Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 40197844

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

December 17, 2019

Tyler Baker
Tennessee Valley Authority
Chickamauga Power Service Cent
4601 North Access Road, Bld. B
Chattanooga, TN 374153825

RE: Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Dear Tyler Baker:
Enclosed are the analytical results for sample(s) received by the laboratory between October 23, 2019 and November 20, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jennifer Gable, Environmental Standards, Inc.
Roy Quinn, TVA

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CERTIFICATIONS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE SUMMARY

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40197844001	JSF-FH-CC-HRD-F-20190619	Tissue	06/19/19 14:40	10/23/19 09:25
40197844002	JSF-FH-CC-HRU-F-20190430	Tissue	04/30/19 11:00	10/23/19 09:25
40197844003	JSF-FH-CC-F-DUP01-20190507	Tissue	05/07/19 00:00	10/23/19 09:25
40197844004	JSF-FH-CC-F-DUP02-20190430	Tissue	04/30/19 00:00	10/23/19 09:25
40197844005	JSF-FH-CC-HRA1-O-20190507	Tissue	05/07/19 18:57	10/23/19 09:25
40197844006	JSF-FH-CC-O-DUP02-20190430	Tissue	04/30/19 00:00	10/23/19 09:25
40197844007	JSF-FH-CC-HRA1-L-20190507	Tissue	05/07/19 18:57	10/23/19 09:25
40197844008	JSF-FH-CC-HRA2-L-20190611	Tissue	06/11/19 16:45	10/23/19 09:25
40197844009	JSF-FH-CC-HRD-L-20190619	Tissue	06/19/19 14:40	10/23/19 09:25
40197844010	JSF-FH-CC-HRU-L-20190430	Tissue	04/30/19 11:00	10/23/19 09:25
40197844011	JSF-FH-CC-L-DUP01-20190507	Tissue	05/07/19 00:00	10/23/19 09:25
40197844012	JSF-FH-CC-L-DUP02-20190430	Tissue	04/30/19 00:00	10/23/19 09:25
40197844013	JSF-FH-SB-HRA1-F-20190409	Tissue	04/09/19 13:45	10/23/19 09:25
40197844014	JSF-FH-LB-HRA2-F-20190409	Tissue	04/09/19 17:05	10/23/19 09:25
40197844015	JSF-FH-LB-HRD-F-20190410	Tissue	04/10/19 13:15	10/23/19 09:25
40197844016	JSF-FH-LB-HRU-F-20190409	Tissue	04/09/19 14:12	10/23/19 09:25
40197844017	JSF-FH-LB-F-DUP01-20190410	Tissue	04/10/19 00:00	10/23/19 09:25
40197844018	JSF-FH-LB-F-DUP02-20190409	Tissue	04/09/19 00:00	10/23/19 09:25
40197844019	JSF-FH-SB-HRA1-O-20190409	Tissue	04/09/19 13:45	10/23/19 09:25
40197844020	JSF-FH-LB-HRA2-O-20190409	Tissue	04/09/19 17:05	10/23/19 09:25
40197844021	RINSE BLANK-A 11-19-19	Tissue	11/19/19 00:00	11/20/19 11:09

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SAMPLE ANALYTE COUNT

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40197844001	JSF-FH-CC-HRD-F-20190619	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844002	JSF-FH-CC-HRU-F-20190430	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844003	JSF-FH-CC-F-DUP01-20190507	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844004	JSF-FH-CC-F-DUP02-20190430	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844005	JSF-FH-CC-HRA1-O-20190507	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844006	JSF-FH-CC-O-DUP02-20190430	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844007	JSF-FH-CC-HRA1-L-20190507	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844008	JSF-FH-CC-HRA2-L-20190611	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844009	JSF-FH-CC-HRD-L-20190619	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844010	JSF-FH-CC-HRU-L-20190430	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844011	JSF-FH-CC-L-DUP01-20190507	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844012	JSF-FH-CC-L-DUP02-20190430	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844013	JSF-FH-SB-HRA1-F-20190409	EPA 6020	DS1	20

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SAMPLE ANALYTE COUNT

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844014	**JSF-FH-LB-HRA2-F-20190409**	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844015	**JSF-FH-LB-HRD-F-20190410**	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844016	**JSF-FH-LB-HRU-F-20190409**	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844017	**JSF-FH-LB-F-DUP01-20190410**	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844018	**JSF-FH-LB-F-DUP02-20190409**	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844019	**JSF-FH-SB-HRA1-O-20190409**	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844020	**JSF-FH-LB-HRA2-O-20190409**	EPA 6020	DS1	20
		EPA 7473	AJT	1
		ASTM D2974-87	CWN	1
40197844021	**RINSE BLANK-A 11-19-19**	EPA 6020	DS1	20
		EPA 7473	AJT	1

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PROJECT NARRATIVE

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: TENNESSEE VALLEY AUTHORITY
Date: December 17, 2019

General Information:
21 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 342862

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40197844001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MSD (Lab ID: 1991169)
  - Calcium

R1: RPD value was outside control limits.

- MS (Lab ID: 1991168)
  - Calcium
- MSD (Lab ID: 1991169)
  - Calcium

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Method: **EPA 7473**
Description: 7473 Mercury, Tissue
Client: TENNESSEE VALLEY AUTHORITY
Date: December 17, 2019

General Information:
21 samples were analyzed for EPA 7473. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 342142

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40197844001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1987222)
  - Mercury
- MSD (Lab ID: 1987223)
  - Mercury

Additional Comments:

Analyte Comments:

QC Batch: 342142

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- JSF-FH-CC-HRU-F-20190430 (Lab ID: 40197844002)
  - Mercury

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PROJECT NARRATIVE

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Method: **ASTM D2974-87**
Description: Percent Moisture Reportable
Client: TENNESSEE VALLEY AUTHORITY
Date: December 17, 2019

General Information:
20 samples were analyzed for ASTM D2974-87. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-HRD-F-20190619 **Lab ID: 40197844001** Collected: 06/19/19 14:40 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.021**	mg/kg	0.10	0.021	1	12/10/19 08:23	12/12/19 20:37	7440-36-0	
Arsenic	**0.083J**	mg/kg	0.10	0.030	1	12/10/19 08:23	12/12/19 20:37	7440-38-2	
Barium	**<0.031**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 20:37	7440-39-3	
Beryllium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 20:37	7440-41-7	
Boron	**<0.70**	mg/kg	2.3	0.70	1	12/10/19 08:23	12/12/19 20:37	7440-42-8	
Cadmium	**0.039J**	mg/kg	0.10	0.011	1	12/10/19 08:23	12/12/19 20:37	7440-43-9	
Calcium	**96.3**	mg/kg	84.5	25.3	1	12/10/19 08:23	12/12/19 20:37	7440-70-2	M0,R1
Chromium	**<0.088**	mg/kg	0.29	0.088	1	12/10/19 08:23	12/12/19 20:37	7440-47-3	
Cobalt	**<0.019**	mg/kg	0.10	0.019	1	12/10/19 08:23	12/12/19 20:37	7440-48-4	
Copper	**0.72J**	mg/kg	0.95	0.28	1	12/10/19 08:23	12/12/19 20:37	7440-50-8	
Lead	**<0.030**	mg/kg	0.10	0.030	1	12/10/19 08:23	12/12/19 20:37	7439-92-1	
Lithium	**<0.021**	mg/kg	0.10	0.021	1	12/10/19 08:23	12/12/19 20:37	7439-93-2	
Molybdenum	**<0.036**	mg/kg	0.12	0.036	1	12/10/19 08:23	12/12/19 20:37	7439-98-7	
Nickel	**0.39**	mg/kg	0.14	0.041	1	12/10/19 08:23	12/12/19 20:37	7440-02-0	
Selenium	**0.17**	mg/kg	0.17	0.051	1	12/10/19 08:23	12/12/19 20:37	7782-49-2	
Silver	**<0.011**	mg/kg	0.050	0.011	1	12/10/19 08:23	12/12/19 20:37	7440-22-4	
Strontium	**<0.16**	mg/kg	0.54	0.16	1	12/10/19 08:23	12/12/19 20:37	7440-24-6	
Thallium	**<0.013**	mg/kg	0.10	0.013	1	12/10/19 08:23	12/12/19 20:37	7440-28-0	
Vanadium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 20:37	7440-62-2	
Zinc	**6.3**	mg/kg	4.7	1.4	1	12/10/19 08:23	12/12/19 20:37	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.070**	mg/kg	0.024	0.0072	1		12/02/19 14:21	7439-97-6	M0
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**79.6**	%	0.10	0.10	1		11/19/19 09:19		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-HRU-F-20190430 **Lab ID: 40197844002** Collected: 04/30/19 11:00 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.021**	mg/kg	0.099	0.021	1	12/10/19 08:23	12/12/19 21:20	7440-36-0	
Arsenic	**0.048J**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 21:20	7440-38-2	
Barium	**<0.030**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 21:20	7440-39-3	
Beryllium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 21:20	7440-41-7	
Boron	**<0.69**	mg/kg	2.3	0.69	1	12/10/19 08:23	12/12/19 21:20	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.099	0.011	1	12/10/19 08:23	12/12/19 21:20	7440-43-9	
Calcium	**75.0J**	mg/kg	83.6	25.1	1	12/10/19 08:23	12/12/19 21:20	7440-70-2	
Chromium	**<0.087**	mg/kg	0.29	0.087	1	12/10/19 08:23	12/12/19 21:20	7440-47-3	
Cobalt	**0.042J**	mg/kg	0.099	0.019	1	12/10/19 08:23	12/12/19 21:20	7440-48-4	
Copper	**<0.28**	mg/kg	0.94	0.28	1	12/10/19 08:23	12/12/19 21:20	7440-50-8	
Lead	**<0.030**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 21:20	7439-92-1	
Lithium	**<0.021**	mg/kg	0.099	0.021	1	12/10/19 08:23	12/12/19 21:20	7439-93-2	
Molybdenum	**<0.035**	mg/kg	0.12	0.035	1	12/10/19 08:23	12/12/19 21:20	7439-98-7	
Nickel	**<0.041**	mg/kg	0.14	0.041	1	12/10/19 08:23	12/12/19 21:20	7440-02-0	
Selenium	**0.18**	mg/kg	0.17	0.050	1	12/10/19 08:23	12/12/19 21:20	7782-49-2	
Silver	**<0.011**	mg/kg	0.049	0.011	1	12/10/19 08:23	12/12/19 21:20	7440-22-4	
Strontium	**<0.16**	mg/kg	0.53	0.16	1	12/10/19 08:23	12/12/19 21:20	7440-24-6	
Thallium	**<0.013**	mg/kg	0.099	0.013	1	12/10/19 08:23	12/12/19 21:20	7440-28-0	
Vanadium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 21:20	7440-62-2	
Zinc	**5.1**	mg/kg	4.6	1.4	1	12/10/19 08:23	12/12/19 21:20	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.23**	mg/kg	0.025	0.0074	1		12/02/19 14:53	7439-97-6	E
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**76.7**	%	0.10	0.10	1		11/19/19 09:20		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-F-DUP01-20190507 **Lab ID: 40197844003** Collected: 05/07/19 00:00 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.097	0.020	1	12/10/19 08:23	12/12/19 21:35	7440-36-0	
Arsenic	**<0.029**	mg/kg	0.097	0.029	1	12/10/19 08:23	12/12/19 21:35	7440-38-2	
Barium	**<0.030**	mg/kg	0.097	0.030	1	12/10/19 08:23	12/12/19 21:35	7440-39-3	
Beryllium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 21:35	7440-41-7	
Boron	**<0.68**	mg/kg	2.3	0.68	1	12/10/19 08:23	12/12/19 21:35	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.097	0.011	1	12/10/19 08:23	12/12/19 21:35	7440-43-9	
Calcium	**77.5J**	mg/kg	82.3	24.7	1	12/10/19 08:23	12/12/19 21:35	7440-70-2	
Chromium	**<0.086**	mg/kg	0.28	0.086	1	12/10/19 08:23	12/12/19 21:35	7440-47-3	
Cobalt	**0.026J**	mg/kg	0.097	0.018	1	12/10/19 08:23	12/12/19 21:35	7440-48-4	
Copper	**0.34J**	mg/kg	0.92	0.28	1	12/10/19 08:23	12/12/19 21:35	7440-50-8	
Lead	**<0.029**	mg/kg	0.097	0.029	1	12/10/19 08:23	12/12/19 21:35	7439-92-1	
Lithium	**<0.021**	mg/kg	0.097	0.021	1	12/10/19 08:23	12/12/19 21:35	7439-93-2	
Molybdenum	**<0.035**	mg/kg	0.12	0.035	1	12/10/19 08:23	12/12/19 21:35	7439-98-7	
Nickel	**<0.040**	mg/kg	0.14	0.040	1	12/10/19 08:23	12/12/19 21:35	7440-02-0	
Selenium	**0.13J**	mg/kg	0.17	0.049	1	12/10/19 08:23	12/12/19 21:35	7782-49-2	
Silver	**<0.011**	mg/kg	0.049	0.011	1	12/10/19 08:23	12/12/19 21:35	7440-22-4	
Strontium	**<0.16**	mg/kg	0.53	0.16	1	12/10/19 08:23	12/12/19 21:35	7440-24-6	
Thallium	**<0.013**	mg/kg	0.097	0.013	1	12/10/19 08:23	12/12/19 21:35	7440-28-0	
Vanadium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 21:35	7440-62-2	
Zinc	**5.7**	mg/kg	4.5	1.4	1	12/10/19 08:23	12/12/19 21:35	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.25**	mg/kg	0.025	0.0075	1		12/02/19 15:05	7439-97-6	J
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**80.4**	%	0.10	0.10	1		11/19/19 09:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-F-DUP02-20190430 **Lab ID: 40197844004** Collected: 04/30/19 00:00 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.095	0.020	1	12/10/19 08:23	12/12/19 21:42	7440-36-0	
Arsenic	**<0.029**	mg/kg	0.095	0.029	1	12/10/19 08:23	12/12/19 21:42	7440-38-2	
Barium	**<0.029**	mg/kg	0.095	0.029	1	12/10/19 08:23	12/12/19 21:42	7440-39-3	
Beryllium	**<0.032**	mg/kg	0.10	0.032	1	12/10/19 08:23	12/12/19 21:42	7440-41-7	
Boron	**<0.66**	mg/kg	2.2	0.66	1	12/10/19 08:23	12/12/19 21:42	7440-42-8	
Cadmium	**<0.010**	mg/kg	0.095	0.010	1	12/10/19 08:23	12/12/19 21:42	7440-43-9	
Calcium	**67.5J**	mg/kg	80.6	24.2	1	12/10/19 08:23	12/12/19 21:42	7440-70-2	
Chromium	**<0.084**	mg/kg	0.28	0.084	1	12/10/19 08:23	12/12/19 21:42	7440-47-3	
Cobalt	**0.021J**	mg/kg	0.095	0.018	1	12/10/19 08:23	12/12/19 21:42	7440-48-4	
Copper	**0.32J**	mg/kg	0.90	0.27	1	12/10/19 08:23	12/12/19 21:42	7440-50-8	
Lead	**<0.029**	mg/kg	0.095	0.029	1	12/10/19 08:23	12/12/19 21:42	7439-92-1	
Lithium	**<0.020**	mg/kg	0.095	0.020	1	12/10/19 08:23	12/12/19 21:42	7439-93-2	
Molybdenum	**<0.034**	mg/kg	0.11	0.034	1	12/10/19 08:23	12/12/19 21:42	7439-98-7	
Nickel	**<0.039**	mg/kg	0.13	0.039	1	12/10/19 08:23	12/12/19 21:42	7440-02-0	
Selenium	**0.16J**	mg/kg	0.16	0.048	1	12/10/19 08:23	12/12/19 21:42	7782-49-2	
Silver	**<0.011**	mg/kg	0.048	0.011	1	12/10/19 08:23	12/12/19 21:42	7440-22-4	
Strontium	**<0.15**	mg/kg	0.51	0.15	1	12/10/19 08:23	12/12/19 21:42	7440-24-6	
Thallium	**<0.012**	mg/kg	0.095	0.012	1	12/10/19 08:23	12/12/19 21:42	7440-28-0	
Vanadium	**<0.032**	mg/kg	0.10	0.032	1	12/10/19 08:23	12/12/19 21:42	7440-62-2	
Zinc	**6.0**	mg/kg	4.4	1.3	1	12/10/19 08:23	12/12/19 21:42	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.42**	mg/kg	0.023	0.0070	1		12/02/19 15:16	7439-97-6	J
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**77.9**	%	0.10	0.10	1		11/19/19 09:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-HRA1-O-20190507 **Lab ID: 40197844005** Collected: 05/07/19 18:57 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.021**	mg/kg	0.10	0.021	1	12/10/19 08:23	12/12/19 21:49	7440-36-0	
Arsenic	**<0.030**	mg/kg	0.10	0.030	1	12/10/19 08:23	12/12/19 21:49	7440-38-2	
Barium	**0.13**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 21:49	7440-39-3	
Beryllium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 21:49	7440-41-7	
Boron	**<0.70**	mg/kg	2.3	0.70	1	12/10/19 08:23	12/12/19 21:49	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.10	0.011	1	12/10/19 08:23	12/12/19 21:49	7440-43-9	
Calcium	**945**	mg/kg	84.6	25.4	1	12/10/19 08:23	12/12/19 21:49	7440-70-2	
Chromium	**<0.088**	mg/kg	0.29	0.088	1	12/10/19 08:23	12/12/19 21:49	7440-47-3	
Cobalt	**0.068J**	mg/kg	0.10	0.019	1	12/10/19 08:23	12/12/19 21:49	7440-48-4	
Copper	**1.0**	mg/kg	0.95	0.28	1	12/10/19 08:23	12/12/19 21:49	7440-50-8	
Lead	**<0.030**	mg/kg	0.10	0.030	1	12/10/19 08:23	12/12/19 21:49	7439-92-1	
Lithium	**<0.021**	mg/kg	0.10	0.021	1	12/10/19 08:23	12/12/19 21:49	7439-93-2	
Molybdenum	**<0.036**	mg/kg	0.12	0.036	1	12/10/19 08:23	12/12/19 21:49	7439-98-7	
Nickel	**<0.041**	mg/kg	0.14	0.041	1	12/10/19 08:23	12/12/19 21:49	7440-02-0	
Selenium	**0.89**	mg/kg	0.17	0.051	1	12/10/19 08:23	12/12/19 21:49	7782-49-2	
Silver	**<0.011**	mg/kg	0.050	0.011	1	12/10/19 08:23	12/12/19 21:49	7440-22-4	
Strontium	**1.6**	mg/kg	0.54	0.16	1	12/10/19 08:23	12/12/19 21:49	7440-24-6	
Thallium	**<0.013**	mg/kg	0.10	0.013	1	12/10/19 08:23	12/12/19 21:49	7440-28-0	
Vanadium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 21:49	7440-62-2	
Zinc	**46.0**	mg/kg	4.7	1.4	1	12/10/19 08:23	12/12/19 21:49	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.021J**	mg/kg	0.024	0.0073	1		12/02/19 17:14	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**58.2**	%	0.10	0.10	1		11/19/19 09:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-O-DUP02-20190430 **Lab ID: 40197844006** Collected: 04/30/19 00:00 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.095	0.020	1	12/10/19 08:23	12/12/19 21:57	7440-36-0	
Arsenic	**<0.029**	mg/kg	0.095	0.029	1	12/10/19 08:23	12/12/19 21:57	7440-38-2	
Barium	**0.19**	mg/kg	0.095	0.029	1	12/10/19 08:23	12/12/19 21:57	7440-39-3	
Beryllium	**<0.031**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 21:57	7440-41-7	
Boron	**<0.66**	mg/kg	2.2	0.66	1	12/10/19 08:23	12/12/19 21:57	7440-42-8	
Cadmium	**<0.010**	mg/kg	0.095	0.010	1	12/10/19 08:23	12/12/19 21:57	7440-43-9	
Calcium	**1060**	mg/kg	80.2	24.0	1	12/10/19 08:23	12/12/19 21:57	7440-70-2	
Chromium	**<0.084**	mg/kg	0.27	0.084	1	12/10/19 08:23	12/12/19 21:57	7440-47-3	
Cobalt	**0.065J**	mg/kg	0.095	0.018	1	12/10/19 08:23	12/12/19 21:57	7440-48-4	
Copper	**1.1**	mg/kg	0.90	0.27	1	12/10/19 08:23	12/12/19 21:57	7440-50-8	
Lead	**<0.028**	mg/kg	0.095	0.028	1	12/10/19 08:23	12/12/19 21:57	7439-92-1	
Lithium	**<0.020**	mg/kg	0.095	0.020	1	12/10/19 08:23	12/12/19 21:57	7439-93-2	
Molybdenum	**<0.034**	mg/kg	0.11	0.034	1	12/10/19 08:23	12/12/19 21:57	7439-98-7	
Nickel	**0.10J**	mg/kg	0.13	0.039	1	12/10/19 08:23	12/12/19 21:57	7440-02-0	
Selenium	**0.90**	mg/kg	0.16	0.048	1	12/10/19 08:23	12/12/19 21:57	7782-49-2	
Silver	**<0.011**	mg/kg	0.047	0.011	1	12/10/19 08:23	12/12/19 21:57	7440-22-4	
Strontium	**1.3**	mg/kg	0.51	0.15	1	12/10/19 08:23	12/12/19 21:57	7440-24-6	
Thallium	**<0.012**	mg/kg	0.095	0.012	1	12/10/19 08:23	12/12/19 21:57	7440-28-0	
Vanadium	**<0.032**	mg/kg	0.10	0.032	1	12/10/19 08:23	12/12/19 21:57	7440-62-2	
Zinc	**38.4**	mg/kg	4.4	1.3	1	12/10/19 08:23	12/12/19 21:57	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.031**	mg/kg	0.024	0.0071	1		12/02/19 17:25	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**59.9**	%	0.10	0.10	1		11/19/19 09:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-HRA1-L-20190507 **Lab ID: 40197844007** Collected: 05/07/19 18:57 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.095	0.020	1	12/10/19 08:23	12/12/19 22:04	7440-36-0	
Arsenic	**<0.029**	mg/kg	0.095	0.029	1	12/10/19 08:23	12/12/19 22:04	7440-38-2	
Barium	**<0.029**	mg/kg	0.095	0.029	1	12/10/19 08:23	12/12/19 22:04	7440-39-3	
Beryllium	**<0.031**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 22:04	7440-41-7	
Boron	**<0.66**	mg/kg	2.2	0.66	1	12/10/19 08:23	12/12/19 22:04	7440-42-8	
Cadmium	**0.024J**	mg/kg	0.095	0.010	1	12/10/19 08:23	12/12/19 22:04	7440-43-9	
Calcium	**47.9J**	mg/kg	80.0	24.0	1	12/10/19 08:23	12/12/19 22:04	7440-70-2	
Chromium	**<0.084**	mg/kg	0.27	0.084	1	12/10/19 08:23	12/12/19 22:04	7440-47-3	
Cobalt	**0.12**	mg/kg	0.095	0.018	1	12/10/19 08:23	12/12/19 22:04	7440-48-4	
Copper	**1.6**	mg/kg	0.90	0.27	1	12/10/19 08:23	12/12/19 22:04	7440-50-8	
Lead	**0.053J**	mg/kg	0.095	0.028	1	12/10/19 08:23	12/12/19 22:04	7439-92-1	
Lithium	**<0.020**	mg/kg	0.095	0.020	1	12/10/19 08:23	12/12/19 22:04	7439-93-2	
Molybdenum	**0.13**	mg/kg	0.11	0.034	1	12/10/19 08:23	12/12/19 22:04	7439-98-7	
Nickel	**<0.039**	mg/kg	0.13	0.039	1	12/10/19 08:23	12/12/19 22:04	7440-02-0	
Selenium	**1.1**	mg/kg	0.16	0.048	1	12/10/19 08:23	12/12/19 22:04	7782-49-2	
Silver	**<0.011**	mg/kg	0.047	0.011	1	12/10/19 08:23	12/12/19 22:04	7440-22-4	
Strontium	**<0.15**	mg/kg	0.51	0.15	1	12/10/19 08:23	12/12/19 22:04	7440-24-6	
Thallium	**<0.012**	mg/kg	0.095	0.012	1	12/10/19 08:23	12/12/19 22:04	7440-28-0	
Vanadium	**0.21**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 22:04	7440-62-2	
Zinc	**21.0**	mg/kg	4.4	1.3	1	12/10/19 08:23	12/12/19 22:04	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.37**	mg/kg	0.025	0.0074	1		12/02/19 17:37	7439-97-6	J
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**80.4**	%	0.10	0.10	1		11/19/19 09:22		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-HRA2-L-20190611 **Lab ID: 40197844008** Collected: 06/11/19 16:45 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.095	0.020	1	12/10/19 08:23	12/12/19 22:11	7440-36-0	
Arsenic	**0.064J**	mg/kg	0.095	0.029	1	12/10/19 08:23	12/12/19 22:11	7440-38-2	
Barium	**<0.029**	mg/kg	0.095	0.029	1	12/10/19 08:23	12/12/19 22:11	7440-39-3	
Beryllium	**<0.031**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 22:11	7440-41-7	
Boron	**<0.66**	mg/kg	2.2	0.66	1	12/10/19 08:23	12/12/19 22:11	7440-42-8	
Cadmium	**0.077J**	mg/kg	0.095	0.010	1	12/10/19 08:23	12/12/19 22:11	7440-43-9	
Calcium	**48.4J**	mg/kg	80.3	24.1	1	12/10/19 08:23	12/12/19 22:11	7440-70-2	
Chromium	**<0.084**	mg/kg	0.27	0.084	1	12/10/19 08:23	12/12/19 22:11	7440-47-3	
Cobalt	**0.18**	mg/kg	0.095	0.018	1	12/10/19 08:23	12/12/19 22:11	7440-48-4	
Copper	**2.4**	mg/kg	0.90	0.27	1	12/10/19 08:23	12/12/19 22:11	7440-50-8	
Lead	**0.11**	mg/kg	0.095	0.028	1	12/10/19 08:23	12/12/19 22:11	7439-92-1	
Lithium	**<0.020**	mg/kg	0.095	0.020	1	12/10/19 08:23	12/12/19 22:11	7439-93-2	
Molybdenum	**0.19**	mg/kg	0.11	0.034	1	12/10/19 08:23	12/12/19 22:11	7439-98-7	
Nickel	**<0.039**	mg/kg	0.13	0.039	1	12/10/19 08:23	12/12/19 22:11	7440-02-0	
Selenium	**1.4**	mg/kg	0.16	0.048	1	12/10/19 08:23	12/12/19 22:11	7782-49-2	
Silver	**<0.011**	mg/kg	0.047	0.011	1	12/10/19 08:23	12/12/19 22:11	7440-22-4	
Strontium	**<0.15**	mg/kg	0.51	0.15	1	12/10/19 08:23	12/12/19 22:11	7440-24-6	
Thallium	**<0.012**	mg/kg	0.095	0.012	1	12/10/19 08:23	12/12/19 22:11	7440-28-0	
Vanadium	**0.62**	mg/kg	0.10	0.032	1	12/10/19 08:23	12/12/19 22:11	7440-62-2	
Zinc	**24.3**	mg/kg	4.4	1.3	1	12/10/19 08:23	12/12/19 22:11	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.43**	mg/kg	0.024	0.0073	1		12/02/19 17:48	7439-97-6	J
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**80.7**	%	0.10	0.10	1		11/19/19 09:22		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-HRD-L-20190619 **Lab ID: 40197844009** Collected: 06/19/19 14:40 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.021**	mg/kg	0.098	0.021	1	12/10/19 08:23	12/12/19 22:18	7440-36-0	
Arsenic	**0.079J**	mg/kg	0.098	0.030	1	12/10/19 08:23	12/12/19 22:18	7440-38-2	
Barium	**0.031J**	mg/kg	0.098	0.030	1	12/10/19 08:23	12/12/19 22:18	7440-39-3	
Beryllium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 22:18	7440-41-7	
Boron	**<0.69**	mg/kg	2.3	0.69	1	12/10/19 08:23	12/12/19 22:18	7440-42-8	
Cadmium	**0.092J**	mg/kg	0.098	0.011	1	12/10/19 08:23	12/12/19 22:18	7440-43-9	
Calcium	**80.1J**	mg/kg	83.3	25.0	1	12/10/19 08:23	12/12/19 22:18	7440-70-2	
Chromium	**<0.087**	mg/kg	0.29	0.087	1	12/10/19 08:23	12/12/19 22:18	7440-47-3	
Cobalt	**0.20**	mg/kg	0.098	0.019	1	12/10/19 08:23	12/12/19 22:18	7440-48-4	
Copper	**2.9**	mg/kg	0.94	0.28	1	12/10/19 08:23	12/12/19 22:18	7440-50-8	
Lead	**0.20**	mg/kg	0.098	0.030	1	12/10/19 08:23	12/12/19 22:18	7439-92-1	
Lithium	**<0.021**	mg/kg	0.098	0.021	1	12/10/19 08:23	12/12/19 22:18	7439-93-2	
Molybdenum	**0.27**	mg/kg	0.12	0.035	1	12/10/19 08:23	12/12/19 22:18	7439-98-7	
Nickel	**<0.040**	mg/kg	0.14	0.040	1	12/10/19 08:23	12/12/19 22:18	7440-02-0	
Selenium	**1.4**	mg/kg	0.17	0.050	1	12/10/19 08:23	12/12/19 22:18	7782-49-2	
Silver	**<0.011**	mg/kg	0.049	0.011	1	12/10/19 08:23	12/12/19 22:18	7440-22-4	
Strontium	**<0.16**	mg/kg	0.53	0.16	1	12/10/19 08:23	12/12/19 22:18	7440-24-6	
Thallium	**<0.013**	mg/kg	0.098	0.013	1	12/10/19 08:23	12/12/19 22:18	7440-28-0	
Vanadium	**0.73**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 22:18	7440-62-2	
Zinc	**26.5**	mg/kg	4.6	1.4	1	12/10/19 08:23	12/12/19 22:18	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.74**	mg/kg	0.024	0.0070	1		12/02/19 17:59	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**78.8**	%	0.10	0.10	1		11/19/19 09:22		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-HRU-L-20190430 **Lab ID: 40197844010** Collected: 04/30/19 11:00 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.097	0.020	1	12/10/19 08:23	12/12/19 22:25	7440-36-0	
Arsenic	**0.043J**	mg/kg	0.097	0.029	1	12/10/19 08:23	12/12/19 22:25	7440-38-2	
Barium	**<0.030**	mg/kg	0.097	0.030	1	12/10/19 08:23	12/12/19 22:25	7440-39-3	
Beryllium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 22:25	7440-41-7	
Boron	**<0.68**	mg/kg	2.3	0.68	1	12/10/19 08:23	12/12/19 22:25	7440-42-8	
Cadmium	**0.027J**	mg/kg	0.097	0.011	1	12/10/19 08:23	12/12/19 22:25	7440-43-9	
Calcium	**51.2J**	mg/kg	82.2	24.7	1	12/10/19 08:23	12/12/19 22:25	7440-70-2	
Chromium	**<0.086**	mg/kg	0.28	0.086	1	12/10/19 08:23	12/12/19 22:25	7440-47-3	
Cobalt	**0.18**	mg/kg	0.097	0.018	1	12/10/19 08:23	12/12/19 22:25	7440-48-4	
Copper	**2.2**	mg/kg	0.92	0.28	1	12/10/19 08:23	12/12/19 22:25	7440-50-8	
Lead	**0.045J**	mg/kg	0.097	0.029	1	12/10/19 08:23	12/12/19 22:25	7439-92-1	
Lithium	**<0.021**	mg/kg	0.097	0.021	1	12/10/19 08:23	12/12/19 22:25	7439-93-2	
Molybdenum	**0.18**	mg/kg	0.12	0.035	1	12/10/19 08:23	12/12/19 22:25	7439-98-7	
Nickel	**<0.040**	mg/kg	0.14	0.040	1	12/10/19 08:23	12/12/19 22:25	7440-02-0	
Selenium	**1.5**	mg/kg	0.17	0.049	1	12/10/19 08:23	12/12/19 22:25	7782-49-2	
Silver	**<0.011**	mg/kg	0.049	0.011	1	12/10/19 08:23	12/12/19 22:25	7440-22-4	
Strontium	**<0.16**	mg/kg	0.52	0.16	1	12/10/19 08:23	12/12/19 22:25	7440-24-6	
Thallium	**<0.013**	mg/kg	0.097	0.013	1	12/10/19 08:23	12/12/19 22:25	7440-28-0	
Vanadium	**0.20**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 22:25	7440-62-2	
Zinc	**25.6**	mg/kg	4.5	1.4	1	12/10/19 08:23	12/12/19 22:25	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.26**	mg/kg	0.024	0.0073	1		12/02/19 18:11	7439-97-6	J
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**80.4**	%	0.10	0.10	1		11/19/19 09:22		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-L-DUP01-20190507 **Lab ID: 40197844011** Collected: 05/07/19 00:00 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.093	0.020	1	12/10/19 08:23	12/12/19 22:47	7440-36-0	
Arsenic	**0.030J**	mg/kg	0.093	0.028	1	12/10/19 08:23	12/12/19 22:47	7440-38-2	
Barium	**<0.028**	mg/kg	0.093	0.028	1	12/10/19 08:23	12/12/19 22:47	7440-39-3	
Beryllium	**<0.031**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 22:47	7440-41-7	
Boron	**<0.65**	mg/kg	2.2	0.65	1	12/10/19 08:23	12/12/19 22:47	7440-42-8	
Cadmium	**0.053J**	mg/kg	0.093	0.010	1	12/10/19 08:23	12/12/19 22:47	7440-43-9	
Calcium	**35.1J**	mg/kg	78.8	23.6	1	12/10/19 08:23	12/12/19 22:47	7440-70-2	
Chromium	**<0.082**	mg/kg	0.27	0.082	1	12/10/19 08:23	12/12/19 22:47	7440-47-3	
Cobalt	**0.16**	mg/kg	0.093	0.018	1	12/10/19 08:23	12/12/19 22:47	7440-48-4	
Copper	**2.3**	mg/kg	0.88	0.26	1	12/10/19 08:23	12/12/19 22:47	7440-50-8	
Lead	**0.079J**	mg/kg	0.093	0.028	1	12/10/19 08:23	12/12/19 22:47	7439-92-1	
Lithium	**<0.020**	mg/kg	0.093	0.020	1	12/10/19 08:23	12/12/19 22:47	7439-93-2	
Molybdenum	**0.15**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 22:47	7439-98-7	
Nickel	**<0.038**	mg/kg	0.13	0.038	1	12/10/19 08:23	12/12/19 22:47	7440-02-0	
Selenium	**1.3**	mg/kg	0.16	0.047	1	12/10/19 08:23	12/12/19 22:47	7782-49-2	
Silver	**<0.010**	mg/kg	0.047	0.010	1	12/10/19 08:23	12/12/19 22:47	7440-22-4	
Strontium	**<0.15**	mg/kg	0.50	0.15	1	12/10/19 08:23	12/12/19 22:47	7440-24-6	
Thallium	**0.012J**	mg/kg	0.093	0.012	1	12/10/19 08:23	12/12/19 22:47	7440-28-0	
Vanadium	**0.40**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 22:47	7440-62-2	
Zinc	**22.4**	mg/kg	4.3	1.3	1	12/10/19 08:23	12/12/19 22:47	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.44**	mg/kg	0.025	0.0076	1		12/02/19 19:00	7439-97-6	J
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**79.9**	%	0.10	0.10	1		11/19/19 09:22		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-CC-L-DUP02-20190430 **Lab ID: 40197844012** Collected: 04/30/19 00:00 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.094	0.020	1	12/10/19 08:23	12/12/19 22:54	7440-36-0	
Arsenic	**0.036J**	mg/kg	0.094	0.028	1	12/10/19 08:23	12/12/19 22:54	7440-38-2	
Barium	**<0.029**	mg/kg	0.094	0.029	1	12/10/19 08:23	12/12/19 22:54	7440-39-3	
Beryllium	**<0.031**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 22:54	7440-41-7	
Boron	**<0.65**	mg/kg	2.2	0.65	1	12/10/19 08:23	12/12/19 22:54	7440-42-8	
Cadmium	**0.029J**	mg/kg	0.094	0.010	1	12/10/19 08:23	12/12/19 22:54	7440-43-9	
Calcium	**49.0J**	mg/kg	79.4	23.8	1	12/10/19 08:23	12/12/19 22:54	7440-70-2	
Chromium	**<0.083**	mg/kg	0.27	0.083	1	12/10/19 08:23	12/12/19 22:54	7440-47-3	
Cobalt	**0.11**	mg/kg	0.094	0.018	1	12/10/19 08:23	12/12/19 22:54	7440-48-4	
Copper	**1.8**	mg/kg	0.89	0.27	1	12/10/19 08:23	12/12/19 22:54	7440-50-8	
Lead	**0.050J**	mg/kg	0.094	0.028	1	12/10/19 08:23	12/12/19 22:54	7439-92-1	
Lithium	**<0.020**	mg/kg	0.094	0.020	1	12/10/19 08:23	12/12/19 22:54	7439-93-2	
Molybdenum	**0.16**	mg/kg	0.11	0.034	1	12/10/19 08:23	12/12/19 22:54	7439-98-7	
Nickel	**<0.039**	mg/kg	0.13	0.039	1	12/10/19 08:23	12/12/19 22:54	7440-02-0	
Selenium	**1.3**	mg/kg	0.16	0.048	1	12/10/19 08:23	12/12/19 22:54	7782-49-2	
Silver	**<0.011**	mg/kg	0.047	0.011	1	12/10/19 08:23	12/12/19 22:54	7440-22-4	
Strontium	**<0.15**	mg/kg	0.51	0.15	1	12/10/19 08:23	12/12/19 22:54	7440-24-6	
Thallium	**<0.012**	mg/kg	0.094	0.012	1	12/10/19 08:23	12/12/19 22:54	7440-28-0	
Vanadium	**0.27**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 22:54	7440-62-2	
Zinc	**21.2**	mg/kg	4.4	1.3	1	12/10/19 08:23	12/12/19 22:54	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**1.0**	mg/kg	0.025	0.0076	1		12/02/19 19:11	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**81.5**	%	0.10	0.10	1		11/19/19 09:23		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-SB-HRA1-F-20190409 **Lab ID: 40197844013** Collected: 04/09/19 13:45 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.021**	mg/kg	0.099	0.021	1	12/10/19 08:23	12/12/19 23:02	7440-36-0	
Arsenic	**0.24**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 23:02	7440-38-2	
Barium	**<0.030**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 23:02	7440-39-3	
Beryllium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 23:02	7440-41-7	
Boron	**<0.69**	mg/kg	2.3	0.69	1	12/10/19 08:23	12/12/19 23:02	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.099	0.011	1	12/10/19 08:23	12/12/19 23:02	7440-43-9	
Calcium	**146**	mg/kg	83.5	25.0	1	12/10/19 08:23	12/12/19 23:02	7440-70-2	
Chromium	**<0.087**	mg/kg	0.29	0.087	1	12/10/19 08:23	12/12/19 23:02	7440-47-3	
Cobalt	**<0.019**	mg/kg	0.099	0.019	1	12/10/19 08:23	12/12/19 23:02	7440-48-4	
Copper	**0.35J**	mg/kg	0.94	0.28	1	12/10/19 08:23	12/12/19 23:02	7440-50-8	
Lead	**<0.030**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 23:02	7439-92-1	
Lithium	**<0.021**	mg/kg	0.099	0.021	1	12/10/19 08:23	12/12/19 23:02	7439-93-2	
Molybdenum	**<0.035**	mg/kg	0.12	0.035	1	12/10/19 08:23	12/12/19 23:02	7439-98-7	
Nickel	**0.050J**	mg/kg	0.14	0.041	1	12/10/19 08:23	12/12/19 23:02	7440-02-0	
Selenium	**0.26**	mg/kg	0.17	0.050	1	12/10/19 08:23	12/12/19 23:02	7782-49-2	
Silver	**<0.011**	mg/kg	0.049	0.011	1	12/10/19 08:23	12/12/19 23:02	7440-22-4	
Strontium	**<0.16**	mg/kg	0.53	0.16	1	12/10/19 08:23	12/12/19 23:02	7440-24-6	
Thallium	**<0.013**	mg/kg	0.099	0.013	1	12/10/19 08:23	12/12/19 23:02	7440-28-0	
Vanadium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 23:02	7440-62-2	
Zinc	**3.3J**	mg/kg	4.6	1.4	1	12/10/19 08:23	12/12/19 23:02	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.59**	mg/kg	0.024	0.0072	1		12/02/19 15:28	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**79.6**	%	0.10	0.10	1		11/19/19 09:23		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-LB-HRA2-F-20190409 **Lab ID: 40197844014** Collected: 04/09/19 17:05 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.096	0.020	1	12/10/19 08:23	12/12/19 23:09	7440-36-0	
Arsenic	**0.14**	mg/kg	0.096	0.029	1	12/10/19 08:23	12/12/19 23:09	7440-38-2	
Barium	**<0.029**	mg/kg	0.096	0.029	1	12/10/19 08:23	12/12/19 23:09	7440-39-3	
Beryllium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 23:09	7440-41-7	
Boron	**<0.67**	mg/kg	2.2	0.67	1	12/10/19 08:23	12/12/19 23:09	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.096	0.011	1	12/10/19 08:23	12/12/19 23:09	7440-43-9	
Calcium	**91.4**	mg/kg	81.4	24.4	1	12/10/19 08:23	12/12/19 23:09	7440-70-2	
Chromium	**<0.085**	mg/kg	0.28	0.085	1	12/10/19 08:23	12/12/19 23:09	7440-47-3	
Cobalt	**<0.018**	mg/kg	0.096	0.018	1	12/10/19 08:23	12/12/19 23:09	7440-48-4	
Copper	**<0.27**	mg/kg	0.91	0.27	1	12/10/19 08:23	12/12/19 23:09	7440-50-8	
Lead	**<0.029**	mg/kg	0.096	0.029	1	12/10/19 08:23	12/12/19 23:09	7439-92-1	
Lithium	**<0.020**	mg/kg	0.096	0.020	1	12/10/19 08:23	12/12/19 23:09	7439-93-2	
Molybdenum	**<0.034**	mg/kg	0.12	0.034	1	12/10/19 08:23	12/12/19 23:09	7439-98-7	
Nickel	**0.12J**	mg/kg	0.13	0.040	1	12/10/19 08:23	12/12/19 23:09	7440-02-0	
Selenium	**0.18**	mg/kg	0.16	0.049	1	12/10/19 08:23	12/12/19 23:09	7782-49-2	
Silver	**<0.011**	mg/kg	0.048	0.011	1	12/10/19 08:23	12/12/19 23:09	7440-22-4	
Strontium	**<0.15**	mg/kg	0.52	0.15	1	12/10/19 08:23	12/12/19 23:09	7440-24-6	
Thallium	**<0.012**	mg/kg	0.096	0.012	1	12/10/19 08:23	12/12/19 23:09	7440-28-0	
Vanadium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 23:09	7440-62-2	
Zinc	**4.5**	mg/kg	4.5	1.3	1	12/10/19 08:23	12/12/19 23:09	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.54**	mg/kg	0.024	0.0072	1		12/02/19 15:39	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**81.2**	%	0.10	0.10	1		11/19/19 09:23		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-LB-HRD-F-20190410 **Lab ID: 40197844015** Collected: 04/10/19 13:15 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.021**	mg/kg	0.099	0.021	1	12/10/19 08:23	12/12/19 23:16	7440-36-0	
Arsenic	**0.13**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 23:16	7440-38-2	
Barium	**<0.030**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 23:16	7440-39-3	
Beryllium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 23:16	7440-41-7	
Boron	**<0.69**	mg/kg	2.3	0.69	1	12/10/19 08:23	12/12/19 23:16	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.099	0.011	1	12/10/19 08:23	12/12/19 23:16	7440-43-9	
Calcium	**155**	mg/kg	84.2	25.3	1	12/10/19 08:23	12/12/19 23:16	7440-70-2	
Chromium	**0.098J**	mg/kg	0.29	0.088	1	12/10/19 08:23	12/12/19 23:16	7440-47-3	
Cobalt	**<0.019**	mg/kg	0.099	0.019	1	12/10/19 08:23	12/12/19 23:16	7440-48-4	
Copper	**0.41J**	mg/kg	0.94	0.28	1	12/10/19 08:23	12/12/19 23:16	7440-50-8	
Lead	**<0.030**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 23:16	7439-92-1	
Lithium	**<0.021**	mg/kg	0.099	0.021	1	12/10/19 08:23	12/12/19 23:16	7439-93-2	
Molybdenum	**<0.036**	mg/kg	0.12	0.036	1	12/10/19 08:23	12/12/19 23:16	7439-98-7	
Nickel	**0.058J**	mg/kg	0.14	0.041	1	12/10/19 08:23	12/12/19 23:16	7440-02-0	
Selenium	**0.23**	mg/kg	0.17	0.050	1	12/10/19 08:23	12/12/19 23:16	7782-49-2	
Silver	**<0.011**	mg/kg	0.050	0.011	1	12/10/19 08:23	12/12/19 23:16	7440-22-4	
Strontium	**<0.16**	mg/kg	0.54	0.16	1	12/10/19 08:23	12/12/19 23:16	7440-24-6	
Thallium	**<0.013**	mg/kg	0.099	0.013	1	12/10/19 08:23	12/12/19 23:16	7440-28-0	
Vanadium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 23:16	7440-62-2	
Zinc	**3.9J**	mg/kg	4.6	1.4	1	12/10/19 08:23	12/12/19 23:16	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.70**	mg/kg	0.025	0.0076	1		12/02/19 16:28	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**81.4**	%	0.10	0.10	1		11/19/19 09:23		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-LB-HRU-F-20190409 **Lab ID: 40197844016** Collected: 04/09/19 14:12 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.097	0.020	1	12/10/19 08:23	12/12/19 23:23	7440-36-0	
Arsenic	**<0.029**	mg/kg	0.097	0.029	1	12/10/19 08:23	12/12/19 23:23	7440-38-2	
Barium	**<0.030**	mg/kg	0.097	0.030	1	12/10/19 08:23	12/12/19 23:23	7440-39-3	
Beryllium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 23:23	7440-41-7	
Boron	**<0.68**	mg/kg	2.3	0.68	1	12/10/19 08:23	12/12/19 23:23	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.097	0.011	1	12/10/19 08:23	12/12/19 23:23	7440-43-9	
Calcium	**245**	mg/kg	82.3	24.7	1	12/10/19 08:23	12/12/19 23:23	7440-70-2	
Chromium	**<0.086**	mg/kg	0.28	0.086	1	12/10/19 08:23	12/12/19 23:23	7440-47-3	
Cobalt	**<0.018**	mg/kg	0.097	0.018	1	12/10/19 08:23	12/12/19 23:23	7440-48-4	
Copper	**0.28J**	mg/kg	0.92	0.28	1	12/10/19 08:23	12/12/19 23:23	7440-50-8	
Lead	**<0.029**	mg/kg	0.097	0.029	1	12/10/19 08:23	12/12/19 23:23	7439-92-1	
Lithium	**<0.021**	mg/kg	0.097	0.021	1	12/10/19 08:23	12/12/19 23:23	7439-93-2	
Molybdenum	**<0.035**	mg/kg	0.12	0.035	1	12/10/19 08:23	12/12/19 23:23	7439-98-7	
Nickel	**0.047J**	mg/kg	0.14	0.040	1	12/10/19 08:23	12/12/19 23:23	7440-02-0	
Selenium	**0.24**	mg/kg	0.17	0.049	1	12/10/19 08:23	12/12/19 23:23	7782-49-2	
Silver	**<0.011**	mg/kg	0.049	0.011	1	12/10/19 08:23	12/12/19 23:23	7440-22-4	
Strontium	**0.20J**	mg/kg	0.52	0.16	1	12/10/19 08:23	12/12/19 23:23	7440-24-6	
Thallium	**<0.013**	mg/kg	0.097	0.013	1	12/10/19 08:23	12/12/19 23:23	7440-28-0	
Vanadium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 23:23	7440-62-2	
Zinc	**4.1J**	mg/kg	4.5	1.4	1	12/10/19 08:23	12/12/19 23:23	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.79**	mg/kg	0.024	0.0073	1		12/02/19 16:39	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**81.0**	%	0.10	0.10	1		11/19/19 09:23		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-LB-F-DUP01-20190410 **Lab ID: 40197844017** Collected: 04/10/19 00:00 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.097	0.020	1	12/10/19 08:23	12/12/19 23:31	7440-36-0	
Arsenic	**0.17**	mg/kg	0.097	0.029	1	12/10/19 08:23	12/12/19 23:31	7440-38-2	
Barium	**<0.030**	mg/kg	0.097	0.030	1	12/10/19 08:23	12/12/19 23:31	7440-39-3	
Beryllium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 23:31	7440-41-7	
Boron	**<0.67**	mg/kg	2.2	0.67	1	12/10/19 08:23	12/12/19 23:31	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.097	0.011	1	12/10/19 08:23	12/12/19 23:31	7440-43-9	
Calcium	**178**	mg/kg	81.7	24.5	1	12/10/19 08:23	12/12/19 23:31	7440-70-2	
Chromium	**<0.085**	mg/kg	0.28	0.085	1	12/10/19 08:23	12/12/19 23:31	7440-47-3	
Cobalt	**<0.018**	mg/kg	0.097	0.018	1	12/10/19 08:23	12/12/19 23:31	7440-48-4	
Copper	**<0.27**	mg/kg	0.92	0.27	1	12/10/19 08:23	12/12/19 23:31	7440-50-8	
Lead	**<0.029**	mg/kg	0.097	0.029	1	12/10/19 08:23	12/12/19 23:31	7439-92-1	
Lithium	**<0.021**	mg/kg	0.097	0.021	1	12/10/19 08:23	12/12/19 23:31	7439-93-2	
Molybdenum	**<0.035**	mg/kg	0.12	0.035	1	12/10/19 08:23	12/12/19 23:31	7439-98-7	
Nickel	**<0.040**	mg/kg	0.14	0.040	1	12/10/19 08:23	12/12/19 23:31	7440-02-0	
Selenium	**0.23**	mg/kg	0.16	0.049	1	12/10/19 08:23	12/12/19 23:31	7782-49-2	
Silver	**<0.011**	mg/kg	0.048	0.011	1	12/10/19 08:23	12/12/19 23:31	7440-22-4	
Strontium	**<0.16**	mg/kg	0.52	0.16	1	12/10/19 08:23	12/12/19 23:31	7440-24-6	
Thallium	**<0.013**	mg/kg	0.097	0.013	1	12/10/19 08:23	12/12/19 23:31	7440-28-0	
Vanadium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 23:31	7440-62-2	
Zinc	**4.4J**	mg/kg	4.5	1.3	1	12/10/19 08:23	12/12/19 23:31	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.58**	mg/kg	0.023	0.0070	1		12/02/19 16:51	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**80.6**	%	0.10	0.10	1		11/19/19 09:24		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-LB-F-DUP02-20190409 **Lab ID: 40197844018** Collected: 04/09/19 00:00 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.020**	mg/kg	0.098	0.020	1	12/10/19 08:23	12/12/19 23:38	7440-36-0	
Arsenic	**<0.029**	mg/kg	0.098	0.029	1	12/10/19 08:23	12/12/19 23:38	7440-38-2	
Barium	**<0.030**	mg/kg	0.098	0.030	1	12/10/19 08:23	12/12/19 23:38	7440-39-3	
Beryllium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 23:38	7440-41-7	
Boron	**<0.68**	mg/kg	2.3	0.68	1	12/10/19 08:23	12/12/19 23:38	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.098	0.011	1	12/10/19 08:23	12/12/19 23:38	7440-43-9	
Calcium	**211**	mg/kg	82.6	24.8	1	12/10/19 08:23	12/12/19 23:38	7440-70-2	
Chromium	**<0.086**	mg/kg	0.28	0.086	1	12/10/19 08:23	12/12/19 23:38	7440-47-3	
Cobalt	**<0.019**	mg/kg	0.098	0.019	1	12/10/19 08:23	12/12/19 23:38	7440-48-4	
Copper	**<0.28**	mg/kg	0.93	0.28	1	12/10/19 08:23	12/12/19 23:38	7440-50-8	
Lead	**<0.029**	mg/kg	0.098	0.029	1	12/10/19 08:23	12/12/19 23:38	7439-92-1	
Lithium	**<0.021**	mg/kg	0.098	0.021	1	12/10/19 08:23	12/12/19 23:38	7439-93-2	
Molybdenum	**<0.035**	mg/kg	0.12	0.035	1	12/10/19 08:23	12/12/19 23:38	7439-98-7	
Nickel	**<0.040**	mg/kg	0.14	0.040	1	12/10/19 08:23	12/12/19 23:38	7440-02-0	
Selenium	**0.22**	mg/kg	0.17	0.049	1	12/10/19 08:23	12/12/19 23:38	7782-49-2	
Silver	**<0.011**	mg/kg	0.049	0.011	1	12/10/19 08:23	12/12/19 23:38	7440-22-4	
Strontium	**0.18J**	mg/kg	0.53	0.16	1	12/10/19 08:23	12/12/19 23:38	7440-24-6	
Thallium	**<0.013**	mg/kg	0.098	0.013	1	12/10/19 08:23	12/12/19 23:38	7440-28-0	
Vanadium	**<0.032**	mg/kg	0.11	0.032	1	12/10/19 08:23	12/12/19 23:38	7440-62-2	
Zinc	**4.3J**	mg/kg	4.5	1.4	1	12/10/19 08:23	12/12/19 23:38	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.74**	mg/kg	0.025	0.0074	1		12/02/19 17:02	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**81.7**	%	0.10	0.10	1		11/19/19 09:24		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-SB-HRA1-O-20190409 **Lab ID: 40197844019** Collected: 04/09/19 13:45 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.021**	mg/kg	0.099	0.021	1	12/10/19 08:23	12/12/19 23:45	7440-36-0	
Arsenic	**0.52**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 23:45	7440-38-2	
Barium	**0.032J**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 23:45	7440-39-3	
Beryllium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 23:45	7440-41-7	
Boron	**<0.69**	mg/kg	2.3	0.69	1	12/10/19 08:23	12/12/19 23:45	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.099	0.011	1	12/10/19 08:23	12/12/19 23:45	7440-43-9	
Calcium	**66.1J**	mg/kg	83.9	25.2	1	12/10/19 08:23	12/12/19 23:45	7440-70-2	
Chromium	**<0.088**	mg/kg	0.29	0.088	1	12/10/19 08:23	12/12/19 23:45	7440-47-3	
Cobalt	**0.021J**	mg/kg	0.099	0.019	1	12/10/19 08:23	12/12/19 23:45	7440-48-4	
Copper	**1.3**	mg/kg	0.94	0.28	1	12/10/19 08:23	12/12/19 23:45	7440-50-8	
Lead	**<0.030**	mg/kg	0.099	0.030	1	12/10/19 08:23	12/12/19 23:45	7439-92-1	
Lithium	**<0.021**	mg/kg	0.099	0.021	1	12/10/19 08:23	12/12/19 23:45	7439-93-2	
Molybdenum	**<0.035**	mg/kg	0.12	0.035	1	12/10/19 08:23	12/12/19 23:45	7439-98-7	
Nickel	**0.042J**	mg/kg	0.14	0.041	1	12/10/19 08:23	12/12/19 23:45	7440-02-0	
Selenium	**0.66**	mg/kg	0.17	0.050	1	12/10/19 08:23	12/12/19 23:45	7782-49-2	
Silver	**<0.011**	mg/kg	0.050	0.011	1	12/10/19 08:23	12/12/19 23:45	7440-22-4	
Strontium	**<0.16**	mg/kg	0.54	0.16	1	12/10/19 08:23	12/12/19 23:45	7440-24-6	
Thallium	**<0.013**	mg/kg	0.099	0.013	1	12/10/19 08:23	12/12/19 23:45	7440-28-0	
Vanadium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 23:45	7440-62-2	
Zinc	**31.0**	mg/kg	4.6	1.4	1	12/10/19 08:23	12/12/19 23:45	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.025J**	mg/kg	0.025	0.0075	1		12/02/19 19:26	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**59.5**	%	0.10	0.10	1		11/19/19 09:24		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: JSF-FH-LB-HRA2-O-20190409 **Lab ID: 40197844020** Collected: 04/09/19 17:05 Received: 10/23/19 09:25 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.019**	mg/kg	0.093	0.019	1	12/10/19 08:23	12/12/19 23:52	7440-36-0	
Arsenic	**0.26**	mg/kg	0.093	0.028	1	12/10/19 08:23	12/12/19 23:52	7440-38-2	
Barium	**<0.028**	mg/kg	0.093	0.028	1	12/10/19 08:23	12/12/19 23:52	7440-39-3	
Beryllium	**<0.031**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 23:52	7440-41-7	
Boron	**<0.65**	mg/kg	2.2	0.65	1	12/10/19 08:23	12/12/19 23:52	7440-42-8	
Cadmium	**<0.010**	mg/kg	0.093	0.010	1	12/10/19 08:23	12/12/19 23:52	7440-43-9	
Calcium	**97.1**	mg/kg	78.4	23.5	1	12/10/19 08:23	12/12/19 23:52	7440-70-2	
Chromium	**<0.082**	mg/kg	0.27	0.082	1	12/10/19 08:23	12/12/19 23:52	7440-47-3	
Cobalt	**0.057J**	mg/kg	0.093	0.018	1	12/10/19 08:23	12/12/19 23:52	7440-48-4	
Copper	**1.6**	mg/kg	0.88	0.26	1	12/10/19 08:23	12/12/19 23:52	7440-50-8	
Lead	**<0.028**	mg/kg	0.093	0.028	1	12/10/19 08:23	12/12/19 23:52	7439-92-1	
Lithium	**<0.020**	mg/kg	0.093	0.020	1	12/10/19 08:23	12/12/19 23:52	7439-93-2	
Molybdenum	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 23:52	7439-98-7	
Nickel	**0.040J**	mg/kg	0.13	0.038	1	12/10/19 08:23	12/12/19 23:52	7440-02-0	
Selenium	**0.68**	mg/kg	0.16	0.047	1	12/10/19 08:23	12/12/19 23:52	7782-49-2	
Silver	**<0.010**	mg/kg	0.046	0.010	1	12/10/19 08:23	12/12/19 23:52	7440-22-4	
Strontium	**0.16J**	mg/kg	0.50	0.15	1	12/10/19 08:23	12/12/19 23:52	7440-24-6	
Thallium	**<0.012**	mg/kg	0.093	0.012	1	12/10/19 08:23	12/12/19 23:52	7440-28-0	
Vanadium	**<0.031**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 23:52	7440-62-2	
Zinc	**34.4**	mg/kg	4.3	1.3	1	12/10/19 08:23	12/12/19 23:52	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**0.024**	mg/kg	0.023	0.0070	1		12/02/19 19:37	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**67.7**	%	0.10	0.10	1		11/19/19 09:24		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Sample: RINSE BLANK-A 11-19-19 **Lab ID: 40197844021** Collected: 11/19/19 00:00 Received: 11/20/19 11:09 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Antimony	**<0.021**	mg/kg	0.10	0.021	1	12/10/19 08:23	12/12/19 20:01	7440-36-0	
Arsenic	**<0.030**	mg/kg	0.10	0.030	1	12/10/19 08:23	12/12/19 20:01	7440-38-2	
Barium	**<0.031**	mg/kg	0.10	0.031	1	12/10/19 08:23	12/12/19 20:01	7440-39-3	
Beryllium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 20:01	7440-41-7	
Boron	**<0.70**	mg/kg	2.3	0.70	1	12/10/19 08:23	12/12/19 20:01	7440-42-8	
Cadmium	**<0.011**	mg/kg	0.10	0.011	1	12/10/19 08:23	12/12/19 20:01	7440-43-9	
Calcium	**<25.3**	mg/kg	84.4	25.3	1	12/10/19 08:23	12/12/19 20:01	7440-70-2	
Chromium	**<0.088**	mg/kg	0.29	0.088	1	12/10/19 08:23	12/12/19 20:01	7440-47-3	
Cobalt	**<0.019**	mg/kg	0.10	0.019	1	12/10/19 08:23	12/12/19 20:01	7440-48-4	
Copper	**<0.28**	mg/kg	0.95	0.28	1	12/10/19 08:23	12/12/19 20:01	7440-50-8	
Lead	**<0.030**	mg/kg	0.10	0.030	1	12/10/19 08:23	12/12/19 20:01	7439-92-1	
Lithium	**0.024J**	mg/kg	0.10	0.021	1	12/10/19 08:23	12/12/19 20:01	7439-93-2	
Molybdenum	**<0.036**	mg/kg	0.12	0.036	1	12/10/19 08:23	12/12/19 20:01	7439-98-7	
Nickel	**0.080J**	mg/kg	0.14	0.041	1	12/10/19 08:23	12/12/19 20:01	7440-02-0	
Selenium	**<0.051**	mg/kg	0.17	0.051	1	12/10/19 08:23	12/12/19 20:01	7782-49-2	
Silver	**<0.011**	mg/kg	0.050	0.011	1	12/10/19 08:23	12/12/19 20:01	7440-22-4	
Strontium	**<0.16**	mg/kg	0.54	0.16	1	12/10/19 08:23	12/12/19 20:01	7440-24-6	
Thallium	**<0.013**	mg/kg	0.10	0.013	1	12/10/19 08:23	12/12/19 20:01	7440-28-0	
Vanadium	**<0.033**	mg/kg	0.11	0.033	1	12/10/19 08:23	12/12/19 20:01	7440-62-2	
Zinc	**<1.4**	mg/kg	4.6	1.4	1	12/10/19 08:23	12/12/19 20:01	7440-66-6	
7473 Mercury, Tissue	Analytical Method: EPA 7473								
Mercury	**<0.0076**	mg/kg	0.025	0.0076	1		12/02/19 19:49	7439-97-6	

