	Hg-CVAFS-T-7030	80			
0I00047-BX	Hg-CVAFS-T-7030	81			
0I00047-BY	Hg-CVAFS-T-7030	82			
0I00047-BZ	Hg-CVAFS-T-7030	83			
0J02003-CCV9	QC	84	2001809		
0J02003-CCB9	QC	85			
0J02003-CCVA	QC	86	2001809		
0J02003-CCBA	QC	87			
0J02003-CCVB	QC	88	2001809		
0J02003-CCBB	QC	89			
F009415-BS1	QC	90			
F009415-BSD1	QC	91			
F009415-BLK1	QC	92			
F009415-BLK2	QC	93			
F009415-BLK3	QC	94			
F009415-BLK4	QC	95			
0I00078-18	Hg-CVAFS-T-7030	96			
F009415-MS1	QC	97			
F009415-MSD1	QC	98			
0I00078-31	Hg-CVAFS-T-7030	99			
0J02003-CCVC	QC	100	2001809		
0J02003-CCBC	QC	101			
F009415-MS2	QC	102			
F009415-MSD2	QC	103			
0I00078-43	Hg-CVAFS-T-7030	104			
0I00078-44	Hg-CVAFS-T-7030	105			
0I00078-45	Hg-CVAFS-T-7030	106			
0I00078-46	Hg-CVAFS-T-7030	107			
0I00078-47	Hg-CVAFS-T-7030	108			

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/1/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00078-48	Hg-CVAFS-T-7030	109			
0I00078-49	Hg-CVAFS-T-7030	110			
0I00078-50	Hg-CVAFS-T-7030	111			
0J02003-CCVD	QC	112	2001809		
0J02003-CCBD	QC	113			
0I00078-51	Hg-CVAFS-T-7030	114			
0I00078-52	Hg-CVAFS-T-7030	115			
0I00078-53	Hg-CVAFS-T-7030	116			
0I00078-54	Hg-CVAFS-T-7030	117			
0I00078-55	Hg-CVAFS-T-7030	118			
0I00078-56	Hg-CVAFS-T-7030	119			
0I00078-57	Hg-CVAFS-T-7030	120			
0I00078-58	Hg-CVAFS-T-7030	121			
0I00078-59	Hg-CVAFS-T-7030	122			
0J02003-CCVE	QC	123	2001809		
0J02003-CCBE	QC	124			

Samples Loaded By

Date

10/2/20

Data Processed By

Date

10/2/20

Peer Review Check List for THg by 2800 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: <u>EMB</u>	Sequence(s) #: <u>44106</u>
Reviewer: _____	Dataset ID(s): <u>THg26003-201001-1</u>
Date: <u>10/2/2020</u>	WO (s) #: <u>0</u>
Batch #(s): <u>F009414, F009415, F009384</u>	

Analyst Initials EMB 10/2/20 Reviewer Initials PLS

- | | | | | |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------|-----------------------------------------|--------------------------|
| 5b. Has the B/C section data been uploaded? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| QA/QC Data Checked | | | | |
| 6. RSD CF ($\leq 15\%$) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 7. The calibration curve included a minimum of 5 Standards | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| 9. ICV and CCV % Recoveries EPA 1631E (77-123%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 10. Do all calibration points pass acceptance criteria? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 11. Are qualifiers consistent with the data review flowcharts? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 12. Explain any items on the failed data report from Element | | | | <input type="checkbox"/> |
| Comments: <u>QM-07, E, E-01</u> | | | | |
| 13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit: | | | | |
| (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (c) Was a BrCl Blank analyzed for each preservation level? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (d) Are Preparation Blanks summarized on QC page? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> |
| 14. Filtration Blank Prepared (if yes, use FB qualifier) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> |
| (a) Filtration Blank prep date same as associated samples' prep date | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 18. Is the correct 'Source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 19. For digested preps: was there a spike witness signature & date on the prep bench sheet? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: EMB	Sequence(s) #: 44106
Reviewer:	Dataset ID(s): THg26003-201001-1
Date: 10/2/2020	WO (s) #: 0
Batch #(s): F009414, F009415, F009384	

Analyst Initials PMB 10/2/20 Reviewer Initials PGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|-----------------------------------------|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| Comments: _____ | | | |
| 22. Are the samples run at the correct dilution level for the method? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 23. Dissolved < Total (if applicable) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 24. Effluent < Influent (visually confirm if needed) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 25. Are re-runs noted with reason? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 27. Is the B trap <5% A Traps | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 28. Are spiked trap recoveries 75-125% of true value? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| Comments: _____ | | | |
| 30. Have re-extracts been created for non-reportable samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 32. Does the data set need scanning? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 33. Does the dataset have an LOQ/LOQ or DOC? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 34. Water samples: has the preservation log been included in dataset for final volume verification? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 35. Water samples-is the final volume correct in the sequence? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

- | | | | | |
|---------------------------------------------------------------------|----------------------------------|-----------------------------------------|----------------------------------------|--------------------------|
| 36. Date of analyst IDOC/CDOC: _____ <u>11/3/12</u> | IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: _____ <u>12/25/19</u> | Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 38. Date of LOD: _____ <u>11/30/20</u> | LOD within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 39. Date of LOQ: _____ <u>11/30/20</u> | LOQ within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |

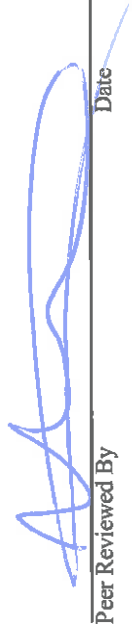
Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0J02003

Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
0J00047-65	Hg-CVAFS-T-7030	1250	15.4				ng/g						FAIL-OVER	PASS	E
F009414-MSD2	Hg-CVAFS-T-7030	476.3	15.6	589.4081107.1975	388.56	388.56	ng/g	95.0	71.00	125.00	25.8	24.00	PASS-OVER	FAIL-MSD (RPD)	QM-07
F009384-MS1	Hg-CVAFS-T-7030	1388	15.1	1248.991	377.98	377.98	ng/g	36.8	71.00	125.00			FAIL-OVER	FAIL-MS	QM-07,E-01
F009384-MSD1	Hg-CVAFS-T-7030	1472	15.3	1387.9251248.991	383.35	383.35	ng/g	58.2	71.00	125.00	45.2	24.00	FAIL-OVER	FAIL-MSD (Rec. and RPD)	QM-07
F009384-MSD2	Hg-CVAFS-T-7030	577.2	15.1	492.8121171.2851	377.27	377.27	ng/g	108	71.00	125.00	25.4	24.00	PASS-OVER	FAIL-MSD (RPD)	QM-07



Analyst Reviewed By _____ Date 10/2/20



Peer Reviewed By _____ Date _____

PREPARATION BENCH SHEET

F009414

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/29/2020**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009414-BLK1	Blank	0.25	20					
F009414-BLK2	Blank	0.25	20					
F009414-BLK3	Blank	0.25	20					
F009414-BS1	LCS	0.25	20	2002032	20			
F009414-BSD1	LCS Dup	0.25	20	2002032	20			
F009414-MS1	Matrix Spike [0100078-12]	0.2638	20	2001204	100			
F009414-MS2	Matrix Spike [0100078-16]	0.2551	20	2001204	100			
F009414-MSD1	Matrix Spike Dup [0100078-12]	0.2607	20	2001204	100			
F009414-MSD2	Matrix Spike Dup [0100078-16]	0.2571	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009414

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-12	OL-01_20LT306_091020_01_TOM_WB	0.2664	20	QC	-	S&R	MS/MSD	
0100078-16	ES-02_20ET938_091820_04_TOM_WB	0.2576	20	QC	-	S&R	MS/MSD	
0100078-24	OL-01_20ET866_091820_03_TOM_WB	0.2619	20	-	-	S&R		
0100078-25	FRB-01_20LT629_092020_05_LOB_TA	0.2623	20	-	-	S&R		
0100078-26	FRB-01_20LT633_092020_06_LOB_TA	0.2647	20	-	-	S&R		
0100078-27	FRB-01_20LT633_092020_07_LOB_TA	0.2618	20	-	-	S&R		
0100078-28	FRB-01_20LT635_092020_08_LOB_TA	0.2678	20	-	-	S&R		
0100078-29	FRB-01_20LT639_092020_09_LOB_TA	0.2696	20	-	-	S&R		
0100078-30	FRB-01_20LT639_092020_10_LOB_TA	0.2638	20	-	-	S&R		
0100078-32	SVE-01_20ET048_092120_03_TOM_WB	0.2638	20	-	-	S&R		
0100078-33	SVE-01_20ET048_092120_04_TOM_WB	0.2597	20	-	-	S&R		
0100078-34	SVE-01_20ET048_092120_05_TOM_WB	0.2546	20	-	-	S&R		
0100078-35	SVE-01_20ET048_092120_06_TOM_WB	0.2622	20	-	-	S&R		
0100078-36	SVE-01_20ET056_092120_02_TOM_WB	0.26	20	-	-	S&R		
0100078-37	ES-02_20ET952_092120_06_TOM_WB	0.2698	20	-	-	S&R		
0100078-38	ES-02_20ET962_092120_07_TOM_WB	0.2699	20	-	-	S&R		
0100078-39	ES-02_20ET964_092120_08_TOM_WB	0.2665	20	-	-	S&R		
078-40	ES-02_20ET967_092120_09_TOM_WB	0.2606	20	-	-	S&R		
078-41	ES-02_20ET968_092120_10_TOM_WB	0.261	20	-	-	S&R		

PREPARATION BENCH SHEET

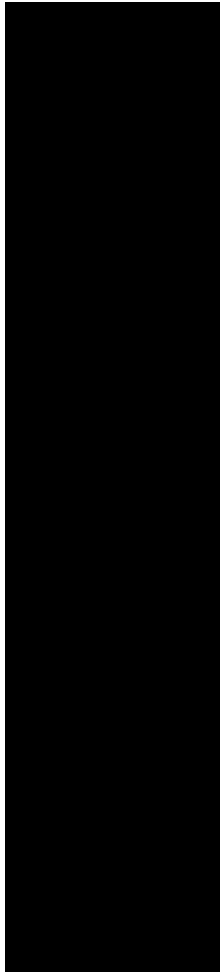
F009414

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

0100078-42	ES-02_20ET970_092120_11_TOM_WB	0.2693	20	-	-	S&R	
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Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep)
Upload/Date: MGS (Data Entry)

9/29/2020
10/2/2020

Samples to lab: NA
Reviewer/Date: EMB 10/2/20

Batch #: F009414

EFGS Preparation Method		ICPMS	AFS
<input type="checkbox"/> SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2837	Tissue Nitric Digestion	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> SOP2840	Modified Aqua Regia		
<input type="checkbox"/> SOP2820	RP		
<input type="checkbox"/> SOP2821	HF Bomb Digestion	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> SOP2825	Nitric Bomb Digestion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> SOP2993	Oven Digestion (As, Se Speciation)		
<input type="checkbox"/> SOP5145	Microwave Digestion (Nitric/Aqua Regia)		
<input type="checkbox"/> SOP5145	Microwave Digestion (3051)		
<input checked="" type="checkbox"/>	NA Other: EFAFS, AFS, SOP2795 Tissues - THg 70:30 Hot plate		

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019
Comments:		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

1. Is any SOP/DOC expiring within one week of Submission Date?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	Reviewer Initials: <u>WZLW</u> <u>EMB</u>	Tertiary Review: <u>WZLW</u> <u>EMB</u>
Data cannot be reported without a current IDOC/CDOC.				
If YES, notify supervisor and technician immediately.				
2. Check prep method	<input checked="" type="checkbox"/> YES			
(a) For Ceuticals: Is correct Hg code being used in LIMS?	<input type="checkbox"/> ICPMS	<input checked="" type="checkbox"/> CV-AFS	<input type="checkbox"/> 70:30	<input type="checkbox"/> N/A
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES			
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES			
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES		<input type="checkbox"/> N/A	
(b) Check and compare mass	<input checked="" type="checkbox"/> YES		<input type="checkbox"/> N/A	
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES		<input checked="" type="checkbox"/> N/A	
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES		<input checked="" type="checkbox"/> N/A	
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES		<input checked="" type="checkbox"/> N/A	
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES			
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> ≤ 20	<input type="checkbox"/> ≤ 10		
(a) PBs per batch?	<input checked="" type="checkbox"/> 3 PBs	<input type="checkbox"/> 2 PBs	<input type="checkbox"/> 1 PBs	
(b) Are pre and post homogenization blanks in batch?			<input checked="" type="checkbox"/> N/A	
(c) BS, BS/BSD or CRM in batch?	<input type="checkbox"/> BS	<input checked="" type="checkbox"/> BS/BSD	<input type="checkbox"/> CRM	
(d) MS/MSD in batch?		<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	
(e) MD in batch?		<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES		<input type="checkbox"/> N/A	
(g) Are there any client specific requests, QC requests, etc?	<input checked="" type="checkbox"/> YES		<input type="checkbox"/> N/A	
Document: <u>see benchsheet</u>				
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		
(j) For EFGS-filtered samples, was a filtration blank included?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		
6. Special prep requirements?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A		
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		
(b) For all spiking was there a witness? (Initials must be in logbook)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		
(c) Spikes added:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A		

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : NA

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
THg-BS	2002032	20			
THg-MS	2001204	100			

Technician: Mn Batch #: F009414 Date: 7/26/2020
 Requested 9/29/20 by MS
 EFAPS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAPS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAPS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAPS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon
 Balance #: 19 Calibrated? Yes No
 *Time in: 1425 Actual Temp. (raw): 25.0 °C *Time in can't begin before target temperature is reached
 Time out: 1656 Actual Temp. (raw): 21.7 °C
 °C/W/ CF: 24.6 °C *Time in can't begin before target temperature is reached
 °C/W/ CF: 16.8 °C

Final vol.: 20 mL (LIMS ID: 2002305) BS Spike vol.: 20 µL (LIMS ID: 2002032)
 Spike Witness: JA 2020020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2001744)

HCl LIMS ID: N/A Pipette SN#: 0007853 Calibration Date: 9-29-20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2002190 Dispenser #: 19081007 Calibrated? Yes No
 Other Acid LIMS ID: 2002206 Dispenser #: 1937295 Calibrated? Yes No
 Glass Vial # 00077092 Boiling Chip lot # 2002020 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size mL µg	Vial #	Sample ID Number	Container ID	Sample Size mL µg	CRM LIMS ID
1	F009414 BLE1	A	0.2701	19	OP00078-32	C	0.2672	NA
2	F009414 BLE2	A	0.2663	20	OP00078-33	C	0.2577	
3	F009414 BLE3	A	0.2666	21	OP00078-34	C	0.2546	
4	F009414 BS1	A	0.2643	22	OP00078-35	C	0.2622	
5	F009414 BS2	A	0.2577	23	OP00078-36	C	0.2600	
6	OP00078-12	C	0.2664	24	OP00078-37	C	0.2678	OP00078-12.13 Under MS/MST2
7	F009414-MS1	C	0.2532	25	OP00078-38	C	0.2677	
8	F009414-MS2	C	0.2607	26	OP00078-37	C	0.2665	OP00078-15.15.15.15 for MS/MST2
9	OP00078-16	C	0.2576	27	OP00078-40	C	0.2626	
10	F009414-MS2	C	0.2551	28	OP00078-41	C	0.2610	
11	F009414-MS2	C	0.2571	29	OP00078-42	C	0.2673	
12	OP00078-24	C	0.2619	30				
13	OP00078-25	C	0.2627	31				
14	OP00078-26	C	0.2647	32				
15	OP00078-27	C	0.2618	33				
16	OP00078-28	C	0.2678	34				
17	OP00078-29	C	0.2696	35				
18	OP00078-30	C	0.2638	36				MS101120

Technician: MM Batch#: F099414 Date: 9/25/2020

- EFASF-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFASF-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFASF-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFASF-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: Glass Teflon
 Balance #: 19 Calibrated? Yes No
 *Time in: _____ °C w/ CF: _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ °C w/ CF: _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # 09971092 Boiling Chip lot # 2002050 *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> g	CRM LIMS ID <input type="checkbox"/> NA
1	F099414 BLK1	A	0.2701	19	0100078-32	C	0.2638	
2	F099414 BLK2	A	0.2663	20	0100078-33	C	0.2597	
3	F099414 BLK3	A	0.2606	21	0100078-34	C	0.2546	
4	F099414 BS1	A	0.2643	22	0100078-35	C	0.2622	
5	F099414 BSAD1	A	0.2593	23	0100078-36	C	0.2600	0100078-12 is used used for MS/MSD
6	0100078-12	C	0.2664	24	0100078-37	C	0.2698	
7	F099414-MS1	A	0.2638	25	0100078-38	C	0.2697	
8	F099414-MS02	A	0.2607	26	0100078-39	C	0.2665	0100078-16 is used for MS/MSD
9	0100078-16	C	0.2576	27	0100078-40	C	0.2606	
10	F099414-MS2	A	0.2557	28	0100078-41	C	0.2610	
11	F099414-MSD	A	0.2571	29	0100078-42	C	0.2693	
12	0100078-12	C	0.2619	30				
13	0100078-25	C	0.2623	31				
14	0100078-26	C	0.2647	32				
15	0100078-27	C	0.2618	33				
16	0100078-28	C	0.2678	34				
17	0100078-29	C	0.2696	35				
18	0100078-30	C	0.2638	36				

Verified By: _____
 Eurofins Frontier Global Sciences / Mercury Sample Digestions / LOG-HG-013 / Effective 6/4/2020 / QA2020-041 *Hotblock diagram located in back of logbook
 Page 19 of 59

Technician: Mr Batch #: F009414 Date: 12/07/2020

- EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: _____
 Balance #: 19 Calibrated? Yes No Vial Type: Glass Teflon
 *Time in: _____ Actual Temp. (raw): _____ °C w/ CF: _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ Actual Temp. (raw): _____ °C w/ CF: _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibration Date: _____
 Other Acid LIMS ID: _____ Dispenser #: _____ Calibration Date: _____
 Glass Vial # 00077092 Boiling Chip lot # 200202 *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size mL µg	Vial #	Sample ID Number	Container ID	Sample Size mL µg	CRM LIMS ID
1	F009414 BLK1	A	0.2701	19	OT00078-32	C	0.2678	NA
2	F009414 BLK2	A	0.2663	20	OT00078-33	C	0.2571	
3	F009414 BLK3	A	0.2606	21	OT00078-34	C	0.2541	
4	F009414 BS1	A	0.2643	22	OT00078-35	C	0.2622	
5	F009414 BS01	A	0.2573	23	OT00078-36	C	0.2600	
6	OT00078-12	C	0.2664	24	OT00078-37	C	0.2678	
7	F009414 MS1	C	0.2638	25	OT00078-38	C	0.2671	
8	F009414 MS01	C	0.2607	26	OT00078-39	C	0.2665	
9	OT00078-16	C	0.2576	27	OT00078-40	C	0.2606	
10	F009414 MS2	C	0.2551	28	OT00078-41	C	0.2610	
11	F009414 MS02	C	0.2571	29	OT00078-42	C	0.2673	
12	OT00078-24	C	0.2619	30				
13	OT00078-25	C	0.2627	31				
14	OT00078-26	C	0.2647	32				
15	OT00078-27	C	0.2618	33				
16	OT00078-28	C	0.2678	34				
17	OT00078-29	C	0.2690	35				
18	OT00078-30	C	0.2638	36				

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/29/2020**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.5	40					E-01, RR OF MS1 @ 400X. EMB 10/2/20
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		
0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R		
0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R		

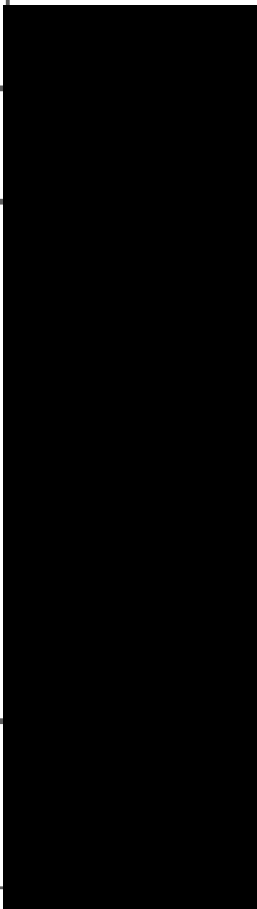
PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/29/2020**

0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R	
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R	



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep) 9/29/2020
Upload/Date: MGS (Data Entry) 10/2/2020

Samples to lab: NA
Reviewer/Date: amb 10/2/20

Batch #: F009384

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input checked="" type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input checked="" type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2893	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA Other	EPA Method 1631	

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

- | | | | | |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------|-------------------------------------|
| | | Reviewer Initials | Tertiary Review | |
| 1. Is any SOP/DOC expiring within one week of Submission Date? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> | <u>WJL</u> |
| Data cannot be reported without a current IDOC/CDOC. | | | | |
| If YES, notify supervisor and technician immediately. | | | | |
| 2. Check prep method | <input checked="" type="checkbox"/> YES | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) For Ceuticals: Is correct Hg code being used in LIMS? | <input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AFS <input type="checkbox"/> 70:30 <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Compare sample ID & container ID with benchsheet & in LIMS | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Check for transcription errors from benchsheet | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) Check and compare initial and final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (b) Check and compare mass | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (c) Has the number of pills been documented (Special Info 5 in benchsheet)? | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (d) Have assay logbook copies been attached & avg masses entered? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (e) For re-digests, have e-mails been attached and verified? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (f) Benchsheet prep date MUST match actual prep date | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Samples per Batch? Check QC Requirements | <input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10 | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) PBs per batch? | <input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (b) Are pre and post homogenization blanks in batch? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (c) BS, BS/BSD or CRM in batch? | <input checked="" type="checkbox"/> BS <input type="checkbox"/> BS/BSD <input type="checkbox"/> CRM | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (d) MS/MSD in batch? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (e) MD in batch? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (f) Is there at least one duplicate QC source in batch? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (g) Are there any client specific requests, QC requests, etc? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Document: <u>see benchsheet</u> | | | | |
| (h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (i) Correct 'source' designated for MD/MS/MSD? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (j) For EFGS-filtered samples, was a filtration blank included? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Special prep requirements? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) For 1638: Have samples sat for 48 hours after preservation? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (b) For 200.8: Have samples sat for 16 hours after preservation? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (c) For DOD have pipettes been calibrated day of prep? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Are the samples appropriately spiked? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (a) Is the spike and amount used appropriate and entered into LIMS? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook) | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| (c) Spikes added: | <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : NA

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
THg-BS	2002032	20			
THg-MS	2001204	100			

Reviewer Initials: amb 10/2/20
Tertiary Review: WJL
10/2/2020
10/2/2020

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/29/2020

Matrix: Tissue

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spiket1 ID	Spiket1 (µl)	Spiket2 ID	Spiket2 (µl)	Extraction Comments
F009384-BLK1	Blank	0.5	20					
F009384-BLK2	Blank	0.5	20					
F009384-BLK3	Blank	0.5	20					
F009384-BS1	LCS	0.5	20	2002032	20			
F009384-BSD1	LCS Dup	0.5	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20			2001204	100	
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20			2001204	100	
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20			2001204	100	
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20			2001204	100	

** updated LMS accordingly MS 10/2/2020*

Standard ID(s): 2002032
 Description: THg 100ng/mL Primary Spiking Standard
 Expiration: 05-Nov-20 00:00

Reagent ID(s): 2002050, 2002190, 2002305
 Description: Boiling Chips for ICPMS, 70/30 Digestion Acid, 5% BrCl
 Expiration: 20-Feb-21 00:00, 08-Sep-21 00:00, 07-Feb-21 00:00

Technician: LEL/MS Batch #: FA9384 Date: 9/25/20 Displaced 9/29/20 by MS

EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.

EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.

EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).

EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon

Balance #: 23 Calibrated? Yes No Therm. #: NOT USED Calibrated? Yes No

*Time in: 12.10 Actual Temp. (raw): 70.9 °C w/ CF: 20.7 °C *Time in can't begin before target temperature is reached

Time out: 17.29 Actual Temp. (raw): 71.9 °C w/ CF: 22.3 °C

Final vol.: 20 mL (LIMS ID: 2002305) BS Spike vol.: 20 µL (LIMS ID: 2002032)

Spike Witness: SMV 9/29/20 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 2002024)

HCl LIMS ID: N/A Pipette SN #: 0007853 Calibration Date: 9/29/20

HNO₃ LIMS ID: N/A Pipette SN #: N/A Calibration Date: N/A

70/30 LIMS ID: 2002190 Dispenser SN #: 19151607 Calibrated? Yes No

Other Acid LIMS ID: 2002305 (57.86 u) Dispenser #: 19137295 Calibrated? Yes No

Glass Vial # 00077097 Boiling Chip lot # 2002050 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	CRM LIMS ID
1	F009384-BIK1	B	0.2564	19	F0100047-BP	C	0.2634	<input checked="" type="checkbox"/> NA
2	F009384-BIK2	B	0.2576	20	OT00047-BG	C	0.2551	
3	F009384-BIK3	B	0.2731	21	OT00047-BL	C	0.2677	
4	F009384-B61	B	0.2603	22	OT00047-BS	C	0.2599	
5	F009384-BSD1	B	0.2545	23	OT00047-BT	C	0.2672	
6	OT00047-65 (Source MS1/MS2)	C	0.2591	24	OT00047-BU	C	0.2621	
7	OT00047-384-MS1	C	0.2643	25	OT00047-BV	C	0.2704	
8	OT00047-91 (Source MS1/MS2)	C	0.2606	26	OT00047-BW	C	0.2617	
9	OT00047-91 (Source MS1/MS2)	C	0.2640	27	OT00047-BX	C	0.2691	
10	F009384-MSA	C	0.2589	28	OT00047-BY	C	0.2645	
11	F009384-MSDZ	C	0.2645	29	OT00047-BZ	C	0.2570	
12	OT00047-BJ	C	0.2691	30				
13	OT00047-BK	C	0.2573	31				
14	OT00047-BL	C	0.2622	32				
15	OT00047-BM	C	0.2557	33				
16	OT00047-BN	C	0.2688	34				
17	OT00047-BO	C	0.2668	35				
18	OT00047-BO	C	0.2644	36				

Technician: LEL/MS Batch#: FA0384 Date: 2/25/20

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KB/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: _____
 Balance #: 23 Calibrated? Yes No Vial Type: Glass Teflon
 Therm. #: _____ Calibrated? Yes No
 *Time in: _____ Actual Temp. (raw): _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ Actual Temp. (raw): _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # 007097 Boiling Chip lot # 2002050 *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size µL/g	Vial #	Sample ID Number	Container ID	Sample Size µL/g	CRM LIMS ID
1	F009384-BIK1	B	0.2564	19	F0100047-BP	C	0.2634	NA
2	F009384-BIK2	B	0.2576	20	0100047-BQ	C	0.2551	
3	F009384-BIK3	B	0.2731	21	0100047-BR	C	0.2677	
4	F009384-BBI	B	0.2603	22	0100047-BS	C	0.2599	
5	F009384-BSD1	B	0.2545	23	0100047-BT	C	0.2672	
6	0100047-BS (Sediments)	C	0.2591	24	0100047-BU	C	0.2621	
7	0100047-BS1	C	0.2643	25	0100047-BV	C	0.2704	
8	0100047-BS2	C	0.2606	26	0100047-BW	C	0.2617	
9	0100047-BS3	C	0.2646	27	0100047-BX	C	0.2691	
10	F009384-MS1	C	0.2589	28	0100047-BY	C	0.2645	
11	F009384-MS2	C	0.2648	29	0100047-BZ	C	0.2520	
12	0100047-B1	C	0.2691	30				
13	0100047-B2	C	0.2573	31				
14	0100047-B3	C	0.2622	32				
15	0100047-B4	C	0.2557	33				
16	0100047-B5	C	0.2688	34				
17	0100047-B6	C	0.2600	35				
18	0100047-B7	C	0.2644	36				

PREPARATION BENCH SHEET

F009415

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/29/2020**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009415-BLK1	Blank	0.25	20					
F009415-BLK2	Blank	0.25	20					
F009415-BLK3	Blank	0.25	20					
F009415-BLK4	Filter Blank 0100076-02	0.2637	20					
F009415-BS1	LCS	0.25	20	2002032	20			
F009415-BSD1	LCS Dup	0.25	20	2002032	20			
F009415-MS1	Matrix Spike [0100078-18]	0.2665	20	2001204	100			
F009415-MS2	Matrix Spike [0100078-31]	0.2643	20	2001204	100			
F009415-MSD1	Matrix Spike Dup [0100078-18]	0.2648	20	2001204	100			
F009415-MSD2	Matrix Spike Dup [0100078-31]	0.264	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009415

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-18	FRB-01_2017606_091720_01_LOB_TA	0.265	20	QC	-	S&R	MS/MSD	
0100078-31	SVE-01_20ET033_092120_01_TOM_WB	0.2655	20	QC	-	S&R	MS/MSD	
0100078-43	SVE-01_20ET048_092120_07_TOM_WB	0.2599	20	-	-	S&R		
0100078-44	SVE-01_20ET050_092120_08_TOM_WB	0.2649	20	-	-	S&R		
0100078-45	SVE-01_20ET051_092120_09_TOM_WB	0.2622	20	-	-	S&R		
0100078-46	SVE-01_20ET052_092120_10_TOM_WB	0.2692	20	-	-	S&R		
0100078-47	SVE-01_20ET053_092120_11_TOM_WB	0.2668	20	-	-	S&R		
0100078-48	SVE-01_20ET059_092120_12_TOM_WB	0.2554	20	-	-	S&R		
0100078-49	ES-02_20ET973_092120_12_TOM_WB	0.2656	20	-	-	S&R		
0100078-50	ES-02_20ET974_092120_13_TOM_WB	0.2576	20	-	-	S&R		
0100078-51	ES-02_20ET978_092120_14_TOM_WB	0.2686	20	-	-	S&R		
0100078-52	SVE-01_20ET077_092220_13_TOM_WB	0.2578	20	-	-	S&R		
0100078-53	SVE-01_20ET082_092220_14_TOM_WB	0.2696	20	-	-	S&R		
0100078-54	SVE-01_20ET083_092220_15_TOM_WB	0.2612	20	-	-	S&R		
0100078-55	SVE-01_20ET083_092220_16_TOM_WB	0.2678	20	-	-	S&R		
0100078-56	SVE-01_20ET083_092220_17_TOM_WB	0.2697	20	-	-	S&R		
0100078-57	SVE-01_20ET087_092220_18_TOM_WB	0.2566	20	-	-	S&R		
0100078-58	SVE-01_20ET089_092220_19_TOM_WB	0.2689	20	-	-	S&R		
0100078-59	SVE-01_20ET089_092220_20_TOM_WB	0.2579	20	-	-	S&R		

PREPARATION BENCH SHEET

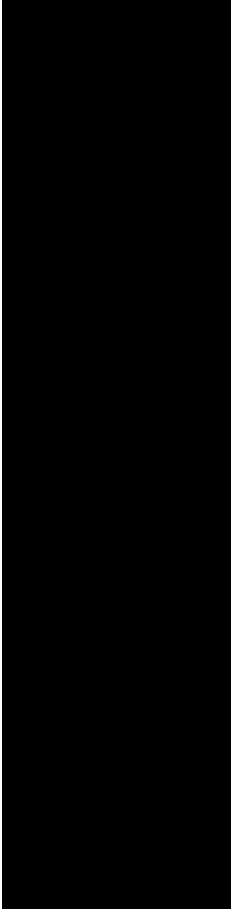
F009415

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/29/2020



Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep) 9/29/2020
Upload/Date: MGS (Data Entry) 10/2/2020

Samples to lab: NA
Reviewer/Date: PMB 10/2/20

Batch #: F009415

EFGS Preparation Method			
<input type="checkbox"/> SOP2836 Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS	<input type="checkbox"/> AFS	
<input type="checkbox"/> SOP2837 Tissue Nitric Digestion	<input checked="" type="checkbox"/> ICPMS	<input checked="" type="checkbox"/> CVAFS	
<input type="checkbox"/> SOP2840 Modified Aqua Regia			
<input type="checkbox"/> SOP2820 RP			
<input type="checkbox"/> SOP2821 HF Bomb Digestion	<input type="checkbox"/> ICPMS	<input type="checkbox"/> CVAFS	
<input type="checkbox"/> SOP2825 Nitric Bomb Digestion	<input checked="" type="checkbox"/> ICPMS	<input checked="" type="checkbox"/> CVAFS	
<input type="checkbox"/> SOP2993 Oven Digestion (As, Se Speciation)			
<input type="checkbox"/> SOP5145 Microwave Digestion (Nutraceuticals)			
<input type="checkbox"/> SOP5145 Microwave Digestion (3051)			
<input checked="" type="checkbox"/> NA Other: <u>EFAPS-AFS SOP2795 Tissues - THg 70:30 30 plate</u>			

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019
Comments: _____		

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

		Reviewer Initials <i>10/2/20 PMB</i>	Tertiary Review	<i>Full</i>
1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, notify supervisor and technician immediately.				
2. Check prep method	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) For Ceuticals: Is correct Hg code being used in LIMS?	<input type="checkbox"/> ICPMS <input checked="" type="checkbox"/> CV-AES <input type="checkbox"/> 70:30 <input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) PBs per batch?	<input checked="" type="checkbox"/> 3 PBs <input type="checkbox"/> 2 PBs <input type="checkbox"/> 1 PBs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) BS, BS/BSO or CRM in batch?	<input type="checkbox"/> BS <input checked="" type="checkbox"/> BS/BSO <input type="checkbox"/> CRM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(d) MS/MSD in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(e) MD in batch?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc? Document: <u>See benchsheet</u>	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Correct LIMS spike ID included for BS, BS/BSO and/or MS/MSD?	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Special prep requirements?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are the samples appropriately spiked?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Spikes added:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : NA

Spike Name	LIMS ID	μL	Spike Name	LIMS ID	μL
THg-BS	2002032	20			
THg-MS	2001204	100			

Technician: YMA Batch #: Fee9415 Date: 9/25/2020
Checked: MFG 9/29/20

EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
 EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
 EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
 EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon
 Balance #: 19 Calibrated? Yes No Therm. #: 120750090 Calibrated? Yes No
 *Time in: 1425 Actual Temp. (raw): 28.0 °C w/ CF: 74.1 °C *Time in can't begin before target temperature is reached
 Time out: 1655 Actual Temp. (raw): 27.7 °C w/ CF: 76.8 °C

Final vol.: 20 mL (LIMS ID: 2002305) BS Spike vol.: 20 µL (LIMS ID: 2002032)
 Spike Witness: MA 9-25-20 (initial and date) MS Spike vol.: 0.0 µL (LIMS ID: 2002001)

HCl LIMS ID: N/A Pipette SN#: 0207553 Calibration Date: 9/29/20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70/30 LIMS ID: 2002090 Dispenser SN#: 191811007 Calibrated? Yes No
 Other Acid LIMS ID: 2002006 Dispenser #: 19237295 Calibrated? Yes No
 Glass Vial # 00077092 Boiling Chip lot # 2002050 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input type="checkbox"/> NA
1	Fee9415 BLK1	A	0.2637	19	0200078-48	C	0.2574	Comments WD 0200076-04 for MMTg only MFG 10/12/20 70.2879 MFG 10/12/20 10/11/20
2	Fee9415 BLK2	A	0.2581	20	0200078-49	C	0.2658	
3	Fee9415 BLK3	A	0.2642	21	0200078-50	C	0.2576	
4	Fee9415 BLK4	C	0.2637	22	0200078-51	C	0.2686	
5	Fee9415 BS1	A	0.2577	23	0200078-52	C	0.2578	
6	Fee9415 BS01	A	0.2765	24	0200078-53	C	0.2696	
7	0200078-18	C	0.2650	25	0200078-54	C	0.2612	
8	Fee9415-MS1	C	0.2665	26	0200078-55	C	0.2678	
9	Fee9415-MS07	C	0.2648	27	0200078-56	C	0.2697	
10	0200078-31	C	0.2655	28	0200078-57	C	0.2566	
11	Fee9415-MS2	C	0.2643	29	0200078-58	C	0.2689	
12	Fee9415-MS02	C	0.2640	30	0200078-59	C	0.2577	
13	0200076-01	B	0.1006	31				
14	0200077-43	C	0.2577	32				
15	0200078-44	C	0.2647	33				
16	0200078-45	C	0.2622	34				
17	0200077-46	C	0.2612	35				
18	0200078-47	C	0.2668	36				

Technician: Ma Batch #: F009415 Date: 11/25/2020

- EF-AFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EF-AFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EF-AFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EF-AFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: Glass Teflon
 Balance #: 19 Calibrated? Yes No
 *Time in: _____ Actual Temp. (raw): _____ °C, w/ CF: _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ Actual Temp. (raw): _____ °C, w/ CF: _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # 0007092 Boiling Chip lot # 2002050 *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size <input type="checkbox"/> mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input type="checkbox"/> NA
1	F009415 BLK1	A	0.2637	19	0100078-48	C	0.2554	
2	F009415 BLK2	A	0.2581	20	0100078-49	C	0.2650	
3	F009415 BLK3	A	0.2648	21	0100078-50	C	0.2576	
4	F009415 BLK4	C	0.2637	22	0100078-51	C	0.2686	
5	F009415 BSD1	A	0.2547	23	0100078-52	C	0.2578	
6	F009415 BSD2	A	0.2765	24	0100078-53	C	0.2646	
7	0100078-18	C	0.2650	25	0100078-54	C	0.2612	
8	F009415-MS1	C	0.2665	26	0100078-55	C	0.2678	
9	F009415-MS2	C	0.2648	27	0100078-56	C	0.2697	
10	0100078-31	C	0.2655	28	0100078-57	C	0.2566	
11	F009415-MS2	C	0.2643	29	0100078-58	C	0.2687	
12	F009415-MSD2	C	0.2640	30	0100078-59	C	0.2507	
13	0100078-01	B	0.1006	31				
14	0100078-43	C	0.2597	32				
15	0100078-44	C	0.2647	33				
16	0100078-45	C	0.2602	34				
17	0100078-46	C	0.2692	35				
18	0100078-47	C	0.2668	36				

Technician: Ma

Batch #: F009415

Date: 9/25/2020

- EFAS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: _____
 Balance #: 19 Calibrated? Yes No
 *Time in: _____ Actual Temp. (raw): _____ °C w/ CF: _____
 Time out: _____ Actual Temp. (raw): _____ °C w/ CF: _____

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # 00071992 Boiling Chip lot # 2002050 *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size µmL <input checked="" type="checkbox"/> <input type="checkbox"/>	Vial #	Sample ID Number	Container ID	Sample Size µmL <input checked="" type="checkbox"/> <input type="checkbox"/>	CRM LIMS ID <input type="checkbox"/> NA
1	F009415 BLK1	A	0.2637	19	OT00078-48	C	0.2554	
2	F009415 BLK2	A	0.2581	20	OT00078-49	C	0.2656	
3	F009415 BLK3	A	0.2648	21	OT00078-50	C	0.2576	
4	F009415 BLK4	C	0.2637	22	OT00078-51	C	0.2686	
5	F009415 BS1	A	0.2547	23	OT00078-52	C	0.2579	
6	F009415 BS02	A	0.2765	24	OT00078-53	C	0.2696	
7	OT00078-18	C	0.2650	25	OT00078-54	C	0.2612	
8	F009415-MS1	C Am waste	0.2665	26	OT00078-55	C	0.2678	
9	F009415-MS02	C	0.2648	27	OT00078-56	C	0.2697	
10	OT00078-31	C	0.2685	28	OT00078-57	C	0.2566	
11	F009415-MS2	C	0.2643	29	OT00078-58	C	0.2684	
12	F009415-MS02	C	0.2640	30	OT00078-59	C	0.2579	
13	OT00076-01 non-afast	B	0.1006	31				
14	OT00078-18-43	C	0.2599	32				
15	OT00078-44	C	0.2649	33				
16	OT00078-45	C	0.2622	34				
17	OT00078-46	C	0.2698	35				
18	OT00078-47	C	0.2668	36				

Analysis Datasheet for Total Mercury

Date of Analysis: October 01, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #:

Analyst:
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	126.43 units	252.85	74.05 units	148.10	97.0 %Rec
SEQ-CAL2	1	1.00 ng/L	201.00 units	201.00	148.62 units	148.62	97.3 %Rec
SEQ-CAL3	1	5.00 ng/L	825.37 units	165.07	773.00 units	154.60	101.2 %Rec
SEQ-CAL4	1	20.00 ng/L	3209.04 units	160.45	3156.66 units	157.83	103.4 %Rec
SEQ-CAL5	1	40.00 ng/L	6228.90 units	155.72	6176.52 units	154.41	101.1 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF Corr. St Dev RF Corr. RSD CF Uncorr. Mean RF
 152.71 +/- 4.20 2.8% RSD 187.02

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	52.38 units	±4.53	0.28 ng/L	±0.02

