

414 Pontius Ave North Seattle, WA 98109 Ph: 206-622-6960

Fx: 206-622-6870

09 March 2012

Peter Fairbanks
URS - Buffalo, NY
77 Goodell St # 4
Buffalo, NY 14203-1243

RE: Mercury Speciation in Sediments

Enclosed are the analytical results for samples received by 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.

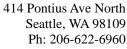
If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kate Haney

Client Services Manager

Faw Muey



Seattle, WA 98109 Ph: 206-622-6960 Fx: 206-622-6870



## ANALYTICAL REPORT FOR SAMPLES

Laboratory: Frontier Global Sciences, Inc. SDG:

Client: URS - Buffalo, NY **Project:** Mercury Speciation in Sediments

Sample ID	Lab ID	Matrix	Date Sampled	Date Received
VIS-1	1201375-01	Soil/Sediment	25-Jan-12 09:20	27-Jan-12 09:56
SB-072R	1201375-02	Soil/Sediment	25-Jan-12 15:15	27-Jan-12 09:56
HgCl2	1201375-03	Soil/Sediment	03-Feb-12 00:00	27-Jan-12 09:56
HgS	1201375-04	Soil/Sediment	03-Feb-12 00:00	27-Jan-12 09:56
HgO	1201375-05	Soil/Sediment	03-Feb-12 00:00	27-Jan-12 09:56

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#### **CASE NARRATIVE**

#### SAMPLE RECEIPT

Two (2) soil samples were received at Frontier Global Sciences, Inc. (FGS) on January 27th, 2012. Samples were received on-ice, within a sealed cooler at a temperature of 8.2 °C.

#### SAMPLE PREPARATION

Soil samples for the Selective Sequential Extraction (SSE) were prepared according to FGS-090, "Selective Sequential Extraction of Geological Samples for the Determination of Biogeochemically Relevant Inorganic Mercury Fractionation".

The following table explains the SSE extraction steps and their anticipated biogeochemical meaning:

Fraction F(1): Water soluble mercury, extracted with DI water (ie: HgCl2, HgSO4)

Fraction F(2): Weak acid extractable mercury, pH2 HCl/HO Ac

Fraction F(3): Organo complexed mercury, extracted with 1N KOH

Fraction F(4): Strong complexed mercury, extracted with 12N HNO3

Fraction F(5): Aqua Regia (cinnabar, HgSe, HgAu)

#### SAMPLE ANALYSIS

Total mercury was analyzed in prepared SSE extracts by cold vapor atomic fluorescence spectrometry (CVAFS) according to EPA 1631 modified.

#### ANALYTICAL AND QUALITY CONTROL ISSUES

The True Values of the CRMs used in the SSE are as follows:

HgS True Value = 1,005,000 ng/g (Sum = 1,080,000 / 107.5% recovery)

HgCl2 True Value = 1,363,000 ng/g (Sum = 1,300,000 / 95.4% Recovery)

Hg0 True Value = 1,400,000 ng/g (Sum = 1,380,000 / 98.6% recovery)

In the report, the term Total Mercury refers to the calculated Sum of the SSE fractions.

All results are corrected by the concentration of the preparation blanks, per EPA 1631E.

There were no further analytical difficulties and all quality control analyses were within acceptable limits except as flagged and described in the following report.

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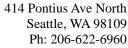
# **CHAIN OF CUSTODY FORMS**

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SAMPLE PE CODES	TB# - TRIP E SD# - MATR	SLANK IX SPIKE DUPLIC	CATE	RB# - RINSE B FR# - FIELD RI		N# - NORMAL MS# - MATRIX	ENVIRONI SPIKE	MENTAL	SAMPLI	(# - 5	SEQUENTIA				ACCOMMODATE MULTIPLE	SAMPLE	SINAS	SINGLE	DAY
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## **ANALYTICAL RESULTS**

## VIS-1

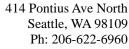
Matrix: Soil/Sediment **Laboratory ID:** <u>1201375-01</u>