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QUALITY CONTROL DATA

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

QC Batch: 342142 Analysis Method: EPA 7473
QC Batch Method: EPA 7473 Analysis Description: 7473 Mercury
Associated Lab Samples: 40197844001, 40197844002, 40197844003, 40197844004, 40197844005, 40197844006, 40197844007, 40197844008, 40197844009, 40197844010, 40197844011, 40197844012, 40197844013, 40197844014, 40197844015, 40197844016, 40197844017, 40197844018, 40197844019, 40197844020, 40197844021

METHOD BLANK: 1987220 Matrix: Tissue
Associated Lab Samples: 40197844001, 40197844002, 40197844003, 40197844004, 40197844005, 40197844006, 40197844007, 40197844008, 40197844009, 40197844010, 40197844011, 40197844012, 40197844013, 40197844014, 40197844015, 40197844016, 40197844017, 40197844018, 40197844019, 40197844020, 40197844021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0076	0.025	0.0076	12/02/19 13:17	

LABORATORY CONTROL SAMPLE: 1987221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.25	0.29	113	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1987222 1987223

Parameter	Units	40197844001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.070	0.14	0.14	0.44	0.44	257	260	80-120	1	20	M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

QC Batch: 342862 Analysis Method: EPA 6020
QC Batch Method: EPA 3050B Analysis Description: 6020 MET TISSUE
Associated Lab Samples: 40197844001, 40197844002, 40197844003, 40197844004, 40197844005, 40197844006, 40197844007, 40197844008, 40197844009, 40197844010, 40197844011, 40197844012, 40197844013, 40197844014, 40197844015, 40197844016, 40197844017, 40197844018, 40197844019, 40197844020, 40197844021

METHOD BLANK: 1991164 Matrix: Tissue
Associated Lab Samples: 40197844001, 40197844002, 40197844003, 40197844004, 40197844005, 40197844006, 40197844007, 40197844008, 40197844009, 40197844010, 40197844011, 40197844012, 40197844013, 40197844014, 40197844015, 40197844016, 40197844017, 40197844018, 40197844019, 40197844020, 40197844021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	<0.021	0.10	0.021	12/12/19 19:54	
Arsenic	mg/kg	<0.030	0.10	0.030	12/12/19 19:54	
Barium	mg/kg	<0.031	0.10	0.031	12/12/19 19:54	
Beryllium	mg/kg	<0.033	0.11	0.033	12/12/19 19:54	
Boron	mg/kg	<0.70	2.3	0.70	12/12/19 19:54	
Cadmium	mg/kg	<0.011	0.10	0.011	12/12/19 19:54	
Calcium	mg/kg	<25.4	84.7	25.4	12/12/19 19:54	
Chromium	mg/kg	<0.088	0.29	0.088	12/12/19 19:54	
Cobalt	mg/kg	<0.019	0.10	0.019	12/12/19 19:54	
Copper	mg/kg	<0.28	0.95	0.28	12/12/19 19:54	
Lead	mg/kg	<0.030	0.10	0.030	12/12/19 19:54	
Lithium	mg/kg	<0.021	0.10	0.021	12/12/19 19:54	
Molybdenum	mg/kg	<0.036	0.12	0.036	12/12/19 19:54	
Nickel	mg/kg	<0.041	0.14	0.041	12/12/19 19:54	
Selenium	mg/kg	<0.051	0.17	0.051	12/12/19 19:54	
Silver	mg/kg	<0.011	0.050	0.011	12/12/19 19:54	
Strontium	mg/kg	<0.16	0.54	0.16	12/12/19 19:54	
Thallium	mg/kg	<0.013	0.10	0.013	12/12/19 19:54	
Vanadium	mg/kg	<0.033	0.11	0.033	12/12/19 19:54	
Zinc	mg/kg	<1.4	4.7	1.4	12/12/19 19:54	

LABORATORY CONTROL SAMPLE: 1991166

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/kg	5	5.4	108	80-120	
Arsenic	mg/kg	5	4.9	99	80-120	
Barium	mg/kg	5	4.9	99	80-120	
Beryllium	mg/kg	5	4.6	92	80-120	
Boron	mg/kg	10	9.6	96	80-120	
Cadmium	mg/kg	5	5.3	105	80-120	
Calcium	mg/kg	250	240	96	80-120	
Chromium	mg/kg	5	4.7	94	80-120	
Cobalt	mg/kg	5	4.8	97	80-120	
Copper	mg/kg	5	4.7	93	80-120	
Lead	mg/kg	5	5.0	99	80-120	
Lithium	mg/kg	5	4.6	91	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

QUALITY CONTROL DATA

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

LABORATORY CONTROL SAMPLE: 1991166

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Molybdenum	mg/kg	5	4.8	96	80-120	
Nickel	mg/kg	5	4.8	96	80-120	
Selenium	mg/kg	5	5.3	106	80-120	
Silver	mg/kg	2.5	2.7	107	80-120	
Strontium	mg/kg	5	5.0	100	80-120	
Thallium	mg/kg	5	5.0	99	80-120	
Vanadium	mg/kg	5	5.0	101	80-120	
Zinc	mg/kg	20	18.2	91	80-120	

LABORATORY CONTROL SAMPLE: 1991167

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	59.5	68.5	115	80-126	
Cadmium	mg/kg	42.3	41.2	97	80-120	
Chromium	mg/kg	2	1.2	62	13-93	
Cobalt	mg/kg	1.1	0.99	93	80-120	
Copper	mg/kg	497	418	84	77-120	
Lead	mg/kg	0.22	0.21	93	79-120	
Molybdenum	mg/kg	3.4	3.0	88	80-120	
Nickel	mg/kg	5.3	4.4	83	76-120	
Selenium	mg/kg	10.9	11.9	109	80-130	
Strontium	mg/kg	36.5	31.0	85	79-120	
Vanadium	mg/kg	9.1	8.8	96	80-120	
Zinc	mg/kg	136	134	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1991168 1991169

Parameter	Units	40197844001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/kg	<0.021	5	5	5.5	5.4	111	108	75-125	3	20	
Arsenic	mg/kg	0.083J	5	5	5.2	5.1	102	100	75-125	1	20	
Barium	mg/kg	<0.031	5	5	5.1	5.1	102	102	75-125	0	20	
Beryllium	mg/kg	<0.033	5	5	4.7	4.8	94	95	75-125	2	20	
Boron	mg/kg	<0.70	10	10	9.4	9.7	93	96	75-125	3	20	
Cadmium	mg/kg	0.039J	5	5	5.4	5.3	107	106	75-125	1	20	
Calcium	mg/kg	96.3	250	250	334	559	95	185	75-125	50	20	M0,R1
Chromium	mg/kg	<0.088	5	5	5.0	5.0	99	99	75-125	0	20	
Cobalt	mg/kg	<0.019	5	5	5.0	5.0	99	100	75-125	0	20	
Copper	mg/kg	0.72J	5	5	5.2	5.4	90	93	75-125	2	20	
Lead	mg/kg	<0.030	5	5	5.1	5.1	102	103	75-125	1	20	
Lithium	mg/kg	<0.021	5	5	4.7	4.8	94	97	75-125	3	20	
Molybdenum	mg/kg	<0.036	5	5	4.8	4.8	95	96	75-125	0	20	
Nickel	mg/kg	0.39	5	5	5.0	5.2	93	97	75-125	4	20	
Selenium	mg/kg	0.17	5	5	5.7	5.5	111	107	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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(920)469-2436

QUALITY CONTROL DATA

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1991168 1991169

Parameter	Units	40197844001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Silver	mg/kg	<0.011	2.5	2.5	2.7	2.7	109	109	75-125	1	20	
Strontium	mg/kg	<0.16	5	5	5.2	5.3	101	104	75-125	2	20	
Thallium	mg/kg	<0.013	5	5	5.1	5.1	102	102	75-125	1	20	
Vanadium	mg/kg	<0.033	5	5	5.1	5.1	101	102	75-125	1	20	
Zinc	mg/kg	6.3	20	20	25.6	25.9	97	98	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

QC Batch: 341138 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight Reporting Only
Associated Lab Samples: 40197844001, 40197844002, 40197844003, 40197844004, 40197844005, 40197844006, 40197844007, 40197844008, 40197844009, 40197844010, 40197844011, 40197844012, 40197844013, 40197844014, 40197844015, 40197844016, 40197844017, 40197844018, 40197844019, 40197844020

SAMPLE DUPLICATE: 1980751

Parameter	Units	40197844001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	79.6	79.6	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
J	Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40197844001	JSF-FH-CC-HRD-F-20190619	EPA 3050B	342862	EPA 6020	343056
40197844002	JSF-FH-CC-HRU-F-20190430	EPA 3050B	342862	EPA 6020	343056
40197844003	JSF-FH-CC-F-DUP01-20190507	EPA 3050B	342862	EPA 6020	343056
40197844004	JSF-FH-CC-F-DUP02-20190430	EPA 3050B	342862	EPA 6020	343056
40197844005	JSF-FH-CC-HRA1-O-20190507	EPA 3050B	342862	EPA 6020	343056
40197844006	JSF-FH-CC-O-DUP02-20190430	EPA 3050B	342862	EPA 6020	343056
40197844007	JSF-FH-CC-HRA1-L-20190507	EPA 3050B	342862	EPA 6020	343056
40197844008	JSF-FH-CC-HRA2-L-20190611	EPA 3050B	342862	EPA 6020	343056
40197844009	JSF-FH-CC-HRD-L-20190619	EPA 3050B	342862	EPA 6020	343056
40197844010	JSF-FH-CC-HRU-L-20190430	EPA 3050B	342862	EPA 6020	343056
40197844011	JSF-FH-CC-L-DUP01-20190507	EPA 3050B	342862	EPA 6020	343056
40197844012	JSF-FH-CC-L-DUP02-20190430	EPA 3050B	342862	EPA 6020	343056
40197844013	JSF-FH-SB-HRA1-F-20190409	EPA 3050B	342862	EPA 6020	343056
40197844014	JSF-FH-LB-HRA2-F-20190409	EPA 3050B	342862	EPA 6020	343056
40197844015	JSF-FH-LB-HRD-F-20190410	EPA 3050B	342862	EPA 6020	343056
40197844016	JSF-FH-LB-HRU-F-20190409	EPA 3050B	342862	EPA 6020	343056
40197844017	JSF-FH-LB-F-DUP01-20190410	EPA 3050B	342862	EPA 6020	343056
40197844018	JSF-FH-LB-F-DUP02-20190409	EPA 3050B	342862	EPA 6020	343056
40197844019	JSF-FH-SB-HRA1-O-20190409	EPA 3050B	342862	EPA 6020	343056
40197844020	JSF-FH-LB-HRA2-O-20190409	EPA 3050B	342862	EPA 6020	343056
40197844021	RINSE BLANK-A 11-19-19	EPA 3050B	342862	EPA 6020	343056
40197844001	JSF-FH-CC-HRD-F-20190619	EPA 7473	342142		
40197844002	JSF-FH-CC-HRU-F-20190430	EPA 7473	342142		
40197844003	JSF-FH-CC-F-DUP01-20190507	EPA 7473	342142		
40197844004	JSF-FH-CC-F-DUP02-20190430	EPA 7473	342142		
40197844005	JSF-FH-CC-HRA1-O-20190507	EPA 7473	342142		
40197844006	JSF-FH-CC-O-DUP02-20190430	EPA 7473	342142		
40197844007	JSF-FH-CC-HRA1-L-20190507	EPA 7473	342142		
40197844008	JSF-FH-CC-HRA2-L-20190611	EPA 7473	342142		
40197844009	JSF-FH-CC-HRD-L-20190619	EPA 7473	342142		
40197844010	JSF-FH-CC-HRU-L-20190430	EPA 7473	342142		
40197844011	JSF-FH-CC-L-DUP01-20190507	EPA 7473	342142		
40197844012	JSF-FH-CC-L-DUP02-20190430	EPA 7473	342142		
40197844013	JSF-FH-SB-HRA1-F-20190409	EPA 7473	342142		
40197844014	JSF-FH-LB-HRA2-F-20190409	EPA 7473	342142		
40197844015	JSF-FH-LB-HRD-F-20190410	EPA 7473	342142		
40197844016	JSF-FH-LB-HRU-F-20190409	EPA 7473	342142		
40197844017	JSF-FH-LB-F-DUP01-20190410	EPA 7473	342142		
40197844018	JSF-FH-LB-F-DUP02-20190409	EPA 7473	342142		
40197844019	JSF-FH-SB-HRA1-O-20190409	EPA 7473	342142		
40197844020	JSF-FH-LB-HRA2-O-20190409	EPA 7473	342142		
40197844021	RINSE BLANK-A 11-19-19	EPA 7473	342142		
40197844001	JSF-FH-CC-HRD-F-20190619	ASTM D2974-87	341138		
40197844002	JSF-FH-CC-HRU-F-20190430	ASTM D2974-87	341138		
40197844003	JSF-FH-CC-F-DUP01-20190507	ASTM D2974-87	341138		
40197844004	JSF-FH-CC-F-DUP02-20190430	ASTM D2974-87	341138		
40197844005	JSF-FH-CC-HRA1-O-20190507	ASTM D2974-87	341138		
40197844006	JSF-FH-CC-O-DUP02-20190430	ASTM D2974-87	341138		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0779777 JOHN SEVIER FOSSIL PLA
Pace Project No.: 40197844

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40197844007	**JSF-FH-CC-HRA1-L-20190507**	ASTM D2974-87	341138		
40197844008	**JSF-FH-CC-HRA2-L-20190611**	ASTM D2974-87	341138		
40197844009	**JSF-FH-CC-HRD-L-20190619**	ASTM D2974-87	341138		
40197844010	**JSF-FH-CC-HRU-L-20190430**	ASTM D2974-87	341138		
40197844011	**JSF-FH-CC-L-DUP01-20190507**	ASTM D2974-87	341138		
40197844012	**JSF-FH-CC-L-DUP02-20190430**	ASTM D2974-87	341138		
40197844013	**JSF-FH-SB-HRA1-F-20190409**	ASTM D2974-87	341138		
40197844014	**JSF-FH-LB-HRA2-F-20190409**	ASTM D2974-87	341138		
40197844015	**JSF-FH-LB-HRD-F-20190410**	ASTM D2974-87	341138		
40197844016	**JSF-FH-LB-HRU-F-20190409**	ASTM D2974-87	341138		
40197844017	**JSF-FH-LB-F-DUP01-20190410**	ASTM D2974-87	341138		
40197844018	**JSF-FH-LB-F-DUP02-20190409**	ASTM D2974-87	341138		
40197844019	**JSF-FH-SB-HRA1-O-20190409**	ASTM D2974-87	341138		
40197844020	**JSF-FH-LB-HRA2-O-20190409**	ASTM D2974-87	341138		

TVA Environmental Investigations

40197844

Tennessee Valley Authority

COOLER No.:	1	of	4
COC No:	JSF_FH_20190522_1A		
2 of 6 Pages			
Task Desc:	JSF_FH		

Chain-of-Custody / Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate

Required Ship to Lab:	
Lab Name:	Pace Analytical Green Bay
Lab Address:	1241 Bellevue Street Suite 9 Green Bay, WI 54302
Lab Manager Contact Information	
Lab PM:	Tod Noltemeyer
Phone/Fax:	920-469-2436
Lab Email:	tod.noltemeyer@pacelabs.com

Required Project Information:			
Site ID #:	JOHN SEVIER FOSSIL PLANT		
Project #:	0779777		
Site Address:	611 Old Highway 70 S		
City:	Rogersville	State, Zip:	TN, 37857
Site PM Name:	Roy Quinn		
Phone/Fax:	423-751-3753		
Site PM Email:	jrquinn@tva.gov		

Required Sampler Information			
Sampler: Tyler Baker			
Sampling Company: TVA			
Address: TVA Chickamauga Power Service Center, 4601 N. Access Road			
City/State: Chattanooga, TN 37415		Phone: 423-876-6733	
Sampling Team Number:	1		
Send EDD/Hard Copy to:	tva-ei@envstd.com		

Analysis Turnaround Time

☐ CALENDAR DAYS ☑ WORKING DAYS

TAT if different from Below _____

- ☐ 24 Hours
- ☐ 3 Business Days
- ☐ 5 Business Days
- ☑ 10 Business Days (Standard)

ITEMS #	SAMPLE ID Samples IDs MUST BE UNIQUE	SAMPLE LOCATION	Sample Depth: Depth Unit	Sample Depth: Feet	MATRIX CODE	G= GRAB C=COMP	SAMPLE TYPE	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	Comments/ Lab Sample I.D.	MS/MSD	Analysis: JSF_FISH	Filtered: N	Preserve: Frozen
1	JSF-FH-BG-HRA1-L-20190522	FH-HRA1	NA	NA	FH	C	N	5/22/2019	1310	1	013 001	☐	X		
2	JSF-FH-BG-HRA2-L-20190507	FH-HRA2	NA	NA	FH	C	N	5/7/2019	1807	1	014 002	☐	X		
3	JSF-FH-BG-HRD-L-20190507	FH-HRD	NA	NA	FH	C	N	5/7/2019	1530	1	015 003	☐	X		
4	JSF-FH-BG-HRU-L-20190507	FH-HRU	NA	NA	FH	C	N	5/7/2019	1220	1	016 004	☐	X		
5	JSF-FH-BG-L-DUP01-20190507	NA	NA	NA	FH	C	FD	5/7/2019	NA	1	017 005	☐	X		
6	JSF-FH-BG-L-DUP02-20190507	NA	NA	NA	FH	C	FD	5/7/2019	NA	1	018 006	☐	X		
7	JSF-FH-CC-HRA1-F-201900507	FH-HRA1	NA	NA	FH	C	N	5/7/2019	1857	1	019 007	☐	X		
8	JSF-FH-CC-HRA2-F-20190611	FH-HRA2	NA	NA	FH	C	N	6/11/2019	1645	1	020 008	☐	X		
9	JSF-FH-CC-HRD-F-20190619	FH-HRD	NA	NA	FH	C	N	6/19/2019	1440	1	021 009	☐	X		
10	JSF-FH-CC-HRU-F-20190430	FH-HRU	NA	NA	FH	C	N	4/30/2019	1100	1	022 010	☐	X		
11	JSF-FH-CC-F-DUP01-20190507	NA	NA	NA	FH	C	FD	5/7/2019	NA	1	023 011	☐	X		
12	JSF-FH-CC-F-DUP02-20190430	NA	NA	NA	FH	C	FD	4/30/2019	NA	1	024 012	☐	X		
13												☐			

Additional Comments/Special Instructions:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Tyler Baker / TVA	10-22-19	1900	Allan Pace	10/23	0925

SHIPPING METHOD	SAMPLER NAME AND SIGNATURE
Fedex	Tyler Baker

Sample Receipt Conditions

Temperature in °C	Sample on Ice?	Sample Intact?	Trip Blank?
Yes / No	Yes / No	Yes / No	Yes / No
Yes / No	Yes / No	Yes / No	Yes / No
Yes / No	Yes / No	Yes / No	Yes / No
Yes / No	Yes / No	Yes / No	Yes / No

Form TVA 30067A

40197844

TVA Environmental Investigations

40197844

Tennessee Valley Authority

COOLER No.:	1 of 4
COC No:	JSF_FH_20190522_1A
	3 of 6 Pages
Task Desc:	JSF_FH

Chain-of-Custody / Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate

Required Ship to Lab:		Required Project Information:				Required Sampler Information	
Lab Name:	Pace Analytical Green Bay	Site ID #:	JOHN SEVIER FOSSIL PLANT			Sampler: Tyler Baker	
Lab Address:	1241 Bellevue Street	Project #:	0779777			Sampling Company: TVA	
	Suite 9	Site Address:	611 Old Highway 70 S			Address: TVA Chickamauga Power Service Center, 4601 N. Access Road	
	Green Bay, WI 54302	City:	Rogersville	State, Zip:	TN, 37857	City/State: Chattanooga, TN 37415	Phone: 423-876-6733
Lab Manager Contact Information		Site PM Name:	Roy Quinn				
Lab PM:	Tod Noltemeyer	Phone/Fax:	423-751-3753			Sampling Team Number:	1
Phone/Fax:	920-469-2436	Site PM Email:	jrquinn@tva.gov			Send EDD/Hard Copy to:	tva-ei@envsld.com
Lab Email:	tod.noltemeyer@pacelabs.com						

Analysis Turnaround Time

☐ CALENDAR DAYS ☑ WORKING DAYS

TAT if different from Below _____

- ☐ 24 Hours
- ☐ 3 Business Days
- ☐ 5 Business Days
- ☑ 10 Business Days (Standard)