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	-0.331 ng/L	±0.806
BLK	2	5	0.004 ng/L	±0.072
BLK	3	3	0.978 ng/L	±0.495
BLK	4	3	0.046 ng/L	±0.040
BLK	5	4	-0.654 ng/L	±0.543
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	10/1/2020 10:11:12	4423-1.RAW	10:11:12 AM	58.71			4.3	0.028	0.028	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	10/1/2020 10:15:21	4424-1.RAW	10:15:21 AM	52.75			4.7	0.002	0.002	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	10/1/2020 10:19:30	4425-1.RAW	10:19:30 AM	47.87			74.0	-0.031	-0.031	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	10/1/2020 10:23:38	4426-1.RAW	10:23:38 AM	126.43			148.6	0.485	0.485	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	10/1/2020 10:27:47	4427-1.RAW	10:27:47 AM	201.00			773.0	0.973	0.973	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	10/1/2020 10:31:56	4428-1.RAW	10:31:56 AM	3208.04			3156.7	5.062	5.062	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	10/1/2020 10:36:05	4429-1.RAW	10:36:05 AM	6228.90			6176.5	20.671	20.671	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	10/1/2020 10:40:14	4430-1.RAW	10:40:14 AM	842.02			789.6	40.445	40.445	ng/L	
Hg2600-3	00	CAL	SEQ-ICV1	1	10/1/2020 10:44:24	4431-1.RAW	10:44:24 AM	88.90			16.5	5.171	5.171	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	10/1/2020 10:48:33	4432-1.RAW	10:48:33 AM	882.52			830.1	0.108	0.108	ng/L	
Hg2600-3	00	SAM	F009414-BS1	20	10/1/2020 10:52:42	4433-1.RAW	10:52:42 AM	882.52			830.1	5.452	109.050	ng/L	
Hg2600-3	00	SAM	F009414-MSD1	20	10/1/2020 10:56:52	4434-1.RAW	10:56:52 AM	882.52			800.6	5.259	105.179	ng/L	
Hg2600-3	00	BLK	F009414-BLK1	20	10/1/2020 11:01:01	4435-1.RAW	11:01:01 AM	56.94			4.6	0.030	0.030	ng/L	
Hg2600-3	00	BLK	F009414-BLK2	20	10/1/2020 11:05:10	4436-1.RAW	11:05:10 AM	46.67			5.7	-0.037	-0.037	ng/L	
Hg2600-3	00	BLK	F009414-BLK3	20	10/1/2020 11:09:20	4437-1.RAW	11:09:20 AM	46.94			6.4	-0.042	-0.042	ng/L	
Hg2600-3	00	SAM	0100078-12	400	10/1/2020 11:13:29	4438-1.RAW	11:13:29 AM	490.39			438.0	2.869	1147.621	ng/L	
Hg2600-3	00	SAM	F009414-MS1	400	10/1/2020 11:17:38	4439-1.RAW	11:17:38 AM	2374.06			2321.7	15.204	6081.495	ng/L	
Hg2600-3	00	SAM	F009414-MSD1	400	10/1/2020 11:21:47	4440-1.RAW	11:21:47 AM	2390.28			2337.9	15.310	6123.972	ng/L	
Hg2600-3	00	SAM	0100078-16	400	10/1/2020 11:25:58	4441-1.RAW	11:25:58 AM	578.38			527.0	3.452	1380.704	ng/L	
Hg2600-3	00	SAM	F009414-MS2	400	10/1/2020 11:34:15	4442-1.RAW	11:34:15 AM	2922.45			2870.1	18.795	7517.900	ng/L	
Hg2600-3	00	CAL	SEQ-CV1	1	10/1/2020 11:38:24	4443-1.RAW	11:38:24 AM	872.38			820.0	5.370	5.370	ng/L	
Hg2600-3	00	CAL	SEQ-COB1	1	10/1/2020 11:42:34	4444-1.RAW	11:42:34 AM	2389.87			22.8	0.149	0.149	ng/L	
Hg2600-3	00	SAM	F009414-MSD2	400	10/1/2020 11:46:43	4445-1.RAW	11:46:43 AM	343.44			2337.5	15.307	6122.906	ng/L	
Hg2600-3	00	SAM	0100078-24	400	10/1/2020 11:50:53	4446-1.RAW	11:50:53 AM	213.89			291.1	1.907	762.719	ng/L	
Hg2600-3	00	SAM	0100078-25	400	10/1/2020 11:55:02	4447-1.RAW	11:55:02 AM	177.01			161.3	1.057	422.859	ng/L	
Hg2600-3	00	SAM	0100078-26	400	10/1/2020 11:59:11	4448-1.RAW	11:59:11 AM	186.45			124.6	0.817	326.793	ng/L	
Hg2600-3	00	SAM	0100078-27	400	10/1/2020 12:03:20	4449-1.RAW	12:03:20 PM	287.91			134.1	0.879	351.501	ng/L	
Hg2600-3	00	SAM	0100078-28	400	10/1/2020 12:07:30	4450-1.RAW	12:07:30 PM	289.37			235.5	1.543	617.252	ng/L	
Hg2600-3	00	SAM	0100078-29	400	10/1/2020 12:11:40	4451-1.RAW	12:11:40 PM	256.52			204.1	1.553	621.088	ng/L	
Hg2600-3	00	SAM	0100078-30	400	10/1/2020 12:15:49	4452-1.RAW	12:15:49 PM	400.82			204.1	1.338	535.044	ng/L	
Hg2600-3	00	SAM	0100078-32	400	10/1/2020 12:19:58	4453-1.RAW	12:19:58 PM	403.99			2.282	2.282	912.999	ng/L	
Hg2600-3	00	SAM	0100078-33	400	10/1/2020 12:24:08	4454-1.RAW	12:24:08 PM	888.50			351.6	2.303	921.321	ng/L	
Hg2600-3	00	CAL	SEQ-CV2	1	10/1/2020 12:28:17	4455-1.RAW	12:28:17 PM	63.78			846.1	5.541	5.541	ng/L	
Hg2600-3	00	CAL	SEQ-COB2	1	10/1/2020 12:32:27	4456-1.RAW	12:32:27 PM	489.66			11.4	0.075	0.075	ng/L	
Hg2600-3	00	SAM	0100078-34	400	10/1/2020 12:36:36	4457-1.RAW	12:36:36 PM	421.85			447.5	2.931	1172.430	ng/L	
Hg2600-3	00	SAM	0100078-35	400	10/1/2020 12:40:46	4458-1.RAW	12:40:46 PM	1201.71			369.3	2.419	967.578	ng/L	
Hg2600-3	00	SAM	0100078-36	400	10/1/2020 12:44:56	4459-1.RAW	12:44:56 PM	523.93			1149.3	7.527	3010.766	ng/L	
Hg2600-3	00	SAM	0100078-37	400	10/1/2020 12:49:05	4460-1.RAW	12:49:05 PM	861.60			790.9	5.180	2071.927	ng/L	
Hg2600-3	00	SAM	0100078-38	400	10/1/2020 12:53:15	4461-1.RAW	12:53:15 PM	517.41			471.6	3.089	1235.473	ng/L	
Hg2600-3	00	SAM	0100078-39	400	10/1/2020 12:57:24	4462-1.RAW	12:57:24 PM	385.09			809.2	5.300	2119.919	ng/L	
Hg2600-3	00	SAM	0100078-40	400	10/1/2020 13:01:34	4463-1.RAW	13:01:34 PM	567.66			332.7	2.180	871.807	ng/L	
Hg2600-3	00	SAM	0100078-41	400	10/1/2020 13:05:43	4464-1.RAW	13:05:43 PM	896.58			465.0	3.046	1218.394	ng/L	
Hg2600-3	00	CAL	SEQ-CV3	1	10/1/2020 13:09:53	4465-1.RAW	13:09:53 PM	67.64			515.3	3.375	1350.018	ng/L	
Hg2600-3	00	CAL	SEQ-COB3	1	10/1/2020 13:14:03	4466-1.RAW	13:14:03 PM	786.66			15.3	0.100	0.100	ng/L	
Hg2600-3	00	SAM	F010331-BS1	1	10/1/2020 13:18:12	4468-1.RAW	13:18:12 PM	776.95			734.3	4.804	4.804	ng/L	
Hg2600-3	00	SAM	F010331-MSD1	1	10/1/2020 13:22:22	4469-1.RAW	13:22:22 PM	56.37			4.0	0.026	0.026	ng/L	
Hg2600-3	00	BLK	F010331-BLK1	1	10/1/2020 13:26:32	4470-1.RAW	13:26:32 PM	47.57			4.8	-0.031	-0.031	ng/L	
Hg2600-3	00	BLK	F010331-BLK2	1	10/1/2020 13:30:41	4471-1.RAW	13:30:41 PM	38.92			1.3	0.009	0.009	ng/L	
Hg2600-3	00	BLK	F010331-BLK3	1	10/1/2020 13:34:51	4472-1.RAW	13:34:51 PM	68.68			1.3	0.009	0.009	ng/L	
Hg2600-3	00	BLK	F010331-BLK4	1	10/1/2020 13:39:00	4473-1.RAW	13:39:00 PM	88.92			-13.5	-0.088	-0.088	ng/L	
Hg2600-3	00	BLK	F010331-BLK5	1	10/1/2020 13:43:10	4474-1.RAW	13:43:10 PM	89.14			16.3	0.107	0.107	ng/L	
Hg2600-3	00	SAM	0100105-06	1	10/1/2020 13:47:20	4475-1.RAW	13:47:20 PM	837.14			6.1	-0.045	-0.045	ng/L	
Hg2600-3	00	SAM	F010331-MS1	1	10/1/2020 13:51:30	4476-1.RAW	13:51:30 PM	871.00			784.8	5.134	5.134	ng/L	
Hg2600-3	00	SAM	F010331-MSD1	1	10/1/2020 13:55:39	4477-1.RAW	13:55:39 PM	858.28			818.6	5.356	5.356	ng/L	
Hg2600-3	00	CAL	SEQ-CV4	1	10/1/2020 13:59:49	4478-1.RAW	13:59:49 PM	56.45			805.9	5.277	5.277	ng/L	
Hg2600-3	00	CAL	SEQ-COB4	1	10/1/2020 14:03:59	4479-1.RAW	2:03:59 PM	56.45			4.1	0.027	0.027	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0100091-02	1	10/1/2020 14:08:09	4480-1.RAW	2:08:09 PM	49.22	2		-3.2	-0.025	-0.075	ng/L	
Hg2600-3	00	SAM	F010331-MS2	1	10/1/2020 14:12:19	4481-1.RAW	2:12:19 PM	852.84	2		800.5	5.237	5.237	ng/L	
Hg2600-3	00	SAM	F010331-MSD2	1	10/1/2020 14:16:28	4482-1.RAW	2:16:28 PM	873.42	2		821.0	5.372	5.372	ng/L	
Hg2600-3	00	SAM	0100088-01	1	10/1/2020 14:20:38	4483-1.RAW	2:20:38 PM	615.57	2		563.2	3.683	3.683	ng/L	
Hg2600-3	00	SAM	0100088-02	1	10/1/2020 14:24:48	4484-1.RAW	2:24:48 PM	54.67	2		2.3	0.011	0.011	ng/L	
Hg2600-3	00	SAM	0100088-03	1	10/1/2020 14:28:58	4485-1.RAW	2:28:58 PM	72.74	2		20.4	0.129	0.129	ng/L	
Hg2600-3	00	SAM	0100091-01	10	10/1/2020 14:33:08	4486-1.RAW	2:33:08 PM	224.75	2		172.4	1.128	1.128	ng/L	
Hg2600-3	00	SAM	0100091-02	10	10/1/2020 14:37:18	4487-1.RAW	2:37:18 PM	179.79	2		0.834	8.339	8.339	ng/L	
Hg2600-3	00	SAM	0100097-01	1	10/1/2020 14:41:28	4488-1.RAW	2:41:28 PM	210.28	2		157.9	1.029	1.029	ng/L	
Hg2600-3	00	SAM	0100097-02	1	10/1/2020 14:45:38	4489-1.RAW	2:45:38 PM	451.84	2		399.5	2.611	2.611	ng/L	
Hg2600-3	00	CAL	SEQ-CCV5	1	10/1/2020 14:49:48	4490-1.RAW	2:49:48 PM	933.818802	2		881.4	5.772	5.772	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	10/1/2020 14:53:58	4491-1.RAW	2:53:58 PM	60.40	2		8.0	0.053	0.053	ng/L	
Hg2600-3	00	SAM	0100097-04	1	10/1/2020 14:58:08	4492-1.RAW	2:58:08 PM	547.86	2		495.5	3.240	3.240	ng/L	
Hg2600-3	00	SAM	0100104-01	1	10/1/2020 15:02:18	4493-1.RAW	3:02:18 PM	57.08	2		4.7	0.026	0.026	ng/L	
Hg2600-3	00	SAM	0100104-02	1	10/1/2020 15:06:28	4494-1.RAW	3:06:28 PM	63.14	2		10.8	0.066	0.066	ng/L	
Hg2600-3	00	SAM	0100104-03	1	10/1/2020 15:10:38	4495-1.RAW	3:10:38 PM	96.21	2		43.8	0.283	0.283	ng/L	
Hg2600-3	00	SAM	0100104-04	1	10/1/2020 15:14:48	4496-1.RAW	3:14:48 PM	87.88	2		35.5	0.228	0.228	ng/L	
Hg2600-3	00	SAM	0100105-01	1	10/1/2020 15:18:58	4497-1.RAW	3:18:58 PM	95.09	2		42.7	0.275	0.275	ng/L	
Hg2600-3	00	SAM	0100105-02	1	10/1/2020 15:23:08	4498-1.RAW	3:23:08 PM	550.97	2		498.6	3.261	3.261	ng/L	
Hg2600-3	00	SAM	0100105-03	1	10/1/2020 15:27:17	4499-1.RAW	3:27:17 PM	51.49	2		-0.9	-0.010	-0.010	ng/L	
Hg2600-3	00	SAM	0100105-04	1	10/1/2020 15:31:27	4500-1.RAW	3:31:27 PM	696.60	2		644.2	4.214	4.214	ng/L	
Hg2600-3	00	CAL	SEQ-CCV6	1	10/1/2020 15:35:37	4501-1.RAW	3:35:37 PM	50.49	2		-1.9	-0.017	-0.017	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	10/1/2020 15:39:47	4502-1.RAW	3:39:47 PM	836.54	2		784.2	5.135	5.135	ng/L	
Hg2600-3	00	SAM	0100105-05	10	10/1/2020 15:43:58	4503-1.RAW	3:43:58 PM	55.19	2		2.8	0.018	0.018	ng/L	
Hg2600-3	00	SAM	F009384-BS1	20	10/1/2020 15:48:09	4504-1.RAW	3:48:09 PM	375.91	2		323.5	2.118	2.118	ng/L	
Hg2600-3	00	SAM	F009384-BSD1	20	10/1/2020 15:52:20	4505-1.RAW	3:52:20 PM	713.11	3		660.7	4.278	4.278	ng/L	
Hg2600-3	00	BLK	F009384-BLK1	20	10/1/2020 15:56:30	4506-1.RAW	3:56:30 PM	745.98	3		3.8	0.025	0.025	ng/L	
Hg2600-3	00	BLK	F009384-BLK2	20	10/1/2020 16:00:41	4507-1.RAW	4:00:41 PM	56.19	3		11.4	0.074	0.074	ng/L	
Hg2600-3	00	BLK	F009384-BLK3	20	10/1/2020 16:04:52	4508-1.RAW	4:04:52 PM	63.74	3		7.2	0.047	0.047	ng/L	
Hg2600-3	00	SAM	0100047-65	400	10/1/2020 16:09:02	4509-1.RAW	4:09:02 PM	59.60	3		6177.9	40.452	16180.672	ng/L	
Hg2600-3	00	SAM	F009384-MS1	400	10/1/2020 16:13:13	4510-1.RAW	4:13:13 PM	6230.25	3		7002.8	45.854	18341.425	ng/L	
Hg2600-3	00	SAM	F009384-MSD1	400	10/1/2020 16:17:23	4511-1.RAW	4:17:23 PM	7055.19	3		865.5	5.665	2266.102	ng/L	
Hg2600-3	00	CAL	SEQ-CCV7	1	10/1/2020 16:21:33	4512-1.RAW	4:21:33 PM	917.91	3		831.6	5.446	5.446	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	10/1/2020 16:25:44	4513-1.RAW	4:25:44 PM	883.98	3		25.2	0.165	0.165	ng/L	
Hg2600-3	00	SAM	F009384-MS2	400	10/1/2020 16:29:54	4514-1.RAW	4:29:54 PM	77.58	3		23.2	0.15	0.15	ng/L	
Hg2600-3	00	SAM	F009384-MSD2	400	10/1/2020 16:34:05	4515-1.RAW	4:34:05 PM	2488.31	3		2435.9	15.949	6379.452	ng/L	
Hg2600-3	00	SAM	0100047-81	400	10/1/2020 16:38:16	4516-1.RAW	4:38:16 PM	2970.59	3		2918.2	19.107	7642.660	ng/L	
Hg2600-3	00	SAM	0100047-82	400	10/1/2020 16:42:28	4517-1.RAW	4:42:28 PM	1591.46	3		1539.1	10.076	4030.317	ng/L	
Hg2600-3	00	SAM	0100047-83	400	10/1/2020 16:46:38	4518-1.RAW	4:46:38 PM	1545.81	3		1493.4	9.777	3910.747	ng/L	
Hg2600-3	00	SAM	0100047-84	400	10/1/2020 16:50:47	4519-1.RAW	4:50:47 PM	4401.23	3		4348.8	28.475	11389.925	ng/L	
Hg2600-3	00	SAM	0100047-85	400	10/1/2020 16:54:57	4520-1.RAW	4:54:57 PM	5955.52	3		5903.1	36.653	15461.064	ng/L	
Hg2600-3	00	SAM	0100047-86	400	10/1/2020 16:59:09	4521-1.RAW	4:59:09 PM	1517.43	3		1465.1	9.951	3836.431	ng/L	
Hg2600-3	00	SAM	0100047-87	400	10/1/2020 17:03:20	4522-1.RAW	5:03:20 PM	2296.09	3		4.830	3.372	1348.627	ng/L	
Hg2600-3	00	SAM	0100047-88	400	10/1/2020 17:07:32	4523-1.RAW	5:07:32 PM	1517.43	3		771.0	5.049	5.049	ng/L	
Hg2600-3	00	CAL	SEQ-CCV8	1	10/1/2020 17:11:42	4524-1.RAW	5:11:42 PM	790.34	3		68.0	0.446	0.446	ng/L	
Hg2600-3	00	CAL	SEQ-CCB8	1	10/1/2020 17:15:54	4525-1.RAW	5:15:54 PM	823.39	3		76.0	0.446	0.446	ng/L	
Hg2600-3	00	SAM	0100047-89	400	10/1/2020 17:20:05	4526-1.RAW	5:20:05 PM	120.41	3		66.0	0.446	0.446	ng/L	
Hg2600-3	00	SAM	0100047-90	400	10/1/2020 17:24:16	4527-1.RAW	5:24:16 PM	120.41	3		1177.8	7.710	3084.146	ng/L	
Hg2600-3	00	SAM	0100047-91	400	10/1/2020 17:28:26	4528-1.RAW	5:28:26 PM	4230.22	3		618.7	4.049	1619.495	ng/L	
Hg2600-3	00	SAM	0100047-92	400	10/1/2020 17:32:38	4529-1.RAW	5:32:38 PM	671.05	3		440.6	2.882	1152.971	ng/L	
Hg2600-3	00	SAM	0100047-93	400	10/1/2020 17:36:49	4530-1.RAW	5:36:49 PM	492.93	3		4.083	4.083	1633.024	ng/L	
Hg2600-3	00	SAM	0100047-94	400	10/1/2020 17:40:59	4531-1.RAW	5:40:59 PM	676.21	3		6.423	3.690	2569.104	ng/L	
Hg2600-3	00	SAM	0100047-95	400	10/1/2020 17:45:15	4532-1.RAW	5:45:15 PM	1033.59	3		563.9	3.690	1476.019	ng/L	
Hg2600-3	00	SAM	0100047-96	400	10/1/2020 17:49:28	4533-1.RAW	5:49:28 PM	616.27	3		748.5	4.899	1959.646	ng/L	
Hg2600-3	00	SAM	0100047-97	400	10/1/2020 17:53:39	4534-1.RAW	5:53:39 PM	800.91	3		534.1	3.495	1397.909	ng/L	
Hg2600-3	00	SAM	0100047-98	400	10/1/2020 17:57:50	4535-1.RAW	5:57:50 PM	586.45	3		5.029	5.029	5.029	ng/L	
Hg2600-3	00	SAM	0100047-99	400	10/1/2020 18:02:00	4536-1.RAW	6:02:00 PM	828.32	3		11.8	0.077	0.077	ng/L	
Hg2600-3	00	CAL	SEQ-CCV9	1	10/1/2020 18:06:11	4537-1.RAW	6:06:11 PM	64.20	4		0.077	0.077	0.077	ng/L	
Hg2600-3	00	CAL	SEQ-CCB9	1	10/1/2020 18:10:22	4538-1.RAW	6:10:22 PM	820.42	4		4.721	4.721	4.721	ng/L	
Hg2600-3	00	SAM	F010332-BS1	1	10/1/2020 18:14:32	4539-1.RAW	6:14:32 PM	780.28	4		4.901	4.901	4.901	ng/L	
Hg2600-3	00	SAM	F010332-BSD1	1	10/1/2020 18:18:43	4540-1.RAW	6:18:43 PM	800.91	4		0.091	0.091	0.091	ng/L	
Hg2600-3	00	BLK	F010332-BLK1	1	10/1/2020 18:22:54	4541-1.RAW	6:22:54 PM	66.33	4		14.0	0.030	0.030	ng/L	
Hg2600-3	00	BLK	F010332-BLK2	1	10/1/2020 18:27:05	4542-1.RAW	6:27:05 PM	66.33	4		4.5	0.030	0.030	ng/L	
Hg2600-3	00	BLK	F010332-BLK3	1	10/1/2020 18:31:15	4543-1.RAW	6:31:15 PM	56.93	4		2.4	0.016	0.016	ng/L	
Hg2600-3	00	BLK	F010332-BLK4	1	10/1/2020 18:35:26	4544-1.RAW	6:35:26 PM	54.81	4		0.016	0.016	0.016	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0100104-09	1	10/1/2020 18:39:36	4545-1.RAW	6:39:36 PM	89.02	4		36.6	0.194	0.194	ng/L	
Hg2600-3	00	SAM	F010332-MS1	1	10/1/2020 18:43:47	4546-1.RAW	6:43:47 PM	745.41	4		693.0	4.492	4.492	ng/L	
Hg2600-3	00	SAM	F010332-MSD1	1	10/1/2020 18:47:59	4547-1.RAW	6:47:59 PM	777.53	4		725.2	4.703	4.703	ng/L	
Hg2600-3	00	SAM	0100104-06	1	10/1/2020 18:52:09	4548-1.RAW	6:52:09 PM	105.04	4		52.7	0.299	0.299	ng/L	
Hg2600-3	00	SAM	0100104-07	1	10/1/2020 18:56:20	4549-1.RAW	6:56:20 PM	90.61	4		38.2	0.205	0.205	ng/L	
Hg2600-3	00	CAL	SEQ-CCVA	1	10/1/2020 18:00:31	4550-1.RAW	7:00:31 PM	808.03			755.7	4.948	4.948	ng/L	
Hg2600-3	00	CAL	SEQ-CCVA	1	10/1/2020 19:04:41	4551-1.RAW	7:04:41 PM	64.65			12.3	0.080	0.080	ng/L	
Hg2600-3	00	SAM	0100104-08	1	10/1/2020 19:08:52	4552-1.RAW	7:08:52 PM	86.46	4		34.1	0.177	0.177	ng/L	
Hg2600-3	00	SAM	0100104-10	1	10/1/2020 19:13:03	4553-1.RAW	7:13:03 PM	126.89	4		38.4	0.206	0.206	ng/L	
Hg2600-3	00	SAM	0100104-11	1	10/1/2020 19:17:14	4554-1.RAW	7:17:14 PM	173.76	4		74.5	0.442	0.442	ng/L	
Hg2600-3	00	SAM	0100104-12	1	10/1/2020 19:21:25	4555-1.RAW	7:21:25 PM	143.15	4		121.4	0.749	0.749	ng/L	
Hg2600-3	00	CAL	SEQ-LCV1	1	10/1/2020 19:25:35	4556-1.RAW	7:25:35 PM	143.15	4		37.8	0.248	0.248	ng/L	
Hg2600-3	00	CAL	SEQ-LCV2	1	10/1/2020 19:29:46	4557-1.RAW	7:29:46 PM	143.15	4		90.8	0.594	0.594	ng/L	
Hg2600-3	00	CAL	SEQ-CVVB	1	10/1/2020 19:33:56	4558-1.RAW	7:33:56 PM	787.57			735.2	4.814	4.814	ng/L	
Hg2600-3	00	CAL	SEQ-CVBB	1	10/1/2020 19:38:07	4559-1.RAW	7:38:07 PM	54.69			2.3	0.015	0.015	ng/L	
Hg2600-3	00	SAM	F009415-BS1	20	10/1/2020 19:42:18	4560-1.RAW	7:42:18 PM	765.91	5		713.5	4.705	4.705	ng/L	
Hg2600-3	00	SAM	F009415-BSD1	20	10/1/2020 19:46:29	4561-1.RAW	7:46:29 PM	717.92	5		665.5	4.391	4.391	ng/L	
Hg2600-3	00	BLK	F009415-BLK1	20	10/1/2020 19:50:39	4562-1.RAW	7:50:39 PM	48.39	5		-4.0	-0.026	-0.522	ng/L	
Hg2600-3	00	BLK	F009415-BLK2	20	10/1/2020 19:54:50	4563-1.RAW	7:54:50 PM	44.37	5		-8.0	-0.052	-1.048	ng/L	
Hg2600-3	00	BLK	F009415-BLK3	20	10/1/2020 19:59:01	4564-1.RAW	7:59:01 PM	43.94	5		-8.4	-0.055	-1.105	ng/L	
Hg2600-3	00	BLK	F009415-BLK4	20	10/1/2020 20:03:11	4565-1.RAW	8:03:11 PM	52.83	5		0.5	0.003	0.059	ng/L	
Hg2600-3	00	SAM	0100078-18	400	10/1/2020 20:07:22	4566-1.RAW	8:07:22 PM	226.02	5		173.6	1.139	455.466	ng/L	
Hg2600-3	00	SAM	F009415-MS1	400	10/1/2020 20:11:33	4567-1.RAW	8:11:33 PM	181.12	5		175.8	11.518	4607.315	ng/L	
Hg2600-3	00	SAM	F009415-MSD1	400	10/1/2020 20:15:44	4568-1.RAW	8:15:44 PM	1918.98	5		1856.6	12.225	4889.842	ng/L	
Hg2600-3	00	SAM	0100078-31	400	10/1/2020 20:19:54	4569-1.RAW	8:19:54 PM	425.39	5		373.0	2.444	977.683	ng/L	
Hg2600-3	00	CAL	SEQ-CVCC	1	10/1/2020 20:24:05	4570-1.RAW	8:24:05 PM	773.02			720.6	4.719	4.719	ng/L	
Hg2600-3	00	CAL	SEQ-CVBC	1	10/1/2020 20:28:16	4571-1.RAW	8:28:16 PM	58.60			6.2	0.041	0.041	ng/L	
Hg2600-3	00	SAM	F009415-MS2	400	10/1/2020 20:32:26	4572-1.RAW	8:32:26 PM	2061.10	5		2008.7	13.155	5262.073	ng/L	
Hg2600-3	00	SAM	F009415-MSD2	400	10/1/2020 20:36:37	4573-1.RAW	8:36:37 PM	2088.63	5		2036.3	13.335	5334.199	ng/L	
Hg2600-3	00	SAM	0100078-43	400	10/1/2020 20:40:47	4574-1.RAW	8:40:47 PM	452.71	5		400.3	2.623	1049.236	ng/L	
Hg2600-3	00	SAM	0100078-44	400	10/1/2020 20:44:58	4575-1.RAW	8:44:58 PM	317.50	5		265.1	1.738	695.081	ng/L	
Hg2600-3	00	SAM	0100078-45	400	10/1/2020 20:49:09	4576-1.RAW	8:49:09 PM	369.21	5		316.8	2.076	830.543	ng/L	
Hg2600-3	00	SAM	0100078-46	400	10/1/2020 20:53:19	4577-1.RAW	8:53:19 PM	553.73	5		501.4	3.285	1313.845	ng/L	
Hg2600-3	00	SAM	0100078-47	400	10/1/2020 20:57:30	4578-1.RAW	8:57:30 PM	486.71	5		434.3	2.846	1138.308	ng/L	
Hg2600-3	00	SAM	0100078-48	400	10/1/2020 21:01:41	4579-1.RAW	9:01:41 PM	297.56	5		245.2	1.607	642.849	ng/L	
Hg2600-3	00	SAM	0100078-49	400	10/1/2020 21:05:52	4580-1.RAW	9:05:52 PM	422.47	5		370.1	2.425	970.037	ng/L	
Hg2600-3	00	CAL	SEQ-CVCD	1	10/1/2020 21:10:02	4581-1.RAW	9:10:02 PM	314.24	5		261.9	1.716	686.549	ng/L	
Hg2600-3	00	CAL	SEQ-CVCD	1	10/1/2020 21:14:13	4582-1.RAW	9:14:13 PM	821.44			769.1	5.036	5.036	ng/L	
Hg2600-3	00	CAL	SEQ-CVCD	1	10/1/2020 21:18:24	4583-1.RAW	9:18:24 PM	58.04			5.7	0.037	0.037	ng/L	
Hg2600-3	00	SAM	0100078-51	400	10/1/2020 21:22:34	4584-1.RAW	9:22:34 PM	338.13	5		285.8	1.873	749.117	ng/L	
Hg2600-3	00	SAM	0100078-52	400	10/1/2020 21:26:45	4585-1.RAW	9:26:45 PM	369.65	5		317.3	2.079	831.690	ng/L	
Hg2600-3	00	SAM	0100078-53	400	10/1/2020 21:30:56	4586-1.RAW	9:30:56 PM	306.06	5		253.7	1.663	665.135	ng/L	
Hg2600-3	00	SAM	0100078-54	400	10/1/2020 21:35:07	4587-1.RAW	9:35:07 PM	462.37	5		410.0	2.686	1074.539	ng/L	
Hg2600-3	00	SAM	0100078-55	400	10/1/2020 21:39:17	4588-1.RAW	9:39:17 PM	269.46	5		217.1	1.423	569.257	ng/L	
Hg2600-3	00	SAM	0100078-56	400	10/1/2020 21:43:28	4589-1.RAW	9:43:28 PM	395.85	5		341.5	2.238	895.028	ng/L	
Hg2600-3	00	SAM	0100078-57	400	10/1/2020 21:47:39	4590-1.RAW	9:47:39 PM	544.72	5		492.3	3.226	1290.242	ng/L	
Hg2600-3	00	SAM	0100078-58	400	10/1/2020 21:51:49	4591-1.RAW	9:51:49 PM	401.82	5		349.4	2.290	915.947	ng/L	
Hg2600-3	00	SAM	0100078-59	400	10/1/2020 21:56:00	4592-1.RAW	9:56:00 PM	374.12	5		321.7	2.109	843.401	ng/L	
Hg2600-3	00	CAL	SEQ-CVCE	1	10/1/2020 22:00:11	4593-1.RAW	10:00:11 PM	773.67			721.3	4.723	4.723	ng/L	
Hg2600-3	00	CAL	SEQ-CVCE	1	10/1/2020 22:04:22	4594-1.RAW	10:04:22 PM	52.67			0.3	0.002	0.002	ng/L	

TotalMercury
EPA1631

Operat: EMB BlankS: 52.376 Callb Eqn: Conc = (Area-52.37 Run Date: 10/1/2020 Blank SD: 4.533749893
 Worksh THg2600 CalibFa 152.71 Status: QC Warnings:11/QC Run Time: 9:51:46 Blank RSD%: 8.656085529
 Method ### R: 0.9999 R2: 0.9999 CF SD: 4.203938197
 Descrip THg26003-201001-1 CF RSD%: 2.752834401

Sample/ID	Locator	Rinse	Dilute	Blank	Conc (ppt)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Control (eif)	Flags	RunCount
Clean				0.00	5.67					4419-1.RAW	9:54:38	866.50	Clean	OK	1
WS				52.38	0.00					4420-1.RAW	9:58:46	38.80	Sample	OK	1
WS				52.38	0.00					4421-1.RAW	10:02:55	37.41	Sample	OK	1
WS				52.38	0.00					4422-1.RAW	10:07:03	33.97	Sample	OK	1
SEQ-IBL1	A1			0.00	0.37					4423-1.RAW	10:11:12	56.71	Sample	OK	1
SEQ-IBL2	A2			0.00	0.35					4424-1.RAW	10:15:21	52.75	Sample	OK	1
SEQ-IBL3	A3			0.00	0.31					4425-1.RAW	10:19:30	47.87	Sample	OK	1
SEQ-CAL1	A4			52.38	0.48			96.98		4426-1.RAW	10:23:38	126.43	Sample	OK	1
SEQ-CAL2	A5			52.38	0.97			97.32		4427-1.RAW	10:27:47	201.00	Sample	OK	1
SEQ-CAL3	A6			52.38	5.06			101.24		4428-1.RAW	10:31:56	825.37	Sample	OK	1
SEQ-CAL4	A7			52.38	20.67			103.35		4429-1.RAW	10:36:05	3209.04	Sample	OK	1
SEQ-CAL5	A8			52.38	40.45			101.11		4430-1.RAW	10:40:14	6228.90	Sample	OK	1
SEQ-ICV1	A9			52.38	5.17			103.41		4431-1.RAW	10:44:24	842.02	Sample	OK	1
SEQ-ICB1	A10			52.38	0.11			0.00		4432-1.RAW	10:48:33	68.90	Sample	OK	1
F009414-BS1	A11		20	52.38	108.72					4433-1.RAW	10:52:42	882.52	Sample	OK	1
F009414-BSD1	A12		20	52.38	104.85					4434-1.RAW	10:56:52	852.96	Sample	OK	1
F009414-BLK1	A13		20	52.38	0.60					4435-1.RAW	11:01:01	56.94	Sample	OK	1
F009414-BLK2	A14		20	52.38	0.00					4436-1.RAW	11:05:10	46.67	Sample	OK	1
F009414-BLK3	A15		20	52.38	0.00					4437-1.RAW	11:09:20	45.94	Sample	OK	1
0100078-12	A16		400	52.38	1147.29					4438-1.RAW	11:13:29	490.39	Sample	OK	1
F009414-MS1	A17		400	52.38	6081.16			529.58		4439-1.RAW	11:17:38	2374.06	Sample	OK	1
F009414-MSD1	A18		400	52.38	6123.64					4440-1.RAW	11:21:47	2390.28	Sample	OK	1
0100078-16	A19		400	52.38	1380.37					4441-1.RAW	11:25:56	579.38	Sample	OK	1
F009414-MS2	A20		400	52.38	7517.57			543.82		4442-1.RAW	11:30:06	2922.45	Sample	OK	1
SEQ-CCV1	A21		1	52.38	5.37			107.39		4443-1.RAW	11:34:15	872.38	Sample	OK	1
SEQ-CCB1	B1		1	52.38	0.15			0.00		4444-1.RAW	11:38:24	75.16	Sample	OK	1
F009414-MSD2	B2		400	52.38	6122.58					4445-1.RAW	11:42:34	2389.87	Sample	OK	1
0100078-24	B3		400	52.38	762.39					4446-1.RAW	11:46:43	343.44	Sample	OK	1
0100078-25	B4		400	52.38	422.53					4447-1.RAW	11:50:53	213.69	Sample	OK	1
0100078-26	B5		400	52.38	326.46					4448-1.RAW	11:55:02	177.01	Sample	OK	1
0100078-27	B6		400	52.38	351.17					4449-1.RAW	11:59:11	186.45	Sample	OK	1
0100078-28	B7		400	52.38	616.92					4450-1.RAW	12:03:20	287.91	Sample	OK	1
0100078-29	B8		400	52.38	620.76					4451-1.RAW	12:07:30	289.37	Sample	OK	1
0100078-30	B9		400	52.38	534.71					4452-1.RAW	12:11:40	256.52	Sample	OK	1
0100078-32	B10		400	52.38	912.67					4453-1.RAW	12:15:49	400.82	Sample	OK	1
0100078-33	B11		400	52.38	920.99					4454-1.RAW	12:19:59	403.99	Sample	OK	1
SEQ-CCV2	B12		1	52.38	5.54			110.81		4455-1.RAW	12:24:08	898.50	Sample	OK	1
SEQ-CCB2	B13		1	52.38	0.07			0.00		4456-1.RAW	12:28:17	63.78	Sample	OK	1
0100078-34	B14		400	52.38	1172.10					4457-1.RAW	12:32:27	499.86	Sample	OK	1
0100078-35	B15		400	52.38	967.25					4458-1.RAW	12:36:36	421.65	Sample	OK	1
0100078-36	B16		400	52.38	3010.44					4459-1.RAW	12:40:46	1201.71	Sample	OK	1
0100078-37	B17		400	52.38	2071.60					4460-1.RAW	12:44:56	843.28	Sample	OK	1
0100078-38	B18		400	52.38	1235.14					4461-1.RAW	12:49:05	523.93	Sample	OK	1
0100078-39	B19		400	52.38	2119.59					4462-1.RAW	12:53:15	861.60	Sample	OK	1
0100078-40	B20		400	52.38	871.48					4463-1.RAW	12:57:24	385.09	Sample	OK	1
0100078-41	B21		400	52.38	1218.06					4464-1.RAW	13:01:34	517.41	Sample	OK	1
0100078-42	C1		400	52.38	1349.69					4465-1.RAW	13:05:43	567.66	Sample	OK	1
SEQ-CCV3	C2		1	52.38	5.53			110.56		4466-1.RAW	13:09:53	896.59	Sample	OK	1
SEQ-CCB3	C3		1	52.38	0.10			0.00		4467-1.RAW	13:14:03	67.64	Sample	OK	1
F010331-BS1	C4		1	52.38	4.81					4468-1.RAW	13:18:12	786.66	Sample	OK	1
F010331-BSD1	C5		1	52.38	4.74					4469-1.RAW	13:22:22	776.95	Sample	OK	1
F010331-BLK1	C6		1	52.38	0.03					4470-1.RAW	13:26:32	56.37	Sample	OK	1
F010331-BLK2	C7		1	52.38	0.00					4471-1.RAW	13:30:41	47.57	Sample	OK	1
F010331-BLK3	C8		1	52.38	0.01					4472-1.RAW	13:34:51	53.72	Sample	OK	1
F010331-BLK4	C9		1	52.38	0.00					4473-1.RAW	13:39:00	38.92	Sample	OK	1
F010331-BLK5	C10		1	52.38	0.11					4474-1.RAW	13:43:10	68.68	Sample	OK	1
0100105-06	C11		1	52.38	0.00					4475-1.RAW	13:47:20	46.25	Sample	OK	1
F010331-MS1	C12		1	52.38	5.14			513.88		4476-1.RAW	13:51:30	837.14	Sample	OK	1
F010331-MSD1	C13		1	52.38	5.36					4477-1.RAW	13:55:39	871.00	Sample	OK	1
SEQ-CCV4	C14		1	52.38	5.28			105.54		4478-1.RAW	13:59:49	858.26	Sample	OK	1
SEQ-CCB4	C15		1	52.38	0.03			0.00		4479-1.RAW	14:03:59	56.45	Sample	OK	1
0100091-02	C16		1	52.38	0.00					4480-1.RAW	14:08:09	49.22	Sample	OK	1
F010331-MS2	C17		1	52.38	5.24			262.08		4481-1.RAW	14:12:19	852.84	Sample	OK	1
F010331-MSD2	C18		1	52.38	5.38					4482-1.RAW	14:16:28	873.42	Sample	OK	1
0100088-01	C19		1	52.38	3.69					4483-1.RAW	14:20:38	615.57	Sample	OK	1
0100088-02	C20		1	52.38	0.02					4484-1.RAW	14:24:48	54.67	Sample	OK	1
0100088-03	C21		1	52.38	0.13					4485-1.RAW	14:28:58	72.74	Sample	OK	1
0100091-01	A1		10	52.38	11.29					4486-1.RAW	14:33:08	224.75	Sample	OK	1
0100097-01	A2		10	52.38	8.34					4487-1.RAW	14:37:18	179.79	Sample	OK	1
0100097-02	A3		1	52.38	1.03					4488-1.RAW	14:41:28	210.26	Sample	OK	1
0100097-03	A4		1	52.38	2.62					4489-1.RAW	14:45:38	451.84	Sample	OK	1
SEQ-CCV5	A5		1	52.38	5.77			115.44		4490-1.RAW	14:49:48	933.82	Sample	OK	1
SEQ-CCB5	A6		1	52.38	0.05			0.00		4491-1.RAW	14:53:58	60.40	Sample	OK	1
0100097-04	A7		1	52.38	3.24					4492-1.RAW	14:58:08	57.08	Sample	OK	1
0100104-01	A8		1	52.38	0.03					4493-1.RAW	15:02:18	57.08	Sample	OK	1
0100104-02	A9		1	52.38	0.07					4494-1.RAW	15:06:28	63.14	Sample	OK	1
0100104-03	A10		1	52.38	0.29					4495-1.RAW	15:10:38	96.21	Sample	OK	1
0100104-04	A11		1	52.38	0.23					4496-1.RAW	15:14:48	87.88	Sample	OK	1
0100104-05	A12		1	52.38	0.28					4497-1.RAW	15:18:58	95.09	Sample	OK	1
0100105-01	A13		1	52.38	3.26					4498-1.RAW	15:23:08	550.97	Sample	OK	1
0100105-02	A14		1	52.38	0.00					4499-1.RAW	15:27:17	51.49	Sample	OK	1
0100105-03	A15		1	52.38	4.22					4500-1.RAW	15:31:27	696.60	Sample	OK	1
0100105-04	A16		1	52.38	0.00					4501-1.RAW	15:35:37	50.49	Sample	OK	1
SEQ-CCV6	A17		1	52.38	5.13			102.70		4502-1.RAW	15:39:47	836.54	Sample	OK	1
SEQ-CCB6	A18		1	52.38	0.02			0.00		4503-1.RAW	15:43:59	55.19	Sample	OK	1
0100105-05	A19		10	52.38	21.19					4504-1.RAW	15:48:09	375.91	Sample	OK	1
F009384-BS1	A20		20	52.38	86.53					4505-1.RAW	15:52:20	713.11	Sample	OK	1
F009384-BSD1	A21		20	52.38	90.84					4506-1.RAW	15:56:30	745.98	Sample	OK	1
F009384-BLK1	B1		20	52.38	0.50					4507-1.RAW	16:00:41	58.19	Sample	OK	1

SEQ-IBL1	A1 ✓	0100078-35	B15 ✓	0100104-01	A8 ✓	0100047-BQ	C1 ✓
SEQ-IBL2	A2 ✓	0100078-36	B16 ✓	0100104-02	A9 ✓	0100047-BR	C2 ✓
SEQ-IBL3	A3 ✓	0100078-37	B17 ✓	0100104-03	A10 ✓	0100047-BS	C3 ✓
SEQ-CAL1	A4 ✓	0100078-38	B18 ✓	0100104-04	A11 ✓	0100047-BT	C4 ✓
SEQ-CAL2	A5 ✓	0100078-39	B19 ✓	0100104-05	A12 ✓	0100047-BU	C5 ✓
SEQ-CAL3	A6 ✓	0100078-40	B20 ✓	0100105-01	A13 ✓	0100047-BV	C6 ✓
SEQ-CAL4	A7 ✓	0100078-41	B21 ✓	0100105-02	A14 ✓	0100047-BW	C7 ✓
SEQ-CAL5	A8 ✓	0100078-42	C1 ✓	0100105-03	A15 ✓	0100047-BX	C8 ✓
SEQ-ICV1	A9 ✓	SEQ-CCV3	C2 ✓	0100105-04	A16 ✓	0100047-BY	C9 ✓
SEQ-ICB1	A10 ✓	SEQ-CCB3	C3 ✓	SEQ-CCV6	A17 ✓	0100047-BZ	C10 ✓
F009414-BS1	A11 ✓	F010331-BS1	C4 ✓	SEQ-CCB6	A18 ✓	SEQ-CCV9	C11 ✓
F009414-BSD1	A12 ✓	F010331-BSD1	C5 ✓	0100105-05	A19 ✓	SEQ-CCB9	C12 ✓
F009414-BLK1	A13 ✓	F010331-BLK1	C6 ✓	F009384-BS1	A20 ✓	F010332-BS1	C13 ✓
F009414-BLK2	A14 ✓	F010331-BLK2	C7 ✓	F009384-BSD1	A21 ✓	F010332-BSD1	C14 ✓
F009414-BLK3	A15 ✓	F010331-BLK3	C8 ✓	F009384-BLK1	B1 ✓	F010332-BLK1	C15 ✓
0100078-12	A16 ✓	F010331-BLK4	C9 ✓	F009384-BLK2	B2 ✓	F010332-BLK2	C16 ✓
F009414-MS1	A17 ✓	F010331-BLK5	C10 ✓	F009384-BLK3	B3 ✓	F010332-BLK3	C17 ✓
F009414-MSD1	A18 ✓	0100105-06	C11 ✓	0100047-65	B4 ✓	0100104-09	C18 ✓
0100078-16	A19 ✓	F010331-MS1	C12 ✓	F009384-MS1	B5 ✓	F010332-MS1	C19 ✓
F009414-MS2	A20 ✓	F010331-MSD1	C13 ✓	F009384-MSD1	B6 ✓	F010332-MSD1	C20 ✓
SEQ-CCV1	A21 ✓	SEQ-CCV4	C14 ✓	0100047-91	B7 ✓	0100104-06	C21 ✓
SEQ-CCB1	B1 ✓	SEQ-CCB4	C15 ✓	SEQ-CCV7	B8 ✓	0100104-07	A1
F009414-MSD2	B2 ✓	0100091-02	C16 ✓	SEQ-CCB7	B9 ✓	SEQ-CCVA	A2
0100078-24	B3 ✓	F010331-MS2	C17 ✓	F009384-MS2	B10 ✓	SEQ-CCBA	A3
0100078-25	B4 ✓	F010331-MSD2	C18 ✓	F009384-MSD2	B11 ✓	0100104-08	A4
0100078-26	B5 ✓	0100088-01	C19 ✓	0100047-BI	B12 ✓	0100104-10	A5
0100078-27	B6 ✓	0100088-02	C20 ✓	0100047-BJ	B13 ✓	0100104-11	A6
0100078-28	B7 ✓	0100088-03	C21 ✓	0100047-BK	B14 ✓	0100104-12	A7
0100078-29	B8 ✓	0100091-01	A1 ✓	0100047-BL	B15 ✓	SEQ-LCV1	A8
0100078-30	B9 ✓	0100097-01	A2 ✓	0100047-BM	B16 ✓	SEQ-LCV2	A9
0100078-32	B10 ✓	0100097-02	A3 ✓	0100047-BN	B17 ✓	SEQ-CCVB	A10
0100078-33	B11 ✓	0100097-03	A4 ✓	0100047-BO	B18 ✓	SEQ-CCB8	A11
SEQ-CCV2	B12 ✓	SEQ-CCV5	A5 ✓	0100047-BP	B19 ✓	F009415-BS1	A12
SEQ-CCB2	B13 ✓	SEQ-CCB5	A6 ✓	SEQ-CCV8	B20 ✓	F009415-BSD1	A13
0100078-34	B14 ✓	0100097-04	A7 ✓	SEQ-CCB8	B21 ✓	F009415-BLK1	A14

A1-C21

ver by ver 10.2-2020

second A1-C21 ver. by ZCH 10/2/2020

third A1-C4 ver. by MFS 10/2/2020

F009415-BLK2	A15
F009415-BLK3	A16
F009415-BLK4	A17
0100078-18	A18
F009415-MS1	A19
F009415-MSD1	A20
0100078-31	A21
SEQ-CCVC	B1
SEQ-CCBC	B2
F009415-MS2	B3
F009415-MSD2	B4
0100078-43	B5
0100078-44	B6
0100078-45	B7
0100078-46	B8
0100078-47	B9
0100078-48	B10
0100078-49	B11
0100078-50	B12
SEQ-CCVD	B13
SEQ-CCBD	B14
0100078-51	B15
0100078-52	B16
0100078-53	B17
0100078-54	B18
0100078-55	B19
0100078-56	B20
0100078-57	B21
0100078-58	C1
0100078-59	C2
SEQ-CCVE	C3
SEQ-CCBE	C4

ANALYSIS SEQUENCE

0J05014

Analyzed w/
0J05013
MFS 10/5/20

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/2/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J05014-IBL1	QC	1			
0J05014-IBL2	QC	2			
0J05014-IBL3	QC	3			
0J05014-CAL1	QC	4	2002064		
0J05014-CAL2	QC	5	2002065		
0J05014-CAL3	QC	6	2002220		
0J05014-CAL4	QC	7	2002221		
0J05014-CAL5	QC	8	2002222		
0J05014-ICV1	QC	9	2001809		
0J05014-ICB1	QC	10			
0J05014-CCV1	QC	11	2001809		
0J05014-CCB1	QC	12			
0J05014-CCV2	QC	13	2001809		
0J05014-CCB2	QC	14			
0J05014-CCV3	QC	15	2001809		
0J05014-CCB3	QC	16			
F009413-BS1	QC	17			
F009413-BSD1	QC	18			
F009413-BLK1	QC	19			
F009413-BLK2	QC	20			
F009413-BLK3	QC	21			
F009413-BLK4	QC	22			
F009413-BLK5	QC	23			
F009413-BLK6	QC	24			
0I00078-04	Hg-CVAFS-T-7030	25			
F009413-MS1	QC	26			
0J05014-CCV4	QC	27	2001809		
0J05014-CCB4	QC	28			
F009413-MSD1	QC	29			
0I00078-06	Hg-CVAFS-T-7030	30			
F009413-MS2	QC	31			
F009413-MSD2	QC	32			
0I00078-01	Hg-CVAFS-T-7030	33			
0I00078-02	Hg-CVAFS-T-7030	34			
0I00078-03	Hg-CVAFS-T-7030	35			
0I00078-05	Hg-CVAFS-T-7030	36			

QUALITY ASSURANCE
PEER REVIEWED
INITIALS: PES

ANALYSIS SEQUENCE

0J05014

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/2/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00078-07	Hg-CVAFS-T-7030	37			
0I00078-08	Hg-CVAFS-T-7030	38			
0J05014-CCV5	QC	39	2001809		
0J05014-CCB5	QC	40			
0I00078-09	Hg-CVAFS-T-7030	41			
0I00078-10	Hg-CVAFS-T-7030	42			
0I00078-11	Hg-CVAFS-T-7030	43			
0I00078-13	Hg-CVAFS-T-7030	44			
0I00078-14	Hg-CVAFS-T-7030	45			
0I00078-15	Hg-CVAFS-T-7030	46			
0I00078-17	Hg-CVAFS-T-7030	47			
0I00078-19	Hg-CVAFS-T-7030	48			
0I00078-20	Hg-CVAFS-T-7030	49			
0I00078-21	Hg-CVAFS-T-7030	50			
0J05014-CCV6	QC	51	2001809		
0J05014-CCB6	QC	52			
0I00078-22	Hg-CVAFS-T-7030	53			
0I00078-23	Hg-CVAFS-T-7030	54			
F009385-BS1	QC	55			
F009385-BSD1	QC	56			
F009385-BLK1	QC	57			
F009385-BLK2	QC	58			
F009385-BLK3	QC	59			
0I00047-12	Hg-CVAFS-T-7030	60			
F009385-MS1	QC	61			
F009385-MSD1	QC	62			
0J05014-CCV7	QC	63	2001809		
0J05014-CCB7	QC	64			
0I00033-01RE1	Hg-CVAFS-T-7030	65			Re-digest in 40mL Vial (FV=20mL) due to mass lost during digest - MFS 9/22/2020
0I00033-02RE1	Hg-CVAFS-T-7030	66			Re-digest in 40mL Vial (FV=20mL) due to mass lost during digest - MFS 9/22/2020
0I00033-03RE1	Hg-CVAFS-T-7030	67			Re-digest in 40mL Vial (FV=20mL) due to mass lost during digest - MFS 9/22/2020
0I00033-04RE1	Hg-CVAFS-T-7030	68			Re-digest in 40mL Vial (FV=20mL) due to mass lost during digest - MFS 9/22/2020
0I00047-CA	Hg-CVAFS-T-7030	69			
0I00047-CB	Hg-CVAFS-T-7030	70			
0I00047-CC	Hg-CVAFS-T-7030	71			

ANALYSIS SEQUENCE

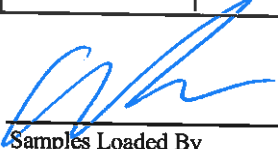
0J05014

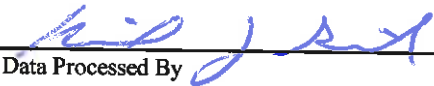
Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/2/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0I00047-CD	Hg-CVAFS-T-7030	72			
0I00047-CE	Hg-CVAFS-T-7030	73			
0J05014-CCV8	QC	74	2001809		
0J05014-CCB8	QC	75			
F009384-MSD3	QC	76			
0I00047-65RE1	Hg-CVAFS-T-7030	77			Added 10/2/2020 by EMB
F009384-MS3	QC	78			
0J05014-CCV9	QC	79	2001809		
0J05014-CCB9	QC	80			

 _____
 Samples Loaded By 10/5/20
Date

 _____
 Data Processed By 10/5/20
Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	EMB/ MFS(DATA ENTRY)	Sequence(s) #:	0J05014
Reviewer:		Dataset ID(s):	THg26003-201002-1
Date:	10/5/2020	WO (s) #:	Multiple
Batch #(s):	F009413, F009385, F009384		

Analyst Initials MFS Reviewer Initials PFS

- 5b. Has the B/C section data been uploaded? YES NO N/A
- QA/QC Data Checked**
6. RSD CF (≤ 15%) PASS FAIL
 Comments: _____
7. The calibration curve included a minimum of 5 Standards YES NO
 Comments: _____
8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) PASS FAIL
9. ICV and CCV % Recoveries EPA 1631E (77-123%) PASS FAIL
 Comments: _____
10. Do all calibration points pass acceptance criteria? YES NO
 Comments: _____
11. Are qualifiers consistent with the data review flowcharts? YES NO N/A
 Comments: _____
12. Explain any items on the failed data report from Element
 Comments: _____
13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) PASS FAIL
 (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit:
 (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? YES NO
 (c) Was a BrCl Blank analyzed for each preservation level? YES NO N/A
 (d) Are Preparation Blanks summarized on QC page? YES NO
14. Filtration Blank Prepared (if yes, use FB qualifier) YES NO
 (a) Filtration Blank prep date same as associated samples' prep date YES NO N/A
 (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI YES NO N/A
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? PASS FAIL
 Comments: _____
16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? PASS FAIL
 Comments: _____
17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) YES NO N/A
18. Is the correct 'Source' designated for MD/MS/MSD? YES NO
19. For digested preps: was there a spike witness signature & date on the prep bench sheet? YES NO N/A

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: EMB/ MFS(DATA ENTRY)	Sequence(s) #: 0J05014
Reviewer:	Dataset ID(s): THg26003-201002-1
Date: 10/5/2020	WO (s) #: Multiple
Batch #(s): F009413, F009385, F009384	

Analyst Initials MFS **Reviewer Initials** PGS

- 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? YES NO
 Comments: _____
- 21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
 Comments: _____
- 22. Are the samples run at the correct dilution level for the method? YES NO
 Comments: _____
- 23. Dissolved < Total (if applicable) YES NO N/A
 Comments: _____
- 24. Effluent < Influent (visually confirm if needed) YES NO N/A
 Comments: _____
- 25. Are re-runs noted with reason? YES NO N/A
 Comments: _____
- 26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
 Comments: _____
- 27. Is the B trap <5% A Traps YES NO N/A
 Comments: _____
- 28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
 Comments: _____
- 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
 Comments: _____
- 30. Have re-extracts been created for non-reportable samples? YES NO N/A
- 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
- 32. Does the data set need scanning? YES N/A
- 33. Does the dataset have an LOQ/LOQ or DOC? YES N/A
- 34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
- 35. Water samples-is the final volume correct in the sequence? YES NO N/A

Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

- 36. Date of analyst IDOC/CDOC: 11/30/20 IDOC/CDOC within last 12 months? YES NO
- 37. Date of analyst's SOP reading for method: 12/25/20 Current SOP revision read? YES NO
- 38. Date of LOD: 12/29/19 LOD within last 3 months? YES NO
- 39. Date of LOQ: 12/29/19 LOQ within last 3 months? YES NO

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep) 9/30/2020
Upload/Date: MGS (Data Entry) 10/2/2020

Samples to lab: NA
Reviewer/Date: MFS 10/5/20

Batch #: F009413

EFGS Preparation Method

SOP2836 Oven Digestion (Total Recoverable Metals) ICPMS AFS

SOP2837 Tissue Nitric Digestion ICPMS CVAFS

SOP2840 Modified Aqua Regia

SOP2820 RP

SOP2821 HF Bomb Digestion ICPMS CVAFS

SOP2828 Nitric Bomb Digestion ICPMS CVAFS

SOP2993 Oven Digestion (As, Se Speciation)

SOP314 Nitric Bomb Digestion (Pharmaceuticals)

SOP5145 Microwave Digestion (3051)

NA - Other: EAFS, ICPMS, SOP2795, Tissues - THg 70:30 Hot plate

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analytes: THg

	ICPMS	CVAFS	70:30	Reviewer Initials	Tertiary Review
1. Is any SOP/DOC expiring within one week of Submission Date? Data cannot be reported without a current IDOC/CDOC.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> NO	<u>MFS</u>	<input type="checkbox"/>
2. Check prep method	If YES, notify supervisor and technician immediately.				
(a) For Ceuticals: Is correct Hg code being used in LIMS?	<input type="checkbox"/> ICPMS	<input checked="" type="checkbox"/> CVAFS	<input type="checkbox"/> 70:30	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
3. Compare sample ID & container ID with benchsheet & in LIMS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
4. Check for transcription errors from benchsheet	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(a) Check and compare initial and final volumes	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(b) Check and compare mass	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(c) Has the number of pills been documented (Special Info 5 in benchsheet)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(d) Have assay logbook copies been attached & avg masses entered?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(e) For re-digests, have e-mails been attached and verified?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
(f) Benchsheet prep date MUST match actual prep date	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/>
5. Samples per Batch? Check QC Requirements	<input checked="" type="checkbox"/> < 20	<input type="checkbox"/> ≤ 10	<input type="checkbox"/> ≤ 10	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(a) PBs per batch?	<input checked="" type="checkbox"/> 3 PBs	<input type="checkbox"/> 2 PBs	<input type="checkbox"/> 1 PBs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Are pre and post homogenization blanks in batch?	<input type="checkbox"/> BS	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) BS, BS/BSD or CRM in batch?	<input type="checkbox"/> BS	<input checked="" type="checkbox"/> BS/BSD	<input type="checkbox"/> CRM	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) MS/MSD in batch?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) MD in batch?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) Is there at least one duplicate QC source in batch?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(g) Are there any client specific requests, QC requests, etc?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Document: <u>see benchsheet</u>	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(h) Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) Correct 'source' designated for MD/MS/MSD?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(j) For EFGS-filtered samples, was a filtration blank included?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Special prep requirements?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(a) For 1638: Have samples sat for 48 hours after preservation?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) For 200.8: Have samples sat for 16 hours after preservation?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) For DOD have pipettes been calibrated day of prep?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are the samples appropriately spiked?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(a) Is the spike and amount used appropriate and entered into LIMS?	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) For <u>all</u> spiking was there a witness? (Initials <u>must</u> be in logbook)	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Spikes added:	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>

NOTE: Due to LIMS software constraints, new LIMS IDs need to be created when multiple/ supplemental spikes are used. Enter new LIMS ID below and use table to list all spikes included in it.