Analyte	Result	MDL	MRL	Units	Dilution	Batch	Sequence	Analyzed	Method	Notes
% Solids	86.1	0.1	0.1	% by Weight	1	F202064		02/08/12	SM 2540B	O-04, O-09
Mercury F-1	288000	10300	32300	ng/g dry	100000	F202059	2B18010	02/13/12	FGS-069	
Mercury F-2	149000	10300	32300	ng/g dry	100000	F202060	2B18009	02/13/12	FGS-069	
Mercury F-3	1240000	41300	129000	ng/g dry	400000	F202061	2B18013	02/14/12	FGS-069	QB-01
Mercury F-4	27400000	1030000	3230000	ng/g dry	1E+07	F202062	2B18014	02/14/12	FGS-069	QB-01
Mercury F-5	8550000	56700	516000	ng/g dry	1E+07	F202063	2B18011	02/14/12	FGS-069	QB-01
<b>Total Mercury</b>	37700000	1030000	3230000	ng/g dry	1E+07	[CALC]		02/14/12	FGS-069	

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## **ANALYTICAL RESULTS**

## **SB-072R**

Matrix: Soil/Sediment **Laboratory ID:** <u>1201375-02</u>

Analyte	Result	MDL	MRL	Units	Dilution	Batch	Sequence	Analyzed	Method	Notes
% Solids	90.5	0.1	0.1	% by Weight	1	F202064		02/08/12	SM 2540B	O-04, O-09
Mercury F-1	367000	9930	31000	ng/g dry	100000	F202059	2B18010	02/13/12	FGS-069	
Mercury F-2	99700	9930	31000	ng/g dry	100000	F202060	2B18009	02/13/12	FGS-069	
Mercury F-3	385000	39700	124000	ng/g dry	400000	F202061	2B18013	02/14/12	FGS-069	QB-01
Mercury F-4	6510000	993000	3100000	ng/g dry	1E+07	F202062	2B18014	02/14/12	FGS-069	QB-01
Mercury F-5	3980000	54500	497000	ng/g dry	1E+07	F202063	2B18011	02/14/12	FGS-069	QB-01
<b>Total Mercury</b>	11300000	993000	3100000	ng/g dry	1E+07	[CALC]		02/14/12	FGS-069	

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## **ANALYTICAL RESULTS**

# HgCl2

Matrix: Soil/Sediment Laboratory ID: 1201375-03

Analyte	Result	MDL	MRL	Units	Dilution	Batch	Sequence	Analyzed	Method	Notes
Mercury F-1	61000	4800	15000	ng/g wet	50000	F202059	2B18010	02/13/12	FGS-069	
Mercury F-2	75800	4800	15000	ng/g wet	50000	F202060	2B18009	02/13/12	FGS-069	
Mercury F-3	723000	38400	120000	ng/g wet	400000	F202061	2B18013	02/14/12	FGS-069	QB-01
Mercury F-4	419000	4800	15000	ng/g wet	50000	F202062	2B18014	02/14/12	FGS-069	QB-01
Mercury F-5	23400	263	2400	ng/g wet	50000	F202063	2B18011	02/14/12	FGS-069	QB-01
<b>Total Mercury</b>	1300000	38400	120000	ng/g wet	400000	[CALC]		02/14/12	FGS-069	

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## **ANALYTICAL RESULTS**

# HgS

Matrix: Soil/Sediment Laboratory ID: 1201375-04

Analyte	Result	MDL	MRL	Units	Dilution	Batch	Sequence	Analyzed	Method	Notes
Mercury F-1	1120	47.4	148	ng/g wet	500	F202059	2C02013	03/01/12	FGS-069	
Mercury F-2	811	47.4	148	ng/g wet	500	F202060	2C02014	03/01/12	FGS-069	
Mercury F-3	265	9.48	29.6	ng/g wet	100	F202061	2B18013	02/14/12	FGS-069	QB-01
Mercury F-4	27200	379	1180	ng/g wet	4000	F202062	2B18014	02/14/12	FGS-069	QB-01
Mercury F-5	1050000	2080	19000	ng/g wet	400000	F202063	2B18011	02/14/12	FGS-069	QB-01
<b>Total Mercury</b>	1080000	2080	19000	ng/g wet	400000	[CALC]		03/01/12	FGS-069	