ITEMS #	SAMPLE ID Samples IDs MUST BE UNIQUE	SAMPLE LOCATION	Sample Depth: Depth Unit	Sample Depth: Feet (Start Depth)	Sample Depth: Feet (End Depth)	MATRIX CODE	G= GRAB C=COMP	SAMPLE TYPE	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	Comments/ Lab Sample I.D.	MS/MSD	Analysis: JSF_FISH	Preserve: Frozen	Filtered: N
1	JSF-FH-CC-HRA1-O-20190507	FH-HRA1	NA	NA	NA	FH	C	N	5/7/2019	1857	1	026 001	☐	X		
2	JSF-FH-CC-O-DUP02-20190430	NA	NA	NA	NA	FH	C	FD	4/30/2019	NA	1	026 002	☐	X		
3	JSF-FH-CC-HRA1-L-201900507	FH-HRA1	NA	NA	NA	FH	C	N	5/7/2019	1857	1	027 003	☐	X		
4	JSF-FH-CC-HRA2-L-20190611	FH-HRA2	NA	NA	NA	FH	C	N	6/11/2019	1645	1	028 004	☐	X		
5	JSF-FH-CC-HRD-L-20190619	FH-HRD	NA	NA	NA	FH	C	N	6/19/2019	1440	1	029 005	☐	X		
6	JSF-FH-CC-HRU-L-20190430	FH-HRU	NA	NA	NA	FH	C	N	4/30/2019	1100	1	030 006	☐	X		
7	JSF-FH-CC-L-DUP01-20190507	NA	NA	NA	NA	FH	C	FD	5/7/2019	NA	1	031 007	☐	X		
8	JSF-FH-CC-L-DUP02-20190430	NA	NA	NA	NA	FH	C	FD	4/30/2019	NA	1	032 008	☐	X		
9	JSF-FH-SB-HRA1-F-20190409	FH-HRA1	NA	NA	NA	FH	C	N	4/9/2019	1345	1	033 009	☐	X		
10	JSF-FH-LB-HRA2-F-20190409	FH-HRA2	NA	NA	NA	FH	C	N	4/9/2019	1705	1	034 010	☐	X		
11	JSF-FH-LB-HRD-F-20190410	FH-HRD	NA	NA	NA	FH	C	N	4/10/2019	1315	1	035 011	☐	X		
12	JSF-FH-LB-HRU-F-20190409	FH-HRU	NA	NA	NA	FH	C	N	4/9/2019	1412	1	036 012	☐	X		
13	JSF-FH-LB-F-DUP01-20190410	NA	NA	NA	NA	FH	C	FD	4/10/2019	NA	1	037 013	☐	X		

005 007
006 008
007 009
008 010
009 011
010 012
011 013
012 014
013 015
014 016
015 017
016 018
017 019

10/23/19 AS

Tyler Baker 10-22-19

Tyler Baker 10-22-19

Tyler Baker 10-22-19

Additional Comments/Special Instructions:

RELINQISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Tyler Baker / TVA	10-22-19	1900	Alan Pace	10/23	0929

Sample Receipt Conditions

Temperature in °C	Sample on Ice?	Sample Intact?	Trip Blank?
☑Yes ☐No 1	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No
☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No
☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No
☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No

10/23/19 AS

SHIPPING METHOD:	SAMPLER NAME AND SIGNATURE
Fedex	Tyler Baker Tyler Baker

40197844

Form TVA 30067A

TVA Environmental Investigations

40197844

Tennessee Valley Authority

COOLER No.:	1	of	4
COC No:	JSF_FH_20190522_1A		
4 of 6 Pages			
Task Desc:	JSF_FH		

Chain-of-Custody / Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate

Required Ship to Lab:	
Lab Name:	Pace Analytical Green Bay
Lab Address:	1241 Bellevue Street
	Suite 9
	Green Bay, WI 54302
Lab Manager Contact Information	
Lab PM:	Tod Noltemeyer
Phone/Fax:	920-469-2436
Lab Email:	tod.noltemeyer@pacelabs.com

Required Project Information:			
Site ID #:	JOHN SEVIER FOSSIL PLANT		
Project #:	0779777		
Site Address:	611 Old Highway 70 S		
City:	Rogersville	State, Zip:	TN, 37857
Site PM Name:	Roy Quinn		
Phone/Fax:	423-751-3753		
Site PM Email:	jrquinn@tva.gov		

Required Sampler Information			
Sampler: Tyler Baker			
Sampling Company: TVA			
Address: TVA Chickamauga Power Service Center, 4601 N. Access Road			
City/State: Chattanooga, TN 37415		Phone:	423-876-6733
Sampling Team Number:	1		
Send EDD/Hard Copy to:	tva-ei@envstd.com		

Analysis Turnaround Time

☐ CALENDAR DAYS ☑ WORKING DAYS

TAT if different from Below _____

- ☐ 24 Hours
- ☐ 3 Business Days
- ☐ 5 Business Days
- ☑ 10 Business Days (Standard)

ITEMS #	SAMPLE ID Samples IDs MUST BE UNIQUE	SAMPLE LOCATION	Sample Depth: Depth Unit: Feet — Start Depth	Sample Depth: Depth Unit: Feet — End Depth	MATRIX CODE	G= GRAB C=COMP	SAMPLE TYPE	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	Comments/ Lab Sample I.D.	MS/MSD	Analysis: Filtered N	Analysis: Preserve Frozen	Analysis: JSF_FISH
1	JSF-FH-LB-F-DUP02-20190409	NA	NA	NA	FH	C	FD	4/9/2019	NA	1		☐			X
2	JSF-FH-SB-HRA1-O-20190409	FH-HRA1	NA	NA	FH	C	N	4/9/2019	1345	1		☐			X
3	JSF-FH-LB-HRA2-O-20190409	FH-HRA2	NA	NA	FH	C	N	4/9/2019	1705	1		☐			X
4	JSF-FH-LB-HRD-O-20190410	FH-HRD	NA	NA	FH	C	N	4/10/2019	1315	1		☐			X
5	JSF-FH-LB-HRU-O-20190409	FH-HRU	NA	NA	FH	C	N	4/9/2019	1412	1		☐			X
6	JSF-FH-LB-O-DUP01-20190410	NA	NA	NA	FH	C	FD	4/10/2019	NA	1		☐			X
7	JSF-FH-LB-O-DUP02-20190409	NA	NA	NA	FH	C	FD	4/9/2019	NA	1		☐			X
8	JSF-FH-SB-HRA1-L-20190409	FH-HRA1	NA	NA	FH	C	N	4/9/2019	1345	1		☐			X
9	JSF-FH-LB-HRA2-L-20190409	FH-HRA2	NA	NA	FH	C	N	4/9/2019	1705	1		☐			X
10	JSF-FH-LB-HRD-L-20190410	FH-HRD	NA	NA	FH	C	N	4/10/2019	1315	1		☐			X
11	JSF-FH-LB-HRU-L-20190409	FH-HRU	NA	NA	FH	C	N	4/9/2019	1412	1		☐			X
12	JSF-FH-LB-L-DUP01-20190410	NA	NA	NA	FH	C	FD	4/10/2019	NA	1		☐			X
13	JSF-FH-LB-L-DUP02-20190409	NA	NA	NA	FH	C	FD	4/9/2019	NA	1		☐			X

018 020
019
020

Additional Comments/Special Instructions:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Tyler Baker / TVA	10-22-19	1900	Alan Cole	10/23	0925

SHIPPING METHOD:	SAMPLER NAME AND SIGNATURE
Fedex	Tyler Baker Tyler Baker

Sample Receipt Conditions

Temperature in °C	Sample on ice?	Sample Intact?	Trip Blank?
☑Yes ☐No 1	☐Yes ☐No	☑Yes ☐No	☐Yes ☑No
☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No
☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No
☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No

Tyler Baker 10-22-19

Form TVA 30067A

40197844

Sample Preservation Receipt Form

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Client Name: John Sevier Power Plant Project # 40197844

All containers needing preservation have been checked and noted below: □Yes □No □N/A

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted): Initial when completed: Date/ Time:

Pace Lab #	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
001																																	2.5 / 5 / 10
002																																	2.5 / 5 / 10
003																																	2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
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016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : □Yes □No □N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3B	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Pace Analytical™ 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: John Sevier Fossil Plant

Project #: WO#: 40197844

Courier: ☐ CS Logistics ☑ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 7804 4[illegible]6291

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used SR - 40 **Type of Ice:** Wet Blue (Dry) None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 0.5 /Corr: 1

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☑ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Person examining contents:
Date: 10/23/19
Initials: AS

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: B	☑Yes ☐No ☐N/A	12.
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:
Person Contacted: Date/Time: If checked, see attached form for additional comments ☐
Comments/ Resolution:

Project Manager Review: ALG for TNJ Date: 10/23/19

Page 2 of 2

CASE NARRATIVE - METALS ANALYSIS

Lab Report Number (SDG): 40197844
Client: TENNESSEE VALLEY AUTHORITY
Project Name: JOHN SEVIER FOSSIL PLANT
Project Number: 0779777

1. RECEIPT

Samples were received frozen on dry ice. Sample RINSE BLANK A 11-19-19 was generated in the laboratory by rinsing the equipment used to stir the tissue samples with deionized water.

2. HOLDING TIMES

A. **Sample Preparation:** The samples, with the exception of RINSE BLANK A 11-19-19, were kept frozen prior to analysis, therefore the sample hold-time criteria is not applicable.

B. **Sample Analysis:** All method required holding times were met.

3. METHOD

Preparation: SW846 3050B, 7473
Analysis: SW846 6020, 7473

4. PREPARATION

Sample preparation proceeded normally. Although sample RINSE BLANK A 11-19-19 consists of deionized water, the sample was prepared in a manner consistent with the other tissue samples in this SDG (i.e., as if it were a tissue sample).

5. ANALYSIS

A. **Calibration:**

1. **Initial verification:** All method acceptance criteria were met.
2. **Continuing verification:** All method acceptance criteria were met.
3. **Reporting limit verification (CRDL):** All method acceptance criteria were met. Due to software limitations, the percent recovery for Calcium and Copper are based on the water reporting limits rather than the tissue reporting limits and appear to recover two (Ca) and five (Cu) times higher than the true value.

B. **Blanks:**

1. **Initial calibration:** All method acceptance criteria were met.
2. **Continuing calibration:** All method acceptance criteria were met.
3. **Method:** All project specific acceptance criteria were met.
4. **Chicken:** A chicken blank is prepared and analyzed with each sample batch to determine the background contamination levels of the chicken used for the laboratory control spike (LCS). The chicken blank is analyzed down to the laboratory MDL. Calcium, Chromium, Copper, Selenium, and Zinc were detected at a level above the MDL in the chicken blank. The chicken blank results for these analytes were subtracted from the associated LCS results prior to calculating the percent recovery of the spike.

C. **Spikes:**

1. **Lab Control Spike (LCS):** The associated LCS met all in-house accuracy criteria.
2. **SRM:** A Standard Reference Material was analyzed with this analytical batch. The in-house accuracy criteria were met.
3. **Matrix Spike / Duplicate (MS/MSD):** Sample JSF-FH-CC-HRD-F-20190619 was designated as the 7473 and 6020 matrix spike sample for this SDG. All in-house accuracy and precision criteria were met with the following exceptions. The recoveries of Mercury were above control criteria. The recovery of Calcium was above control criteria in the MSD. The “M0” data qualifier was applied to the final report. The relative percent difference of Calcium was outside control criteria. The “R1” data qualifier was applied to the final report.

D. **Sample Duplicates:** Not applicable.

E. **Internal Standards:** All in-house acceptance criteria were met for the internal standards used for quantification.

F. **ICPMS Interference Check Samples:** All acceptance criteria were met.

G. **ICPMS Serial Dilution:** All applicable acceptance criteria were met.

H. **Samples:** Sample analyses proceeded normally.

I. **Dilutions:** None required for this SDG

J. **Reanalysis:** None required for this SDG.

K. **Comments:** Samples were reported on a wet weight basis.
Due to the nature of dual cell calibration for mercury by EPA 7473, the reported results for JSF-FH-CC-F-DUP01-20190507, JSF-FH-CC-F-DUP02-20190430, JSF-FH-CC-HRA1-L-20190507, JSF-FH-CC-HRA2-L-20190611, JSF-FH-CC-HRU-L-20190430, and JSF-FH-CC-L-DUP01-20190507 are generated by the second cell, but falls below the second cell's calibration range. As a result of this relationship with the calibration, the data is estimated and given the J data qualifier.
The Mercury result for sample JSF-FH-CC-HRU-F-20190430 exceeded the lower calibration range and the “E” data qualifier was applied to the final report.

I certify that this data package is in compliance, with the terms and conditions agreed to by **Pace Analytical Services, LLC** and by the client, both technically and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this completed data package:

Signed: Jill A. Duranceau Date: 12/17/19

Name: Jill A Duranceau Position: Quality Assurance Auditor

SAMPLE NO.

JSF-FH-CC-HRD-F-20190619

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.021	U	mg/kg	1	12/12/2019 20:37
7440-38-2	Arsenic	0.083	J	mg/kg	1	12/12/2019 20:37
7440-39-3	Barium	<0.031	U	mg/kg	1	12/12/2019 20:37
7440-41-7	Beryllium	<0.033	U	mg/kg	1	12/12/2019 20:37
7440-42-8	Boron	<0.70	U	mg/kg	1	12/12/2019 20:37
7440-43-9	Cadmium	0.039	J	mg/kg	1	12/12/2019 20:37
7440-70-2	Calcium	96.3		mg/kg	1	12/12/2019 20:37
7440-47-3	Chromium	<0.088	U	mg/kg	1	12/12/2019 20:37
7440-48-4	Cobalt	<0.019	U	mg/kg	1	12/12/2019 20:37
7440-50-8	Copper	0.72	J	mg/kg	1	12/12/2019 20:37
7439-92-1	Lead	<0.030	U	mg/kg	1	12/12/2019 20:37
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 20:37
7439-98-7	Molybdenum	<0.036	U	mg/kg	1	12/12/2019 20:37
7440-02-0	Nickel	0.39		mg/kg	1	12/12/2019 20:37
7782-49-2	Selenium	0.17		mg/kg	1	12/12/2019 20:37
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 20:37
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 20:37
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 20:37
7440-62-2	Vanadium	<0.033	U	mg/kg	1	12/12/2019 20:37
7440-66-6	Zinc	6.3		mg/kg	1	12/12/2019 20:37

SAMPLE NO.

JSF-FH-CC-HRU-F-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.021	U	mg/kg	1	12/12/2019 21:20
7440-38-2	Arsenic	0.048	J	mg/kg	1	12/12/2019 21:20
7440-39-3	Barium	<0.030	U	mg/kg	1	12/12/2019 21:20
7440-41-7	Beryllium	<0.033	U	mg/kg	1	12/12/2019 21:20
7440-42-8	Boron	<0.69	U	mg/kg	1	12/12/2019 21:20
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 21:20
7440-70-2	Calcium	75.0	J	mg/kg	1	12/12/2019 21:20
7440-47-3	Chromium	<0.087	U	mg/kg	1	12/12/2019 21:20
7440-48-4	Cobalt	0.042	J	mg/kg	1	12/12/2019 21:20
7440-50-8	Copper	<0.28	U	mg/kg	1	12/12/2019 21:20
7439-92-1	Lead	<0.030	U	mg/kg	1	12/12/2019 21:20
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 21:20
7439-98-7	Molybdenum	<0.035	U	mg/kg	1	12/12/2019 21:20
7440-02-0	Nickel	<0.041	U	mg/kg	1	12/12/2019 21:20
7782-49-2	Selenium	0.18		mg/kg	1	12/12/2019 21:20
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 21:20
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 21:20
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 21:20
7440-62-2	Vanadium	<0.033	U	mg/kg	1	12/12/2019 21:20
7440-66-6	Zinc	5.1		mg/kg	1	12/12/2019 21:20

SAMPLE NO.

JSF-FH-CC-F-DUP01-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 21:35
7440-38-2	Arsenic	<0.029	U	mg/kg	1	12/12/2019 21:35
7440-39-3	Barium	<0.030	U	mg/kg	1	12/12/2019 21:35
7440-41-7	Beryllium	<0.032	U	mg/kg	1	12/12/2019 21:35
7440-42-8	Boron	<0.68	U	mg/kg	1	12/12/2019 21:35
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 21:35
7440-70-2	Calcium	77.5	J	mg/kg	1	12/12/2019 21:35
7440-47-3	Chromium	<0.086	U	mg/kg	1	12/12/2019 21:35
7440-48-4	Cobalt	0.026	J	mg/kg	1	12/12/2019 21:35
7440-50-8	Copper	0.34	J	mg/kg	1	12/12/2019 21:35
7439-92-1	Lead	<0.029	U	mg/kg	1	12/12/2019 21:35
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 21:35
7439-98-7	Molybdenum	<0.035	U	mg/kg	1	12/12/2019 21:35
7440-02-0	Nickel	<0.040	U	mg/kg	1	12/12/2019 21:35
7782-49-2	Selenium	0.13	J	mg/kg	1	12/12/2019 21:35
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 21:35
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 21:35
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 21:35
7440-62-2	Vanadium	<0.032	U	mg/kg	1	12/12/2019 21:35
7440-66-6	Zinc	5.7		mg/kg	1	12/12/2019 21:35

SAMPLE NO.

JSF-FH-CC-F-DUP02-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 21:42
7440-38-2	Arsenic	<0.029	U	mg/kg	1	12/12/2019 21:42
7440-39-3	Barium	<0.029	U	mg/kg	1	12/12/2019 21:42
7440-41-7	Beryllium	<0.032	U	mg/kg	1	12/12/2019 21:42
7440-42-8	Boron	<0.66	U	mg/kg	1	12/12/2019 21:42
7440-43-9	Cadmium	<0.010	U	mg/kg	1	12/12/2019 21:42
7440-70-2	Calcium	67.5	J	mg/kg	1	12/12/2019 21:42
7440-47-3	Chromium	<0.084	U	mg/kg	1	12/12/2019 21:42
7440-48-4	Cobalt	0.021	J	mg/kg	1	12/12/2019 21:42
7440-50-8	Copper	0.32	J	mg/kg	1	12/12/2019 21:42
7439-92-1	Lead	<0.029	U	mg/kg	1	12/12/2019 21:42
7439-93-2	Lithium	<0.020	U	mg/kg	1	12/12/2019 21:42
7439-98-7	Molybdenum	<0.034	U	mg/kg	1	12/12/2019 21:42
7440-02-0	Nickel	<0.039	U	mg/kg	1	12/12/2019 21:42
7782-49-2	Selenium	0.16	J	mg/kg	1	12/12/2019 21:42
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 21:42
7440-24-6	Strontium	<0.15	U	mg/kg	1	12/12/2019 21:42
7440-28-0	Thallium	<0.012	U	mg/kg	1	12/12/2019 21:42
7440-62-2	Vanadium	<0.032	U	mg/kg	1	12/12/2019 21:42
7440-66-6	Zinc	6.0		mg/kg	1	12/12/2019 21:42

SAMPLE NO.

JSF-FH-CC-HRA1-O-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.021	U	mg/kg	1	12/12/2019 21:49
7440-38-2	Arsenic	<0.030	U	mg/kg	1	12/12/2019 21:49
7440-39-3	Barium	0.13		mg/kg	1	12/12/2019 21:49
7440-41-7	Beryllium	<0.033	U	mg/kg	1	12/12/2019 21:49
7440-42-8	Boron	<0.70	U	mg/kg	1	12/12/2019 21:49
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 21:49
7440-70-2	Calcium	945		mg/kg	1	12/12/2019 21:49
7440-47-3	Chromium	<0.088	U	mg/kg	1	12/12/2019 21:49
7440-48-4	Cobalt	0.068	J	mg/kg	1	12/12/2019 21:49
7440-50-8	Copper	1.0		mg/kg	1	12/12/2019 21:49
7439-92-1	Lead	<0.030	U	mg/kg	1	12/12/2019 21:49
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 21:49
7439-98-7	Molybdenum	<0.036	U	mg/kg	1	12/12/2019 21:49
7440-02-0	Nickel	<0.041	U	mg/kg	1	12/12/2019 21:49
7782-49-2	Selenium	0.89		mg/kg	1	12/12/2019 21:49
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 21:49
7440-24-6	Strontium	1.6		mg/kg	1	12/12/2019 21:49
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 21:49
7440-62-2	Vanadium	<0.033	U	mg/kg	1	12/12/2019 21:49
7440-66-6	Zinc	46.0		mg/kg	1	12/12/2019 21:49

SAMPLE NO.

JSF-FH-CC-O-DUP02-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 21:57
7440-38-2	Arsenic	<0.029	U	mg/kg	1	12/12/2019 21:57
7440-39-3	Barium	0.19		mg/kg	1	12/12/2019 21:57
7440-41-7	Beryllium	<0.031	U	mg/kg	1	12/12/2019 21:57
7440-42-8	Boron	<0.66	U	mg/kg	1	12/12/2019 21:57
7440-43-9	Cadmium	<0.010	U	mg/kg	1	12/12/2019 21:57
7440-70-2	Calcium	1060		mg/kg	1	12/12/2019 21:57
7440-47-3	Chromium	<0.084	U	mg/kg	1	12/12/2019 21:57
7440-48-4	Cobalt	0.065	J	mg/kg	1	12/12/2019 21:57
7440-50-8	Copper	1.1		mg/kg	1	12/12/2019 21:57
7439-92-1	Lead	<0.028	U	mg/kg	1	12/12/2019 21:57
7439-93-2	Lithium	<0.020	U	mg/kg	1	12/12/2019 21:57
7439-98-7	Molybdenum	<0.034	U	mg/kg	1	12/12/2019 21:57
7440-02-0	Nickel	0.10	J	mg/kg	1	12/12/2019 21:57
7782-49-2	Selenium	0.90		mg/kg	1	12/12/2019 21:57
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 21:57
7440-24-6	Strontium	1.3		mg/kg	1	12/12/2019 21:57
7440-28-0	Thallium	<0.012	U	mg/kg	1	12/12/2019 21:57
7440-62-2	Vanadium	<0.032	U	mg/kg	1	12/12/2019 21:57
7440-66-6	Zinc	38.4		mg/kg	1	12/12/2019 21:57

SAMPLE NO.

JSF-FH-CC-HRA1-L-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 22:04
7440-38-2	Arsenic	<0.029	U	mg/kg	1	12/12/2019 22:04
7440-39-3	Barium	<0.029	U	mg/kg	1	12/12/2019 22:04
7440-41-7	Beryllium	<0.031	U	mg/kg	1	12/12/2019 22:04
7440-42-8	Boron	<0.66	U	mg/kg	1	12/12/2019 22:04
7440-43-9	Cadmium	0.024	J	mg/kg	1	12/12/2019 22:04
7440-70-2	Calcium	47.9	J	mg/kg	1	12/12/2019 22:04
7440-47-3	Chromium	<0.084	U	mg/kg	1	12/12/2019 22:04
7440-48-4	Cobalt	0.12		mg/kg	1	12/12/2019 22:04
7440-50-8	Copper	1.6		mg/kg	1	12/12/2019 22:04
7439-92-1	Lead	0.053	J	mg/kg	1	12/12/2019 22:04
7439-93-2	Lithium	<0.020	U	mg/kg	1	12/12/2019 22:04
7439-98-7	Molybdenum	0.13		mg/kg	1	12/12/2019 22:04
7440-02-0	Nickel	<0.039	U	mg/kg	1	12/12/2019 22:04
7782-49-2	Selenium	1.1		mg/kg	1	12/12/2019 22:04
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 22:04
7440-24-6	Strontium	<0.15	U	mg/kg	1	12/12/2019 22:04
7440-28-0	Thallium	<0.012	U	mg/kg	1	12/12/2019 22:04
7440-62-2	Vanadium	0.21		mg/kg	1	12/12/2019 22:04
7440-66-6	Zinc	21.0		mg/kg	1	12/12/2019 22:04

SAMPLE NO.

JSF-FH-CC-HRA2-L-20190611

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 22:11
7440-38-2	Arsenic	0.064	J	mg/kg	1	12/12/2019 22:11
7440-39-3	Barium	<0.029	U	mg/kg	1	12/12/2019 22:11
7440-41-7	Beryllium	<0.031	U	mg/kg	1	12/12/2019 22:11
7440-42-8	Boron	<0.66	U	mg/kg	1	12/12/2019 22:11
7440-43-9	Cadmium	0.077	J	mg/kg	1	12/12/2019 22:11
7440-70-2	Calcium	48.4	J	mg/kg	1	12/12/2019 22:11
7440-47-3	Chromium	<0.084	U	mg/kg	1	12/12/2019 22:11
7440-48-4	Cobalt	0.18		mg/kg	1	12/12/2019 22:11
7440-50-8	Copper	2.4		mg/kg	1	12/12/2019 22:11
7439-92-1	Lead	0.11		mg/kg	1	12/12/2019 22:11
7439-93-2	Lithium	<0.020	U	mg/kg	1	12/12/2019 22:11
7439-98-7	Molybdenum	0.19		mg/kg	1	12/12/2019 22:11
7440-02-0	Nickel	<0.039	U	mg/kg	1	12/12/2019 22:11
7782-49-2	Selenium	1.4		mg/kg	1	12/12/2019 22:11
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 22:11
7440-24-6	Strontium	<0.15	U	mg/kg	1	12/12/2019 22:11
7440-28-0	Thallium	<0.012	U	mg/kg	1	12/12/2019 22:11
7440-62-2	Vanadium	0.62		mg/kg	1	12/12/2019 22:11
7440-66-6	Zinc	24.3		mg/kg	1	12/12/2019 22:11

SAMPLE NO.

JSF-FH-CC-HRD-L-20190619

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.021	U	mg/kg	1	12/12/2019 22:18
7440-38-2	Arsenic	0.079	J	mg/kg	1	12/12/2019 22:18
7440-39-3	Barium	0.031	J	mg/kg	1	12/12/2019 22:18
7440-41-7	Beryllium	<0.033	U	mg/kg	1	12/12/2019 22:18
7440-42-8	Boron	<0.69	U	mg/kg	1	12/12/2019 22:18
7440-43-9	Cadmium	0.092	J	mg/kg	1	12/12/2019 22:18
7440-70-2	Calcium	80.1	J	mg/kg	1	12/12/2019 22:18
7440-47-3	Chromium	<0.087	U	mg/kg	1	12/12/2019 22:18
7440-48-4	Cobalt	0.20		mg/kg	1	12/12/2019 22:18
7440-50-8	Copper	2.9		mg/kg	1	12/12/2019 22:18
7439-92-1	Lead	0.20		mg/kg	1	12/12/2019 22:18
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 22:18
7439-98-7	Molybdenum	0.27		mg/kg	1	12/12/2019 22:18
7440-02-0	Nickel	<0.040	U	mg/kg	1	12/12/2019 22:18
7782-49-2	Selenium	1.4		mg/kg	1	12/12/2019 22:18
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 22:18
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 22:18
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 22:18
7440-62-2	Vanadium	0.73		mg/kg	1	12/12/2019 22:18
7440-66-6	Zinc	26.5		mg/kg	1	12/12/2019 22:18

SAMPLE NO.

JSF-FH-CC-HRU-L-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 22:25
7440-38-2	Arsenic	0.043	J	mg/kg	1	12/12/2019 22:25
7440-39-3	Barium	<0.030	U	mg/kg	1	12/12/2019 22:25
7440-41-7	Beryllium	<0.032	U	mg/kg	1	12/12/2019 22:25
7440-42-8	Boron	<0.68	U	mg/kg	1	12/12/2019 22:25
7440-43-9	Cadmium	0.027	J	mg/kg	1	12/12/2019 22:25
7440-70-2	Calcium	51.2	J	mg/kg	1	12/12/2019 22:25
7440-47-3	Chromium	<0.086	U	mg/kg	1	12/12/2019 22:25
7440-48-4	Cobalt	0.18		mg/kg	1	12/12/2019 22:25
7440-50-8	Copper	2.2		mg/kg	1	12/12/2019 22:25
7439-92-1	Lead	0.045	J	mg/kg	1	12/12/2019 22:25
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 22:25
7439-98-7	Molybdenum	0.18		mg/kg	1	12/12/2019 22:25
7440-02-0	Nickel	<0.040	U	mg/kg	1	12/12/2019 22:25
7782-49-2	Selenium	1.5		mg/kg	1	12/12/2019 22:25
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 22:25
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 22:25
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 22:25
7440-62-2	Vanadium	0.20		mg/kg	1	12/12/2019 22:25
7440-66-6	Zinc	25.6		mg/kg	1	12/12/2019 22:25

SAMPLE NO.

JSF-FH-CC-L-DUP01-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 22:47
7440-38-2	Arsenic	0.030	J	mg/kg	1	12/12/2019 22:47
7440-39-3	Barium	<0.028	U	mg/kg	1	12/12/2019 22:47
7440-41-7	Beryllium	<0.031	U	mg/kg	1	12/12/2019 22:47
7440-42-8	Boron	<0.65	U	mg/kg	1	12/12/2019 22:47
7440-43-9	Cadmium	0.053	J	mg/kg	1	12/12/2019 22:47
7440-70-2	Calcium	35.1	J	mg/kg	1	12/12/2019 22:47
7440-47-3	Chromium	<0.082	U	mg/kg	1	12/12/2019 22:47
7440-48-4	Cobalt	0.16		mg/kg	1	12/12/2019 22:47
7440-50-8	Copper	2.3		mg/kg	1	12/12/2019 22:47
7439-92-1	Lead	0.079	J	mg/kg	1	12/12/2019 22:47
7439-93-2	Lithium	<0.020	U	mg/kg	1	12/12/2019 22:47
7439-98-7	Molybdenum	0.15		mg/kg	1	12/12/2019 22:47
7440-02-0	Nickel	<0.038	U	mg/kg	1	12/12/2019 22:47
7782-49-2	Selenium	1.3		mg/kg	1	12/12/2019 22:47
7440-22-4	Silver	<0.010	U	mg/kg	1	12/12/2019 22:47
7440-24-6	Strontium	<0.15	U	mg/kg	1	12/12/2019 22:47
7440-28-0	Thallium	0.012	J	mg/kg	1	12/12/2019 22:47
7440-62-2	Vanadium	0.40		mg/kg	1	12/12/2019 22:47
7440-66-6	Zinc	22.4		mg/kg	1	12/12/2019 22:47

SAMPLE NO.

JSF-FH-CC-L-DUP02-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844012 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 22:54
7440-38-2	Arsenic	0.036	J	mg/kg	1	12/12/2019 22:54
7440-39-3	Barium	<0.029	U	mg/kg	1	12/12/2019 22:54
7440-41-7	Beryllium	<0.031	U	mg/kg	1	12/12/2019 22:54
7440-42-8	Boron	<0.65	U	mg/kg	1	12/12/2019 22:54
7440-43-9	Cadmium	0.029	J	mg/kg	1	12/12/2019 22:54
7440-70-2	Calcium	49.0	J	mg/kg	1	12/12/2019 22:54
7440-47-3	Chromium	<0.083	U	mg/kg	1	12/12/2019 22:54
7440-48-4	Cobalt	0.11		mg/kg	1	12/12/2019 22:54
7440-50-8	Copper	1.8		mg/kg	1	12/12/2019 22:54
7439-92-1	Lead	0.050	J	mg/kg	1	12/12/2019 22:54
7439-93-2	Lithium	<0.020	U	mg/kg	1	12/12/2019 22:54
7439-98-7	Molybdenum	0.16		mg/kg	1	12/12/2019 22:54
7440-02-0	Nickel	<0.039	U	mg/kg	1	12/12/2019 22:54
7782-49-2	Selenium	1.3		mg/kg	1	12/12/2019 22:54
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 22:54
7440-24-6	Strontium	<0.15	U	mg/kg	1	12/12/2019 22:54
7440-28-0	Thallium	<0.012	U	mg/kg	1	12/12/2019 22:54
7440-62-2	Vanadium	0.27		mg/kg	1	12/12/2019 22:54
7440-66-6	Zinc	21.2		mg/kg	1	12/12/2019 22:54

SAMPLE NO.

JSF-FH-SB-HRA1-F-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844013 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.021	U	mg/kg	1	12/12/2019 23:02
7440-38-2	Arsenic	0.24		mg/kg	1	12/12/2019 23:02
7440-39-3	Barium	<0.030	U	mg/kg	1	12/12/2019 23:02
7440-41-7	Beryllium	<0.033	U	mg/kg	1	12/12/2019 23:02
7440-42-8	Boron	<0.69	U	mg/kg	1	12/12/2019 23:02
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 23:02
7440-70-2	Calcium	146		mg/kg	1	12/12/2019 23:02
7440-47-3	Chromium	<0.087	U	mg/kg	1	12/12/2019 23:02
7440-48-4	Cobalt	<0.019	U	mg/kg	1	12/12/2019 23:02
7440-50-8	Copper	0.35	J	mg/kg	1	12/12/2019 23:02
7439-92-1	Lead	<0.030	U	mg/kg	1	12/12/2019 23:02
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 23:02
7439-98-7	Molybdenum	<0.035	U	mg/kg	1	12/12/2019 23:02
7440-02-0	Nickel	0.050	J	mg/kg	1	12/12/2019 23:02
7782-49-2	Selenium	0.26		mg/kg	1	12/12/2019 23:02
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 23:02
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 23:02
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 23:02
7440-62-2	Vanadium	<0.033	U	mg/kg	1	12/12/2019 23:02
7440-66-6	Zinc	3.3	J	mg/kg	1	12/12/2019 23:02

SAMPLE NO.

JSF-FH-LB-HRA2-F-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 23:09
7440-38-2	Arsenic	0.14		mg/kg	1	12/12/2019 23:09
7440-39-3	Barium	<0.029	U	mg/kg	1	12/12/2019 23:09
7440-41-7	Beryllium	<0.032	U	mg/kg	1	12/12/2019 23:09
7440-42-8	Boron	<0.67	U	mg/kg	1	12/12/2019 23:09
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 23:09
7440-70-2	Calcium	91.4		mg/kg	1	12/12/2019 23:09
7440-47-3	Chromium	<0.085	U	mg/kg	1	12/12/2019 23:09
7440-48-4	Cobalt	<0.018	U	mg/kg	1	12/12/2019 23:09
7440-50-8	Copper	<0.27	U	mg/kg	1	12/12/2019 23:09
7439-92-1	Lead	<0.029	U	mg/kg	1	12/12/2019 23:09
7439-93-2	Lithium	<0.020	U	mg/kg	1	12/12/2019 23:09
7439-98-7	Molybdenum	<0.034	U	mg/kg	1	12/12/2019 23:09
7440-02-0	Nickel	0.12	J	mg/kg	1	12/12/2019 23:09
7782-49-2	Selenium	0.18		mg/kg	1	12/12/2019 23:09
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 23:09
7440-24-6	Strontium	<0.15	U	mg/kg	1	12/12/2019 23:09
7440-28-0	Thallium	<0.012	U	mg/kg	1	12/12/2019 23:09
7440-62-2	Vanadium	<0.032	U	mg/kg	1	12/12/2019 23:09
7440-66-6	Zinc	4.5		mg/kg	1	12/12/2019 23:09

SAMPLE NO.

JSF-FH-LB-HRD-F-20190410

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.021	U	mg/kg	1	12/12/2019 23:16
7440-38-2	Arsenic	0.13		mg/kg	1	12/12/2019 23:16
7440-39-3	Barium	<0.030	U	mg/kg	1	12/12/2019 23:16
7440-41-7	Beryllium	<0.033	U	mg/kg	1	12/12/2019 23:16
7440-42-8	Boron	<0.69	U	mg/kg	1	12/12/2019 23:16
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 23:16
7440-70-2	Calcium	155		mg/kg	1	12/12/2019 23:16
7440-47-3	Chromium	0.098	J	mg/kg	1	12/12/2019 23:16
7440-48-4	Cobalt	<0.019	U	mg/kg	1	12/12/2019 23:16
7440-50-8	Copper	0.41	J	mg/kg	1	12/12/2019 23:16
7439-92-1	Lead	<0.030	U	mg/kg	1	12/12/2019 23:16
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 23:16
7439-98-7	Molybdenum	<0.036	U	mg/kg	1	12/12/2019 23:16
7440-02-0	Nickel	0.058	J	mg/kg	1	12/12/2019 23:16
7782-49-2	Selenium	0.23		mg/kg	1	12/12/2019 23:16
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 23:16
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 23:16
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 23:16
7440-62-2	Vanadium	<0.033	U	mg/kg	1	12/12/2019 23:16
7440-66-6	Zinc	3.9	J	mg/kg	1	12/12/2019 23:16

SAMPLE NO.

JSF-FH-LB-HRU-F-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 23:23
7440-38-2	Arsenic	<0.029	U	mg/kg	1	12/12/2019 23:23
7440-39-3	Barium	<0.030	U	mg/kg	1	12/12/2019 23:23
7440-41-7	Beryllium	<0.032	U	mg/kg	1	12/12/2019 23:23
7440-42-8	Boron	<0.68	U	mg/kg	1	12/12/2019 23:23
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 23:23
7440-70-2	Calcium	245		mg/kg	1	12/12/2019 23:23
7440-47-3	Chromium	<0.086	U	mg/kg	1	12/12/2019 23:23
7440-48-4	Cobalt	<0.018	U	mg/kg	1	12/12/2019 23:23
7440-50-8	Copper	0.28	J	mg/kg	1	12/12/2019 23:23
7439-92-1	Lead	<0.029	U	mg/kg	1	12/12/2019 23:23
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 23:23
7439-98-7	Molybdenum	<0.035	U	mg/kg	1	12/12/2019 23:23
7440-02-0	Nickel	0.047	J	mg/kg	1	12/12/2019 23:23
7782-49-2	Selenium	0.24		mg/kg	1	12/12/2019 23:23
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 23:23
7440-24-6	Strontium	0.20	J	mg/kg	1	12/12/2019 23:23
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 23:23
7440-62-2	Vanadium	<0.032	U	mg/kg	1	12/12/2019 23:23
7440-66-6	Zinc	4.1	J	mg/kg	1	12/12/2019 23:23

SAMPLE NO.

JSF-FH-LB-F-DUP01-20190410

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 23:31
7440-38-2	Arsenic	0.17		mg/kg	1	12/12/2019 23:31
7440-39-3	Barium	<0.030	U	mg/kg	1	12/12/2019 23:31
7440-41-7	Beryllium	<0.032	U	mg/kg	1	12/12/2019 23:31
7440-42-8	Boron	<0.67	U	mg/kg	1	12/12/2019 23:31
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 23:31
7440-70-2	Calcium	178		mg/kg	1	12/12/2019 23:31
7440-47-3	Chromium	<0.085	U	mg/kg	1	12/12/2019 23:31
7440-48-4	Cobalt	<0.018	U	mg/kg	1	12/12/2019 23:31
7440-50-8	Copper	<0.27	U	mg/kg	1	12/12/2019 23:31
7439-92-1	Lead	<0.029	U	mg/kg	1	12/12/2019 23:31
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 23:31
7439-98-7	Molybdenum	<0.035	U	mg/kg	1	12/12/2019 23:31
7440-02-0	Nickel	<0.040	U	mg/kg	1	12/12/2019 23:31
7782-49-2	Selenium	0.23		mg/kg	1	12/12/2019 23:31
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 23:31
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 23:31
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 23:31
7440-62-2	Vanadium	<0.032	U	mg/kg	1	12/12/2019 23:31
7440-66-6	Zinc	4.4	J	mg/kg	1	12/12/2019 23:31

SAMPLE NO.

JSF-FH-LB-F-DUP02-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.020	U	mg/kg	1	12/12/2019 23:38
7440-38-2	Arsenic	<0.029	U	mg/kg	1	12/12/2019 23:38
7440-39-3	Barium	<0.030	U	mg/kg	1	12/12/2019 23:38
7440-41-7	Beryllium	<0.032	U	mg/kg	1	12/12/2019 23:38
7440-42-8	Boron	<0.68	U	mg/kg	1	12/12/2019 23:38
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 23:38
7440-70-2	Calcium	211		mg/kg	1	12/12/2019 23:38
7440-47-3	Chromium	<0.086	U	mg/kg	1	12/12/2019 23:38
7440-48-4	Cobalt	<0.019	U	mg/kg	1	12/12/2019 23:38
7440-50-8	Copper	<0.28	U	mg/kg	1	12/12/2019 23:38
7439-92-1	Lead	<0.029	U	mg/kg	1	12/12/2019 23:38
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 23:38
7439-98-7	Molybdenum	<0.035	U	mg/kg	1	12/12/2019 23:38
7440-02-0	Nickel	<0.040	U	mg/kg	1	12/12/2019 23:38
7782-49-2	Selenium	0.22		mg/kg	1	12/12/2019 23:38
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 23:38
7440-24-6	Strontium	0.18	J	mg/kg	1	12/12/2019 23:38
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 23:38
7440-62-2	Vanadium	<0.032	U	mg/kg	1	12/12/2019 23:38
7440-66-6	Zinc	4.3	J	mg/kg	1	12/12/2019 23:38

SAMPLE NO.

JSF-FH-SB-HRA1-O-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.021	U	mg/kg	1	12/12/2019 23:45
7440-38-2	Arsenic	0.52		mg/kg	1	12/12/2019 23:45
7440-39-3	Barium	0.032	J	mg/kg	1	12/12/2019 23:45
7440-41-7	Beryllium	<0.033	U	mg/kg	1	12/12/2019 23:45
7440-42-8	Boron	<0.69	U	mg/kg	1	12/12/2019 23:45
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 23:45
7440-70-2	Calcium	66.1	J	mg/kg	1	12/12/2019 23:45
7440-47-3	Chromium	<0.088	U	mg/kg	1	12/12/2019 23:45
7440-48-4	Cobalt	0.021	J	mg/kg	1	12/12/2019 23:45
7440-50-8	Copper	1.3		mg/kg	1	12/12/2019 23:45
7439-92-1	Lead	<0.030	U	mg/kg	1	12/12/2019 23:45
7439-93-2	Lithium	<0.021	U	mg/kg	1	12/12/2019 23:45
7439-98-7	Molybdenum	<0.035	U	mg/kg	1	12/12/2019 23:45
7440-02-0	Nickel	0.042	J	mg/kg	1	12/12/2019 23:45
7782-49-2	Selenium	0.66		mg/kg	1	12/12/2019 23:45
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 23:45
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 23:45
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 23:45
7440-62-2	Vanadium	<0.033	U	mg/kg	1	12/12/2019 23:45
7440-66-6	Zinc	31.0		mg/kg	1	12/12/2019 23:45

SAMPLE NO.