Spike LIMS ID : NA

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
THg-BS	2002032	20			
THg-MS	2001204	100			

PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Prepared: 9/30/2020

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009413-BLK1	Blank	0.25	20					
F009413-BLK2	Blank	0.25	20					
F009413-BLK3	Blank	0.25	20					
F009413-BLK4	Pre-homogenization blank 092320	0.2508	20					WO 0100078-60
F009413-BLK5	Post-homogenization blank 092320	0.2579	20					WO 0100078-61
F009413-BLK6	Post-homogenization Blank 092420	0.2851	20					WO 0100078-62
F009413-BS1	LCS	0.25	20	2002032	20			
F009413-BSD1	LCS Dup	0.25	20	2002032	20			
F009413-MS1	Matrix Spike [0100078-04]	0.2678	20	2001204	100			
F009413-MS2	Matrix Spike [0100078-06]	0.1376	10	2001204	100			
F009413-MSD1	Matrix Spike Dup [0100078-04]	0.2594	20	2001204	100			
F009413-MSD2	Matrix Spike Dup [0100078-06]	0.1383	10	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002304	5% BrCl	30-Mar-21 00:00
			2002305		07-Feb-21 00:00

PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/30/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-01	ES-FP_20ET711_091020_01_TOM_WB	0.259	20	-	-	S&R		
0100078-02	ES-FP_20ET717_091020_02_TOM_WB	0.2607	20	-	-	S&R		
0100078-03	ES-FP_20ET741_091520_03_TOM_WB	0.2656	20	-	-	S&R		
0100078-04	ES-FP_20ET755_091520_04_TOM_WB	0.2548	20	QC	-	S&R	MS/MSD	
0100078-05	ES-FP_20ET756_091520_05_TOM_WB	0.2691	20	-	-	S&R		
0100078-06	ES-FP_20SN001_091120_01_RAS_WB	0.1294	10	QC	-	S&R	MS/MSD	
0100078-07	ES-FP_20SN001_091120_02_RAS_WB	0.2573	20	-	-	S&R		
0100078-08	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R		
0100078-09	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R		
0100078-10	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R		
0100078-11	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R		
0100078-13	ES-02_20ET909_091620_01_TOM_WB	0.2629	20	-	-	S&R		
0100078-14	ES-02_20ET924_091820_02_TOM_WB	0.2576	20	-	-	S&R		
0100078-15	ES-02_20ET934_091820_03_TOM_WB	0.2553	20	-	-	S&R		
0100078-17	ES-02_20ET941_091820_05_TOM_WB	0.2643	20	-	-	S&R		
0100078-19	FRB-01_20LT620_091720_02_LOB_TA	0.2539	20	-	-	S&R		
0100078-20	FRB-01_20LT621_092020_03_LOB_TA	0.2634	20	-	-	S&R		
0100078-21	FRB-01_20LT627_092020_04_LOB_TA	0.258	20	-	-	S&R		
0100078-22	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R		

PREPARATION BENCH SHEET

F009413

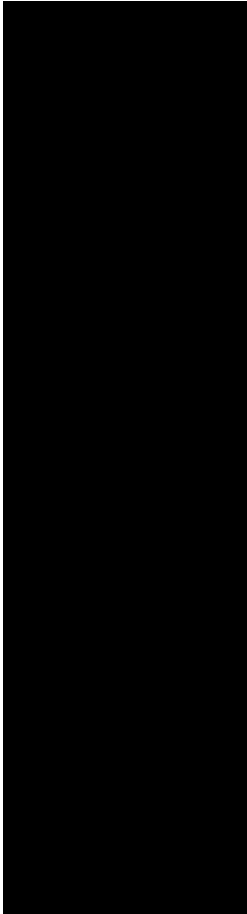
Eurofins Frontier Global Sciences, LLC

Prepared: 9/30/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

0100078-23	OL-01_20ET866_091820_02_TOM_WB	0.2302	20	-	-	S&R	
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Technician: WJ Batch#: FO09413 Date: 9-24-2020

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: NA
 Balance#: 23 Calibrated? Yes No
 *Time in: 144 Actual Temp. (raw): 17.9 °C w/ CF: 17.3 °C *Time in can't begin before target temperature is reached
 Time out: 1443 Actual Temp. (raw): 17.4 °C w/ CF: 17.4 °C

Final vol.: 20 mL (LIMS ID: 20020370) BS Spike vol.: 20 µL (LIMS ID: 20020370)
 Spike Witness: ZKH 9/30/2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 20012020)

HCl LIMS ID: N/A Pipette SN#: 0001853 Calibration Date: 9/29/20
 HNO₃ LIMS ID: N/A Pipette SN#: P03325 Calibration Date: 9/28/20
 70/30 LIMS ID: 20020304 (2002304*) Dispenser #: 19281607 Calibrated? Yes No
 Other Acid LIMS ID: 2002304 (5A, 3rc) Dispenser #: 19287245
 Glass Vial # 00017092 Boiling Chip lot # 2002050 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	CRM LIMS ID
1	20020370-01	A	0.2703	19	0100078-10	C	0.2548	<input checked="" type="checkbox"/> NA
2	FO09413-BIK2	A	0.2683	20	0100078-11	C	0.2568	
3	FO09413-BIK3	B	0.2922	21	0100078-13	C	0.2679	
4	FO09413-BS1	B	0.2620	22	0100078-14	C	0.2576	
5	FO09413-BS01	B	0.2763	23	0100078-15	C	0.2553	A 15 weighed 9.24.2020
6	0100078-04(SRC1)	C	0.2548	24	0100078-17	C	0.2643	
7	FO09413-MS1	C	0.2678	25	0100078-19	C	0.2539	9-11: Limited Volume
8	FO09413-MSD1	C	0.2594	26	0100078-20	C	0.2634	FO09413-BIK4 10/20/2020
9	0100078-06(SRC2)	C	0.1794	27	0100078-21	C	0.2580	FO09413-BIK5: 0100078-01
10	FO09413-MS2	C	0.1376	28	0100078-22	C	0.2650	FO09413-BIK6: 0100078-02
11	FO09413-MSD2	C	0.1393	29	0100078-23	C	0.2502	FO09413-BIK7: 0100078-03
12	0100078-01	C	0.2590	30	FO09413-BIK4	A	0.2508	08 brought to F.U. = 10m
13	0100078-02	C	0.2607	31	FO09413-BIK5	A	0.2577	* vials 15-32 10/2/2020
14	0100078-03	C	0.2656	32	FO09413-BIK6	A	0.2551	
15	0100078-05	C	0.2691	33				
16	0100078-07	C	0.2573	34				
17	0100078-08	C	0.2536	35				
18	0100078-09	C	0.2556	36				

Verified By: ZKH 9/1/2020
 *Hotblock diagram located in back of logbook
 Page 16 of 59

Technician: USA Batch #: F009413 Date: 9-26-2020

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: NA
 Balance #: 23 Vial Type: Glass Teflon
 *Time in: _____ Calibrated? Yes No
 Time out: _____ Actual Temp. (raw): _____ °C w/ CF: _____ °C *Time in can't begin before target temperature is reached
 _____ Actual Temp. (raw): _____ °C w/ CF: _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)
 HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibration Date: _____
 Other Acid LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Glass Vial # _____ Boiling Chip lot # _____ *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	Vial #	Sample ID Number	Container ID	Sample Size □ mL <input checked="" type="checkbox"/> µg	CRM LIMS ID <input type="checkbox"/> NA
1	0100078-09	A	0.2703	19	0100078-10	C	0.2548	
2	F009413-BIK2	A	0.2683	20	0100078-11	C	0.2568	
3	F009413-BIK3	B	0.2922	21	0100078-13	C	0.2679	
4	F009413-BS1	B	0.2620	22	0100078-14	C	0.2576	
5	F009413-BS01	B	0.2763	23	0100078-15	C	0.2553	A 15 weighed 9.24.2020
6	0100078-04 (SRC1)	C	0.2548	24	0100078-17	C	0.2643	
7	F009413-MS1	C	0.2678	25	0100078-19	C	0.2539	9-11: Limited Volume
8	F009413-MSD1	C	0.2594	26	0100078-20	C	0.2634	
9	0100078-06 (SRC2)	C	0.1794	27	0100078-21	C	0.2580	F009413-BIK4 05/20/20
10	F009413-MS2	C	0.1376	28	0100078-22	C	0.2650	F009413-BIK5 06/10/20
11	F009413-MSD2	C	0.1383	29	0100078-23	C	0.2502	F009413-BIK6 01/00/20
12	0100078-01	C	0.2590	30	F009413-BIK4	A	0.2508	
13	0100078-02	C	0.2607	31	F009413-BIK5	A	0.2579	
14	0100078-03	C	0.2656	32	F009413-BIK6	A	0.2551	
15	0100078-05	C	0.2691	33				
16	0100078-07	C	0.2573	34				
17	0100078-08	C	0.2536	35				
18	0100078-09	C	0.2556	36				

Sample Preparation Review Checklist

Revision: 4
Effective: Dec. 11, 2017

Technician/Date: MFS (prep)
Upload/Date: MGS (Data Entry)

9/28/2020
10/2/2020

Samples to lab: NA
Reviewer/Date: MFS 10/5/20

Batch #: F009385

EFGS Preparation Method			
<input type="checkbox"/>	SOP2836	Oven Digestion (Total Recoverable Metals)	<input type="checkbox"/> ICPMS <input type="checkbox"/> AFS
<input type="checkbox"/>	SOP2837	Tissue Nitric Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2840	Modified Aqua Regia	
<input type="checkbox"/>	SOP2820	RP	
<input type="checkbox"/>	SOP2821	HF Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2825	Nitric Bomb Digestion	<input type="checkbox"/> ICPMS <input type="checkbox"/> CVAFS
<input type="checkbox"/>	SOP2993	Oven Digestion (As, Se Speciation)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (Nutraceuticals)	
<input type="checkbox"/>	SOP5145	Microwave Digestion (3051)	
<input checked="" type="checkbox"/>	NA - Other	EPA 821-R-03-005 SOP 2705 Tissues - THg 70:30 plate	

Initials	SOP Date	DOC Date
MFS	10/28/2019	11/18/2019

Comments: _____

Conditionally formatted training files located at:
\\us34file\General and Admin\Quality Assurance\Training\Training Master
(Contact QA for any problems regarding these training files.)

Analyses: THg

- Is any SOP/DOC expiring within one week of Submission Date? YES NO Tertiary Review
Data cannot be reported without a current IDOC/CDOC. If YES, notify supervisor and technician immediately.
- Check prep method YES NO Tertiary Review
 - For Ceuticals: Is correct Hg code being used in LIMS? ICPMS CV-AFS 70:30 N/A Tertiary Review
- Compare sample ID & container ID with benchsheet & in LIMS YES NO Tertiary Review
- Check for transcription errors from benchsheet YES NO Tertiary Review
 - Check and compare initial and final volumes YES N/A Tertiary Review
 - Check and compare mass YES N/A Tertiary Review
 - Has the number of pills been documented (Special Info 5 in benchsheet)? YES N/A Tertiary Review
 - Have assay logbook copies been attached & avg masses entered? YES N/A Tertiary Review
 - For re-digests, have e-mails been attached and verified? YES NO Tertiary Review
 - Benchsheet prep date MUST match actual prep date YES NO Tertiary Review
- Samples per Batch? Check QC Requirements > 20 ≤ 10 Tertiary Review
 - PBs per batch? 3 PBs 2 PBs 1 PBs Tertiary Review
 - Are pre and post homogenization blanks in batch? YES N/A Tertiary Review
 - BS, BS/BSD or CRM in batch? BS BS/BSD CRM Tertiary Review
 - MS/MSD in batch? YES N/A Tertiary Review
 - MD in batch? YES N/A Tertiary Review
 - Is there at least one duplicate QC source in batch? YES N/A Tertiary Review
 - Are there any client specific requests, QC requests, etc? YES N/A Tertiary Review

Document: See bench sheet
- Correct LIMS spike ID included for BS, BS/BSD and/or MS/MSD? YES N/A Tertiary Review
- Correct 'source' designated for MD/MS/MSD? YES N/A Tertiary Review
- For EFGS-filtered samples, was a filtration blank included? YES N/A Tertiary Review
- Special prep requirements? YES N/A Tertiary Review
 - For 1638: Have samples sat for 48 hours after preservation? YES N/A Tertiary Review
 - For 200.8: Have samples sat for 16 hours after preservation? YES N/A Tertiary Review
 - For DOD have pipettes been calibrated day of prep? YES N/A Tertiary Review
- Are the samples appropriately spiked? YES N/A Tertiary Review
 - Is the spike and amount used appropriate and entered into LIMS? YES N/A Tertiary Review
 - For all spiking was there a witness? (Initials must be in logbook) YES N/A Tertiary Review
 - Spikes added: YES N/A Tertiary Review

Spike LIMS ID : NA

Spike Name	LIMS ID	µL	Spike Name	LIMS ID	µL
THg-BS	2002032	20			
THg-MS	2001204	100			

PREPARATION BENCH SHEET

F009385

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/28/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009385-BLK1	Blank	0.25	20					
F009385-BLK2	Blank	0.25	20					
F009385-BLK3	Blank	0.25	20					
F009385-BS1	LCS	0.25	20	2002032	20			
F009385-BSDI	LCS Dup	0.25	20	2002032	20			
F009385-MS1	Matrix Spike [0100047-12]	0.2687	20	2001204	100			
F009385-MSDI	Matrix Spike Dup [0100047-12]	0.2584	20	2001204	100			

Standard ID(s):

2001204
2002032

Description:

THg 1,000ng/mL Secondary Spiking Standard
THg 100ng/mL Primary Spiking Standard

Expiration:

05-Nov-20 00:00
05-Nov-20 00:00

Reagent ID(s):

2002050
2002190
2002305

Description:

Boiling Chips for ICPMS
70/30 Digestion Acid
5% BrCl

Expiration:

20-Feb-21 00:00
08-Sep-21 00:00
07-Feb-21 00:00

PREPARATION BENCH SHEET

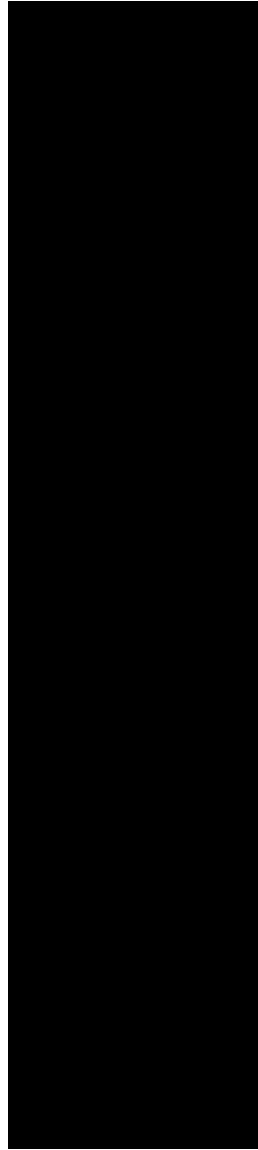
F009385

Eurofins Frontier Global Sciences, LLC

Prepared: 9/28/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100033-01RE1	710-2020-13787001	0.2545	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-02RE1	710-2020-13787002	0.253	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-03RE1	710-2020-13787003	0.2678	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-04RE1	710-2020-13787004	0.2883 0.256 MES 10/15/20	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100047-12	L9-45_20LT009_091020_12_LOB_TA	0.2684	20	-	-	eezer 23		
0100047-CA	0B-01_20ET614_091020_17_TOM_WB	0.2654	20	-	-	S&R		
0100047-CB	0B-01_20ET616_091020_18_TOM_WB	0.253	20	-	-	S&R		
0100047-CC	0B-01_20ET617_091020_19_TOM_WB	0.2599	20	-	-	S&R		
0100047-CD	0B-01_20ET617_091020_20_TOM_WB	0.2568 9.15.20	20	-	-	S&R		
0100047-CE	HERRING_091020_LOBSTER_BAIT	0.269	20	-	-	fms Cals		



Technician: LEL/MPB Batch #: FO09385 Date: assigned 9/25/20

- EFAFS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAFS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAFS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAFS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: N/A Vial Type: Glass Teflon
 Balance #: 26 Calibrated? Yes No Therm. #: 10750091 Calibrated? Yes No
 *Time in: 1417 Actual Temp. (raw): 21.8 °C w/ CF: 12.2 °C *Time in can't begin before target temperature is reached
 Time out: 1443 Actual Temp. (raw): 22.0 °C w/ CF: 12.4 °C

Final vol.: 20 mL (LIMS ID: 20012505) BS Spike vol.: 20 µL (LIMS ID: 20000032)
 Spike Witness: ZKH 9/30/2020 (initial and date) MS Spike vol.: 100 µL (LIMS ID: 20020011)

HCl LIMS ID: N/A Pipette SN#: 0201853 Calibration Date: 9-29-20
 HNO₃ LIMS ID: N/A Pipette SN#: N/A Calibration Date: N/A
 70:30 LIMS ID: 2002190 Dispenser SN#: 19060007 Calibrated? Yes No
 Other Acid LIMS ID: 2002205 (578001) Dispenser #: 19031295 Calibrated? Yes No
 Glass Vial # 60021092 Boiling Chip lot # 2002050 *Hotblock Position: N/A

Vial #	Sample ID Number	Container ID	Sample Size mL/g	Vial #	Sample ID Number	Container ID	Sample Size mL/g	CRM LIMS ID
1	FO09385-B1K1	B	0.2543	19				
2	FO09385-B1K2	B	0.2735	20				
3	FO09385-B1K3	B	0.2717	21				
4	FO09385-B51	B	0.2614	22				
5	FO09385-B5D1	B	0.2673	23				
6	0100047-12 (B578001)	C	0.2684	24				
7	FO09385-M51	C	0.2687	25				
8	FO09385-M5D1	C	0.2584	26				
9	0100047-CA	C	0.2654	27				
10	0100047-CB	C	0.2530	28				
11	0100047-CC	C	0.2599	29				
12	0100047-CD	C	0.2690	30				
13	0100047-CE	C	0.2545	31				
14	0100033-01RE1	A	0.2543	32				
15	0100033-02RE1	A	0.2530	33				
16	0100033-03RE1	A	0.2676	34				
17	0100033-04RE1	A	0.2583	35				
18			N/A	36				

Comments:
 1 Digested in 40mL vial, rinsed w/ diluent into same vial
 2 added 0.1492g Boiling chips (BC) to vial
 3 added 0.2289g BC to vial
 4 added 0.1586g BC to vial
 5 added 0.1386g BC to vial
 6 transcribed 9-30-2020
 18 N/A 9-30-2020

Technician: RA/MS Batch #: FO09385 Date: _____

- EFAPS-T-AFS-SOP2986 Tissues - Methyl Mercury - KOH/Methanol: Hot plate 75±5°C for 2-4 hours.
- EFAPS-T-AFS-SOP2795 Tissues - Total Mercury - 70:30: Hot plate 75±5°C for two hours.
- EFAPS-T-AFS-SOP5134 Sediments - Methyl Mercury - KBr/CH₂Cl₂: Heat Block 45°C (nitrogen purge for 30 minutes).
- EFAPS-T-AFS-SOP2807 Solids - Total Mercury - Cold AR: 18-25°C for over four hours.

Other: _____ Vial Type: Glass Teflon
 Balance #: 25 Calibrated? Yes No Calibrated? Yes No
 *Time in: _____ Actual Temp. (raw): _____ °C *Time in can't begin before target temperature is reached
 Time out: _____ Actual Temp. (raw): _____ °C

Final vol.: _____ mL (LIMS ID: _____) BS Spike vol.: _____ µL (LIMS ID: _____)
 Spike Witness: _____ (initial and date) MS Spike vol.: _____ µL (LIMS ID: _____)

HCl LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 HNO₃ LIMS ID: _____ Pipette SN#: _____ Calibration Date: _____
 70/30 LIMS ID: _____ Dispenser #: _____ Calibrated? Yes No
 Other Acid LIMS ID: _____ Dispenser #: _____
 Glass Vial # _____ Boiling Chip lot # _____ *Hotblock Position: _____

Vial #	Sample ID Number	Container ID	Sample Size mL/g	Vial #	Sample ID Number	Container ID	Sample Size mL/g	CRM LIMS ID <input type="checkbox"/> NA	Comments
1	FO09385-BIK1	B	0.2543	19					
2	FO09385-BIK2	B	0.2735	20					
3	FO09385-BIK3	B	0.2717	21					
4	FO09385-BS1	B	0.2614	22					
5	FO09385-BS1	B	0.2673	23					
6	OT00047-12 (MSI/MSD)	C	0.2684	24					① Digested in 40 mL vial. Rinsed with Diluent in to 20 mL vial.
7	FO09385-MS1	C	0.2687	25					② Added 0.1492g Boiling Chips to vial
8	FO09385-MSD1	C	0.2584	26					③ Added 0.2289g Boiling Chips to vial
9	OT00047-CA	C	0.2694	27					④ Added 0.1518g Boiling Chips to vial
10	OT00047-CE	C	0.2530	28					⑤ Added 0.1388g Boiling Chips to vial
11	OT00047-CC	C	0.2599	29					
12	OT00047-CD	C	0.2569	30					
13	OT00047-CE	C	0.2690	31					
14	OT00033-01 RE1	A	0.2545	32					
15	OT00033-02 RE1	A	0.2530	33					
16	OT00033-03 RE1	A	0.2678	34					
17	OT00033-04 RE1	A	0.2583	35					
18				36					

225

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

emb
2000-3
10/11/20

patency

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.5	40					E-01, RR OF MSI @ 400X, EMB 10/2/20
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for ICPMS	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT1313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT1313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		
0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R		
0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R		

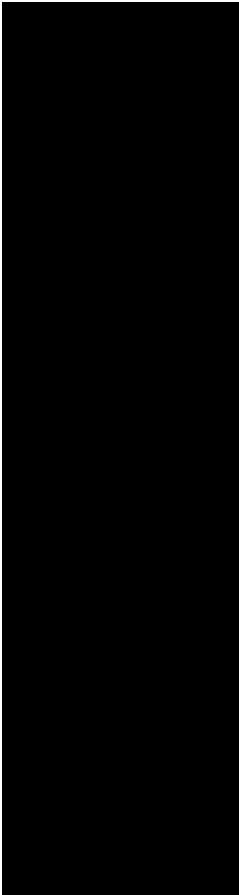
PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R	
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R	



PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Prepared: 9/30/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-01	ES-FP_20ET711_091020_01_TOM_WB	0.259	20	-	-	S&R		
0100078-02	ES-FP_20ET717_091020_02_TOM_WB	0.2607	20	-	-	S&R		
0100078-03	ES-FP_20ET741_091520_03_TOM_WB	0.2656	20	-	-	S&R		
0100078-04	ES-FP_20ET755_091520_04_TOM_WB	0.2548	20	QC	-	S&R	MS/MSD	
0100078-05	ES-FP_20ET756_091520_05_TOM_WB	0.2691	20	-	-	S&R		
0100078-06	ES-FP_20SN001_091120_01_RAS_WB	0.1294	10	QC	-	S&R	MS/MSD	
0100078-07	ES-FP_20SN001_091120_02_RAS_WB	0.2573	20	-	-	S&R		
0100078-08	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R		
0100078-09RE1	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-09	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R		
0100078-09RE1	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-10	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R		
0100078-10RE1	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-11	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R		
0100078-11RE1	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-13	ES-02_20ET909_091620_01_TOM_WB	0.2629	20	-	-	S&R		
078-14	ES-02_20ET924_091820_02_TOM_WB	0.2576	20	-	-	S&R		
078-15	ES-02_20ET934_091820_03_TOM_WB	0.2553	20	-	-	S&R		
078-17	ES-02_20ET941_091820_05_TOM_WB	0.2643	20	-	-	S&R		

PREPARATION BENCH SHEET

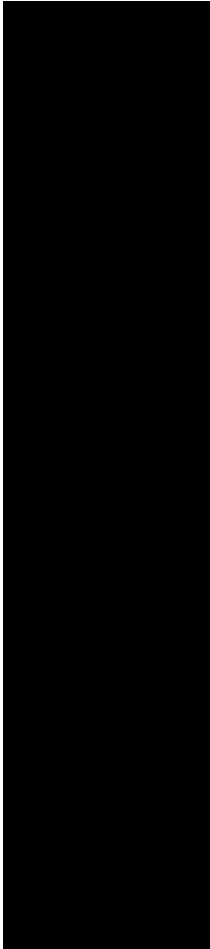
F009413

Eurofins Frontier Global Sciences, LLC

Prepared: 9/30/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

0100078-19	FRB-01_20LT620_091720_02_LOB_TA	0.2539	20	-	-	S&R	
0100078-20	FRB-01_20LT621_092020_03_LOB_TA	0.2634	20	-	-	S&R	
0100078-21	FRB-01_20LT627_092020_04_LOB_TA	0.258	20	-	-	S&R	
0100078-22	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	
0100078-22REF1	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Added 10/5/2020 by MFS Undercurve: RR@20X MFS 10/5/20
0100078-23	OL-01_20ET866_091820_02_TOM_WB	0.2302	20	-	-	S&R	



PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Prepared: 9/30/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009413-BLK1	Blank	0.25	20					
F009413-BLK2	Blank	0.25	20					
F009413-BLK3	Blank	0.25	20					
F009413-BLK4	Pre-homogenization blank 092320	0.2508	20					WO 0100078-60
F009413-BLK5	Post-homogenization blank 092320	0.2579	20					WO 0100078-61
F009413-BLK6	Post-homogenization Blank 092420	0.2851	20					WO 0100078-62
F009413-BS1	LCS	0.25	20	2002032	20			
F009413-BSD1	LCS Dup	0.25	20	2002032	20			
F009413-MS1	Matrix Spike [0100078-04]	0.2678	20	2001204	100			
F009413-MS2	Matrix Spike [0100078-06]	0.1376	10	2001204	100			
F009413-MSD1	Matrix Spike Dup [0100078-04]	0.2594	20	2001204	100			
F009413-MSD2	Matrix Spike Dup [0100078-06]	0.1383	10	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002304	70/30 Digestion Acid	30-Mar-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009385

Eurofins Frontier Global Sciences, LLC

Prepared: 9/28/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009385-BLK1	Blank	0.25	20					
F009385-BLK2	Blank	0.25	20					
F009385-BLK3	Blank	0.25	20					
F009385-BS1	LCS	0.25	20	2002032	20			
F009385-BSD1	LCS Dup	0.25	20	2002032	20			
F009385-MS1	Matrix Spike [0100047-12]	0.2687	20	2001204	100			
F009385-MSD1	Matrix Spike Dup [0100047-12]	0.2584	20	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000mg/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100mg/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009385

Eurofins Frontier Global Sciences, LLC

Prepared: 9/28/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100033-01RE1	710-2020-13787001	0.2545	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-02RE1	710-2020-13787002	0.253	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-03RE1	710-2020-13787003	0.2678	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100033-04RE1	710-2020-13787004	0.2883	20	-	-	210101	Dreinkantmuschel Re-digest in 40mL V	
0100047-12	L9-45_20LT009_091020_12_LOB_TA	0.2684	20	-	-	eezer 23		
0100047-CA	0B-01_20ET614_091020_17_TOM_WB	0.2654	20	-	-	S&R		
0100047-CB	0B-01_20ET616_091020_18_TOM_WB	0.253	20	-	-	S&R		
0100047-CC	0B-01_20ET617_091020_19_TOM_WB	0.2599	20	-	-	S&R		
0100047-CD	0B-01_20ET617_091020_20_TOM_WB	0.2568	20	-	-	S&R		
0100047-CE	HERRING_091020_LOBSTER_BAIT	0.269	20	-	-	fins Cals		

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.2643	20					E-01, RR OF MS1 @ 400X. EMB 10/2/20
F009384-MS4	Matrix Spike [0100047-65]RE2	0.2643	20	2001204	100			RR MS1 @ 1000X MFS 10/5/2020
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			
F009384-MSD3	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			Added 10/5/2020 by MFS
F009384-MSD4	Matrix Spike Dup [0100047-65]RE2	0.2606	20	2001204	100			RR MS1 @ 1000X MFS 10/5/2020

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001978	THg 2% BrCl	
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-65RE2	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD RR @ 1000X. EMB 10/2/20	E-01: RR@400X MFS 10/5/20
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		
0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R		

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R	
0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R	
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R	





Frontier Global Sciences

THg26003-201002-1

Analysis Datasheet for Total Mercury

Date of Analysis: October 02, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 0105013, 0105014

Analyst: **EMZ**
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	222.68 units	445.36	104.37 units	208.74	91.8 %Rec
SEQ-CAL2	1	1.00 ng/L	342.36 units	342.36	224.05 units	224.05	98.6 %Rec
SEQ-CAL3	1	5.00 ng/L	1285.51 units	257.10	1167.20 units	233.44	102.7 %Rec
SEQ-CAL4	1	20.00 ng/L	4722.53 units	236.13	4604.23 units	230.21	101.3 %Rec
SEQ-CAL5	1	40.00 ng/L	9717.01 units	242.93	9598.70 units	239.97	105.6 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 227.28 Corr. St Dev RF +/- 11.85 Corr. RSD CF 5.2% RSD Uncorr. Mean RF 304.77

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-BL	3	118.31 units	±8.91	0.39 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	-0.035 ng/L	±0.121
BLK	2	6	-4.619 ng/L	±0.340
BLK	3	3	-5.481 ng/L	±0.236
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	10/2/2020 10:47:32	4599-1.RAW	10:47:32 AM	127.49			9.2	0.040	0.040	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	10/2/2020 10:51:41	4600-1.RAW	10:51:41 AM	117.74			-0.6	-0.003	-0.003	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	10/2/2020 10:55:49	4601-1.RAW	10:55:49 AM	109.70			-8.6	-0.038	-0.038	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	10/2/2020 10:59:58	4602-1.RAW	10:59:58 AM	222.68			224.1	0.986	0.986	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	10/2/2020 11:04:06	4603-1.RAW	11:04:06 AM	342.36			224.1	0.986	0.986	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	10/2/2020 11:08:15	4604-1.RAW	11:08:15 AM	1285.51			1167.2	5.135	5.135	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	10/2/2020 11:12:24	4605-1.RAW	11:12:24 AM	4722.53			4604.2	20.258	20.258	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	10/2/2020 11:16:33	4606-1.RAW	11:16:33 AM	9717.01			9598.7	42.232	42.232	ng/L	
Hg2600-3	00	CAL	SEQ-ICV1	1	10/2/2020 11:20:43	4607-1.RAW	11:20:43 AM	1395.71			1277.4	5.620	5.620	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	10/2/2020 11:24:52	4608-1.RAW	11:24:52 AM	120.99			2.7	0.012	0.012	ng/L	
Hg2600-3	00	SAM	F010333-BS1	1	10/2/2020 11:29:02	4609-1.RAW	11:29:02 AM	1256.90			1138.6	5.044	5.044	ng/L	F010333
Hg2600-3	00	SAM	F010333-BSD1	1	10/2/2020 11:33:11	4610-1.RAW	11:33:11 AM	1265.88			1147.6	5.084	5.084	ng/L	F010333
Hg2600-3	00	BLK	F010333-BLK1	1	10/2/2020 11:37:20	4611-1.RAW	11:37:20 AM	120.68			2.4	0.010	0.010	ng/L	F010333
Hg2600-3	00	BLK	F010333-BLK2	1	10/2/2020 11:41:30	4612-1.RAW	11:41:30 AM	79.38			131.32	0.057	0.057	ng/L	F010333
Hg2600-3	00	BLK	F010333-BLK3	1	10/2/2020 11:45:39	4613-1.RAW	11:45:39 AM	79.38			-38.9	-0.171	-0.171	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS1	1	10/2/2020 11:49:48	4614-1.RAW	11:49:48 AM	95.50			-22.8	-0.066	-0.066	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD1	1	10/2/2020 11:53:58	4615-1.RAW	11:53:58 AM	1273.35			1155.0	5.117	5.117	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 12:02:18	4616-1.RAW	12:02:18 PM	440.42			322.1	1.452	1.452	ng/L	F010333
Hg2600-3	00	SAM	F010333-MS2	1	10/2/2020 12:06:25	4617-1.RAW	12:06:25 PM	1610.58			1492.3	6.600	6.600	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCV1	1	10/2/2020 12:10:35	4618-1.RAW	12:10:35 PM	1389.58			1271.3	5.593	5.593	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCB1	1	10/2/2020 12:14:44	4620-1.RAW	12:14:44 PM	85.26			-33.0	-0.145	-0.145	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:18:53	4621-1.RAW	12:18:53 PM	1578.77			7316.4	32.225	32.225	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:23:02	4622-1.RAW	12:23:02 PM	7494.67			4655.2	20.516	20.516	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:27:11	4623-1.RAW	12:27:11 PM	4773.48			1.8	0.042	0.042	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:31:20	4624-1.RAW	12:31:20 PM	120.11			0.6	0.037	0.037	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:35:30	4625-1.RAW	12:35:30 PM	116.75			-1.6	0.028	0.028	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:39:39	4626-1.RAW	12:39:39 PM	103.75			-14.6	-0.030	-0.030	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:43:48	4627-1.RAW	12:43:48 PM	82.08			-36.2	-0.125	-0.125	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:47:57	4628-1.RAW	12:47:57 PM	114.01			-4.3	0.016	0.016	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 12:52:07	4628-1.RAW	12:52:07 PM	268.87			150.6	0.697	0.697	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCV2	1	10/2/2020 12:56:16	4630-1.RAW	12:56:16 PM	1395.24			1216.9	5.354	5.354	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCB2	1	10/2/2020 13:04:35	4632-1.RAW	1:04:35 PM	80.83			-37.5	-0.165	-0.165	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 13:08:45	4633-1.RAW	1:08:45 PM	128.96			8.6	0.073	0.073	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 13:12:54	4634-1.RAW	1:12:54 PM	108.73			-8.6	-0.003	-0.003	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 13:17:04	4635-1.RAW	1:17:04 PM	220.64			102.3	0.485	0.485	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 13:21:13	4635-1.RAW	1:21:13 PM	252.74			134.4	0.626	0.626	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 13:25:23	4637-1.RAW	1:25:23 PM	206.82			88.5	0.424	0.424	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 13:29:33	4638-1.RAW	1:29:33 PM	1023.84			905.5	4.019	4.019	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 13:33:43	4638-1.RAW	1:33:43 PM	74.09			-44.2	-0.160	-0.160	ng/L	F010333
Hg2600-3	00	SAM	F010333-MSD2	1	10/2/2020 13:37:52	4640-1.RAW	1:37:52 PM	343.86			225.6	1.027	1.027	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCV3	1	10/2/2020 13:42:02	4641-1.RAW	1:42:02 PM	1288.68			1170.4	5.149	5.149	ng/L	F010333
Hg2600-3	00	CAL	SEQ-CCB3	1	10/2/2020 13:46:12	4642-1.RAW	1:46:12 PM	78.05			-39.3	-0.173	-0.173	ng/L	F010333
Hg2600-3	00	SAM	F009413-BS1	20	10/2/2020 13:50:21	4643-1.RAW	1:50:21 PM	1334.33			1216.0	5.581	5.581	ng/L	F009413
Hg2600-3	00	SAM	F009413-BSD1	20	10/2/2020 13:54:31	4644-1.RAW	1:54:31 PM	1313.91			1195.6	5.491	5.491	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK1	20	10/2/2020 13:58:40	4645-1.RAW	1:58:40 PM	67.28			-22.4	-0.490	-0.490	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK2	20	10/2/2020 14:02:50	4646-1.RAW	2:02:50 PM	64.42			-53.9	-0.237	-0.237	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK3	20	10/2/2020 14:07:00	4647-1.RAW	2:07:00 PM	66.26			-52.1	-0.229	-0.229	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK4	20	10/2/2020 14:11:09	4648-1.RAW	2:11:09 PM	68.54			-59.5	-0.262	-0.262	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK5	20	10/2/2020 14:15:19	4649-1.RAW	2:15:19 PM	69.54			-48.8	-0.215	-0.215	ng/L	F009413
Hg2600-3	00	BLK	F009413-BLK6	20	10/2/2020 14:19:28	4650-1.RAW	2:19:28 PM	379.94			261.0	1.160	1.160	ng/L	F009413
Hg2600-3	00	SAM	F008413-MS1	400	10/2/2020 14:23:38	4651-1.RAW	2:23:38 PM	3130.91			3012.6	13.266	13.266	ng/L	F008413
Hg2600-3	00	SAM	F008413-MS1	400	10/2/2020 14:27:49	4652-1.RAW	2:27:49 PM	1284.66			51.8	0.228	0.228	ng/L	F008413
Hg2600-3	00	CAL	SEQ-CCV4	1	10/2/2020 14:31:59	4653-1.RAW	2:31:59 PM	86.53			-51.8	-0.228	-0.228	ng/L	F008413
Hg2600-3	00	CAL	SEQ-CCB4	1	10/2/2020 14:36:08	4654-1.RAW	2:36:08 PM								
Hg2600-3	00	CAL	SEQ-CCV4	1	10/2/2020 14:40:18	4655-1.RAW	2:40:18 PM								

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	F009413-MSD1	400	10/2/2020 14:44:28	4656-1.RAW	2:44:28 PM	2914.10	2		2795.8	12.312	4924.991	ng/L	F009413
Hg2600-3	00	SAM	0100078-06	400	10/2/2020 14:48:38	4687-1.RAW	2:48:38 PM	484.15	2		365.8	1.621	648.474	ng/L	F009413
Hg2600-3	00	SAM	F009413-MS2	400	10/2/2020 14:52:47	4658-1.RAW	2:52:47 PM	5503.77	2		5385.5	23.707	9482.614	ng/L	F009413
Hg2600-3	00	SAM	F009413-MSD2	400	10/2/2020 14:56:57	4659-1.RAW	2:56:57 PM	6262.57	2		6144.3	27.045	10818.054	ng/L	F009413
Hg2600-3	00	SAM	0100078-01	400	10/2/2020 15:01:06	4660-1.RAW	3:01:08 PM	442.72	2		324.4	1.439	575.567	ng/L	F009413
Hg2600-3	00	SAM	0100078-02	400	10/2/2020 15:05:18	4661-1.RAW	3:05:18 PM	567.00	2		305.18	1.986	794.285	ng/L	F009413
Hg2600-3	00	SAM	0100078-03	400	10/2/2020 15:09:28	4662-1.RAW	3:09:28 PM	574.64	2		456.3	2.019	807.722	ng/L	F009413
Hg2600-3	00	SAM	0100078-05	400	10/2/2020 15:13:38	4663-1.RAW	3:13:38 PM	801.25	2		682.9	3.016	1206.539	ng/L	F009413
Hg2600-3	00	SAM	0100078-07	400	10/2/2020 15:17:46	4664-1.RAW	3:17:46 PM	447.43	2		329.1	1.460	583.843	ng/L	F009413
Hg2600-3	00	SAM	0100078-08	400	10/2/2020 15:21:56	4665-1.RAW	3:21:56 PM	182.16	2		63.9	0.293	117.000	ng/L	F009413
Hg2600-3	00	CAL	SEQ-CCV5	1	10/2/2020 15:26:08	4666-1.RAW	3:26:08 PM	1214.207024	2		1095.9	4.822	4.822	ng/L	F009413
Hg2600-3	00	CAL	SEQ-CCB5	1	10/2/2020 15:30:18	4667-1.RAW	3:30:18 PM	83.08	2		-35.2	-0.155	-0.155	ng/L	F009413
Hg2600-3	00	SAM	0100078-09	400	10/2/2020 15:34:28	4668-1.RAW	3:34:28 PM	128.33	2		10.0	0.056	22.265	ng/L	F009413
Hg2600-3	00	SAM	0100078-10	400	10/2/2020 15:38:38	4669-1.RAW	3:38:38 PM	121.56	2		3.3	0.026	10.340	ng/L	F009413
Hg2600-3	00	SAM	0100078-11	400	10/2/2020 15:42:48	4670-1.RAW	3:42:48 PM	207.00	2		88.7	0.402	160.716	ng/L	F009413
Hg2600-3	00	SAM	0100078-14	400	10/2/2020 15:46:58	4671-1.RAW	3:46:58 PM	602.62	2		484.3	2.142	856.971	ng/L	F009413
Hg2600-3	00	SAM	0100078-15	400	10/2/2020 15:51:09	4672-1.RAW	3:51:09 PM	386.81	2		268.5	1.193	477.157	ng/L	F009413
Hg2600-3	00	SAM	0100078-15	400	10/2/2020 15:55:19	4673-1.RAW	3:55:19 PM	443.21	2		324.9	1.441	576.423	ng/L	F009413
Hg2600-3	00	SAM	0100078-17	400	10/2/2020 15:59:29	4674-1.RAW	3:59:29 PM	864.00	2		745.7	3.292	1316.980	ng/L	F009413
Hg2600-3	00	SAM	0100078-19	400	10/2/2020 16:03:39	4675-1.RAW	4:03:39 PM	311.82	2		193.5	0.863	345.186	ng/L	F009413
Hg2600-3	00	SAM	0100078-20	400	10/2/2020 16:07:50	4676-1.RAW	4:07:50 PM	316.84	2		198.5	0.885	354.017	ng/L	F009413
Hg2600-3	00	SAM	0100078-21	400	10/2/2020 16:12:00	4677-1.RAW	4:12:00 PM	283.21	2		164.9	0.737	294.837	ng/L	F009413
Hg2600-3	00	CAL	SEQ-CCV6	1	10/2/2020 16:16:10	4678-1.RAW	4:16:10 PM	1221.64	2		1103.3	4.854	4.854	ng/L	F009413
Hg2600-3	00	SAM	0100078-22	400	10/2/2020 16:20:20	4679-1.RAW	4:20:20 PM	62.01	2		-56.3	-0.248	-0.248	ng/L	F009413
Hg2600-3	00	SAM	0100078-23	400	10/2/2020 16:24:31	4680-1.RAW	4:24:31 PM	160.83	2		160.83	0.199	79.460	ng/L	F009413
Hg2600-3	00	SAM	F009385-B51	20	10/2/2020 16:28:41	4681-1.RAW	4:28:41 PM	364.57	3		246.3	1.095	498.022	ng/L	F009385
Hg2600-3	00	SAM	F009385-B5D1	20	10/2/2020 16:32:52	4682-1.RAW	4:32:52 PM	1246.56	3		1128.3	5.238	104.763	ng/L	F009385
Hg2600-3	00	BLK	F009385-BLK1	20	10/2/2020 16:37:02	4683-1.RAW	4:37:02 PM	1217.98	3		1099.7	5.112	102.248	ng/L	F009385
Hg2600-3	00	BLK	F009385-BLK2	20	10/2/2020 16:41:13	4684-1.RAW	4:41:13 PM	58.56	3		-59.7	-0.263	-5.257	ng/L	F009385
Hg2600-3	00	BLK	F009385-BLK3	20	10/2/2020 16:45:23	4685-1.RAW	4:45:23 PM	56.27	3		-62.0	-0.273	-5.459	ng/L	F009385
Hg2600-3	00	SAM	0100047-12	400	10/2/2020 16:49:33	4686-1.RAW	4:49:33 PM	53.22	3		-65.1	-0.286	-5.728	ng/L	F009385
Hg2600-3	00	SAM	F009385-M51	400	10/2/2020 16:53:44	4687-1.RAW	4:53:44 PM	2282.25	3		2163.9	9.535	3813.851	ng/L	F009385
Hg2600-3	00	SAM	F009385-M5D1	400	10/2/2020 16:57:56	4688-1.RAW	4:57:56 PM	4903.58	3		4785.3	21.068	8427.199	ng/L	F009385
Hg2600-3	00	CAL	SEQ-CCV7	1	10/2/2020 17:02:05	4689-1.RAW	5:02:05 PM	4614.26	3		4496.0	19.795	7918.011	ng/L	F009385
Hg2600-3	00	CAL	SEQ-CCB7	1	10/2/2020 17:06:15	4690-1.RAW	5:06:15 PM	1226.80	3		1108.5	4.877	4.877	ng/L	F009385
Hg2600-3	00	SAM	0100033-01RE1	20	10/2/2020 17:10:25	4691-1.RAW	5:10:25 PM	71.49	3		-46.8	-0.206	-0.206	ng/L	F009385
Hg2600-3	00	SAM	0100033-02RE1	20	10/2/2020 17:14:36	4692-1.RAW	5:14:36 PM	5064.08	3		4945.8	22.035	440.690	ng/L	F009385
Hg2600-3	00	SAM	0100033-03RE1	20	10/2/2020 17:18:46	4693-1.RAW	5:18:46 PM	5283.45	3		5165.1	23.000	459.994	ng/L	F009385
Hg2600-3	00	SAM	0100033-04RE1	20	10/2/2020 17:22:57	4694-1.RAW	5:22:57 PM	7330.78	3		7212.5	32.008	640.151	ng/L	F009385
Hg2600-3	00	SAM	0100047-CA	400	10/2/2020 17:27:07	4695-1.RAW	5:27:07 PM	5637.09	3		5518.8	24.556	1961.802	ng/L	F009385
Hg2600-3	00	SAM	0100047-CB	400	10/2/2020 17:31:17	4696-1.RAW	5:31:17 PM	1229.90	3		1111.6	4.905	1732.251	ng/L	F009385
Hg2600-3	00	SAM	0100047-CC	400	10/2/2020 17:35:27	4697-1.RAW	5:35:27 PM	1099.47	3		981.2	4.331	1732.251	ng/L	F009385
Hg2600-3	00	SAM	0100047-CD	400	10/2/2020 17:39:38	4698-1.RAW	5:39:38 PM	466.29	3		348.0	1.545	617.904	ng/L	F009385
Hg2600-3	00	SAM	0100047-CE	400	10/2/2020 17:43:48	4699-1.RAW	5:43:48 PM	543.30	3		420.5	1.884	753.429	ng/L	F009385
Hg2600-3	00	SAM	HYD. BLK TEST	1	10/2/2020 17:52:08	4700-1.RAW	5:52:08 PM	538.83	3		420.5	1.864	745.570	ng/L	F009385
Hg2600-3	00	CAL	SEQ-CCV8	1	10/2/2020 17:56:18	4702-1.RAW	5:56:18 PM	57.66	3		-60.6	Error	#VALUE!	ng/L	F009385
Hg2600-3	00	CAL	SEQ-CCB8	1	10/2/2020 18:00:29	4703-1.RAW	5:56:18 PM	1160.36	3		1042.1	4.585	4.585	ng/L	F009385
Hg2600-3	00	SAM	F009384-M5D3	400	10/2/2020 18:04:39	4704-1.RAW	6:00:29 PM	70.14	4		-48.2	-0.212	-0.212	ng/L	F009384
Hg2600-3	00	SAM	0100047-65RE1	400	10/2/2020 18:08:49	4705-1.RAW	6:04:39 PM	9553.57	4		9435.3	41.513	16605.335	ng/L	F009384
Hg2600-3	00	SAM	F009384-M53	1000	10/2/2020 18:12:59	4706-1.RAW	6:08:49 PM	2923.83	4		2805.5	12.344	4937.497	ng/L	F009384
Hg2600-3	00	CAL	SEQ-CCV9	1	10/2/2020 18:17:10	4707-1.RAW	6:12:59 PM	9370.51	4		9252.2	40.708	40707.943	ng/L	F009384
Hg2600-3	00	CAL	SEQ-CCB9	1	10/2/2020 18:21:20	4708-1.RAW	6:17:10 PM	1212.93	4		1094.6	4.816	4.816	ng/L	F009384
Hg2600-3	00	CAL	SEQ-CCV9	1	10/2/2020 18:21:20	4708-1.RAW	6:21:20 PM	85.00	4		-33.3	-0.147	-0.147	ng/L	F009384

SEQ-IBL1	A1	QJ00001-10	B11	0I00078-02	C21		
SEQ-IBL2	A2	SEQ-CCV2	B12	0I00078-03	A1		
SEQ-IBL3	A3	SEQ-CCB2	B13	0I00078-05	A2		
SEQ-CAL1	A4	QJ00001-11	B14	0I00078-07	A3		
SEQ-CAL2	A5	QJ00001-12	B15	0I00078-08	A4		
SEQ-CAL3	A6	QJ00002-01	B16	SEQ-CCV5	A5		
SEQ-CAL4	A7	QJ00002-02	B17	SEQ-CCB5	A6		
SEQ-CAL5	A8	QJ00002-03	B18	0I00078-09	A7		
SEQ-ICV1	A9	QJ00002-05	B19	0I00078-10	A8		
SEQ-ICB1	A10	QJ00005-01	B20	0I00078-11	A9		
F010333-BS1	A11	QJ00005-03	B21	0I00078-13	A10		
F010333-BSD1	A12	QJ00005-05	C1	0I00078-14	A11		
F010333-BLK1	A13	SEQ-CCV3	C2	0I00078-15	A12		
F010333-BLK2	A14	SEQ-CCB3	C3	0I00078-17	A13		
F010333-BLK3	A15	F009413-BS1	C4	0I00078-19	A14	0I00033-01RE1	B10
QJ00001-04	A16	F009413-BSD1	C5	0I00078-20	A15	0I00033-02RE1	B11
F010333-MS1	A17	F009413-BLK1	C6	0I00078-21	A16	0I00033-03RE1	B12
F010333-MSD1	A18	F009413-BLK2	C7	SEQ-CCV6	A17	0I00033-04RE1	B13
QJ00002-04	A19	F009413-BLK3	C8	SEQ-CCB6	A18	0I00047-CA	B14
F010333-MS2	A20	F009413-BLK4	C9	0I00078-22	A19	0I00047-CB	B15
SEQ-CCV1	A21	F009413-BLK5	C10	0I00078-23	A20	0I00047-CC	B16
SEQ-CCB1	B1	F009413-BLK6	C11	F009385-BS1	A21	0I00047-CD	B17
F010333-MSD2	B2	0I00078-04	C12	F009385-BSD1	B1	0I00047-CE	B18
QJ00001-01	B3	F009413-MS1	C13	F009385-BLK1	B2	HYD. BLK TEST	B19
QJ00001-02	B4	SEQ-CCV4	C14	F009385-BLK2	B3	SEQ-CCV8	B20
QJ00001-03	B5	SEQ-CCB4	C15	F009385-BLK3	B4	SEQ-CCB8	B21
QJ00001-05	B6	F009413-MSD1	C16	0I00047-12	B5	F009384-MS3	C1
QJ00001-06	B7	0I00078-06	C17	F009385-MS1	B6	F009384-MSD3	C2
QJ00001-07	B8	F009413-MS2	C18	F009385-MSD1	B7	0I00047-65RE1	C3
QJ00001-08	B9	F009413-MSD2	C19	SEQ-CCV7	B8	SEQ-CCV9	C4
QJ00001-09	B10	0I00078-01	C20	SEQ-CCB7	B9	SEQ-CCB9	C5

- 9384-MSD3
 47-65RE1
 - 0I00047-65RE1 10/5/20
 - F009384 MS3

Verified by:

Total Mercury
 EPA1631
 Operati EMB Blanks: 118.31 Calib Eqn: Conc = (Area-118.3 Run Date: 10/2/2020 Blank SD: 8.907767179
 Worksh THg260(CalibFa 227.28 Status: QC Warnings:9/QC E Run Time: 10:28:06 Blank RSD%: 7.529295025
 Method ### R: 0.9998 R2: 0.9996
 Descrip THg26003-201002-1 CF SD: 11.8496357
 CF RSD%: 5.213613938

SampleID	Location	RunSeq	Dilute	Blank	Conc (ppb)	MB%	FinalConc	Rec%	QA	RawData	RunEnd	Peak (Raw)	Conc:ref (eff)	Flags	RunCount
Clean				0.00	3.82					4595-1.RAW	10:30:58	869.23	Clean	OK	1
WS				118.31	0.52					4596-1.RAW	10:35:06	236.23	Sample	OK	1
WS				118.31	0.09					4597-1.RAW	10:39:15	139.78	Sample	OK	1
WS				118.31	0.00					4598-1.RAW	10:43:23	114.73	Sample	OK	1
SEQ-IBL1	A1			0.00	0.56					4599-1.RAW	10:47:32	127.49	Sample	OK	1
SEQ-IBL2	A2			0.00	0.52					4600-1.RAW	10:51:41	117.74	Sample	OK	1
SEQ-IBL3	A3			0.00	0.48					4601-1.RAW	10:55:49	109.70	Sample	OK	1
SEQ-CAL1	A4			118.31	0.46	91.84				4602-1.RAW	10:59:58	222.68	Sample	OK	1
SEQ-CAL2	A5			118.31	0.99	98.58				4603-1.RAW	11:04:06	342.36	Sample	OK	1
SEQ-CAL3	A6			118.31	5.14	102.71				4604-1.RAW	11:08:15	1285.51	Sample	OK	1
SEQ-CAL4	A7			118.31	20.26	101.29				4605-1.RAW	11:12:24	4722.53	Sample	OK	1
SEQ-CAL5	A8			118.31	42.23	105.58				4606-1.RAW	11:16:33	9717.01	Sample	OK	1
SEQ-ICV1	A9			118.31	5.62	112.41				4607-1.RAW	11:20:43	1395.71	Sample	OK	1
SEQ-ICB1	A10			118.31	0.01	0.00				4608-1.RAW	11:24:52	120.99	Sample	OK	1
F010333-BS1	A11			118.31	5.01					4609-1.RAW	11:29:02	1256.90	Sample	OK	1
F010333-BSD1	A12			118.31	5.05					4610-1.RAW	11:33:11	1265.88	Sample	OK	1
F010333-BLK1	A13			118.31	0.01					4611-1.RAW	11:37:20	120.68	Sample	OK	1
F010333-BLK2	A14			118.31	0.06					4612-1.RAW	11:41:30	131.32	Sample	OK	1
F010333-BLK3	A15			118.31	0.00					4613-1.RAW	11:45:39	79.38	Sample	OK	1
OJ00001-04	A16			118.31	0.00					4614-1.RAW	11:49:48	95.50	Sample	OK	1
F010333-MS1	A17			118.31	5.08	508.20				4615-1.RAW	11:53:58	1273.35	Sample	OK	1
F010333-MSD1	A18			118.31	5.33					4616-1.RAW	11:58:07	1328.82	Sample	OK	1
OJ00002-04	A19			118.31	1.42					4617-1.RAW	12:02:16	440.42	Sample	OK	1
F010333-MS2	A20			118.31	6.57	192.14				4618-1.RAW	12:06:25	1610.58	Sample	OK	1
SEQ-CCV1	A21			118.31	5.59	111.87				4619-1.RAW	12:10:35	1389.58	Sample	OK	1
SEQ-CCB1	B1			118.31	0.00					4620-1.RAW	12:14:44	85.26	Sample	OK	1
F010333-MSD2	B2			118.31	6.43					4621-1.RAW	12:18:53	1578.77	Sample	OK	1
OJ00001-01	B3			118.31	32.19					4622-1.RAW	12:23:02	7494.67	Sample	OK	1
OJ00001-02	B4			118.31	20.48					4623-1.RAW	12:27:11	4773.48	Sample	OK	1
OJ00001-03	B5			118.31	0.01					4624-1.RAW	12:31:20	120.11	Sample	OK	1
OJ00001-05	B6			118.31	0.00					4625-1.RAW	12:35:30	118.87	Sample	OK	1
OJ00001-06	B7			118.31	0.00					4626-1.RAW	12:39:39	116.75	Sample	OK	1
OJ00001-07	B8			118.31	0.00					4627-1.RAW	12:43:48	103.75	Sample	OK	1
OJ00001-08	B9			118.31	0.00					4628-1.RAW	12:47:57	82.08	Sample	OK	1
OJ00001-09	B10			118.31	0.00					4629-1.RAW	12:52:07	114.01	Sample	OK	1
OJ00001-10	B11			118.31	0.66					4630-1.RAW	12:56:16	268.87	Sample	OK	1
SEQ-CCV2	B12			118.31	5.35	107.09				4631-1.RAW	13:00:26	1335.24	Sample	OK	1
SEQ-CCB2	B13			118.31	0.00					4632-1.RAW	13:04:35	80.83	Sample	OK	1
OJ00001-11	B14			118.31	0.04					4633-1.RAW	13:08:45	126.96	Sample	OK	1
OJ00001-12	B15			118.31	0.00					4634-1.RAW	13:12:54	109.73	Sample	OK	1
OJ00002-01	B16			118.31	0.45					4635-1.RAW	13:17:04	220.64	Sample	OK	1
OJ00002-02	B17			118.31	0.59					4636-1.RAW	13:21:13	252.74	Sample	OK	1
OJ00002-03	B18			118.31	0.39					4637-1.RAW	13:25:23	206.82	Sample	OK	1
OJ00002-05	B19			118.31	3.98					4638-1.RAW	13:29:33	1023.84	Sample	OK	1