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## **ANALYTICAL RESULTS**

# HgO

Matrix: Soil/Sediment Laboratory ID: 1201375-05

Analyte	Result	MDL	MRL U	J <b>nits</b>	Dilution	Batch	Sequence	Analyzed	Method	Notes
Mercury F-1	1070000	38200	119000 ng	/g wet	400000	F202059	2B18010	02/13/12	FGS-069	
Mercury F-2	274000	38200	119000 ng	/g wet	400000	F202060	2B18009	02/13/12	FGS-069	
Mercury F-3	19500	382	1190 ng	/g wet	4000	F202061	2B18013	02/14/12	FGS-069	QB-01
Mercury F-4	13100	382	1190 ng	/g wet	4000	F202062	2B18014	02/14/12	FGS-069	QB-01
Mercury F-5	3650	21.0	191 ng	/g wet	4000	F202063	2B18011	02/14/12	FGS-069	QB-01
<b>Total Mercury</b>	1380000	38200	119000 ng	/g wet	400000	[CALC]		02/14/12	FGS-069	

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## MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-01** 

**Batch:** F202059 Sequence: 2B18010

Preparation: Hg SSE Fraction F-1 Lab Number: F202059-DUP2

Analyte	Sample Concentration ng/g dry	Duplicate Concentration ng/g dry	MRL	% RPD	RPD Limit	Method	Notes
Mercury F-1	288100	553100	32900	63.0	25	FGS-069	QR-07

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## MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-01** 

**Batch:** F202059 Sequence: 2B18010

Preparation: Hg SSE Fraction F-1 Lab Number: F202059-DUP3

Analyte	Sample Concentration ng/g dry	Duplicate Concentration ng/g dry	MRL	% RPD	RPD Limit	Method	Notes
Mercury F-1	288100	331300	32300	14.0	25	FGS-069	AD

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# MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-01RE1** 

**Batch:** <u>F202060</u> Sequence: <u>2B18009</u>

Preparation: Hg SSE Fraction F-2 Lab Number: F202060-DUP1

Analyte	Sample Concentration ng/g dry	Duplicate Concentration ng/g dry	MRL	% RPD	RPD Limit	Method	Notes
Mercury F-2	149200	158000	32900	5.73	25	FGS-069	

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## MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-01RE1** 

**Batch:** F202060 Sequence: 2B18009

Preparation: Hg SSE Fraction F-2 Lab Number: F202060-DUP2

Analyte	Sample Concentration ng/g dry	Duplicate Concentration ng/g dry	MRL	% RPD	RPD Limit	Method	Notes
Mercury F-2	149200	146600	32300	1.77	25	FGS-069	AD

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## MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-01RE1** 

**Batch:** <u>F202060</u> Sequence: <u>2B18009</u>

Preparation: Hg SSE Fraction F-2 Lab Number: F202060-DUP3

Analyte	Sample Concentration ng/g dry	Duplicate Concentration ng/g dry	MRL	% RPD	RPD Limit	Method	Notes
Mercury F-2	149200	155500	32900	4.12	25	FGS-069	

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## MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-01** 

**Batch:** <u>F202061</u> Sequence: <u>2B18013</u>

Preparation: Hg SSE Fraction F-3 Lab Number: F202061-DUP1

Analyte	Sample Concentration ng/g dry	Duplicate Concentration ng/g dry	MRL	% RPD	RPD Limit	Method	Notes
Mercury F-3	1242000	808000	132000	42.3	25	FGS-069	QR-07

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# MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-01** 

**Batch:** F202061 Sequence: 2B18013

Preparation: Hg SSE Fraction F-3 Lab Number: F202061-DUP2

Analyte	Sample Concentration ng/g dry	Duplicate Concentration ng/g dry	MRL	% RPD	RPD Limit	Method	Notes
Mercury F-3	1242000	1048000	129000	16.9	25	FGS-069	AD

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## MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-01** 

**Batch:** <u>F202062</u> Sequence: <u>2B18014</u>

Preparation: Hg SSE Fraction F-4 Lab Number: F202062-DUP1

Analyte	Sample Concentration ng/g dry	Duplicate Concentration ng/g dry	MRL	% RPD	RPD Limit	Method	Notes
Mercury F-4	27440000	23960000	3230000	13.5	25	FGS-069	AD