JSF-FH-LB-HRA2-O-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.019	U	mg/kg	1	12/12/2019 23:52
7440-38-2	Arsenic	0.26		mg/kg	1	12/12/2019 23:52
7440-39-3	Barium	<0.028	U	mg/kg	1	12/12/2019 23:52
7440-41-7	Beryllium	<0.031	U	mg/kg	1	12/12/2019 23:52
7440-42-8	Boron	<0.65	U	mg/kg	1	12/12/2019 23:52
7440-43-9	Cadmium	<0.010	U	mg/kg	1	12/12/2019 23:52
7440-70-2	Calcium	97.1		mg/kg	1	12/12/2019 23:52
7440-47-3	Chromium	<0.082	U	mg/kg	1	12/12/2019 23:52
7440-48-4	Cobalt	0.057	J	mg/kg	1	12/12/2019 23:52
7440-50-8	Copper	1.6		mg/kg	1	12/12/2019 23:52
7439-92-1	Lead	<0.028	U	mg/kg	1	12/12/2019 23:52
7439-93-2	Lithium	<0.020	U	mg/kg	1	12/12/2019 23:52
7439-98-7	Molybdenum	<0.033	U	mg/kg	1	12/12/2019 23:52
7440-02-0	Nickel	0.040	J	mg/kg	1	12/12/2019 23:52
7782-49-2	Selenium	0.68		mg/kg	1	12/12/2019 23:52
7440-22-4	Silver	<0.010	U	mg/kg	1	12/12/2019 23:52
7440-24-6	Strontium	0.16	J	mg/kg	1	12/12/2019 23:52
7440-28-0	Thallium	<0.012	U	mg/kg	1	12/12/2019 23:52
7440-62-2	Vanadium	<0.031	U	mg/kg	1	12/12/2019 23:52
7440-66-6	Zinc	34.4		mg/kg	1	12/12/2019 23:52

SAMPLE NO.

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FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844021 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.021	U	mg/kg	1	12/12/2019 20:01
7440-38-2	Arsenic	<0.030	U	mg/kg	1	12/12/2019 20:01
7440-39-3	Barium	<0.031	U	mg/kg	1	12/12/2019 20:01
7440-41-7	Beryllium	<0.033	U	mg/kg	1	12/12/2019 20:01
7440-42-8	Boron	<0.70	U	mg/kg	1	12/12/2019 20:01
7440-43-9	Cadmium	<0.011	U	mg/kg	1	12/12/2019 20:01
7440-70-2	Calcium	<25.3	U	mg/kg	1	12/12/2019 20:01
7440-47-3	Chromium	<0.088	U	mg/kg	1	12/12/2019 20:01
7440-48-4	Cobalt	<0.019	U	mg/kg	1	12/12/2019 20:01
7440-50-8	Copper	<0.28	U	mg/kg	1	12/12/2019 20:01
7439-92-1	Lead	<0.030	U	mg/kg	1	12/12/2019 20:01
7439-93-2	Lithium	0.024	J	mg/kg	1	12/12/2019 20:01
7439-98-7	Molybdenum	<0.036	U	mg/kg	1	12/12/2019 20:01
7440-02-0	Nickel	0.080	J	mg/kg	1	12/12/2019 20:01
7782-49-2	Selenium	<0.051	U	mg/kg	1	12/12/2019 20:01
7440-22-4	Silver	<0.011	U	mg/kg	1	12/12/2019 20:01
7440-24-6	Strontium	<0.16	U	mg/kg	1	12/12/2019 20:01
7440-28-0	Thallium	<0.013	U	mg/kg	1	12/12/2019 20:01
7440-62-2	Vanadium	<0.033	U	mg/kg	1	12/12/2019 20:01
7440-66-6	Zinc	<1.4	U	mg/kg	1	12/12/2019 20:01

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Initial Calibration Verification Source: 242162

Continuing Calibration Verification Source: 242477

Concentration Units: ug/L Instrument ID: 40ICM2

	Initial Calibration Verification				Continuing Calibration Verification						
	12/12/2019 18:56				12/12/2019 19:39			12/12/2019 21:06			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
Antimony	110	113	103.1	90-110	100	102	101.5	100	100	100.0	90-110
Arsenic	110	104	94.2	90-110	100	99.9	99.9	100	99.6	99.6	90-110
Barium	110	107	97.4	90-110	100	100	100.4	100	99.7	99.7	90-110
Beryllium	110	108	98.5	90-110	100	100	100.3	100	99.0	99.0	90-110
Boron	110	108	97.8	90-110	100	103	103.2	100	100	100.0	90-110
Cadmium	110	112	102.1	90-110	100	102	102.3	100	102	102.4	90-110
Calcium	5500	5370	97.7	90-110	5000	4770	95.4	5000	4900	98.0	90-110
Chromium	110	108	98.3	90-110	100	98.8	98.8	100	99.5	99.5	90-110
Cobalt	110	106	96.4	90-110	100	98.9	98.9	100	99.4	99.4	90-110
Copper	110	106	96.0	90-110	100	98.3	98.3	100	98.9	98.9	90-110
Lead	110	108	98.3	90-110	100	102	102.1	100	102	102.5	90-110
Lithium	110	107	97.3	90-110	100	103	102.7	100	102	101.5	90-110
Molybdenum	110	101	92.0	90-110	100	99.2	99.2	100	99.2	99.2	90-110
Nickel	110	106	96.8	90-110	100	99.0	99.0	100	98.6	98.6	90-110
Selenium	110	109	98.9	90-110	100	101	100.8	100	102	101.7	90-110
Silver	55	55.8	101.5	90-110	50	50.1	100.2	50	50.5	101.1	90-110
Strontium	110	108	97.9	90-110	100	99.0	99.0	100	101	100.7	90-110
Thallium	110	106	96.8	90-110	100	102	102.2	100	103	102.9	90-110
Vanadium	110	109	99.4	90-110	100	98.0	98.0	100	98.8	98.8	90-110
Zinc	110	110	100.0	90-110	100	100	100.0	100	99.7	99.7	90-110

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 242477

Concentration Units: ug/L Instrument ID: 40ICM2

	Continuing Calibration Verification									
	12/12/2019 22:33			12/12/2019 23:59			12/13/2019 00:43			Control Limit
Analyte	True	Found	%R	True	Found	%R	True	Found	%R	
Antimony	100	104	104.3	100	104	103.9	100	107	106.7	90-110
Arsenic	100	101	101.4	100	99.8	99.8	100	100	100.3	90-110
Barium	100	101	101.4	100	100	100.3	100	101	101.2	90-110
Beryllium	100	93.0	93.0	100	92.6	92.6	100	100	100.5	90-110
Boron	100	94.5	94.5	100	93.2	93.2	100	98.9	98.9	90-110
Cadmium	100	105	104.7	100	104	104.0	100	105	105.4	90-110
Calcium	5000	4980	99.7	5000	5100	102.0	5000	4940	98.8	90-110
Chromium	100	102	101.5	100	101	101.2	100	101	101.1	90-110
Cobalt	100	102	101.7	100	100	100.5	100	99.7	99.7	90-110
Copper	100	101	101.3	100	100	100.1	100	99.2	99.2	90-110
Lead	100	103	102.9	100	102	101.9	100	102	101.8	90-110
Lithium	100	93.9	93.9	100	93.3	93.3	100	100	100.1	90-110
Molybdenum	100	101	101.4	100	101	100.9	100	101	101.0	90-110
Nickel	100	102	102.4	100	101	101.0	100	100	100.3	90-110
Selenium	100	102	102.3	100	99.7	99.7	100	100	100.4	90-110
Silver	50	51.8	103.6	50	51.3	102.6	50	51.4	102.8	90-110
Strontium	100	101	101.2	100	101	100.7	100	100	100.5	90-110
Thallium	100	103	102.9	100	102	101.7	100	101	101.4	90-110
Vanadium	100	100	100.4	100	101	100.8	100	100	100.5	90-110
Zinc	100	101	100.8	100	101	100.8	100	102	101.9	90-110

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

CRDL Check Standard Source: 242472 Analysis Date/Time: 12/12/2019 19:10

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	100.6	70-130
Arsenic	1.0	1.1	108.0	70-130
Barium	1.0	1.0	102.8	70-130
Beryllium	1.0	0.98	98.4	70-130
Cadmium	1.0	0.99	98.7	70-130
Chromium	1.0	0.98	97.7	70-130
Cobalt	1.0	1.0	101.2	70-130
Lead	1.0	1.0	102.4	70-130
Lithium	1.0	1.1	112.5	70-130
Molybdenum	1.0	0.96	96.5	70-130
Nickel	1.0	1.0	102.6	70-130
Selenium	1.0	1.0	102.0	70-130
Silver	0.5	0.51	102.6	70-130
Strontium	1.0	1.0	101.8	70-130
Thallium	1.0	1.1	105.2	70-130
Vanadium	1.0	0.98	98.0	70-130

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

CRDL Check Standard Source: 242473 Analysis Date/Time: 12/12/2019 19:18

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Boron	5.0	5.2	104.9	70-130
Calcium	250	526	210.3	70-130
Copper	1.0	5.0	500.3	70-130
Zinc	5.0	5.0	99.1	70-130

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

CRDL Check Standard Source: 242472 Analysis Date/Time: 12/13/2019 00:14

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.1	106.1	70-130
Arsenic	1.0	1.1	105.3	70-130
Barium	1.0	0.98	98.3	70-130
Beryllium	1.0	0.93	93.4	70-130
Cadmium	1.0	1.1	105.1	70-130
Chromium	1.0	0.99	98.9	70-130
Cobalt	1.0	0.99	99.4	70-130
Lead	1.0	1.0	100.5	70-130
Lithium	1.0	0.92	91.6	70-130
Molybdenum	1.0	0.98	98.3	70-130
Nickel	1.0	1.0	100.9	70-130
Selenium	1.0	1.1	109.2	70-130
Silver	0.5	0.50	101.0	70-130
Strontium	1.0	0.99	98.6	70-130
Thallium	1.0	1.0	99.8	70-130
Vanadium	1.0	0.93	93.4	70-130

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

CRDL Check Standard Source: 242473 Analysis Date/Time: 12/13/2019 00:21

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Boron	5.0	4.8	95.1	70-130
Calcium	250	478	191.2	70-130
Copper	1.0	5.0	504.8	70-130
Zinc	5.0	5.0	100.3	70-130

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract : 0779777 JOHN SEVIER FOSSIL PLA

Method Blank Matrix: Tissue Instrument ID: 40ICM2

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	12/12/2019 19:03	C	12/12/2019 19:47	C	12/12/2019 21:13	C	12/12/2019 22:40	C	1991164	C
Antimony	0.16	U	0.16	U	0.16	U	0.16	U	<0.021	U
Arsenic	0.14	U	0.14	U	0.14	U	0.14	U	<0.030	U
Barium	0.38	U	0.38	U	0.38	U	0.38	U	<0.031	U
Beryllium	0.22	U	0.22	U	0.22	U	0.22	U	<0.033	U
Boron	1.7	U	1.7	U	1.7	U	1.7	U	<0.70	U
Cadmium	0.10	U	0.12		0.10	U	0.10	U	<0.011	U
Calcium	500	U	500	U	500	U	500	U	<25.4	U
Chromium	1.4	U	1.4	U	1.4	U	1.4	U	<0.088	U
Cobalt	0.10	U	0.12		0.10	U	0.10	U	<0.019	U
Copper	0.64	U	0.64	U	0.64	U	0.64	U	<0.28	U
Lead	0.29	U	0.29	U	0.29	U	0.29	U	<0.030	U
Lithium	1.0	U	1.0	U	1.0	U	1.0	U	<0.021	U
Molybdenum	0.13	U	0.49		0.13	U	0.13	U	<0.036	U
Nickel	0.65	U	0.65	U	0.65	U	0.65	U	<0.041	U
Selenium	0.81	U	0.81	U	0.81	U	0.81	U	<0.051	U
Silver	0.014	U	0.052		0.027		0.030		<0.011	U
Strontium	0.24	U	0.24	U	0.24	U	0.24	U	<0.16	U
Thallium	0.11	U	0.16		0.11	U	0.11		<0.013	U
Vanadium	0.40	U	0.40	U	0.40	U	0.40	U	<0.033	U
Zinc	18.9	U	18.9	U	18.9	U	18.9	U	<1.4	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract : 0779777 JOHN SEVIER FOSSIL PLA

Method Blank Matrix: Tissue Instrument ID: 40ICM2

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)						Tissue Blank	
		C	12/13/2019 00:07	C	12/13/2019 00:50	C		C	1991165	C
Antimony			0.16	U	0.16	U			<0.021	U
Arsenic			0.14	U	0.14	U			<0.030	U
Barium			0.38	U	0.38	U			<0.031	U
Beryllium			0.22	U	0.22	U			<0.033	U
Boron			1.7	U	1.7	U			<0.70	U
Cadmium			0.10	U	0.10	U			<0.011	U
Calcium			500	U	500	U			47.2	J
Chromium			1.4	U	1.4	U			0.25	J
Cobalt			0.10	U	0.10	U			<0.019	U
Copper			0.64	U	0.64	U			0.35	J
Lead			0.29	U	0.29	U			<0.030	U
Lithium			1.0	U	1.0	U			<0.021	U
Molybdenum			0.13	U	0.45				<0.036	U
Nickel			0.65	U	0.65	U			<0.041	U
Selenium			0.81	U	0.81	U			0.14	J
Silver			0.024		0.042				<0.011	U
Strontium			0.24	U	0.24	U			<0.16	U
Thallium			0.11	U	0.14				<0.013	U
Vanadium			0.40	U	0.40	U			<0.033	U
Zinc			18.9	U	18.9	U			6.6	

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40ICM2 Solution A Run Date: 12/12/2019 19:25

ICS Source: 242124,242125 Solution AB Run Date: 12/12/2019 19:32

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	50000	50000	47840	95.7	48270	96.5	80-120
Antimony		100	0.092		100.9	100.9	80-120
Arsenic		100	0.084		102.5	102.5	80-120
Barium		100	0.119		99.64	99.6	80-120
Beryllium		100	0.003		95.05	95.1	80-120
Boron		100	0.404		96.91	96.9	80-120
Cadmium		100	-0.015		102.5	102.5	80-120
Calcium	50000	50000	49690	99.4	50360	100.7	80-120
Chromium		100	0.214		102	102	80-120
Cobalt		100	0.035		101	101	80-120
Copper		100	0.174		96.44	96.4	80-120
Iron	50000	50000	50110	100.2	50100	100.2	80-120
Lead		100	0.05		103.6	103.6	80-120
Lithium		100	0.301		98.46	98.5	80-120
Magnesium	50000	50000	47760	95.5	47890	95.8	80-120
Molybdenum	1000	1100	1018	101.8	1147	104.3	80-120
Nickel		100	0.058		97.81	97.8	80-120
Phosphorus	50000	55000	51010	102	54960	99.9	80-120
Potassium	50000	50000	49550	99.1	49720	99.4	80-120
Selenium		100	0.128		105	105	80-120
Silver		50	0.001		47.66	95.3	80-120
Sodium	50000	50000	48430	96.9	49530	99.1	80-120
Strontium		100	0.498		104.5	104.5	80-120
Thallium		100	0.02		105.7	105.7	80-120
Titanium	1000	1100	992.9	99.3	1100	100	80-120
Vanadium		100	-0.061		103	103	80-120
Zinc		100	-0.17		103.7	103.7	80-120

FORM IV INORGANIC-2
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40ICM2 Solution A Run Date: 12/13/2019 00:28

ICS Source: 242124,242125 Solution AB Run Date: 12/13/2019 00:36

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	50000	50000	48020	96	48420	96.8	80-120
Antimony		100	0.093		105.6	105.6	80-120
Arsenic		100	0.081		103.9	103.9	80-120
Barium		100	0.123		101	101	80-120
Beryllium		100	-0.008		92.48	92.5	80-120
Boron		100	0.361		93.29	93.3	80-120
Cadmium		100	-0.009		104.3	104.3	80-120
Calcium	50000	50000	50090	100.2	49730	99.5	80-120
Chromium		100	0.191		101.2	101.2	80-120
Cobalt		100	0.029		99.94	99.9	80-120
Copper		100	0.186		96.4	96.4	80-120
Iron	50000	50000	50730	101.5	50160	100.3	80-120
Lead		100	0.036		103.1	103.1	80-120
Lithium		100	0.266		94.45	94.5	80-120
Magnesium	50000	50000	47910	95.8	48300	96.6	80-120
Molybdenum	1000	1100	1032	103.2	1144	104	80-120
Nickel		100	0.036		97.59	97.6	80-120
Phosphorus	50000	55000	51200	102.4	55130	100.2	80-120
Potassium	50000	50000	50380	100.8	49970	99.9	80-120
Selenium		100	0.06		105.3	105.3	80-120
Silver		50	-0.002		47.94	95.9	80-120
Sodium	50000	50000	49580	99.2	49520	99	80-120
Strontium		100	0.514		103.4	103.4	80-120
Thallium		100	-0.004		104.5	104.5	80-120
Titanium	1000	1100	992.6	99.3	1100	100	80-120
Vanadium		100	-0.15		102	102	80-120
Zinc		100	-0.254		104.3	104.3	80-120

SAMPLE NO.

1991168MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue Basis: Wet Parent Sample ID: JSF-FH-CC-HRD-F-20190619

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	5.5	<0.021	5.0	111
Arsenic	mg/kg	75-125	5.2	0.083J	5.0	102
Barium	mg/kg	75-125	5.1	<0.031	5.0	102
Beryllium	mg/kg	75-125	4.7	<0.033	5.0	94
Boron	mg/kg	75-125	9.4	<0.70	10.0	93
Cadmium	mg/kg	75-125	5.4	0.039J	5.0	107
Calcium	mg/kg	75-125	334	96.3	250	95
Chromium	mg/kg	75-125	5.0	<0.088	5.0	99
Cobalt	mg/kg	75-125	5.0	<0.019	5.0	99
Copper	mg/kg	75-125	5.2	0.72J	5.0	90
Lead	mg/kg	75-125	5.1	<0.030	5.0	102
Lithium	mg/kg	75-125	4.7	<0.021	5.0	94
Molybdenum	mg/kg	75-125	4.8	<0.036	5.0	95
Nickel	mg/kg	75-125	5.0	0.39	5.0	93
Selenium	mg/kg	75-125	5.7	0.17	5.0	111
Silver	mg/kg	75-125	2.7	<0.011	2.5	109
Strontium	mg/kg	75-125	5.2	<0.16	5.0	101
Thallium	mg/kg	75-125	5.1	<0.013	5.0	102
Vanadium	mg/kg	75-125	5.1	<0.033	5.0	101
Zinc	mg/kg	75-125	25.6	6.3	20.0	97

SAMPLE NO.

1991169MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue Basis: Wet Parent Sample ID: JSF-FH-CC-HRD-F-20190619

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Antimony	mg/kg	75-125	5.4	<0.021	5.0	108
Arsenic	mg/kg	75-125	5.1	0.083J	5.0	100
Barium	mg/kg	75-125	5.1	<0.031	5.0	102
Beryllium	mg/kg	75-125	4.8	<0.033	5.0	95
Boron	mg/kg	75-125	9.7	<0.70	10.0	96
Cadmium	mg/kg	75-125	5.3	0.039J	5.0	106
Calcium	mg/kg	75-125	559	96.3	250	185*
Chromium	mg/kg	75-125	5.0	<0.088	5.0	99
Cobalt	mg/kg	75-125	5.0	<0.019	5.0	100
Copper	mg/kg	75-125	5.4	0.72J	5.0	93
Lead	mg/kg	75-125	5.1	<0.030	5.0	103
Lithium	mg/kg	75-125	4.8	<0.021	5.0	97
Molybdenum	mg/kg	75-125	4.8	<0.036	5.0	96
Nickel	mg/kg	75-125	5.2	0.39	5.0	97
Selenium	mg/kg	75-125	5.5	0.17	5.0	107
Silver	mg/kg	75-125	2.7	<0.011	2.5	109
Strontium	mg/kg	75-125	5.3	<0.16	5.0	104
Thallium	mg/kg	75-125	5.1	<0.013	5.0	102
Vanadium	mg/kg	75-125	5.1	<0.033	5.0	102
Zinc	mg/kg	75-125	25.9	6.3	20.0	98

* Spike Recovery outside QC Limits

SAMPLE NO.

1991972PDS

FORM V INORGANIC-1

POST-DIGESTION SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Matrix: Tissue Parent Sample ID: JSF-FH-CC-HRD-F-20190619

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Antimony	ug/L	80-120	1	55.8	1	0.21U	50	111.7
Arsenic	ug/L	80-120	1	51.6	1	0.83J	50	101.6
Barium	ug/L	80-120	1	51.3	1	0.31U	50	102.6
Beryllium	ug/L	80-120	1	48.2	1	0.33U	50	96.3
Boron	ug/L	80-120	1	91.4	1	7.0U	100	91.4
Cadmium	ug/L	80-120	1	54.3	1	0.39J	50	107.8
Calcium	ug/L	80-120	1	3600	1	964	2500	105.3
Chromium	ug/L	80-120	1	49.9	1	0.88U	50	99.8
Cobalt	ug/L	80-120	1	49.0	1	0.19U	50	98.0
Copper	ug/L	80-120	1	51.4	1	7.2J	50	88.4
Lead	ug/L	80-120	1	49.8	1	0.30U	50	99.6
Lithium	ug/L	80-120	1	46.6	1	0.21U	50	93.1
Molybdenum	ug/L	80-120	1	46.7	1	0.36U	50	93.4
Nickel	ug/L	80-120	1	52.6	1	3.9	50	97.5
Selenium	ug/L	80-120	1	55.4	1	1.7	50	107.4
Silver	ug/L	80-120	1	25.5	1	0.11U	25	102.0
Strontium	ug/L	80-120	1	51.4	1	1.6U	50	102.9
Thallium	ug/L	80-120	1	49.4	1	0.13U	50	98.8
Vanadium	ug/L	80-120	1	50.4	1	0.33U	50	100.9
Zinc	ug/L	80-120	1	255	1	62.8	200	96.2

SAMPLE NO.

1991169MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue Concentration Units: mg/kg

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Antimony	20	5.5	5.4	3
Arsenic	20	5.2	5.1	1
Barium	20	5.1	5.1	0
Beryllium	20	4.7	4.8	2
Boron	20	9.4	9.7	3
Cadmium	20	5.4	5.3	1
Calcium	20	334	559	50*
Chromium	20	5.0	5.0	0
Cobalt	20	5.0	5.0	0
Copper	20	5.2	5.4	2
Lead	20	5.1	5.1	1
Lithium	20	4.7	4.8	3
Molybdenum	20	4.8	4.8	0
Nickel	20	5.0	5.2	4
Selenium	20	5.7	5.5	4
Silver	20	2.7	2.7	1
Strontium	20	5.2	5.3	2
Thallium	20	5.1	5.1	1
Vanadium	20	5.1	5.1	1
Zinc	20	25.6	25.9	1

* RPD outside QC Limits

SAMPLE NO.

1991166LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	5.0	5.4	108	80	120
Arsenic	mg/kg	5.0	4.9	99	80	120
Barium	mg/kg	5.0	4.9	99	80	120
Beryllium	mg/kg	5.0	4.6	92	80	120
Boron	mg/kg	10.0	9.6	96	80	120
Cadmium	mg/kg	5.0	5.3	105	80	120
Calcium	mg/kg	250	240	96	80	120
Chromium	mg/kg	5.0	4.7	94	80	120
Cobalt	mg/kg	5.0	4.8	97	80	120
Copper	mg/kg	5.0	4.7	93	80	120
Lead	mg/kg	5.0	5.0	99	80	120
Lithium	mg/kg	5.0	4.6	91	80	120
Molybdenum	mg/kg	5.0	4.8	96	80	120
Nickel	mg/kg	5.0	4.8	96	80	120
Selenium	mg/kg	5.0	5.3	106	80	120
Silver	mg/kg	2.5	2.7	107	80	120
Strontium	mg/kg	5.0	5.0	100	80	120
Thallium	mg/kg	5.0	5.0	99	80	120
Vanadium	mg/kg	5.0	5.0	101	80	120
Zinc	mg/kg	20.0	18.2	91	80	120

SAMPLE NO.

1991167SRM

FORM VII INORGANIC-2
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue

Analyte	Units	True	Found	%R	Limits	
Arsenic	mg/kg	59.5	68.5	115	80	126
Cadmium	mg/kg	42.3	41.2	97	80	120
Chromium	mg/kg	2.0	1.2	62	13	93
Cobalt	mg/kg	1.1	0.99	93	80	120
Copper	mg/kg	497	418	84	77	120
Lead	mg/kg	0.22	0.21	93	79	120
Molybdenum	mg/kg	3.4	3.0	88	80	120
Nickel	mg/kg	5.3	4.4	83	76	120
Selenium	mg/kg	10.9	11.9	109	80	130
Strontium	mg/kg	36.5	31.0	85	79	120
Vanadium	mg/kg	9.1	8.8	96	80	120
Zinc	mg/kg	136	134	98	80	120

SAMPLE NO.

1991973SD

FORM VIII INORGANIC-1
SERIAL DILUTIONS

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Matrix: Tissue Parent Sample ID: JSF-FH-CC-HRU-F-20190430

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Antimony	ug/L	0.21U	1.0U		10
Arsenic	ug/L	0.49J	1.5U		10
Barium	ug/L	0.31U	1.5U		10
Beryllium	ug/L	0.33U	1.7U		10
Boron	ug/L	7.0U	34.9U		10
Cadmium	ug/L	0.11U	0.55U		10
Calcium	ug/L	759J	1270U		10
Chromium	ug/L	0.88U	4.4U		10
Cobalt	ug/L	0.42J	0.95U		10
Copper	ug/L	2.8U	14.2U		10
Lead	ug/L	0.30U	1.5U		10
Lithium	ug/L	0.21U	1.1U		10
Molybdenum	ug/L	0.36U	1.8U		10
Nickel	ug/L	0.41U	2.1U		10
Selenium	ug/L	1.8	2.5U		10
Silver	ug/L	0.11U	0.56U		10
Strontium	ug/L	1.6U	8.0U		10
Thallium	ug/L	0.13U	0.65U		10
Vanadium	ug/L	0.33U	1.7U		10
Zinc	ug/L	51.4	69.9U		10

* Indicates that the % Difference exceeds the control limit.
No difference is calculated if either result is a non-detect.

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Preparation Method: None Instrument ID: 40ICM2

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Antimony	0.16	0.16	12/14/2011
Arsenic	0.14	0.14	12/14/2011
Barium	0.38	0.38	12/14/2011
Beryllium	0.22	0.22	12/14/2011
Boron	1.7	1.7	12/14/2011
Cadmium	0.10	0.10	12/14/2011
Calcium	500	500	12/14/2011
Chromium	1.4	1.4	12/14/2011
Cobalt	0.10	0.10	12/14/2011
Copper	0.64	0.64	12/14/2011
Lead	0.29	0.29	12/14/2011
Lithium	1.0	1.0	12/14/2011
Molybdenum	0.13	0.13	12/14/2011
Nickel	0.65	0.65	12/14/2011
Selenium	0.81	0.81	12/14/2011
Silver	0.014	0.014	12/14/2011
Strontium	0.24	0.24	12/14/2011
Thallium	0.11	0.11	12/14/2011
Vanadium	0.40	0.40	12/14/2011
Zinc	18.9	18.9	12/14/2011

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Preparation Method: EPA 3050B Instrument ID: 40ICM2

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Antimony	0.10	0.021	07/08/2019
Arsenic	0.10	0.030	07/08/2019
Barium	0.10	0.031	07/08/2019
Beryllium	0.11	0.033	07/08/2019
Boron	2.3	0.70	07/08/2019
Cadmium	0.10	0.011	07/08/2019
Calcium	84.7	25.4	07/08/2019
Chromium	0.29	0.088	07/08/2019
Cobalt	0.10	0.019	07/08/2019
Copper	0.95	0.28	07/08/2019
Lead	0.10	0.030	07/08/2019
Lithium	0.10	0.021	07/08/2019
Molybdenum	0.12	0.036	07/08/2019
Nickel	0.14	0.041	07/08/2019
Selenium	0.17	0.051	07/08/2019
Silver	0.050	0.011	07/08/2019
Strontium	0.54	0.16	07/08/2019
Thallium	0.10	0.013	07/08/2019
Vanadium	0.11	0.033	07/08/2019
Zinc	4.7	1.4	07/08/2019

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract : 0779777 JOHN SEVIER

Instrument ID: 40ICM2 Effective Date:02/06/2017

Analyte	Concentration (ug/L)
Antimony	5000
Arsenic	10000
Barium	10000
Beryllium	5000
Boron	5000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Lead	10000
Lithium	10000
Molybdenum	10000
Nickel	10000
Selenium	10000
Silver	2500
Strontium	10000
Thallium	10000
Vanadium	10000
Zinc	20000

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Preparation Method: EPA 3050B Batch: MPRP 21824

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
1991164	1991164BLANK	12/10/2019	0.5	50
1991165	1991165SBLK	12/10/2019	0.5	50
1991166	1991166LCS	12/10/2019	0.5	50
1991167	1991167SRM	12/10/2019	0.5	50
1991168	1991168MS	12/10/2019	0.5001	50
1991169	1991169MSD	12/10/2019	0.5003	50
40197844001	JSF-FH-CC-HRD-F-20190619	12/10/2019	0.501	50
40197844002	JSF-FH-CC-HRU-F-20190430	12/10/2019	0.5062	50
40197844003	JSF-FH-CC-F-DUP01-	12/10/2019	0.5141	50
40197844004	JSF-FH-CC-F-DUP02-	12/10/2019	0.525	50
40197844005	JSF-FH-CC-HRA1-O-	12/10/2019	0.5005	50
40197844006	JSF-FH-CC-O-DUP02-	12/10/2019	0.5281	50
40197844007	JSF-FH-CC-HRA1-L-	12/10/2019	0.5291	50
40197844008	JSF-FH-CC-HRA2-L-	12/10/2019	0.5274	50
40197844009	JSF-FH-CC-HRD-L-20190619	12/10/2019	0.508	50
40197844010	JSF-FH-CC-HRU-L-20190430	12/10/2019	0.5151	50
40197844011	JSF-FH-CC-L-DUP01-	12/10/2019	0.5371	50
40197844012	JSF-FH-CC-L-DUP02-	12/10/2019	0.5332	50
40197844013	JSF-FH-SB-HRA1-F-20190409	12/10/2019	0.5072	50
40197844014	JSF-FH-LB-HRA2-F-20190409	12/10/2019	0.52	50
40197844015	JSF-FH-LB-HRD-F-20190410	12/10/2019	0.5028	50
40197844016	JSF-FH-LB-HRU-F-20190409	12/10/2019	0.5146	50
40197844017	JSF-FH-LB-F-DUP01-	12/10/2019	0.5179	50
40197844018	JSF-FH-LB-F-DUP02-	12/10/2019	0.5127	50
40197844019	JSF-FH-SB-HRA1-O-	12/10/2019	0.5044	50
40197844020	JSF-FH-LB-HRA2-O-	12/10/2019	0.5402	50
40197844021	RINSE BLANK-A 11-19-19	12/10/2019	0.5013	50

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40ICM2 Analysis Method: EPA 6020

Start Date: 12/12/2019 18:13 End Date: 12/13/2019 00:50

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Li	Mo	Ni	Pb	Sb	Se
13139288CAL0	13139288CAL0	1	12/12/2019	18:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139289CAL1	13139289CAL1	1	12/12/2019	18:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139290CAL2	13139290CAL2	1	12/12/2019	18:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139291CAL3	13139291CAL3	1	12/12/2019	18:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139292CAL4	13139292CAL4	1	12/12/2019	18:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139293CAL5	13139293CAL5	1	12/12/2019	18:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139294ICV	13139294ICV	1	12/12/2019	18:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139295ICB	13139295ICB	1	12/12/2019	19:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139296CRDL	13139296CRDL	1	12/12/2019	19:10	X	X		X	X		X	X	X		X	X	X	X	X	X
13139297CRDL	13139297CRDL	1	12/12/2019	19:18			X			X				X						
13139298ICSA	13139298ICSA	1	12/12/2019	19:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139299ICSAB	13139299ICSAB	1	12/12/2019	19:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139300CCV	13139300CCV	1	12/12/2019	19:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139301CCB	13139301CCB	1	12/12/2019	19:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1991164BLANK	1991164	1	12/12/2019	19:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RINSE BLANK-A 11-19-19	40197844021	1	12/12/2019	20:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1991165SBLK	1991165	1	12/12/2019	20:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1991166LCS	1991166	1	12/12/2019	20:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1991167SRM	1991167	1	12/12/2019	20:30		X					X	X	X	X		X	X	X		X
JSF-FH-CC-HRD-F-20190619	40197844001	1	12/12/2019	20:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1991168MS	1991168	1	12/12/2019	20:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1991169MSD	1991169	1	12/12/2019	20:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1991972PDS	1991972	1	12/12/2019	20:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139302CCV	13139302CCV	1	12/12/2019	21:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139303CCB	13139303CCB	1	12/12/2019	21:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-HRU-F-20190430	40197844002	1	12/12/2019	21:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1991973SD	1991973	5	12/12/2019	21:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-F-DUP01-	40197844003	1	12/12/2019	21:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-F-DUP02-	40197844004	1	12/12/2019	21:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-HRA1-O-	40197844005	1	12/12/2019	21:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-O-DUP02-	40197844006	1	12/12/2019	21:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-HRA1-L-	40197844007	1	12/12/2019	22:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-HRA2-L-	40197844008	1	12/12/2019	22:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-HRD-L-20190619	40197844009	1	12/12/2019	22:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-HRU-L-20190430	40197844010	1	12/12/2019	22:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139304CCV	13139304CCV	1	12/12/2019	22:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139305CCB	13139305CCB	1	12/12/2019	22:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-L-DUP01-	40197844011	1	12/12/2019	22:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-L-DUP02-	40197844012	1	12/12/2019	22:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-SB-HRA1-F-	40197844013	1	12/12/2019	23:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-LB-HRA2-F-20190409	40197844014	1	12/12/2019	23:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-LB-HRD-F-20190410	40197844015	1	12/12/2019	23:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-LB-HRU-F-20190409	40197844016	1	12/12/2019	23:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-LB-F-DUP01-	40197844017	1	12/12/2019	23:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-LB-F-DUP02-	40197844018	1	12/12/2019	23:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

FORM XIII INORGANIC-2
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40ICM2 Analysis Method: EPA 6020

Start Date: 12/12/2019 18:13 End Date: 12/13/2019 00:50

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Li	Mo	Ni	Pb	Sb	Se
JSF-FH-SB-HRA1-O-	40197844019	1	12/12/2019	23:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-LB-HRA2-O-	40197844020	1	12/12/2019	23:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139306CCV	13139306CCV	1	12/12/2019	23:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139307CCB	13139307CCB	1	12/13/2019	00:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139308CRDL	13139308CRDL	1	12/13/2019	00:14	X	X		X	X		X	X	X		X	X	X	X	X	X
13139309CRDL	13139309CRDL	1	12/13/2019	00:21			X			X				X						
13139310ICSA	13139310ICSA	1	12/13/2019	00:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139311ICSAB	13139311ICSAB	1	12/13/2019	00:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139312CCV	13139312CCV	1	12/13/2019	00:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13139313CCB	13139313CCB	1	12/13/2019	00:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40ICM2 Analysis Method: EPA 6020

Start Date: 12/12/2019 18:13 End Date: 12/13/2019 00:50

Sample Name	Lab Sample ID	D/F	Date	Time	Sr	Tl	V	Zn
13139288CAL0	13139288CAL0	1	12/12/2019	18:13	X	X	X	X
13139289CAL1	13139289CAL1	1	12/12/2019	18:20	X	X	X	X
13139290CAL2	13139290CAL2	1	12/12/2019	18:27	X	X	X	X
13139291CAL3	13139291CAL3	1	12/12/2019	18:34	X	X	X	X
13139292CAL4	13139292CAL4	1	12/12/2019	18:42	X	X	X	X
13139293CAL5	13139293CAL5	1	12/12/2019	18:49	X	X	X	X
13139294ICV	13139294ICV	1	12/12/2019	18:56	X	X	X	X
13139295ICB	13139295ICB	1	12/12/2019	19:03	X	X	X	X
13139296CRDL	13139296CRDL	1	12/12/2019	19:10	X	X	X	
13139297CRDL	13139297CRDL	1	12/12/2019	19:18				X
13139298ICSA	13139298ICSA	1	12/12/2019	19:25	X	X	X	X
13139299ICSAB	13139299ICSAB	1	12/12/2019	19:32	X	X	X	X
13139300CCV	13139300CCV	1	12/12/2019	19:39	X	X	X	X
13139301CCB	13139301CCB	1	12/12/2019	19:47	X	X	X	X
1991164BLANK	1991164	1	12/12/2019	19:54	X	X	X	X
RINSE BLANK-A 11-19-19	40197844021	1	12/12/2019	20:01	X	X	X	X
1991165SBLK	1991165	1	12/12/2019	20:08	X	X	X	X
1991166LCS	1991166	1	12/12/2019	20:15	X	X	X	X
1991167SRM	1991167	1	12/12/2019	20:30	X		X	X
JSF-FH-CC-HRD-F-20190619	40197844001	1	12/12/2019	20:37	X	X	X	X
1991168MS	1991168	1	12/12/2019	20:44	X	X	X	X
1991169MSD	1991169	1	12/12/2019	20:52	X	X	X	X
1991972PDS	1991972	1	12/12/2019	20:59	X	X	X	X
13139302CCV	13139302CCV	1	12/12/2019	21:06	X	X	X	X
13139303CCB	13139303CCB	1	12/12/2019	21:13	X	X	X	X
JSF-FH-CC-HRU-F-20190430	40197844002	1	12/12/2019	21:20	X	X	X	X
1991973SD	1991973	5	12/12/2019	21:28	X	X	X	X
JSF-FH-CC-F-DUP01-	40197844003	1	12/12/2019	21:35	X	X	X	X
JSF-FH-CC-F-DUP02-	40197844004	1	12/12/2019	21:42	X	X	X	X
JSF-FH-CC-HRA1-O-	40197844005	1	12/12/2019	21:49	X	X	X	X
JSF-FH-CC-O-DUP02-	40197844006	1	12/12/2019	21:57	X	X	X	X
JSF-FH-CC-HRA1-L-	40197844007	1	12/12/2019	22:04	X	X	X	X
JSF-FH-CC-HRA2-L-	40197844008	1	12/12/2019	22:11	X	X	X	X
JSF-FH-CC-HRD-L-20190619	40197844009	1	12/12/2019	22:18	X	X	X	X
JSF-FH-CC-HRU-L-20190430	40197844010	1	12/12/2019	22:25	X	X	X	X
13139304CCV	13139304CCV	1	12/12/2019	22:33	X	X	X	X
13139305CCB	13139305CCB	1	12/12/2019	22:40	X	X	X	X
JSF-FH-CC-L-DUP01-	40197844011	1	12/12/2019	22:47	X	X	X	X
JSF-FH-CC-L-DUP02-	40197844012	1	12/12/2019	22:54	X	X	X	X
JSF-FH-SB-HRA1-F-	40197844013	1	12/12/2019	23:02	X	X	X	X
JSF-FH-LB-HRA2-F-20190409	40197844014	1	12/12/2019	23:09	X	X	X	X
JSF-FH-LB-HRD-F-20190410	40197844015	1	12/12/2019	23:16	X	X	X	X
JSF-FH-LB-HRU-F-20190409	40197844016	1	12/12/2019	23:23	X	X	X	X
JSF-FH-LB-F-DUP01-	40197844017	1	12/12/2019	23:31	X	X	X	X
JSF-FH-LB-F-DUP02-	40197844018	1	12/12/2019	23:38	X	X	X	X

FORM XIII INORGANIC-2
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40ICM2 Analysis Method: EPA 6020

Start Date: 12/12/2019 18:13 End Date: 12/13/2019 00:50

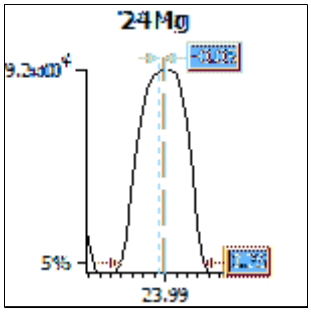
Sample Name	Lab Sample ID	D/F	Date	Time	Sr	Tl	V	Zn
JSF-FH-SB-HRA1-O-	40197844019	1	12/12/2019	23:45	X	X	X	X
JSF-FH-LB-HRA2-O-	40197844020	1	12/12/2019	23:52	X	X	X	X
13139306CCV	13139306CCV	1	12/12/2019	23:59	X	X	X	X
13139307CCB	13139307CCB	1	12/13/2019	00:07	X	X	X	X
13139308CRDL	13139308CRDL	1	12/13/2019	00:14	X	X	X	
13139309CRDL	13139309CRDL	1	12/13/2019	00:21				X
13139310ICSA	13139310ICSA	1	12/13/2019	00:28	X	X	X	X
13139311ICSAB	13139311ICSAB	1	12/13/2019	00:36	X	X	X	X
13139312CCV	13139312CCV	1	12/13/2019	00:43	X	X	X	X
13139313CCB	13139313CCB	1	12/13/2019	00:50	X	X	X	X