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0J00005-01	B20	1	118.31	0.00	4639-1.RAW	13:33:43	74.09	Sample	OK	1
0J00005-03	B21	1	118.31	0.00	4640-1.RAW	13:37:52	101.66	Sample	OK	1
0J00005-05	C1	1	118.31	0.99	4641-1.RAW	13:42:02	343.88	Sample	OK	1
SEQ-CCV3	C2	1	118.31	5.15	4642-1.RAW	13:46:12	1288.68	Sample	OK	1
SEQ-CCB3	C3	1	118.31	0.00	4643-1.RAW	13:50:21	79.05	Sample	OK	1
F009413-BS1	C4	20	118.31	107.01	4644-1.RAW	13:54:31	1334.33	Sample	OK	1
F009413-BSD1	C5	20	118.31	105.21	4645-1.RAW	13:58:40	1313.91	Sample	OK	1
F009413-BLK1	C6	20	118.31	0.00	4646-1.RAW	14:02:50	67.28	Sample	OK	1
F009413-BLK2	C7	20	118.31	0.00	4647-1.RAW	14:07:00	64.42	Sample	OK	1
F009413-BLK3	C8	20	118.31	0.00	4648-1.RAW	14:11:09	66.26	Sample	OK	1
F009413-BLK4	C9	20	118.31	0.00	4649-1.RAW	14:15:19	58.83	Sample	OK	1
F009413-BLK5	C10	20	118.31	0.00	4650-1.RAW	14:19:28	68.54	Sample	OK	1
F009413-BLK6	C11	20	118.31	0.00	4651-1.RAW	14:23:39	69.54	Sample	OK	1
F009413-MS1	C12	400	118.31	459.40	4652-1.RAW	14:27:49	379.34	Sample	OK	1
0I00078-04	C13	400	118.31	5301.94	4653-1.RAW	14:31:59	3130.91	Sample	OK	1
SEQ-CCV4	C14	1	118.31	5.13	4654-1.RAW	14:36:08	1284.68	Sample	OK	1
SEQ-CCB4	C15	1	118.31	0.00	4655-1.RAW	14:40:18	66.53	Sample	OK	1
F009413-MSD1	C16	400	118.31	4920.37	4656-1.RAW	14:44:28	2914.10	Sample	OK	1
0I00078-06	C17	400	118.31	643.85	4657-1.RAW	14:48:38	484.15	Sample	OK	1
F009413-MS2	C18	400	118.31	9477.99	4658-1.RAW	14:52:47	5503.77	Sample	OK	1
F009413-MSD2	C19	400	118.31	10813.43	4659-1.RAW	14:56:57	6282.57	Sample	OK	1
0I00078-01	C20	400	118.31	570.95	4660-1.RAW	15:01:08	442.72	Sample	OK	1
0I00078-02	C21	400	118.31	789.67	4661-1.RAW	15:05:18	567.00	Sample	OK	1
0I00078-03	A1	400	118.31	803.10	4662-1.RAW	15:09:28	574.64	Sample	OK	1
0I00078-05	A2	400	118.31	1201.92	4663-1.RAW	15:13:38	801.25	Sample	OK	1
0I00078-07	A3	400	118.31	578.22	4664-1.RAW	15:17:48	447.43	Sample	OK	1
0I00078-08	A4	400	118.31	112.38	4665-1.RAW	15:21:58	182.16	Sample	OK	1
SEQ-CCV5	A5	1	118.31	4.82	4666-1.RAW	15:26:08	1214.21	Sample	OK	1
SEQ-CCB5	A6	1	118.31	0.00	4667-1.RAW	15:30:18	83.08	Sample	OK	1
0I00078-09	A7	400	118.31	17.65	4668-1.RAW	15:34:28	128.33	Sample	OK	1
0I00078-10	A8	400	118.31	5.72	4669-1.RAW	15:38:38	121.56	Sample	OK	1
0I00078-11	A9	400	118.31	156.10	4670-1.RAW	15:42:48	207.00	Sample	OK	1
0I00078-13	A10	400	118.31	852.35	4671-1.RAW	15:46:58	602.62	Sample	OK	1
0I00078-14	A11	400	118.31	472.54	4672-1.RAW	15:51:09	386.81	Sample	OK	1
0I00078-15	A12	400	118.31	571.80	4673-1.RAW	15:55:19	443.21	Sample	OK	1
0I00078-17	A13	400	118.31	1312.36	4674-1.RAW	15:59:29	864.00	Sample	OK	1
0I00078-19	A14	400	118.31	340.57	4675-1.RAW	16:03:39	311.82	Sample	OK	1
0I00078-20	A15	400	118.31	349.40	4676-1.RAW	16:07:50	316.84	Sample	OK	1
0I00078-21	A16	400	118.31	290.22	4677-1.RAW	16:12:00	283.21	Sample	OK	1
SEQ-CCV6	A17	1	118.31	4.85	4678-1.RAW	16:16:10	1221.64	Sample	OK	1
SEQ-CCB6	A18	1	118.31	0.00	4679-1.RAW	16:20:20	62.01	Sample	OK	1
0I00078-22	A19	400	118.31	74.84	4680-1.RAW	16:24:31	160.83	Sample	OK	1
0I00078-23	A20	400	118.31	433.40	4681-1.RAW	16:28:41	364.57	Sample	OK	1
F009385-BS1	A21	20	118.31	99.28	4682-1.RAW	16:32:52	1246.56	Sample	OK	1
F009385-BSD1	B1	20	118.31	96.77	4683-1.RAW	16:37:02	1217.98	Sample	OK	1
F009385-BLK1	B2	20	118.31	0.00	4684-1.RAW	16:41:13	58.56	Sample	OK	1
F009385-BLK2	B3	20	118.31	0.00	4685-1.RAW	16:45:23	56.27	Sample	OK	1
F009385-BLK3	B4	20	118.31	0.00	4686-1.RAW	16:49:33	53.22	Sample	OK	1
0I00047-12	B5	400	118.31	3808.37	4687-1.RAW	16:53:44	2282.25	Sample	OK	1

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F009385-MS1	B6	400	118.31	8421.72	221.08	4688-1.RAW	16:57:55	4903.58	Sample	OK	1
F009385-MSD1	B7	400	118.31	7912.53		4689-1.RAW	17:02:05	4614.26	Sample	OK	1
SEQ-CCV7	B8	1	118.31	4.88	97.54	4690-1.RAW	17:06:15	1226.80	Sample	OK	1
SEQ-CCB7	B9	1	118.31	0.00	0.00	4691-1.RAW	17:10:25	71.49	Sample	OK	1
0100033-01RE1	B10	20	118.31	435.21		4692-1.RAW	17:14:36	5064.08	Sample	OK	1
0100033-02RE1	B11	20	118.31	454.51		4693-1.RAW	17:18:46	5283.45	Sample	OK	1
0100033-03RE1	B12	20	118.31	634.67		4694-1.RAW	17:22:57	7330.78	Sample	OK	1
0100033-04RE1	B13	20	118.31	485.63		4695-1.RAW	17:27:07	5637.09	Sample	OK	1
0100047-CA	B14	400	118.31	1956.32		4696-1.RAW	17:31:17	1229.90	Sample	OK	1
0100047-CB	B15	400	118.31	1726.77		4697-1.RAW	17:35:27	1099.47	Sample	OK	1
0100047-CC	B16	400	118.31	612.42		4698-1.RAW	17:39:38	466.29	Sample	OK	1
0100047-CD	B17	400	118.31	747.95		4699-1.RAW	17:43:48	543.30	Sample	OK	1
0100047-CE	B18	400	118.31	740.09		4700-1.RAW	17:47:58	538.83	Sample	OK	1
HYD. BLK TEST	B19	1	118.31	0.00		4701-1.RAW	17:52:08	57.66	Sample	OK	1
SEQ-CCV8	B20	1	118.31	4.58	91.70	4702-1.RAW	17:56:18	1160.36	Sample	OK	1
SEQ-CCB8	B21	1	118.31	0.00	0.00	4703-1.RAW	18:00:29	70.14	Sample	OK	1
F009384-MS3	C1	400	118.31	16605.33	553511.16	4704-1.RAW	18:04:39	9553.57	Sample	OK	1
F009384-MSD3	C2	400	118.31	4937.50		4705-1.RAW	18:08:49	2923.83	Sample	OK	1
0100047-65RE1	C3	1000	118.31	40707.94		4706-1.RAW	18:12:59	9370.51	Sample	OK	1
SEQ-CCV9	C4	1	118.31	4.82	96.32	4707-1.RAW	18:17:10	1212.93	Sample	OK	1
SEQ-CCB9	C5	1	118.31	0.00	0.00	4708-1.RAW	18:21:20	85.00	Sample	OK	1

C1 = F009384-MSD3
 C2 = 0100047-65RE1
 C3 = F009384-MS3
 MPS 10/15/20
 MPS 10/15/20

ANALYSIS SEQUENCE

0J07015

Analyzed with
0J07014 and 0J07016
MFS 10/7/20

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/6/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J07015-IBL1	QC	1			
0J07015-IBL2	QC	2			
0J07015-IBL3	QC	3			
0J07015-CAL1	QC	4	2002064		QUALITY ASSURANCE PEER-REVIEWED INITIALS: <u> PFS </u>
0J07015-CAL2	QC	5	2002065		
0J07015-CAL3	QC	6	2002220		
0J07015-CAL4	QC	7	2002221		
0J07015-CAL5	QC	8	2002222		
0J07015-ICV1	QC	9	2001809		
0J07015-ICB1	QC	10			
0J07015-CCV1	QC	11	2001809		
0J07015-CCB1	QC	12			
0J07015-CCV2	QC	13	2001809		
0J07015-CCB2	QC	14			
0J07015-CCV3	QC	15	2001809		
0J07015-CCB3	QC	16			
0J07015-CCV4	QC	17	2001809		
0J07015-CCB4	QC	18			
0J07015-CCV5	QC	19	2001809		
0J07015-CCB5	QC	20			
0I00047-65RE2	Hg-CVAFS-T-7030	21			RR @ 1000X. EMB 10/2/20
F009384-MS4	QC	22			
F009384-MSD4	QC	23			
0I00078-08RE1	Hg-CVAFS-T-7030	24			Added 10/5/2020 by MFS
0I00078-09RE1	Hg-CVAFS-T-7030	25			Added 10/5/2020 by MFS
0I00078-10RE1	Hg-CVAFS-T-7030	26			Added 10/5/2020 by MFS
0I00078-11RE1	Hg-CVAFS-T-7030	27			Added 10/5/2020 by MFS
0I00078-22RE1	Hg-CVAFS-T-7030	28			Added 10/5/2020 by MFS
0J07015-CCV6	QC	29	2001809		
0J07015-CCB6	QC	30			

 PFS 10/7/20
Samples Loaded By Date

 PFS 10/7/20
Data Processed By Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0J07015
Reviewer:		Dataset ID(s):	THg26003-201006-1
Date:	10/7/2020	WO (s) #:	0100047, 0100078
Batch #(s):	F009384, F009413		

Analyst Initials

MFS

Reviewer Initials

PGE

5b. Has the B/C section data been uploaded?

 YES
 NO
 N/A

QA/QC Data Checked

6. RSD CF ($\leq 15\%$)
 PASS
 FAIL

Comments: _____

7. The calibration curve included a minimum of 5 Standards

 YES
 NO

Comments: _____

8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%)

 PASS
 FAIL

9. ICV and CCV % Recoveries EPA 1631E (77-123%)

 PASS
 FAIL

Comments: _____

10. Do all calibration points pass acceptance criteria?

 YES
 NO

Comments: _____

11. Are qualifiers consistent with the data review flowcharts?

 YES
 NO
 N/A

Comments: _____

12. Explain any items on the failed data report from Element

Comments: _____

13. Are the individual Preparation Blanks $< PQL$ or $< 2.2xMDL$ for WI (refer to appropriate prep method PQL list)
 PASS
 FAIL
(a) If not $< PQL$ or $< 2.2xMDL$ for WI, note which PB(s) are above control limit:(b) Is the mean PB $< PQL$ or $< 2.2xMDL$ for WI (for appropriate qualification)?
 YES
 NO

(c) Was a BrCl Blank analyzed for each preservation level?

 YES
 NO
 N/A

(d) Are Preparation Blanks summarized on QC page?

 YES
 NO

14. Filtration Blank Prepared (if yes, use FB qualifier)

 YES
 NO

(a) Filtration Blank prep date same as associated samples' prep date

 YES
 NO
 N/A
(b) Filtration Blank absolute value $< PQL$ or $< 2.2xMDL$ for WI
 YES
 NO
 N/A
15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L?
 PASS
 FAIL

Comments: _____

16. CCBs individually < 0.50 ng/L or $2.2 \times MDL$ for WI?
 PASS
 FAIL

Comments: _____

17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)

 YES
 NO
 N/A

18. Is the correct 'Source' designated for MD/MS/MSD?

 YES
 NO

19. For digested preps: was there a spike witness signature & date on the prep bench sheet?

 YES
 NO
 N/A

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: MFS	Sequence(s) #: QJ07015
Reviewer:	Dataset ID(s): THg26003-201006-1
Date: 10/7/2020	WO (s) #: 0I00047, 0I00078
Batch #(s): F009384, F009413	

Analyst Initials MFS **Reviewer Initials** PGS

20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher)? YES NO
- Comments: _____
21. Are all samples within instrument calibration range? (or at minimum dilution size) PASS FAIL
- Comments: _____
22. Are the samples run at the correct dilution level for the method? YES NO
- Comments: _____
23. Dissolved < Total (if applicable) YES NO N/A
- Comments: _____
24. Effluent < Influent (visually confirm if needed) YES NO N/A
- Comments: _____
25. Are re-runs noted with reason? YES NO N/A
- Comments: _____
26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? YES NO N/A
- Comments: _____
27. Is the B trap <5% A Traps YES NO N/A
- Comments: _____
28. Are spiked trap recoveries 75-125% of true value? YES NO N/A
- Comments: _____
29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? YES NO N/A
- Comments: _____
30. Have re-extracts been created for non-reportable samples? YES NO N/A
31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. YES NO N/A
32. Does the data set need scanning? YES N/A
33. Does the dataset have an LOQ/LOQ or DOC? YES N/A
34. Water samples: has the preservation log been included in dataset for final volume verification? YES NO N/A
35. Water samples-is the final volume correct in the sequence? YES NO N/A
- Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs
36. Date of analyst IDOC/CDOC: _____ 3/2/20 IDOC/CDOC within last 12 months? YES NO
37. Date of analyst's SOP reading for method: _____ 3/2/20 Current SOP revision read? YES NO
38. Date of LOD: _____ 12/29/19 LOD within last 3 months? YES NO
39. Date of LOQ: _____ 12/29/19 LOQ within last 3 months? YES NO

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0J07015

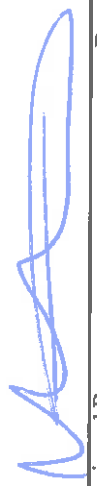
Sample ID	Analysis	Result	MRL	Dup Result	Source Result	True Value	Units	% Rec.	Rec. LCL	Rec. UCL	RPD	RPD Limit	Over Cal	Failure	Qualifier
0J07015-CCV5	Hg-CVAFS-T-7030	6.725	1.000			4.9950	ng/L	135	77.00	123.00			PASS-OVER	FAIL-CCV	



 Analyst Reviewed By

10/17/08

 Date



 Peer Reviewed By

Date

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.2643	20					E-01, RR OF MS1 @ 400X. EMB 10/2/20
F009384-MS4	Matrix Spike [0100047-65RE2]	0.2643	20	2001204	100			RR MS1@1000x MFS 10/5/2020
F009384-MS5	Matrix Spike [0100047-65RE3]	0.2643	40	2001204	100			CCV Fail: RR MS1 @ 1000x MFS 10/7/2020
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			
F009384-MSD3	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			Added 10/5/2020 by MFS
F009384-MSD4	Matrix Spike Dup [0100047-65RE2]	0.2606	20	2001204	100			RR MS1@1000x MFS 10/5/2020
F009384-MSD5	Matrix Spike Dup [0100047-65RE3]	0.2606	40	2001204	100			CCV Fail: RR MS1 @ 1000x MFS 10/7/2020

Standard ID(s):	Description:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	2001276	25% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
		2001978	THg 2% BrCl	
		2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
		2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
		2002190	70/30 Digestion Acid	08-Sep-21 00:00
		2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
		2002305	5% BrCl	07-Feb-21 00:00
		2002353	25% Hydroxylamine-HCl working solution	01-Apr-21 00:00
		2002354	THg Washstation (0.5% BrCl)	07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-65RE2	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD RR @ 1000X. EMB 10/2/20	E-01: RR@400X MFS 10/5/20
0100047-65RE3	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD E-01: RR@400X MFS 10/5/20	CCV Fail: RR@1000x MFS 10/7/2020
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		

PREPARATION BENCH SHEET

F009384

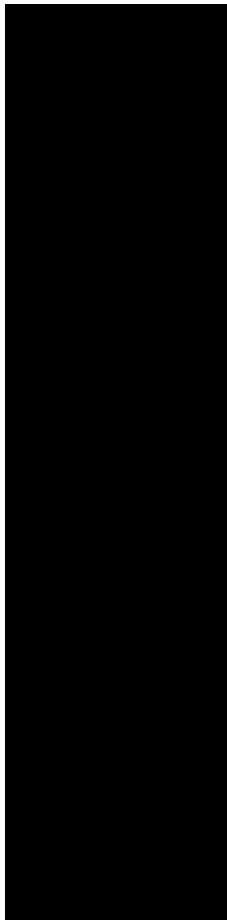
Eurofins Frontier Global Sciences, LLC

Prepared: 9/29/2020

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Matrix: Tissue

0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R	
0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R	
0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R	
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R	



PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/30/2020**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009413-BLK1	Blank	0.25	20					
F009413-BLK2	Blank	0.25	20					
F009413-BLK3	Blank	0.25	20					
F009413-BLK4	Pre-homogenization blank 092320	0.2508	20					WO 0100078-60
F009413-BLK5	Post-homogenization blank 092320	0.2579	20					WO 0100078-61
F009413-BLK6	Post-homogenization Blank 092420	0.2851	20					WO 0100078-62
F009413-BS1	LCS	0.25	20	2002032	20			
F009413-BSD1	LCS Dup	0.25	20	2002032	20			
F009413-MS1	Matrix Spike [0100078-04]	0.2678	20	2001204	100			
F009413-MS2	Matrix Spike [0100078-06]	0.1376	10	2001204	100			
F009413-MSD1	Matrix Spike Dup [0100078-04]	0.2594	20	2001204	100			
F009413-MSD2	Matrix Spike Dup [0100078-06]	0.1383	10	2001204	100			

Standard ID(s):	Description:	Expiration:	Reagent ID(s):	Description:	Expiration:
2001204	THg 1,000ng/mL Secondary Spiking Standard	05-Nov-20 00:00	2001276	2.5% Hydroxylamine-HCl working solution	03-Oct-20 00:00
2002032	THg 100ng/mL Primary Spiking Standard	05-Nov-20 00:00	2001977	THg Dilute 1% BrCl	07-Feb-21 00:00
			2001979	THg Washstation (0.5% BrCl)	03-Oct-20 00:00
			2002050	Boiling Chips for Trace Metals	20-Feb-21 00:00
			2002190	70/30 Digestion Acid	08-Sep-21 00:00
			2002218	3% SnCl2 THg reductant	09-Feb-21 00:00
			2002304	70/30 Digestion Acid	30-Mar-21 00:00
			2002305	5% BrCl	07-Feb-21 00:00
			2002353	2.5% Hydroxylamine-HCl working solution	01-Apr-21 00:00
			2002354	THg Washstation (0.5% BrCl)	07-Feb-21 00:00

PREPARATION BENCH SHEET

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Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-01	ES-FP_20ET711_091020_01_TOM_WB	0.259	20	-	-	S&R		
0100078-02	ES-FP_20ET717_091020_02_TOM_WB	0.2607	20	-	-	S&R		
0100078-03	ES-FP_20ET741_091520_03_TOM_WB	0.2656	20	-	-	S&R		
0100078-04	ES-FP_20ET755_091520_04_TOM_WB	0.2548	20	QC	-	S&R	MS/MSD	
0100078-05	ES-FP_20ET756_091520_05_TOM_WB	0.2691	20	-	-	S&R		
0100078-06	ES-FP_20SN001_091120_01_RAS_WB	0.1294	10	QC	-	S&R	MS/MSD	
0100078-07	ES-FP_20SN001_091120_02_RAS_WB	0.2573	20	-	-	S&R		
0100078-08	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R		
0100078-08RE1	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-08RE2	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-09	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R		
0100078-09RE1	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-09RE2	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-10	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R		
0100078-10RE1	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-10RE2	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-11	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R		
0100078-11RE1	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-11RE2	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20

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0100078-13	ES-02_20ET909_091620_01_TOM_WB	0.2629	20	-	-	S&R	
0100078-14	ES-02_20ET924_091820_02_TOM_WB	0.2576	20	-	-	S&R	
0100078-15	ES-02_20ET934_091820_03_TOM_WB	0.2553	20	-	-	S&R	
0100078-17	ES-02_20ET941_091820_05_TOM_WB	0.2643	20	-	-	S&R	
0100078-19	FRB-01_20LT620_091720_02_LOB_TA	0.2539	20	-	-	S&R	
0100078-20	FRB-01_20LT621_092020_03_LOB_TA	0.2634	20	-	-	S&R	
0100078-21	FRB-01_20LT627_092020_04_LOB_TA	0.258	20	-	-	S&R	
0100078-22	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	
0100078-22RE1	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20
0100078-22RE2	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20
0100078-23	OL-01_20ET866_091820_02_TOM_WB	0.2302	20	-	-	S&R	Undercurve: RR@20X MFS 10/7/20



Analysis Datasheet for Total Mercury

Date of Analysis: October 06, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 0107014, 0107015, 0107016

Analyst: **MS**
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	201.66 units	403.33	136.70 units	273.41	111.1 %Rec
SEQ-CAL2	1	1.00 ng/L	302.84 units	302.84	237.88 units	237.88	96.6 %Rec
SEQ-CAL3	1	5.00 ng/L	1295.89 units	259.18	1230.93 units	246.19	100.0 %Rec
SEQ-CAL4	1	20.00 ng/L	4790.01 units	239.50	4725.05 units	236.25	96.0 %Rec
SEQ-CAL5	1	40.00 ng/L	9549.26 units	238.73	9484.30 units	237.11	96.3 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 246.17 Corr. St Dev RF +/- 15.74 Corr. RSD CF 6.4% RSD Uncorr. Mean RF 288.72

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	64.96 units	±9.73	0.22 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	2.455 ng/L	±1.185
BLK	2	3	1.174 ng/L	±1.505
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	3	-2.236 ng/L	±2.388
BLK	6	3	0.240 ng/L	±0.270

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	10/6/2020 11:30:22	4835-1.RAW	11:30:22 AM	80.01			-4.9	-0.020	-0.020	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	10/6/2020 11:34:31	4836-1.RAW	11:34:31 AM	76.17			11.2	0.046	0.046	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	10/6/2020 11:38:39	4837-1.RAW	11:38:39 AM	58.70			-6.3	-0.025	-0.025	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	10/6/2020 11:42:48	4838-1.RAW	11:42:48 AM	201.66			136.7	0.555	0.555	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	10/6/2020 11:46:57	4839-1.RAW	11:46:57 AM	302.84			237.9	0.966	0.966	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	10/6/2020 11:51:06	4840-1.RAW	11:51:06 AM	1285.89			1230.9	5.000	5.000	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	10/6/2020 11:55:14	4841-1.RAW	11:55:14 AM	4780.01			4725.1	19.195	19.195	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	10/6/2020 11:59:24	4842-1.RAW	11:59:24 AM	9549.26			9484.3	38.528	38.528	ng/L	
Hg2600-3	00	CAL	SEQ-HCV1	1	10/6/2020 12:03:33	4843-1.RAW	12:03:33 PM	1417.57			1352.6	5.495	5.495	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	10/6/2020 12:07:43	4844-1.RAW	12:07:43 PM	78.53			13.6	0.055	0.055	ng/L	
Hg2600-3	00	SAM	F009418-BS1	10	10/6/2020 12:11:52	4845-1.RAW	12:11:52 PM	10280.18	1		10215.2	41.252	41.252	ng/L	F004818
Hg2600-3	00	SAM	F009418-BSD1	10	10/6/2020 12:16:01	4846-1.RAW	12:16:01 PM	10593.65	1		10528.7	42.525	42.525	ng/L	F004818
Hg2600-3	00	BLK	F009418-BLK1	10	10/6/2020 12:20:10	4847-1.RAW	12:20:10 PM	128.83	1		63.9	0.259	0.259	ng/L	F004818
Hg2600-3	00	BLK	F009418-BLK2	10	10/6/2020 12:24:18	4848-1.RAW	12:24:18 PM	94.68	1		29.7	0.121	0.121	ng/L	F004818
Hg2600-3	00	BLK	F009418-BLK3	10	10/6/2020 12:28:29	4849-1.RAW	12:28:29 PM	152.69	1		87.7	0.356	0.356	ng/L	F004818
Hg2600-3	00	SAM	0100073-42	50	10/6/2020 12:32:38	4850-1.RAW	12:32:38 PM	4576.42	1		4451.5	18.034	18.034	ng/L	F004818
Hg2600-3	00	SAM	F009418-MS1	400	10/6/2020 12:36:47	4851-1.RAW	12:36:47 PM	3031.88	1		2966.9	12.046	12.046	ng/L	F004818
Hg2600-3	00	SAM	F009418-MSD1	400	10/6/2020 12:40:56	4852-1.RAW	12:40:56 PM	3211.69	1		3146.7	12.777	12.777	ng/L	F004818
Hg2600-3	00	SAM	0100073-43	50	10/6/2020 12:45:08	4853-1.RAW	12:45:08 PM	3871.17	1		3806.2	15.413	15.413	ng/L	F004818
Hg2600-3	00	SAM	0100073-45	50	10/6/2020 12:49:15	4854-1.RAW	12:49:15 PM	4333.44	1		4268.5	17.291	17.291	ng/L	F004818
Hg2600-3	00	CAL	SEQ-CCV1	1	10/6/2020 12:53:24	4855-1.RAW	12:53:24 PM	1370.85			1305.9	5.305	5.305	ng/L	F004818
Hg2600-3	00	CAL	SEQ-CCB1	1	10/6/2020 12:57:34	4856-1.RAW	12:57:34 PM	80.61			15.6	0.064	0.064	ng/L	F004818
Hg2600-3	00	SAM	0100073-47	50	10/6/2020 13:01:43	4857-1.RAW	1:01:43 PM	4531.08	1		4466.1	18.094	18.094	ng/L	F004818
Hg2600-3	00	SAM	0100073-48	50	10/6/2020 13:05:52	4858-1.RAW	1:05:52 PM	293.24	1		168.3	0.635	0.635	ng/L	F004818
Hg2600-3	00	SAM	0100073-49	50	10/6/2020 13:10:02	4859-1.RAW	1:10:02 PM	281.38	1		196.4	0.749	0.749	ng/L	F004818
Hg2600-3	00	SAM	0100073-50	50	10/6/2020 13:14:11	4860-1.RAW	1:14:11 PM	276.52	1		211.6	0.810	0.810	ng/L	F004818
Hg2600-3	00	SAM	0100073-51	50	10/6/2020 13:18:20	4861-1.RAW	1:18:20 PM	3363.07	1		3298.1	13.349	13.349	ng/L	F004818
Hg2600-3	00	SAM	0100073-52	50	10/6/2020 13:22:30	4862-1.RAW	1:22:30 PM	4271.12	1		4206.2	17.038	17.038	ng/L	F004818
Hg2600-3	00	SAM	0100073-53	50	10/6/2020 13:26:39	4863-1.RAW	1:26:39 PM	6488.21	1		6423.2	26.044	26.044	ng/L	F004818
Hg2600-3	00	SAM	0100073-55	50	10/6/2020 13:30:49	4864-1.RAW	1:30:49 PM	5870.39	1		5805.4	23.534	23.534	ng/L	F004818
Hg2600-3	00	SAM	0100073-56	50	10/6/2020 13:34:58	4865-1.RAW	1:34:58 PM	3522.54	1		3457.6	13.997	13.997	ng/L	F004818
Hg2600-3	00	SAM	0100073-57	50	10/6/2020 13:39:08	4866-1.RAW	1:39:08 PM	3826.09	1		3761.1	15.230	15.230	ng/L	F004818
Hg2600-3	00	CAL	SEQ-CCV2	1	10/6/2020 13:43:17	4867-1.RAW	1:43:17 PM	1393.49			1328.5	5.397	5.397	ng/L	F004818
Hg2600-3	00	CAL	SEQ-CCB2	1	10/6/2020 13:47:27	4868-1.RAW	1:47:27 PM	78.14			13.2	0.054	0.054	ng/L	F004818
Hg2600-3	00	SAM	0100073-58	50	10/6/2020 13:51:36	4869-1.RAW	1:51:36 PM	5486.51	1		5421.6	21.975	21.975	ng/L	F004818
Hg2600-3	00	SAM	0100073-59	50	10/6/2020 13:55:46	4870-1.RAW	1:55:46 PM	450.79	1		385.8	1.518	1.518	ng/L	F004818
Hg2600-3	00	SAM	0100073-60	50	10/6/2020 13:59:55	4871-1.RAW	1:59:55 PM	1297.21	1		1232.2	4.957	4.957	ng/L	F004818
Hg2600-3	00	SAM	F009419-BS1	10	10/6/2020 14:04:04	4872-1.RAW	2:04:04 PM	10381.26	2		10296.3	41.709	41.709	ng/L	F004819
Hg2600-3	00	SAM	F009419-BSD1	10	10/6/2020 14:08:14	4873-1.RAW	2:08:14 PM	8968.81	2		8901.8	36.044	36.044	ng/L	F004819
Hg2600-3	00	BLK	F009419-BLK1	10	10/6/2020 14:12:23	4874-1.RAW	2:12:23 PM	138.08	2		71.1	0.289	0.289	ng/L	F004819
Hg2600-3	00	BLK	F009419-BLK2	10	10/6/2020 14:16:33	4875-1.RAW	2:16:33 PM	78.69	2		13.9	0.057	0.057	ng/L	F004819
Hg2600-3	00	BLK	F009419-BLK3	10	10/6/2020 14:20:42	4876-1.RAW	2:20:42 PM	66.65	2		1.7	0.007	0.007	ng/L	F004819
Hg2600-3	00	SAM	0100073-61	50	10/6/2020 14:24:52	4877-1.RAW	2:24:52 PM	1464.23	2		1399.3	5.661	5.661	ng/L	F004819
Hg2600-3	00	SAM	F009419-MS1	400	10/6/2020 14:29:01	4878-1.RAW	2:29:01 PM	3088.08	2		2993.1	12.156	12.156	ng/L	F004819
Hg2600-3	00	CAL	SEQ-CCV3	1	10/6/2020 14:33:11	4879-1.RAW	2:33:11 PM	1385.51			5.5	0.022	0.022	ng/L	F004819
Hg2600-3	00	CAL	SEQ-CCB3	1	10/6/2020 14:37:21	4880-1.RAW	2:37:21 PM	70.42			6.992	0.222	0.222	ng/L	F004819
Hg2600-3	00	SAM	F009419-MSD1	400	10/6/2020 14:41:30	4881-1.RAW	2:41:30 PM	1768.85	2		1721.9	6.992	6.992	ng/L	F004819
Hg2600-3	00	SAM	0100073-67	50	10/6/2020 14:45:40	4882-1.RAW	2:45:40 PM	4399.04	2		4304.1	17.461	17.461	ng/L	F004819
Hg2600-3	00	SAM	F009419-MS2	400	10/6/2020 14:49:50	4883-1.RAW	2:49:50 PM	2799.55	2		2734.6	11.106	11.106	ng/L	F004819
Hg2600-3	00	SAM	F009419-MSD2	400	10/6/2020 14:53:59	4884-1.RAW	2:53:59 PM	3145.98	2		3081.0	12.513	12.513	ng/L	F004819
Hg2600-3	00	SAM	0100073-63	50	10/6/2020 14:58:09	4885-1.RAW	2:58:09 PM	2183.37	2		2118.4	8.582	8.582	ng/L	F004819
Hg2600-3	00	SAM	0100073-64	50	10/6/2020 15:02:19	4886-1.RAW	3:02:19 PM	3156.40	2		3091.4	12.533	12.533	ng/L	F004819
Hg2600-3	00	SAM	0100073-65	50	10/6/2020 15:06:28	4887-1.RAW	3:06:28 PM	5680.21	2		5495.3	22.300	22.300	ng/L	F004819
Hg2600-3	00	SAM	0100073-66	50	10/6/2020 15:10:38	4888-1.RAW	3:10:38 PM	3141.70	2		3076.7	12.475	12.475	ng/L	F004819
Hg2600-3	00	SAM	0100073-68	50	10/6/2020 15:14:47	4889-1.RAW	3:14:47 PM	3875.90	2		3810.9	15.458	15.458	ng/L	F004819
Hg2600-3	00	SAM	0100073-69	50	10/6/2020 15:18:57	4890-1.RAW	3:18:57 PM	3492.82	2		3427.9	13.901	13.901	ng/L	F004819
Hg2600-3	00	CAL	SEQ-CCV4	1	10/6/2020 15:23:07	4891-1.RAW	3:23:07 PM	1445.35			1380.4	5.608	5.608	ng/L	F004819

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	Initial Result	Final Result	Initial Units	Comments
Hg2600-3	00	CAL	SEQ-CCB4	1	10/6/2020 15:27:16	4892-1.RAW	3:27:16 PM	75.76			10.8	0.044	0.044	ng/L	
Hg2600-3	00	SAM	0100073-70	50	10/6/2020 15:31:26	4893-1.RAW	3:31:26 PM	3743.92	2		3679.0	14.921	746.075	ng/L	F004819
Hg2600-3	00	SAM	0100073-71	50	10/6/2020 15:35:36	4894-1.RAW	3:35:36 PM	5477.14	2		5412.2	21.962	1098.118	ng/L	F004819
Hg2600-3	00	SAM	0100073-72	50	10/6/2020 15:39:45	4895-1.RAW	3:39:45 PM	3022.16	2		2957.2	11.990	599.475	ng/L	F004819
Hg2600-3	00	SAM	0100073-73	50	10/6/2020 15:43:55	4896-1.RAW	3:43:55 PM	2640.26	2		2775.3	11.251	562.536	ng/L	F004819
Hg2600-3	00	SAM	0100073-74	50	10/6/2020 15:48:05	4897-1.RAW	3:48:05 PM	3463.84	2		3398.9	13.784	689.188	ng/L	F004819
Hg2600-3	00	SAM	0100073-75	50	10/6/2020 15:52:14	4898-1.RAW	3:52:14 PM	3604.84	2		3539.7	14.356	717.786	ng/L	F004819
Hg2600-3	00	SAM	0100073-76	50	10/6/2020 15:56:24	4899-1.RAW	3:56:24 PM	4099.55	2		4034.6	16.366	818.308	ng/L	F004819
Hg2600-3	00	SAM	0100073-77	50	10/6/2020 16:00:34	4900-1.RAW	4:00:34 PM	3510.55	2		3445.6	13.973	698.674	ng/L	F004819
Hg2600-3	00	SAM	0100073-78	50	10/6/2020 16:04:45	4901-1.RAW	4:04:45 PM	5111.09	2		5046.1	20.475	1023.767	ng/L	F004819
Hg2600-3	00	SAM	0100073-79	50	10/6/2020 16:08:55	4902-1.RAW	4:08:55 PM	3976.9169	2		3911.4	15.866	793.294	ng/L	F004819
Hg2600-3	00	CAL	SEQ-CCV5	1	10/6/2020 16:13:04	4903-1.RAW	4:13:04 PM	1720.45			1655.5	6.725	6.725	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	10/6/2020 16:17:14	4904-1.RAW	4:17:14 PM	79.96			15.0	0.061	0.061	ng/L	
Hg2600-3	00	SAM	0100073-80	50	10/6/2020 16:21:24	4905-1.RAW	4:21:24 PM	6330.07	2		6265.1	25.427	1271.359	ng/L	F004819
Hg2600-3	00	SAM	0100073-81	50	10/6/2020 16:25:34	4906-1.RAW	4:25:34 PM	3370.05	2		3305.1	13.403	670.136	ng/L	F004819
Hg2600-3	00	SAM	0100047-55RE2	1000	10/6/2020 16:29:44	4907-1.RAW	4:29:44 PM	3469.95	3		3405.0	13.832	1383.063	ng/L	F009384
Hg2600-3	00	SAM	F009384-MS4	1000	10/6/2020 16:33:54	4908-1.RAW	4:33:54 PM	4837.66	3		4772.7	19.388	1938.088	ng/L	F009384
Hg2600-3	00	SAM	F009384-MSD4	1000	10/6/2020 16:38:05	4909-1.RAW	4:38:05 PM	4851.44	3		4786.5	19.444	1944.045	ng/L	F009384
Hg2600-3	00	SAM	0100078-08RE1	20	10/6/2020 16:42:14	4910-1.RAW	4:42:14 PM	3050.39	4		2985.4	12.128	242.553	ng/L	F009413
Hg2600-3	00	SAM	0100078-09RE1	20	10/6/2020 16:46:24	4911-1.RAW	4:46:24 PM	1745.26	4		1680.3	6.826	136.517	ng/L	F009413
Hg2600-3	00	SAM	0100078-10RE1	20	10/6/2020 16:50:34	4912-1.RAW	4:50:34 PM	1986.30	4		1921.3	7.805	156.100	ng/L	F009413
Hg2600-3	00	SAM	0100078-11RE1	20	10/6/2020 16:54:44	4913-1.RAW	4:54:44 PM	2911.62	4		2846.7	11.564	231.279	ng/L	F009413
Hg2600-3	00	SAM	0100078-12RE1	20	10/6/2020 16:58:54	4914-1.RAW	4:58:54 PM	3378.96	4		3314.0	13.462	269.248	ng/L	F009413
Hg2600-3	00	CAL	SEQ-CCV6	1	10/6/2020 17:03:04	4915-1.RAW	5:03:04 PM	1425.72			1360.8	5.528	5.528	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	10/6/2020 17:07:14	4916-1.RAW	5:07:14 PM	69.71			4.7	0.019	0.019	ng/L	
Hg2600-3	00	SAM	F010335-B51	400	10/6/2020 17:11:24	4917-1.RAW	5:11:24 PM	1345.19	5		1280.2	5.206	2082.500	ng/L	F010335
Hg2600-3	00	SAM	F010335-BSD1	400	10/6/2020 17:15:33	4918-1.RAW	5:15:33 PM	1380.43	5		1315.5	5.349	2139.764	ng/L	F010335
Hg2600-3	00	BLK	F010335-BLK1	100	10/6/2020 17:19:43	4919-1.RAW	5:19:43 PM	66.23	5		1.3	0.005	0.515	ng/L	F010335
Hg2600-3	00	BLK	F010335-BLK2	100	10/6/2020 17:23:53	4920-1.RAW	5:23:53 PM	56.50	5		-8.5	-0.034	-3.439	ng/L	F010335
Hg2600-3	00	BLK	F010335-BLK3	100	10/6/2020 17:28:03	4921-1.RAW	5:28:03 PM	55.65	5		-9.3	-0.038	-3.784	ng/L	F010335
Hg2600-3	00	SAM	0100112-01	100	10/6/2020 17:32:13	4922-1.RAW	5:32:13 PM	730.05	5		665.1	2.724	272.413	ng/L	F010335
Hg2600-3	00	SAM	0100112-02	100	10/6/2020 17:36:23	4923-1.RAW	5:36:23 PM	806.32	5		741.4	3.034	303.397	ng/L	F010335
Hg2600-3	00	SAM	0100112-03	100	10/6/2020 17:40:33	4924-1.RAW	5:40:33 PM	512.51	5		447.6	1.840	184.044	ng/L	F010335
Hg2600-3	00	SAM	0100112-04	100	10/6/2020 17:44:43	4925-1.RAW	5:44:43 PM	561.01	5		496.1	2.037	203.747	ng/L	F010335
Hg2600-3	00	SAM	0100112-06	100	10/6/2020 17:48:53	4926-1.RAW	5:48:53 PM	620.36	5		555.4	2.279	227.857	ng/L	F010335
Hg2600-3	00	CAL	SEQ-CCV7	1	10/6/2020 17:53:02	4927-1.RAW	5:53:02 PM	1355.04			1290.1	5.241	5.241	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	10/6/2020 17:57:12	4928-1.RAW	5:57:12 PM	52.08			-12.9	-0.052	-0.052	ng/L	
Hg2600-3	00	SAM	F009420-B51	20	10/6/2020 18:01:22	4929-1.RAW	6:01:22 PM	3858.12	6		3793.2	15.397	307.938	ng/L	F009420
Hg2600-3	00	SAM	F009420-BSD1	20	10/6/2020 18:05:33	4930-1.RAW	6:05:33 PM	4286.35	6		4221.4	17.136	342.730	ng/L	F009420
Hg2600-3	00	BLK	F009420-BLK1	10	10/6/2020 18:09:44	4931-1.RAW	6:09:44 PM	77.89	6		12.9	0.053	0.525	ng/L	F009420
Hg2600-3	00	BLK	F009420-BLK2	10	10/6/2020 18:13:54	4932-1.RAW	6:13:54 PM	70.06	6		5.1	0.021	0.207	ng/L	F009420
Hg2600-3	00	BLK	F009420-BLK3	10	10/6/2020 18:18:04	4933-1.RAW	6:18:04 PM	64.65	6		-0.3	-0.001	-0.013	ng/L	F009420
Hg2600-3	00	SAM	0100073-82	50	10/6/2020 18:22:15	4934-1.RAW	6:22:15 PM	3706.22	6		3641.3	14.787	739.352	ng/L	F009420
Hg2600-3	00	SAM	0100073-83	400	10/6/2020 18:26:26	4935-1.RAW	6:26:26 PM	2169.25	6		2104.3	8.548	3419.054	ng/L	F009420
Hg2600-3	00	SAM	F009420-MSD1	400	10/6/2020 18:30:36	4936-1.RAW	6:30:36 PM	1931.96	6		1867.0	7.584	3033.483	ng/L	F009420
Hg2600-3	00	SAM	0100073-84	50	10/6/2020 18:34:47	4937-1.RAW	6:34:47 PM	6016.98	6		5952.0	24.174	1208.701	ng/L	F009420
Hg2600-3	00	SAM	F009420-MS2	400	10/6/2020 18:38:57	4938-1.RAW	6:38:57 PM	2289.96	6		2205.0	8.957	3582.695	ng/L	F009420
Hg2600-3	00	CAL	SEQ-CCV8	1	10/6/2020 18:43:08	4939-1.RAW	6:43:08 PM	1358.84			1293.9	5.256	5.256	ng/L	
Hg2600-3	00	CAL	SEQ-CCB8	1	10/6/2020 18:47:18	4940-1.RAW	6:47:18 PM	56.29			-8.7	-0.035	-0.035	ng/L	
Hg2600-3	00	SAM	F009420-MSD2	400	10/6/2020 18:51:29	4941-1.RAW	6:51:29 PM	2367.83	6		2302.9	9.354	3741.721	ng/L	F009420
Hg2600-3	00	SAM	0100073-85	50	10/6/2020 18:55:39	4942-1.RAW	6:55:39 PM	1618.65	6		1553.7	6.307	315.337	ng/L	F009420
Hg2600-3	00	SAM	0100073-86	50	10/6/2020 18:59:50	4943-1.RAW	6:59:50 PM	2785.90	6		2720.9	11.048	552.422	ng/L	F009420
Hg2600-3	00	SAM	0100073-87	50	10/6/2020 19:04:00	4944-1.RAW	7:04:00 PM	2055.38	6		1990.4	8.081	404.042	ng/L	F009420
Hg2600-3	00	SAM	0100073-88	50	10/6/2020 19:08:10	4945-1.RAW	7:08:10 PM	2252.44	6		2187.5	8.881	444.069	ng/L	F009420
Hg2600-3	00	SAM	0100073-89	50	10/6/2020 19:12:20	4946-1.RAW	7:12:20 PM	2713.29	6		2648.3	10.753	537.673	ng/L	F009420
Hg2600-3	00	SAM	0100073-90	50	10/6/2020 19:16:30	4947-1.RAW	7:16:30 PM	1694.35	6		1629.4	6.614	330.713	ng/L	F009420
Hg2600-3	00	SAM	0100073-91	50	10/6/2020 19:20:41	4948-1.RAW	7:20:41 PM	2442.05	6		1662.9	6.750	337.517	ng/L	F009420
Hg2600-3	00	SAM	0100073-92	50	10/6/2020 19:24:51	4949-1.RAW	7:24:51 PM	2727.1	6		2377.1	9.652	482.581	ng/L	F009420
Hg2600-3	00	CAL	SEQ-CCV9	1	10/6/2020 19:29:01	4950-1.RAW	7:29:01 PM	5112.46			5047.5	20.500	1024.980	ng/L	F009420
Hg2600-3	00	CAL	SEQ-CCB9	1	10/6/2020 19:33:12	4951-1.RAW	7:33:12 PM	1389.58			-2.1	-0.009	-0.009	ng/L	
Hg2600-3	00	SAM	0100073-94	50	10/6/2020 19:37:22	4952-1.RAW	7:37:22 PM	62.81			4343.4	17.639	881.956	ng/L	F009420
Hg2600-3	00	SAM	0100073-95	50	10/6/2020 19:41:32	4953-1.RAW	7:41:32 PM	4408.36	6		3605.6	14.642	732.100	ng/L	F009420
Hg2600-3	00	SAM	0100073-96	50	10/6/2020 19:45:43	4954-1.RAW	7:45:43 PM	3670.52	6		2002.2	8.129	406.445	ng/L	F009420
Hg2600-3	00	SAM	0100073-97	50	10/6/2020 19:49:53	4955-1.RAW	7:49:53 PM	2067.21	6		2541.8	10.321	516.032	ng/L	F009420
Hg2600-3	00	SAM	0100073-97	50											

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	SAM	0100073-98	50	10/6/2020 19:58:14	4957-1.RAW	7:58:14 PM	1619.53	6		1554.6	6.310	315.514	ng/L	F009420
Hg2600-3	00	SAM	0100073-99	50	10/6/2020 20:02:24	4958-1.RAW	8:02:24 PM	1181.28	6		1116.3	4.530	226.501	ng/L	F009420
Hg2600-3	00	SAM	0100073-AA	50	10/6/2020 20:08:35	4959-1.RAW	8:06:35 PM	745.58	6		680.6	2.760	138.003	ng/L	F009420
Hg2600-3	00	SAM	0100073-AB	50	10/6/2020 20:10:45	4960-1.RAW	8:10:45 PM	2297.73	6		2232.8	9.085	453.267	ng/L	F009420
Hg2600-3	00	CAL	SEQ-CCVA	1	10/6/2020 20:14:55	4961-1.RAW	8:14:55 PM	1324.43			1259.5	5.116	5.116	ng/L	
Hg2600-3	00	CAL	SEQ-CCBA	1	10/6/2020 20:19:06	4962-1.RAW	8:19:06 PM	63.21			-1.8	-0.007	-0.007	ng/L	

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TotalMercury EPA1631
 Operati MFS BlankSI 64.96 Calib Eqn: Conc = (Area-64.96 Run Date: 10/6/2020 Blank SD: 9.730961601
 Worksh THg2600 CalibFa 246.17 Status: QC Warnings:7/QC E Run Time: 11:02:38 Blank RSD%: 14.97981523
 Method ### R: 1 R2: 1 CF SD: 15.74042944
 Descrip THg26003-201006-1 CF RSD%: 6.394214281

SampleID	Location	Pin#	Dilute	Blank	Conc (ppb)	MB%	FinalConc	Rec%	QA	RawData	R:inEnd	Peak (Raw)	Centrif (g)	Flags	RunCunt	Comment
Clean					0.00	4.86				4829-1.RAW	11:05:30	1195.41	Clean	OK	1	
WS					64.96	0.00				4830-1.RAW	11:09:39	22.24	Sample	OK	1	
WS					64.96	0.00				4831-1.RAW	11:13:47	19.77	Sample	OK	1	
WS					64.96	0.00				4832-1.RAW	11:17:56	20.52	Sample	OK	1	
WS					64.96	0.00				4833-1.RAW	11:22:04	43.93	Sample	OK	1	
WS					64.96	0.00				4834-1.RAW	11:26:13	45.99	Sample	OK	1	
SEQ-IBL1	A1		1		0.00	0.24				4835-1.RAW	11:30:22	60.01	Sample	OK	1	
SEQ-IBL2	A2		1		0.00	0.31				4836-1.RAW	11:34:31	76.17	Sample	OK	1	
SEQ-IBL3	A3		1		0.00	0.24				4837-1.RAW	11:38:39	58.70	Sample	OK	1	
SEQ-CAL1	A4		1		64.96	0.56		111.07		4838-1.RAW	11:42:48	201.86	Sample	OK	1	
SEQ-CAL2	A5		1		64.96	0.97		96.63		4839-1.RAW	11:46:57	302.84	Sample	OK	1	
SEQ-CAL3	A6		1		64.96	5.00		100.01		4840-1.RAW	11:51:06	1295.89	Sample	OK	1	
SEQ-CAL4	A7		1		64.96	19.19		95.97		4841-1.RAW	11:55:14	4790.01	Sample	OK	1	
SEQ-CAL5	A8		1		64.96	38.53		96.32		4842-1.RAW	11:59:24	9549.28	Sample	OK	1	
SEQ-ICV1	A9		1		64.96	5.49		109.89		4843-1.RAW	12:03:33	1417.57	Sample	OK	1	
SEQ-ICB1	A10		1		64.96	0.06		0.00		4844-1.RAW	12:07:43	78.53	Sample	OK	1	
F009418-BS1	A11		10		64.96	414.97				4845-1.RAW	12:11:52	10280.16	Sample	OK	1	F004818
F009418-BSD1	A12		10		64.96	427.71				4846-1.RAW	12:16:01	10593.65	Sample	OK	1	F004818
F009418-BLK1	A13		10		64.96	2.59				4847-1.RAW	12:20:10	128.83	Sample	OK	1	F004818
F009418-BLK2	A14		10		64.96	1.21				4848-1.RAW	12:24:19	94.66	Sample	OK	1	F004818
F009418-BLK3	A15		10		64.96	3.56				4849-1.RAW	12:28:29	152.69	Sample	OK	1	F004818
0100073-42	A16		50		64.96	904.16				4850-1.RAW	12:32:38	4516.42	Sample	OK	1	F004818
F009418-MS1	A17		400		64.96	4821.00		532.61		4851-1.RAW	12:36:47	3031.88	Sample	OK	1	F004818
F009418-MSD1	A18		400		64.96	5113.17				4852-1.RAW	12:40:56	3211.69	Sample	OK	1	F004818
0100073-43	A19		50		64.96	773.10				4853-1.RAW	12:45:06	3871.17	Sample	OK	1	F004818
0100073-45	A20		50		64.96	866.99				4854-1.RAW	12:49:15	4333.44	Sample	OK	1	F004818
SEQ-CCV1	A21		1		64.96	5.30		106.10		4855-1.RAW	12:53:24	1370.85	Sample	OK	1	F004818
SEQ-CCB1	B1		1		64.96	0.06		0.00		4856-1.RAW	12:57:34	80.61	Sample	OK	1	F004818
0100073-47	B2		50		64.96	907.13				4857-1.RAW	13:01:43	4531.08	Sample	OK	1	F004818
0100073-48	B3		50		64.96	34.18				4858-1.RAW	13:05:52	233.24	Sample	OK	1	F004818
0100073-49	B4		50		64.96	39.90				4859-1.RAW	13:10:02	261.38	Sample	OK	1	F004818
0100073-50	B5		50		64.96	42.97				4860-1.RAW	13:14:11	276.52	Sample	OK	1	F004818
0100073-51	B6		50		64.96	669.89				4861-1.RAW	13:18:20	3363.07	Sample	OK	1	F004818
0100073-53	B7		50		64.96	854.33				4862-1.RAW	13:22:30	4271.12	Sample	OK	1	F004818
0100073-54	B8		50		64.96	1304.65				4863-1.RAW	13:26:39	6486.21	Sample	OK	1	F004818
0100073-55	B9		50		64.96	1179.17				4864-1.RAW	13:30:49	5870.39	Sample	OK	1	F004818
0100073-56	B10		50		64.96	702.28				4865-1.RAW	13:34:58	3522.54	Sample	OK	1	F004818
0100073-57	B11		50		64.96	763.94				4866-1.RAW	13:39:08	3826.09	Sample	OK	1	F004818
SEQ-CCV2	B12		1		64.96	5.40		107.94		4867-1.RAW	13:43:17	1393.49	Sample	OK	1	F004818
SEQ-CCB2	B13		1		64.96	0.05		0.00		4868-1.RAW	13:47:27	78.14	Sample	OK	1	F004818
0100073-58	B14		50		64.96	1101.19				4869-1.RAW	13:51:36	5486.51	Sample	OK	1	F004818
0100073-59	B15		50		64.96	78.37				4870-1.RAW	13:55:46	450.79	Sample	OK	1	F004818
0100073-60	B16		50		64.96	250.29				4871-1.RAW	13:59:55	1297.21	Sample	OK	1	F004818
F009419-BS1	B17		10		64.96	418.27				4872-1.RAW	14:04:04	10361.26	Sample	OK	1	F004819
F009419-BSD1	B18		10		64.96	361.62				4873-1.RAW	14:08:14	8966.81	Sample	OK	1	F004819
F009419-BLK1	B19		10		64.96	2.89				4874-1.RAW	14:12:23	136.06	Sample	OK	1	F004819