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# MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-01** 

**Batch:** F202063 Sequence: 2B18011

Preparation: Hg SSE Fraction F-5 Lab Number: F202063-DUP1

Analyte	Sample Concentration ng/g dry	Duplicate Concentration ng/g dry	MRL	% RPD	RPD Limit	Method	Notes
Mercury F-5	8550000	8792000	527000	2.79	25	FGS-069	

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## MATRIX DUPLICATES/TRIPLICATES

**SOURCE: 1201375-02** 

**Batch:** <u>F202064</u> Sequence:

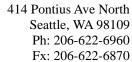
Preparation: Solids Analysis Lab Number: F202064-DUP1

Analyte	Sample Concentration % by Weight	Duplicate Concentration % by Weight	MRL	% RPD	RPD Limit	Method	Notes
% Solids	90.5	92.4	0.1	2.08	10	SM 2540B	<u>.                                      </u>

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**SOURCE: 1201375-01** 

**Batch:** <u>F202059</u> Sequence: <u>2B18010</u>

Preparation: Hg SSE Fraction F-1 Lab Number: F202059-MS/MSD1

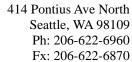
Analyte	Sample Concentration (ng/g dry)	Spike Added (ng/g dry)	MS Concentration (ng/g dry)	MS % Recovery	Recovery Limits	Method	Notes
Mercury F-1	288100	322620	674900	120	75 - 125	FGS-069	

Analyte	Spike Added (ng/g dry)	MSD Concentration (ng/g dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Mercury F-1	322620	664800	117	2.66	75 - 125	25	FGS-069	

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**SOURCE: 1201375-01RE1** 

**Batch:** <u>F202060</u> Sequence: <u>2B18009</u>

Preparation: Hg SSE Fraction F-2 Lab Number: F202060-MS/MSD1

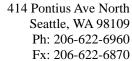
Analyte	Sample Concentration (ng/g dry)	Spike Added (ng/g dry)	MS Concentration (ng/g dry)	MS % Recovery	Recovery Limits	Method	Notes
Mercury F-2	149200	322620	472900	100	75 - 125	FGS-069	

Analyte	Spike Added (ng/g dry)	MSD Concentration (ng/g dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Mercury F-2	322620	468600	99.0	1.32	75 - 125	25	FGS-069	

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**SOURCE: 1201375-01** 

**Batch:** <u>F202061</u> Sequence: <u>2B18013</u>

Preparation: Hg SSE Fraction F-3 Lab Number: F202061-MS/MSD1

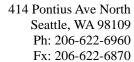
Analyte	Sample Concentration (ng/g dry)	Spike Added (ng/g dry)	MS Concentration (ng/g dry)	MS % Recovery	Recovery Limits	Method	Notes
Mercury F-3	1242000	1935700	3307000	107	75 - 125	FGS-069	

Analyte	Spike Added (ng/g dry)	MSD Concentration (ng/g dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Mercury F-3	1935700	3299000	106	0.397	75 - 125	25	FGS-069	

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**SOURCE: 1201375-01** 

**Batch:** F202062 Sequence: 2B18014

Preparation: Hg SSE Fraction F-4 Lab Number: F202062-MS/MSD1

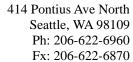
Analyte	Sample Concentration (ng/g dry)	Spike Added (ng/g dry)	MS Concentration (ng/g dry)	MS % Recovery	Recovery Limits	Method	Notes
Mercury F-4	27440000	32262000	60850000	104	75 - 125	FGS-069	

Analyte	Spike Added (ng/g dry)	MSD Concentration (ng/g dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Mercury F-4	32262000	60680000	103	0.513	75 - 125	25	FGS-069	

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**SOURCE: 1201375-01** 

**Batch:** <u>F202063</u> Sequence: <u>2B18011</u>

Preparation: Hg SSE Fraction F-5 Lab Number: F202063-MS/MSD1

Analyte	Sample Concentration (ng/g dry)	Spike Added (ng/g dry)	MS Concentration (ng/g dry)	MS % Recovery	Recovery Limits	Method	Notes
Mercury F-5	8550000	10324000	18820000	99.5	75 - 125	FGS-069	