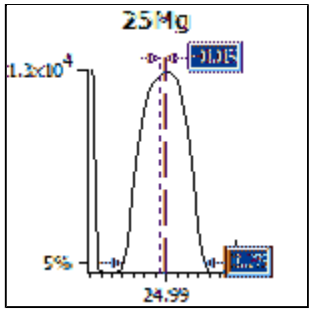
Performance Report

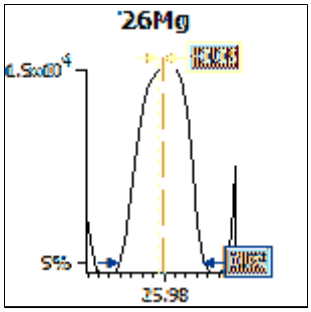
Sample details
Acquired at : 12/12/2018 1:33:15 PM
Report name : EPA 40ICM2 SN 01301C [2/27/2013 1:40:34 PM]

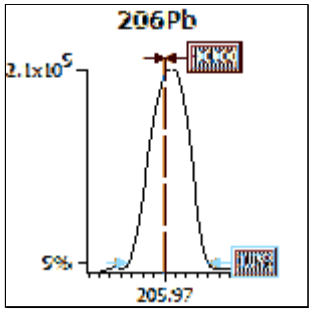
Mass Calibration verification

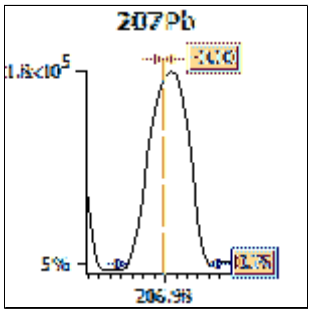
Acquisition parameters
Sweeps : 10
Dwell : 10.0 mSecs
Point spacing : 0.05 amu
Peak width measured at 5% of the peak maximum

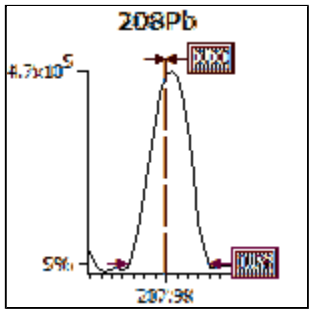












Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
24Mg	0.85	0.65	0.10	0.76	-0.05
25Mg	0.85	0.65	0.10	0.76	-0.05
26Mg	0.85	0.65	0.10	0.76	-0.05
206Pb	0.85	0.65	0.10	0.76	-0.00
207Pb	0.85	0.65	0.10	0.76	-0.00
208Pb	0.85	0.65	0.10	0.76	0.00

Sample details
Acquired at : 12/12/2018 1:33:15 PM
Report name : EPA 40ICM2 SN 01301C [2/27/2013 1:40:34 PM]

Tune conditions

Major	
Extraction	-141.2
Lens 1	-1263
Lens 2	-80.0
Focus	14.7
D1	-46.3
D2	-151
Pole Bias	0.1
Hexapole Bias	-3.5
Nebuliser	0.81

Minor	
Lens 3	-194.5
Forward power	1404
Horizontal	97
Vertical	465
DA	-31.4
Cool	13.0
Auxiliary	0.70
Sampling Depth	145

Global	
Standard resolution	147
High resolution	80
Analogue Detector	2500
PC Detector	4530

Add. Gases	
CCT-He	0.00
CCT-He	0.00

Sensitivity and stability results

Acquisition parameters
Sweeps : 35

Run	Time	5Bkg	7Li	24Mg	25Mg	26Mg	59Co	137Ba++	115In	137Ba
Dwell (mSecs)		500.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Limits	%RSD	-	2.0%	2.0%	2.0%	2.0%	2.0%	-	2.0%	-
	Countrate	<1	>60000	>10000	>10000	>10000	>150000	-	>400000	-
1	1:33:38 PM	0.057	65172.964	92465.809	12642.927	15004.764	166269.80	800.046	475787.64	55823.473
2	1:34:23 PM	0.000	65126.820	91513.316	12514.122	14520.880	164619.75	825.763	472420.44	55924.279
3	1:35:08 PM	0.057	64501.020	91863.610	12262.245	14603.911	164599.27	874.341	472215.77	55595.944
4	1:35:54 PM	0.057	64521.206	92361.579	12522.709	14727.028	162586.98	805.761	474669.14	55512.423
5	1:36:40 PM	0.171	63909.878	91776.759	12445.428	14346.232	162955.47	731.467	472924.50	54841.408
x		0.069	64646.378	91996.215	12477.486	14640.563	164206.25	807.476	473603.50	55539.505
σ		0.06	521.38	404.03	139.74	246.18	1480.72	51.58	1556.64	424.25
%RSD		91.287	0.807	0.439	1.120	1.681	0.902	6.387	0.329	0.764

Run	Time	138Ba	140Ce	156Ce O	206Pb	207Pb	208Pb	220Bkg	238U
Dwell (mSecs)		10.0	10.0	10.0	10.0	10.0	10.0	500.0	10.0
Limits	%RSD	-	-	-	2.0%	2.0%	2.0%	-	2.0%
	Countrate	-	-	-	>10000	>10000	>10000	<1	>800000
1	1:33:38 PM	369642.74	448011.25	9263.317	215029.79	180835.68	453855.92	0.000	997585.34
2	1:34:23 PM	363006.02	447253.23	8359.314	211280.16	179185.14	448763.27	0.114	987744.90
3	1:35:08 PM	361384.66	444051.53	8559.558	211533.41	178628.21	454910.23	0.057	986440.37
4	1:35:54 PM	364323.85	445515.25	7878.753	214387.53	179012.19	456805.94	0.114	995635.90
5	1:36:40 PM	364681.93	439443.23	8070.401	212481.71	179495.87	450191.40	0.000	991613.92
x		364607.84	444854.90	8426.268	212942.52	179431.42	452905.35	0.057	991804.09
σ		3098.03	3394.19	536.03	1688.65	845.23	3341.41	0.06	4831.88
%RSD		0.850	0.763	6.361	0.793	0.471	0.738	100.000	0.487

Ratio results

Run	Time	137Ba++/137Ba	156Ce O/140Ce
Ratio limits		<0.0300	<0.0200
1	1:33:38 PM	0.014	0.021
2	1:34:23 PM	0.015	0.019
3	1:35:08 PM	0.016	0.019
4	1:35:54 PM	0.015	0.018
5	1:36:40 PM	0.013	0.018
x		0.0145	0.0189
σ		0.00	0.00
%RSD		5.9064	5.9607

Result : The performance report passed.

Performance Report

Sample details
Acquired at : 12/12/2018 1:44:45 PM
Report name : Xt CCT 40ICM2 SN 01301C [2/27/2013 1:40:34 PM]

Tune conditions

Major	
Extraction	-141.2
Lens 1	-1263
Lens 2	-80.0
Focus	11.8
D1	-45.5
D2	-143
Pole Bias	-9.0
Hexapole Bias	-4.0
Nebuliser	0.81

Minor	
Lens 3	-195.3
Forward power	1404
Horizontal	97
Vertical	465
DA	-31.4
Cool	13.0
Auxiliary	0.70
Sampling Depth	145

Global	
Standard resolution	147
High resolution	80
Analogue Detector	2500
PC Detector	4530

Add. Gases	
CCT-He	0.00
CCT-He	0.31

Sensitivity and stability results

Acquisition parameters
Sweeps : 45

Run	Time	7Li	9Be	11B
Dwell (mSecs)		10.0	10.0	10.0
Limits	%RSD	2.0%	2.0%	2.0%
	Countrate	>10000	>2000	>2000
1	1:44:45 PM	18054.550	5250.873	7495.154
2	1:44:48 PM	18350.881	5295.351	7390.597
3	1:44:51 PM	18502.393	5199.724	7201.510
4	1:44:54 PM	18673.963	5148.575	7481.806
5	1:44:57 PM	18647.224	5092.978	7225.980
x		18445.802	5197.500	7359.009
σ		253.93	80.23	138.85
%RSD		1.377	1.544	1.887

Result : The performance report passed.

Performance Report

Sample details
Acquired at : 12/12/2018 1:54:40 PM
Report name : Xt CCT-KED 40ICM2 SN01301C [2/27/2013 1:40:34 PM]

Tune conditions

Major	
Extraction	-141.2
Lens 1	-1263
Lens 2	-80.0
Focus	-7.3
D1	-58.8
D2	-143
Pole Bias	-17.0
Hexapole Bias	-20.0
Nebuliser	0.81

Minor	
Lens 3	-195.3
Forward power	1404
Horizontal	97
Vertical	465
DA	-31.4
Cool	13.0
Auxiliary	0.70
Sampling Depth	145

Global	
Standard resolution	147
High resolution	80
Analogue Detector	2500
PC Detector	4530

Add. Gases	
CCT-He	0.00
CCT-He	3.80

Sensitivity and stability results

Acquisition parameters
Sweeps : 35

Run	Time	78Se	115In	140Ce	156Ce O
Dwell (mSecs)		100.0	10.0	10.0	50.0
Limits	%RSD	-	2.0%	-	-
	Countrate	<20	>100000	-	-
1	1:54:41 PM	5.714	209969.87	290911.16	3237.326
2	1:54:49 PM	4.000	212614.25	292954.42	3207.026
3	1:54:57 PM	8.286	209495.87	294330.82	3370.532
4	1:55:05 PM	5.143	209492.93	292284.19	3356.811
5	1:55:13 PM	6.857	211960.42	291783.79	3305.930
x		6.000	210706.67	292452.88	3295.525
σ		1.64	1474.18	1287.56	71.95
%RSD		27.355	0.700	0.440	2.183

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0200
1	1:54:41 PM	0.011
2	1:54:49 PM	0.011
3	1:54:57 PM	0.011
4	1:55:05 PM	0.011
5	1:55:13 PM	0.011
x		0.0113
σ		0.00
%RSD		2.0186

Result : The performance report passed.

FORM XV INORGANIC-1

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40ICM2 Start Date: 12/12/2019 18:13 End Date: 12/13/2019 00:50

Sample Name	Time	Bi-209	Ge-72	In-115	Sc-45-CCT	Sc-45-KED	Tb-159	Y-89
13139288CAL0	18:13	100.0	100.0	100.0	100.0	100.0	100.0	100.0
13139289CAL1	18:20	99.7	102.9	102.0	101.8	100.2	100.4	99.5
13139290CAL2	18:27	100.0	102.5	101.6	101.5	100.6	100.3	100.0
13139291CAL3	18:34	99.8	101.2	101.2	101.1	100.1	99.1	98.6
13139292CAL4	18:42	98.3	96.1	98.6	100.3	97.4	97.7	95.4
13139293CAL5	18:49	98.4	89.6	97.5	99.1	97.0	95.7	94.6
13139294ICV	18:56	98.9	96.2	97.1	93.6	93.3	95.3	93.5
13139295ICB	19:03	95.1	89.5	91.1	88.3	87.7	93.5	90.2
13139296CRDL	19:10	96.8	94.9	96.4	91.7	92.7	96.6	93.9
13139297CRDL	19:18	99.5	99.7	99.6	96.3	96.9	99.4	97.4
13139298ICSA	19:25	82.6	73.3	81.6	84.6	76.5	82.9	77.8
13139299ICSAB	19:32	83.7	71.6	82.1	77.7	75.7	84.5	76.5
13139300CCV	19:39	99.4	96.4	98.8	91.2	96.5	97.7	95.7
13139301CCB	19:47	97.7	98.3	97.4	96.5	95.5	98.5	96.0
1991164BLANK	19:54	99.2	98.2	97.9	90.0	93.0	97.5	94.6
RINSE BLANK-A 11-19-	20:01	99.6	100.9	101.5	99.4	99.6	100.7	99.0
1991165SBLK	20:08	105.5	113.4	107.4	103.2	108.5	105.5	106.4
1991166LCS	20:15	100.0	104.3	103.3	111.8	104.1	104.0	102.6
1991167SRM	20:30	89.0	87.2	88.9	86.8	83.2	92.4	95.6
JSF-FH-CC-HRD-F-	20:37	104.2	104.2	103.0	98.2	98.9	102.0	100.6
1991168MS	20:44	101.5	101.9	102.5	103.7	99.8	103.4	100.8
1991169MSD	20:52	97.9	94.3	98.3	97.7	95.4	100.1	96.7
1991972PDS	20:59	99.2	101.0	97.6	99.4	95.0	97.3	96.6
13139302CCV	21:06	97.2	91.5	95.3	91.3	91.7	96.2	91.6
13139303CCB	21:13	98.5	93.5	95.9	93.3	94.0	99.0	94.3
JSF-FH-CC-HRU-F-	21:20	102.9	107.1	104.2	101.7	104.4	103.5	102.7
1991973SD	21:28	103.1	103.4	100.6	100.9	99.1	100.9	98.8
JSF-FH-CC-F-DUP01-	21:35	104.0	107.0	104.9	104.0	104.6	105.8	103.1
JSF-FH-CC-F-DUP02-	21:42	103.7	108.2	104.3	104.2	103.8	104.6	103.6
JSF-FH-CC-HRA1-O-	21:49	100.0	95.4	96.8	94.6	92.2	100.1	94.7
JSF-FH-CC-O-DUP02-	21:57	99.7	92.9	94.7	89.6	89.6	98.6	92.0
JSF-FH-CC-HRA1-L-	22:04	99.6	96.6	98.0	94.3	94.1	101.0	95.6
JSF-FH-CC-HRA2-L-	22:11	101.1	103.9	102.8	98.1	100.5	102.5	101.5
JSF-FH-CC-HRD-L-	22:18	102.3	104.1	103.1	101.4	101.5	104.1	101.5
JSF-FH-CC-HRU-L-	22:25	104.4	107.1	105.1	104.8	104.1	106.4	103.1
13139304CCV	22:33	103.2	104.6	104.5	108.5	104.0	103.8	102.5
13139305CCB	22:40	102.0	103.7	101.8	104.5	101.6	103.8	101.7
JSF-FH-CC-L-DUP01-	22:47	105.9	114.8	108.5	111.6	110.3	106.6	108.6
JSF-FH-CC-L-DUP02-	22:54	103.5	114.8	108.4	113.3	111.0	107.6	108.1
JSF-FH-SB-HRA1-F-	23:02	104.3	111.6	108.5	112.2	109.9	108.9	108.4

FORM XV INORGANIC-2

INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40ICM2 Start Date: 12/12/2019 18:13 End Date: 12/13/2019 00:50

Sample Name	Time	Bi-209	Ge-72	In-115	Sc-45-CCT	Sc-45-KED	Tb-159	Y-89
JSF-FH-LB-HRA2-F-	23:09	105.0	112.6	109.4	111.7	110.1	109.8	109.2
JSF-FH-LB-HRD-F-	23:16	104.6	112.9	108.7	109.9	107.9	108.3	107.8
JSF-FH-LB-HRU-F-	23:23	103.1	108.0	105.4	107.5	104.3	106.5	104.0
JSF-FH-LB-F-DUP01-	23:31	103.3	107.0	105.5	106.5	104.4	107.8	104.5
JSF-FH-LB-F-DUP02-	23:38	103.4	107.5	105.4	106.3	104.3	106.9	103.9
JSF-FH-SB-HRA1-O-	23:45	105.7	111.8	107.4	109.4	108.0	108.2	107.4
JSF-FH-LB-HRA2-O-	23:52	104.8	112.6	107.5	108.6	107.1	106.5	106.6
13139306CCV	23:59	102.1	102.7	102.4	105.2	100.8	102.3	99.8
13139307CCB	00:07	100.8	101.3	99.8	100.2	99.6	102.5	99.8
13139308CRDL	00:14	101.2	109.2	105.5	106.6	105.1	104.3	104.8
13139309CRDL	00:21	100.8	108.0	103.1	105.9	103.1	102.6	102.3
13139310ICSA	00:28	83.1	73.7	80.8	82.9	75.8	83.3	76.8
13139311ICSAB	00:36	85.4	75.1	82.2	79.7	76.8	84.5	77.5
13139312CCV	00:43	98.8	97.3	96.2	93.2	93.8	96.1	93.6
13139313CCB	00:50	96.7	98.2	95.7	96.2	95.1	98.3	95.6

Experiment Details

Description	PlasmaLab Template BlankExperiment
Template Filename	C:\Program Files\Thermo Fisher\PlasmaLab\Templates\TVA Project XSII SN 01301 C.tet
Created By User	metals
Analyte Database	Pace.tea
Creation Timestamp	7/10/2008 4:47:18 PM
Last Edited By	ICM2
Last Edit Timestamp	12/13/2019 7:07:57 AM
Instrument Detector	Simultaneous
Database Version	3,51
Acquisition Mode	Unknown

Numerical Results report key (text indicates meaning)

Blue text indicates that cell is a statistic.
Underlining indicates that a data warning flag is set.

Column headings
No flag
Semi Quant
Standard Addition
Multi Element

Result cells
Internal Standard
Excluded
QC Warning
QC Failure
Transient TRA only:
Peak Not Found
Manually Edited
Merged Peak

Data warning flags
I - Invalid calibration
T - Tripped
F - Interference correction failed
M - Result over max
V - Valley integration failed
D - Different method used

Setup

Survey Scan Setup

Sweeps	10
Dwell Time	600
Channels Per Mass	10
Acquisition Duration	13345

Main Run Setup

Main Run	Peak Jumping
Sweeps	45
Dwell Time	10000
Channels Per Mass	1
Acquisition Duration	32128
Channel Spacing	0.02

Survey Scan Regions

Start AMU	End AMU	Channels	Dwell ms	Resolution
4.59	11.50	69	600	
12.50	13.50	10	600	
22.59	28.41	58	600	
30.59	31.41	8	600	
33.59	35.50	19	600	
38.59	39.41	8	600	
42.59	45.50	29	600	
46.50	79.41	329	600	
80.59	245.50	1649	600	

Peak Jump Regions

Analyte	Channels	Dwell ms	Resolution
7Li	1	10000	Standard
9Be	1	10000	Standard
10B	1	10000	Standard
23Na	1	5000	
25Mg	1	10000	Standard
27Al	1	10000	Standard
28Si	1	10000	Standard
31P	1	10000	Standard
34S	1	10000	
35Cl	1	10000	

39K	1	10000	
43Ca	1	10000	Standard
45Sc-KED	1	10000	Standard
45Sc-CCT	1	10000	
47Ti	1	10000	Standard
51V	1	10000	Standard
52Cr	1	10000	Standard
53Cl O	1	10000	Standard
54Fe	1	10000	Standard
55Mn	1	10000	Standard
59Co	1	10000	Standard
60Ni	1	10000	Standard
63Cu	1	10000	Standard
66Zn	1	10000	Standard
72Ge	1	10000	Standard
73Ge	1	10000	Standard
75As	1	50000	Standard
78Se	1	50000	Standard
83Kr	1	50000	Standard
88Sr	1	10000	Standard
89Y	1	10000	Standard
90Zr	1	10000	Standard
95Mo	1	10000	Standard
105Pd	1	10000	Standard
107Ag	1	10000	Standard
111Cd	1	10000	Standard
115In	1	10000	Standard
118Sn	1	10000	Standard
121Sb	1	10000	Standard
137Ba	1	10000	Standard
159Tb	1	10000	Standard
184W	1	10000	Standard
195Pt	1	10000	Standard
201Hg	1	10000	Standard
205Tl	1	10000	Standard
206Pb	1	10000	Standard
207Pb	1	10000	Standard
208Pb	1	10000	Standard
209Bi	1	10000	Standard
238U	1	10000	Standard

Instrument Configuration

Sample/Analyte Settings

Label	Config	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
242471_10399_Cal0	3	7	7	7	8	8	8	8	8	8	8
242472_10399_Cal1	3	7	7	7	8	8	8	8	8	8	8
242473_10399_Cal2	3	7	7	7	8	8	8	8	8	8	8
242474_10399_Cal3	3	7	7	7	8	8	8	8	8	8	8
242475_10399_Cal4	3	7	7	7	8	8	8	8	8	8	8
242476_10399_Cal5	3	7	7	7	8	8	8	8	8	8	8
242162_10399_ICV	3	7	7	7	8	8	8	8	8	8	8
242471_10399_ICBTVA	3	7	7	7	8	8	8	8	8	8	8
242472_10399_CRDL_A1	3	7	7	7	8	8	8	8	8	8	8
242473_10399_CRDL_B1	3	7	7	7	8	8	8	8	8	8	8
242124_10399_ICSA1	3	7	7	7	8	8	8	8	8	8	8
242125_10399_ICSAB1	3	7	7	7	8	8	8	8	8	8	8
242477_10399_CCV1	3	7	7	7	8	8	8	8	8	8	8
242471_10399_CCBTVA1	3	7	7	7	8	8	8	8	8	8	8
1991164_10391	3	7	7	7	8	8	8	8	8	8	8
40197844021_10391	3	7	7	7	8	8	8	8	8	8	8
1991165_10391	3	7	7	7	8	8	8	8	8	8	8
1991166_10391	3	7	7	7	8	8	8	8	8	8	8
1991167_10391x2	3	7	7	7	8	8	8	8	8	8	8
1991167_10391	3	7	7	7	8	8	8	8	8	8	8
40197844001_10391	3	7	7	7	8	8	8	8	8	8	8
1991168_10391	3	7	7	7	8	8	8	8	8	8	8
1991169_10391	3	7	7	7	8	8	8	8	8	8	8
1991972_10391	3	7	7	7	8	8	8	8	8	8	8
242477_10399_CCV2	3	7	7	7	8	8	8	8	8	8	8

242471_10399_CCBTVA2	3	7	7	7	8	8	8	8	8	8	8
40197844002_10391	3	7	7	7	8	8	8	8	8	8	8
1991973_10391x5	3	7	7	7	8	8	8	8	8	8	8
40197844003_10391	3	7	7	7	8	8	8	8	8	8	8
40197844004_10391	3	7	7	7	8	8	8	8	8	8	8
40197844005_10391	3	7	7	7	8	8	8	8	8	8	8
40197844006_10391	3	7	7	7	8	8	8	8	8	8	8
40197844007_10391	3	7	7	7	8	8	8	8	8	8	8
40197844008_10391	3	7	7	7	8	8	8	8	8	8	8
40197844009_10391	3	7	7	7	8	8	8	8	8	8	8
40197844010_10391	3	7	7	7	8	8	8	8	8	8	8
242477_10399_CCV3	3	7	7	7	8	8	8	8	8	8	8
242471_10399_CCBTVA3	3	7	7	7	8	8	8	8	8	8	8
40197844011_10391	3	7	7	7	8	8	8	8	8	8	8
40197844012_10391	3	7	7	7	8	8	8	8	8	8	8
40197844013_10391	3	7	7	7	8	8	8	8	8	8	8
40197844014_10391	3	7	7	7	8	8	8	8	8	8	8
40197844015_10391	3	7	7	7	8	8	8	8	8	8	8
40197844016_10391	3	7	7	7	8	8	8	8	8	8	8
40197844017_10391	3	7	7	7	8	8	8	8	8	8	8
40197844018_10391	3	7	7	7	8	8	8	8	8	8	8
40197844019_10391	3	7	7	7	8	8	8	8	8	8	8
40197844020_10391	3	7	7	7	8	8	8	8	8	8	8
242477_10399_CCV4	3	7	7	7	8	8	8	8	8	8	8
242471_10399_CCBTVA4	3	7	7	7	8	8	8	8	8	8	8
242472_10399_CRDL_A2	3	7	7	7	8	8	8	8	8	8	8
242473_10399_CRDL_B2	3	7	7	7	8	8	8	8	8	8	8
242124_10399_ICSA2	3	7	7	7	8	8	8	8	8	8	8
242125_10399_ICSAB2	3	7	7	7	8	8	8	8	8	8	8
242477_10399_CCV5	3	7	7	7	8	8	8	8	8	8	8
242471_10399_CCBTVA5	3	7	7	7	8	8	8	8	8	8	8
Label	**Config**	**39K**	**43Ca**	**45Sc-KED**	**45Sc-CCT**	**47Ti**	**51V**	**52Cr**	**53Cl O**	**54Fe**	**55Mn**
242471_10399_Cal0	3	8	8	8	7	8	8	8	8	8	8
242472_10399_Cal1	3	8	8	8	7	8	8	8	8	8	8
242473_10399_Cal2	3	8	8	8	7	8	8	8	8	8	8
242474_10399_Cal3	3	8	8	8	7	8	8	8	8	8	8
242475_10399_Cal4	3	8	8	8	7	8	8	8	8	8	8
242476_10399_Cal5	3	8	8	8	7	8	8	8	8	8	8
242162_10399_ICV	3	8	8	8	7	8	8	8	8	8	8
242471_10399_ICBTVA	3	8	8	8	7	8	8	8	8	8	8
242472_10399_CRDL_A1	3	8	8	8	7	8	8	8	8	8	8
242473_10399_CRDL_B1	3	8	8	8	7	8	8	8	8	8	8
242124_10399_ICSA1	3	8	8	8	7	8	8	8	8	8	8
242125_10399_ICSAB1	3	8	8	8	7	8	8	8	8	8	8
242477_10399_CCV1	3	8	8	8	7	8	8	8	8	8	8
242471_10399_CCBTVA1	3	8	8	8	7	8	8	8	8	8	8
1991164_10391	3	8	8	8	7	8	8	8	8	8	8
40197844021_10391	3	8	8	8	7	8	8	8	8	8	8
1991165_10391	3	8	8	8	7	8	8	8	8	8	8
1991166_10391	3	8	8	8	7	8	8	8	8	8	8
1991167_10391x2	3	8	8	8	7	8	8	8	8	8	8
1991167_10391	3	8	8	8	7	8	8	8	8	8	8
40197844001_10391	3	8	8	8	7	8	8	8	8	8	8
1991168_10391	3	8	8	8	7	8	8	8	8	8	8
1991169_10391	3	8	8	8	7	8	8	8	8	8	8
1991972_10391	3	8	8	8	7	8	8	8	8	8	8
242477_10399_CCV2	3	8	8	8	7	8	8	8	8	8	8
242471_10399_CCBTVA2	3	8	8	8	7	8	8	8	8	8	8
40197844002_10391	3	8	8	8	7	8	8	8	8	8	8
1991973_10391x5	3	8	8	8	7	8	8	8	8	8	8
40197844003_10391	3	8	8	8	7	8	8	8	8	8	8
40197844004_10391	3	8	8	8	7	8	8	8	8	8	8
40197844005_10391	3	8	8	8	7	8	8	8	8	8	8
40197844006_10391	3	8	8	8	7	8	8	8	8	8	8
40197844007_10391	3	8	8	8	7	8	8	8	8	8	8
40197844008_10391	3	8	8	8	7	8	8	8	8	8	8
40197844009_10391	3	8	8	8	7	8	8	8	8	8	8
40197844010_10391	3	8	8	8	7	8	8	8	8	8	8
242477_10399_CCV3	3	8	8	8	7	8	8	8	8	8	8

242471_10399_CCBTVA3	3	8	8	8	7	8	8	8	8	8	8
40197844011_10391	3	8	8	8	7	8	8	8	8	8	8
40197844012_10391	3	8	8	8	7	8	8	8	8	8	8
40197844013_10391	3	8	8	8	7	8	8	8	8	8	8
40197844014_10391	3	8	8	8	7	8	8	8	8	8	8
40197844015_10391	3	8	8	8	7	8	8	8	8	8	8
40197844016_10391	3	8	8	8	7	8	8	8	8	8	8
40197844017_10391	3	8	8	8	7	8	8	8	8	8	8
40197844018_10391	3	8	8	8	7	8	8	8	8	8	8
40197844019_10391	3	8	8	8	7	8	8	8	8	8	8
40197844020_10391	3	8	8	8	7	8	8	8	8	8	8
242477_10399_CCV4	3	8	8	8	7	8	8	8	8	8	8
242471_10399_CCBTVA4	3	8	8	8	7	8	8	8	8	8	8
242472_10399_CRDL_A2	3	8	8	8	7	8	8	8	8	8	8
242473_10399_CRDL_B2	3	8	8	8	7	8	8	8	8	8	8
242124_10399_ICSA2	3	8	8	8	7	8	8	8	8	8	8
242125_10399_ICSAB2	3	8	8	8	7	8	8	8	8	8	8
242477_10399_CCV5	3	8	8	8	7	8	8	8	8	8	8
242471_10399_CCBTVA5	3	8	8	8	7	8	8	8	8	8	8
Label	**Config**	**59Co**	**60Ni**	**63Cu**	**66Zn**	**72Ge**	**73Ge**	**75As**	**78Se**	**83Kr**	**88Sr**
242471_10399_Cal0	3	8	8	8	8	8	8	8	8	8	8
242472_10399_Cal1	3	8	8	8	8	8	8	8	8	8	8
242473_10399_Cal2	3	8	8	8	8	8	8	8	8	8	8
242474_10399_Cal3	3	8	8	8	8	8	8	8	8	8	8
242475_10399_Cal4	3	8	8	8	8	8	8	8	8	8	8
242476_10399_Cal5	3	8	8	8	8	8	8	8	8	8	8
242162_10399_ICV	3	8	8	8	8	8	8	8	8	8	8
242471_10399_ICBTVA	3	8	8	8	8	8	8	8	8	8	8
242472_10399_CRDL_A1	3	8	8	8	8	8	8	8	8	8	8
242473_10399_CRDL_B1	3	8	8	8	8	8	8	8	8	8	8
242124_10399_ICSA1	3	8	8	8	8	8	8	8	8	8	8
242125_10399_ICSAB1	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV1	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA1	3	8	8	8	8	8	8	8	8	8	8
1991164_10391	3	8	8	8	8	8	8	8	8	8	8
40197844021_10391	3	8	8	8	8	8	8	8	8	8	8
1991165_10391	3	8	8	8	8	8	8	8	8	8	8
1991166_10391	3	8	8	8	8	8	8	8	8	8	8
1991167_10391x2	3	8	8	8	8	8	8	8	8	8	8
1991167_10391	3	8	8	8	8	8	8	8	8	8	8
40197844001_10391	3	8	8	8	8	8	8	8	8	8	8
1991168_10391	3	8	8	8	8	8	8	8	8	8	8
1991169_10391	3	8	8	8	8	8	8	8	8	8	8
1991972_10391	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV2	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA2	3	8	8	8	8	8	8	8	8	8	8
40197844002_10391	3	8	8	8	8	8	8	8	8	8	8
1991973_10391x5	3	8	8	8	8	8	8	8	8	8	8
40197844003_10391	3	8	8	8	8	8	8	8	8	8	8
40197844004_10391	3	8	8	8	8	8	8	8	8	8	8
40197844005_10391	3	8	8	8	8	8	8	8	8	8	8
40197844006_10391	3	8	8	8	8	8	8	8	8	8	8
40197844007_10391	3	8	8	8	8	8	8	8	8	8	8
40197844008_10391	3	8	8	8	8	8	8	8	8	8	8
40197844009_10391	3	8	8	8	8	8	8	8	8	8	8
40197844010_10391	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV3	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA3	3	8	8	8	8	8	8	8	8	8	8
40197844011_10391	3	8	8	8	8	8	8	8	8	8	8
40197844012_10391	3	8	8	8	8	8	8	8	8	8	8
40197844013_10391	3	8	8	8	8	8	8	8	8	8	8
40197844014_10391	3	8	8	8	8	8	8	8	8	8	8
40197844015_10391	3	8	8	8	8	8	8	8	8	8	8
40197844016_10391	3	8	8	8	8	8	8	8	8	8	8
40197844017_10391	3	8	8	8	8	8	8	8	8	8	8
40197844018_10391	3	8	8	8	8	8	8	8	8	8	8
40197844019_10391	3	8	8	8	8	8	8	8	8	8	8
40197844020_10391	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV4	3	8	8	8	8	8	8	8	8	8	8

242471_10399_CCBTVA4	3	8	8	8	8	8	8	8	8	8	8
242472_10399_CRDL_A2	3	8	8	8	8	8	8	8	8	8	8
242473_10399_CRDL_B2	3	8	8	8	8	8	8	8	8	8	8
242124_10399_ICSA2	3	8	8	8	8	8	8	8	8	8	8
242125_10399_ICSAB2	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV5	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA5	3	8	8	8	8	8	8	8	8	8	8
Label	**Config**	**89Y**	**90Zr**	**95Mo**	**105Pd**	**107Ag**	**111Cd**	**115In**	**118Sn**	**121Sb**	**137Ba**
242471_10399_Cal0	3	8	8	8	8	8	8	8	8	8	8
242472_10399_Cal1	3	8	8	8	8	8	8	8	8	8	8
242473_10399_Cal2	3	8	8	8	8	8	8	8	8	8	8
242474_10399_Cal3	3	8	8	8	8	8	8	8	8	8	8
242475_10399_Cal4	3	8	8	8	8	8	8	8	8	8	8
242476_10399_Cal5	3	8	8	8	8	8	8	8	8	8	8
242162_10399_ICV	3	8	8	8	8	8	8	8	8	8	8
242471_10399_ICBTVA	3	8	8	8	8	8	8	8	8	8	8
242472_10399_CRDL_A1	3	8	8	8	8	8	8	8	8	8	8
242473_10399_CRDL_B1	3	8	8	8	8	8	8	8	8	8	8
242124_10399_ICSA1	3	8	8	8	8	8	8	8	8	8	8
242125_10399_ICSAB1	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV1	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA1	3	8	8	8	8	8	8	8	8	8	8
1991164_10391	3	8	8	8	8	8	8	8	8	8	8
40197844021_10391	3	8	8	8	8	8	8	8	8	8	8
1991165_10391	3	8	8	8	8	8	8	8	8	8	8
1991166_10391	3	8	8	8	8	8	8	8	8	8	8
1991167_10391x2	3	8	8	8	8	8	8	8	8	8	8
1991167_10391	3	8	8	8	8	8	8	8	8	8	8
40197844001_10391	3	8	8	8	8	8	8	8	8	8	8
1991168_10391	3	8	8	8	8	8	8	8	8	8	8
1991169_10391	3	8	8	8	8	8	8	8	8	8	8
1991972_10391	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV2	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA2	3	8	8	8	8	8	8	8	8	8	8
40197844002_10391	3	8	8	8	8	8	8	8	8	8	8
1991973_10391x5	3	8	8	8	8	8	8	8	8	8	8
40197844003_10391	3	8	8	8	8	8	8	8	8	8	8
40197844004_10391	3	8	8	8	8	8	8	8	8	8	8
40197844005_10391	3	8	8	8	8	8	8	8	8	8	8
40197844006_10391	3	8	8	8	8	8	8	8	8	8	8
40197844007_10391	3	8	8	8	8	8	8	8	8	8	8
40197844008_10391	3	8	8	8	8	8	8	8	8	8	8
40197844009_10391	3	8	8	8	8	8	8	8	8	8	8
40197844010_10391	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV3	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA3	3	8	8	8	8	8	8	8	8	8	8
40197844011_10391	3	8	8	8	8	8	8	8	8	8	8
40197844012_10391	3	8	8	8	8	8	8	8	8	8	8
40197844013_10391	3	8	8	8	8	8	8	8	8	8	8
40197844014_10391	3	8	8	8	8	8	8	8	8	8	8
40197844015_10391	3	8	8	8	8	8	8	8	8	8	8
40197844016_10391	3	8	8	8	8	8	8	8	8	8	8
40197844017_10391	3	8	8	8	8	8	8	8	8	8	8
40197844018_10391	3	8	8	8	8	8	8	8	8	8	8
40197844019_10391	3	8	8	8	8	8	8	8	8	8	8
40197844020_10391	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV4	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA4	3	8	8	8	8	8	8	8	8	8	8
242472_10399_CRDL_A2	3	8	8	8	8	8	8	8	8	8	8
242473_10399_CRDL_B2	3	8	8	8	8	8	8	8	8	8	8
242124_10399_ICSA2	3	8	8	8	8	8	8	8	8	8	8
242125_10399_ICSAB2	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV5	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA5	3	8	8	8	8	8	8	8	8	8	8
Label	**Config**	**159Tb**	**184W**	**195Pt**	**201Hg**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**	**238U**
242471_10399_Cal0	3	8	8	8	8	8	8	8	8	8	8
242472_10399_Cal1	3	8	8	8	8	8	8	8	8	8	8
242473_10399_Cal2	3	8	8	8	8	8	8	8	8	8	8
242474_10399_Cal3	3	8	8	8	8	8	8	8	8	8	8

242475_10399_Cal4	3	8	8	8	8	8	8	8	8	8	8
242476_10399_Cal5	3	8	8	8	8	8	8	8	8	8	8
242162_10399_ICV	3	8	8	8	8	8	8	8	8	8	8
242471_10399_ICBTVA	3	8	8	8	8	8	8	8	8	8	8
242472_10399_CRDL_A1	3	8	8	8	8	8	8	8	8	8	8
242473_10399_CRDL_B1	3	8	8	8	8	8	8	8	8	8	8
242124_10399_ICSA1	3	8	8	8	8	8	8	8	8	8	8
242125_10399_ICSAB1	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV1	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA1	3	8	8	8	8	8	8	8	8	8	8
1991164_10391	3	8	8	8	8	8	8	8	8	8	8
40197844021_10391	3	8	8	8	8	8	8	8	8	8	8
1991165_10391	3	8	8	8	8	8	8	8	8	8	8
1991166_10391	3	8	8	8	8	8	8	8	8	8	8
1991167_10391x2	3	8	8	8	8	8	8	8	8	8	8
1991167_10391	3	8	8	8	8	8	8	8	8	8	8
40197844001_10391	3	8	8	8	8	8	8	8	8	8	8
1991168_10391	3	8	8	8	8	8	8	8	8	8	8
1991169_10391	3	8	8	8	8	8	8	8	8	8	8
1991972_10391	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV2	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA2	3	8	8	8	8	8	8	8	8	8	8
40197844002_10391	3	8	8	8	8	8	8	8	8	8	8
1991973_10391x5	3	8	8	8	8	8	8	8	8	8	8
40197844003_10391	3	8	8	8	8	8	8	8	8	8	8
40197844004_10391	3	8	8	8	8	8	8	8	8	8	8
40197844005_10391	3	8	8	8	8	8	8	8	8	8	8
40197844006_10391	3	8	8	8	8	8	8	8	8	8	8
40197844007_10391	3	8	8	8	8	8	8	8	8	8	8
40197844008_10391	3	8	8	8	8	8	8	8	8	8	8
40197844009_10391	3	8	8	8	8	8	8	8	8	8	8
40197844010_10391	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV3	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA3	3	8	8	8	8	8	8	8	8	8	8
40197844011_10391	3	8	8	8	8	8	8	8	8	8	8
40197844012_10391	3	8	8	8	8	8	8	8	8	8	8
40197844013_10391	3	8	8	8	8	8	8	8	8	8	8
40197844014_10391	3	8	8	8	8	8	8	8	8	8	8
40197844015_10391	3	8	8	8	8	8	8	8	8	8	8
40197844016_10391	3	8	8	8	8	8	8	8	8	8	8
40197844017_10391	3	8	8	8	8	8	8	8	8	8	8
40197844018_10391	3	8	8	8	8	8	8	8	8	8	8
40197844019_10391	3	8	8	8	8	8	8	8	8	8	8
40197844020_10391	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV4	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA4	3	8	8	8	8	8	8	8	8	8	8
242472_10399_CRDL_A2	3	8	8	8	8	8	8	8	8	8	8
242473_10399_CRDL_B2	3	8	8	8	8	8	8	8	8	8	8
242124_10399_ICSA2	3	8	8	8	8	8	8	8	8	8	8
242125_10399_ICSAB2	3	8	8	8	8	8	8	8	8	8	8
242477_10399_CCV5	3	8	8	8	8	8	8	8	8	8	8
242471_10399_CCBTVA5	3	8	8	8	8	8	8	8	8	8	8

Configuration 3 - X Series Default

Minimum uptake 5
Maximum uptake 20
Minimum wash 80
Maximum wash 200

ACL Script

Title Fast uptake wash
Description Data acquisition using the peri pump at high speed for the washes and uptakes
Author paceuser
Version 1

Settings sets

Id	Description	Extraction	Lens 1	Lens 2	Lens 3	Pole Bias	Sampling Depth	Horizontal	Vertical	Cool	Auxiliary

7	CCT Mode 12122019	-161.00	-1240.00	-80.00	-195.30	-9.00	145.00	68.00	118.00	13.00	0.70
8	CCTKED Mode 12122019	-161.00	-1240.00	-80.00	-195.30	-17.00	145.00	68.00	118.00	13.00	0.70

Id	Description	Nebuliser	Forward power	D1	Focus	CCT Gas 1	CCT Gas 2	D2	DA	Hexapole Bias
7	CCT Mode 12122019	0.96	1400.00	-46.30	7.80	0.00	0.30	-143.00	-21.20	-4.00
8	CCTKED Mode 12122019	0.96	1400.00	-58.80	-9.40	0.00	3.80	-143.00	-21.20	-20.00

Fully Quantitative Concentrations

Id	Label	Li	Be	B	Na	Mg	Al	Si	P	K	Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	242471_10399_Cal0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	242472_10399_Cal1	1.000	1.000		250.000	250.000	250.000	50.000	50.000	250.000	250.000
3	242473_10399_Cal2	5.000	5.000	5.000	500.000	500.000	500.000	250.000	250.000	500.000	500.000
4	242474_10399_Cal3	50.000	50.000	50.000	2500.000	2500.000	2500.000	2500.000	2500.000	2500.000	2500.000
5	242475_10399_Cal4	250.000	250.000	250.000	12500.000	12500.000	12500.000	12500.000	12500.000	12500.000	12500.000
6	242476_10399_Cal5	500.000	500.000	500.000	25000.000	25000.000	25000.000	25000.000	25000.000	25000.000	25000.000