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F009419-BLK2	B20	10	64.96	0.57	4875-1.RAW	14:16:33	78.89 Sample	OK	1	F004819
F009419-BLK3	B21	10	64.96	0.07	4876-1.RAW	14:20:42	66.65 Sample	OK	1	F004819
0100073-61	C1	50	64.96	284.21	4877-1.RAW	14:24:52	1484.23	OK	1	F004819
F009419-MS1	C2	400	64.96	4883.56	4878-1.RAW	14:29:01	3058.08 Sample	OK	1	F004819
SEQ-CCV3	C3	1	64.96	5.36	4879-1.RAW	14:33:11	1385.51 Sample	OK	1	F004819
SEQ-CCB3	C4	1	64.96	0.02	4880-1.RAW	14:37:21	70.42 Sample	OK	1	F004819
F009419-MSD1	C5	400	64.96	2797.92	4881-1.RAW	14:41:30	1786.85 Sample	OK	1	F004819
0100073-67	C6	50	64.96	874.22	4882-1.RAW	14:45:40	4369.04 Sample	OK	1	F004819
F009419-MS2	C7	400	64.96	4443.47	4883-1.RAW	14:49:50	2789.55 Sample	OK	1	F004819
F009419-MSD2	C8	400	64.96	5006.37	4884-1.RAW	14:53:59	3145.96 Sample	OK	1	F004819
0100073-63	C9	50	64.96	430.28	4885-1.RAW	14:58:09	2183.37 Sample	OK	1	F004819
0100073-64	C10	50	64.96	627.92	4886-1.RAW	15:02:19	3156.40 Sample	OK	1	F004819
0100073-65	C11	50	64.96	1116.16	4887-1.RAW	15:06:28	5560.21 Sample	OK	1	F004819
0100073-66	C12	50	64.96	624.93	4888-1.RAW	15:10:38	3141.70 Sample	OK	1	F004819
0100073-66	C13	50	64.96	774.06	4889-1.RAW	15:14:47	3875.90 Sample	OK	1	F004819
0100073-69	C14	50	64.96	696.25	4890-1.RAW	15:18:57	3492.82 Sample	OK	1	F004819
SEQ-CCV4	C15	1	64.96	5.61	4891-1.RAW	15:23:07	1445.35 Sample	OK	1	F004819
SEQ-CCB4	C16	1	64.96	0.04	4892-1.RAW	15:27:16	75.76 Sample	OK	1	F004819
0100073-70	C17	1	64.96	747.25	4893-1.RAW	15:31:26	3743.92 Sample	OK	1	F004819
0100073-71	C18	50	64.96	1099.29	4894-1.RAW	15:35:36	5477.14 Sample	OK	1	F004819
0100073-72	C19	50	64.96	600.65	4895-1.RAW	15:39:45	3022.16 Sample	OK	1	F004819
0100073-73	C20	50	64.96	563.71	4896-1.RAW	15:43:55	2840.29 Sample	OK	1	F004819
0100073-74	C21	50	64.96	690.36	4897-1.RAW	15:48:05	3463.84 Sample	OK	1	F004819
0100073-75	A1	50	64.96	718.96	4898-1.RAW	15:52:14	3604.64 Sample	OK	1	F004819
0100073-76	A2	50	64.96	819.48	4899-1.RAW	15:56:24	4099.55 Sample	OK	1	F004819
0100073-77	A3	50	64.96	699.85	4900-1.RAW	16:00:34	3510.55 Sample	OK	1	F004819
0100073-78	A4	50	64.96	1024.94	4901-1.RAW	16:04:45	5111.09 Sample	OK	1	F004819
0100073-79	A5	50	64.96	794.47	4902-1.RAW	16:08:55	3976.39 Sample	OK	1	F004819
SEQ-CCV5	A6	50	64.96	6.73	4903-1.RAW	16:13:04	1720.45 Sample	OK	1	F004819
SEQ-CCB5	A7	1	64.96	0.06	4904-1.RAW	16:17:14	79.96 Sample	OK	1	F004819
0100073-80	A8	50	64.96	1272.53	4905-1.RAW	16:21:24	6330.07 Sample	OK	1	F004819
0100073-81	A9	50	64.96	671.31	4906-1.RAW	16:25:34	3370.05 Sample	OK	1	F004819
F009384-MS4	A10	1000	64.96	13832.06	4907-1.RAW	16:29:44	3469.95 Sample	OK	1	F009384
F009384-MSD4	A11	1000	64.96	19388.09	4908-1.RAW	16:33:54	4837.66 Sample	OK	1	F009384
0100073-85RE2	A12	1000	64.96	19444.04	4909-1.RAW	16:38:05	4851.44 Sample	OK	1	F009384
0100078-08RE1	A13	20	64.96	242.55	4910-1.RAW	16:42:14	3050.39 Sample	OK	1	F009413
0100078-09RE1	A14	20	64.96	136.52	4911-1.RAW	16:46:24	1745.26 Sample	OK	1	F009413
0100078-10RE1	A15	20	64.96	156.10	4912-1.RAW	16:50:34	1986.30 Sample	OK	1	F009413
0100078-11RE1	A16	20	64.96	231.28	4913-1.RAW	16:54:44	2911.62 Sample	OK	1	F009413
0100078-22RE1	A17	20	64.96	269.25	4914-1.RAW	16:58:54	3378.96 Sample	OK	1	F009413
SEQ-CCV6	A18	1	64.96	5.53	4915-1.RAW	17:03:04	1425.72 Sample	OK	1	F009413
SEQ-CCB6	A19	1	64.96	0.02	4916-1.RAW	17:07:14	69.71 Sample	OK	1	F010335
F010335-BS1	A20	400	64.96	2080.26	4917-1.RAW	17:11:24	1345.19 Sample	OK	1	F010335
F010335-BSD1	A21	400	64.96	2137.53	4918-1.RAW	17:15:33	1380.43 Sample	OK	1	F010335
F010335-BLK1	B1	100	64.96	0.51	4919-1.RAW	17:19:43	66.23 Sample	OK	1	F010335
F010335-BLK2	B2	100	64.96	0.00	4920-1.RAW	17:23:53	56.50 Sample	OK	1	F010335
F010335-BLK3	B3	100	64.96	0.00	4921-1.RAW	17:28:03	55.65 Sample	OK	1	F010335
0100112-01	B4	100	64.96	270.18	4922-1.RAW	17:32:13	730.05 Sample	OK	1	F010335
0100112-02	B5	100	64.96	301.16	4923-1.RAW	17:36:23	806.32 Sample	OK	1	F010335
0100112-03	B6	100	64.96	181.81	4924-1.RAW	17:40:33	512.51 Sample	OK	1	F010335
0100112-04	B7	100	64.96	201.51	4925-1.RAW	17:44:43	561.01 Sample	OK	1	F010335

0100073-81
 F009384-MS4
 F009384-MSD4
 0100073-85RE2
 0100078-08RE1
 0100078-09RE1
 0100078-10RE1
 0100078-11RE1
 0100078-22RE1
 SEQ-CCV6
 SEQ-CCB6
 F010335-BS1
 F010335-BSD1
 F010335-BLK1
 F010335-BLK2
 F010335-BLK3
 0100112-01
 0100112-02
 0100112-03
 0100112-04

Pg 3

0100112-06	B8	100	64.96	225.62	4926-1.RAW	17:48:53	620.36	Sample	OK	1	F010335
SEQ-CCV7	B9	1	64.96	5.24	4927-1.RAW	17:53:02	1355.04	Sample	OK	1	
SEQ-CCB7	B10	1	64.96	0.00	4928-1.RAW	17:57:12	52.08	Sample	OK	1	
F009420-BS1	B11	20	64.96	308.18	4929-1.RAW	18:01:22	3658.12	Sample	OK	1	F009420
F009420-BSD1	B12	20	64.96	342.97	4930-1.RAW	18:05:33	4286.35	Sample	OK	1	F009420
F009420-BLK1	B13	10	64.96	0.53	4931-1.RAW	18:09:44	77.89	Sample	OK	1	F009420
F009420-BLK2	B14	10	64.96	0.21	4932-1.RAW	18:13:54	70.06	Sample	OK	1	F009420
F009420-BLK3	B15	10	64.96	0.00	4933-1.RAW	18:18:04	64.65	Sample	OK	1	F009420
0100073-82	B16	50	64.96	739.59	4934-1.RAW	18:22:15	3706.22	Sample	OK	1	F009420
F009420-MS1	B17	400	64.96	3419.29	4935-1.RAW	18:26:25	2169.25	Sample	OK	1	F009420
F009420-MSD1	B18	400	64.96	3033.72	4936-1.RAW	18:30:36	1931.96	Sample	OK	1	F009420
0100073-83	B19	50	64.96	1208.94	4937-1.RAW	18:34:47	6016.98	Sample	OK	1	F009420
F009420-MS2	B20	50	64.96	1208.94	4938-1.RAW	18:38:57	2269.96	Sample	OK	1	F009420
SEQ-CCV8	B21	400	64.96	3582.94	4939-1.RAW	18:43:08	1358.84	Sample	OK	1	F009420
SEQ-CCB8	C1	1	64.96	5.26	4940-1.RAW	18:47:18	56.29	Sample	OK	1	
F009420-MSD2	C2	1	64.96	0.00	4941-1.RAW	18:51:29	2367.83	Sample	OK	1	F009420
0100073-84	C3	400	64.96	3741.96	4942-1.RAW	18:55:39	1618.65	Sample	OK	1	F009420
0100073-85	C4	50	64.96	315.58	4943-1.RAW	18:59:50	2785.90	Sample	OK	1	F009420
0100073-86	C5	50	64.96	552.66	4944-1.RAW	19:04:00	2055.38	Sample	OK	1	F009420
0100073-87	C6	50	64.96	404.28	4945-1.RAW	19:08:10	2252.44	Sample	OK	1	F009420
0100073-88	C7	50	64.96	444.31	4946-1.RAW	19:12:20	2713.29	Sample	OK	1	F009420
0100073-89	C8	50	64.96	537.91	4947-1.RAW	19:16:30	1694.35	Sample	OK	1	F009420
0100073-90	C9	50	64.96	330.95	4948-1.RAW	19:20:41	1727.85	Sample	OK	1	F009420
0100073-91	C10	50	64.96	337.76	4949-1.RAW	19:24:51	2442.05	Sample	OK	1	F009420
0100073-92	C11	50	64.96	482.82	4950-1.RAW	19:29:01	5112.46	Sample	OK	1	F009420
SEQ-CCV9	C12	50	64.96	1025.22	4951-1.RAW	19:33:12	1389.58	Sample	OK	1	F009420
SEQ-CCB9	C13	1	64.96	5.38	4952-1.RAW	19:37:22	62.81	Sample	OK	1	
0100073-94	C14	1	64.96	0.00	4953-1.RAW	19:41:32	4408.36	Sample	OK	1	F009420
0100073-95	C15	50	64.96	882.21	4954-1.RAW	19:45:43	3670.52	Sample	OK	1	F009420
0100073-96	C16	50	64.96	732.34	4955-1.RAW	19:49:53	2087.21	Sample	OK	1	F009420
0100073-97	C17	50	64.96	406.68	4956-1.RAW	19:54:03	2606.74	Sample	OK	1	F009420
0100073-98	C18	50	64.96	516.27	4957-1.RAW	19:58:14	1619.53	Sample	OK	1	F009420
0100073-99	C19	50	64.96	315.75	4958-1.RAW	20:02:24	1181.28	Sample	OK	1	F009420
0100073-AA	C20	50	64.96	226.74	4959-1.RAW	20:06:35	745.58	Sample	OK	1	F009420
0100073-AB	C21	50	64.96	138.24	4960-1.RAW	20:10:45	2297.73	Sample	OK	1	F009420
SEQ-CCVA	A1	1	64.96	453.51	4961-1.RAW	20:14:55	1324.43	Sample	OK	1	
SEQ-CCBA	A2	1	64.96	5.12	4962-1.RAW	20:19:06	63.21	Sample	OK	1	
		1	64.96	0.00							

SEQ-IBL1	A1	0100073-57	B11	0100073-74	C21	SEQ-CCB7	B10
SEQ-IBL2	A2	SEQ-CCV2	B12	0100073-75	A1	F009420-BS1	B11
SEQ-IBL3	A3	SEQ-CCB2	B13	0100073-76	A2	F009420-BSD1	B12
SEQ-CAL1	A4	0100073-58	B14	0100073-77	A3	F009420-BLK1	B13
SEQ-CAL2	A5	0100073-59	B15	0100073-78	A4	F009420-BLK2	B14
SEQ-CAL3	A6	0100073-60	B16	0100073-79	A5	F009420-BLK3	B15
SEQ-CAL4	A7	F009419-BS1	B17	SEQ-CCV5	A6	0100073-82	B16
SEQ-CAL5	A8	F009419-BSD1	B18	SEQ-CCB5	A7	F009420-MS1	B17
SEQ-ICV1	A9	F009419-BLK1	B19	0100073-80	A8	F009420-MSD1	B18
SEQ-ICB1	A10	F009419-BLK2	B20	0100073-81	A9	0100073-83	B19
F009418-BS1	A11	F009419-BLK3	B21	F009384-MS4	A10	F009420-MS2	B20
F009418-BSD1	A12	0100073-61	C1	F009384-MSD4	A11	SEQ-CCV8	B21
F009418-BLK1	A13	F009419-MS1	C2	0100047-65RE2	A12	SEQ-CCB8	C1
F009418-BLK2	A14	SEQ-CCV3	C3	0100078-08RE1	A13	F009420-MSD2	C2
F009418-BLK3	A15	SEQ-CCB3	C4	0100078-09RE1	A14	0100073-84	C3
0100073-42	A16	F009419-MSD1	C5	0100078-10RE1	A15	0100073-85	C4
F009418-MS1	A17	0100073-67	C6	0100078-11RE1	A16	0100073-86	C5
F009418-MSD1	A18	F009419-MS2	C7	0100078-22RE1	A17	0100073-87	C6
0100073-43	A19	F009419-MSD2	C8	SEQ-CCV6	A18	0100073-88	C7
0100073-45	A20	0100073-63	C9	SEQ-CCB6	A19	0100073-89	C8
SEQ-CCV1	A21	0100073-64	C10	F010335-BS1	A20	0100073-90	C9
SEQ-CCB1	B1	0100073-65	C11	F010335-BSD1	A21	0100073-91	C10
0100073-47	B2	0100073-66	C12	F010335-BLK1	B1	0100073-92	C11
0100073-48	B3	0100073-68	C13	F010335-BLK2	B2	SEQ-CCV9	C12
0100073-49	B4	0100073-69	C14	F010335-BLK3	B3	SEQ-CCB9	C13
0100073-50	B5	SEQ-CCV4	C15	0100112-01	B4	0100073-94	C14
0100073-51	B6	SEQ-CCB4	C16	0100112-02	B5	0100073-95	C15
0100073-53	B7	0100073-70	C17	0100112-03	B6	0100073-96	C16
0100073-54	B8	0100073-71	C18	0100112-04	B7	0100073-97	C17
0100073-55	B9	0100073-72	C19	0100112-06	B8	0100073-98	C18
0100073-56	B10	0100073-73	C20	SEQ-CCV7	B9	0100073-99	C19

0100047-65RE2 : A10
 -MS4 : A11
 -MSD4 : A12

0100073-AA C20
 0100073-AB C21
 SEQ-CCVA A1
 SEQ-CCBA A2

Verified by:
 [Signature] 10-7-2020

ANALYSIS SEQUENCE

0J08011

Analyzed with
0J08010
MFS 10/8/20

Instrument: Hg2600-3

Calibration ID: UNASSIGNED

Analyzed: 10/7/2020

Lab Number	Analysis	Order	STD ID	ISTD ID	Comments
0J08011-IBL1	QC	1			
0J08011-IBL2	QC	2			
0J08011-IBL3	QC	3			
0J08011-CAL1	QC	4	2002064		QUALITY ASSURANCE PEER REVIEWED INITIALS: PGS
0J08011-CAL2	QC	5	2002065		
0J08011-CAL3	QC	6	2002220		
0J08011-CAL4	QC	7	2002221		
0J08011-CAL5	QC	8	2002222		
0J08011-ICV1	QC	9	2001809		
0J08011-ICB1	QC	10			
0J08011-CCV1	QC	11	2001809		
0J08011-CCB1	QC	12			
0J08011-CCV2	QC	13	2001809		
0J08011-CCB2	QC	14			
0I00047-65RE3	Hg-CVAFS-T-7030	15			E-01: RR@400X MFS 10/5/20
0J08011-CCV3	QC	16	2001809		
0J08011-CCB3	QC	17			
F009384-MS5	QC	18			
F009384-MSD5	QC	19			
0I00078-08RE2	Hg-CVAFS-T-7030	20			Undercurve: RR@20X MFS 10/5/20
0I00078-09RE2	Hg-CVAFS-T-7030	21			Undercurve: RR@20X MFS 10/5/20
0I00078-10RE2	Hg-CVAFS-T-7030	22			Undercurve: RR@20X MFS 10/5/20
0I00078-11RE2	Hg-CVAFS-T-7030	23			Undercurve: RR@20X MFS 10/5/20
0I00078-22RE2	Hg-CVAFS-T-7030	24			Undercurve: RR@20X MFS 10/5/20
0J08011-CCV4	QC	25	2001809		
0J08011-CCB4	QC	26			

[Signature] 10/8/20
 Samples Loaded By Date

[Signature] 10/8/20
 Data Processed By Date

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst: MFS	Sequence(s) #: 0J08011
Reviewer:	Dataset ID(s): THg26003-201007-1
Date: 10/8/2020	WO (s) #: 0I00047, 0I00078
Batch #(s): F009384, F009413	

• Select the correct preparation method.

Analyte	Prep Method	Matrix
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2985	FSTM Trap 70:30 Digest Air/Gas
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2807	Modified Cold Aqua Regia Sed/Soil
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2821	Shared Bomb- HF/HNO3/HCl Digest Sed/Soil
<input type="checkbox"/> THg	EFTM-T-TM-SOP2825	Nitric Acid Oven Bomb Sed/Soil
<input checked="" type="checkbox"/> THg	EFAFS-T-AFS-SOP2795	70:30 Digest Tissue
<input type="checkbox"/> THg	EFAFS-T-AFS-SOP2800	KCl Trap BrCl Oxidation Air/Gas
<input type="checkbox"/> THg	EFTM-T-TM-SOP2837	Shared Nitric Tissue
<input type="checkbox"/> THg	EFSR-P-SP-SOP2796	BrCl Oxidation Water
<input type="checkbox"/> Hg0	NA	NA Water
<input type="checkbox"/> Inorg Hg	NA	NA Water

Analyst Initials: MFS Reviewer Initials: PGS

- | | | | |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|------------------------------|
| 1. Compare SampleID with Benchsheet/Sequence/Raw Data (Have all samples been imported?) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 2. Check for transcription errors from Excel spreadsheet (or Prep Benchsheet)/Raw data | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) On raw data (instrument print-out), does correct file (dataset ID#) name appear in description? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Naming convention: THg26001-yymmdd-1 or THg26002-yymmdd-1 | | | |
| (b) Check 5% of transcription from Instrument print-out and Excel file | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Compare the "Dilute" and "Peak (raw)" columns to "Dilution" and "Uncorrected Result" in Excel | | | |
| (c) Check standards & reagents in sequence & bench sheet for correct usage (expiries). | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (d) Check and compare masses (review prep benchsheet) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (e) Check & compare initial & final volumes | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| (f) Do aliquots and dilutions written on benchsheet match those in Excel? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| 50 ml / aliquot = Excel dilution value | | | |
| (g) Is the sequence #, analyst, date, and instrument # on the QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (h) Is the analysis status correct? (analyzed/initial review/reviewed) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) Original prep bench sheet added to data package? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (j) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 3. High QA? WO#(s)/Client(s): _____ | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 4. Client specific QC? (if Yes, refer to Project Notes/LIMS) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (a) Have the QC requirements been met for all WO#s? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (b) Prep blanks corrections/assigned properly | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 5a. 20 or fewer samples in batch? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (i) 3 PBs, 1 LCS(or BS), 1 LCSD(or BSD), 1 DUP/Batch 1 MS/MSD (or AS/ASD)/10 samples? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| (ii) 1 CCV and 1 CCB every 10 analytical runs? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0J08011
Reviewer:		Dataset ID(s):	THg26003-201007-1
Date:	10/8/2020	WO (s) #:	0I00047, 0I00078
Batch #(s):	F009384, F009413		

Analyst Initials MFS

Reviewer Initials PGS

- | | | | | |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------|-----------------------------------------|--------------------------|
| 5b. Has the B/C section data been uploaded? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| QA/QC Data Checked | | | | |
| 6. RSD CF ($\leq 15\%$) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 7. The calibration curve included a minimum of 5 Standards | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 8. 1st Calibration Standard % Recoveries EPA 1631E (75-125%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| 9. ICV and CCV % Recoveries EPA 1631E (77-123%) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 10. Do all calibration points pass acceptance criteria? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 11. Are qualifiers consistent with the data review flowcharts? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 12. Explain any items on the failed data report from Element | | | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 13. Are the individual Preparation Blanks < PQL or <2.2xMDL for WI (refer to appropriate prep method PQL list) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| (a) If not < PQL or <2.2xMDL for WI, note which PB(s) are above control limit: | | | | |
| (b) Is the mean PB < PQL or <2.2xMDL for WI (for appropriate qualification)? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| (c) Was a BrCl Blank analyzed for each preservation level? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| (d) Are Preparation Blanks summarized on QC page? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 14. Filtration Blank Prepared (if yes, use FB qualifier) | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> |
| (a) Filtration Blank prep date same as associated samples' prep date | | | | |
| (b) Filtration Blank absolute value < PQL or <2.2xMDL for WI | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 15. IBLs (3 minimum) individually < 0.50 ng/L, mean < 0.25 ng/L and STD of 0.10 ng/L? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 16. CCBs individually < 0.50 ng/L or 2.2 x MDL for WI? | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | | <input type="checkbox"/> |
| Comments: _____ | | | | |
| 17. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done) | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> |
| 18. Is the correct 'Source' designated for MD/MS/MSD? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | <input type="checkbox"/> |
| 19. For digested preps: was there a spike witness signature & date on the prep bench sheet? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A | <input type="checkbox"/> |

Peer Review Check List for THg by 2600 CV-AFS (SOP2822) 2016 Rev 1 (04/1/2016)

Analyst:	MFS	Sequence(s) #:	0J08011
Reviewer:		Dataset ID(s):	THg26003-201007-1
Date:	10/8/2020	WO (s) #:	0I00047, 0I00078
Batch #(s):	F009384, F009413		

Analyst Initials MFS Reviewer Initials RGS

- | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------|-----------------------------------------|
| 20. MS/MSD Spiked at least 1-5 X ambient or 5x MRL (whichever is higher) ? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| Comments: _____ | | | |
| 21. Are all samples within instrument calibration range? (or at minimum dilution size) | <input checked="" type="checkbox"/> PASS | <input type="checkbox"/> FAIL | <input type="checkbox"/> |
| Comments: _____ | | | |
| 22. Are the samples run at the correct dilution level for the method? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | |
| Comments: _____ | | | |
| 23. Dissolved < Total (if applicable) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 24. Effluent < Influent (visually confirm if needed) | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 25. Are re-runs noted with reason? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> N/A |
| Comments: _____ | | | |
| 26. FSTM Datasets: Check to ensure the 'Response' & 'Initial Result' columns match in both the Excel dataset & LIMS for the FSTM A (in sequence) & B/C (in batch) traps? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 27. Is the B trap <5% A Traps | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 28. Are spiked trap recoveries 75-125% of true value? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 29. Have non-reportable samples been imported into LIMS and clicked to non-reportable? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| Comments: _____ | | | |
| 30. Have re-extracts been created for non-reportable samples? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 31. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning. | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 32. Does the data set need scanning? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A |
| 33. Does the dataset have an LOQ/LOQ or DOC? | <input type="checkbox"/> YES | | <input checked="" type="checkbox"/> N/A |
| 34. Water samples: has the preservation log been included in dataset for final volume verification? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |
| 35. Water samples-is the final volume correct in the sequence? | <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A |

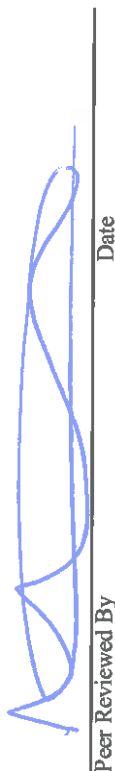
Files located at: \\Cuprum\gen_admin\Quality Assurance\Training Master\DOCs

- | | | | | | |
|-----------------------------------------------------|------------|----------------------------------|-----------------------------------------|----------------------------------------|--------------------------|
| 36. Date of analyst IDOC/CDOC: _____ | 3/2/20 | IDOC/CDOC within last 12 months? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 37. Date of analyst's SOP reading for method: _____ | 3/2/20 | Current SOP revision read? | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> |
| 38. Date of LOD: _____ | 12/29/2019 | LOD within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |
| 39. Date of LOQ: _____ | 12/29/2019 | LOQ within last 3 months? | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | <input type="checkbox"/> |

Data can not be reported without a current IDOC/CDOC, LOD or LOQ.

Failing Data Report - 0J08011

Sample ID Analysis Result MRL Dup Source True Units % Rec. Rec. Rec. RPD RPD Over Cal Failure Qualifier



[Signature]
Analyst Reviewed By _____ Date 10/15/20

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue

Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion

Prepared: 9/29/2020

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009384-BLK1	Blank	0.25	20					
F009384-BLK2	Blank	0.25	20					
F009384-BLK3	Blank	0.25	20					
F009384-BS1	LCS	0.25	20	2002032	20			
F009384-BSD1	LCS Dup	0.25	20	2002032	20			
F009384-MS1	Matrix Spike [0100047-65]	0.2643	20	2001204	100			
F009384-MS2	Matrix Spike [0100047-91]	0.2589	20	2001204	100			
F009384-MS3	Matrix Spike [0100047-65]	0.2643	20					E-01, RR OF MS1 @ 400X. EMB 10/2/20
F009384-MS4	Matrix Spike [0100047-65RE2]	0.2643	20	2001204	100			RR MS1@1000x MFS 10/5/2020
F009384-MS5	Matrix Spike [0100047-65RE3]	0.2643	20	2001204	100			CCV Fail: RR MS1 @1000x MFS 10/7/2020
F009384-MSD1	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			
F009384-MSD2	Matrix Spike Dup [0100047-91]	0.2648	20	2001204	100			
F009384-MSD3	Matrix Spike Dup [0100047-65]	0.2606	20	2001204	100			Added 10/5/2020 by MFS
F009384-MSD4	Matrix Spike Dup [0100047-65RE2]	0.2606	20	2001204	100			RR MSD1@1000x MFS 10/5/2020
F009384-MSD5	Matrix Spike Dup [0100047-65RE3]	0.2606	20	2001204	100			CCV Fail: RR MSD1 @1000x MFS 10/7/2020

Standard ID(s):

2001204
2002032

Description:

THg 1,000ng/mL Secondary Spiking Standard
THg 100ng/mL Primary Spiking Standard

Expiration:

05-Nov-20 00:00
05-Nov-20 00:00

Reagent ID(s):

2001276
2001977
2001978
2001979
2002050
2002190
2002218
2002305
2002353
2002354

Description:

25% Hydroxylamine-HCl working solution
THg Dilute 1% BrCl
THg 2% BrCl
THg Washstation (0.5% BrCl)
Boiling Chips for Trace Metals
70/30 Digestion Acid
3% SnCl2 THg reductant
5% BrCl
25% Hydroxylamine-HCl working solution
THg Washstation (0.5% BrCl)

Expiration:

03-Oct-20 00:00
07-Feb-21 00:00
03-Oct-20 00:00
20-Feb-21 00:00
08-Sep-21 00:00
09-Feb-21 00:00
07-Feb-21 00:00
01-Apr-21 00:00
07-Feb-21 00:00

PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100047-65	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD	
0100047-65RE1	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD Added 10/2/2020 by EMB	RR @ 1000X. EMB 10/2/20
0100047-65RE2	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD RR @ 1000X. EMB 10/2/20	E-01: RR@400X MFS 10/5/20
0100047-65RE3	OL-01_20LT301_091020_01_LOB_TA	0.2591	20	QC	-	eezer 23	MS/MSD E-01: RR@400X MFS 10/5/20	CCV Fail: RR@1000x MFS 10/7/2020
0100047-91	SVE-01_20LT401_091020_01_LOB_TA	0.2646	20	QC	-	S&R	MS/MSD	
0100047-BI	OL-01_20LT313_091020_17_LOB_TA	0.2691	20	-	-	S&R		
0100047-BJ	OL-01_20LT313_091020_18_LOB_TA	0.2573	20	-	-	S&R		
0100047-BK	OL-01_20LT314_091020_19_LOB_TA	0.2622	20	-	-	S&R		
0100047-BL	OL-01_20LT314_091020_20_LOB_TA	0.2557	20	-	-	S&R		
0100047-BM	OL-01_20LT323_091020_15_LOB_TA	0.2688	20	-	-	S&R		
0100047-BN	OL-01_20LT324_091020_16_LOB_TA	0.2668	20	-	-	S&R		
0100047-BO	0B-01_20ET606_091020_05_TOM_WB	0.2644	20	-	-	S&R		
0100047-BP	0B-01_20ET607_091020_06_TOM_WB	0.2634	20	-	-	S&R		
0100047-BQ	0B-01_20ET607_091020_07_TOM_WB	0.2551	20	-	-	S&R		
0100047-BR	0B-01_20ET607_091020_08_TOM_WB	0.2677	20	-	-	S&R		
0100047-BS	0B-01_20ET607_091020_09_TOM_WB	0.2599	20	-	-	S&R		
0100047-BT	0B-01_20ET609_091020_10_TOM_WB	0.2672	20	-	-	S&R		
0100047-BU	0B-01_20ET609_091020_11_TOM_WB	0.2621	20	-	-	S&R		
0100047-BV	0B-01_20ET611_091020_12_TOM_WB	0.2704	20	-	-	S&R		

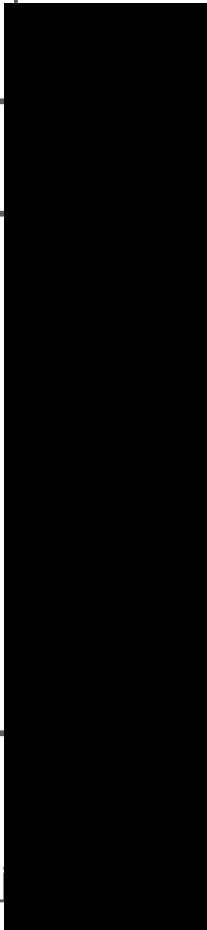
PREPARATION BENCH SHEET

F009384

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/29/2020

0100047-BW	0B-01_20ET613_091020_13_TOM_WB	0.2617	20	-	-	S&R
0100047-BX	0B-01_20ET613_091020_14_TOM_WB	0.2691	20	-	-	S&R
0100047-BY	0B-01_20ET613_091020_15_TOM_WB	0.2645	20	-	-	S&R
0100047-BZ	0B-01_20ET614_091020_16_TOM_WB	0.252	20	-	-	S&R



PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue **Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion** **Prepared: 9/30/2020**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F009413-BLK1	Blank	0.25	20					
F009413-BLK2	Blank	0.25	20					
F009413-BLK3	Blank	0.25	20					
F009413-BLK4	Pre-homogenization blank 092320	0.2508	20					WO 0100078-60
F009413-BLK5	Post-homogenization blank 092320	0.2579	20					WO 0100078-61
F009413-BLK6	Post-homogenization Blank 092420	0.2851	20					WO 0100078-62
F009413-BS1	LCS	0.25	20	2002032	20			
F009413-BSD1	LCS Dup	0.25	20	2002032	20			
F009413-MS1	Matrix Spike [0100078-04]	0.2678	20	2001204	100			
F009413-MS2	Matrix Spike [0100078-06]	0.1376	10	2001204	100			
F009413-MSD1	Matrix Spike Dup [0100078-04]	0.2594	20	2001204	100			
F009413-MSD2	Matrix Spike Dup [0100078-06]	0.1383	10	2001204	100			

Standard ID(s):
2001204
2002032

Description:
THg 1,000ng/mL Secondary Spiking Standard
THg 100ng/mL Primary Spiking Standard

Expiration:
05-Nov-20 00:00
05-Nov-20 00:00

Reagent ID(s):

2001276 25% Hydroxylamine-HCl working solution
2001977 THg Dilute 1% BrCl
2001979 THg Washstation (0.5% BrCl)
2002050 Boiling Chips for Trace Metals
2002190 70/30 Digestion Acid
2002218 3% SnCl2 THg reductant
2002304 70/30 Digestion Acid
2002305 5% BrCl
2002353 25% Hydroxylamine-HCl working solution
2002354 THg Washstation (0.5% BrCl)

Expiration:

03-Oct-20 00:00
07-Feb-21 00:00
03-Oct-20 00:00
20-Feb-21 00:00
08-Sep-21 00:00
09-Feb-21 00:00
30-Mar-21 00:00
07-Feb-21 00:00
01-Apr-21 00:00
07-Feb-21 00:00

PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals – EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/30/2020

Lab Number	Sample ID	Initial (g)	Final (mL)	QC Sample	Sample Specs.	Location	Sample Comments	Analysis Comments
0100078-01	ES-FP_20ET711_091020_01_TOM_WB	0.259	20	-	-	S&R		
0100078-02	ES-FP_20ET717_091020_02_TOM_WB	0.2607	20	-	-	S&R		
0100078-03	ES-FP_20ET741_091520_03_TOM_WB	0.2656	20	-	-	S&R		
0100078-04	ES-FP_20ET755_091520_04_TOM_WB	0.2548	20	QC	-	S&R	MS/MSD	
0100078-05	ES-FP_20ET756_091520_05_TOM_WB	0.2691	20	-	-	S&R		
0100078-06	ES-FP_20SN001_091120_01_RAS_WB	0.1294	10	QC	-	S&R	MS/MSD	
0100078-07	ES-FP_20SN001_091120_02_RAS_WB	0.2573	20	-	-	S&R		
0100078-08	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R		
0100078-08RE1	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-08RE2	FRB-02_20ET653_091520_01_TOM_WB	0.2536	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-09	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R		
0100078-09RE1	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-09RE2	FRB-02_20ET654_091520_02_TOM_WB	0.2556	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-10	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R		
0100078-10RE1	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
0100078-10RE2	FRB-02_20ET659_091520_03_TOM_WB	0.2548	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20
0100078-11	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R		
078-11RE1	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Added 10/5/2020 by MFS	Undercurve: RR@20X MFS 10/5/20
078-11RE2	FRB-02_20ET659_091520_04_TOM_WB	0.2568	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20	CCV Fail: RR@20X MFS 10/7/20

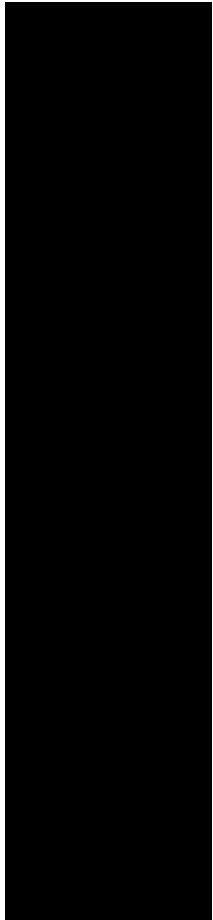
PREPARATION BENCH SHEET

F009413

Eurofins Frontier Global Sciences, LLC

Matrix: Tissue Prepared using: Trace Metals - EFGS SOP2795 Nitric/Sulfuric Hg Digestion Prepared: 9/30/2020

0100078-13	ES-02_20ET909_091620_01_TOM_WB	0.2629	20	-	-	S&R	
0100078-14	ES-02_20ET924_091820_02_TOM_WB	0.2576	20	-	-	S&R	
0100078-15	ES-02_20ET934_091820_03_TOM_WB	0.2553	20	-	-	S&R	
0100078-17	ES-02_20ET941_091820_05_TOM_WB	0.2643	20	-	-	S&R	
0100078-19	FRB-01_20LT620_091720_02_LOB_TA	0.2539	20	-	-	S&R	
0100078-20	FRB-01_20LT621_092020_03_LOB_TA	0.2634	20	-	-	S&R	
0100078-21	FRB-01_20LT627_092020_04_LOB_TA	0.258	20	-	-	S&R	
0100078-22	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	
0100078-22RE1	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Undercurve: RR@20X MFS 10/5/20
0100078-22RE2	FRB-02_20ET662_091520_05_TOM_WB	0.265	20	-	-	S&R	Added 10/5/2020 by MFS Undercurve: RR@20X MFS 10/5/20
0100078-23	OL-01_20ET866_091820_02_TOM_WB	0.2302	20	-	-	S&R	CCV Fail: RR@20X MFS 10/7/20





Analysis Datasheet for Total Mercury

Date of Analysis: October 07, 2020
 Instrument #: Hg2600-3
 LIMS Sequence #: 008010_010801.1

Analyst: MFS
 Units ng/L

Calibration Statistics:

LabNumber	n	True Val	Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.50 ng/L	187.63 units	375.27	123.94 units	247.88	107.8 %Rec
SEQ-CAL2	1	1.00 ng/L	294.11 units	294.11	230.42 units	230.42	100.3 %Rec
SEQ-CAL3	1	5.00 ng/L	1190.70 units	238.14	1127.01 units	225.40	98.1 %Rec
SEQ-CAL4	1	20.00 ng/L	4389.20 units	219.46	4325.50 units	216.28	94.1 %Rec
SEQ-CAL5	1	40.00 ng/L	9233.07 units	230.83	9169.38 units	229.23	99.7 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF 229.84 Corr. St. Dev RF +/- 11.51 Corr. RSD CF 5.0% RSD Uncorr. Mean RF 271.56

Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-IBL	3	63.69 units	±9.03	0.23 ng/L	±0.03

Preparation Blanks

Sample Type	Batch ID	n	Mean	Std Dev
BLK	1	3	4.091 ng/L	±3.936
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	2	-0.523 ng/L	±0.005
BLK	5	3	0.809 ng/L	±1.424
BLK	6	0	0.000 ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-IBL1	1	10/7/2020 11:35:30 AM	4967-1.RAW	11:35:30 AM	62.78			-0.9	-0.004	-0.004	ng/L	
Hg2600-3	00	CAL	SEQ-IBL2	1	10/7/2020 11:39:36 AM	4968-1.RAW	11:39:36 AM	55.16			-8.5	-0.037	-0.037	ng/L	
Hg2600-3	00	CAL	SEQ-IBL3	1	10/7/2020 11:43:48 AM	4969-1.RAW	11:43:48 AM	73.14			9.4	0.041	0.041	ng/L	
Hg2600-3	00	CAL	SEQ-CAL1	1	10/7/2020 11:47:56 AM	4970-1.RAW	11:47:56 AM	187.63			123.9	0.539	0.539	ng/L	
Hg2600-3	00	CAL	SEQ-CAL2	1	10/7/2020 11:52:05 AM	4971-1.RAW	11:52:05 AM	294.11			230.4	1.003	1.003	ng/L	
Hg2600-3	00	CAL	SEQ-CAL3	1	10/7/2020 11:56:13 AM	4972-1.RAW	11:56:13 AM	1190.70			1127.0	4.903	4.903	ng/L	
Hg2600-3	00	CAL	SEQ-CAL4	1	10/7/2020 12:00:22 PM	4973-1.RAW	12:00:22 PM	4389.20			4325.5	18.819	18.819	ng/L	
Hg2600-3	00	CAL	SEQ-CAL5	1	10/7/2020 12:04:31 PM	4974-1.RAW	12:04:31 PM	9233.07			9169.4	39.894	39.894	ng/L	
Hg2600-3	00	CAL	SEQ-ICV1	1	10/7/2020 12:08:41 PM	4975-1.RAW	12:08:41 PM	1295.48			1231.8	5.359	5.359	ng/L	
Hg2600-3	00	CAL	SEQ-ICB1	1	10/7/2020 12:12:50 PM	4976-1.RAW	12:12:50 PM	80.79			17.1	0.074	0.074	ng/L	
Hg2600-3	00	SAM	F009421-BS1	20	10/7/2020 12:16:59 PM	4977-1.RAW	12:16:59 PM	4851.07			4851.07	386.383	386.383	ng/L	F009421
Hg2600-3	00	SAM	F009421-BSD1	20	10/7/2020 12:21:09 PM	4978-1.RAW	12:21:09 PM	4286.20			4232.5	364.205	364.205	ng/L	F009421
Hg2600-3	00	BLK	F009421-BLK1	10	10/7/2020 12:25:18 PM	4979-1.RAW	12:25:18 PM	133.86			70.2	0.305	0.305	ng/L	F009421
Hg2600-3	00	BLK	F009421-BLK2	10	10/7/2020 12:29:27 PM	4980-1.RAW	12:29:27 PM	257.73			194.0	0.844	0.844	ng/L	F009421
Hg2600-3	00	BLK	F009421-BLK3	10	10/7/2020 12:33:36 PM	4981-1.RAW	12:33:36 PM	81.59			17.9	0.078	0.078	ng/L	F009421
Hg2600-3	00	SAM	0100073-AC	50	10/7/2020 12:37:45 PM	4982-1.RAW	12:37:45 PM	1449.93			1386.2	5.949	5.949	ng/L	F009421
Hg2600-3	00	SAM	F009421-MS1	400	10/7/2020 12:41:55 PM	4983-1.RAW	12:41:55 PM	3058.73			2995.0	5208.235	5208.235	ng/L	F009421
Hg2600-3	00	SAM	F009421-MSD1	400	10/7/2020 12:46:04 PM	4984-1.RAW	12:46:04 PM	2462.61			2398.9	10.427	10.427	ng/L	F009421
Hg2600-3	00	SAM	0100073-AD	50	10/7/2020 12:50:13 PM	4985-1.RAW	12:50:13 PM	694.40			630.7	4170.800	4170.800	ng/L	F009421
Hg2600-3	00	SAM	F009421-MS2	400	10/7/2020 12:54:22 PM	4986-1.RAW	12:54:22 PM	2181.01			2117.3	133.114	133.114	ng/L	F009421
Hg2600-3	00	CAL	SEQ-CCV1	1	10/7/2020 12:58:32 PM	4987-1.RAW	12:58:32 PM	1259.24			1195.5	5.202	5.202	ng/L	F009421
Hg2600-3	00	CAL	SEQ-CCB1	1	10/7/2020 13:02:41 PM	4988-1.RAW	1:02:41 PM	80.73			-3.0	-0.013	-0.013	ng/L	
Hg2600-3	00	SAM	F009421-MSD2	400	10/7/2020 13:06:50 PM	4989-1.RAW	1:06:50 PM	2320.46			2256.8	3923.409	3923.409	ng/L	F009421
Hg2600-3	00	SAM	0100073-AE	50	10/7/2020 13:10:59 PM	4990-1.RAW	1:10:59 PM	1909.44			1845.7	7.949	7.949	ng/L	F009421
Hg2600-3	00	SAM	0100073-AF	50	10/7/2020 13:15:09 PM	4991-1.RAW	1:15:09 PM	2490.59			2426.9	10.477	10.477	ng/L	F009421
Hg2600-3	00	SAM	0100073-AG	50	10/7/2020 13:19:18 PM	4992-1.RAW	1:19:18 PM	3477.44			3413.7	14.771	14.771	ng/L	F009421
Hg2600-3	00	SAM	0100073-AH	50	10/7/2020 13:23:27 PM	4993-1.RAW	1:23:27 PM	1076.38			1012.7	4.324	4.324	ng/L	F009421
Hg2600-3	00	SAM	0100073-AI	50	10/7/2020 13:27:36 PM	4994-1.RAW	1:27:36 PM	2817.06			2753.4	11.898	11.898	ng/L	F009421
Hg2600-3	00	SAM	0100073-AJ	50	10/7/2020 13:31:45 PM	4995-1.RAW	1:31:45 PM	3098.14			3029.4	13.099	13.099	ng/L	F009421
Hg2600-3	00	SAM	0100073-AK	50	10/7/2020 13:35:55 PM	4996-1.RAW	1:35:55 PM	3097.82			3034.1	13.119	13.119	ng/L	F009421
Hg2600-3	00	SAM	0100073-AL	50	10/7/2020 13:40:04 PM	4997-1.RAW	1:40:04 PM	840.69			777.0	3.299	3.299	ng/L	F009421
Hg2600-3	00	SAM	0100073-AM	50	10/7/2020 13:44:14 PM	4998-1.RAW	1:44:14 PM	1280.57			1216.9	5.213	5.213	ng/L	F009421
Hg2600-3	00	CAL	SEQ-CCV2	1	10/7/2020 13:48:23 PM	4999-1.RAW	1:48:23 PM	1283.95			1189.7	5.176	5.176	ng/L	F009421
Hg2600-3	00	CAL	SEQ-CCB2	1	10/7/2020 13:52:32 PM	5000-1.RAW	1:52:32 PM	53.82			-10.1	-0.044	-0.044	ng/L	
Hg2600-3	00	SAM	0100073-AN	50	10/7/2020 13:56:42 PM	5001-1.RAW	1:56:42 PM	1107.93			1044.2	4.461	4.461	ng/L	F009421
Hg2600-3	00	SAM	0100073-AO	50	10/7/2020 14:00:53 PM	5002-1.RAW	2:00:53 PM	4101.79			4038.1	17.487	17.487	ng/L	F009421
Hg2600-3	00	SAM	0100073-AP	50	10/7/2020 14:05:02 PM	5003-1.RAW	2:05:02 PM	2981.99			2918.3	12.615	12.615	ng/L	F009421
Hg2600-3	00	SAM	0100073-AQ	50	10/7/2020 14:09:12 PM	5004-1.RAW	2:09:12 PM	5302.59			5238.9	22.712	22.712	ng/L	F009421
Hg2600-3	00	SAM	0100073-AR	50	10/7/2020 14:13:21 PM	5005-1.RAW	2:13:21 PM	1672.84			1608.9	6.918	6.918	ng/L	F009421
Hg2600-3	00	SAM	0100073-AS	50	10/7/2020 14:17:31 PM	5006-1.RAW	2:17:31 PM	2632.02			2568.3	11.092	11.092	ng/L	F009421
Hg2600-3	00	SAM	0100073-AT	50	10/7/2020 14:21:40 PM	5007-1.RAW	2:21:40 PM	2894.05			2830.4	12.233	12.233	ng/L	F009421
Hg2600-3	00	SAM	0100073-AU	50	10/7/2020 14:25:50 PM	5008-1.RAW	2:25:50 PM	194.95			131.3	0.489	0.489	ng/L	F009421
Hg2600-3	00	SAM	0100073-AV	50	10/7/2020 14:30:00 PM	5009-1.RAW	2:30:00 PM	182.83			119.1	0.437	0.437	ng/L	F009421
Hg2600-3	00	SAM	0100073-AW	50	10/7/2020 14:34:09 PM	5010-1.RAW	2:34:09 PM	2955.01			2891.3	12.580	12.580	ng/L	F009421
Hg2600-3	00	SAM	0100073-AX	1000	10/7/2020 14:38:19 PM	5011-1.RAW	2:38:19 PM	1227.42			1163.7	5.063	5.063	ng/L	F009384
Hg2600-3	00	CAL	SEQ-CCB3	1	10/7/2020 14:42:29 PM	5012-1.RAW	2:42:29 PM	54.33			-9.4	-0.041	-0.041	ng/L	
Hg2600-3	00	SAM	F009384-MS5	1000	10/7/2020 14:46:38 PM	5013-1.RAW	2:46:38 PM	3957.87			3894.2	16.943	16.943	ng/L	F009384
Hg2600-3	00	SAM	F009384-MSD5	1000	10/7/2020 14:50:48 PM	5014-1.RAW	2:50:48 PM	3921.79			3858.1	16.786	16.786	ng/L	F009384
Hg2600-3	00	SAM	0100078-ORR2	20	10/7/2020 14:54:58 PM	5015-1.RAW	2:54:58 PM	2896.97			2633.3	11.457	11.457	ng/L	F009413
Hg2600-3	00	SAM	0100078-ORR2	20	10/7/2020 14:59:08 PM	5016-1.RAW	2:59:08 PM	1579.00			1515.3	6.593	6.593	ng/L	F009413
Hg2600-3	00	SAM	0100078-10RE2	20	10/7/2020 15:03:18 PM	5017-1.RAW	3:03:18 PM	1392.33			1288.6	5.520	5.520	ng/L	F009413
Hg2600-3	00	SAM	0100078-11RE2	20	10/7/2020 15:07:28 PM	5018-1.RAW	3:07:28 PM	2614.51			2550.8	11.098	11.098	ng/L	F009413
Hg2600-3	00	SAM	0100078-22RE2	20	10/7/2020 15:11:38 PM	5019-1.RAW	3:11:38 PM	3028.66			2963.0	12.891	12.891	ng/L	F009413
Hg2600-3	00	SAM	F009438-BS1	20	10/7/2020 15:15:48 PM	5020-1.RAW	3:15:48 PM	2046.97			1983.3	8.655	8.655	ng/L	F009438
Hg2600-3	00	SAM	F009438-BS2	20	10/7/2020 15:19:58 PM	5021-1.RAW	3:19:58 PM	2040.52			1976.8	8.627	8.627	ng/L	F009438
Hg2600-3	00	SAM	F009438-BS3	20	10/7/2020 15:24:07 PM	5022-1.RAW	3:24:07 PM	2117.36			2053.7	8.961	8.961	ng/L	F009438
Hg2600-3	00	CAL	SEQ-CCV4	1	10/7/2020 15:28:17 PM	5023-1.RAW	3:28:17 PM	1177.45			1113.9	4.846	4.846	ng/L	