Analyte	Spike Added (ng/g dry)	MSD Concentration (ng/g dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Mercury F-5	10324000	19110000	102	2.77	75 - 125	25	FGS-069	_

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# LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

#### **RECOVERY AND RPD**

Batch: F202059 **Sequence:** <u>2B18010</u>

**Preparation:** Hg SSE Fraction F-1 **Lab Number:** F202059-BS/BSD1

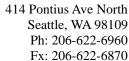
LCS Source: LCS

Analyte		Spike Added (ng/g wet)	LC Concent (ng/g	ration	LCS % Recovery	Recovery Limits	Method	Notes
Mercury F-1		0.050000	0.0	5	106	0 - 125	FGS-069	
Analyte	Spike Added (ng/g wet)	LCSD Concentration (ng/g wet)	LCSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Mercury F-1	0.050000	0.05	107	0.976	0 - 125	25	FGS-069	

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Mercury F-2

## LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

#### **RECOVERY AND RPD**

**Batch:** <u>F202060</u> Sequence: <u>2B18009</u>

Preparation: Hg SSE Fraction F-2 Lab Number: F202060-BS/BSD1

0.05

0.050000

LCS Source: LCS

0.0938

Analyte		Spike Added (ng/g wet)	LCS Concentration (ng/g wet)	LCS on % Recovery	Recovery Limits	Method	Notes
Mercury F-2		0.050000	0.05	101	0 - 125	FGS-069	
Analyte	Spike Added (ng/g wet)	LCSD Concentration (ng/g wet)	LCSD % Recovery RI		·	Method	Notes

101

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25

FGS-069

0 - 125

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Mercury F-3

## LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

#### **RECOVERY AND RPD**

**Batch:** F202061 **Sequence:** <u>2B18013</u>

0.10000

**Preparation:** Hg SSE Fraction F-3 Lab Number: F202061-BS/BSD1

0.09

LCS Source: LCS

2.62

0 - 125

25

FGS-069

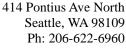
Analyte		Spike Added (ng/g wet)	LCS Concentrati (ng/g wet)		Recovery Limits	Method	Notes
Mercury F-3		0.10000	0.09	91.7	0 - 125	FGS-069	
Analyte	Spike Added (ng/g wet)	LCSD Concentration (ng/g wet)		% Recovery	y RPD Limit	Method	Notes

89.4

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Seattle, WA 98109 Ph: 206-622-6960 Fx: 206-622-6870



Mercury F-4

## LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

### **RECOVERY AND RPD**

Batch: F202062 **Sequence:** <u>2B18014</u>

781.25

**Preparation:** Hg SSE Fraction F-4 Lab Number: F202062-BS/BSD1

335.4

LCS Source: LCS

0.589

Analyte		Spike Added (ng/g wet)	LCS Concentration (ng/g wet)	LCS % Recovery	Recovery Limits	Method	Notes
Mercury F-4		781.25	337.4	43.2	0 - 125	FGS-069	•
Analyte	Spike Added (ng/g wet)	LCSD Concentration (ng/g wet)	LCSD % % Recovery RPI	Recover Limits	y RPD Limit	Method	Notes

42.9

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FGS-069

0 - 125

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Mercury F-5

## LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

#### **RECOVERY AND RPD**

**Batch:** <u>F202063</u> **Sequence:** <u>2B18011</u>

0.10000

**Preparation:** Hg SSE Fraction F-5 Lab Number: F202063-BS/BSD2

0.008

LCS Source: LCS

12.0

25

FGS-069

0 - 125

Analyte		Spike Added (ng/g wet)	LCS Concentration (ng/g wet)	LCS on % Recovery	Recovery Limits	Method	Notes
Mercury F-5		0.10000	0.009	9.40	0 - 125	FGS-069	
Analyte	Spike Added (ng/g wet)	LCSD Concentration (ng/g wet)	LCSD % % Recovery RF		·	Method	Notes