Id	Label	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	As
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	242471_10399_Cal0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	242472_10399_Cal1	1.000	1.000	1.000	1.000	250.000	1.000	1.000	1.000		1.000
3	242473_10399_Cal2	5.000	5.000	5.000	5.000	500.000	5.000	5.000	5.000	5.000	5.000
4	242474_10399_Cal3	50.000	50.000	50.000	50.000	2500.000	50.000	50.000	50.000	50.000	50.000
5	242475_10399_Cal4	250.000	250.000	250.000	250.000	12500.000	250.000	250.000	250.000	250.000	250.000
6	242476_10399_Cal5	500.000	500.000	500.000	500.000	25000.000	500.000	500.000	500.000	500.000	500.000

Id	Label	Se	Sr	Zr	Mo	Pd	Ag	Cd	Sn	Sb	Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	242471_10399_Cal0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	242472_10399_Cal1	1.000	1.000	1.000	1.000	1.000	0.500	1.000	1.000	1.000	1.000
3	242473_10399_Cal2	5.000	5.000	5.000	5.000	5.000	2.500	5.000	5.000	5.000	5.000
4	242474_10399_Cal3	50.000	50.000	50.000	50.000	50.000	25.000	50.000	50.000	50.000	50.000
5	242475_10399_Cal4	250.000	250.000	250.000	250.000	250.000	125.000	250.000	250.000	250.000	250.000
6	242476_10399_Cal5	500.000	500.000	500.000	500.000	500.000	250.000	500.000	500.000	500.000	500.000

Id	Label	Pt	Hg	Tl	Pb	U
		ppb	ppb	ppb	ppb	ppb
1	242471_10399_Cal0	0.000	0.000	0.000	0.000	0.000
2	242472_10399_Cal1	1.000	0.200	1.000	1.000	1.000
3	242473_10399_Cal2	5.000	0.500	5.000	5.000	5.000
4	242474_10399_Cal3	50.000	1.000	50.000	50.000	50.000
5	242475_10399_Cal4	250.000	10.000	250.000	250.000	250.000
6	242476_10399_Cal5	500.000	25.000	500.000	500.000	500.000

Calibration Technique

Use External Drift Correction - No
Calibrate by - Isotope

Symbol	Interference Correction	RSF	Calibration Method	Line Fit	Weighting	Forcing	Use for Semi-Quant	Max Error	Minimum Correlation
7Li	Yes	0.36	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
9Be	Yes	0.07	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
10B	Yes	0.13	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
23Na	Yes	0.55	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
25Mg	Yes	0.49	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
27Al	Yes	0.45	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
28Si	Yes	0.20	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
31P	Yes	0.02	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
34S	Yes	0.04	Semi-Quantified				No		
35Cl	Yes	0.00	Semi-Quantified				No		
39K	Yes	0.38	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
43Ca	Yes	0.81	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
45Sc-KED	Yes	0.60	None				No		
47Ti	Yes	0.38	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
51V	Yes	0.39	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
52Cr	Yes	0.46	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
55Mn	Yes	0.70	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
54Fe	Yes	0.60	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
59Co	Yes	0.42	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
60Ni	Yes	0.33	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000

63Cu	Yes	0.33	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
66Zn	Yes	0.35	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
72Ge	Yes	0.35	None				No	
73Ge	Yes	0.35	None				No	
75As	Yes	0.05	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
78Se	Yes	0.07	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
83Kr	Yes	0.00	None				No	
88Sr	Yes	0.66	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
89Y	Yes	0.74	None				No	
90Zr	Yes	0.61	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
95Mo	Yes	0.63	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
105Pd	Yes	0.48	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
107Ag	Yes	0.45	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
111Cd	Yes	0.55	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
115In	Yes	0.77	None				No	
118Sn	Yes	0.69	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
121Sb	Yes	0.34	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
137Ba	Yes	0.53	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
159Tb	Yes	0.90	None				No	
184W	Yes	0.71	Semi-Quantified				No	
195Pt	Yes	0.30	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
201Hg	Yes	0.06	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
206Pb	Yes	0.55	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
207Pb	Yes	0.55	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
208Pb	Yes	0.55	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
209Bi	Yes	0.45	None				No	
238U	Yes	0.65	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
205Tl	Yes	0.58	Fully-Quantified	Linear	Absolute SD	None	Yes	0.998000
53Cl O	Yes		Semi-Quantified				No	
45Sc-CCT	Yes	0.60	None				No	

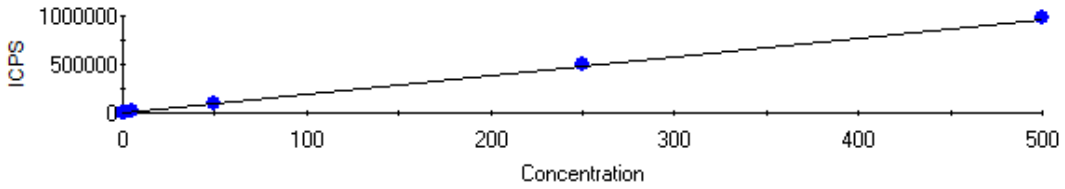
Sample List

No	Label	Type	Weight	Rack	Row	Col	Height
1	242471_10399_Cal0	Fully Quant Standard	1.000	0	1	8	144
2	242472_10399_Cal1	Fully Quant Standard	1.000	0	1	2	144
3	242473_10399_Cal2	Fully Quant Standard	1.000	0	1	3	144
4	242474_10399_Cal3	Fully Quant Standard	1.000	0	1	4	144
5	242475_10399_Cal4	Fully Quant Standard	1.000	0	1	5	144
6	242476_10399_Cal5	Fully Quant Standard	1.000	0	1	6	144
7	242162_10399_ICV	Unknown	1.000	1	1	1	144
8	242471_10399_ICBTVA	Unknown	1.000	0	1	8	144
9	242472_10399_CRDL_A1	Unknown	1.000	0	1	2	144
10	242473_10399_CRDL_B1	Unknown	1.000	0	1	3	144
11	242124_10399_ICSA1	Unknown	1.000	1	1	4	144
12	242125_10399_ICSAB1	Unknown	1.000	1	1	5	144
13	242477_10399_CCV1	Unknown	1.000	0	1	9	144
14	242471_10399_CCBTVA1	Unknown	1.000	0	1	10	144
15	1991164_10391	Unknown	1.000	2	1	1	144
16	40197844021_10391	Unknown	1.000	2	3	6	144
17	1991165_10391	Unknown	1.000	2	1	2	144
18	1991166_10391	Unknown	1.000	2	1	3	144
19	1991167_10391x2	Unknown	1.000	2	1	4	144
20	1991167_10391	Unknown	1.000	2	1	5	144
21	40197844001_10391	Unknown	1.000	2	1	6	144
22	1991168_10391	Unknown	1.000	2	1	7	144
23	1991169_10391	Unknown	1.000	2	1	8	144
24	1991972_10391	Unknown	1.000	2	1	9	144
25	242477_10399_CCV2	Unknown	1.000	0	1	9	144
26	242471_10399_CCBTVA2	Unknown	1.000	0	1	10	144
27	40197844002_10391	Unknown	1.000	2	1	10	144
28	1991973_10391x5	Unknown	1.000	2	1	11	144
29	40197844003_10391	Unknown	1.000	2	1	12	144
30	40197844004_10391	Unknown	1.000	2	2	1	144
31	40197844005_10391	Unknown	1.000	2	2	2	144
32	40197844006_10391	Unknown	1.000	2	2	3	144
33	40197844007_10391	Unknown	1.000	2	2	4	144
34	40197844008_10391	Unknown	1.000	2	2	5	144
35	40197844009_10391	Unknown	1.000	2	2	6	144
36	40197844010_10391	Unknown	1.000	2	2	7	144
37	242477_10399_CCV3	Unknown	1.000	0	1	9	144
38	242471_10399_CCBTVA3	Unknown	1.000	0	1	10	144
39	40197844011_10391	Unknown	1.000	2	2	8	144
40	40197844012_10391	Unknown	1.000	2	2	9	144
41	40197844013_10391	Unknown	1.000	2	2	10	144
42	40197844014_10391	Unknown	1.000	2	2	11	144

43	40197844015_10391	Unknown	1.000	2	2	12	144
44	40197844016_10391	Unknown	1.000	2	3	1	144
45	40197844017_10391	Unknown	1.000	2	3	2	144
46	40197844018_10391	Unknown	1.000	2	3	3	144
47	40197844019_10391	Unknown	1.000	2	3	4	144
48	40197844020_10391	Unknown	1.000	2	3	5	144
49	242477_10399_CCV4	Unknown	1.000	0	1	9	144
50	242471_10399_CCBTVA4	Unknown	1.000	0	1	10	144
51	242472_10399_CRDL_A2	Unknown	1.000	0	1	2	144
52	242473_10399_CRDL_B2	Unknown	1.000	0	1	3	144
53	242124_10399_ICSA2	Unknown	1.000	1	1	4	144
54	242125_10399_ICSAB2	Unknown	1.000	1	1	5	144
55	242477_10399_CCV5	Unknown	1.000	0	1	9	144
56	242471_10399_CCBTVA5	Unknown	1.000	0	1	10	144

Fully Quant Calibration

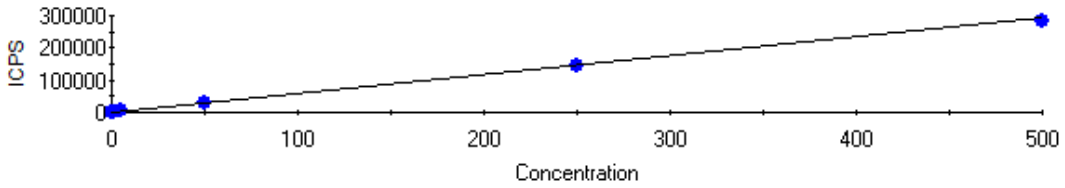
7Li FQ Block 1



Intercept CPS=33.114326 Intercept Conc=0.017171
Sensitivity=1928.495732 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.047	0.047	123.02	0.00
242472_10399_Cal1	1.000	0.977	0.023	1917.51	2.29
242473_10399_Cal2	5.000	5.161	0.161	9986.91	3.23
242474_10399_Cal3	50.000	49.680	0.320	95840.27	0.64
242475_10399_Cal4	250.000	254.944	4.944	491691.64	1.98
242476_10399_Cal5	500.000	508.344	8.344	980372.29	1.67

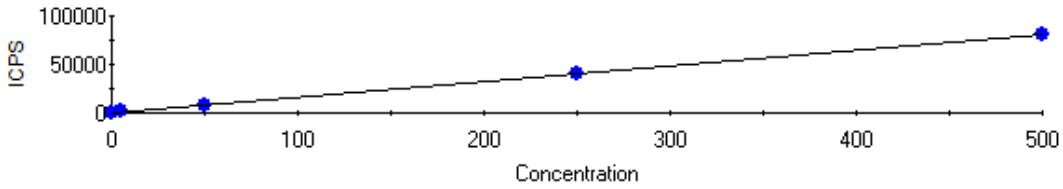
9Be FQ Block 1



Intercept CPS=22.503849 Intercept Conc=0.038130
Sensitivity=590.185298 Correlation Coeff=0.999743

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.003	0.003	20.73	0.00
242472_10399_Cal1	1.000	0.977	0.023	599.40	2.25
242473_10399_Cal2	5.000	4.970	0.030	2955.96	0.59
242474_10399_Cal3	50.000	50.723	0.723	29958.76	1.45
242475_10399_Cal4	250.000	248.851	1.149	146890.73	0.46
242476_10399_Cal5	500.000	475.080	24.920	280407.83	4.98

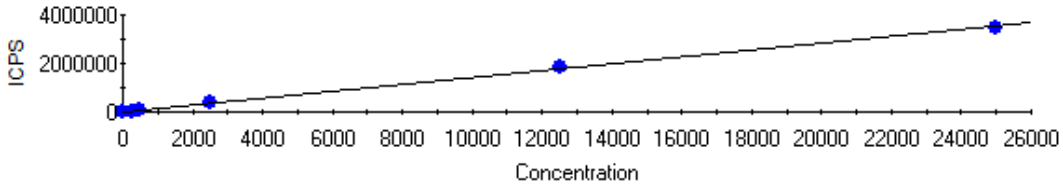
10B FQ Block 1



Intercept CPS=120.298230 Intercept Conc=0.744944
Sensitivity=161.486363 Correlation Coeff=0.999984

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.062	0.062	110.34	0.00
242473_10399_Cal2	5.000	5.644	0.644	1031.74	12.88
242474_10399_Cal3	50.000	49.554	0.446	8122.52	0.89
242475_10399_Cal4	250.000	252.421	2.421	40882.78	0.97
242476_10399_Cal5	500.000	499.484	0.516	80780.16	0.10

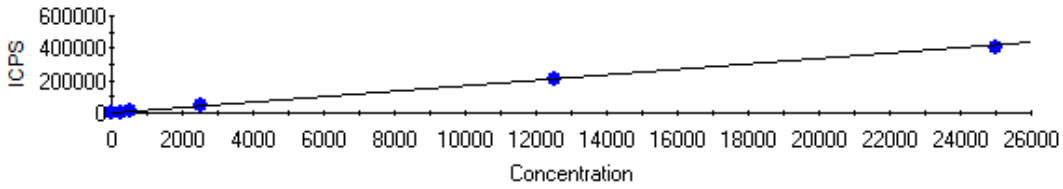
23Na FQ Block 1



Intercept CPS=1034.108983 Intercept Conc=7.228260
Sensitivity=143.064723 Correlation Coeff=0.999596

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.000	0.000	1034.14	0.00
242472_10399_Cal1	250.000	253.307	3.307	37273.38	1.32
242473_10399_Cal2	500.000	500.719	0.719	72669.33	0.14
242474_10399_Cal3	2500.000	2479.575	20.425	355773.81	0.82
242475_10399_Cal4	12500.000	12844.863	344.863	1838680.88	2.76
242476_10399_Cal5	25000.000	24238.328	761.672	3468683.72	3.05

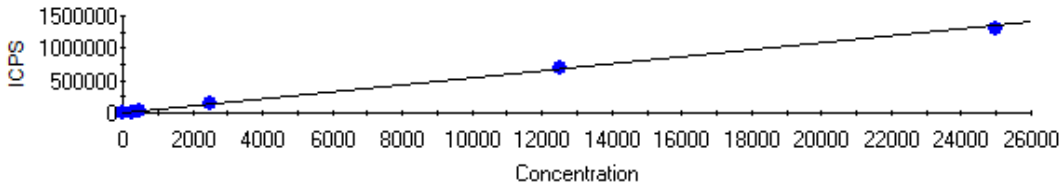
25Mg FQ Block 1



Intercept CPS=48.250301 Intercept Conc=2.855037
Sensitivity=16.900060 Correlation Coeff=0.999689

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.345	0.345	42.42	0.00
242472_10399_Cal1	250.000	257.253	7.253	4395.85	2.90
242473_10399_Cal2	500.000	503.039	3.039	8549.63	0.61
242474_10399_Cal3	2500.000	2487.016	12.984	42078.97	0.52
242475_10399_Cal4	12500.000	12522.000	22.000	211670.80	0.18
242476_10399_Cal5	25000.000	23784.491	1215.509	402007.57	4.86

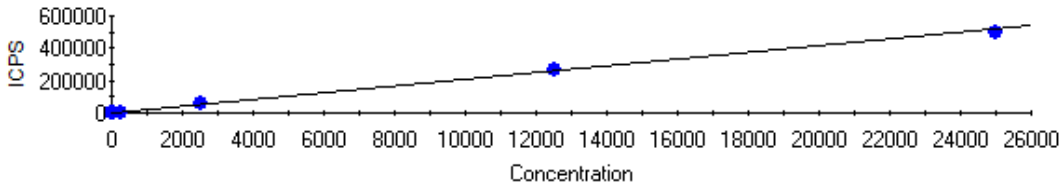
27Al FQ Block 1



Intercept CPS=142.176192 Intercept Conc=2.609578
Sensitivity=54.482441 Correlation Coeff=0.999736

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.024	0.024	140.85	0.00
242472_10399_Cal1	250.000	256.196	6.196	14100.36	2.48
242473_10399_Cal2	500.000	502.505	2.505	27519.88	0.50
242474_10399_Cal3	2500.000	2471.441	28.559	134792.30	1.14
242475_10399_Cal4	12500.000	12535.798	35.798	683123.05	0.29
242476_10399_Cal5	25000.000	23906.005	1093.995	1302599.68	4.38

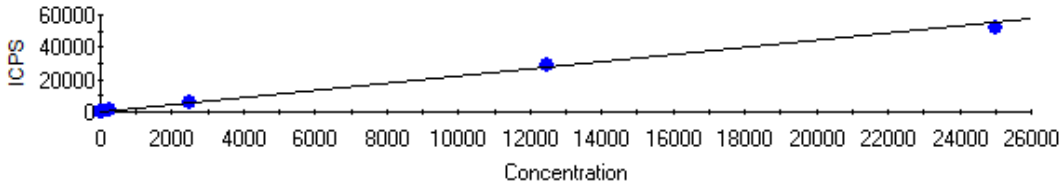
28Si FQ Block 1



Intercept CPS=237.490591 Intercept Conc=11.306912
Sensitivity=21.004018 Correlation Coeff=0.999628

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-2.169	2.169	191.94	0.00
242472_10399_Cal1	50.000	52.875	2.875	1348.08	5.75
242473_10399_Cal2	250.000	259.247	9.247	5682.72	3.70
242474_10399_Cal3	2500.000	2555.235	55.235	53907.69	2.21
242475_10399_Cal4	12500.000	12451.896	48.104	261777.34	0.38
242476_10399_Cal5	25000.000	23551.223	1448.777	494907.79	5.80

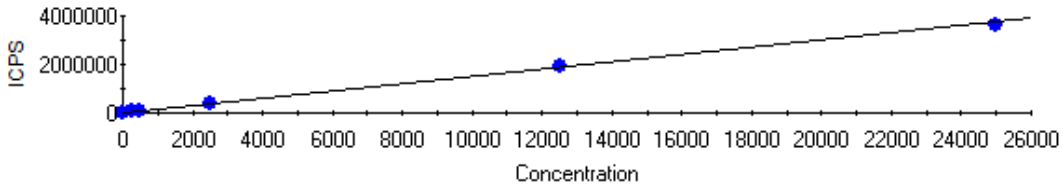
31P FQ Block 1



Intercept CPS=103.813898 Intercept Conc=46.726031
Sensitivity=2.221757 Correlation Coeff=0.999316

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-9.628	9.628	82.42	0.00
242472_10399_Cal1	50.000	49.716	0.284	214.27	0.57
242473_10399_Cal2	250.000	264.416	14.416	691.28	5.77
242474_10399_Cal3	2500.000	2597.498	97.498	5874.82	3.90
242475_10399_Cal4	12500.000	12684.058	184.058	28284.71	1.47
242476_10399_Cal5	25000.000	23530.603	1469.397	52383.10	5.88

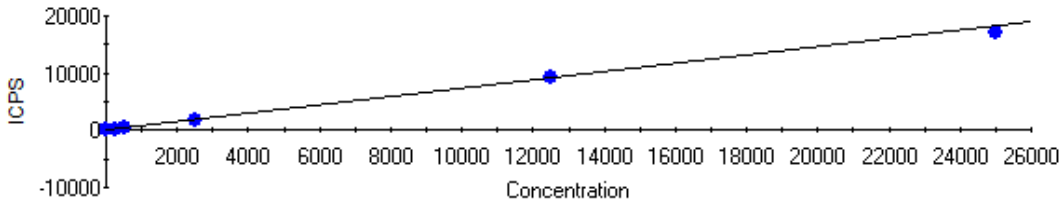
39K FQ Block 1



Intercept CPS=37335.657382 Intercept Conc=249.772574
Sensitivity=149.478611 Correlation Coeff=0.999714

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-1.925	1.925	37047.96	0.00
242472_10399_Cal1	250.000	253.930	3.930	75292.82	1.57
242473_10399_Cal2	500.000	500.177	0.177	112101.43	0.04
242474_10399_Cal3	2500.000	2494.306	5.694	410181.05	0.23
242475_10399_Cal4	12500.000	12690.134	190.134	1934239.23	1.52
242476_10399_Cal5	25000.000	24159.322	840.678	3648637.56	3.36

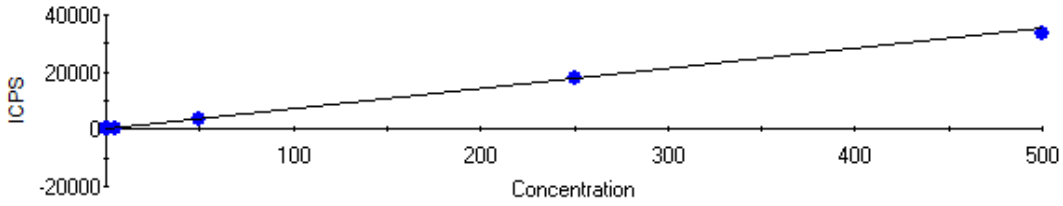
43Ca FQ Block 1



Intercept CPS=1.126948 Intercept Conc=1.547556
Sensitivity=0.728212 Correlation Coeff=0.999561

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.141	0.141	1.23	0.00
242472_10399_Cal1	250.000	231.710	18.290	169.86	7.32
242473_10399_Cal2	500.000	477.673	22.327	348.97	4.47
242474_10399_Cal3	2500.000	2472.839	27.161	1801.88	1.09
242475_10399_Cal4	12500.000	12506.920	6.920	9108.81	0.06
242476_10399_Cal5	25000.000	23546.692	1453.308	17148.10	5.81

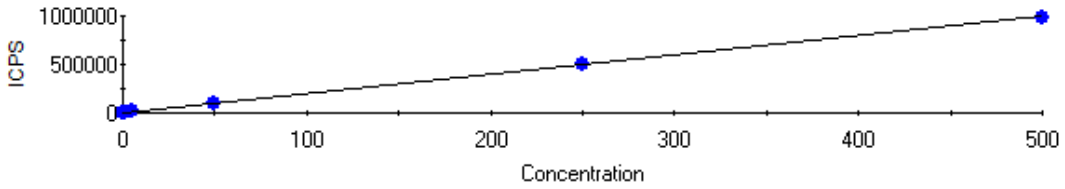
47Ti FQ Block 1



Intercept CPS=2.606369 Intercept Conc=0.036933
Sensitivity=70.569896 Correlation Coeff=0.999673

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.022	0.022	4.17	0.00
242472_10399_Cal1	1.000	0.982	0.018	71.89	1.82
242473_10399_Cal2	5.000	4.721	0.279	335.77	5.58
242474_10399_Cal3	50.000	50.508	0.508	3566.94	1.02
242475_10399_Cal4	250.000	250.375	0.375	17671.52	0.15
242476_10399_Cal5	500.000	475.157	24.843	33534.38	4.97

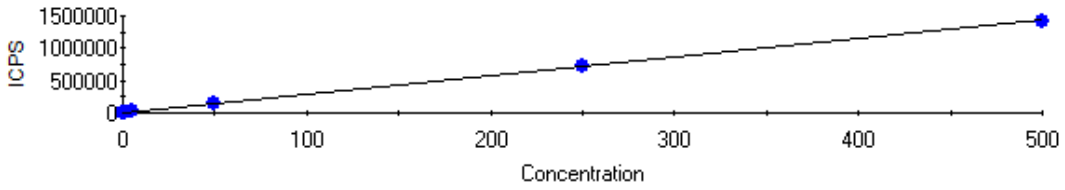
51V FQ Block 1



Intercept CPS=595.408872 Intercept Conc=0.298647
Sensitivity=1993.688480 Correlation Coeff=0.999777

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.103	0.103	390.46	0.00
242472_10399_Cal1	1.000	1.002	0.002	2593.52	0.22
242473_10399_Cal2	5.000	4.709	0.291	9983.62	5.82
242474_10399_Cal3	50.000	49.568	0.432	99418.64	0.86
242475_10399_Cal4	250.000	254.499	4.499	507986.85	1.80
242476_10399_Cal5	500.000	487.389	12.611	972296.63	2.52

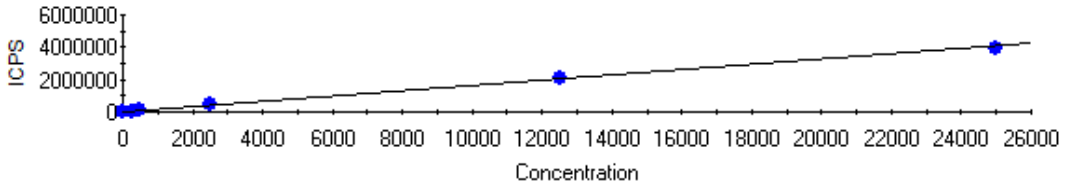
52Cr FQ Block 1



Intercept CPS=212.604421 Intercept Conc=0.073959
Sensitivity=2874.618928 Correlation Coeff=0.999832

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.000	0.000	212.25	0.00
242472_10399_Cal1	1.000	1.001	0.001	3091.53	0.15
242473_10399_Cal2	5.000	5.011	0.011	14616.09	0.21
242474_10399_Cal3	50.000	49.872	0.128	143575.44	0.26
242475_10399_Cal4	250.000	254.275	4.275	731156.65	1.71
242476_10399_Cal5	500.000	489.595	10.405	1407610.51	2.08

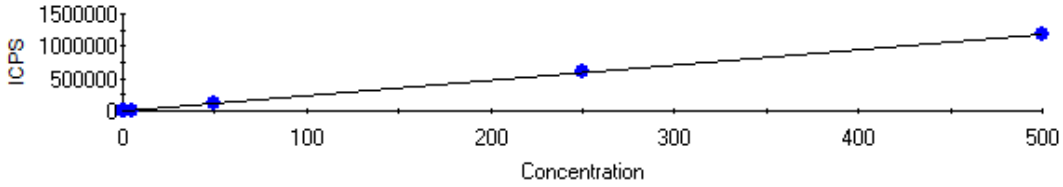
54Fe FQ Block 1



Intercept CPS=737.133976 Intercept Conc=4.529337
Sensitivity=162.746564 Correlation Coeff=0.999753

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.006	0.006	736.16	0.00
242472_10399_Cal1	250.000	252.832	2.832	41884.61	1.13
242473_10399_Cal2	500.000	501.440	1.440	82344.72	0.29
242474_10399_Cal3	2500.000	2487.845	12.155	405625.39	0.49
242475_10399_Cal4	12500.000	12570.701	70.701	2046575.46	0.57
242476_10399_Cal5	25000.000	24010.842	989.158	3908419.21	3.96

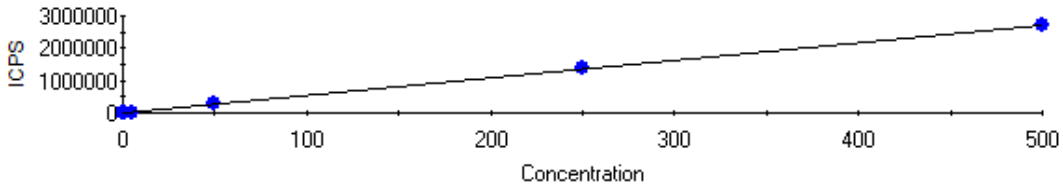
55Mn FQ Block 1



Intercept CPS=41.779789 Intercept Conc=0.017710
Sensitivity=2359.081371 Correlation Coeff=0.999973

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.000	0.000	41.98	0.00
242472_10399_Cal1	1.000	0.985	0.015	2366.01	1.48
242473_10399_Cal2	5.000	4.893	0.107	11584.20	2.14
242474_10399_Cal3	50.000	49.524	0.476	116872.73	0.95
242475_10399_Cal4	250.000	253.199	3.199	597358.07	1.28
242476_10399_Cal5	500.000	498.919	1.081	1177031.55	0.22

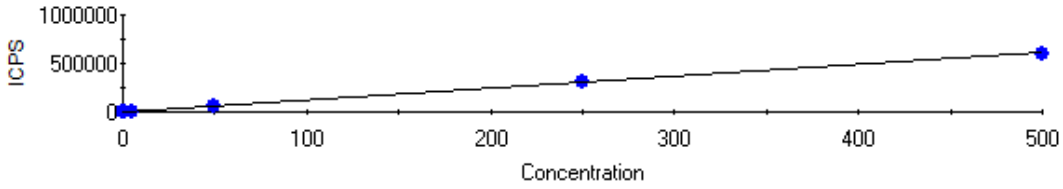
59Co FQ Block 1



Intercept CPS=74.404891 Intercept Conc=0.013722
Sensitivity=5422.221664 Correlation Coeff=0.999985

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.000	0.000	74.00	0.00
242472_10399_Cal1	1.000	1.009	0.009	5546.69	0.92
242473_10399_Cal2	5.000	5.005	0.005	27215.32	0.11
242474_10399_Cal3	50.000	49.772	0.228	269951.66	0.46
242475_10399_Cal4	250.000	253.823	3.823	1376360.81	1.53
242476_10399_Cal5	500.000	502.115	2.115	2722652.00	0.42

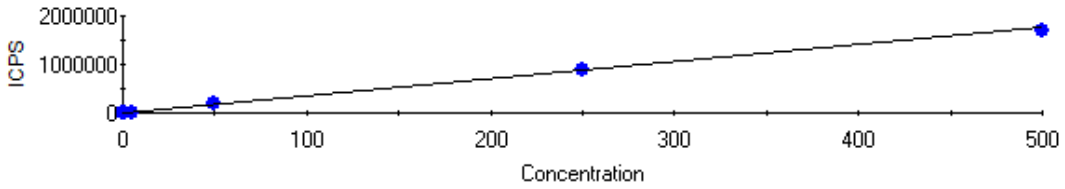
60Ni FQ Block 1



Intercept CPS=76.316203 Intercept Conc=0.062755
Sensitivity=1216.094329 Correlation Coeff=0.999924

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.007	0.007	67.36	0.00
242472_10399_Cal1	1.000	1.041	0.041	1341.74	4.06
242473_10399_Cal2	5.000	4.977	0.023	6128.35	0.47
242474_10399_Cal3	50.000	49.976	0.024	60851.40	0.05
242475_10399_Cal4	250.000	250.837	0.837	305118.17	0.33
242476_10399_Cal5	500.000	488.946	11.054	594680.91	2.21

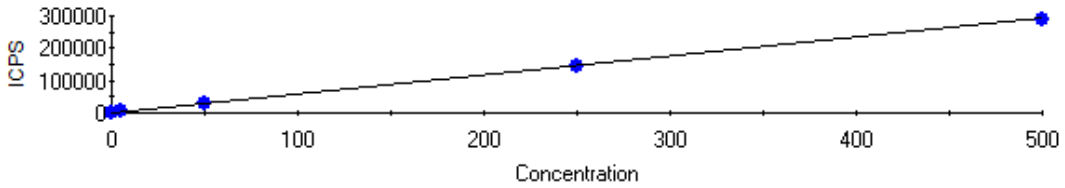
63Cu FQ Block 1



Intercept CPS=202.674008 Intercept Conc=0.057354
Sensitivity=3533.766720 Correlation Coeff=0.999924

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.001	0.001	200.01	0.00
242472_10399_Cal1	1.000	1.003	0.003	3746.91	0.30
242473_10399_Cal2	5.000	5.003	0.003	17883.68	0.07
242474_10399_Cal3	50.000	49.882	0.118	176475.01	0.24
242475_10399_Cal4	250.000	246.403	3.597	870934.26	1.44
242476_10399_Cal5	500.000	480.403	19.597	1697835.76	3.92

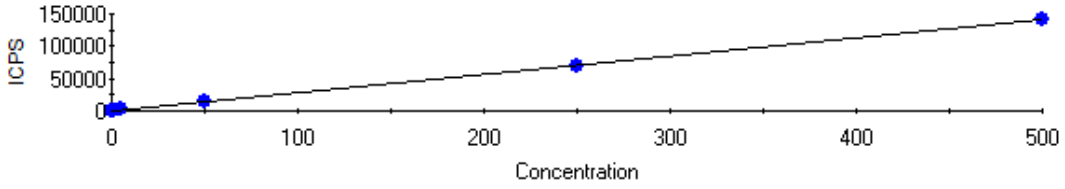
66Zn FQ Block 1



Intercept CPS=148.999889 Intercept Conc=0.252557
Sensitivity=589.965773 Correlation Coeff=0.999973

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.013	0.013	141.37	0.00
242473_10399_Cal2	5.000	5.131	0.131	3176.09	2.62
242474_10399_Cal3	50.000	50.138	0.138	29728.65	0.28
242475_10399_Cal4	250.000	248.549	1.451	146784.41	0.58
242476_10399_Cal5	500.000	489.762	10.238	289091.53	2.05

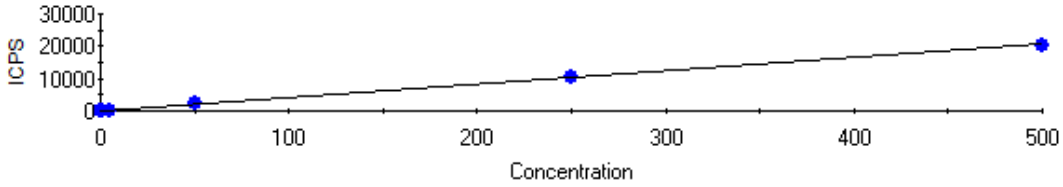
75As FQ Block 1



Intercept CPS=160.121093 Intercept Conc=0.563869
Sensitivity=283.968795 Correlation Coeff=0.999969

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.009	0.009	157.52	0.00
242472_10399_Cal1	1.000	1.030	0.030	452.55	2.98
242473_10399_Cal2	5.000	5.082	0.082	1603.37	1.65
242474_10399_Cal3	50.000	50.488	0.488	14497.25	0.98
242475_10399_Cal4	250.000	243.887	6.113	69416.40	2.45
242476_10399_Cal5	500.000	495.267	4.733	140800.50	0.95

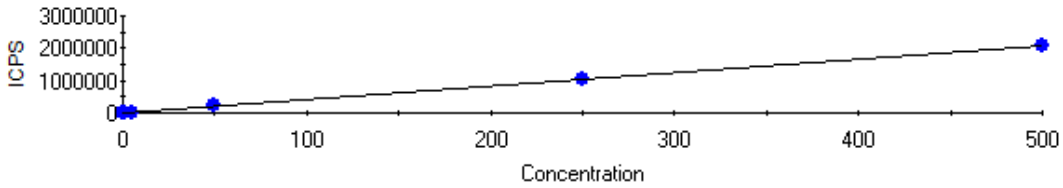
78Se FQ Block 1



Intercept CPS=7.390529 Intercept Conc=0.177874
Sensitivity=41.549184 Correlation Coeff=0.999921

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.027	0.027	6.27	0.00
242472_10399_Cal1	1.000	1.006	0.006	49.19	0.60
242473_10399_Cal2	5.000	4.899	0.101	210.95	2.02
242474_10399_Cal3	50.000	50.965	0.965	2124.96	1.93
242475_10399_Cal4	250.000	246.085	3.915	10232.00	1.57
242476_10399_Cal5	500.000	480.138	19.862	19956.74	3.97

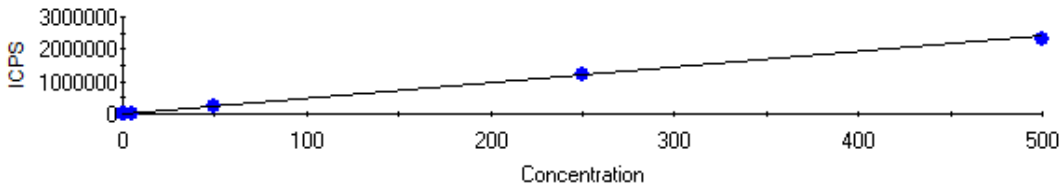
88Sr FQ Block 1



Intercept CPS=225.042621 Intercept Conc=0.054425
Sensitivity=4134.885753 Correlation Coeff=0.999898

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.008	0.008	191.05	0.00
242472_10399_Cal1	1.000	1.014	0.014	4417.38	1.39
242473_10399_Cal2	5.000	5.009	0.009	20935.49	0.17
242474_10399_Cal3	50.000	49.673	0.327	205618.42	0.65
242475_10399_Cal4	250.000	256.055	6.055	1058981.18	2.42
242476_10399_Cal5	500.000	497.333	2.667	2056640.21	0.53

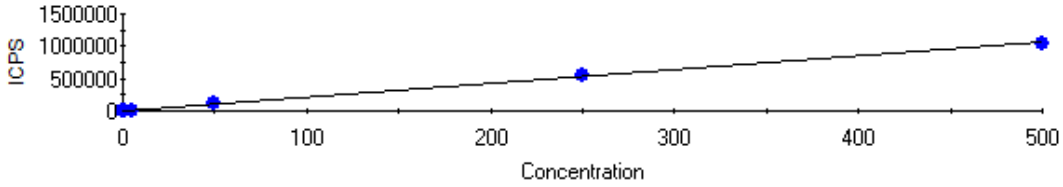
90Zr FQ Block 1



Intercept CPS=339.566103 Intercept Conc=0.070903
Sensitivity=4789.149028 Correlation Coeff=0.999649

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.002	0.002	349.62	0.00
242472_10399_Cal1	1.000	0.987	0.013	5064.28	1.35
242473_10399_Cal2	5.000	4.936	0.064	23979.90	1.28
242474_10399_Cal3	50.000	50.215	0.215	240824.75	0.43
242475_10399_Cal4	250.000	256.493	6.493	1228723.31	2.60
242476_10399_Cal5	500.000	485.752	14.248	2326679.07	2.85

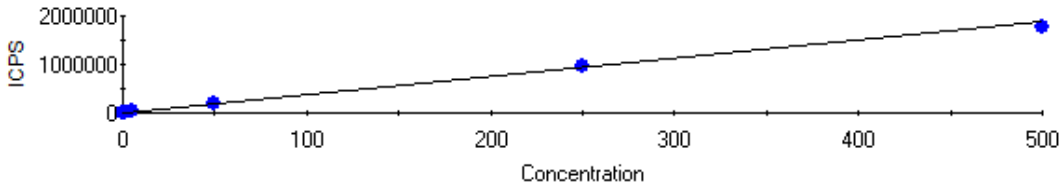
95Mo FQ Block 1



Intercept CPS=99.851113 Intercept Conc=0.046176
Sensitivity=2162.385591 Correlation Coeff=0.999745

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.002	0.002	104.27	0.00
242472_10399_Cal1	1.000	0.912	0.088	2072.29	8.78
242473_10399_Cal2	5.000	4.892	0.108	10678.07	2.16
242474_10399_Cal3	50.000	49.276	0.724	106654.23	1.45
242475_10399_Cal4	250.000	252.349	2.349	545775.55	0.94
242476_10399_Cal5	500.000	481.761	18.239	1041853.24	3.65

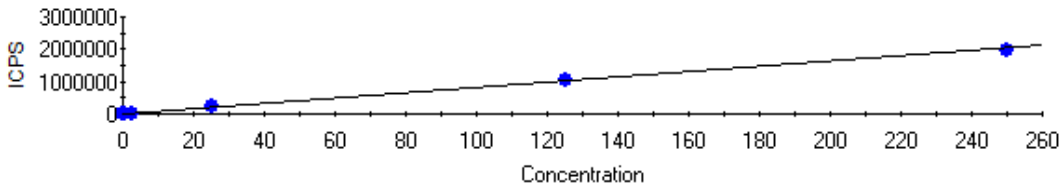
105Pd FQ Block 1



Intercept CPS=1038.791310 Intercept Conc=0.273606
Sensitivity=3796.670769 Correlation Coeff=0.999506

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.000	0.000	1039.34	0.00
242472_10399_Cal1	1.000	0.991	0.009	4801.31	0.90
242473_10399_Cal2	5.000	5.034	0.034	20151.17	0.68
242474_10399_Cal3	50.000	50.360	0.360	192237.41	0.72
242475_10399_Cal4	250.000	250.244	0.244	951134.74	0.10
242476_10399_Cal5	500.000	469.221	30.779	1782517.66	6.16

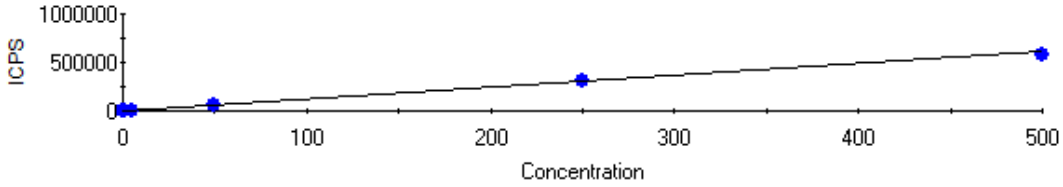
107Ag FQ Block 1



Intercept CPS=486.647634 Intercept Conc=0.059521
Sensitivity=8176.014887 Correlation Coeff=0.999627

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.008	0.008	418.34	0.00
242472_10399_Cal1	0.500	0.508	0.008	4640.42	1.61
242473_10399_Cal2	2.500	2.551	0.051	21346.94	2.06
242474_10399_Cal3	25.000	25.317	0.317	207478.39	1.27
242475_10399_Cal4	125.000	125.199	0.199	1024116.75	0.16
242476_10399_Cal5	250.000	236.724	13.276	1935945.04	5.31