Instrument	Analyst	Sample Type	LabNumber	Dilution	Analyzed	FileID	RunEnd	Uncorrected Response	Batch ID	No PB Correction?	RESP	InitialResult	FinalResult	InitialUnits	Comments
Hg2600-3	00	CAL	SEQ-CCB4	1	10/7/2020 15:32:27	5024-1.RAW	3:32:27 PM	68.48			4.8	0.021	0.021	ng/L	
Hg2600-3	00	SAM	F009438-B5A	20	10/7/2020 15:36:37	5025-1.RAW	3:36:37 PM	2109.86	4		2046.2	8.929	178.573	ng/L	F009438
Hg2600-3	00	SAM	0100098-01	10	10/7/2020 15:40:46	5026-1.RAW	3:40:46 PM	53.55	4		-10.1	0.008	0.082	ng/L	F009438
Hg2600-3	00	BLK	F009438-BLK2	10	10/7/2020 15:44:56	5027-1.RAW	3:44:56 PM	51.75	4		-11.9	0.052	-0.520	ng/L	F009438
Hg2600-3	00	BLK	F009438-BLK3	10	10/7/2020 15:49:06	5028-1.RAW	3:49:06 PM	51.58	4		-12.1	-0.053	-0.527	ng/L	F009438
Hg2600-3	00	SAM	F009442-B5T	20	10/7/2020 15:53:16	5029-1.RAW	3:53:16 PM	4389.17	5		4325.5	18.779	375.577	ng/L	F009442
Hg2600-3	00	SAM	F009442-B5D1	20	10/7/2020 15:57:26	5030-1.RAW	3:57:26 PM	4247.40	5		4183.7	18.162	363.241	ng/L	F009442
Hg2600-3	00	BLK	F009442-BLK1	10	10/7/2020 16:01:35	5031-1.RAW	4:01:35 PM	106.23	5		42.5	0.185	1.851	ng/L	F009442
Hg2600-3	00	BLK	F009442-BLK2	10	10/7/2020 16:05:45	5032-1.RAW	4:05:45 PM	95.65	5		32.0	0.139	1.390	ng/L	F009442
Hg2600-3	00	BLK	F009442-BLK3	10	10/7/2020 16:09:55	5033-1.RAW	4:09:55 PM	44.99	5		-18.7	-0.081	-0.814	ng/L	F009442
Hg2600-3	00	SAM	0100073-03	50	10/7/2020 16:14:05	5034-1.RAW	4:14:05 PM	5785.063857	5		5721.4	24.876	1243.818	ng/L	F009442
Hg2600-3	00	CAL	SEQ-CCV5	1	10/7/2020 16:18:15	5035-1.RAW	4:18:15 PM	1173.37			1109.7	4.828	4.828	ng/L	
Hg2600-3	00	CAL	SEQ-CCB5	1	10/7/2020 16:22:25	5036-1.RAW	4:22:25 PM	61.25			-2.4	-0.011	-0.011	ng/L	
Hg2600-3	00	SAM	F009442-MS1	400	10/7/2020 16:26:35	5037-1.RAW	4:26:35 PM	2674.33	5		2610.6	11.356	4542.544	ng/L	F009442
Hg2600-3	00	SAM	F009442-MSD1	400	10/7/2020 16:30:44	5038-1.RAW	4:30:44 PM	2834.15	5		2770.5	12.052	4820.687	ng/L	F009442
Hg2600-3	00	SAM	0100073-41	50	10/7/2020 16:34:54	5039-1.RAW	4:34:54 PM	3477.57	5		3413.9	14.857	741.846	ng/L	F009442
Hg2600-3	00	SAM	F009442-MS2	400	10/7/2020 16:39:04	5040-1.RAW	4:39:04 PM	2641.31	5		2577.6	11.213	4485.079	ng/L	F009442
Hg2600-3	00	SAM	F009442-MSD2	400	10/7/2020 16:43:14	5041-1.RAW	4:43:14 PM	2679.12	5		2615.4	11.377	4550.886	ng/L	F009442
Hg2600-3	00	SAM	0100073-04	50	10/7/2020 16:47:24	5042-1.RAW	4:47:24 PM	211.29	5		147.6	0.626	31.298	ng/L	F009442
Hg2600-3	00	SAM	0100073-07	50	10/7/2020 16:51:34	5043-1.RAW	4:51:34 PM	3040.37	5		2976.7	12.935	646.738	ng/L	F009442
Hg2600-3	00	SAM	0100073-09	50	10/7/2020 16:55:43	5044-1.RAW	4:55:43 PM	3406.84	5		3343.1	14.529	726.461	ng/L	F009442
Hg2600-3	00	SAM	0100073-10	50	10/7/2020 16:59:54	5045-1.RAW	4:59:54 PM	3986.25	5		3922.6	17.050	852.505	ng/L	F009442
Hg2600-3	00	SAM	0100073-11	50	10/7/2020 17:04:04	5046-1.RAW	5:04:04 PM	218.20	5		154.5	0.656	32.802	ng/L	F009442
Hg2600-3	00	CAL	SEQ-CCV6	1	10/7/2020 17:08:14	5047-1.RAW	5:08:14 PM	1134.20			1070.5	4.658	4.658	ng/L	
Hg2600-3	00	CAL	SEQ-CCB6	1	10/7/2020 17:12:24	5048-1.RAW	5:12:24 PM	57.78			-5.9	-0.026	-0.026	ng/L	
Hg2600-3	00	SAM	0100073-17	50	10/7/2020 17:16:34	5049-1.RAW	5:16:34 PM	2933.57	5		2869.9	12.470	623.505	ng/L	F009442
Hg2600-3	00	SAM	0100073-46	50	10/7/2020 17:20:44	5050-1.RAW	5:20:44 PM	3341.88	5		3278.2	14.247	712.330	ng/L	F009442
Hg2600-3	00	SAM	0100073-52	50	10/7/2020 17:24:54	5051-1.RAW	5:24:54 PM	2969.15	5		2903.5	12.625	631.246	ng/L	F009442
Hg2600-3	00	SAM	0100073-44	50	10/7/2020 17:28:04	5052-1.RAW	5:28:04 PM	1761.67	5		1698.0	7.371	368.570	ng/L	F009442
Hg2600-3	00	SAM	WS					39.36			Error	#VALUE!			
Hg2600-3	00	SAM	0100073-93	50	10/7/2020 17:33:15	5053-1.RAW	5:33:15 PM	3344.71	6		3281.0	14.275	713.755	ng/L	F009442
Hg2600-3	00	CAL	SEQ-CCV7	1	10/7/2020 17:37:25	5054-1.RAW	5:37:25 PM	1152.44			1088.7	4.737	4.737	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	10/7/2020 17:41:35	5055-1.RAW	5:41:35 PM	60.24			-3.4	-0.015	-0.015	ng/L	
Hg2600-3	00	CAL	SEQ-CCB7	1	10/7/2020 17:45:45	5056-1.RAW	5:45:45 PM	60.24			-3.4	-0.015	-0.015	ng/L	

PK

Sample ID	Location	Phase	Dilute	Blank	Conc (ppb)	MS%	Final Conc	Rec%	QA	Raw File	Run Time	Peak (Raw)	Control (Std)	Flags	Run Count	Comment
Total Mercury																
EPA1631																
Operator MFS	BlankSt	63.693	Calib Eqn:	Conc = (Area-63.69	Run Date:	10/7/2020	Blank SD:									
Method #1631	Thg260	CalibFa	229.84	Status:	QC Warnings:	7	QC E Run Time:	11:16:04	Blank RSD%:							
Method #1631	R:	0.9996	R2:	0.9992												
Descrip	Thg26003-201007-1															
Blank																
Clean																
WS																
WS																
SEQ-IBL1	A1	1	0.00	0.27												
SEQ-IBL2	A2	1	0.00	0.24												
SEQ-IBL3	A3	1	0.00	0.32												
SEQ-CAL1	A4	1	63.69	0.54												
SEQ-CAL2	A5	1	63.69	1.00												
SEQ-CAL3	A6	1	63.69	4.90												
SEQ-CAL4	A7	1	63.69	18.82												
SEQ-CAL5	A8	1	63.69	39.89												
SEQ-ICV1	A9	1	63.69	5.36												
SEQ-ICB1	A10	1	63.69	0.07												
F009421-BS1	A11		63.69	19.52												F009421
F009421-BSD1	A12		63.69	18.41												F009421
F009421-BLK1	A13		63.69	0.31												F009421
F009421-BLK2	A14		63.69	0.84												F009421
F009421-BLK3	A15		63.69	0.08												F009421
0100073-AC	A16		63.69	6.03												F009421
F009421-MS1	A17		63.69	13.03												F009421
F009421-MSD1	A18		63.69	10.44												F009421
0100073-AD	A19		63.69	2.74												F009421
F009421-MS2	A20		63.69	9.21												F009421
SEQ-CCV1	A21		63.69	5.20												F009421
SEQ-CCB1	B1		63.69	0.00												F009421
F009421-MSD2	B2		63.69	9.82												F009421
0100073-AE	B3		63.69	8.03												F009421
0100073-AF	B4		63.69	10.56												F009421
0100073-AG	B5		63.69	14.85												F009421
0100073-AH	B6		63.69	4.41												F009421
0100073-AI	B7		63.69	11.98												F009421
0100073-AJ	B8		63.69	13.18												F009421
0100073-AK	B9		63.69	13.20												F009421
0100073-AL	B10		63.69	3.38												F009421
0100073-AM	B11		63.69	5.28												F009421
SEQ-CCV2	B12		63.69	5.18												F009421
SEQ-CCB2	B13		63.69	0.00												F009421
0100073-AN	B14		63.69	4.54												F009421
0100073-AO	B15		63.69	17.57												F009421
0100073-AP	B16		63.69	12.70												F009421
0100073-AQ	B17		63.69	22.79												F009421
0100073-AR	B18		63.69	7.00												F009421
0100073-AS	B19		63.69	11.17												F009421
0100073-AT	B20		63.69	12.31												F009421
0100073-AU	B21		63.69	0.57												F009421

P2

0100073-AV	C1	63.69	0.52	5009-1.RAW	14:30:00	182.83	Sample	OK	1	F009421
0100047-65RE3	C2	63.69	12.58	5010-1.RAW	14:34:09	2955.01	Sample	OK	1	F009384
SEQ-CCV3	C3	63.69	5.06	5011-1.RAW	14:38:19	1227.42	Sample	OK	1	
SEQ-CCB3	C4	63.69	0.00	5012-1.RAW	14:42:29	54.33	Sample	OK	1	
F009384-MS5	C5	63.69	16.94	5013-1.RAW	14:46:38	3957.87	Sample	OK	1	F009384
F009384-MSD5	C6	63.69	16.79	5014-1.RAW	14:50:48	3921.79	Sample	OK	1	F009384
0100078-08RE2	C7	63.69	11.46	5015-1.RAW	14:54:58	2696.97	Sample	OK	1	F009413
0100078-09RE2	C8	63.69	5.52	5016-1.RAW	14:59:08	1579.00	Sample	OK	1	F009413
0100078-10RE2	C9	63.69	5.52	5017-1.RAW	15:03:18	1332.33	Sample	OK	1	F009413
0100078-11RE2	C10	63.69	11.10	5018-1.RAW	15:07:28	2614.51	Sample	OK	1	F009413
0100078-22RE2	C11	63.69	12.89	5019-1.RAW	15:11:38	3026.66	Sample	OK	1	F009413
F009438-BS1	C12	63.69	8.63	5020-1.RAW	15:15:48	2048.97	Sample	OK	1	F009438
F009438-BS2	C13	63.69	8.60	5021-1.RAW	15:19:58	2040.52	Sample	OK	1	F009438
F009438-BS3	C14	63.69	8.94	5022-1.RAW	15:24:07	2117.36	Sample	OK	1	F009438
SEQ-CCV4	C15	63.69	4.85	5023-1.RAW	15:28:17	1177.45	Sample	OK	1	
SEQ-CCB4	C16	63.69	0.02	5024-1.RAW	15:32:27	88.48	Sample	OK	1	
F009438-BS4	C17	63.69	8.90	5025-1.RAW	15:36:37	2109.86	Sample	OK	1	F009438
0100096-01	C18	63.69	0.00	5026-1.RAW	15:40:48	53.55	Sample	OK	1	F009438
F009438-BLK2	C19	63.69	0.00	5027-1.RAW	15:44:56	51.75	Sample	OK	1	F009438
F009438-BLK3	C20	63.69	0.00	5028-1.RAW	15:49:06	51.58	Sample	OK	1	F009438
F009442-BS1	C21	63.69	18.82	5029-1.RAW	15:53:16	4389.17	Sample	OK	1	F009442
F009442-BLK1	A1	63.69	18.20	5030-1.RAW	15:57:28	4247.40	Sample	OK	1	F009442
F009442-BLK2	A2	63.69	0.19	5031-1.RAW	16:01:35	106.23	Sample	OK	1	F009442
F009442-BLK3	A3	63.69	0.00	5032-1.RAW	16:05:45	95.65	Sample	OK	1	F009442
0100073-03	A4	63.69	0.00	5033-1.RAW	16:09:55	44.99	Sample	OK	1	F009442
SEQ-CCV5	A5	63.69	24.89	5034-1.RAW	16:14:05	5785.05	Sample	OK	1	F009442
SEQ-CCB5	A6	63.69	4.83	5035-1.RAW	16:18:15	1173.37	Sample	OK	1	
F009442-MS1	A7	63.69	0.00	5036-1.RAW	16:22:25	61.25	Sample	OK	1	F009442
F009442-MSD1	A8	63.69	11.36	5037-1.RAW	16:26:35	2674.33	Sample	OK	1	F009442
0100073-41	A9	63.69	12.05	5038-1.RAW	16:30:44	2834.15	Sample	OK	1	F009442
F009442-MS2	A10	63.69	14.85	5039-1.RAW	16:34:54	3477.57	Sample	OK	1	F009442
F009442-MSD2	A11	63.69	11.21	5040-1.RAW	16:39:04	2641.31	Sample	OK	1	F009442
0100073-04	A12	63.69	11.38	5041-1.RAW	16:43:14	2678.12	Sample	OK	1	F009442
0100073-07	A13	63.69	0.64	5042-1.RAW	16:47:24	211.29	Sample	OK	1	F009442
0100073-09	A14	63.69	12.96	5043-1.RAW	16:51:34	3040.37	Sample	OK	1	F009442
0100073-10	A15	63.69	14.55	5044-1.RAW	16:55:43	3406.84	Sample	OK	1	F009442
0100073-11	A16	63.69	17.07	5045-1.RAW	16:59:54	3986.25	Sample	OK	1	F009442
SEQ-CCV6	A17	63.69	0.67	5046-1.RAW	17:04:04	218.20	Sample	OK	1	F009442
SEQ-CCB6	A18	63.69	4.86	5047-1.RAW	17:08:14	1134.20	Sample	OK	1	F009442
0100073-17	A19	63.69	0.00	5048-1.RAW	17:12:24	57.78	Sample	OK	1	
0100073-46	A20	63.69	12.49	5049-1.RAW	17:16:34	2933.57	Sample	OK	1	F009442
0100073-52	A21	63.69	14.26	5050-1.RAW	17:20:44	3341.88	Sample	OK	1	F009442
0100073-44	B1	63.69	12.84	5051-1.RAW	17:24:54	2969.15	Sample	OK	1	F009442
WS	B2	63.69	7.38	5052-1.RAW	17:29:04	1761.67	Sample	OK	1	F009442
0100073-93	B3	63.69	0.00	5053-1.RAW	17:33:15	39.36	Sample	OK	1	
SEQ-CCV7	B4	63.69	14.28	5054-1.RAW	17:37:25	3344.71	Sample	OK	1	F009420
SEQ-CCB7	B5	63.69	4.74	5055-1.RAW	17:41:35	1152.44	Sample	OK	1	
WS		63.69	0.00	5056-1.RAW	17:45:45	60.24	Sample	OK	1	
WS		63.69	0.00	5057-1.RAW	17:49:56	30.24	Sample	OK	1	
WS		63.69	0.00	5058-1.RAW	17:54:07	28.22	Sample	OK	1	
WS		63.69	0.00	5059-1.RAW	17:58:18	23.47	Sample	OK	1	

Pg 3

WS
WS

5060-1.RAW
5061-1.RAW

18:02:28
18:06:39

20.43 Sample
21.49 Sample

OK OK
1 1

THg26003-201007-1

SEQ-IBL1	A1	SEQ-CCV2	B12		
SEQ-IBL2	A2	SEQ-CCB2	B13		
SEQ-IBL3	A3	0I00073-AN	B14		
SEQ-CAL1	A4	0I00073-AO	B15		
SEQ-CAL2	A5	0I00073-AP	B16		
SEQ-CAL3	A6	0I00073-AQ	B17		
SEQ-CAL4	A7	0I00073-AR	B18	F009442-BLK1	A2
SEQ-CAL5	A8	0I00073-AS	B19	F009442-BLK2	A3
SEQ-ICV1	A9	0I00073-AT	B20	F009442-BLK3	A4
SEQ-ICB1	A10	0I00073-AU	B21	0I00073-03	A5
F009421-BS1	A11	0I00073-AV	C1	SEQ-CCV5	A6
F009421-BSD1	A12	0I00047-65RE3	C2	SEQ-CCB5	A7
F009421-BLK1	A13	SEQ-CCV3	C3	F009442-MS1	A8
F009421-BLK2	A14	SEQ-CCB3	C4	F009442-MSD1	A9
F009421-BLK3	A15	F009384-MS5	C5	0I00073-41	A10
0I00073-AC	A16	F009384-MSD5	C6	F009442-MS2	A11
F009421-MS1	A17	0I00078-08RE2	C7	F009442-MSD2	A12
F009421-MSD1	A18	0I00078-09RE2	C8	0I00073-04	A13
0I00073-AD	A19	0I00078-10RE2	C9	0I00073-07	A14
F009421-MS2	A20	0I00078-11RE2	C10	0I00073-09	A15
SEQ-CCV1	A21	0I00078-22RE2	C11	0I00073-10	A16
SEQ-CCB1	B1	F009438-BS1	C12	0I00073-11	A17
F009421-MSD2	B2	F009438-BS2	C13	SEQ-CCV6	A18
0I00073-AE	B3	F009438-BS3	C14	SEQ-CCB6	A19
0I00073-AF	B4	SEQ-CCV4	C15	0I00073-17	A20
0I00073-AG	B5	SEQ-CCB4	C16	0I00073-46	A21
0I00073-AH	B6	F009438-BS4	C17	0I00073-52	B1
0I00073-AI	B7	0I00096-01	C18	0I00073-44	B2
0I00073-AJ	B8	F009438-BLK2	C19	WS	
0I00073-AK	B9	F009438-BLK3	C20	0I00073-93	B3
0I00073-AL	B10	F009442-BS1	C21	SEQ-CCV7	B4
0I00073-AM	B11	F009442-BSD1	A1	SEQ-CCB7	B5

Verified by: *[Signature]* 10/8/20



October 22, 2020

Patrick Garcia-Strickland
Eurofins Frontier Geosciences
5755 8th Street East
Tacoma, WA 98424-

Project Name: 0100047
Physis Project ID: 2009006-001

Dear Patrick,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 10/2/2020. A total of 155 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Organics
Percent Lipids by Gravimetric

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Misty Mercier
714 602-5320
Extension 202
mistymercier@physislabs.com

PROJECT SAMPLE LIST

Eurofins Frontier Geosciences

PHYSIS Project ID: 2009006-001

0100047

Total Samples: 2E

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
80859	L9-45_20LT001_091020_01_LOB_TA		9/10/2020	7:59	Tissue	Not Specified
80860	L9-45_20LT002_091020_02_LOB_TA		9/10/2020	7:59	Tissue	Not Specified
80861	L9-45_20LT004_091020_03_LOB_TA		9/10/2020	8:07	Tissue	Not Specified
80862	L9-45_20LT004_091020_04_LOB_TA		9/10/2020	8:07	Tissue	Not Specified
80863	L9-45_20LT005_091020_06_LOB_TA		9/10/2020	8:14	Tissue	Not Specified
80864	L9-45_20LT005_091020_07_LOB_TA		9/10/2020	8:14	Tissue	Not Specified
80865	L9-45_20LT005_091020_08_LOB_TA		9/10/2020	8:14	Tissue	Not Specified
80866	L9-45_20LT006_091020_05_LOB_TA		9/10/2020	8:14	Tissue	Not Specified
80867	L9-45_20LT007_091020_09_LOB_TA		9/10/2020	8:20	Tissue	Not Specified
80868	L9-45_20LT009_091020_10_LOB_TA		9/10/2020	8:26	Tissue	Not Specified
80869	L9-45_20LT009_091020_11_LOB_TA		9/10/2020	8:26	Tissue	Not Specified
80870	L9-45_20LT009_091020_12_LOB_TA		9/10/2020	8:26	Tissue	Not Specified
80871	CJ-04_20LT101_091020_01_LOB_TA		9/10/2020	8:54	Tissue	Not Specified
80872	CJ-04_20LT101_091020_02_LOB_TA		9/10/2020	8:54	Tissue	Not Specified
80873	CJ-04_20LT101_091020_03_LOB_TA		9/10/2020	8:54	Tissue	Not Specified
80874	CJ-04_20LT104_091020_04_LOB_TA		9/10/2020	9:05	Tissue	Not Specified
80875	CJ-04_20LT104_091020_05_LOB_TA		9/10/2020	9:05	Tissue	Not Specified
80876	CJ-04_20LT105_091020_06_LOB_TA		9/10/2020	9:11	Tissue	Not Specified
80877	L9-45_20LT009_091020_13_LOB_TA		9/10/2020	8:26	Tissue	Not Specified
80878	L9-45_20LT009_091020_14_LOB_TA		9/10/2020	8:26	Tissue	Not Specified
80879	1B-05_20ET001_091020_01_TOM_WI		9/10/2020	9:05	Tissue	Not Specified
80880	1B-05_20ET001_091020_02_TOM_WI		9/10/2020	9:05	Tissue	Not Specified
80881	1B-05_20ET001_091020_03_TOM_WI		9/10/2020	9:05	Tissue	Not Specified
80882	1B-05_20ET003_091020_04_TOM_WI		9/10/2020	9:15	Tissue	Not Specified
80883	CJ-04_20LT108_091020_07_LOB_TA		9/10/2020	9:17	Tissue	Not Specified
80884	CJ-04_20LT108_091020_08_LOB_TA		9/10/2020	9:17	Tissue	Not Specified
80885	CJ-04_20LT109_091020_09_LOB_TA		9/10/2020	9:26	Tissue	Not Specified
80886	1B-05_20ET003_091020_05_TOM_WI		9/10/2020	9:15	Tissue	Not Specified
80887	1B-05_20ET003_091020_06_TOM_WI		9/10/2020	9:15	Tissue	Not Specified
80888	1B-05_20ET003_091020_07_TOM_WI		9/10/2020	9:15	Tissue	Not Specified
80889	1B-05_20ET003_091020_08_TOM_WI		9/10/2020	9:15	Tissue	Not Specified
80890	1B-05_20ET004_091020_09_TOM_WI		9/10/2020	9:30	Tissue	Not Specified
80891	1B-05_20ET005_091020_10_TOM_WI		9/10/2020	9:38	Tissue	Not Specified
80892	1B-05_20ET005_091020_11_TOM_WI		9/10/2020	9:38	Tissue	Not Specified
80893	ES-FP_20LT201_091020_01_LOB_TA		9/10/2020	9:40	Tissue	Not Specified

Eurofins Frontier Geosciences

PHYSIS Project ID: 2009006-001

0100047

Total Samples: 2E

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
80894	ES-FP_20LT201_091020_02_LOB_TA		9/10/2020	9:40	Tissue	Not Specified
80895	ES-FP_20LT201_091020_03_LOB_TA		9/10/2020	9:40	Tissue	Not Specified
80896	ES-FP_20LT202_091020_04_LOB_TA		9/10/2020	9:40	Tissue	Not Specified
80897	ES-FP_20LT202_091020_05_LOB_TA		9/10/2020	9:40	Tissue	Not Specified
80898	ES-FP_20LT202_091020_06_LOB_TA		9/10/2020	9:40	Tissue	Not Specified
80899	ES-FP_20LT202_091020_07_LOB_TA		9/10/2020	9:40	Tissue	Not Specified
80900	ES-FP_20LT202_091020_08_LOB_TA		9/10/2020	9:40	Tissue	Not Specified
80901	IB-05_20ET007_091020_12_TOM_WI		9/10/2020	9:46	Tissue	Not Specified
80902	IB-05_20ET007_091020_13_TOM_WI		9/10/2020	9:46	Tissue	Not Specified
80903	IB-05_20ET007_091020_14_TOM_WI		9/10/2020	9:46	Tissue	Not Specified
80904	IB-05_20ET009_091020_15_TOM_WI		9/10/2020	9:58	Tissue	Not Specified
80905	ES-FP_20LT203_091020_09_LOB_TA		9/10/2020	10:06	Tissue	Not Specified
80906	ES-FP_20LT203_091020_10_LOB_TA		9/10/2020	10:06	Tissue	Not Specified
80907	ES-FP_20LT203_091020_11_LOB_TA		9/10/2020	10:06	Tissue	Not Specified
80908	ES-FP_20LT205_091020_12_LOB_TA		9/10/2020	10:14	Tissue	Not Specified
80909	ES-FP_20LT205_091020_13_LOB_TA		9/10/2020	10:14	Tissue	Not Specified
80910	ES-FP_20LT206_091020_14_LOB_TA		9/10/2020	10:14	Tissue	Not Specified
80911	ES-FP_20LT206_091020_15_LOB_TA		9/10/2020	10:14	Tissue	Not Specified
80912	IB-05_20ET009_091020_16_TOM_WI		9/10/2020	9:58	Tissue	Not Specified
80913	IB-05_20ET009_091020_17_TOM_WI		9/10/2020	9:58	Tissue	Not Specified
80914	IB-05_20ET009_091020_18_TOM_WI		9/10/2020	9:58	Tissue	Not Specified
80915	IB-05_20ET010_091020_19_TOM_WI		9/10/2020	10:06	Tissue	Not Specified
80916	IB-05_20ET011_091020_20_TOM_WI		9/10/2020	10:13	Tissue	Not Specified
80917	O-04_20ET503_091020_01_TOM_WI		9/10/2020	11:22	Tissue	Not Specified
80918	ES-FP_20LT207_091020_16_LOB_TA		9/10/2020	10:26	Tissue	Not Specified
80919	ES-FP_20LT208_091020_17_LOB_TA		9/10/2020	10:26	Tissue	Not Specified
80920	ES-FP_20LT208_091020_18_LOB_TA		9/10/2020	10:26	Tissue	Not Specified
80921	ES-FP_20LT208_091020_19_LOB_TA		9/10/2020	10:26	Tissue	Not Specified
80922	ES-FP_20LT209_091020_20_LOB_TA		9/10/2020	10:41	Tissue	Not Specified
80923	DL-01_20LT301_091020_01_LOB_TA		9/10/2020	10:58	Tissue	Not Specified
80924	DL-01_20LT301_091020_02_LOB_TA		9/10/2020	10:58	Tissue	Not Specified
80925	DL-01_20LT302_091020_03_LOB_TA		9/10/2020	10:58	Tissue	Not Specified
80926	DL-01_20LT304_091020_04_LOB_TA		9/10/2020	11:10	Tissue	Not Specified
80927	DL-01_20LT304_091020_05_LOB_TA		9/10/2020	11:10	Tissue	Not Specified
80928	DL-01_20LT304_091020_06_LOB_TA		9/10/2020	11:10	Tissue	Not Specified
80929	O-04_20ET503_091020_02_TOM_WI		9/10/2020	11:22	Tissue	Not Specified
80930	O-04_20ET506_091020_03_TOM_WI		9/10/2020	11:35	Tissue	Not Specified

Eurofins Frontier Geosciences

PHYSIS Project ID: 2009006-001

0100047

Total Samples: 2E

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
80931	O-04_20ET506_091020_04_TOM_WI		9/10/2020	11:35	Tissue	Not Specified
80932	O-04_20ET506_091020_05_TOM_WI		9/10/2020	11:35	Tissue	Not Specified
80933	O-04_20ET506_091020_06_TOM_WI		9/10/2020	11:35	Tissue	Not Specified
80934	O-04_20ET507_091020_07_TOM_WI		9/10/2020	11:45	Tissue	Not Specified
80935	O-04_20ET508_091020_08_TOM_WI		9/10/2020	11:48	Tissue	Not Specified
80936	DL-01_20LT305_091020_07_LOB_TA		9/10/2020	11:24	Tissue	Not Specified
80937	DL-01_20LT305_091020_08_LOB_TA		9/10/2020	11:24	Tissue	Not Specified
80938	DL-01_20LT306_091020_09_LOB_TA		9/10/2020	11:24	Tissue	Not Specified
80939	DL-01_20LT307_091020_10_LOB_TA		9/10/2020	11:37	Tissue	Not Specified
80940	O-04_20ET508_091020_09_TOM_WI		9/10/2020	11:48	Tissue	Not Specified
80941	O-04_20ET508_091020_10_TOM_WI		9/10/2020	11:48	Tissue	Not Specified
80942	O-04_20ET508_091020_11_TOM_WI		9/10/2020	11:48	Tissue	Not Specified
80943	O-04_20ET509_091020_12_TOM_WI		9/10/2020	11:54	Tissue	Not Specified
80944	O-04_20ET509_091020_13_TOM_WI		9/10/2020	11:54	Tissue	Not Specified
80945	O-04_20ET509_091020_14_TOM_WI		9/10/2020	11:54	Tissue	Not Specified
80946	O-04_20ET509_091020_15_TOM_WI		9/10/2020	11:54	Tissue	Not Specified
80947	O-04_20ET510_091020_16_TOM_WI		9/10/2020	12:01	Tissue	Not Specified
80948	O-04_20ET510_091020_17_TOM_WI		9/10/2020	12:01	Tissue	Not Specified
80949	VE-01_20LT401_091020_01_LOB_TA		9/10/2020	12:02	Tissue	Not Specified
80950	VE-01_20LT401_091020_02_LOB_TA		9/10/2020	12:02	Tissue	Not Specified
80951	VE-01_20LT401_091020_03_LOB_TA		9/10/2020	12:02	Tissue	Not Specified
80952	O-04_20ET511_091020_18_TOM_WI		9/10/2020	12:05	Tissue	Not Specified
80953	O-04_20ET511_091020_19_TOM_WI		9/10/2020	12:05	Tissue	Not Specified
80954	O-04_20ET513_091020_20_TOM_WI		9/10/2020	12:11	Tissue	Not Specified
80955	VE-01_20LT401_091020_04_LOB_TA		9/10/2020	12:02	Tissue	Not Specified
80956	VE-01_20LT402_091020_05_LOB_TA		9/10/2020	12:02	Tissue	Not Specified
80957	VE-01_20LT402_091020_06_LOB_TA		9/10/2020	12:02	Tissue	Not Specified
80958	VE-01_20LT402_091020_07_LOB_TA		9/10/2020	12:02	Tissue	Not Specified
80959	VE-01_20LT402_091020_08_LOB_TA		9/10/2020	12:02	Tissue	Not Specified
80960	VE-01_20LT403_091020_09_LOB_TA		9/10/2020	12:22	Tissue	Not Specified
80961	VE-01_20LT403_091020_10_LOB_TA		9/10/2020	12:22	Tissue	Not Specified
80962	VE-01_20LT404_091020_11_LOB_TA		9/10/2020	12:22	Tissue	Not Specified
80963	VE-01_20LT404_091020_12_LOB_TA		9/10/2020	12:22	Tissue	Not Specified
80964	CJ-04_20LT123_091220_12_LOB_TA		9/12/2020	8:41	Tissue	Not Specified
80965	L9-45_20L011_091220_15_LOB_TA		9/12/2020	8:03	Tissue	Not Specified
80966	L9-45_20L017_091220_16_LOB_TA		9/12/2020	8:20	Tissue	Not Specified
80967	L9-45_20L018_091220_17_LOB_TA		9/12/2020	8:20	Tissue	Not Specified

Eurofins Frontier Geosciences

PHYSIS Project ID: 2009006-001

0100047

Total Samples: 2E

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
80968	VE-01_20LT405_091020_13_LOB_T/		9/10/2020	12:31	Tissue	Not Specified
80969	VE-01_20LT405_091020_14_LOB_T/		9/10/2020	12:31	Tissue	Not Specified
80970	VE-01_20LT405_091020_15_LOB_T/		9/10/2020	12:31	Tissue	Not Specified
80971	VE-01_20LT405_091020_16_LOB_T/		9/10/2020	12:31	Tissue	Not Specified
80972	VE-01_20LT405_091020_17_LOB_T/		9/10/2020	12:31	Tissue	Not Specified
80973	VE-01_20LT406_091020_18_LOB_T/		9/10/2020	12:42	Tissue	Not Specified
80974	VE-01_20LT406_091020_19_LOB_T/		9/10/2020	12:42	Tissue	Not Specified
80975	VE-01_20LT406_091020_20_LOB_T/		9/10/2020	12:42	Tissue	Not Specified
80976	CJ-04_20LT111_091220_14_LOB_TA		9/12/2020	8:48	Tissue	Not Specified
80977	CJ-04_20LT111_091220_15_LOB_TA		9/12/2020	8:48	Tissue	Not Specified
80978	CJ-04_20LT111_091220_16_LOB_TA		9/12/2020	8:48	Tissue	Not Specified
80979	CJ-04_20LT111_091220_17_LOB_TA		9/12/2020	8:48	Tissue	Not Specified
80980	CJ-04_20LT113_091220_18_LOB_TA		9/12/2020	8:59	Tissue	Not Specified
80981	CJ-04_20LT113_091220_19_LOB_TA		9/12/2020	8:59	Tissue	Not Specified
80982	CJ-04_20LT116_091220_20_LOB_TA		9/12/2020	9:07	Tissue	Not Specified
80983	CJ-04_20LT124_091220_13_LOB_TA		9/12/2020	8:41	Tissue	Not Specified
80984	DL-01_20LT320_091220_13_LOB_TA		9/12/2020	10:01	Tissue	Not Specified
80985	DL-01_20LT321_091220_11_LOB_TA		9/12/2020	9:55	Tissue	Not Specified
80986	DL-01_20LT322_091220_12_LOB_TA		9/12/2020	9:55	Tissue	Not Specified
80987	DL-01_20LT323_091220_14_LOB_TA		9/12/2020	10:10	Tissue	Not Specified
80988	IB-01_20ET601_091320_01_TOM_WI		9/13/2020	10:11	Tissue	Not Specified
80989	IB-01_20ET601_091320_02_TOM_WI		9/13/2020	10:11	Tissue	Not Specified
80990	IB-01_20ET603_091320_03_TOM_WI		9/13/2020	10:18	Tissue	Not Specified
80991	IB-01_20ET605_091320_04_TOM_WI		9/13/2020	10:27	Tissue	Not Specified
80992	DL-01_20LT313_091220_17_LOB_TA		9/12/2020	10:17	Tissue	Not Specified
80993	DL-01_20LT313_091220_18_LOB_TA		9/12/2020	10:17	Tissue	Not Specified
80994	DL-01_20LT314_091220_19_LOB_TA		9/12/2020	10:17	Tissue	Not Specified
80995	DL-01_20LT314_091220_20_LOB_TA		9/12/2020	10:17	Tissue	Not Specified
80996	DL-01_20LT323_091220_15_LOB_TA		9/12/2020	10:10	Tissue	Not Specified
80997	DL-01_20LT324_091220_16_LOB_TA		9/12/2020	10:10	Tissue	Not Specified
80998	IB-01_20ET606_091320_05_TOM_WI		9/13/2020	10:30	Tissue	Not Specified
80999	IB-01_20ET607_091320_06_TOM_WI		9/13/2020	10:33	Tissue	Not Specified
81000	IB-01_20ET607_091320_07_TOM_WI		9/13/2020	10:33	Tissue	Not Specified
81001	IB-01_20ET607_091320_08_TOM_WI		9/13/2020	10:33	Tissue	Not Specified
81002	IB-01_20ET607_091320_09_TOM_WI		9/13/2020	10:33	Tissue	Not Specified
81003	IB-01_20ET609_091320_10_TOM_WI		9/13/2020	10:43	Tissue	Not Specified
81004	IB-01_20ET609_091320_11_TOM_WI		9/13/2020	10:43	Tissue	Not Specified

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PHYSIS Project ID: 2009006-001

Total Samples: 2E

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
	81005	IB-01_20ET611_091320_12_TOM_WI	9/13/2020	10:51	Tissue	Not Specified
	81006	IB-01_20ET613_091320_13_TOM_WI	9/13/2020	10:57	Tissue	Not Specified
	81007	IB-01_20ET613_091320_14_TOM_WI	9/13/2020	10:57	Tissue	Not Specified
	81008	IB-01_20ET613_091320_15_TOM_WI	9/13/2020	10:57	Tissue	Not Specified
	81009	IB-01_20ET614_091320_16_TOM_WI	9/13/2020	11:04	Tissue	Not Specified
	81010	IB-01_20ET614_091320_17_TOM_WI	9/13/2020	11:04	Tissue	Not Specified
	81011	IB-01_20ET616_091320_18_TOM_WI	9/13/2020	11:12	Tissue	Not Specified
	81012	IB-01_20ET617_091320_19_TOM_WI	9/13/2020	11:15	Tissue	Not Specified
	81013	IB-01_20ET617_091320_20_TOM_WI	9/13/2020	11:15	Tissue	Not Specified

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS₁/MS₂, BS₁/BS₂, LCS₁/LCS₂, LCM₁/LCM₂, CRM₁/CRM₂, surrogate spikes and/or replicate project sample analysis (R₁/R₂) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

CASE NARRATIVE

QUALIFIER NOTES

In addition to the use of analyte specific Physis Qualifier Codes where applicable, the following were also noted.

PERCENT LIPIDS

In one batch of Percent Lipids (C-27141), a result of 0.0549 % was reported in the B1 due to the presence of glass fibers (~0.002 g) from the extraction thimble in the vial after sample processing. This result was within 10x MDL (0.01 %) and occurred only in the B1 vial for this batch and all other samples in were not affected.

PHYSIS

ANALYTICAL

REPORT

TERRA AURA

ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80859-R1	L9-45_20LT001_091020_01_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.463	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 7:59		Received: 02-Oct-20							
Sample ID: 80860-R1	L9-45_20LT002_091020_02_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.576	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 7:59		Received: 02-Oct-20							
Sample ID: 80861-R1	L9-45_20LT004_091020_03_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.614	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 8:07		Received: 02-Oct-20							
Sample ID: 80862-R1	L9-45_20LT004_091020_04_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.502	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 8:07		Received: 02-Oct-20							
Sample ID: 80863-R1	L9-45_20LT005_091020_06_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.647	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 8:14		Received: 02-Oct-20							
Sample ID: 80864-R1	L9-45_20LT005_091020_07_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.703	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 8:14		Received: 02-Oct-20							
Sample ID: 80865-R1	L9-45_20LT005_091020_08_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.654	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 8:14		Received: 02-Oct-20							
Sample ID: 80866-R1	L9-45_20LT006_091020_05_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.826	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 8:14		Received: 02-Oct-20							
Sample ID: 80867-R1	L9-45_20LT007_091020_09_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.49	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 8:20		Received: 02-Oct-20							
Sample ID: 80868-R1	L9-45_20LT009_091020_10_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.577	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 8:26		Received: 02-Oct-20							
Sample ID: 80869-R1	L9-45_20LT009_091020_11_LOB_T	Matrix: Tissue								
Percent Lipids	Gravimetric	% wet weight	0.566	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Dilution Factor: 1	Sampled: 10-Sep-20 8:26		Received: 02-Oct-20							

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80870-R1	L9-45_20LT009_091020_12_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 8:26		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.705	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Sample ID: 80871-R1	CJ-04_20LT101_091020_01_LOB_TA	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 8:54		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.552	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Sample ID: 80872-R1	CJ-04_20LT101_091020_02_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 8:54		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.432	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Sample ID: 80873-R1	CJ-04_20LT101_091020_03_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 8:54		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.21	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Sample ID: 80874-R1	CJ-04_20LT104_091020_04_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:05		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.689	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Sample ID: 80875-R1	CJ-04_20LT104_091020_05_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:05		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.984	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Sample ID: 80876-R1	CJ-04_20LT105_091020_06_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:11		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.409	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Sample ID: 80877-R1	L9-45_20LT009_091020_13_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 8:26		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.676	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Sample ID: 80878-R1	L9-45_20LT009_091020_14_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 8:26		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.162	0.01	0.05	NA		C-27141	07-Oct-20	12-Oct-20
Sample ID: 80879-R1	OB-05_20ET001_091020_01_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:05		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.925	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80880-R1	OB-05_20ET001_091020_02_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:05		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.799	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80881-R1	OB-05_20ET001_091020_03_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:05		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.812	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80882-R1	OB-05_20ET003_091020_04_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:15		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.68	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80883-R1	CJ-04_20LT108_091020_07_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:17		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.53	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80884-R1	CJ-04_20LT108_091020_08_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:17		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.549	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80885-R1	CJ-04_20LT109_091020_09_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:26		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.652	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80886-R1	OB-05_20ET003_091020_05_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:15		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.1	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80887-R1	OB-05_20ET003_091020_06_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:15		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.722	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80888-R1	OB-05_20ET003_091020_07_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:15		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.815	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80889-R1	OB-05_20ET003_091020_08_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:15		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	2.33	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80890-R1	OB-05_20ET004_091020_09_TOM Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:30		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.601	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80891-R1	OB-05_20ET005_091020_10_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:38		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.647	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80892-R1	OB-05_20ET005_091020_11_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:38	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.969	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80893-R1	ES-FP_20LT201_091020_01_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:40	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.704	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80894-R1	ES-FP_20LT201_091020_02_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:40	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.566	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80895-R1	ES-FP_20LT201_091020_03_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:40	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.719	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80896-R1	ES-FP_20LT202_091020_04_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:40	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.464	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80897-R1	ES-FP_20LT202_091020_05_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:40	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.578	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80898-R1	ES-FP_20LT202_091020_06_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:40	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.686	0.01	0.05	NA		C-27142	08-Oct-20	12-Oct-20
Sample ID: 80899-R1	ES-FP_20LT202_091020_07_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:40	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.51	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80900-R1	ES-FP_20LT202_091020_08_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:40	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.525	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80901-R1	OB-05_20ET007_091020_12_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:46	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.76	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80902-R1	OB-05_20ET007_091020_13_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 9:46	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.513	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80903-R1	OB-05_20ET007_091020_14_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:46		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.842	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80904-R1	OB-05_20ET009_091020_15_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:58		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.774	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80905-R1	ES-FP_20LT203_091020_09_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 10:06		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.725	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80906-R1	ES-FP_20LT203_091020_10_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 10:06		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.612	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80907-R1	ES-FP_20LT203_091020_11_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 10:06		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.803	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80908-R1	ES-FP_20LT205_091020_12_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 10:14		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.412	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80909-R1	ES-FP_20LT205_091020_13_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 10:14		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.599	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80910-R1	ES-FP_20LT206_091020_14_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 10:14		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.598	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80911-R1	ES-FP_20LT206_091020_15_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 10:14		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.585	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80912-R1	OB-05_20ET009_091020_16_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:58		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.938	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80913-R1	OB-05_20ET009_091020_17_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 9:58		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.645	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80914-R1	OB-05_20ET009_091020_18_TOM_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 9:58		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	1.04	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80915-R1	OB-05_20ET010_091020_19_TOM_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 10:06		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.738	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80916-R1	OB-05_20ET011_091020_20_TOM_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 10:13		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.846	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80917-R1	BO-04_20ET503_091020_01_TOM_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 11:22		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.711	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80918-R1	ES-FP_20LT207_091020_16_LOB_T Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 10:26		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.721	0.01	0.05	NA		C-27143	12-Oct-20	16-Oct-20
Sample ID: 80919-R1	ES-FP_20LT208_091020_17_LOB_T Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 10:26		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.614	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80920-R1	ES-FP_20LT208_091020_18_LOB_T Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 10:26		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.85	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80921-R1	ES-FP_20LT208_091020_19_LOB_T Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 10:26		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.704	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80922-R1	ES-FP_20LT209_091020_20_LOB_T Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 10:41		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.669	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80923-R1	OL-01_20LT301_091020_01_LOB_T Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 10:58		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.893	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80924-R1	OL-01_20LT301_091020_02_LOB_T Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 10:58		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.76	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80925-R1	OL-01_20LT302_091020_03_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 10:58	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.582	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80926-R1	OL-01_20LT304_091020_04_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:10	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.517	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80927-R1	OL-01_20LT304_091020_05_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:10	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.562	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80928-R1	OL-01_20LT304_091020_06_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:10	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.566	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80929-R1	BO-04_20ET503_091020_02_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:22	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	1.02	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80930-R1	BO-04_20ET506_091020_03_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:35	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.657	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80931-R1	BO-04_20ET506_091020_04_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:35	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.706	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80932-R1	BO-04_20ET506_091020_05_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:35	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.811	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80933-R1	BO-04_20ET506_091020_06_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:35	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.772	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80934-R1	BO-04_20ET507_091020_07_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:45	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.665	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80935-R1	BO-04_20ET508_091020_08_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:48	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.633	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80936-R1	OL-01_20LT305_091020_07_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:24		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.581	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80937-R1	OL-01_20LT305_091020_08_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:24		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.459	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80938-R1	OL-01_20LT306_091020_09_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:24		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	1.02	0.01	0.05	NA		C-27144	13-Oct-20	17-Oct-20
Sample ID: 80939-R1	OL-01_20LT307_091020_10_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:37		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.552	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80940-R1	BO-04_20ET508_091020_09_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:48		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.723	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80941-R1	BO-04_20ET508_091020_10_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:48		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.673	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80942-R1	BO-04_20ET508_091020_11_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:48		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.795	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80943-R1	BO-04_20ET509_091020_12_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:54		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.899	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80944-R1	BO-04_20ET509_091020_13_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:54		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.912	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80945-R1	BO-04_20ET509_091020_14_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:54		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.949	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80946-R1	BO-04_20ET509_091020_15_TOM	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:54		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.664	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80947-R1	BO-04_20ET510_091020_16_TOM_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:01		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.595	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80948-R1	BO-04_20ET510_091020_17_TOM_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:01		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.799	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80949-R1	SVE-01_20LT401_091020_01_LOB_T Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:02		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.421	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80950-R1	SVE-01_20LT401_091020_02_LOB_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:02		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.624	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80951-R1	SVE-01_20LT401_091020_03_LOB_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:02		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.621	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80952-R1	BO-04_20ET511_091020_18_TOM_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:05		Received: 07-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.738	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80953-R1	BO-04_20ET511_091020_19_TOM_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:05		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.826	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80954-R1	BO-04_20ET513_091020_20_TOM_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:11		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.612	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80955-R1	SVE-01_20LT401_091020_04_LOB_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:02		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.668	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80956-R1	SVE-01_20LT402_091020_05_LOB_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:02		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.478	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80957-R1	SVE-01_20LT402_091020_06_LOB_ Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 12:02		Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.482	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80958-R1	SVE-01_20LT402_091020_07_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 12:02		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.627	0.01	0.05	NA		C-27145	14-Oct-20	17-Oct-20
Sample ID: 80959-R1	SVE-01_20LT402_091020_08_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 12:02		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.49	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80960-R1	SVE-01_20LT403_091020_09_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 12:22		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.569	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80961-R1	SVE-01_20LT403_091020_10_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 12:22		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.832	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80962-R1	SVE-01_20LT404_091020_11_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 12:22		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.679	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80963-R1	SVE-01_20LT404_091020_12_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 12:22		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.828	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80964-R1	CJ-04_20LT123_091220_12_LOB_TA Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 8:41		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.605	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80965-R1	L9-45_20L011_091220_15_LOB_TA Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 8:03		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.783	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80966-R1	L9-45_20L017_091220_16_LOB_TA Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 8:20		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.503	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80967-R1	L9-45_20L018_091220_17_LOB_TA Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 8:20		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.52	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80968-R1	SVE-01_20LT405_091020_13_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 10-Sep-20 12:31		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.611	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80969-R1	SVE-01_20LT405_091020_14_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 12:31			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.91	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80970-R1	SVE-01_20LT405_091020_15_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 12:31			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.924	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80971-R1	SVE-01_20LT405_091020_16_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 12:31			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	1.22	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80972-R1	SVE-01_20LT405_091020_17_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 12:31			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.632	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80973-R1	SVE-01_20LT406_091020_18_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 12:42			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.604	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80974-R1	SVE-01_20LT406_091020_19_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 12:42			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.659	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80975-R1	SVE-01_20LT406_091020_20_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 12:42			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.575	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80976-R1	CJ-04_20LT111_091220_14_LOB_TA	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 8:48			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	1.01	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80977-R1	CJ-04_20LT111_091220_15_LOB_TA	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 8:48			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.679	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80978-R1	CJ-04_20LT111_091220_16_LOB_TA	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 8:48			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.578	0.01	0.05	NA		C-27146	15-Oct-20	21-Oct-20
Sample ID: 80979-R1	CJ-04_20LT111_091220_17_LOB_TA	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 8:48			Received: 02-Oct-20			
Percent Lipids	Gravimetric	% wet weight	0.665	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80980-R1	CJ-04_20LT113_091220_18_LOB_TA	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 8:59	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.677	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80981-R1	CJ-04_20LT113_091220_19_LOB_TA	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 8:59	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.395	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80982-R1	CJ-04_20LT116_091220_20_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 9:07	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.623	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80983-R1	CJ-04_20LT124_091220_13_LOB_TA	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 8:41	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.499	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80984-R1	OL-01_20LT320_091220_13_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 10:01	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.541	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80985-R1	OL-01_20LT321_0912020_11_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 9:55	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.48	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80986-R1	OL-01_20LT322_091220_12_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 9:55	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.71	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80987-R1	OL-01_20LT323_091220_14_LOB_T	Matrix: Tissue	Dilution Factor: 1	Sampled: 12-Sep-20 10:10	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.525	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80988-R1	OB-01_20ET601_091320_01_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 13-Sep-20 10:11	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.952	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80989-R1	OB-01_20ET601_091320_02_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 13-Sep-20 10:11	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.868	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80990-R1	OB-01_20ET603_091320_03_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 13-Sep-20 10:18	Received: 02-Oct-20					
Percent Lipids	Gravimetric	% wet weight	0.648	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 80991-R1	OB-01_20ET605_091320_04_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:27		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.752	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80992-R1	OL-01_20LT313_091220_17_LOB_TA Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 10:17		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.73	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80993-R1	OL-01_20LT313_091220_18_LOB_TA Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 10:17		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.926	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80994-R1	OL-01_20LT314_091220_19_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 10:17		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.932	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80995-R1	OL-01_20LT314_091220_20_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 10:17		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.83	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80996-R1	OL-01_20LT323_091220_15_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 10:10		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.726	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80997-R1	OL-01_20LT324_091220_16_LOB_T Matrix: Tissue			Dilution Factor: 1		Sampled: 12-Sep-20 10:10		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.558	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80998-R1	OB-01_20ET606_091320_05_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:30		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.06	0.01	0.05	NA		C-27147	16-Oct-20	21-Oct-20
Sample ID: 80999-R1	OB-01_20ET607_091320_06_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:33		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.792	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81000-R1	OB-01_20ET607_091320_07_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:33		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.88	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81001-R1	OB-01_20ET607_091320_08_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:33		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.41	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 81002-R1	OB-01_20ET607_091320_09_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:33		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.762	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81003-R1	OB-01_20ET609_091320_10_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:43		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.887	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81004-R1	OB-01_20ET609_091320_11_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:43		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.368	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81005-R1	OB-01_20ET611_091320_12_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:51		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.849	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81006-R1	OB-01_20ET613_091320_13_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:57		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.03	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81007-R1	OB-01_20ET613_091320_14_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:57		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.686	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81008-R1	OB-01_20ET613_091320_15_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 10:57		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.89	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81009-R1	OB-01_20ET614_091320_16_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 11:04		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.946	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81010-R1	OB-01_20ET614_091320_17_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 11:04		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.774	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81011-R1	OB-01_20ET616_091320_18_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 11:12		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.802	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20
Sample ID: 81012-R1	OB-01_20ET617_091320_19_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 13-Sep-20 11:15		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.968	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 81013-R1	OB-01_20ET617_091320_20_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 13-Sep-20	11:15	Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.888	0.01	0.05	NA		C-27148	19-Oct-20	21-Oct-20

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QUALITY CONTROL REPORT

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Total Extractable Organics QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE	SOURCE	ACCURACY	PRECISION	QA CODE
						LEVEL	RESULT	% LIMITS	% LIMITS	
Sample ID: 80843-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27141		Prepared: 07-Oct-20		Analyzed: 12-Oct-20	
Percent Lipids	NA	0.0549	0.01	0.05	% wet weight					1
Sample ID: 80844-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27142		Prepared: 08-Oct-20		Analyzed: 12-Oct-20	
Percent Lipids	NA	ND	0.01	0.05	% wet weight					
Sample ID: 80845-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27143		Prepared: 12-Oct-20		Analyzed: 16-Oct-20	
Percent Lipids	NA	ND	0.01	0.05	% wet weight					
Sample ID: 80846-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27144		Prepared: 13-Oct-20		Analyzed: 17-Oct-20	
Percent Lipids	NA	ND	0.01	0.05	% wet weight					
Sample ID: 80847-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27145		Prepared: 14-Oct-20		Analyzed: 17-Oct-20	
Percent Lipids	NA	ND	0.01	0.05	% wet weight					
Sample ID: 80848-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27146		Prepared: 15-Oct-20		Analyzed: 21-Oct-20	
Percent Lipids	NA	ND	0.01	0.05	% wet weight					
Sample ID: 80849-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27147		Prepared: 16-Oct-20		Analyzed: 21-Oct-20	
Percent Lipids	NA	ND	0.01	0.05	% wet weight					
Sample ID: 80850-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27148		Prepared: 19-Oct-20		Analyzed: 21-Oct-20	
Percent Lipids	NA	ND	0.01	0.05	% wet weight					
Sample ID: 80851-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27141		Prepared: 07-Oct-20		Analyzed: 12-Oct-20	
Percent Lipids	NA	10.5	0.01	0.05	% wet weight	10.4	101	62 - 137%	PASS	



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Total Extractable Organics

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Sample ID: 80852-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27142		Prepared: 08-Oct-20		Analyzed: 12-Oct-20			
Percent Lipids	NA	10.4	0.01	0.05	% wet weight	10.4	100	62 - 137%	PASS			
Sample ID: 80853-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27143		Prepared: 12-Oct-20		Analyzed: 16-Oct-20			
Percent Lipids	NA	10.9	0.01	0.05	% wet weight	10.4	105	62 - 137%	PASS			
Sample ID: 80854-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27144		Prepared: 13-Oct-20		Analyzed: 17-Oct-20			
Percent Lipids	NA	9.26	0.01	0.05	% wet weight	10.4	89	62 - 137%	PASS			
Sample ID: 80855-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27145		Prepared: 14-Oct-20		Analyzed: 17-Oct-20			
Percent Lipids	NA	9.4	0.01	0.05	% wet weight	10.4	90	62 - 137%	PASS			
Sample ID: 80856-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27146		Prepared: 15-Oct-20		Analyzed: 21-Oct-20			
Percent Lipids	NA	11.7	0.01	0.05	% wet weight	10.4	112	62 - 137%	PASS			
Sample ID: 80857-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27147		Prepared: 16-Oct-20		Analyzed: 21-Oct-20			
Percent Lipids	NA	10.3	0.01	0.05	% wet weight	10.4	99	62 - 137%	PASS			
Sample ID: 80858-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27148		Prepared: 19-Oct-20		Analyzed: 21-Oct-20			
Percent Lipids	NA	11.8	0.01	0.05	% wet weight	10.4	113	62 - 137%	PASS			
Sample ID: 80874-R2		CJ-04_20LT104_091020_04_LOB_TA			Matrix: Tissue		Sampled: 10-Sep-20 9:05		Received: 02-Oct-20			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27141		Prepared: 07-Oct-20		Analyzed: 12-Oct-20			
Percent Lipids	NA	0.646	0.01	0.05	% wet weight				6	30	PASS	
Sample ID: 80881-R2		OB-05_20ET001_091020_03_TOM_WB			Matrix: Tissue		Sampled: 10-Sep-20 9:05		Received: 02-Oct-20			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27142		Prepared: 08-Oct-20		Analyzed: 12-Oct-20			
Percent Lipids	NA	0.876	0.01	0.05	% wet weight				8	30	PASS	



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Total Extractable Organics

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE	SOURCE	ACCURACY		PRECISION		QA CODE
								LEVEL	RESULT	%	LIMITS	
Sample ID: 80902-R2		OB-05_20ET007_091020_13_TOM_WB		Matrix: Tissue		Sampled: 10-Sep-20 9:46		Received: 02-Oct-20				
Dilution Factor: 1		Method: Gravimetric		Batch ID: C-27143		Prepared: 12-Oct-20		Analyzed: 16-Oct-20				
Percent Lipids	NA	0.523	0.01	0.05	% wet weight			2	30	PASS		
Sample ID: 80929-R2		BO-04_20ET503_091020_02_TOM_WB		Matrix: Tissue		Sampled: 10-Sep-20 11:22		Received: 02-Oct-20				
Dilution Factor: 1		Method: Gravimetric		Batch ID: C-27144		Prepared: 13-Oct-20		Analyzed: 17-Oct-20				
Percent Lipids	NA	0.875	0.01	0.05	% wet weight			15	30	PASS		
Sample ID: 80957-R2		SVE-01_20LT402_091020_06_LOB_TA		Matrix: Tissue		Sampled: 10-Sep-20 12:02		Received: 02-Oct-20				
Dilution Factor: 1		Method: Gravimetric		Batch ID: C-27145		Prepared: 14-Oct-20		Analyzed: 17-Oct-20				
Percent Lipids	NA	0.557	0.01	0.05	% wet weight			14	30	PASS		
Sample ID: 80969-R2		SVE-01_20LT405_091020_14_LOB_TA		Matrix: Tissue		Sampled: 10-Sep-20 12:31		Received: 02-Oct-20				
Dilution Factor: 1		Method: Gravimetric		Batch ID: C-27146		Prepared: 15-Oct-20		Analyzed: 21-Oct-20				
Percent Lipids	NA	0.697	0.01	0.05	% wet weight			27	30	PASS		
Sample ID: 80992-R2		OL-01_20LT313_091220_17_LOB_TA		Matrix: Tissue		Sampled: 12-Sep-20 10:17		Received: 02-Oct-20				
Dilution Factor: 1		Method: Gravimetric		Batch ID: C-27147		Prepared: 16-Oct-20		Analyzed: 21-Oct-20				
Percent Lipids	NA	0.858	0.01	0.05	% wet weight			16	30	PASS		
Sample ID: 81000-R2		OB-01_20ET607_091320_07_TOM_WB		Matrix: Tissue		Sampled: 13-Sep-20 10:33		Received: 02-Oct-20				
Dilution Factor: 1		Method: Gravimetric		Batch ID: C-27148		Prepared: 19-Oct-20		Analyzed: 21-Oct-20				
Percent Lipids	NA	0.849	0.01	0.05	% wet weight			4	30	PASS		

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Lab Book

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2009006-001

Batch #1

A. Gonzalez

Date/Time processed: 10/7/2020 12:30

Date/Time Analyzed: 10/12/2020 1:00

C-27

Description: Percent lipids for Eurofins Frontier Geosciences
0100047 project.