8.34

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## PREPARATION BLANKS

Instrument:  $\underline{\text{Hg-}17}$  Sequence:  $\underline{2B18010}$ 

**Preparation:** Hg SSE Fraction F-1

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F202059-BLK1	Mercury F-1	0.11	3.12	ng/g wet	F202059	FGS-069	U
F202059-BLK2	Mercury F-1	0.34	3.12	ng/g wet	F202059	FGS-069	U
F202059-BLK3	Mercury F-1	0.72	3.12	ng/g wet	F202059	FGS-069	U

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## PREPARATION BLANKS

Instrument:  $\underline{\text{Hg-}17}$  Sequence:  $\underline{2C02013}$ 

**Preparation:** Hg SSE Fraction F-1

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F202059-BLK4	Mercury F-1	0.43	3.12	ng/g wet	F202059	FGS-069	U
F202059-BLK5	Mercury F-1	0.79	3.12	ng/g wet	F202059	FGS-069	U
F202059-BLK6	Mercury F-1	0.86	3.12	ng/g wet	F202059	FGS-069	U

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## PREPARATION BLANKS

Instrument: Hg-16 Sequence: 2B18009

**Preparation:** Hg SSE Fraction F-2

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F202060-BLK1	Mercury F-2	0.11	3.12	ng/g wet	F202060	FGS-069	U
F202060-BLK2	Mercury F-2	0.17	3.12	ng/g wet	F202060	FGS-069	U
F202060-BLK3	Mercury F-2	0.22	3.12	ng/g wet	F202060	FGS-069	U

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## PREPARATION BLANKS

Instrument: Hg-17 Sequence: 2C02014

**Preparation:** Hg SSE Fraction F-2

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F202060-BLK4	Mercury F-2	0.15	3.12	ng/g wet	F202060	FGS-069	U
F202060-BLK5	Mercury F-2	0.60	3.12	ng/g wet	F202060	FGS-069	U
F202060-BLK6	Mercury F-2	0.38	3.12	ng/g wet	F202060	FGS-069	U

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## PREPARATION BLANKS

Instrument:  $\underline{\text{Hg-}17}$  Sequence:  $\underline{2B18013}$ 

**Preparation:** Hg SSE Fraction F-3

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F202061-BLK1	Mercury F-3	0.85	6.25	ng/g wet	F202061	FGS-069	U
F202061-BLK2	Mercury F-3	14.25	6.25	ng/g wet	F202061	FGS-069	QB-10
F202061-BLK3	Mercury F-3	0.43	6.25	ng/g wet	F202061	FGS-069	U

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## PREPARATION BLANKS

Instrument: Hg-17 Sequence: 2B18014

**Preparation:** Hg SSE Fraction F-4

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F202062-BLK1	Mercury F-4	1.73	15.6	ng/g wet	F202062	FGS-069	U
F202062-BLK2	Mercury F-4	56.42	15.6	ng/g wet	F202062	FGS-069	QB-10
F202062-BLK3	Mercury F-4	37.96	15.6	ng/g wet	F202062	FGS-069	QB-10

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## PREPARATION BLANKS

Instrument: Hg-16 Sequence: 2B18011

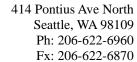
**Preparation:** Hg SSE Fraction F-5

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F202063-BLK1	Mercury F-5	0.83	1.00	ng/g wet	F202063	FGS-069	U
F202063-BLK2	Mercury F-5	5.28	1.00	ng/g wet	F202063	FGS-069	QB-10
F202063-BLK3	Mercury F-5	23.72	1.00	ng/g wet	F202063	FGS-069	QB-10

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# **Notes and Definitions**

U	Analyte included in the analysis, but not detected
QR-07	The RPD/RSD value for the matrix duplicate/triplicate was outside of acceptance limits. Batch QC acceptable based on MS/MSD and/or LCS/LCSD RPD values within control limits.
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.
O-09	Total Solids are prepared at the same time as the preparation for the analyte(s) of interest in order to provide the most accurate dry mass correction.
O-04	This sample was analyzed outside of the recommended holding time.
AD	This matrix duplicate is an analytical duplicate.
DET	Analyte Detected
MDL	Minimum Detection Limit
MRL	Minimum Reporting Limit

RPD Relative Percent Difference

Analyte Not Detected at or above the reporting limit

Sample results reported on a wet weight basis

Sample results reported on a dry weight basis

ND

wet dry

RSD Relative Standard Deviation

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