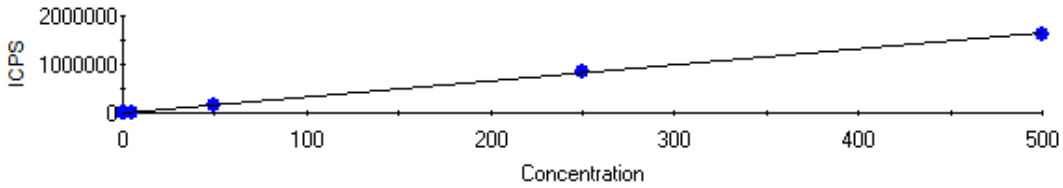
111Cd FQ Block 1



Intercept CPS=16.892134 Intercept Conc=0.013681
Sensitivity=1234.727275 Correlation Coeff=0.999497

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.000	0.000	16.84	0.00
242472_10399_Cal1	1.000	1.000	0.000	1251.96	0.03
242473_10399_Cal2	5.000	4.999	0.001	6189.40	0.02
242474_10399_Cal3	50.000	51.253	1.253	63300.04	2.51
242475_10399_Cal4	250.000	253.063	3.063	312480.13	1.23
242476_10399_Cal5	500.000	474.312	25.688	585662.69	5.14

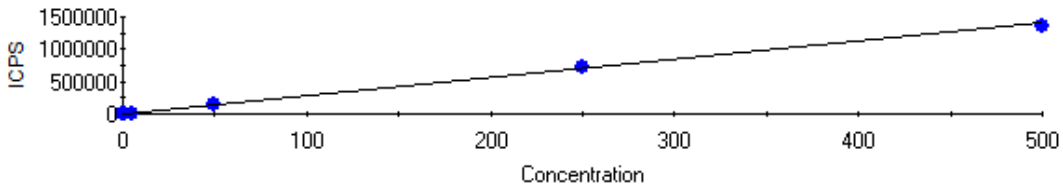
118Sn FQ Block 1



Intercept CPS=179.252291 Intercept Conc=0.054128
Sensitivity=3311.652113 Correlation Coeff=0.999849

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.002	0.002	184.62	0.00
242472_10399_Cal1	1.000	0.978	0.022	3418.30	2.19
242473_10399_Cal2	5.000	5.041	0.041	16874.40	0.83
242474_10399_Cal3	50.000	49.889	0.111	165393.34	0.22
242475_10399_Cal4	250.000	251.685	1.685	833672.55	0.67
242476_10399_Cal5	500.000	485.537	14.463	1608109.57	2.89

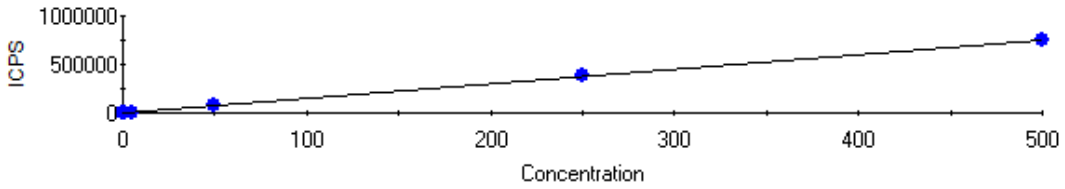
121Sb FQ Block 1



Intercept CPS=52.496994 Intercept Conc=0.018551
Sensitivity=2829.821902 Correlation Coeff=0.999655

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.000	0.000	52.55	0.00
242472_10399_Cal1	1.000	0.984	0.016	2838.18	1.56
242473_10399_Cal2	5.000	5.024	0.024	14268.74	0.47
242474_10399_Cal3	50.000	50.653	0.653	143390.93	1.31
242475_10399_Cal4	250.000	250.659	0.659	709374.16	0.26
242476_10399_Cal5	500.000	474.965	25.035	1344119.46	5.01

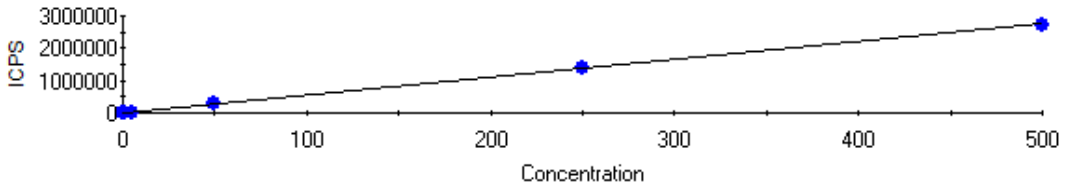
137Ba FQ Block 1



Intercept CPS=24.947253 Intercept Conc=0.016632
Sensitivity=1499.924831 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.001	0.001	25.89	0.00
242472_10399_Cal1	1.000	0.981	0.019	1496.13	1.92
242473_10399_Cal2	5.000	4.943	0.057	7439.73	1.13
242474_10399_Cal3	50.000	49.539	0.461	74329.88	0.92
242475_10399_Cal4	250.000	252.325	2.325	378493.03	0.93
242476_10399_Cal5	500.000	500.258	0.258	750375.06	0.05

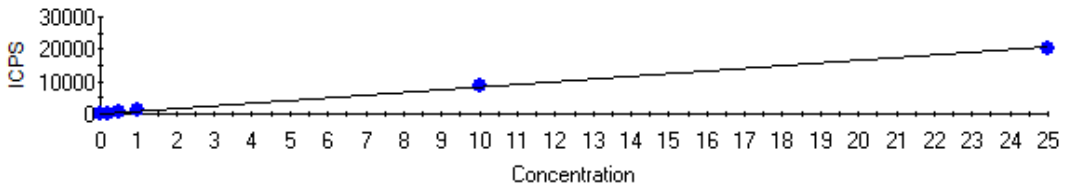
195Pt FQ Block 1



Intercept CPS=781.986328 Intercept Conc=0.141772
Sensitivity=5515.821617 Correlation Coeff=0.999935

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.001	0.001	785.97	0.00
242472_10399_Cal1	1.000	0.991	0.009	6245.41	0.95
242473_10399_Cal2	5.000	4.983	0.017	28268.46	0.34
242474_10399_Cal3	50.000	50.248	0.248	277941.86	0.50
242475_10399_Cal4	250.000	250.867	0.867	1384520.42	0.35
242476_10399_Cal5	500.000	489.955	10.045	2703289.03	2.01

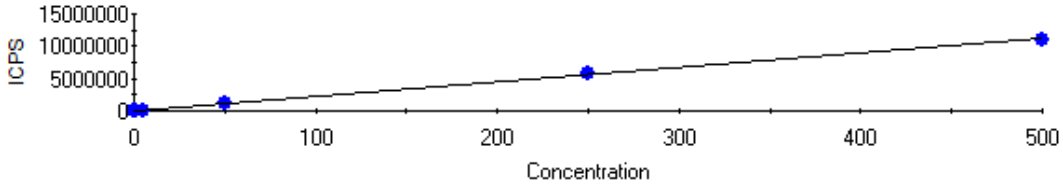
201Hg FQ Block 1



Intercept CPS=11.111956 Intercept Conc=0.013361
Sensitivity=831.654641 Correlation Coeff=0.999852

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	-0.000	0.000	11.11	0.00
242472_10399_Cal1	0.200	0.213	0.013	188.43	6.61
242473_10399_Cal2	0.500	0.497	0.003	424.23	0.65
242474_10399_Cal3	1.000	1.039	0.039	875.14	3.89
242475_10399_Cal4	10.000	10.054	0.054	8372.57	0.54
242476_10399_Cal5	25.000	24.065	0.935	20025.05	3.74

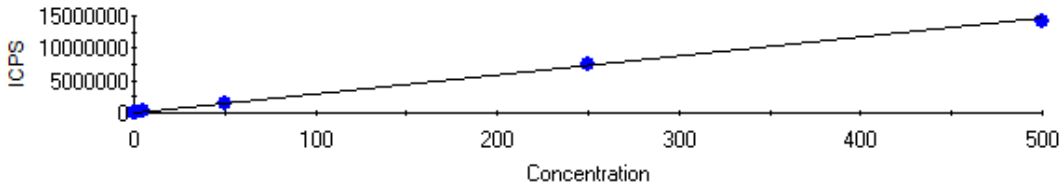
205Tl FQ Block 1



Intercept CPS=680.617306 Intercept Conc=0.030474
Sensitivity=22334.572908 Correlation Coeff=0.999874

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.000	0.000	684.54	0.00
242472_10399_Cal1	1.000	0.995	0.005	22905.68	0.49
242473_10399_Cal2	5.000	5.055	0.055	113570.95	1.09
242474_10399_Cal3	50.000	50.276	0.276	1123579.40	0.55
242475_10399_Cal4	250.000	252.445	2.445	5638935.78	0.98
242476_10399_Cal5	500.000	488.508	11.492	10911305.20	2.30

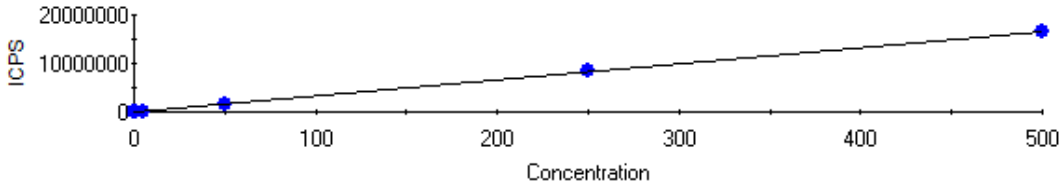
208Pb FQ Block 1



Intercept CPS=761.657833 Intercept Conc=0.025791
Sensitivity=29532.170967 Correlation Coeff=0.999744

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.000	0.000	763.00	0.00
242472_10399_Cal1	1.000	0.994	0.006	30103.57	0.64
242473_10399_Cal2	5.000	5.064	0.064	150325.71	1.29
242474_10399_Cal3	50.000	50.169	0.169	1482365.71	0.34
242475_10399_Cal4	250.000	252.097	2.097	7445744.09	0.84
242476_10399_Cal5	500.000	481.145	18.855	14210011.66	3.77

238U FQ Block 1



Intercept CPS=400.534623 Intercept Conc=0.012030
Sensitivity=33294.104624 Correlation Coeff=0.999870

Label	Defined	Measured	Error	Mean CPS	% Error
242471_10399_Cal0	0.000	0.000	0.000	402.89	0.00
242472_10399_Cal1	1.000	0.983	0.017	33121.69	1.72
242473_10399_Cal2	5.000	4.954	0.046	165338.03	0.92
242474_10399_Cal3	50.000	49.790	0.210	1658103.94	0.42
242475_10399_Cal4	250.000	258.479	8.479	8606221.56	3.39
242476_10399_Cal5	500.000	500.221	0.221	16654796.69	0.04

Dilution Corrected Concentrations

242471_10399_Cal0 12/12/2019 6:13:07 PM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:11	0.055	-0.015	-0.121	-0.009	0.898	0.176	-1.602	0.169	93.130	T 1294000.000
2	18:13:14	0.043	0.015	-0.016	0.230	-0.768	0.061	-3.960	-16.960	72.350	T 1281000.000
3	18:13:18	0.042	-0.008	-0.048	-0.220	-1.164	-0.309	-0.944	-12.090	72.560	T 1276000.000
x		0.047	-0.003	-0.062	0.000	-0.345	-0.024	-2.169	-9.628	79.340	T 1283000.000
σ		0.007	0.016	0.054	0.225	1.094	0.254	1.586	8.826	11.940	T 9046.000
%RSD		15.200	520.000	87.530	107100.000	317.300	1044.000	73.130	91.670	15.040	T 0.705

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:11	1.050	1.218	98.113%	99.268%	-0.041	-0.012	-0.003	4.524	0.011	-0.001
2	18:13:14	-4.207	-1.940	100.809%	100.027%	0.022	-0.192	0.003	5.169	0.102	-0.001
3	18:13:18	-2.617	1.145	101.078%	100.705%	0.085	-0.104	-0.000	4.684	-0.131	0.002
x		-1.925	0.141	100.000%	100.000%	0.022	-0.103	-0.000	4.793	-0.006	0.000
σ		2.696	1.803	1.639%	0.719%	0.063	0.090	0.003	0.336	0.117	0.002
%RSD		140.100	1275.000	1.639	0.719	283.500	87.790	2420.000	7.010	1965.000	1815.000

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:11	-0.001	0.005	0.002	0.032	101.322%	-0.034	-0.062	-0.009	97.847%	-0.001
2	18:13:14	-0.000	-0.023	0.001	-0.030	99.475%	-0.013	-0.005	-0.003	101.237%	0.007
3	18:13:18	0.001	-0.004	-0.004	-0.041	99.203%	0.020	-0.015	-0.012	100.916%	-0.000
x		-0.000	-0.007	-0.001	-0.013	100.000%	-0.009	-0.027	-0.008	100.000%	0.002
σ		0.001	0.014	0.003	0.039	1.153%	0.027	0.030	0.004	1.871%	0.004
%RSD		1369.000	190.200	428.100	303.600	1.153	295.400	112.800	52.590	1.871	212.200

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:13:11	-0.001	0.001	-0.002	0.005	97.667%	0.006	-0.000	-0.001	T 97.880%	0.004
2	18:13:14	0.009	0.006	-0.002	-0.005	101.011%	0.004	0.001	0.005	T 101.013%	-0.006
3	18:13:18	-0.001	-0.006	-0.021	0.000	101.322%	-0.005	-0.001	-0.002	T 101.107%	0.004
x		0.002	0.000	-0.008	-0.000	100.000%	0.002	0.000	0.001	T 100.000%	0.001
σ		0.006	0.006	0.011	0.005	2.027%	0.006	0.001	0.004	T 1.837%	0.006
%RSD		278.900	4292.000	133.300	11260.000	2.027	362.200	4694.000	653.800	T 1.837	770.700

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	18:13:11	-0.000	-0.002	0.001	100.423%	0.001
2	18:13:14	0.000	0.001	0.000	99.318%	-0.000
3	18:13:18	-0.000	0.001	-0.001	100.258%	-0.000
x		-0.000	0.000	0.000	100.000%	0.000
σ		0.000	0.002	0.001	0.596%	0.001
%RSD		11290.000	1160.000	2438.000	0.596	1294.000

242472_10399_Cal1 12/12/2019 6:20:21 PM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:24	0.979	1.006	1.798	255.000	253.700	262.400	54.910	52.060	85.480	T 1322000.000
2	18:20:28	0.981	1.034	1.161	255.200	266.200	257.000	50.540	42.230	75.330	T 1315000.000
3	18:20:31	0.972	0.892	0.861	249.700	251.900	249.100	53.170	54.860	77.570	T 1290000.000
x		0.977	0.978	1.273	253.300	257.300	256.200	52.880	49.720	79.460	T 1309000.000
σ		0.005	0.075	0.479	3.125	7.770	6.696	2.199	6.637	5.328	T 16490.000
%RSD		0.494	7.673	37.590	1.233	3.021	2.614	4.159	13.350	6.705	T 1.260

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:24	257.300	230.200	99.227%	101.727%	1.044	1.007	1.032	5.052	254.500	0.976
2	18:20:28	251.800	206.700	100.076%	101.823%	0.911	0.994	0.982	4.514	250.000	1.017
3	18:20:31	252.700	258.200	101.410%	101.966%	0.991	1.006	0.991	4.499	254.000	0.963
x		253.900	231.700	100.238%	101.839%	0.982	1.002	1.001	4.688	252.800	0.985
σ		2.956	25.780	1.100%	0.120%	0.067	0.008	0.027	0.315	2.424	0.028
%RSD		1.164	11.130	1.098	0.118	6.853	0.750	2.665	6.724	0.959	2.875

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:24	1.016	1.011	0.986	1.101	102.256%	0.976	1.021	1.008	98.965%	0.999
2	18:20:28	1.017	1.038	1.014	1.231	102.256%	1.090	0.992	1.018	100.177%	0.985
3	18:20:31	0.995	1.072	1.009	1.224	104.111%	1.023	1.005	1.016	99.304%	0.976
x		1.009	1.041	1.003	1.185	102.874%	1.030	1.006	1.014	99.482%	0.987
σ		0.013	0.030	0.015	0.074	1.071%	0.058	0.014	0.006	0.625%	0.012
%RSD		1.268	2.927	1.495	6.206	1.041	5.605	1.423	0.546	0.628	1.170

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:24	0.861	0.960	0.494	1.008	101.412%	0.965	0.966	0.967	T 100.471%	0.965
2	18:20:28	0.925	0.989	0.517	1.055	102.688%	1.001	1.011	1.008	T 100.575%	1.001
3	18:20:31	0.950	1.024	0.513	0.939	101.943%	0.968	0.976	0.968	T 100.061%	1.006
x		0.912	0.991	0.508	1.000	102.014%	0.978	0.984	0.981	T 100.369%	0.991
σ		0.046	0.032	0.012	0.058	0.641%	0.020	0.024	0.024	T 0.272%	0.023
%RSD		5.046	3.207	2.412	5.836	0.629	2.031	2.416	2.416	T 0.271	2.283

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	18:20:24	0.208	0.999	0.990	98.703%	0.977
2	18:20:28	0.208	1.003	1.007	99.910%	0.971
3	18:20:31	0.223	0.983	0.984	100.589%	1.000
x		0.213	0.995	0.994	99.734%	0.983
σ		0.009	0.010	0.012	0.955%	0.015
%RSD		4.080	1.040	1.214	0.958	1.556

242473_10399_Cal2 12/12/2019 6:27:34 PM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:38	5.181	5.084	5.836	501.700	500.100	503.000	259.700	279.200	79.120	T 1320000.000
2	18:27:42	5.108	4.900	5.500	485.600	507.600	499.300	265.100	259.200	78.720	T 1293000.000
3	18:27:45	5.195	4.927	5.596	514.900	501.400	505.100	252.900	254.900	103.700	T 1318000.000
x		5.161	4.970	5.644	500.700	503.000	502.500	259.200	264.400	87.170	T 1310000.000
σ		0.047	0.100	0.173	14.690	4.022	2.940	6.135	12.940	14.290	T 15080.000
%RSD		0.912	2.003	3.066	2.934	0.799	0.585	2.367	4.893	16.390	T 1.150

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:38	494.600	509.900	100.982%	100.792%	4.278	4.569	4.988	6.214	497.800	4.927
2	18:27:42	494.500	442.000	102.019%	101.587%	5.003	4.919	5.015	6.009	497.500	4.797
3	18:27:45	511.400	481.100	98.815%	102.003%	4.883	4.638	5.029	6.019	509.100	4.955
x		500.200	477.700	100.605%	101.461%	4.721	4.709	5.011	6.081	501.400	4.893
σ		9.733	34.090	1.635%	0.615%	0.389	0.186	0.021	0.116	6.629	0.084
%RSD		1.946	7.136	1.625	0.606	8.232	3.939	0.410	1.908	1.322	1.725

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:38	4.994	5.049	4.997	5.127	99.478%	5.183	5.254	5.021	100.114%	4.892
2	18:27:42	4.998	4.945	5.011	5.257	101.579%	5.166	4.861	4.941	101.405%	4.862
3	18:27:45	5.024	4.935	5.002	5.009	106.402%	4.898	4.582	5.064	98.363%	5.054
x		5.005	4.977	5.003	5.131	102.486%	5.082	4.899	5.009	99.961%	4.936
σ		0.016	0.063	0.007	0.124	3.550%	0.160	0.337	0.063	1.527%	0.103
%RSD		0.327	1.267	0.148	2.424	3.464	3.139	6.884	1.251	1.527	2.092

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:38	4.912	4.938	2.518	5.009	101.745%	5.002	4.868	4.840	T 101.231%	4.922
2	18:27:42	4.812	4.977	2.509	4.934	102.378%	5.003	4.868	4.884	T 101.529%	5.021
3	18:27:45	4.951	5.187	2.627	5.055	100.633%	5.119	5.335	5.106	T 98.006%	5.007
x		4.892	5.034	2.551	4.999	101.586%	5.041	5.024	4.943	T 100.255%	4.983
σ		0.072	0.134	0.066	0.061	0.883%	0.067	0.270	0.143	T 1.954%	0.053
%RSD		1.469	2.658	2.583	1.224	0.870	1.335	5.369	2.887	T 1.949	1.071

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	18:27:38	0.506	5.117	5.099	98.944%	5.015
2	18:27:42	0.497	5.152	5.141	99.006%	4.965
3	18:27:45	0.487	4.895	4.953	102.186%	4.882
x		0.497	5.055	5.064	100.045%	4.954
σ		0.010	0.139	0.099	1.854%	0.067
%RSD		1.926	2.756	1.946	1.853	1.351

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:52	49.760	50.910	49.720	2480.000	2483.000	2473.000	2523.000	2542.000	84.730	T 1335000.000
2	18:34:55	49.560	50.540	48.840	2486.000	2462.000	2447.000	2539.000	2633.000	69.570	T 1315000.000
3	18:34:59	49.720	50.720	50.090	2472.000	2516.000	2495.000	2604.000	2617.000	72.860	T 1333000.000
x		49.680	50.720	49.550	2480.000	2487.000	2471.000	2555.000	2597.000	75.720	T 1328000.000
σ		0.109	0.183	0.643	6.925	27.440	23.880	42.930	48.510	7.972	T 10880.000
%RSD		0.220	0.361	1.298	0.279	1.103	0.966	1.680	1.868	10.530	T 0.819

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:52	2492.000	2649.000	99.621%	100.596%	48.510	49.500	49.830	10.150	2478.000	49.800
2	18:34:55	2491.000	2477.000	100.123%	101.301%	50.590	49.470	49.970	11.890	2501.000	49.010
3	18:34:59	2500.000	2292.000	100.661%	101.379%	52.430	49.730	49.810	9.877	2484.000	49.760
x		2494.000	2473.000	100.135%	101.092%	50.510	49.570	49.870	10.640	2488.000	49.520
σ		5.017	178.700	0.520%	0.432%	1.961	0.138	0.089	1.090	11.620	0.445
%RSD		0.201	7.226	0.519	0.427	3.882	0.278	0.179	10.240	0.467	0.897

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:52	49.600	49.960	50.090	51.220	101.664%	51.480	51.290	49.520	98.296%	49.550
2	18:34:55	49.710	50.250	49.810	48.780	101.203%	49.600	51.740	49.780	98.015%	51.060
3	18:34:59	50.010	49.720	49.750	50.420	100.806%	50.390	49.870	49.720	99.485%	50.030
x		49.770	49.980	49.880	50.140	101.224%	50.490	50.970	49.670	98.599%	50.210
σ		0.213	0.267	0.184	1.246	0.429%	0.943	0.979	0.135	0.781%	0.772
%RSD		0.427	0.535	0.369	2.485	0.424	1.868	1.920	0.271	0.792	1.538

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:34:52	49.260	50.730	25.690	52.200	99.606%	50.280	52.080	50.470	T 97.543%	50.680
2	18:34:55	49.940	50.210	25.310	50.810	101.524%	49.740	50.220	48.830	T 100.402%	49.760
3	18:34:59	48.630	50.150	24.940	50.750	102.408%	49.650	49.660	49.320	T 99.474%	50.300
x		49.280	50.360	25.320	51.250	101.179%	49.890	50.650	49.540	T 99.140%	50.250
σ		0.654	0.318	0.376	0.821	1.433%	0.340	1.265	0.841	T 1.459%	0.465
%RSD		1.328	0.631	1.484	1.601	1.416	0.681	2.497	1.698	T 1.472	0.925

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	18:34:52	1.025	49.610	49.560	99.075%	49.290
2	18:34:55	1.009	50.220	50.210	100.969%	49.930
3	18:34:59	1.083	51.000	50.730	99.463%	50.140
x		1.039	50.280	50.170	99.836%	49.790
σ		0.039	0.698	0.589	1.000%	0.442
%RSD		3.731	1.388	1.174	1.002	0.887

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:05	255.800	249.000	253.600	12920.000	12680.000	12640.000	12610.000	12580.000	75.240	T1532000.000
2	18:42:08	254.800	247.100	252.500	12800.000	12430.000	12450.000	12330.000	12680.000	80.230	T1507000.000
3	18:42:12	254.200	250.500	251.200	12810.000	12460.000	12520.000	12420.000	12800.000	75.370	T1507000.000
x		254.900	248.900	252.400	12840.000	12520.000	12540.000	12450.000	12680.000	76.950	T1515000.000
σ		0.838	1.673	1.193	65.160	134.700	96.780	140.900	110.900	2.841	T14550.000
%RSD		0.329	0.672	0.473	0.507	1.076	0.772	1.132	0.874	3.692	T0.960

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:05	12770.000	12480.000	97.472%	100.874%	252.000	254.700	255.700	35.630	12670.000	255.400
2	18:42:08	12660.000	12490.000	97.546%	100.442%	249.700	253.400	253.700	39.020	12530.000	252.300
3	18:42:12	12640.000	12540.000	97.306%	99.488%	249.400	255.300	253.400	38.490	12520.000	251.900
x		12690.000	12510.000	97.441%	100.268%	250.400	254.500	254.300	37.710	12570.000	253.200
σ		67.120	32.170	0.123%	0.709%	1.443	0.977	1.236	1.824	83.730	1.923
%RSD		0.529	0.257	0.126	0.707	0.576	0.384	0.486	4.838	0.666	0.760

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:05	257.400	254.100	249.200	251.600	94.612%	250.500	251.500	258.200	94.816%	259.200
2	18:42:08	252.900	251.400	246.100	248.800	96.737%	241.700	243.700	254.900	95.564%	254.900
3	18:42:12	251.100	247.000	243.900	245.300	96.865%	239.500	243.000	255.100	95.693%	255.400
x		253.800	250.800	246.400	248.500	96.071%	243.900	246.100	256.100	95.358%	256.500
σ		3.258	3.607	2.629	3.163	1.265%	5.824	4.731	1.826	0.473%	2.393
%RSD		1.284	1.438	1.067	1.273	1.317	2.388	1.923	0.713	0.496	0.933

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:42:05	253.800	252.200	126.100	255.500	97.486%	253.800	250.700	255.400	T96.976%	254.400
2	18:42:08	251.800	248.900	124.900	252.100	98.968%	251.100	251.500	251.200	T97.946%	249.100
3	18:42:12	251.500	249.600	124.600	251.600	99.224%	250.200	249.700	250.300	T98.194%	249.100
x		252.300	250.200	125.200	253.100	98.559%	251.700	250.700	252.300	T97.705%	250.900
σ		1.279	1.741	0.834	2.101	0.938%	1.896	0.936	2.701	T0.644%	3.036
%RSD		0.507	0.696	0.666	0.830	0.952	0.753	0.373	1.071	T0.659	1.210

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	18:42:05	10.280	T257.700	T256.800	96.760%	T262.300
2	18:42:08	9.859	T249.000	T248.900	99.192%	T255.600
3	18:42:12	10.020	T250.600	T250.600	99.075%	T257.500
x		10.050	T252.400	T252.100	98.342%	T258.500
σ		0.213	T4.615	T4.119	1.372%	T3.446
%RSD		2.122	T1.828	T1.634	1.395	T1.333

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:49:18	M 513.600	479.200	499.900	T 24590.000	23990.000	24080.000	23540.000	23360.000	90.680	T 1695000.000
2	18:49:22	M 505.100	472.500	499.900	T 24720.000	24220.000	24310.000	24070.000	23930.000	88.920	T 1704000.000
3	18:49:25	M 506.300	473.500	498.600	T 23410.000	23150.000	23320.000	23040.000	23300.000	93.270	T 1636000.000
x		M 508.300	475.100	499.500	T 24240.000	23780.000	23910.000	23550.000	23530.000	90.960	T 1679000.000
σ		M 4.616	3.604	0.734	T 719.400	562.600	517.800	516.500	343.200	2.191	T 37050.000
%RSD		M 0.908	0.759	0.147	T 2.968	2.366	2.166	2.193	1.459	2.409	T 2.207

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:49:18	T 24460.000	24090.000	96.691%	98.781%	483.900	494.500	498.900	80.380	T 24480.000	M 508.100
2	18:49:22	T 24470.000	23860.000	96.308%	99.558%	487.100	495.500	497.600	76.270	T 24480.000	M 508.800
3	18:49:25	T 23550.000	22690.000	97.959%	98.922%	454.500	472.300	472.200	72.450	T 23080.000	479.900
x		T 24160.000	23550.000	96.986%	99.087%	475.200	487.400	489.600	76.370	T 24010.000	M 498.900
σ		T 527.600	747.900	0.864%	0.414%	18.000	13.120	15.050	3.969	T 809.900	M 16.450
%RSD		T 2.184	3.176	0.891	0.418	3.788	2.691	3.074	5.197	T 3.373	M 3.297

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:49:18	M 513.100	M 501.300	492.200	M 502.600	87.905%	M 507.100	488.900	M 503.800	93.775%	489.500
2	18:49:22	M 514.500	M 500.100	491.400	M 502.400	87.919%	M 503.800	491.900	M 500.200	94.470%	489.500
3	18:49:25	478.700	465.400	457.600	464.300	92.882%	474.900	459.700	488.000	95.518%	478.300
x		M 502.100	M 488.900	480.400	M 489.800	89.568%	M 495.300	480.100	M 497.300	94.588%	485.800
σ		M 20.290	M 20.360	19.740	M 22.050	2.870%	M 17.720	17.760	M 8.317	0.878%	6.461
%RSD		M 4.041	M 4.165	4.108	M 4.503	3.204	M 3.577	3.700	M 1.672	0.928	1.330

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:49:18	488.700	476.700	240.400	480.400	96.349%	492.100	481.900	M 507.800	T 94.812%	495.500
2	18:49:22	484.200	471.400	238.400	475.800	97.305%	491.800	477.200	M 506.400	T 95.201%	498.500
3	18:49:25	472.400	459.500	231.400	466.700	98.909%	472.800	465.800	486.600	T 96.971%	475.800
x		481.800	469.200	236.700	474.300	97.521%	485.500	475.000	M 500.300	T 95.661%	490.000
σ		8.435	8.801	4.731	6.958	1.293%	11.070	8.278	M 11.820	T 1.151%	12.370
%RSD		1.751	1.876	1.999	1.467	1.326	2.280	1.743	M 2.363	T 1.203	2.524

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	18:49:18	24.610	T 495.800	T 488.200	97.471%	TM 508.400
2	18:49:22	24.240	T 498.500	T 490.900	97.557%	TM 510.700
3	18:49:25	23.340	T 471.200	T 464.400	100.053%	T 481.600
x		24.070	T 488.500	T 481.100	98.360%	TM 500.200
σ		0.652	T 15.050	T 14.610	1.467%	TM 16.190
%RSD		2.711	T 3.081	T 3.036	1.491	TM 3.236

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:32	107.500	109.400	108.100	5548.000	5466.000	5469.000	5685.000	5511.000	62.850	T 1258000.000
2	18:56:35	107.000	108.900	107.900	5499.000	5482.000	5467.000	5563.000	5895.000	66.610	T 1263000.000
3	18:56:39	106.600	107.000	106.800	5356.000	5477.000	5384.000	5736.000	5782.000	64.270	T 1256000.000
x		107.000	108.400	107.600	5468.000	5475.000	5440.000	5661.000	5729.000	64.580	T 1259000.000
σ		0.484	1.229	0.728	99.420	8.263	48.230	88.460	196.900	1.903	T 3859.000
%RSD		0.452	1.134	0.676	1.818	0.151	0.886	1.562	3.437	2.947	T 0.306

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:32	5391.000	5423.000	92.579%	93.135%	105.800	110.900	109.400	17.160	5464.000	107.600
2	18:56:35	5512.000	5534.000	92.876%	93.414%	106.900	109.200	108.300	17.530	5463.000	107.100
3	18:56:39	5372.000	5165.000	94.354%	94.195%	104.400	107.700	106.500	18.650	5367.000	106.200
x		5425.000	5374.000	93.270%	93.582%	105.700	109.300	108.100	17.780	5431.000	107.000
σ		76.290	189.400	0.951%	0.549%	1.243	1.601	1.427	0.777	55.910	0.717
%RSD		1.406	3.524	1.019	0.587	1.176	1.465	1.321	4.371	1.029	0.670

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:32	106.500	106.500	105.200	109.400	94.815%	102.800	108.800	107.800	92.780%	111.500
2	18:56:35	105.900	108.100	106.600	111.500	98.789%	103.300	107.300	108.900	93.397%	110.900
3	18:56:39	105.600	104.800	105.200	109.100	94.947%	104.700	110.300	106.500	94.430%	109.300
x		106.000	106.500	105.600	110.000	96.184%	103.600	108.800	107.700	93.536%	110.600
σ		0.436	1.611	0.806	1.319	2.257%	0.962	1.466	1.221	0.834%	1.120
%RSD		0.411	1.513	0.763	1.199	2.347	0.929	1.348	1.133	0.892	1.013

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:32	101.800	101.100	55.510	113.500	97.138%	110.000	112.400	105.300	T 96.306%	104.700
2	18:56:35	101.800	101.900	56.500	113.500	96.320%	113.400	117.700	109.200	T 93.450%	106.000
3	18:56:39	99.950	99.680	55.470	110.000	97.951%	110.100	110.100	106.900	T 96.187%	106.900
x		101.200	100.900	55.830	112.300	97.136%	111.200	113.400	107.100	T 95.315%	105.900
σ		1.063	1.115	0.582	1.991	0.815%	1.943	3.905	2.001	T 1.615%	1.073
%RSD		1.051	1.105	1.042	1.773	0.839	1.748	3.444	1.868	T 1.695	1.013

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	18:56:32	4.084	106.800	108.800	98.369%	T 114.500
2	18:56:35	4.193	103.600	105.500	100.050%	T 109.100
3	18:56:39	4.274	109.100	110.000	98.185%	T 112.600
x		4.184	106.500	108.100	98.868%	T 112.100
σ		0.095	2.734	2.365	1.028%	T 2.706
%RSD		2.281	2.566	2.188	1.040	T 2.414

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:45	0.279	0.205	0.672	0.987	1.093	1.441	0.299	-7.458	74.750	T 1279000.000
2	19:03:49	0.256	0.163	0.615	0.159	0.753	0.281	0.183	-4.420	75.410	T 1269000.000
3	19:03:53	0.246	0.141	0.547	-1.333	-0.050	0.688	-1.684	2.693	77.760	T 1259000.000
x		0.260	0.169	0.611	-0.062	0.599	0.803	-0.400	-3.061	75.970	T 1269000.000
σ		0.017	0.033	0.063	1.175	0.587	0.588	1.113	5.210	1.579	T 10100.000
%RSD		6.435	19.190	10.270	1887.000	97.980	73.220	277.900	170.200	2.078	T 0.796

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:45	-2.822	1.258	86.602%	88.371%	-0.005	-0.009	0.021	3.371	0.936	0.036
2	19:03:49	-5.972	-2.136	87.476%	88.046%	0.067	-0.025	-0.003	3.466	0.553	0.026
3	19:03:53	-7.408	4.783	89.053%	88.430%	0.029	-0.054	-0.005	3.608	0.476	0.017
x		-5.401	1.302	87.711%	88.282%	0.030	-0.029	0.004	3.481	0.655	0.026
σ		2.346	3.460	1.242%	0.207%	0.036	0.023	0.014	0.119	0.247	0.009
%RSD		43.430	265.800	1.416	0.235	118.600	77.580	354.000	3.426	37.660	36.040

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:45	0.036	0.026	0.116	0.066	89.295%	-0.005	0.138	0.036	89.399%	0.043
2	19:03:49	0.026	0.005	0.072	0.039	89.538%	-0.016	0.028	0.020	90.363%	0.028
3	19:03:53	0.014	0.001	0.080	-0.017	89.653%	0.068	0.047	0.013	90.760%	0.028
x		0.025	0.011	0.089	0.029	89.495%	0.016	0.071	0.023	90.174%	0.033
σ		0.011	0.014	0.023	0.042	0.183%	0.046	0.059	0.012	0.700%	0.009
%RSD		43.750	128.800	25.760	144.200	0.204	288.200	82.720	53.110	0.776	26.560

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:45	0.017	0.052	0.014	0.058	90.039%	0.072	0.050	0.048	T 93.263%	0.049
2	19:03:49	0.038	0.006	0.012	0.029	91.397%	0.043	0.030	0.025	T 92.970%	0.012
3	19:03:53	-0.007	-0.004	0.006	0.010	91.941%	0.037	0.027	0.012	T 94.259%	0.010
x		0.016	0.018	0.011	0.032	91.126%	0.051	0.036	0.028	T 93.497%	0.024
σ		0.022	0.030	0.004	0.024	0.980%	0.019	0.013	0.018	T 0.676%	0.022
%RSD		139.300	165.700	38.900	75.150	1.075	36.970	35.380	64.200	T 0.723	94.800

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	19:03:45	0.012	0.121	0.042	94.277%	0.038
2	19:03:49	0.018	0.098	0.029	95.667%	0.023
3	19:03:53	0.018	0.095	0.022	95.444%	0.014
x		0.016	0.105	0.031	95.130%	0.025
σ		0.003	0.014	0.010	0.746%	0.012
%RSD		19.490	13.550	32.680	0.785	48.140

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:10:59	1.135	1.043	1.336	257.700	263.200	253.600	57.520	48.760	79.140	T 1322000.000
2	19:11:03	1.122	0.871	1.329	246.000	259.100	244.800	56.760	26.060	60.060	T 1296000.000
3	19:11:07	1.117	1.039	1.446	247.900	252.500	249.400	54.030	48.870	82.720	T 1301000.000
x		1.125	0.984	1.370	250.500	258.300	249.300	56.100	41.230	73.970	T 1306000.000
σ		0.009	0.098	0.066	6.317	5.386	4.428	1.839	13.140	12.180	T 13590.000
%RSD		0.797	9.992	4.794	2.521	2.085	1.776	3.277	31.870	16.470	T 1.041

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:10:59	253.500	213.500	90.081%	91.248%	0.842	0.984	0.965	4.015	258.300	1.022
2	19:11:03	255.600	254.100	94.823%	91.579%	1.067	0.964	0.996	4.019	250.100	1.000
3	19:11:07	251.300	213.000	93.122%	92.327%	1.218	0.991	0.970	4.208	251.300	0.988
x		253.500	226.900	92.675%	91.718%	1.042	0.980	0.977	4.081	253.300	1.003
σ		2.122	23.580	2.403%	0.553%	0.190	0.014	0.017	0.110	4.429	0.018
%RSD		0.837	10.390	2.592	0.603	18.180	1.422	1.737	2.705	1.749	1.746

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:10:59	1.009	1.033	1.074	1.180	94.647%	1.107	0.989	1.027	92.186%	0.977
2	19:11:03	1.023	0.993	1.080	1.078	93.337%	1.036	0.983	1.014	95.507%	1.002
3	19:11:07	1.003	1.053	1.066	1.107	96.673%	1.095	1.089	1.013	94.138%	0.959
x		1.012	1.026	1.073	1.122	94.885%	1.080	1.020	1.018	93.944%	0.979
σ		0.010	0.030	0.007	0.052	1.681%	0.038	0.059	0.008	1.669%	0.022
%RSD		1.000	2.948	0.632	4.674	1.771	3.540	5.813	0.784	1.777	2.226

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:10:59	0.923	1.031	0.526	0.974	94.688%	1.014	1.059	1.051	T 95.494%	1.026
2	19:11:03	0.997	0.961	0.499	1.010	98.272%	0.976	0.985	0.992	T 98.268%	0.962
3	19:11:07	0.977	1.014	0.513	0.977	96.140%	1.001	0.975	1.040	T 96.175%	0.982
x		0.965	1.002	0.513	0.987	96.367%	0.997	1.006	1.028	T 96.646%	0.990
σ		0.038	0.037	0.013	0.020	1.803%	0.019	0.046	0.031	T 1.446%	0.033
%RSD		3.959	3.645	2.571	2.023	1.871	1.922	4.581	3.048	T 1.496	3.293

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	19:10:59	0.240	1.057	1.019	96.238%	0.994
2	19:11:03	0.212	1.063	1.038	96.765%	1.016
3	19:11:07	0.218	1.037	1.015	97.421%	0.988
x		0.223	1.052	1.024	96.808%	1.000
σ		0.014	0.014	0.012	0.593%	0.015
%RSD		6.461	1.293	1.203	0.612	1.475

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:18:12	5.037	4.880	4.908	504.700	506.200	507.700	268.100	250.900	74.350	T 1346000.000
2	19:18:15	5.086	5.068	5.509	483.700	489.700	491.500	259.900	238.100	55.410	T 1288000.000
3	19:18:19	5.114	5.180	5.312	501.100	494.900	507.600	258.100	256.400	79.700	T 1315000.000
x		5.079	5.043	5.243	496.500	496.900	502.300	262.100	248.400	69.820	T 1316000.000
σ		0.039	0.152	0.306	11.270	8.445	9.319	5.350	9.388	12.760	T 29290.000
%RSD		0.769	3.006	5.845	2.270	1.700	1.855	2.042	3.779	18.270	T 2.225

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:18:12	515.200	522.800	94.786%	96.167%	4.882	5.049	5.167	4.837	511.500	4.938
2	19:18:15	491.400	516.200	98.339%	96.387%	4.421	4.702	4.926	4.770	494.100	4.869
3	19:18:19	496.900	538.000	97.682%	96.340%	4.950	4.906	5.062	4.882	497.000	4.946
x		501.200	525.700	96.936%	96.298%	4.751	4.886	5.052	4.830	500.900	4.918
σ		12.460	11.190	1.890%	0.116%	0.288	0.174	0.121	0.056	9.293	0.042
%RSD		2.487	2.129	1.950	0.120	6.058	3.561	2.399	1.161	1.855	0.863