Method: Gravimetric

	PSID	Vial wt(g)	Sample wt (g)	Vial + Sample wt (g)		Wet % Lipids	Comm
				(1)	(2)		
(80843)	Blank	2.0514		2.0541	2.0540	0.05	
(80851)	CRM 1947	2.0520	0.829	2.1393	2.1391	10.52	
	80859	2.0596	5.788	2.0865	2.0863	0.46	
	80860	2.0403	4.860	2.0684	2.0682	0.58	
	80861	2.0781	4.283	2.1045	2.1043	0.61	
	80862	2.0535	5.437	2.0809	2.0807	0.50	
	80863	2.0549	5.210	2.0887	2.0885	0.65	
	80864	2.0987	4.443	2.1301	2.13298	0.70	
	80865	2.0760	5.092	2.1094	2.1092	0.65	
	80866	2.0685	4.197	2.1032	2.1031	0.83	
	80867	2.0586	4.761	^{4.761} 2.0821 2.0818	2.0818	0.49	
	80868	2.0691	5.104	2.0986	2.0985	0.58	
	80869	2.0562	5.296	2.0862	2.0862	0.57	
	80870	2.0567	5.570	2.0960	2.0959	0.70	
	80871	2.0479	4.175	2.0709	2.0710	0.55	
	80872	2.0660	5.544	2.0900	2.0899	0.43	
	80873	2.0248	4.398	2.0340	2.0341	0.21	
	80874 a1	2.0494	4.442	2.0801	2.0799	0.69	
	e2	2.0635	4.382	2.0919	2.0917	0.65	
	80875	2.0878	4.519	2.1323	2.1322	0.98	
	80876	2.0364	4.227	2.0537	2.0537	0.41	
	80877	2.0855	4.779	2.1178	2.1178	0.68	
	80878	2.0626	4.782	2.0946	2.0947	0.16	

entered
AG 10/12/20

2 009006-002.1 (Batch #2)

Date/Time processed: 10/8/2020 11:00

Date/Time Analyzed: 10/12/2020 1:00

27142

Description: Percent lipids for Eurofins frontier Geosciences 0100047 project.

Method: Gravimetric

PSID	Vial wt AG 10/8/2020		Vial + Sample wt(g)		wet % Lipids	Comments
	sample (g)	Sample wt(g)	(1)	(2)		
Blank	2.0486		2.0490	2.0490	0.01	
CRM 1947	2.0643	0.597	2.1264	2.1264	10.40	
80879	2.01934	4.944	2.0651	2.0652	0.93	A
80880	2.0812	2.873	2.1042	2.1041	0.80	A
80881 R1	2.0474	5.971	2.0959	2.0959	0.81	
R2	2.04344	5.640	2.0928	2.0928	0.88	
80882	2.0644	4.306	2.0936	2.0938	0.68	
80883	2.1028	6.697	2.1382	2.1384	0.53	
80884	2.0687	6.049	2.1019	2.1019	0.55	
80885	2.0767	5.909	2.1152	2.1152	0.65	
80886	2.0627	4.859	2.1163	2.1162	1.10	A
80887	2.0658	5.077	2.1025	2.1024	0.72	A
80888	2.0807	4.470	2.1171	2.1172	0.82	B
80889	2.0799	7.176	2.2474	2.2473	2.33	B
80890	2.0454	4.225	2.0708	2.0708	0.60	
80891	2.0645	2.637	2.0816	2.0815	0.65	A
80892	2.0405	5.076	2.0898	2.0896	0.97	
80893	2.0683	5.701	2.1085	2.1084	0.70	
80894	2.0552	5.326	2.0854	2.0853	0.57	
80895	2.0500	6.043	2.0935	2.0934	0.72	
80896	2.0565	6.108	2.0849	2.0848	0.46	
80897	2.0712	4.331	2.0963	2.0962	0.58	
80898	2.0325	5.894	2.0730	2.0729	0.69	

A) all of the sample was used AG 10/8/2020

B) Sample not fully homogenized; parts of the fish were distinct

entered
AG 10/12/20

2009006-001 (Batch #3)

Date/Time processed: 10/12/2020 10:30

Date/Time Analyzed: 10/16/2020 3:00

C-27

Description: Percent lipids for Eurofins frontier Geosciences 0100047 project.

Method: Gravimetric

PSID	vial wt(g)	sample wt(g)	vial + Sample wt(g)		wet % lipids	Con
			(1)	(2)		
(80845) Blank	2.0561		2.0566	2.0566	0.01	
(80855) CRM1947	2.0695	0.631	2.1380	2.1381	10.86	
80899 80914	2.0522	5.395	2.0797	2.0797 ^{2.0797} AG 10/16/2020	0.51	
80900 80920	2.0678	6.003	^{AG 10/16/2020} 2.06993	2.0993	0.52	
^{AG 10/12/2020} 80901	2.0955	5.050	2.1339	2.1338	0.76	A
80902 r1	2.0680	4.009	2.0885	2.0886	0.51	
r2	2.0702	4.118	2.0917	2.0918	0.52	
80903	2.0492	4.9394 ^{AG 10/12/20}	2.0862	2.0862	0.84	
80904	2.0310	4.098	2.0627	2.0627	0.77	
80905	2.0575	4.957	2.0934	2.0935	0.73	
80906	2.0679	5.396	2.1009	2.1009	6.61	
80907	2.0586	6.663	2.1120	2.1122	0.80	
80908	2.0553	5.928	2.0796	2.0798	0.41	
80909	2.0692	5.667	2.1032	2.1031	0.60	
80910	2.0605	5.469	2.0932	2.0932	0.60	
80911	2.0248	6.123	2.0606	2.0606	0.58	
80912	2.0710	4.465	2.1129	2.1129	0.94	
80913	2.0618	2.077	2.0752	2.0752	0.65	A
80914	2.0380	4.265	2.0823	2.0822	1.04	A
80915	2.0565	2.298	2.0735	2.0734	0.74	A
80916	2.0728	2.388	2.0930	2.0930	0.85	A
80917	2.0439	4.292	2.0744	2.0744	0.71	
80918	2.1078	5.725	2.1491	2.1491	0.72	

Comments

A) All of the sample was used

entered
AG 10/16/2020

20091006-001 (Batch #4)

Date/Time processed: 10/13/2020 11:30

Date/Time Analyzed 10/17/2020 12:00

2-27144

Description: Percent lipids for Eurofins frontier Geosciences
0100047 Project

Method: Gravimetric

	PSID	Sample wt (g)	Vial wt (g)	Vial + Sample wt (g)		wet % lipids	Comments
				(1)	(2)		
80846)	Blank	—	2.0943	2.0946	2.0946	0.01	
80854)	CRM 1947	0.636	2.0741	2.1330	2.1330	9.26	
	80919	4.431	2.0808	2.1080	2.1080	0.61	
	80920	5.718	2.0487	2.0973	2.0973	0.85	
	80921	5.270	2.0445	2.0816	2.0816	0.70	
	80922	5.309	2.0889	2.1244	2.1244	0.67	
	80923	5.803	2.0329	2.0847	2.0847	0.89	
	80924	5.184	2.0930	2.1324	2.1324	0.76	
	80925	5.915	2.0915	2.1259	2.1260	0.58	
	80926	6.464	2.0561	2.0895	2.0895	0.52	
	80927	5.299	2.0512	2.0810	2.0810	0.56	
	80928	5.494	2.0439	2.0750	2.0750	0.71 0.57	AG 10/17/2020
	80929 r1	3.992	2.0141	2.0548	2.0548	1.02	
	80929 r2	4.030	2.0943	2.1295	2.1296	0.87	
	80930	4.231	2.0495	2.0773	2.0773	0.66	
	80931	2.670	2.0545	2.0733	2.0734	0.71	A
	80932	2.058	2.0543	2.0710	2.0710	0.81	A
	80933	2.221	2.0175	2.0346	2.0347	0.77	A
	80934	4.484	2.0561	2.0859	2.0859	0.66	
	80935	4.114	2.0655	2.0916	2.0915	0.63	
	80936	5.514	2.0803	2.1124	2.1123	0.58	
	80937	6.566	2.0762	2.1063	2.1064	0.46	
	80938	5.554	2.0757	2.1324	2.1324	1.02	

Comments

A) All of the sample was used for the extraction

entered
for 10/19/2020

Date / Time processed: 10/14/2020 11:30

Date / Time Analyzed: 10/17/2020 12:30

C-2

Description: Percent lipids for Eurofins frontier Geosciences 010047 project.

Method: Gravimetric

PSID	Sample wt (g)	vial wt (g)	vial + Sample wt (g)		wet % Lipids	Comm.
			(1)	(2)		
(80847) Blank		2.0534	2.0537	2.0537	0.01	
(80855) CRM 1947	0.646	2.0768	2.1374	2.1376	9.40	
80939	6.175	2.0913	2.1254	2.1254	0.55	
80940	4.804	2.0691	2.1038	2.1039	0.72	
80941	2.012	2.0678	2.0813	2.0814	0.67	A
80942	2.534	2.0509	2.0710	2.0711	0.80	A
80943	5.053	2.0563	2.1017	2.1018	0.90	
80944	5.018 ^{AG 10/14/20}	2.0911	2.1368	2.1369	0.91	A
80945	5.008	2.0324	2.0799	2.0800	0.95	A
80946	2.229	2.0433	2.0581	2.0581	0.66	A
^{AG 10/14/2020} 80947R1	6.201	2.0766	2.1135	2.1135	0.60	
<hr/>						
^{AG 10/14/2020} 80948	4.672	2.0675	2.1048	2.1049	0.80	
80949	5.086	2.0908	2.1122	2.1122	0.42	
80950	6.264	2.0911	2.1302	2.1302	0.62	
80951	4.964	2.0754	2.1062	2.1063	0.62	
80952	3.200	2.0663	2.0899	2.0899	0.74	
80953	1.803	2.0779	2.0928	2.0928	0.83	A
80954	4.623	2.0471	2.0754	2.0754	0.61	
80955	5.162	2.0710	2.1055	2.1055	0.67	
80956	5.151	2.0600	2.0846	2.0846	0.48	
80957 R1	5.763	2.0904	2.1181	2.1182	0.48	
^{AG 10/14/20} 80957R2	4.603	2.0577	2.0833	2.0834	0.56	
80958	5.073	2.0667	2.0985	2.0985	0.63	

Comments

A) All of the sample was used for the extraction

entered
AG 10/19/2020


Date / Time processed: 10/15/2020 (10:00)

Date / Time Analyzed: 10/21/2020 (15:30)

Description: Percent Lipids for Eurofins frontier Geosciences
0100047 project

Method: Gravimetric

PSID	Sample wt (g)	vial + sample wt (g)		wet % Lipids	comments
		vial wt (g)	(1) (2)		
Blank		2.0348	2.0351 2.0350	0.00	
CRM 1947	0.626	2.0631	2.1361 2.1361	11.66	
80959	4.516	2.0521	2.0743 2.0742	0.49	
80960	6.189	2.0768	2.1120 2.1120	0.57	
80961	5.951 5.961	2.0884	2.1380 2.1380	0.83	
80962	5.804	2.0690	2.1084 2.1084	0.68	
80963	5.632	2.0802	2.1268 2.1269	0.83	
80964	6.220	2.0783	2.1159 2.1159	0.60	
80965	5.931	2.0785	2.1249 2.1250	0.78	
80966	5.191	2.0415	2.0676 2.0676	0.50	
80967	5.687	2.0450	2.0746 2.0745	0.52	
80968	5.301	2.0475	2.0799 2.0799	0.61	
80969 r1	6.384	2.0670	2.1251 2.1251	0.91	
r2	5.518	2.0544	2.1054 2.1054	0.92	
80970	6.403	2.0403	2.1186 2.1186	1.22	
80971	5.209	2.0637	2.0966 2.0966	0.63	
80972	5.364	2.0210	2.0534 2.0534	0.60	
80973	5.674	2.0979	2.1353 2.1355	0.66	
80974	4.608	2.0628	2.0893 2.0893	0.58	
80975	5.796	2.0516	2.1102 2.1102	1.01	
80976	4.774	2.0430	2.0754 2.0754	0.68	
80977	5.867	2.0533	2.0872 2.0871	0.58	
80978	5.278	2.0605	2.0973 2.0973	0.70	

Outward

 10/21/2020

Date / Time processed: 10/16/2020 (12:00)

Date / Time Analyzed: 10/21/2020 (15:30)

Description: Percent Lipids for Eurofins frontier Geosciences
0100047 Project

Method: Gravimetric

PSID	Sample wt (g)		vial wt (g)	vial + sample wt (g)		Wet % Lipids	Com
				(1)	(2)		
Blank			1.9981	1.9983	1.9983	0.00	
CRM 1947	0.624		2.0504	2.1144	2.1144	10.26	
80979	5.066	2.0441	2.0441	2.0778	2.0778	0.67	
80980	5.068	^{MN} 10/21/20	2.0560	2.0843	2.0843	0.68	
80981	5.590		2.0733	2.0953	2.0955	0.40	
80982	5.594		2.0816	2.1164	2.1165	0.62	
80983	5.446		2.0465	2.0677	2.0677	0.50	
80984	5.934		2.0336	2.0657	2.0657	0.54	
80985	5.020		2.0364	2.0605	2.0605	0.48	
80986	5.662		2.0618	2.1020	2.1020	0.71	
80987	5.048		2.0561	2.0826	2.0826	0.52	
80988	5.859		2.0806	2.1363	2.1364	0.95	
80989	2.374		2.0790	2.0995	2.0997	0.87	A
80990	5.790		2.0341	2.0716	2.0716	0.65	
80991	6.181		2.0385	2.0850	2.0850	0.75	
80992 R1	6.359		2.0684	2.1148	2.1148	0.73	
R2	6.598		2.0788	2.1344	2.1344	0.86	
80993	5.841		2.0160	2.0701	2.0701	0.93	
80994	5.568		2.0368	2.0887	2.0887	0.93	
80995	5.654		2.0610	2.1079	2.1079	0.83	
80996	5.204		2.0353	2.0731	2.0731	0.73	
80997	4.997		2.0549	2.0828	2.0828	0.56	
80998	5.401	^{MN} 10/21/2020	2.0448	2.1519	2.1519	1.06	

Comments

A) All of the sample was used for the extraction

ended
 MN
 10/21/2020

Date / Time processed: 10/19/2020 10:00

Date / Time Analyzed: 10/21/2020 17:50

27148

Description: Percent lipids for Eurofins Frontier Geosciences 0100047 project.

Method: Gravimetric

PSID	Sample wt (g)	Vial wt (g)	Vial + Sample wt		wet % lipids	Comments
			(1)	(2)		
Blank	—	2.0691	2.0692	2.0692	0	
CRM 1947	0.614	2.0745	2.1469	2.1469	11.79	
80999	4.707	2.0983	2.1356	2.1356	0.79	
8000 P1	4.899	2.0656	2.1087	2.1087	0.88	
81000 R2	4.829	2.0528	2.0938	2.0938	0.85	
81001	5.029	2.0573	2.1284	2.1284	1.41	
81002	4.1855	2.0766	2.1085	2.1085	0.76	A
81003	4.093	2.0520	2.0883	2.0883	0.89	
81004	5.211	2.0553	2.0745	2.0745	0.37	
81005	6.279	2.0368	2.0901	2.0901	0.85	
81006	4.439	2.0434	2.0890	2.0890	1.03	A
81007	6.022	2.0797	2.1210	2.1210	0.69	
81008	6.087	2.0769	2.1919	2.1919	1.89	
81009	5.357	2.0380	2.0887	2.0887	0.95	
81010	5.260	2.0576	2.0983	2.0983	0.77	
81011	5.139	2.0408	2.0820	2.0820	0.80	
81012	5.3264	2.0396	2.0712	2.0712	0.97	A
81013	5.193	2.0671	2.1132	2.1132	0.89	A

Comments

A) All of the sample was used for the extraction

Entered
AM
10/21/2020

PHYSIS

Calibration

TERRA

FAUNA

FLORA

AQUA

AURA

ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

DATE	ANALYST	200.0 mg	5g	50g	2 mg	1 mg
9/15/2020	JH	200.1	5.0000	50.0000	2.0	1.0000
9/16/2020	KE	200.1	5.0000	50.0000	2.0	1.0000
9/17/2020	SE	200.1	5.0001	50.0000	2.1	1.0001
9/22/2020	MN	200.1	5.0000	49.9999	2.0	1.0001
9/23/2020	MN	200.0	5.0000	49.9999	2.0	1.0000
9/24/2020	SE	200.0	5.0000	49.9999	2.0	1.0000
9/25/2020	SE	200.0	5.0000	50.0000	2.0	1.0001
9/28/2020	JH	200.0	5.0000	50.0000	2.0	1.0001
9/29/2020	JH	200.0	5.0000	49.9998	2.0	1.0000
9/30/2020	JH	200.0	5.0000	49.9999	2.0	1.0000
10/1/2020	SE	200.0	5.0000	49.9999	2.0	1.0000
10/2/2020	SE	200.0	5.0000	49.9999	2.0	1.0000
10/4/2020	MN	200.0	5.0000	49.9999	2.1	1.0000
10/5/2020	JH	200.0	5.0000	49.9999	2.0	1.0001
10/6/2020	SE	200.0	5.0000	50.0000	2.0	1.0001
10/7/2020	JH	200.0	5.0000	49.9999	2.0	1.0000
10/8/2020	JH	200.0	5.0000	50.0000	2.0	1.0001
10/9/2020	SE	200.0	5.0000	49.9999	2.0	1.0000
10/12/2020	JH	200.0	5.0000	50.0000	2.0	1.0001
10/13/2020	AG	200.0	5.0000	49.9999	2.0	1.0000
10/14/2020	SE	200.0	5.0000	49.9998	2.0	1.0000
10/15/2020	JH	200.0	5.0000	50.0000	2.0	1.0000
10/16/2020	JH	200.0	5.0000	50.0000	2.1	1.0001
10/17/2020	AM	200.0	5.0000	49.9999	2.1	1.0001

Mead.

BALANCE #2
CALIBRATION LOG BOOK

S/N: 1128331102

FIVE STAR.
★★★★★

<u>Date</u>	<u>Analyst</u>	<u>1g</u>	<u>20g</u>
10/06/20	MN	1.000	20.000
10/07/20	SE	1.000	20.000
10/08/20	AG	1.000	20.000
10/12/20	AG	1.000	20.000
10/13/20	SE	1.000	20.000
10/14/20	AM	1.000	20.000
10/15/20	AG	1.000	20.000
10/16/20	AG	1.000	20.000
10/19/20	AG	1.000	20.000
10/20/20	AM	1.000	20.000
10/21/20	AM	1.000	20.000
10/22/20	SE	1.000	20.000

CHAIN OF CUSTODY

TERRA FUTURE AURA
ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
 5755 8th Street East
 Tacoma, WA 98424
 Phone: (253) 922-2310
 Fax: (000) 000-0000
 Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Physis Labs
 1904 E. Wright Circle
 Anaheim, CA 92806
 Phone : (714) 335-5793
 Fax: -

Analysis	Due	Expires	Comments
Sample ID: L9-45_20LT001_091020_01_LOB_TA		Sampled: 10-Sep-20 07:59 MS/MSD	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 04:59	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: L9-45_20LT002_091020_02_LOB_TA		Sampled: 10-Sep-20 07:59	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 04:59	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: L9-45_20LT004_091020_03_LOB_TA		Sampled: 10-Sep-20 08:07	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:07	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: L9-45_20LT004_091020_04_LOB_TA		Sampled: 10-Sep-20 08:07	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:07	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: L9-45_20LT005_091020_06_LOB_TA		Sampled: 10-Sep-20 08:14	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

			10-2-20
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
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Sample ID: L9-45_20LT005_091020_07_LOB_TA **Sampled: 10-Sep-20 08:14**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: L9-45_20LT005_091020_08_LOB_TA **Sampled: 10-Sep-20 08:14**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: L9-45_20LT006_091020_05_LOB_TA **Sampled: 10-Sep-20 08:14**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: L9-45_20LT007_091020_09_LOB_TA **Sampled: 10-Sep-20 08:20**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:20	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: L9-45_20LT009_091020_10_LOB_TA **Sampled: 10-Sep-20 08:26**


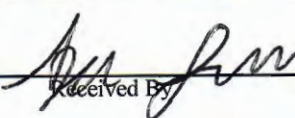
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:26	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: L9-45_20LT009_091020_11_LOB_TA **Sampled: 10-Sep-20 08:26**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:26	NOAA 1993a Lipids
<i>Containers Supplied:</i>			


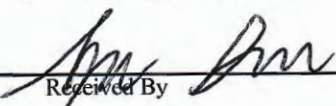
Sample ID: L9-45_20LT009_091020_12_LOB_TA **Sampled: 10-Sep-20 08:26**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:26	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

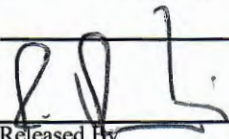

	10/1/2020		10-2-20
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0100047

Analysis	Due	Expires	Comments
Sample ID: CJ-04_20LT101_091020_01_LOB_TA		Sampled: 10-Sep-20 08:54 MS/MSD	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:54	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: CJ-04_20LT101_091020_02_LOB_TA		Sampled: 10-Sep-20 08:54 MS/MSD	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:54	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: CJ-04_20LT101_091020_03_LOB_TA		Sampled: 10-Sep-20 08:54	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:54	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: CJ-04_20LT104_091020_04_LOB_TA		Sampled: 10-Sep-20 09:05	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:05	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: CJ-04_20LT104_091020_05_LOB_TA		Sampled: 10-Sep-20 09:05	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:05	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: CJ-04_20LT105_091020_06_LOB_TA		Sampled: 10-Sep-20 09:11	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:11	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: L9-45_20LT009_091020_13_LOB_TA		Sampled: 10-Sep-20 08:26	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 05:26	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Released By 	Date <i>w/1/20</i>	Received By 	Date <i>10-2-20</i>
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
Sample ID: L9-45_20LT009_091020_14_LOB_TA		Sampled: 10-Sep-20 08:26	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 05:26	NOAA 1993a Lipids
Sample ID: 0B-05_20ET001_091020_01_TOM_WB		Sampled: 10-Sep-20 09:05	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 06:05	NOAA 1993a Lipids
Sample ID: 0B-05_20ET001_091020_02_TOM_WB		Sampled: 10-Sep-20 09:05	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 06:05	NOAA 1993a Lipids
Sample ID: 0B-05_20ET001_091020_03_TOM_WB		Sampled: 10-Sep-20 09:05 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 06:05	NOAA 1993a Lipids
Sample ID: 0B-05_20ET003_091020_04_TOM_WB		Sampled: 10-Sep-20 09:15	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 06:15	NOAA 1993a Lipids
Sample ID: CJ-04_20L108_091020_07_LOB_TA		Sampled: 10-Sep-20 09:17	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 06:17	NOAA 1993a Lipids
Sample ID: CJ-04_20L108_091020_08_LOB_TA		Sampled: 10-Sep-20 09:17	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 06:17	NOAA 1993a Lipids
	Date <i>10/1/20</i>		Date <i>10-2-20</i>
Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
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Analysis	Due	Expires	Comments
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Sample ID: CJ-04_20L109_091020_09_LOB_TA **Sampled: 10-Sep-20 09:26**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:26	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET003_091020_05_TOM_WB **Sampled: 10-Sep-20 09:15**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:15	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET003_091020_06_TOM_WB **Sampled: 10-Sep-20 09:15**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:15	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET003_091020_07_TOM_WB **Sampled: 10-Sep-20 09:15**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:15	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET003_091020_08_TOM_WB **Sampled: 10-Sep-20 09:15**

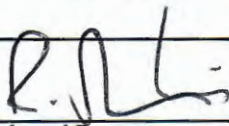
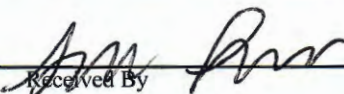
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:15	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET004_091020_09_TOM_WB **Sampled: 10-Sep-20 09:30**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:30	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET005_091020_10_TOM_WB **Sampled: 10-Sep-20 09:38**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:38	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

	10/1/20		(0-2-20)
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
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Sample ID: ES-FP_20LT202_091020_07_LOB_TA **Sampled: 10-Sep-20 09:40** MS/MSD

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:40	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: ES-FP_20LT202_091020_08_LOB_TA **Sampled: 10-Sep-20 09:40** MS/MSD

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:40	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET007_091020_12_TOM_WB **Sampled: 10-Sep-20 09:46**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET007_091020_13_TOM_WB **Sampled: 10-Sep-20 09:46**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET007_091020_14_TOM_WB **Sampled: 10-Sep-20 09:46**

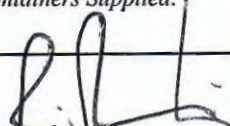
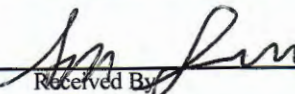
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:46	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-05_20ET009_091020_15_TOM_WB **Sampled: 10-Sep-20 09:58**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:58	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

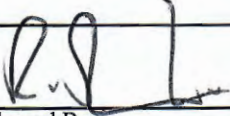
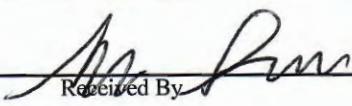
Sample ID: ES-FP_20LT203_091020_09_LOB_TA **Sampled: 10-Sep-20 10:06**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:06	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

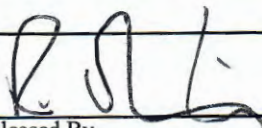
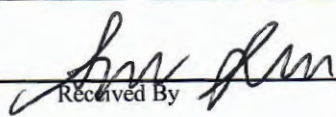
	10/1/2020		10-2-20
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
Sample ID: ES-FP_20LT203_091020_10_LOB_TA		Sampled: 10-Sep-20 10:06	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:06	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: ES-FP_20LT203_091020_11_LOB_TA		Sampled: 10-Sep-20 10:06	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:06	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: ES-FP_20LT205_091020_12_LOB_TA		Sampled: 10-Sep-20 10:14	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: ES-FP_20LT205_091020_13_LOB_TA		Sampled: 10-Sep-20 10:14	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: ES-FP_20LT206_091020_14_LOB_TA		Sampled: 10-Sep-20 10:14	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: ES-FP_20LT206_091020_15_LOB_TA		Sampled: 10-Sep-20 10:14	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:14	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: 0B-05_20ET009_091020_16_TOM_WB		Sampled: 10-Sep-20 09:58	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 06:58	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
	10/1/2020		10-2-20
Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
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Analysis	Due	Expires	Comments
Sample ID: 0B-05_20ET009_091020_17_TOM_WB		Sampled: 10-Sep-20 09:58	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 06:58	NOAA 1993a Lipids
Sample ID: 0B-05_20ET009_091020_18_TOM_WB		Sampled: 10-Sep-20 09:58	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 06:58	NOAA 1993a Lipids
Sample ID: 0B-05_20ET010_091020_19_TOM_WB		Sampled: 10-Sep-20 10:06	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 07:06	NOAA 1993a Lipids
Sample ID: 0B-05_20ET011_091020_20_TOM_WB		Sampled: 10-Sep-20 10:13	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 07:13	NOAA 1993a Lipids
Sample ID: 0B-04_20ET503_091020_01_TOM_WB		Sampled: 10-Sep-20 11:22 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 08:22	NOAA 1993a Lipids
Sample ID: ES-FP_20LT207_091020_16_LOB_TA		Sampled: 10-Sep-20 10:26	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 07:26	NOAA 1993a Lipids
Sample ID: ES-FP_20LT208_091020_17_LOB_TA		Sampled: 10-Sep-20 10:26	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 07:26	NOAA 1993a Lipids
	10/1/20		10-2-20
Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
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Analysis	Due	Expires	Comments
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Sample ID: ES-FP_20LT208_091020_18_LOB_TA **Sampled: 10-Sep-20 10:26**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:26	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: ES-FP_20LT208_091020_19_LOB_TA **Sampled: 10-Sep-20 10:26**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:26	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: ES-FP_20LT209_091020_20_LOB_TA **Sampled: 10-Sep-20 10:41**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:41	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: OL-01_20LT301_091020_01_LOB_TA **Sampled: 10-Sep-20 10:58** MS/MSD

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:58	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: OL-01_20LT301_091020_02_LOB_TA **Sampled: 10-Sep-20 10:58**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:58	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: OL-01_20LT302_091020_03_LOB_TA **Sampled: 10-Sep-20 10:58**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 07:58	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: OL-01_20LT304_091020_04_LOB_TA **Sampled: 10-Sep-20 11:10**

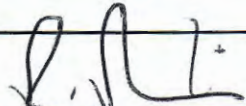
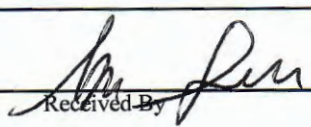
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:10	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

			10-2-20
Released By	Date	Received By	Date

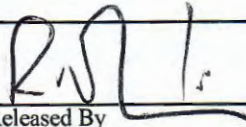
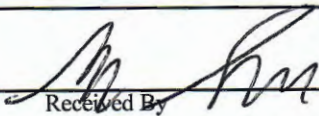
Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
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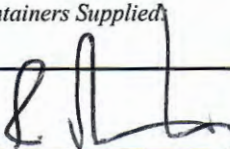
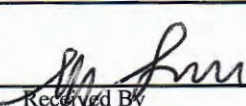
Analysis	Due	Expires	Comments
Sample ID: OL-01_20LT304_091020_05_LOB_TA		Sampled: 10-Sep-20 11:10	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:10	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OL-01_20LT304_091020_06_LOB_TA		Sampled: 10-Sep-20 11:10	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:10	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET503_091020_02_TOM_WB		Sampled: 10-Sep-20 11:22	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:22	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET506_091020_03_TOM_WB		Sampled: 10-Sep-20 11:35	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:35	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET506_091020_04_TOM_WB		Sampled: 10-Sep-20 11:35	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:35	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET506_091020_05_TOM_WB		Sampled: 10-Sep-20 11:35	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:35	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET506_091020_06_TOM_WB		Sampled: 10-Sep-20 11:35	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:35	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

	10/1/20		10-20
Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER
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Analysis	Due	Expires	Comments
Sample ID: BO-04_20ET507_091020_07_TOM_WB		Sampled: 10-Sep-20 11:45	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:45	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET508_091020_08_TOM_WB		Sampled: 10-Sep-20 11:48	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:48	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OL-01_20LT305_091020_07_LOB_TA		Sampled: 10-Sep-20 11:24	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:24	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OL-01_20LT305_091020_08_LOB_TA		Sampled: 10-Sep-20 11:24	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:24	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OL-01_20LT306_091020_09_LOB_TA		Sampled: 10-Sep-20 11:24	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:24	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: OL-01_20LT307_091020_10_LOB_TA		Sampled: 10-Sep-20 11:37	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:37	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: BO-04_20ET508_091020_09_TOM_WB		Sampled: 10-Sep-20 11:48	
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 08:48	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Released By	Date	Received By	Date
	10/1/20		10-2-20
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
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Analysis	Due	Expires	Comments
Sample ID: BO-04_20ET510_091020_17_TOM_WB		Sampled: 10-Sep-20 12:01	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:01	NOAA 1993a Lipids
Sample ID: SVE-01_20LT401_091020_01_LOB_TA		Sampled: 10-Sep-20 12:02 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:02	NOAA 1993a Lipids
Sample ID: SVE-01_20LT401_091020_02_LOB_TA		Sampled: 10-Sep-20 12:02	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:02	NOAA 1993a Lipids
Sample ID: SVE-01_20LT401_091020_03_LOB_TA		Sampled: 10-Sep-20 12:02	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:02	NOAA 1993a Lipids
Sample ID: BO-04_20ET511_091020_18_TOM_WB		Sampled: 10-Sep-20 12:05	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:05	NOAA 1993a Lipids
Sample ID: BO-04_20ET511_091020_19_TOM_WB		Sampled: 10-Sep-20 12:05	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:05	NOAA 1993a Lipids
Sample ID: BO-04_20ET513_091020_20_TOM_WB		Sampled: 10-Sep-20 12:11	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:11	NOAA 1993a Lipids
	<i>w/p/m</i>		10-2-20
Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
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Sample ID: SVE-01_20LT401_091020_04_LOB_TA **Sampled: 10-Sep-20 12:02**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 09:02	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: SVE-01_20LT402_091020_05_LOB_TA **Sampled: 10-Sep-20 12:02**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 09:02	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: SVE-01_20LT402_091020_06_LOB_TA **Sampled: 10-Sep-20 12:02**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 09:02	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: SVE-01_20LT402_091020_07_LOB_TA **Sampled: 10-Sep-20 12:02**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 09:02	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: SVE-01_20LT402_091020_08_LOB_TA **Sampled: 10-Sep-20 12:02**

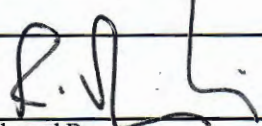
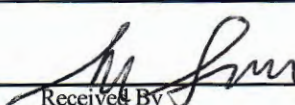
Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 09:02	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: SVE-01_20LT403_091020_09_LOB_TA **Sampled: 10-Sep-20 12:22**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 09:22	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: SVE-01_20LT403_091020_10_LOB_TA **Sampled: 10-Sep-20 12:22**

Misc. Subcontract 1	14-Oct-20 19:00	08-Oct-20 09:22	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

 Released By	10/1/20 Date	 Received By	10-2-20 Date
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Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
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Sample ID: SVE-01_20LT405_091020_14_LOB_TA **Sampled: 10-Sep-20 12:31**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:31	NOAA 1993a Lipids
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Sample ID: SVE-01_20LT405_091020_15_LOB_TA **Sampled: 10-Sep-20 12:31**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:31	NOAA 1993a Lipids
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Sample ID: SVE-01_20LT405_091020_16_LOB_TA **Sampled: 10-Sep-20 12:31**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:31	NOAA 1993a Lipids
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Sample ID: SVE-01_20LT405_091020_17_LOB_TA **Sampled: 10-Sep-20 12:31**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:31	NOAA 1993a Lipids
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Sample ID: SVE-01_20LT406_091020_18_LOB_TA **Sampled: 10-Sep-20 12:42**

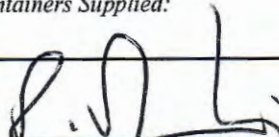
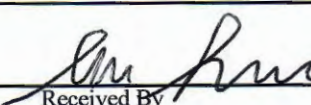
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:42	NOAA 1993a Lipids
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Sample ID: SVE-01_20LT406_091020_19_LOB_TA **Sampled: 10-Sep-20 12:42**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:42	NOAA 1993a Lipids
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Sample ID: SVE-01_20LT406_091020_20_LOB_TA **Sampled: 10-Sep-20 12:42**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 09:42	NOAA 1993a Lipids
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	10/1/20		10-2-20
Released By	Date	Received By	Date

Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
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Sample ID: CJ-04_20LT111_091020_14_LOB_TA **Sampled: 10-Sep-20 08:48**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 05:48	NOAA 1993a Lipids
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Sample ID: CJ-04_20LT111_091020_15_LOB_TA **Sampled: 10-Sep-20 08:48**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 05:48	NOAA 1993a Lipids
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Sample ID: CJ-04_20LT111_091020_16_LOB_TA **Sampled: 10-Sep-20 08:48**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 05:48	NOAA 1993a Lipids
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Sample ID: CJ-04_20LT111_091020_17_LOB_TA **Sampled: 10-Sep-20 08:48**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 05:48	NOAA 1993a Lipids
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Sample ID: CJ-04_20LT113_091020_18_LOB_TA **Sampled: 10-Sep-20 08:59**

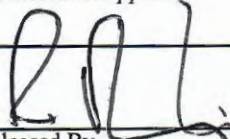
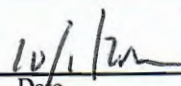
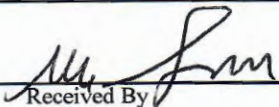
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 05:59	NOAA 1993a Lipids
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Sample ID: CJ-04_20LT113_091020_19_LOB_TA **Sampled: 10-Sep-20 08:59**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 05:59	NOAA 1993a Lipids
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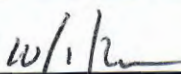
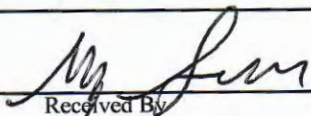
Sample ID: CJ-04_20LT116_091020_20_LOB_TA **Sampled: 10-Sep-20 09:07**

Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	08-Oct-20 06:07	NOAA 1993a Lipids
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 Released By	 Date	 Received By	 Date
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Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
Sample ID: OL-01_20LT324_091020_16_LOB_TA		Sampled: 12-Sep-20 10:10	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	10-Oct-20 07:10	NOAA 1993a Lipids
Sample ID: 0B-01_20ET606_091020_05_TOM_WB		Sampled: 13-Sep-20 10:30	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	11-Oct-20 07:30	NOAA 1993a Lipids
Sample ID: 0B-01_20ET607_091020_06_TOM_WB		Sampled: 13-Sep-20 10:33	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	11-Oct-20 07:33	NOAA 1993a Lipids
Sample ID: 0B-01_20ET607_091020_07_TOM_WB		Sampled: 13-Sep-20 10:33	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	11-Oct-20 07:33	NOAA 1993a Lipids
Sample ID: 0B-01_20ET607_091020_08_TOM_WB		Sampled: 13-Sep-20 10:33	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	11-Oct-20 07:33	NOAA 1993a Lipids
Sample ID: 0B-01_20ET607_091020_09_TOM_WB		Sampled: 13-Sep-20 10:33	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	11-Oct-20 07:33	NOAA 1993a Lipids
Sample ID: 0B-01_20ET609_091020_10_TOM_WB		Sampled: 13-Sep-20 10:43	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	11-Oct-20 07:43	NOAA 1993a Lipids
			10-2-20
Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
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Sample ID: 0B-01_20ET609_091020_11_TOM_WB **Sampled: 13-Sep-20 10:43**

Misc. Subcontract 1	14-Oct-20 19:00	11-Oct-20 07:43	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-01_20ET611_091020_12_TOM_WB **Sampled: 13-Sep-20 10:51**

Misc. Subcontract 1	14-Oct-20 19:00	11-Oct-20 07:51	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-01_20ET613_091020_13_TOM_WB **Sampled: 13-Sep-20 10:57**

Misc. Subcontract 1	14-Oct-20 19:00	11-Oct-20 07:57	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-01_20ET613_091020_14_TOM_WB **Sampled: 13-Sep-20 10:57**

Misc. Subcontract 1	14-Oct-20 19:00	11-Oct-20 07:57	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-01_20ET613_091020_15_TOM_WB **Sampled: 13-Sep-20 10:57**

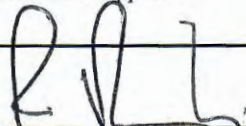
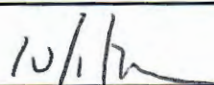
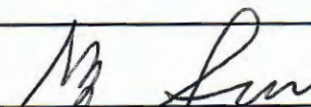
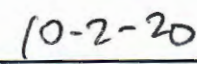
Misc. Subcontract 1	14-Oct-20 19:00	11-Oct-20 07:57	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-01_20ET614_091020_16_TOM_WB **Sampled: 13-Sep-20 11:04**

Misc. Subcontract 1	14-Oct-20 19:00	11-Oct-20 08:04	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

Sample ID: 0B-01_20ET614_091020_17_TOM_WB **Sampled: 13-Sep-20 11:04**

Misc. Subcontract 1	14-Oct-20 19:00	11-Oct-20 08:04	NOAA 1993a Lipids
<i>Containers Supplied:</i>			

			
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00047

Analysis	Due	Expires	Comments
Sample ID: 0B-01_20ET616_091020_18_TOM_WB		Sampled: 13-Sep-20 11:12	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	11-Oct-20 08:12	NOAA 1993a Lipids
Sample ID: 0B-01_20ET617_091020_19_TOM_WB		Sampled: 13-Sep-20 11:15	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	11-Oct-20 08:15	NOAA 1993a Lipids
Sample ID: 0B-01_20ET617_091020_20_TOM_WB		Sampled: 13-Sep-20 11:15	
Misc. Subcontract 1 <i>Containers Supplied:</i>	14-Oct-20 19:00	11-Oct-20 08:15	NOAA 1993a Lipids




Released By _____ Date 10/1/20 Received By _____ Date 10-2-20

Released By _____ Date _____ Received By _____ Date _____

Project Iteration ID: 2009006-001
 Client Name: Eurofins Frontier Geosciences
 Project Name: 0100047
 COC Page Number: 24 of 24
 Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: BTS
2. Date Received: 10-2-20
3. Time Received: 0950
4. Client Name: Eurofins
5. Courier Information: (Please circle)
 - Client
 - UPS
 - Area Fast
 - DRS
 - **FedEx**
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver:
 - i. Start Time: _____
 - iii. Total Mileage: _____
 - ii. End Time: _____
 - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
 - 1 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
7. What type of ice was used: (Please any that were used or circle none)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - None
8. Randomly Selected Samples Temperature (°C): -3.2 Used I/R Thermometer # 2

Inspection Info

1. Initials Inspected By: RGH/AI

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out..... Yes / No
2. All sample containers arrived intact..... Yes / No
3. All samples listed on COC(s) are present..... Yes / No
4. Information on containers consistent with information on COC(s)..... Yes / No
5. Correct containers and volume for all analyses indicated..... Yes / No
6. All samples received within method holding time..... Yes / No
7. Correct preservation used for all analyses indicated..... Yes / No
8. Name of sampler included on COC(s)..... Yes / No

Notes:

BO-04-20ET511_091020-18-TOM-WB missing

HERRING_091020-LOBSTER-BAIT received but not on the COC.

Project Iteration ID: 2009006-001B
 Client Name: Eurofins Frontier Geosciences
 Project Name: 0100047
 COC Page Number: 2 of 2
 Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: AG
2. Date Received: 10/7/2020
3. Time Received: 9:45
4. Client Name: Eurofins
5. Courier Information: (Please circle)
 - Client
 - UPS
 - Area Fast
 - DRS
 - FedEx
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver:
 - i. Start Time: _____
 - ii. End Time: _____
 - iii. Total Mileage: _____
 - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
 - 1 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
7. What type of ice was used: (Please any that were used or circle none)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - None
8. Randomly Selected Samples Temperature (°C): 3.0 Used I/R Thermometer # 1

Inspection Info

1. Initials Inspected By: R6H

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out..... Yes / No
2. All sample containers arrived intact..... Yes / No
3. All samples listed on COC(s) are present..... Yes / No
4. Information on containers consistent with information on COC(s)..... Yes / No
5. Correct containers and volume for all analyses indicated..... Yes / No
6. All samples received within method holding time..... Yes / No
7. Correct preservation used for all analyses indicated..... Yes / No
8. Name of sampler included on COC(s)..... Yes / No

Notes:



November 18, 2020

Patrick Garcia-Strickland
Eurofins Frontier Geosciences
5755 8th Street East
Tacoma, WA 98424-

Project Name: 0100047
Physis Project ID: 2009006-003


Dear Patrick,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 11/13/2020. A total of 2 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Organics
Percent Lipids by Gravimetric

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Misty Mercier
714 602-5320
Extension 202
mistymercier@physislabs.com

PROJECT SAMPLE LIST

Eurofins Frontier Geosciences
0100047

PHYSIS Project ID: 2009006-00
Total Samples: 2

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
82879	CJ-04_20LT109_091020_10_LOB_TA		9/10/2020	9:26	Tissue	Not Specified
82880	CJ-04_20LT109_091020_11_LOB_TA		9/10/2020	9:26	Tissue	Not Specified

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS₁/MS₂, BS₁/BS₂, LCS₁/LCS₂, LCM₁/LCM₂, CRM₁/CRM₂, surrogate spikes and/or replicate project sample analysis (R₁/R₂) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

PHYSIS

ANALYTICAL

REPORT

TERRA AURA

ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 82879-R1	CJ-04_20LT109_091020_10_LOB_T	Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 9:26		Received: 13-Nov-20		
Percent Lipids	Gravimetric	% wet weight	0.703	0.01	0.05	NA		C-27154	13-Nov-20	16-Nov-20
Sample ID: 82880-R1	CJ-04_20LT109_091020_11_LOB_TA	Matrix: Tissue		Dilution Factor: 1		Sampled: 10-Sep-20 9:26		Received: 13-Nov-20		
Percent Lipids	Gravimetric	% wet weight	1.22	0.01	0.05	NA		C-27154	13-Nov-20	16-Nov-20

PHYSICS

QUALITY CONTROL REPORT

TERRA FUSION AQUA AURA
ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature



1904 E. Wright Circle, Anaheim CA 92806 main: (714) 602-5320 fax: (714) 602-5321 www.physislabs.com info@physislabs.com CA ELAP #2769

Total Extractable Organics

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
Sample ID: 82877-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27154		Prepared: 13-Nov-20		Analyzed: 16-Nov-20	
Percent Lipids	NA	ND	0.01	0.05	% wet weight					
Sample ID: 82878-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27154		Prepared: 13-Nov-20		Analyzed: 16-Nov-20	
Percent Lipids	NA	12.2	0.01	0.05	% wet weight	10.4	117	62 - 137% PASS		
Sample ID: 82880-R2		CJ-04_20LT109_091020_11_LOB_TA			Matrix: Tissue		Sampled: 10-Sep-20 9:26		Received: 13-Nov-20	
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27154		Prepared: 13-Nov-20		Analyzed: 16-Nov-20	
Percent Lipids	NA	1.08	0.01	0.05	% wet weight			12	30	PASS

PHYSIS

Lab Book

TERRA

FAUNA

FLORA

AQUA

AURA

ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Date/Time Processed: 11/13/2020 (12:00)

Date/Time Analyzed: 11/16/2020 (12:00)

C-27154

O-31004

Description: Percent lipids for Eurofins Frontier GeoSciences
0100047 Project.

Method: Gravimetric

	PSID	Sample Wt (g)	Vial Wt (g)	Vial + Sample Wt (g)		wet % lipids	Com
				(1)	(2)		
(82877)	Blank	—	2.0643	2.0643	2.0643	0.000	
(82878)	CRM 1947	0.639	2.0845	2.1624	2.1628	12.222	
	82879	5.520	2.0789	2.1177	2.1177	0.703	
	82880 R1	5.535	2.0528	2.1205	2.1205	1.223	
	R2	5.337	2.0810	2.1389	2.1389	1.085	

Entered
AG
11/17/2020

PHYSIS

Calibration

TERRA

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AQUA

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ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

COMPOSITION BOOK

BALANCE #1 CALIBRATION LOG BOOK

S/N: WV1107029

Wide Rule

100 Sheets • 200 pages

9.75 in x 7.5 in/24.7 cm x 19.0 cm

TOP FLIGHT

Wide Ruling

DATE	ANALYST	200 mg	5g	50g :	2 mg	1mg	DATE
10/19/20	JH	200.0	5.0000	49.9999	2.0	1.0000	
10/20/20	JH	200.0	5.0000	49.9999	2.0	1.0000	
10/21/2020	MN	200.1	5.0000	50.0000	2.1	1.0000	
10/22/20	JH	200.0	5.0000	50.0000	2.0	1.0001	
10/23/20	JH	199.8	5.0000	50.0000	2.0	1.0001	
10/26/20	KC	199.9	5.0000	49.9999	2.0	1.0000	
10/28/20	JH	200.0	5.0000	49.9999	2.0	1.0001	
10/29/20	KC	200.1	5.0001	50.0000	2.0	1.0000	
10/30/20	SE	200.1	5.0000	50.0000	2.0	1.0000	
11/2/20	JH	200.0	5.0000	50.0000	2.0	1.0001	
11/4/20	JH	200.0	5.0000	50.0000	2.0	1.0002	
11/5/20	JH	200.0	5.0000	50.0000	2.0	1.0000	
11/6/20	JH	200.0	5.0000	50.0000	2.0	1.0000	
11/9/20	AM	200.0	5.0000	50.0001	2.0	1.0001	
11/10/20	KC	200.0	5.0000	50.0000	2.0	1.0001	
11/11/20	SE	199.9	5.0000	50.0000	2.0	1.0000	
11/12/20	MN	200.1	5.0001	50.0000	2.0	1.0000	
11/13/20	MN	200.0	5.0001	50.0000	2.0	1.0000	
11/14/20	AM	200.0	5.0000	50.0001	2.1	1.0001	
11/16/20	JH	200.0	5.0000	50.0000	2.0	1.0000	
11/17/20	JH	200.0	5.0000	50.0000	2.0	1.0001	

Mead.

BALANCE #2

CALIBRATION LOG BOOK

S/N: 1128331102

FIVE STAR.
★★★★★

<u>Date</u>	<u>Analyst</u>	<u>1g</u>	<u>20g</u>
10/06/20	MN	1.000	20.000
10/07/20	SE	1.000	20.000
10/08/20	AG	1.000	20.000
10/12/20	AG	1.000	20.000
10/13/20	SE	1.000	20.000
10/14/20	AM	1.000	20.000
10/15/20	AG	1.000	20.000
10/16/20	AG	1.000	20.000
10/19/20	AG	1.000	20.000
10/20/20	AM	1.000	20.000
10/21/20	AM	1.000	20.000
10/22/20	SE	1.000	20.000
10/26/20	AM	1.000	20.000
10/27/20	AG	1.000	20.000
10/28/20	AM	1.000	20.000
10/29/20	AG	1.000	20.000
11/02/20	SE	1.000	20.000
11/3/20	AM	1.000	20.000
11/4/20	SE	1.000	20.000
11/5/20	SE	1.000	20.000
11/06/20	MN	1.000	20.000
11/09/20	AG	1.000	20.000
11/10/20	AG	1.000	20.000
11/11/20	SE	1.000	20.000
11/13/20	SE	1.000	20.000
11/15/20	MN	1.000	20.000
11/16/2020	MN	1.000	20.000

**CHAIN OF
CUSTODY**

P H A S I S

TERRA FUSION AURA

ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Project Iteration ID: 2009006-003
 Client Name: Eurofins Frontier Geosciences
 Project Name: 0100047
 COC Page Number: 2 of 2
 Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: DA
2. Date Received: 11/13/2020
3. Time Received: 0930
4. Client Name: Eurofins
5. Courier Information: (Please circle)
 - Client
 - UPS
 - Area Fast
 - DRS
 - FedEx
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver:
 - i. Start Time: _____
 - ii. End Time: _____
 - iii. Total Mileage: _____
 - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
 - 1 Cooler
 - ___ Styrofoam Cooler
 - ___ Boxes
 - None
 - ___ Carboy(s)
 - ___ Carboy Trash Can(s)
 - ___ Carboy Cap(s)
 - Other _____
7. What type of ice was used: (Please circle any that apply)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - Water
 - None
8. Randomly Selected Samples Temperature (°C): 1.9
 Used I/R Thermometer # 2

Inspection Info

1. Initials Inspected By: DA

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out..... Yes / No
2. All sample containers arrived intact..... Yes / No
3. All samples listed on COC(s) are present..... Yes / No
4. Information on containers consistent with information on COC(s)..... Yes / No
5. Correct containers and volume for all analyses indicated..... Yes / No
6. All samples received within method holding time..... Yes / No
7. Correct preservation used for all analyses indicated..... Yes / No
8. Name of sampler included on COC(s)..... Yes / No

Notes:



November 13, 2020

Patrick Garcia-Strickland
Eurofins Frontier Geosciences
5755 8th Street East
Tacoma, WA 98424-

Project Name: 0100078
Physis Project ID: 2009006-002

Dear Patrick,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 10/2/2020. A total of 59 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Organics
Percent Lipids by Gravimetric

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Misty Mercier
714 602-5320
Extension 202
mistymercier@physislabs.com

PROJECT SAMPLE LIST

Eurofins Frontier Geosciences
0100078

PHYSIS Project ID: 2009006-00

Total Samples: 59

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
81029	S-FP_20ET711_091020_01_TOM_WI		9/10/2020	8:28	Tissue	Not Specified
81030	S-FP_20ET717_091020_02_TOM_WI		9/10/2020	8:54	Tissue	Not Specified
81031	S-FP_20ET741_091520_03_TOM_WI		9/15/2020	8:34	Tissue	Not Specified
81032	S-FP_20ET755_091520_04_TOM_WI		9/15/2020	9:02	Tissue	Not Specified
81033	S-FP_20ET756_091520_05_TOM_WI		9/15/2020	9:05	Tissue	Not Specified
81034	S-FP_20SN001_091120_01_RAS_WI		9/11/2020	9:15	Tissue	Not Specified
81035	S-FP_20SN001_091120_02_RAS_WI		9/11/2020	9:15	Tissue	Not Specified
81036	RB-02_20ET653_091520_01_TOM_W		9/15/2020	18:55	Tissue	Not Specified
81037	RB-02_20ET654_091520_02_TOM_W		9/15/2020	19:00	Tissue	Not Specified
81038	RB-02_20ET659_091520_03_TOM_W		9/15/2020	19:05	Tissue	Not Specified
81039	RB-02_20ET659_091520_04_TOM_W		9/15/2020	19:10	Tissue	Not Specified
81040	L-01_20LT306_091020_01_TOM_WI		9/10/2020	11:24	Tissue	Not Specified
81041	S-02_20ET909_091620_01_TOM_WI		9/16/2020	10:08	Tissue	Not Specified
81042	S-02_20ET924_091820_02_TOM_WI		9/18/2020	11:53	Tissue	Not Specified
81043	S-02_20ET934_091820_03_TOM_WI		9/18/2020	12:23	Tissue	Not Specified
81044	S-02_20ET938_091820_04_TOM_WI		9/18/2020	12:35	Tissue	Not Specified
81045	S-02_20ET941_091820_05_TOM_WI		9/18/2020	12:48	Tissue	Not Specified
81046	RB-01_20LT606_091720_01_LOB_T/		9/17/2020	12:32	Tissue	Not Specified
81047	RB-01_20LT620_091720_02_LOB_T/		9/17/2020	13:03	Tissue	Not Specified
81048	RB-01_20LT621_092020_03_LOB_T/		9/20/2020	11:02	Tissue	Not Specified
81049	RB-01_20LT627_092020_04_LOB_T/		9/20/2020	11:19	Tissue	Not Specified
81050	RB-02_20ET662_091520_05_TOM_W		9/15/2020	19:15	Tissue	Not Specified
81051	L-01_20ET866_091820_02_TOM_WI		9/18/2020	9:50	Tissue	Not Specified
81052	L-01_20ET866_091820_03_TOM_WI		9/18/2020	9:50	Tissue	Not Specified
81053	RB-01_20LT629_092020_05_LOB_T/		9/20/2020	11:25	Tissue	Not Specified
81054	RB-01_20LT633_092020_06_LOB_T/		9/20/2020	11:37	Tissue	Not Specified
81055	RB-01_20LT633_092020_07_LOB_T/		9/20/2020	11:37	Tissue	Not Specified
81056	RB-01_20LT635_092020_08_LOB_T/		9/20/2020	11:46	Tissue	Not Specified
81057	RB-01_20LT639_092020_09_LOB_T/		9/20/2020	11:56	Tissue	Not Specified
81058	RB-01_20LT639_092020_10_LOB_T/		9/20/2020	11:56	Tissue	Not Specified
81059	VE-01_20ET033_092120_01_TOM_W		9/21/2020	8:22	Tissue	Not Specified
81060	VE-01_20ET048_092120_03_TOM_W		9/21/2020	9:32	Tissue	Not Specified
81061	VE-01_20ET048_092120_04_TOM_W		9/21/2020	9:32	Tissue	Not Specified
81062	VE-01_20ET048_092120_05_TOM_W		9/21/2020	9:32	Tissue	Not Specified
81063	VE-01_20ET048_092120_06_TOM_W		9/21/2020	9:32	Tissue	Not Specified

Eurofins Frontier Geosciences
0100078

PHYSIS Project ID: 2009006-00

Total Samples: 59

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
81064	VE-01_20ET056_092120_02_TOM_W		9/21/2020	8:31	Tissue	Not Specified
81065	S-02_20ET952_092120_06_TOM_WI		9/21/2020	11:08	Tissue	Not Specified
81066	S-02_20ET962_092120_07_TOM_WI		9/21/2020	11:37	Tissue	Not Specified
81067	S-02_20ET964_092120_08_TOM_WI		9/21/2020	11:44	Tissue	Not Specified
81068	S-02_20ET967_092120_09_TOM_WI		9/21/2020	11:53	Tissue	Not Specified
81069	S-02_20ET968_092120_10_TOM_WI		9/21/2020	11:56	Tissue	Not Specified
81070	S-02_20ET970_092120_11_TOM_WI		9/21/2020	12:02	Tissue	Not Specified
81071	VE-01_20ET048_092120_07_TOM_W		9/21/2020	9:32	Tissue	Not Specified
81072	VE-01_20ET050_092120_08_TOM_W		9/21/2020	9:45	Tissue	Not Specified
81073	VE-01_20ET051_092120_09_TOM_W		9/21/2020	9:48	Tissue	Not Specified
81074	VE-01_20ET052_092120_10_TOM_W		9/21/2020	9:52	Tissue	Not Specified
81075	VE-01_20ET053_092120_11_TOM_W		9/21/2020	9:56	Tissue	Not Specified
81076	VE-01_20ET059_092120_12_TOM_W		9/21/2020	10:14	Tissue	Not Specified
81077	S-02_20ET973_092120_12_TOM_WI		9/21/2020	12:12	Tissue	Not Specified
81078	S-02_20ET974_092120_13_TOM_WI		9/21/2020	12:15	Tissue	Not Specified
81079	S-02_20ET978_092120_14_TOM_WI		9/21/2020	12:26	Tissue	Not Specified
81080	VE-01_20ET077_092220_13_TOM_W		9/22/2020	9:08	Tissue	Not Specified
81081	VE-01_20ET082_092220_14_TOM_W		9/22/2020	9:19	Tissue	Not Specified
81082	VE-01_20ET083_092220_15_TOM_W		9/22/2020	9:23	Tissue	Not Specified
81083	VE-01_20ET083_092220_16_TOM_W		9/22/2020	9:23	Tissue	Not Specified
81084	VE-01_20ET083_092220_17_TOM_W		9/22/2020	9:23	Tissue	Not Specified
81085	VE-01_20ET087_092220_18_TOM_W		9/22/2020	9:43	Tissue	Not Specified
81086	VE-01_20ET089_092220_19_TOM_W		9/22/2020	9:40	Tissue	Not Specified
81087	VE-01_20ET089_092220_20_TOM_W		9/22/2020	9:40	Tissue	Not Specified

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS₁/MS₂, BS₁/BS₂, LCS₁/LCS₂, LCM₁/LCM₂, CRM₁/CRM₂, surrogate spikes and/or replicate project sample analysis (R₁/R₂) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

PHYSIS

ANALYTICAL

REPORT

TERRA AURA

ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 81029-R1	ES-FP_20ET711_091020_01_TOM_	Matrix: Tissue		Dilution Factor: 1			Sampled: 10-Sep-20 8:28		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.21	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81030-R1	ES-FP_20ET717_091020_02_TOM_	Matrix: Tissue		Dilution Factor: 1			Sampled: 10-Sep-20 8:54		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	0.869	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81031-R1	ES-FP_20ET741_091520_03_TOM_	Matrix: Tissue		Dilution Factor: 1			Sampled: 15-Sep-20 8:34		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.18	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81032-R1	ES-FP_20ET755_091520_04_TOM_	Matrix: Tissue		Dilution Factor: 1			Sampled: 15-Sep-20 9:02		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.58	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81033-R1	ES-FP_20ET756_091520_05_TOM_	Matrix: Tissue		Dilution Factor: 1			Sampled: 15-Sep-20 9:05		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.23	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81034-R1	ES-FP_20SN001_091120_01_RAS_W	Matrix: Tissue		Dilution Factor: 1			Sampled: 11-Sep-20 9:15		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	0.765	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81035-R1	ES-FP_20SN001_091120_02_RAS_	Matrix: Tissue		Dilution Factor: 1			Sampled: 11-Sep-20 9:15		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.08	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81036-R1	FRB-02_20ET653_091520_01_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 15-Sep-20 18:55		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.02	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81037-R1	FRB-02_20ET654_091520_02_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 15-Sep-20 19:00		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.32	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81038-R1	FRB-02_20ET659_091520_03_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 15-Sep-20 19:05		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.66	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81039-R1	FRB-02_20ET659_091520_04_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 15-Sep-20 19:10		Received: 07-Oct-20	
Percent Lipids	Gravimetric	% wet weight	0.818	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 81040-R1	OL-01_20LT306_091020_01_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 10-Sep-20 11:24		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	1.31	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81041-R1	ES-02_20ET909_091620_01_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 16-Sep-20 10:08		Received: 07-Oct-20				
Percent Lipids	Gravimetric	% wet weight	1.17	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81042-R1	ES-02_20ET924_091820_02_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 18-Sep-20 11:53		Received: 07-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.718	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81043-R1	ES-02_20ET934_091820_03_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 18-Sep-20 12:23		Received: 07-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.959	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81044-R1	ES-02_20ET938_091820_04_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 18-Sep-20 12:35		Received: 07-Oct-20				
Percent Lipids	Gravimetric	% wet weight	1.08	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81045-R1	ES-02_20ET941_091820_05_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 18-Sep-20 12:48		Received: 07-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.881	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81046-R1	FRB-01_20LT606_091720_01_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 17-Sep-20 12:32		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.791	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81047-R1	FRB-01_20LT620_091720_02_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 17-Sep-20 13:03		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.533	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81048-R1	FRB-01_20LT621_092020_03_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 20-Sep-20 11:02		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.791	0.01	0.05	NA		C-27151	09-Nov-20	13-Nov-20
Sample ID: 81049-R1	FRB-01_20LT627_092020_04_LOB_	Matrix: Tissue	Dilution Factor: 1	Sampled: 20-Sep-20 11:19		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.621	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81050-R1	FRB-02_20ET662_091520_05_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 15-Sep-20 19:15		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.924	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 81051-R1	OL-01_20ET866_091820_02_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 18-Sep-20 9:50		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.02	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81052-R1	OL-01_20ET866_091820_03_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 18-Sep-20 9:50		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.32	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81053-R1	FRB-01_20LT629_092020_05_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 20-Sep-20 11:25		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.802	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81054-R1	FRB-01_20LT633_092020_06_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 20-Sep-20 11:37		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.879	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81055-R1	FRB-01_20LT633_092020_07_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 20-Sep-20 11:37		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.966	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81056-R1	FRB-01_20LT635_092020_08_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 20-Sep-20 11:46		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.16	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81057-R1	FRB-01_20LT639_092020_09_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 20-Sep-20 11:56		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.786	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81058-R1	FRB-01_20LT639_092020_10_LOB_ Matrix: Tissue			Dilution Factor: 1		Sampled: 20-Sep-20 11:56		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.622	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81059-R1	SVE-01_20ET033_092120_01_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 8:22		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.05	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81060-R1	SVE-01_20ET048_092120_03_TOM Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 9:32		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.14	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81061-R1	SVE-01_20ET048_092120_04_TOM Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 9:32		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.953	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 81062-R1	SVE-01_20ET048_092120_05_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 9:32		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	0.837	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81063-R1	SVE-01_20ET048_092120_06_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 9:32		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	0.795	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81064-R1	SVE-01_20ET056_092120_02_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 8:31		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.07	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81065-R1	ES-02_20ET952_092120_06_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 11:08		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	0.903	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81066-R1	ES-02_20ET962_092120_07_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 11:37		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.38	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81067-R1	ES-02_20ET964_092120_08_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 11:44		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	0.893	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81068-R1	ES-02_20ET967_092120_09_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 11:53		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1	0.01	0.05	NA		C-27152	10-Nov-20	13-Nov-20
Sample ID: 81069-R1	ES-02_20ET968_092120_10_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 11:56		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.16	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81070-R1	ES-02_20ET970_092120_11_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 12:02		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.34	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81071-R1	SVE-01_20ET048_092120_07_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 9:32		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	0.986	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81072-R1	SVE-01_20ET050_092120_08_TOM	Matrix: Tissue		Dilution Factor: 1			Sampled: 21-Sep-20 9:45		Received: 02-Oct-20	
Percent Lipids	Gravimetric	% wet weight	1.5	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 81073-R1	SVE-01_20ET051_092120_09_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 9:48		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.12	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81074-R1	SVE-01_20ET052_092120_10_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 9:52		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.41	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81075-R1	SVE-01_20ET053_092120_11_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 9:56		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.09	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81076-R1	SVE-01_20ET059_092120_12_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 10:14		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.992	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81077-R1	ES-02_20ET973_092120_12_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 12:12		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	0.944	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81078-R1	ES-02_20ET974_092120_13_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 12:15		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.02	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81079-R1	ES-02_20ET978_092120_14_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 21-Sep-20 12:26		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.03	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81080-R1	SVE-01_20ET077_092220_13_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 22-Sep-20 9:08		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.13	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81081-R1	SVE-01_20ET082_092220_14_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 22-Sep-20 9:19		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.38	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81082-R1	SVE-01_20ET083_092220_15_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 22-Sep-20 9:23		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81083-R1	SVE-01_20ET083_092220_16_TOM_ Matrix: Tissue			Dilution Factor: 1		Sampled: 22-Sep-20 9:23		Received: 02-Oct-20		
Percent Lipids	Gravimetric	% wet weight	1.31	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20

Total Extractable Organics

ANALYTE	Method	Units	RESULT	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 81084-R1	SVE-01_20ET083_092220_17_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 22-Sep-20 9:23		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	0.898	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81085-R1	SVE-01_20ET087_092220_18_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 22-Sep-20 9:43		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	1.85	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81086-R1	SVE-01_20ET089_092220_19_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 22-Sep-20 9:40		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	1.21	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20
Sample ID: 81087-R1	SVE-01_20ET089_092220_20_TOM_	Matrix: Tissue	Dilution Factor: 1	Sampled: 22-Sep-20 9:40		Received: 02-Oct-20				
Percent Lipids	Gravimetric	% wet weight	1.65	0.01	0.05	NA		C-27153	11-Nov-20	13-Nov-20

PHYSICS

QUALITY CONTROL REPORT

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Innovative Solutions for Nature



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Total Extractable Organics QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE	SOURCE	ACCURACY		PRECISION		QA CODE
								LEVEL	RESULT	%	LIMITS	
Sample ID: 81026-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27151		Prepared: 09-Nov-20		Analyzed: 13-Nov-20			
Percent Lipids	NA	ND	0.01	0.05	% wet weight							
Sample ID: 81027-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27152		Prepared: 10-Nov-20		Analyzed: 13-Nov-20			
Percent Lipids	NA	ND	0.01	0.05	% wet weight							
Sample ID: 81028-B1		QAQC Procedural Blank			Matrix: BlankMatrix		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27153		Prepared: 11-Nov-20		Analyzed: 13-Nov-20			
Percent Lipids	NA	ND	0.01	0.05	% wet weight							
Sample ID: 81040-R2		OL-01_20LT306_091020_01_TOM_WB			Matrix: Tissue		Sampled: 10-Sep-20 11:24		Received: 02-Oct-20			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27151		Prepared: 09-Nov-20		Analyzed: 13-Nov-20			
Percent Lipids	NA	1.13	0.01	0.05	% wet weight			15	30	PASS		
Sample ID: 81059-R2		SVE-01_20ET033_092120_01_TOM_WB			Matrix: Tissue		Sampled: 21-Sep-20 8:22		Received: 02-Oct-20			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27152		Prepared: 10-Nov-20		Analyzed: 13-Nov-20			
Percent Lipids	NA	1.08	0.01	0.05	% wet weight			3	30	PASS		
Sample ID: 81070-R2		ES-02_20ET970_092120_11_TOM_WB			Matrix: Tissue		Sampled: 21-Sep-20 12:02		Received: 02-Oct-20			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27153		Prepared: 11-Nov-20		Analyzed: 13-Nov-20			
Percent Lipids	NA	1.4	0.01	0.05	% wet weight			4	30	PASS		
Sample ID: 81088-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27151		Prepared: 09-Nov-20		Analyzed: 13-Nov-20			
Percent Lipids	NA	10.4	0.01	0.05	% wet weight	10.4	100	62 - 137%	PASS			
Sample ID: 81089-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27152		Prepared: 10-Nov-20		Analyzed: 13-Nov-20			
Percent Lipids	NA	9.71	0.01	0.05	% wet weight	10.4	93	62 - 137%	PASS			
Sample ID: 81090-CRM1		QAQC CRM - SRM 1947			Matrix: Tissue		Sampled:		Received:			
Dilution Factor: 1		Method: Gravimetric			Batch ID: C-27153		Prepared: 11-Nov-20		Analyzed: 13-Nov-20			
Percent Lipids	NA	10.6	0.01	0.05	% wet weight	10.4	102	62 - 137%	PASS			

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Lab Book

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ENVIRONMENTAL LABORATORIES, INC.

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2009006-002 Batch #1

Date/Time Processed: 11/09/2020 (11:00)

C-27151

Date/Time Analyzed: 11/13/2020 (10:20am)

AG 11/9/2020 ^{wrong name}Description: Percent lipids for ~~GEE~~ Enofins ~~Eaton~~ Frontier Geosciences 0100078 project.

Method: Gravimetric

PSID	Sample wt(g)	vial wt(g)	Vial + Sample wt(g)		wet % Lipids	Comments
			(1)	(2)		
Blank		2.0331	2.0333	2.0333	0.004	
CRM 1447	0.616	1.9890	2.0530	2.0530	10.390	
81029	5.018	2.0524	2.1133	2.1133	1.214	
81030	0.869	2.0750	2.0832	2.0831	0.869	A, B
81031	2.678	2.0243	2.0560	2.0560	1.184	A
81032	5.558	2.0346	2.1225	2.1224	1.581	
81033	5.659	2.0232	2.0928	2.0927	1.229	
81034	5.3000	2.0003	2.0409	2.0408	0.765	
81035	5.506	2.0209	2.0803	2.0800	1.076	A
81036	5.080	2.0431	2.0951	2.0950	1.023	
81037	6.380	2.0742	2.1583	2.1583	1.318	
81038	5.228	2.0242	2.1109	2.1109	1.658	
81039	4.786	2.0036	2.0428	2.0427	0.818	A
81040 R1	5.240	AG 11/9/2020 2.19804	2.0488	2.0488	1.305	
R2	5.976	2.0854	2.1551	2.1551	1.166	
81041	4.911	2.0863	2.1216	2.1215	0.718	
81042	3.327	2.0135	2.0454	2.0454	0.959	A
81043	5.331	2.0880	2.1462	2.1462	1.080	A
81044	5.708	2.0440	2.0949	2.0949	0.881	
81045	5.133	2.0110	2.0516	2.0516	0.791	
81046	6.176	2.0454	2.0783	2.0783	0.533	
81047	5.742	2.0233	2.0687	2.0687	0.791	
81048	5.528	2.0175	2.0797	2.0797	1.125	

Comments

- A) All of the sample was used for the extraction
 B) flat bottom solvent dried out during extraction; Lipid content was visible in the flat bottom; solvent in the extractor was cycled through; we continued with the processing. AG 11/10/2020

AG
 11/13/2020

Date/time processed: 11/10/2020 (11:00)

Date/time analyzed: 11/13/2020 (11:00)

C-27152

Description: Percent lipids for Eurofins frontier Geosciences 0100078 project.

Method: Gravimetric

PSID	Sample wt (g)	Vial wt (g)	Vial + Sample (g)		Wet % Lipids	Com
			(1)	(2)		
Blank		2.0736	2.0738	2.0738	0.003	
CRM 1947	0.617	2.1098	2.1697	2.1697	9.708	
81049	5.817	2.0210	2.0571	2.0571	0.621	
81050	5.119	2.0698	2.0571	2.0571	0.924	
81051	1.941	1.9989	2.0187	2.0187	1.020	A
81052	5.917	1.9836	2.0615	2.0615	1.317	
81053	6.103	2.0070	2.0559	2.0560	0.802	
81054	6.772	2.0459	2.1054	2.1054	0.879	
81055	5.758	2.0541	2.1097	2.1097	0.966	
81056	5.820	1.9823	2.0496	2.0495	1.155	
81057	5.990	2.0164	2.0635	2.0635	0.786	
81058	6.029	2.0047	2.0422	2.0422	0.622	
81059 R1	5.965	2.0153	2.0778	2.0778	1.048	
R2	5.600	2.0002	2.0605	2.0605	1.077	
81060	1.974	2.0841	2.1067	2.1067	1.145	A
81061	5.341	2.1006	2.1515	2.1515	0.953	A
81062	6.751	2.0266	2.0831	2.0831	0.837	A
81063	6.915	2.0357	2.0907	2.0907	0.795	A
81064	8.948	2.0038	2.0991	2.0991	1.065	A
81065	5.890	1.9999	2.0531	2.0531	0.903	
81066	6.984	1.9911	2.0878	2.0878	1.384	A
81067	6.626	2.0007	2.0599	2.0599	0.893	
81068	5.498	1.9909	2.0459	2.0459	1.000	A

Comments

A) All of the sample was used for the % Lipid extraction

dated
 MN
 11/13/2020

Date/Time Processed: 11/11/2020 (9:00)

M. Nonu

Date/Time Analyzed: 11/13/2020 (11:30)

C-27153

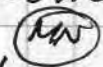
Description: Percent lipids for Eurofins Frontier Geo Sciences
0100078 project.

Method: Gravimetric

PSID	Sample wt (g)	Vial wt (g)	Vial + Sample wt (g)		wet % lipids	Comments
			(1)	(2)		
8) Blank	—	1.9833	1.9835	1.9835	0.004	
0) CRM 1947	0.659	2.0620	2.1320	2.1320	10.622	
81069	5.337	2.0984	2.1604	2.1604	1.162	
81070 R1	5.890	2.0128	2.0919	2.0919	1.343	
R2	5.721	2.0371	2.1173	2.1173	1.402	
81071	5.920	2.0141	2.0725	2.0725	0.986	
81072	2.145	2.0646	2.0967	2.0967	1.497	A
81073	5.436	2.0404	2.1015	2.1015	1.124	
81074	5.228	2.0365	2.1101	2.1101	1.408	
81075	5.172	2.0599	2.1162	2.1162	1.089	
81076	3.902	2.0504	2.0891	2.0891	0.992	A
81077	5.075	2.0185	2.0664	2.0664	0.944	A
81078	5.126	2.0102	2.0623	2.0623	1.016	
81079	5.162	2.0339	2.0870	2.0870	1.029	
81080	5.018	2.0802	^{MN} _{11/13/20} 2.1368	2.1370	1.132	
81081	5.401	2.0958	2.1703	2.1703	1.379	
81082	3.778	2.1157	2.1536	2.1536	1.003	A
81083	2.091	2.0420	2.0694	2.0694	1.310	A
81084	4.003	2.0629	2.0994	2.0994	0.898	A
81085	5.244	2.0785	2.1754	2.1754	1.848	
81086	5.460	2.0691	2.1349	2.1348	1.205	
81087	5.457	2.0668	2.1566	2.1566	1.646	

Comments:

A) All of the sample was used for the % lipid extraction

Entered

 11/13/2020

PHYSIS

Calibration

TERRA

FAUNA

FLORA

AQUA

AURA

ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Mead.

BALANCE #2

CALIBRATION LOG BOOK

S/N: 1128331102

FIVE STAR.
★★★★★

<u>Date</u>	<u>Analyst</u>	<u>1g</u>	<u>20g</u>
10/06/20	MN	1.000	20.000
10/07/20	SE	1.000	20.000
10/08/20	AG	1.000	20.000
10/12/20	AG	1.000	20.000
10/13/20	SE	1.000	20.000
10/14/20	AM	1.000	20.000
10/15/20	AG	1.000	20.000
10/16/20	AG	1.000	20.000
10/19/20	AG	1.000	20.000
10/20/20	AM	1.000	20.000
10/21/20	AM	1.000	20.000
10/22/20	SE	1.000	20.000
10/26/20	AM	1.000	20.000
10/27/20	AG	1.000	20.000
10/28/20	AM	1.000	20.000
10/29/20	AG	1.000	20.000
11/02/20	SE	1.000	20.000
11/3/20	AM	1.000	20.000
11/4/20	SE	1.000	20.000
11/5/20	SE	1.000	20.000
11/06/20	MN	1.000	20.000
11/09/20	AG	1.000	20.000
11/10/20	AG	1.000	20.000
11/11/20	SE	1.000	20.000

CHAIN OF CUSTODY

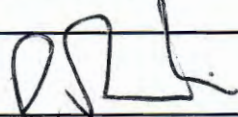
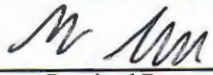
PHYSICS

TERRA FUSION ENERGY SOLUTIONS AURA
ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: ES-FP_20SN001_091120_01_RAS_WB		Sampled: 11-Sep-20 09:15 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	09-Oct-20 06:15	NOAA 1993a Lipids
Sample ID: ES-FP_20SN001_091120_02_RAS_WB		Sampled: 11-Sep-20 09:15	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	09-Oct-20 06:15	NOAA 1993a Lipids
Sample ID: FRB-02_20ET653_091520_01_TOM_WB		Sampled: 15-Sep-20 18:55	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 15:55	NOAA 1993a Lipids
Sample ID: FRB-02_20ET654_091520_02_TOM_WB		Sampled: 15-Sep-20 19:00	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 16:00	NOAA 1993a Lipids
Sample ID: FRB-02_20ET659_091520_03_TOM_WB		Sampled: 15-Sep-20 19:05	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 16:05	NOAA 1993a Lipids
Sample ID: FRB-02_20ET659_091520_04_TOM_WB		Sampled: 15-Sep-20 19:10	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 16:10	NOAA 1993a Lipids
Sample ID: OL-01_20LT306_091020_01_TOM_WB		Sampled: 10-Sep-20 11:24 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	08-Oct-20 08:24	NOAA 1993a Lipids

	20/1/20		10-2-20
Released By	Date	Received By	Date
Released By	Date	Received By	Date

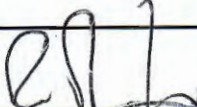
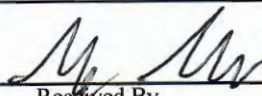
SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: FRB-01_20LT621_092020_03_LOB_TA		Sampled: 20-Sep-20 11:02	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:02	NOAA 1993a Lipids
Sample ID: FRB-01_20LT627_092020_04_LOB_TA		Sampled: 20-Sep-20 11:19	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:19	NOAA 1993a Lipids
Sample ID: FRB-02_20ET662_091520_05_TOM_WB		Sampled: 15-Sep-20 19:15	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 16:15	NOAA 1993a Lipids
Sample ID: OL-01_20ET866_091820_02_TOM_WB		Sampled: 18-Sep-20 09:50	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	16-Oct-20 06:50	NOAA 1993a Lipids
Sample ID: OL-01_20ET866_091820_03_TOM_WB		Sampled: 18-Sep-20 09:50	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	16-Oct-20 06:50	NOAA 1993a Lipids
Sample ID: FRB-01_20LT629_092020_05_LOB_TA		Sampled: 20-Sep-20 11:25	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:25	NOAA 1993a Lipids
Sample ID: FRB-01_20LT633_092020_06_LOB_TA		Sampled: 20-Sep-20 11:37	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:37	NOAA 1993a Lipids

	10/1/2020		10-2-20
Released By	Date	Received By	Date

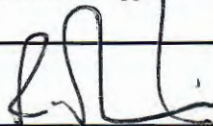
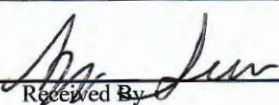
Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: FRB-01_20LT633_092020_07_LOB_TA		Sampled: 20-Sep-20 11:37	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:37	NOAA 1993a Lipids
Sample ID: FRB-01_20LT635_092020_08_LOB_TA		Sampled: 20-Sep-20 11:46	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:46	NOAA 1993a Lipids
Sample ID: FRB-01_20LT639_092020_09_LOB_TA		Sampled: 20-Sep-20 11:56	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:56	NOAA 1993a Lipids
Sample ID: FRB-01_20LT639_092020_10_LOB_TA		Sampled: 20-Sep-20 11:56	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:56	NOAA 1993a Lipids
Sample ID: SVE-01_20ET033_092120_01_TOM_WB		Sampled: 21-Sep-20 08:22 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 05:22	NOAA 1993a Lipids
Sample ID: SVE-01_20ET048_092120_03_TOM_WB		Sampled: 21-Sep-20 09:32	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:32	NOAA 1993a Lipids
Sample ID: SVE-01_20ET048_092120_04_TOM_WB		Sampled: 21-Sep-20 09:32	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:32	NOAA 1993a Lipids
	<i>10/1/20</i>		<i>10-2-20</i>
Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

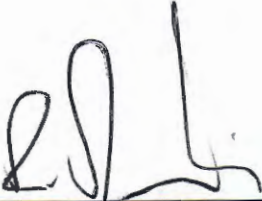
Analysis	Due	Expires	Comments
Sample ID: ES-02_20ET968_092120_10_TOM_WB		Sampled: 21-Sep-20 11:56	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 08:56	NOAA 1993a Lipids
Sample ID: ES-02_20ET970_092120_11_TOM_WB		Sampled: 21-Sep-20 12:02	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 09:02	NOAA 1993a Lipids
Sample ID: SVE-01_20ET048_092120_07_TOM_WB		Sampled: 21-Sep-20 09:32	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:32	NOAA 1993a Lipids
Sample ID: SVE-01_20ET050_092120_08_TOM_WB		Sampled: 21-Sep-20 09:45	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:45	NOAA 1993a Lipids
Sample ID: SVE-01_20ET051_092120_09_TOM_WB		Sampled: 21-Sep-20 09:48	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:48	NOAA 1993a Lipids
Sample ID: SVE-01_20ET052_092120_10_TOM_WB		Sampled: 21-Sep-20 09:52	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:52	NOAA 1993a Lipids
Sample ID: SVE-01_20ET053_092120_11_TOM_WB		Sampled: 21-Sep-20 09:56	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:56	NOAA 1993a Lipids

	10/1/20		10-2-20
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: SVE-01_20ET083_092220_16_TOM_WB		Sampled: 22-Sep-20 09:23	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	20-Oct-20 06:23	NOAA 1993a Lipids
Sample ID: SVE-01_20ET083_092220_17_TOM_WB		Sampled: 22-Sep-20 09:23	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	20-Oct-20 06:23	NOAA 1993a Lipids
Sample ID: SVE-01_20ET087_092220_18_TOM_WB		Sampled: 22-Sep-20 09:43	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	20-Oct-20 06:43	NOAA 1993a Lipids
Sample ID: SVE-01_20ET089_092220_19_TOM_WB		Sampled: 22-Sep-20 09:40	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	20-Oct-20 06:40	NOAA 1993a Lipids
Sample ID: SVE-01_20ET089_092220_20_TOM_WB		Sampled: 22-Sep-20 09:40	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	20-Oct-20 06:40	NOAA 1993a Lipids


10/1/20

10-2-20

Released By _____ Date _____ Received By _____ Date _____

Released By _____ Date _____ Received By _____ Date _____

Project Iteration ID: 2009006-002
 Client Name: Eurofins Frontier Geosciences
 Project Name: 0100078
 COC Page Number: 10 of 19
 Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: BTS
2. Date Received: 10-2-20
3. Time Received: 0950
4. Client Name: Eurofins
5. Courier Information: (Please circle)
 - Client
 - UPS
 - Area Fast
 - DRS
 - FedEx
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver:
 - i. Start Time: _____
 - ii. End Time: _____
 - iii. Total Mileage: _____
 - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
 - Cooler
 - Styrofoam Cooler
 - Boxes
 - None
7. What type of ice was used: (Please any that were used or circle none)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - None
8. Randomly Selected Samples Temperature (°C): -3.2 Used I/R Thermometer # 2

Inspection Info

1. Initials Inspected By: RGH/AJ

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out..... Yes / No
2. All sample containers arrived intact..... Yes / No
3. All samples listed on COC(s) are present..... Yes / No
4. Information on containers consistent with information on COC(s)..... Yes / No
5. Correct containers and volume for all analyses indicated..... Yes / No
6. All samples received within method holding time..... Yes / No
7. Correct preservation used for all analyses indicated..... Yes / No
8. Name of sampler included on COC(s)..... Yes / No

Notes:

Duplicate COC's 1 to 9 pages
 missing samples see on back.

ES-FP_20ET711_091020_01_TOM_WB

ES-FP_20ET717_091020_02_TOM_WB

ES-FP_20ET741_091520_03_TOM_WB

ES-FP_20ET755_091520_04_TOM_WB

ES-FP_20ET756_091520_05_TOM_WB

ES-FP_20SN001_091120_01_RAS_WB

ES-FP_20SN001_091120_02_RAS_WB

FRB-02_20ET653_091520_01_TOM_WB

FRB-02_20ET659_091520_03_TOM_WB

FRB-02_20ET659_091520_04_TOM_WB

ES-02_20ET909_091820_01_TOM_WB

ES-02_20ET924_091820_02_TOM_WB

ES-02_20ET934_091820_03_TOM_WB

ES-02_20ET938_091820_04_TOM_WB

ES-02_20ET941_091820_05_TOM_WB

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

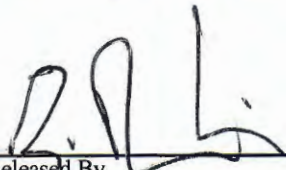
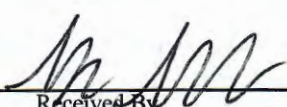
SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
 5755 8th Street East
 Tacoma, WA 98424
 Phone: (253) 922-2310
 Fax: (000) 000-0000
 Project Manager: Patrick Garcia-Strickland

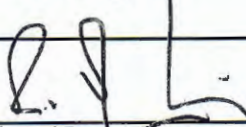
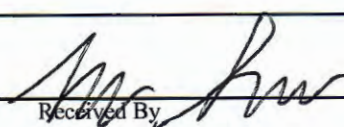
RECEIVING LABORATORY:

Physis Labs
 1904 E. Wright Circle
 Anaheim, CA 92806
 Phone : (714) 335-5793
 Fax: -

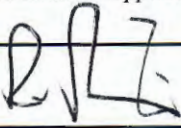
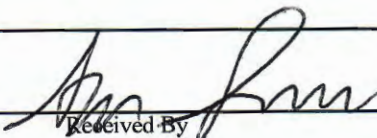
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Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	08-Oct-20 05:28	NOAA 1993a Lipids
Sample ID: ES-FP_20ET717_091020_02_TOM_WB		Sampled: 10-Sep-20 08:54	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	08-Oct-20 05:54	NOAA 1993a Lipids
Sample ID: ES-FP_20ET741_091520_03_TOM_WB		Sampled: 15-Sep-20 08:34	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 05:34	NOAA 1993a Lipids
Sample ID: ES-FP_20ET755_091520_04_TOM_WB		Sampled: 15-Sep-20 09:02 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 06:02	NOAA 1993a Lipids
Sample ID: ES-FP_20ET756_091520_05_TOM_WB		Sampled: 15-Sep-20 09:05	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 06:05	NOAA 1993a Lipids

	20/1/2020		10-2-20
Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: ES-02_20ET909_091620_01_TOM_WB		Sampled: 16-Sep-20 10:08	
Misc. Subcontract 1	21-Oct-20 19:00	14-Oct-20 07:08	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: ES-02_20ET924_091820_02_TOM_WB		Sampled: 18-Sep-20 11:53	
Misc. Subcontract 1	21-Oct-20 19:00	16-Oct-20 08:53	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: ES-02_20ET934_091820_03_TOM_WB		Sampled: 18-Sep-20 12:23	
Misc. Subcontract 1	21-Oct-20 19:00	16-Oct-20 09:23	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: ES-02_20ET938_091820_04_TOM_WB		Sampled: 18-Sep-20 12:35 MS/MSD	
Misc. Subcontract 1	21-Oct-20 19:00	16-Oct-20 09:35	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: ES-02_20ET941_091820_05_TOM_WB		Sampled: 18-Sep-20 12:48	
Misc. Subcontract 1	21-Oct-20 19:00	16-Oct-20 09:48	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: FRB-01_20LT606_091720_01_LOB_TA		Sampled: 17-Sep-20 12:32 MS/MSD	
Misc. Subcontract 1	21-Oct-20 19:00	15-Oct-20 09:32	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Sample ID: FRB-01_20LT620_091720_02_LOB_TA		Sampled: 17-Sep-20 13:03	
Misc. Subcontract 1	21-Oct-20 19:00	15-Oct-20 10:03	NOAA 1993a Lipids
<i>Containers Supplied:</i>			
Released By 	Date 10/1/20	Received By 	Date 10-2-20
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: FRB-01_20LT633_092020_07_LOB_TA		Sampled: 20-Sep-20 11:37	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:37	NOAA 1993a Lipids
Sample ID: FRB-01_20LT635_092020_08_LOB_TA		Sampled: 20-Sep-20 11:46	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:46	NOAA 1993a Lipids
Sample ID: FRB-01_20LT639_092020_09_LOB_TA		Sampled: 20-Sep-20 11:56	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:56	NOAA 1993a Lipids
Sample ID: FRB-01_20LT639_092020_10_LOB_TA		Sampled: 20-Sep-20 11:56	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	18-Oct-20 08:56	NOAA 1993a Lipids
Sample ID: SVE-01_20ET033_092120_01_TOM_WB		Sampled: 21-Sep-20 08:22 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 05:22	NOAA 1993a Lipids
Sample ID: SVE-01_20ET048_092120_03_TOM_WB		Sampled: 21-Sep-20 09:32	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:32	NOAA 1993a Lipids
Sample ID: SVE-01_20ET048_092120_04_TOM_WB		Sampled: 21-Sep-20 09:32	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:32	NOAA 1993a Lipids
	10/1/20		10-2-20
Released By	Date	Received By	Date
Released By	Date	Received By	Date

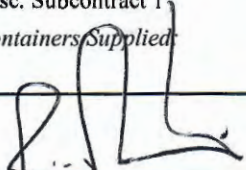
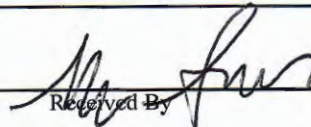
SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: ES-02_20ET968_092120_10_TOM_WB		Sampled: 21-Sep-20 11:56	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 08:56	NOAA 1993a Lipids
Sample ID: ES-02_20ET970_092120_11_TOM_WB		Sampled: 21-Sep-20 12:02	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 09:02	NOAA 1993a Lipids
Sample ID: SVE-01_20ET048_092120_07_TOM_WB		Sampled: 21-Sep-20 09:32	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:32	NOAA 1993a Lipids
Sample ID: SVE-01_20ET050_092120_08_TOM_WB		Sampled: 21-Sep-20 09:45	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:45	NOAA 1993a Lipids
Sample ID: SVE-01_20ET051_092120_09_TOM_WB		Sampled: 21-Sep-20 09:48	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:48	NOAA 1993a Lipids
Sample ID: SVE-01_20ET052_092120_10_TOM_WB		Sampled: 21-Sep-20 09:52	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:52	NOAA 1993a Lipids
Sample ID: SVE-01_20ET053_092120_11_TOM_WB		Sampled: 21-Sep-20 09:56	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 06:56	NOAA 1993a Lipids

			
Released By	Date	Received By	Date

Released By	Date	Received By	Date
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SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: SVE-01_20ET059_092120_12_TOM_WB		Sampled: 21-Sep-20 10:14	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 07:14	NOAA 1993a Lipids
Sample ID: ES-02_20ET973_092120_12_TOM_WB		Sampled: 21-Sep-20 12:12	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 09:12	NOAA 1993a Lipids
Sample ID: ES-02_20ET974_092120_13_TOM_WB		Sampled: 21-Sep-20 12:15	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 09:15	NOAA 1993a Lipids
Sample ID: ES-02_20ET978_092120_14_TOM_WB		Sampled: 21-Sep-20 12:26	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	19-Oct-20 09:26	NOAA 1993a Lipids
Sample ID: SVE-01_20ET077_092220_13_TOM_WB		Sampled: 22-Sep-20 09:08	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	20-Oct-20 06:08	NOAA 1993a Lipids
Sample ID: SVE-01_20ET082_092220_14_TOM_WB		Sampled: 22-Sep-20 09:19	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	20-Oct-20 06:19	NOAA 1993a Lipids
Sample ID: SVE-01_20ET083_092220_15_TOM_WB		Sampled: 22-Sep-20 09:23	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	20-Oct-20 06:23	NOAA 1993a Lipids
	10/1/20		10-2-20
Released By	Date	Received By	Date
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

SENDING LABORATORY:

Eurofins Frontier Global Sciences, LLC
 5755 8th Street East
 Tacoma, WA 98424
 Phone: (253) 922-2310
 Fax: (000) 000-0000
 Project Manager: Patrick Garcia-Strickland

RECEIVING LABORATORY:

Physis Labs
 1904 E. Wright Circle
 Anaheim, CA 92806
 Phone : (714) 335-5793
 Fax: -

Analysis	Due	Expires	Comments
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Sample ID: ES-FP_20ET711_091020_01_TOM_WB **Sampled: 10-Sep-20 08:28**

Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	08-Oct-20 05:28	NOAA 1993a Lipids
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Sample ID: ES-FP_20ET717_091020_02_TOM_WB **Sampled: 10-Sep-20 08:54**

Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	08-Oct-20 05:54	NOAA 1993a Lipids
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Sample ID: ES-FP_20ET741_091520_03_TOM_WB **Sampled: 15-Sep-20 08:34**


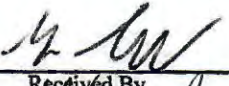
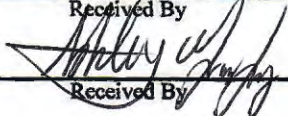
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 05:34	NOAA 1993a Lipids
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Sample ID: ES-FP_20ET755_091520_04_TOM_WB **Sampled: 15-Sep-20 09:02** **MS/MSD**

Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 06:02	NOAA 1993a Lipids
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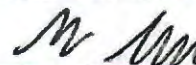
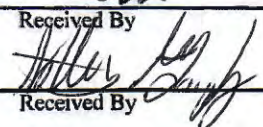
Sample ID: ES-FP_20ET756_091520_05_TOM_WB **Sampled: 15-Sep-20 09:05**

Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 06:05	NOAA 1993a Lipids
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	10/1/2020		10-2-20
Released By	Date	Received By	Date
			10/7/2020 9:45
Released By	Date	Received By	Date

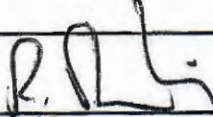
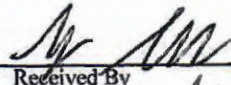
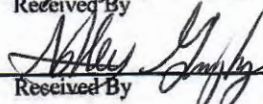
SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: ES-FP_20SN001_091120_01_RAS_WB		Sampled: 11-Sep-20 09:15 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	09-Oct-20 06:15	NOAA 1993a Lipids
Sample ID: ES-FP_20SN001_091120_02_RAS_WB		Sampled: 11-Sep-20 09:15	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	09-Oct-20 06:15	NOAA 1993a Lipids
Sample ID: FRB-02_20ET653_091520_01_TOM_WB		Sampled: 15-Sep-20 18:55	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 15:55	NOAA 1993a Lipids
Sample ID: FRB-02_20ET654_091520_02_TOM_WB		Sampled: 15-Sep-20 19:00	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 16:00	NOAA 1993a Lipids
Sample ID: FRB-02_20ET659_091520_03_TOM_WB		Sampled: 15-Sep-20 19:05	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 16:05	NOAA 1993a Lipids
Sample ID: FRB-02_20ET659_091520_04_TOM_WB		Sampled: 15-Sep-20 19:10	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	13-Oct-20 16:10	NOAA 1993a Lipids
Sample ID: OL-01_20LT306_091020_01_TOM_WB		Sampled: 10-Sep-20 11:24 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	08-Oct-20 08:24	NOAA 1993a Lipids

	20/1/2020		10-2-20
Released By	Date	Received By	Date
			10/7/2020 9:45
Released By	Date	Received By	Date

SUBCONTRACT ORDER
Eurofins Frontier Global Sciences, LLC
0I00078

Analysis	Due	Expires	Comments
Sample ID: ES-02_20ET909_091620_01_TOM_WB		Sampled: 16-Sep-20 10:08	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	14-Oct-20 07:08	NOAA 1993a Lipids
Sample ID: ES-02_20ET924_091820_02_TOM_WB		Sampled: 18-Sep-20 11:53	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	16-Oct-20 08:53	NOAA 1993a Lipids
Sample ID: ES-02_20ET934_091820_03_TOM_WB		Sampled: 18-Sep-20 12:23	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	16-Oct-20 09:23	NOAA 1993a Lipids
Sample ID: ES-02_20ET938_091820_04_TOM_WB		Sampled: 18-Sep-20 12:35 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	16-Oct-20 09:35	NOAA 1993a Lipids
Sample ID: ES-02_20ET941_091820_05_TOM_WB		Sampled: 18-Sep-20 12:48	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	16-Oct-20 09:48	NOAA 1993a Lipids
Sample ID: FRB-01_20LT606_091720_01_LOB_TA		Sampled: 17-Sep-20 12:32 MS/MSD	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	15-Oct-20 09:32	NOAA 1993a Lipids
Sample ID: FRB-01_20LT620_091720_02_LOB_TA		Sampled: 17-Sep-20 13:03	
Misc. Subcontract 1 <i>Containers Supplied:</i>	21-Oct-20 19:00	15-Oct-20 10:03	NOAA 1993a Lipids

	20/10/2020		10-2-20
Released By	Date	Received By	Date
			10/7/2020 9:45
Released By	Date	Received By	Date

Project Iteration ID: 2009006-002B
 Client Name: Eurofins Frontier Geosciences
 Project Name: 0100078
 COC Page Number: 4 of 4
 Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: AG
2. Date Received: 10/7/2020
3. Time Received: 9:45
4. Client Name: Eurofins
5. Courier Information: (Please circle)
 - Client
 - UPS
 - Area Fast
 - DRS
 - FedEx
 - GSO/GLS
 - Ontrac
 - PAMS
 - PHYSIS Driver:
 - i. Start Time: _____
 - ii. End Time: _____
 - iii. Total Mileage: _____
 - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
 - 1 Cooler
 - Styrofoam Cooler
 - Boxes
 - None
7. What type of ice was used: (Please any that were used or circle none)
 - Wet Ice
 - Blue Ice
 - Dry Ice
 - None
8. Randomly Selected Samples Temperature (°C): 3.0 Used I/R Thermometer # 1

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out..... Yes / No
2. All sample containers arrived intact..... Yes / No
3. All samples listed on COC(s) are present..... Yes / No
4. Information on containers consistent with information on COC(s)..... Yes / No
5. Correct containers and volume for all analyses indicated..... Yes / No
6. All samples received within method holding time..... Yes / No
7. Correct preservation used for all analyses indicated..... Yes / No
8. Name of sampler included on COC(s)..... Yes / No

Notes:

ES-02-20ET941-091820-05-TOM-WB the label is illegible. "0100078-17B" and could see "_05" as well as by method of elimination.