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:18:12	5.059	5.035	5.049	4.922	97.170%	4.908	5.198	4.982	95.959%	5.015
2	19:18:15	4.886	4.986	4.947	5.193	99.483%	5.042	4.638	4.860	98.441%	4.887
3	19:18:19	4.901	5.064	5.013	4.752	102.522%	4.900	4.692	4.929	97.944%	5.022
x		4.949	5.028	5.003	4.956	99.725%	4.950	4.843	4.924	97.448%	4.975
σ		0.096	0.039	0.052	0.222	2.684%	0.080	0.309	0.061	1.313%	0.076
%RSD		1.934	0.784	1.037	4.483	2.692	1.614	6.375	1.243	1.348	1.521

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:18:12	4.873	5.063	2.543	5.257	97.456%	5.007	4.992	4.965	T 99.075%	4.918
2	19:18:15	4.933	4.916	2.492	4.928	101.012%	4.917	4.983	4.731	T 100.173%	4.819
3	19:18:19	4.971	5.117	2.493	5.094	100.271%	4.955	5.250	4.970	T 98.951%	4.922
x		4.925	5.032	2.509	5.093	99.580%	4.960	5.075	4.889	T 99.400%	4.886
σ		0.050	0.104	0.029	0.165	1.876%	0.045	0.151	0.136	T 0.673%	0.058
%RSD		1.006	2.070	1.160	3.236	1.884	0.911	2.984	2.789	T 0.677	1.193

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	19:18:12	0.476	5.064	5.023	98.080%	4.956
2	19:18:15	0.495	4.970	4.921	99.751%	4.874
3	19:18:19	0.477	4.929	4.910	100.589%	4.923
x		0.483	4.988	4.951	99.473%	4.917
σ		0.011	0.069	0.062	1.277%	0.041
%RSD		2.247	1.390	1.250	1.284	0.837

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:25	0.300	-0.003	0.279	TM 48540.000	M 47840.000	M 48100.000	10.720	M 51270.000	2321.000	T 1305000.000
2	19:25:29	0.294	-0.016	0.229	TM 48430.000	M 47830.000	M 47580.000	6.380	M 50770.000	2298.000	T 1288000.000
3	19:25:33	0.309	0.029	0.706	TM 48340.000	M 47620.000	M 47840.000	9.254	M 51010.000	2337.000	T 1288000.000
x		0.301	0.003	0.404	TM 48430.000	M 47760.000	M 47840.000	8.784	M 51010.000	2319.000	T 1294000.000
σ		0.008	0.023	0.262	TM 98.290	M 124.100	M 258.700	2.207	M 250.200	19.440	T 9870.000
%RSD		2.515	670.700	64.850	TM 0.203	M 0.260	M 0.541	25.130	M 0.490	0.838	T 0.763

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:25	TM 49720.000	M 49630.000	77.817%	84.711%	M 987.000	-0.210	0.218	4.672	TM 50140.000	-0.034
2	19:25:29	TM 49320.000	M 49140.000	75.971%	84.803%	M 989.400	-0.084	0.213	4.696	TM 50180.000	-0.009
3	19:25:33	TM 49610.000	M 50290.000	75.644%	84.435%	M 1002.000	0.112	0.211	3.739	TM 50010.000	0.066
x		TM 49550.000	M 49690.000	76.477%	84.649%	M 992.900	-0.061	0.214	4.369	TM 50110.000	0.008
σ		TM 205.000	M 577.400	1.172%	0.192%	M 8.310	0.162	0.004	0.546	TM 91.490	0.052
%RSD		TM 0.414	M 1.162	1.532	0.226	M 0.837	268.200	1.728	12.490	TM 0.183	674.400

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:25	0.035	0.062	0.176	-0.106	73.298%	0.098	0.170	0.493	78.947%	0.133
2	19:25:29	0.026	0.052	0.178	-0.220	72.889%	0.059	0.088	0.489	77.567%	0.116
3	19:25:33	0.044	0.061	0.169	-0.183	73.664%	0.094	0.127	0.512	77.021%	0.103
x		0.035	0.058	0.174	-0.170	73.284%	0.084	0.128	0.498	77.845%	0.117
σ		0.009	0.006	0.005	0.058	0.388%	0.022	0.041	0.012	0.993%	0.015
%RSD		26.240	9.974	2.985	34.440	0.529	26.000	31.770	2.404	1.275	12.720

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:25:25	M 1015.000	0.063	0.005	0.026	82.989%	0.175	0.083	0.127	83.812%	0.037
2	19:25:29	M 1021.000	0.046	-0.001	-0.048	80.850%	0.177	0.088	0.123	82.344%	0.026
3	19:25:33	M 1018.000	0.040	-0.001	-0.024	80.965%	0.155	0.105	0.107	82.461%	0.030
x		M 1018.000	0.049	0.001	-0.015	81.601%	0.169	0.092	0.119	82.872%	0.031
σ		M 3.034	0.012	0.004	0.038	1.203%	0.013	0.012	0.011	0.816%	0.005
%RSD		M 0.298	24.440	349.900	249.100	1.474	7.461	12.470	9.163	0.984	17.790

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	19:25:25	0.009	0.021	0.050	81.835%	0.009
2	19:25:29	0.006	0.021	0.056	82.826%	0.009
3	19:25:33	0.009	0.017	0.043	83.186%	0.007
x		0.008	0.020	0.050	82.616%	0.008
σ		0.002	0.002	0.007	0.699%	0.001
%RSD		23.240	11.610	13.320	0.847	17.350

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:37	98.200	95.270	95.720	TM 49570.000	M 47920.000	M 47970.000	4832.000	M 55210.000	2327.000	T 1376000.000
2	19:32:41	99.130	95.600	98.470	TM 48530.000	M 47210.000	M 47730.000	4800.000	M 54530.000	2259.000	T 1362000.000
3	19:32:45	98.040	94.280	96.530	TM 50490.000	M 48550.000	M 49120.000	4787.000	M 55130.000	2322.000	T 1392000.000
x		98.460	95.050	96.910	TM 49530.000	M 47890.000	M 48270.000	4806.000	M 54960.000	2303.000	T 1377000.000
σ		0.591	0.687	1.414	TM 980.100	M 668.900	M 742.300	22.810	M 372.600	37.710	T 14710.000
%RSD		0.600	0.723	1.459	TM 1.979	M 1.397	M 1.538	0.475	M 0.678	1.637	T 1.068

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:37	TM 49740.000	M 50610.000	75.015%	77.614%	M 1097.000	102.300	101.600	18.760	TM 50100.000	101.000
2	19:32:41	TM 49000.000	M 49790.000	77.162%	77.739%	M 1097.000	102.700	101.100	17.940	TM 49580.000	101.600
3	19:32:45	TM 50410.000	M 50680.000	74.879%	77.680%	M 1106.000	104.000	103.200	15.800	TM 50630.000	102.900
x		TM 49720.000	M 50360.000	75.686%	77.678%	M 1100.000	103.000	102.000	17.500	TM 50100.000	101.900
σ		TM 702.200	M 493.800	1.281%	0.063%	M 5.262	0.902	1.111	1.528	TM 524.900	0.973
%RSD		TM 1.412	M 0.981	1.692	0.081	M 0.478	0.876	1.090	8.730	TM 1.048	0.955

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:37	101.200	96.070	96.280	103.600	69.977%	102.900	105.400	103.400	76.446%	103.600
2	19:32:41	100.900	98.830	97.600	104.600	70.079%	104.600	106.100	104.500	77.601%	103.600
3	19:32:45	101.000	98.530	95.430	102.800	74.707%	100.100	103.500	105.600	75.588%	104.200
x		101.000	97.810	96.440	103.700	71.588%	102.500	105.000	104.500	76.545%	103.800
σ		0.150	1.513	1.093	0.883	2.702%	2.277	1.334	1.096	1.010%	0.381
%RSD		0.149	1.547	1.133	0.852	3.775	2.220	1.271	1.049	1.320	0.367

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:37	M 1141.000	96.410	47.350	102.000	81.471%	98.650	98.120	98.860	83.752%	103.400
2	19:32:41	M 1140.000	95.830	47.230	100.300	82.615%	99.360	98.860	99.220	84.906%	102.800
3	19:32:45	M 1161.000	97.950	48.410	105.400	82.334%	102.800	105.800	100.800	84.758%	103.700
x		M 1147.000	96.730	47.660	102.500	82.140%	100.300	100.900	99.640	84.472%	103.300
σ		M 11.740	1.097	0.650	2.569	0.596%	2.217	4.216	1.049	0.628%	0.418
%RSD		M 1.024	1.134	1.364	2.506	0.726	2.211	4.178	1.053	0.743	0.405

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	19:32:37	5.446	106.000	104.200	82.536%	T 113.900
2	19:32:41	5.190	106.000	103.900	83.865%	T 112.200
3	19:32:45	5.178	104.900	102.600	84.720%	113.000
x		5.271	105.700	103.600	83.707%	T 113.000
σ		0.151	0.637	0.838	1.101%	T 0.868
%RSD		2.871	0.603	0.809	1.315	T 0.767

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:39:51	102.600	100.200	101.800	4861.000	4901.000	4841.000	5055.000	4955.000	70.050	T 1352000.000
2	19:39:54	103.600	99.780	104.400	4878.000	4951.000	4842.000	5052.000	5152.000	69.730	T 1358000.000
3	19:39:58	102.000	101.000	103.400	4948.000	4967.000	4924.000	5078.000	5005.000	67.080	T 1354000.000
x		102.700	100.300	103.200	4896.000	4940.000	4869.000	5061.000	5037.000	68.960	T 1355000.000
σ		0.790	0.591	1.301	46.010	34.700	47.610	14.140	102.300	1.630	T 3335.000
%RSD		0.769	0.589	1.260	0.940	0.703	0.978	0.279	2.032	2.364	T 0.246

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:39:51	4824.000	4739.000	95.337%	90.711%	92.660	96.390	98.020	18.680	4832.000	97.280
2	19:39:54	4906.000	4812.000	96.947%	91.460%	95.780	98.910	98.880	18.990	4933.000	99.360
3	19:39:58	4924.000	4759.000	97.113%	91.516%	95.390	98.620	99.490	20.190	4938.000	99.040
x		4885.000	4770.000	96.466%	91.229%	94.610	97.970	98.800	19.290	4901.000	98.560
σ		53.140	37.720	0.981%	0.449%	1.700	1.378	0.739	0.795	59.470	1.124
%RSD		1.088	0.791	1.017	0.493	1.796	1.407	0.748	4.122	1.213	1.140

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:39:51	97.540	97.380	96.650	97.840	95.619%	97.530	98.910	97.190	95.510%	98.810
2	19:39:54	100.100	99.530	99.600	101.400	95.821%	102.500	101.500	99.210	96.326%	100.200
3	19:39:58	99.210	100.200	98.530	100.600	97.642%	99.560	102.000	100.600	95.281%	101.900
x		98.940	99.050	98.260	99.950	96.361%	99.870	100.800	99.000	95.706%	100.300
σ		1.293	1.489	1.497	1.870	1.114%	2.512	1.650	1.721	0.549%	1.564
%RSD		1.306	1.503	1.523	1.871	1.156	2.515	1.637	1.738	0.574	1.559

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:39:51	98.050	98.360	48.930	99.620	98.656%	97.410	98.850	97.700	T 98.516%	99.140
2	19:39:54	99.390	100.200	50.690	102.700	98.622%	100.700	102.500	101.900	T 96.896%	101.900
3	19:39:58	100.200	101.300	50.700	104.500	99.181%	100.300	103.100	101.500	T 97.714%	101.900
x		99.220	99.950	50.110	102.300	98.819%	99.480	101.500	100.400	T 97.709%	101.000
σ		1.090	1.488	1.018	2.465	0.313%	1.801	2.293	2.315	T 0.810%	1.614
%RSD		1.099	1.489	2.031	2.410	0.317	1.811	2.260	2.307	T 0.829	1.598

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	19:39:51	5.003	101.300	101.600	98.826%	T 101.300
2	19:39:54	5.161	102.100	101.900	99.493%	T 100.400
3	19:39:58	5.117	103.100	102.700	99.971%	T 102.500
x		5.094	102.200	102.100	99.430%	T 101.400
σ		0.082	0.870	0.600	0.575%	T 1.080
%RSD		1.600	0.851	0.588	0.579	T 1.064

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:47:04	0.129	0.041	0.391	30.930	30.900	31.210	5.217	20.680	80.210	T 1294000.000
2	19:47:08	0.146	0.098	0.294	22.540	22.480	24.890	7.123	20.920	78.930	T 1258000.000
3	19:47:11	0.161	0.070	0.275	9.041	12.570	14.180	1.325	4.602	65.650	T 1288000.000
x		0.145	0.070	0.320	20.840	21.980	23.430	4.555	15.400	74.930	T 1280000.000
σ		0.016	0.029	0.062	11.040	9.177	8.608	2.955	9.352	8.059	T 19550.000
%RSD		11.110	41.390	19.420	53.000	41.750	36.750	64.880	60.730	10.760	T 1.528

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:47:04	32.590	42.600	93.485%	95.735%	0.894	0.096	0.132	4.104	29.250	0.156
2	19:47:08	14.120	22.130	97.594%	96.654%	0.730	0.070	0.119	4.280	24.790	0.120
3	19:47:11	11.300	23.200	95.486%	97.194%	0.221	0.151	0.053	4.211	13.340	0.053
x		19.330	29.310	95.521%	96.528%	0.615	0.106	0.102	4.198	22.460	0.110
σ		11.560	11.520	2.055%	0.738%	0.351	0.041	0.042	0.089	8.207	0.052
%RSD		59.800	39.320	2.151	0.764	57.080	38.870	41.570	2.111	36.540	47.460

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:47:04	0.159	0.164	0.166	0.255	99.102%	0.098	0.243	0.147	93.476%	0.145
2	19:47:08	0.149	0.114	0.151	0.162	98.183%	0.189	0.216	0.120	97.768%	0.102
3	19:47:11	0.064	0.075	0.079	0.096	97.522%	0.061	0.097	0.052	96.710%	0.068
x		0.124	0.118	0.132	0.171	98.269%	0.116	0.185	0.106	95.985%	0.105
σ		0.052	0.045	0.046	0.080	0.794%	0.066	0.078	0.049	2.236%	0.039
%RSD		41.860	37.840	35.190	46.640	0.808	56.490	42.010	46.330	2.329	36.710

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:47:04	0.660	0.144	0.077	0.163	96.111%	0.176	0.179	0.195	T 98.633%	0.159
2	19:47:08	0.546	0.141	0.059	0.130	97.481%	0.144	0.123	0.100	T 97.776%	0.136
3	19:47:11	0.269	0.041	0.021	0.068	98.558%	0.080	0.078	0.066	T 99.079%	0.074
x		0.492	0.109	0.052	0.120	97.383%	0.133	0.127	0.120	T 98.496%	0.123
σ		0.201	0.059	0.029	0.048	1.226%	0.049	0.051	0.067	T 0.662%	0.044
%RSD		40.920	53.920	54.670	39.750	1.259	36.650	40.120	55.560	T 0.673	35.800

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	19:47:04	0.016	0.207	0.161	99.346%	0.150
2	19:47:08	0.012	0.179	0.140	95.849%	0.128
3	19:47:11	0.017	0.098	0.063	97.972%	0.064
x		0.015	0.161	0.121	97.722%	0.114
σ		0.003	0.057	0.052	1.762%	0.045
%RSD		18.610	35.180	42.490	1.803	39.350

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:18	0.095	0.040	0.106	20.130	14.390	18.870	16.090	39.240	76.300	T967900.000
2	19:54:21	0.088	0.048	0.286	18.010	15.020	17.850	17.110	56.850	79.550	T961900.000
3	19:54:25	0.074	0.023	-0.135	10.870	9.133	12.050	12.420	43.420	73.420	T959200.000
x		0.086	0.037	0.086	16.340	12.850	16.260	15.210	46.500	76.420	T963000.000
σ		0.011	0.012	0.211	4.847	3.230	3.679	2.466	9.200	3.066	T4428.000
%RSD		12.470	33.620	245.900	29.670	25.150	22.630	16.220	19.780	4.012	T0.460

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:18	-12.720	27.690	90.754%	92.157%	0.577	-0.018	0.748	3.337	17.360	0.158
2	19:54:21	-17.490	14.010	92.708%	92.062%	0.227	-0.112	0.703	3.742	14.960	0.135
3	19:54:25	-22.780	23.280	95.424%	85.700%	0.055	-0.007	0.720	2.928	11.040	0.128
x		-17.670	21.660	92.962%	89.973%	0.286	-0.046	0.723	3.336	14.450	0.140
σ		5.030	6.982	2.346%	3.701%	0.266	0.057	0.023	0.407	3.188	0.016
%RSD		28.470	32.230	2.523	4.113	92.990	125.600	3.121	12.200	22.060	11.360

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:18	0.070	0.367	0.117	0.526	98.485%	-0.044	0.024	0.075	93.092%	0.044
2	19:54:21	0.050	0.354	0.093	0.378	96.412%	-0.009	0.013	0.060	95.018%	0.033
3	19:54:25	0.032	0.380	0.084	0.433	99.828%	-0.005	-0.045	0.044	95.700%	0.032
x		0.051	0.367	0.098	0.446	98.241%	-0.019	-0.003	0.060	94.603%	0.036
σ		0.019	0.013	0.017	0.075	1.721%	0.021	0.037	0.015	1.353%	0.007
%RSD		36.930	3.547	17.300	16.860	1.752	112.400	1392.000	25.880	1.430	18.880

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:54:18	0.327	0.055	0.033	0.071	95.416%	37.920	0.053	0.052	T95.734%	0.074
2	19:54:21	0.314	0.025	0.020	0.026	98.536%	36.460	0.036	0.051	T97.960%	0.046
3	19:54:25	0.211	0.014	0.010	0.030	99.790%	36.350	0.024	0.037	T98.947%	0.028
x		0.284	0.031	0.021	0.042	97.914%	36.910	0.037	0.047	T97.547%	0.049
σ		0.063	0.021	0.011	0.025	2.252%	0.876	0.015	0.008	T1.646%	0.023
%RSD		22.350	67.070	55.290	58.970	2.300	2.374	38.870	17.790	T1.687	46.890

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	19:54:18	0.022	0.068	0.066	97.675%	0.048
2	19:54:21	0.019	0.054	0.048	99.459%	0.040
3	19:54:25	0.008	0.037	0.031	100.521%	0.023
x		0.016	0.053	0.048	99.218%	0.037
σ		0.008	0.015	0.018	1.438%	0.013
%RSD		45.780	28.880	36.540	1.449	33.660

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:30	0.221	-0.015	0.519	47.000	7.035	32.090	20.310	36.640	73.710	T 1241000.000
2	20:01:33	0.242	0.004	-0.012	44.710	6.654	29.840	26.100	23.600	74.070	T 1229000.000
3	20:01:37	0.256	-0.004	0.403	46.870	4.832	31.300	26.540	56.340	113.300	T 1223000.000
x		0.240	-0.005	0.303	46.190	6.173	31.080	24.310	38.860	87.020	T 1231000.000
σ		0.018	0.009	0.279	1.289	1.178	1.143	3.476	16.480	22.730	T 8970.000
%RSD		7.299	178.700	92.020	2.790	19.070	3.679	14.300	42.420	26.120	T 0.729

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:30	21.140	16.400	98.388%	99.046%	0.213	-0.125	0.381	5.243	5.447	0.084
2	20:01:33	22.510	7.039	99.565%	99.492%	0.211	0.100	0.392	4.119	4.822	0.080
3	20:01:37	14.940	4.018	100.929%	99.512%	0.019	-0.015	0.413	4.531	3.810	0.070
x		19.530	9.154	99.627%	99.350%	0.147	-0.013	0.395	4.631	4.693	0.078
σ		4.033	6.459	1.271%	0.263%	0.112	0.113	0.016	0.569	0.826	0.007
%RSD		20.650	70.560	1.276	0.265	75.700	835.800	4.062	12.280	17.600	9.316

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:30	0.013	0.793	0.207	1.077	99.320%	-0.046	-0.015	0.032	98.034%	0.008
2	20:01:33	0.012	0.857	0.236	1.102	100.212%	0.023	-0.101	0.025	99.100%	0.004
3	20:01:37	0.008	0.755	0.218	1.123	103.181%	0.037	-0.079	0.009	99.910%	0.004
x		0.011	0.802	0.221	1.101	100.904%	0.005	-0.065	0.022	99.015%	0.005
σ		0.002	0.052	0.014	0.023	2.021%	0.044	0.045	0.012	0.941%	0.002
%RSD		21.620	6.461	6.452	2.076	2.003	924.700	68.650	53.310	0.950	45.730

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:30	0.121	-0.018	-0.002	0.002	101.307%	35.760	0.019	0.018	T 101.308%	0.004
2	20:01:33	0.109	0.025	-0.003	-0.002	101.556%	36.820	0.019	0.014	T 101.132%	-0.001
3	20:01:37	0.092	0.025	-0.007	-0.002	101.737%	37.020	0.015	0.004	T 99.537%	0.015
x		0.107	0.010	-0.004	-0.000	101.533%	36.530	0.018	0.012	T 100.659%	0.006
σ		0.015	0.025	0.003	0.002	0.216%	0.673	0.003	0.007	T 0.976%	0.008
%RSD		13.660	240.200	74.320	694.000	0.213	1.843	14.700	61.040	T 0.969	134.000

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	20:01:30	0.000	0.021	0.018	99.185%	0.006
2	20:01:33	0.005	0.012	0.014	99.822%	0.001
3	20:01:37	0.003	0.012	0.006	99.772%	0.000
x		0.003	0.015	0.013	99.593%	0.003
σ		0.003	0.005	0.006	0.354%	0.003
%RSD		97.550	33.360	47.140	0.356	130.600

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:08:43	0.069	-0.016	4.004	5486.000	3423.000	8.263	45.790	M 28190.000	1139.000	T 928200.000
2	20:08:47	0.080	-0.009	4.081	5458.000	3382.000	7.831	39.210	M 28160.000	1158.000	T 921500.000
3	20:08:50	0.076	0.005	4.062	5510.000	3417.000	6.681	42.140	M 28270.000	1153.000	T 923500.000
x		0.075	-0.007	4.049	5485.000	3407.000	7.592	42.380	M 28200.000	1150.000	T 924400.000
σ		0.006	0.011	0.040	25.690	22.000	0.817	3.297	M 58.980	10.350	T 3448.000
%RSD		7.446	164.000	0.984	0.468	0.646	10.770	7.780	M 0.209	0.900	T 0.373

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:08:43	TM 41190.000	465.000	106.548%	101.995%	-0.561	-0.084	2.551	3.668	61.360	2.833
2	20:08:47	TM 41180.000	460.800	110.166%	103.518%	-0.333	-0.070	2.525	3.735	61.780	2.818
3	20:08:50	TM 41400.000	491.400	108.875%	104.205%	-0.441	-0.142	2.552	3.944	61.480	2.938
x		TM 41260.000	472.400	108.530%	103.239%	-0.445	-0.099	2.543	3.783	61.540	2.863
σ		TM 121.600	16.580	1.834%	1.131%	0.114	0.038	0.015	0.144	0.216	0.066
%RSD		TM 0.295	3.509	1.689	1.095	25.670	38.620	0.602	3.809	0.351	2.295

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:08:43	0.013	0.279	3.554	66.330	111.311%	-0.106	1.290	0.365	104.245%	0.046
2	20:08:47	0.008	0.320	3.427	66.010	114.883%	-0.055	1.383	0.350	107.605%	0.023
3	20:08:50	0.011	0.274	3.486	66.550	113.991%	-0.050	1.443	0.367	107.256%	0.027
x		0.011	0.291	3.489	66.300	113.395%	-0.070	1.372	0.361	106.369%	0.032
σ		0.003	0.025	0.064	0.271	1.859%	0.031	0.077	0.009	1.847%	0.013
%RSD		24.710	8.590	1.825	0.409	1.640	43.640	5.623	2.618	1.737	39.770

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:08:43	0.274	-0.034	-0.010	-0.007	104.990%	35.260	0.019	0.079	T 105.209%	0.035
2	20:08:47	0.332	-0.013	-0.013	0.004	108.791%	35.650	0.007	0.097	T 105.785%	0.026
3	20:08:50	0.302	-0.043	0.001	-0.004	108.463%	35.890	0.015	0.087	T 105.516%	0.039
x		0.302	-0.030	-0.007	-0.002	107.414%	35.600	0.014	0.088	T 105.503%	0.033
σ		0.029	0.015	0.007	0.006	2.106%	0.317	0.006	0.009	T 0.288%	0.007
%RSD		9.650	50.690	98.280	249.700	1.961	0.890	43.760	9.931	T 0.273	19.870

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	20:08:43	0.030	0.005	0.008	104.037%	-0.001
2	20:08:47	0.014	-0.001	0.006	106.265%	-0.003
3	20:08:50	0.017	-0.001	0.004	106.120%	-0.006
x		0.020	0.001	0.006	105.474%	-0.004
σ		0.009	0.004	0.002	1.247%	0.003
%RSD		41.710	416.900	37.070	1.182	75.220

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:57	45.450	46.570	95.370	T 15180.000	13170.000	2520.000	296.600	M 31320.000	1014.000	T 1232000.000
2	20:16:00	45.770	46.070	95.340	T 14730.000	13050.000	2455.000	292.100	M 31510.000	1040.000	T 1218000.000
3	20:16:04	45.380	45.970	97.900	T 15110.000	13180.000	2527.000	290.900	M 30930.000	1021.000	T 1214000.000
x		45.540	46.200	96.200	T 15010.000	13130.000	2501.000	293.200	M 31250.000	1025.000	T 1221000.000
σ		0.208	0.323	1.473	T 244.100	71.170	39.730	3.003	M 297.600	13.350	T 9648.000
%RSD		0.457	0.698	1.531	T 1.626	0.542	1.589	1.024	M 0.952	1.303	T 0.790

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:57	TM 97370.000	2866.000	105.668%	111.048%	50.230	50.400	49.840	13.220	2537.000	50.540
2	20:16:00	TM 95480.000	2961.000	104.273%	112.287%	48.520	49.690	48.710	11.710	2508.000	49.920
3	20:16:04	TM 95990.000	2790.000	102.437%	111.952%	49.750	51.280	49.750	9.833	2541.000	50.500
x		TM 96280.000	2872.000	104.126%	111.762%	49.500	50.460	49.430	11.590	2528.000	50.320
σ		TM 975.100	85.450	1.620%	0.641%	0.882	0.799	0.627	1.696	18.030	0.348
%RSD		TM 1.013	2.975	1.556	0.573	1.782	1.584	1.268	14.640	0.713	0.692

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:57	48.350	47.640	49.940	249.100	106.033%	48.550	55.100	49.960	103.333%	23.720
2	20:16:00	48.460	47.930	50.380	250.000	102.631%	50.150	54.030	49.370	103.101%	23.250
3	20:16:04	48.220	47.990	49.950	247.300	104.347%	49.080	54.190	50.540	101.371%	23.970
x		48.340	47.850	50.090	248.800	104.337%	49.260	54.440	49.960	102.602%	23.650
σ		0.120	0.187	0.252	1.388	1.701%	0.816	0.574	0.582	1.072%	0.370
%RSD		0.248	0.391	0.504	0.558	1.631	1.657	1.053	1.166	1.045	1.562

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:15:57	47.980	-0.019	26.700	53.540	103.872%	73.380	54.780	49.030	T 104.016%	0.015
2	20:16:00	47.110	0.003	26.650	51.710	103.456%	72.130	52.410	49.490	T 104.732%	0.021
3	20:16:04	48.180	-0.019	27.040	52.930	102.611%	73.300	54.190	49.650	T 103.249%	0.005
x		47.760	-0.012	26.800	52.730	103.313%	72.940	53.790	49.390	T 103.999%	0.014
σ		0.568	0.012	0.211	0.933	0.643%	0.698	1.229	0.322	T 0.742%	0.008
%RSD		1.190	108.100	0.787	1.770	0.622	0.957	2.285	0.653	T 0.713	60.820

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	20:15:57	1.272	48.650	49.030	100.495%	53.380
2	20:16:00	1.208	50.540	50.360	99.084%	53.910
3	20:16:04	1.342	49.600	49.480	100.535%	54.070
x		1.274	49.600	49.630	100.038%	53.790
σ		0.067	0.943	0.676	0.827%	0.362
%RSD		5.234	1.902	1.362	0.826	0.673

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:10	1.438	0.074	14.540	TM 95630.000	5263.000	38.670	117.700	M 55600.000	3218.000	T 1252000.000
2	20:23:13	1.469	0.067	15.250	TM 94410.000	5265.000	35.460	115.500	M 55040.000	3259.000	T 1232000.000
3	20:23:17	1.442	0.106	14.830	TM 93370.000	5287.000	37.430	119.800	M 55600.000	3239.000	T 1241000.000
x		1.450	0.082	14.870	TM 94470.000	5272.000	37.190	117.700	M 55410.000	3239.000	T 1241000.000
σ		0.017	0.021	0.355	TM 1129.000	13.360	1.619	2.134	M 324.600	20.200	T 10080.000
%RSD		1.149	25.250	2.390	TM 1.196	0.254	4.354	1.814	M 0.586	0.624	T 0.812

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:10	TM 70240.000	11930.000	86.950%	93.907%	1.883	43.740	6.221	5.208	807.200	70.840
2	20:23:13	TM 69300.000	11900.000	87.106%	93.285%	3.018	43.670	5.997	5.060	803.400	71.270
3	20:23:17	TM 69150.000	11750.000	87.419%	94.114%	2.727	43.250	6.076	5.659	795.000	70.510
x		TM 69560.000	11860.000	87.158%	93.769%	2.543	43.550	6.098	5.309	801.900	70.870
σ		TM 587.300	98.560	0.239%	0.431%	0.590	0.262	0.113	0.312	6.242	0.385
%RSD		TM 0.844	0.831	0.274	0.460	23.190	0.601	1.859	5.875	0.778	0.543

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:10	5.005	22.560	TM 2221.000	M 675.400	92.025%	319.500	54.290	163.300	93.047%	0.356
2	20:23:13	5.072	22.510	TM 2186.000	M 672.300	92.559%	325.400	55.290	162.300	93.704%	0.364
3	20:23:17	5.027	21.890	TM 2155.000	M 659.400	88.599%	331.000	56.380	160.000	95.191%	0.351
x		5.035	22.320	TM 2187.000	M 669.000	91.061%	325.300	55.320	161.800	93.981%	0.357
σ		0.034	0.375	TM 32.850	M 8.492	2.149%	5.756	1.048	1.699	1.099%	0.007
%RSD		0.673	1.680	TM 1.502	M 1.269	2.360	1.769	1.895	1.050	1.169	1.853

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:23:10	15.430	0.058	44.240	208.800	91.138%	18.190	0.384	1.182	T 95.141%	0.025
2	20:23:13	15.530	0.036	44.100	208.600	91.340%	18.020	0.352	1.176	T 94.818%	0.021
3	20:23:17	15.490	0.046	43.320	201.200	91.597%	17.690	0.323	1.175	T 95.728%	0.007
x		15.480	0.047	43.890	206.200	91.358%	17.970	0.353	1.178	T 95.229%	0.018
σ		0.052	0.011	0.499	4.298	0.230%	0.254	0.030	0.004	T 0.461%	0.009
%RSD		0.336	23.770	1.136	2.084	0.252	1.415	8.614	0.306	T 0.485	53.410

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	20:23:10	1.288	0.122	1.052	91.635%	0.600
2	20:23:13	1.219	0.107	1.070	92.417%	0.590
3	20:23:17	1.176	0.102	1.068	91.469%	0.594
x		1.228	0.110	1.063	91.840%	0.595
σ		0.057	0.010	0.010	0.506%	0.005
%RSD		4.617	9.054	0.926	0.551	0.790

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:23	2.452	0.066	25.600	TM 181200.000	9992.000	70.410	225.400	M 112500.000	6395.000	T 1150000.000
2	20:30:27	2.505	0.071	26.590	TM 181500.000	10000.000	68.150	228.600	M 113700.000	6357.000	T 1170000.000
3	20:30:31	2.440	0.083	25.880	TM 183000.000	10220.000	69.810	225.300	M 115500.000	6494.000	T 1165000.000
x		2.466	0.073	26.020	TM 181900.000	10070.000	69.460	226.400	M 113900.000	6415.000	T 1161000.000
σ		0.035	0.009	0.511	TM 955.600	129.200	1.171	1.908	M 1472.000	70.750	T 10580.000
%RSD		1.408	12.050	1.966	TM 0.525	1.283	1.686	0.843	M 1.293	1.103	T 0.911

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:23	TM 136000.000	23170.000	83.077%	86.822%	5.251	87.790	12.120	4.721	1585.000	139.800
2	20:30:27	TM 136900.000	23500.000	83.481%	86.546%	4.385	87.430	11.930	5.162	1578.000	140.500
3	20:30:31	TM 137000.000	23430.000	83.086%	87.015%	4.791	87.620	12.170	4.644	1588.000	139.800
x		TM 136600.000	23370.000	83.214%	86.795%	4.809	87.610	12.070	4.842	1584.000	140.000
σ		TM 511.000	174.200	0.231%	0.235%	0.433	0.177	0.128	0.279	5.111	0.430
%RSD		TM 0.374	0.746	0.277	0.271	9.012	0.203	1.058	5.771	0.323	0.307

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:23	9.866	43.690	TM 4210.000	M 1339.000	86.137%	M 680.200	118.000	308.700	94.941%	0.548
2	20:30:27	9.917	43.930	TM 4184.000	M 1335.000	87.374%	M 683.200	118.400	311.500	95.767%	0.554
3	20:30:31	9.771	43.620	TM 4149.000	M 1331.000	88.067%	M 690.800	119.800	311.000	96.038%	0.546
x		9.851	43.750	TM 4181.000	M 1335.000	87.193%	M 684.700	118.700	310.400	95.582%	0.549
σ		0.074	0.163	TM 30.510	M 4.069	0.978%	M 5.460	0.948	1.522	0.571%	0.004
%RSD		0.755	0.374	TM 0.730	M 0.305	1.122	M 0.797	0.798	0.490	0.598	0.805

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:23	30.000	0.038	83.430	410.700	88.388%	35.090	0.589	2.273	T 92.519%	0.034
2	20:30:27	30.170	0.017	84.110	414.800	89.168%	35.440	0.639	2.282	T 92.284%	0.023
3	20:30:31	30.390	0.026	83.260	411.500	89.209%	35.440	0.613	2.288	T 92.392%	0.038
x		30.190	0.027	83.600	412.300	88.922%	35.320	0.614	2.281	T 92.398%	0.032
σ		0.194	0.011	0.452	2.167	0.463%	0.204	0.025	0.008	T 0.118%	0.008
%RSD		0.642	39.030	0.541	0.526	0.521	0.577	4.052	0.336	T 0.127	24.570

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	20:30:23	2.646	0.117	2.089	88.251%	1.150
2	20:30:27	2.460	0.122	2.095	89.313%	1.154
3	20:30:31	2.540	0.104	2.088	89.324%	1.138
x		2.549	0.114	2.091	88.963%	1.147
σ		0.094	0.009	0.004	0.616%	0.008
%RSD		3.671	7.810	0.174	0.693	0.739

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:37:36	0.074	-0.007	0.652	3961.000	2316.000	8.774	40.010	20050.000	946.600	T 1194000.000
2	20:37:40	0.089	-0.022	0.498	3922.000	2261.000	8.802	41.160	20310.000	960.900	T 1170000.000
3	20:37:43	0.085	-0.027	0.676	3979.000	2310.000	9.432	41.570	20150.000	939.400	T 1175000.000
x		0.083	-0.019	0.609	3954.000	2296.000	9.003	40.910	20170.000	949.000	T 1180000.000
σ		0.008	0.011	0.096	29.580	30.340	0.372	0.808	131.500	10.950	T 12420.000
%RSD		9.216	57.400	15.830	0.748	1.321	4.136	1.974	0.652	1.154	T 1.053

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:37:36	TM 37400.000	1030.000	97.107%	95.572%	-0.058	-0.045	0.647	6.208	66.260	1.539
2	20:37:40	TM 36480.000	930.900	100.437%	96.299%	-0.167	0.178	0.631	5.573	65.890	1.592
3	20:37:43	TM 37040.000	933.000	99.246%	102.652%	0.263	-0.001	0.693	6.218	66.850	1.725
x		TM 36970.000	964.500	98.930%	98.174%	0.013	0.044	0.657	6.000	66.330	1.619
σ		TM 463.800	56.430	1.687%	3.895%	0.224	0.118	0.032	0.370	0.481	0.096
%RSD		TM 1.255	5.851	1.705	3.967	1768.000	270.700	4.847	6.158	0.725	5.932

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:37:36	0.124	3.908	7.075	62.590	103.885%	0.808	1.681	1.083	99.880%	-0.000
2	20:37:40	0.127	3.713	7.521	62.620	103.068%	0.856	1.819	1.176	101.179%	0.010
3	20:37:43	0.121	3.952	7.075	63.140	105.643%	0.819	1.668	1.153	100.639%	-0.005
x		0.124	3.858	7.224	62.780	104.199%	0.828	1.723	1.137	100.566%	0.001
σ		0.003	0.127	0.257	0.312	1.316%	0.025	0.083	0.048	0.652%	0.008
%RSD		2.314	3.292	3.560	0.497	1.263	3.065	4.841	4.232	0.649	534.900

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:37:36	0.082	0.016	0.091	0.407	101.532%	35.300	0.014	0.102	T 100.887%	-0.015
2	20:37:40	0.088	0.029	0.098	0.391	104.121%	35.160	0.011	0.072	T 103.300%	-0.014
3	20:37:43	0.102	-0.002	0.092	0.378	103.236%	36.040	0.009	0.089	T 101.855%	-0.014
x		0.091	0.015	0.094	0.392	102.963%	35.500	0.011	0.088	T 102.014%	-0.015
σ		0.010	0.015	0.004	0.015	1.316%	0.472	0.002	0.015	T 1.214%	0.001
%RSD		11.370	105.100	4.338	3.726	1.278	1.331	20.840	17.180	T 1.190	3.803

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	20:37:36	1.722	-0.000	0.017	102.697%	-0.006
2	20:37:40	1.690	0.001	0.018	104.522%	-0.006
3	20:37:43	1.664	-0.004	0.017	105.392%	-0.007
x		1.692	-0.001	0.017	104.204%	-0.006
σ		0.029	0.002	0.000	1.376%	0.001
%RSD		1.708	212.600	2.428	1.320	12.460

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:44:53	47.320	46.940	91.530	T 13890.000	12250.000	2483.000	286.000	M 25500.000	975.200	T 1084000.000
2	20:44:57	46.920	47.230	95.540	13590.000	12240.000	2506.000	291.500	M 26050.000	956.600	T 1097000.000
3	20:45:01	46.580	46.430	93.520	14240.000	12650.000	2602.000	287.400	M 26190.000	967.700	T 1116000.000
x		46.940	46.870	93.530	T 13900.000	12380.000	2530.000	288.300	M 25910.000	966.500	T 1099000.000
σ		0.368	0.404	2.005	T 324.300	234.600	62.990	2.871	M 362.600	9.366	T 15810.000
%RSD		0.785	0.861	2.143	T 2.333	1.896	2.490	0.996	M 1.399	0.969	T 1.439

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:44:53	TM 94260.000	3264.000	100.479%	103.551%	49.470	51.150	50.540	10.890	2604.000	50.950
2	20:44:57	TM 95150.000	3385.000	100.677%	103.605%	50.370	50.120	49.810	11.530	2567.000	50.510
3	20:45:01	TM 98270.000	3385.000	98.247%	104.003%	50.660	50.530	49.420	12.410	2599.000	51.520
x		TM 95890.000	3345.000	99.801%	103.720%	50.170	50.600	49.920	11.610	2590.000	50.990
σ		TM 2109.000	69.420	1.349%	0.247%	0.618	0.516	0.567	0.766	20.440	0.507
%RSD		TM 2.199	2.076	1.352	0.238	1.231	1.021	1.136	6.598	0.789	0.995

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:44:53	49.920	49.880	52.780	254.600	100.201%	51.970	56.580	51.720	100.594%	24.100
2	20:44:57	49.600	50.120	52.340	254.800	101.490%	51.400	58.930	50.990	102.211%	23.570
3	20:45:01	49.650	50.600	51.740	258.500	104.138%	51.450	56.430	52.490	99.729%	24.400
x		49.720	50.200	52.290	256.000	101.943%	51.610	57.320	51.730	100.845%	24.020
σ		0.171	0.366	0.523	2.185	2.007%	0.318	1.400	0.749	1.259%	0.421
%RSD		0.344	0.729	1.000	0.854	1.969	0.616	2.443	1.447	1.249	1.753

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:44:53	48.370	-0.022	27.480	54.020	103.223%	81.710	55.200	50.030	T 104.381%	0.046
2	20:44:57	47.240	0.048	27.250	53.580	102.292%	82.950	54.090	51.880	T 103.118%	0.027
3	20:45:01	47.800	0.006	27.630	54.390	102.064%	83.090	56.750	51.590	T 102.629%	0.037
x		47.800	0.011	27.450	54.000	102.526%	82.580	55.350	51.170	T 103.376%	0.037
σ		0.564	0.035	0.191	0.404	0.614%	0.759	1.335	0.997	T 0.904%	0.009
%RSD		1.179	333.500	0.697	0.748	0.599	0.920	2.413	1.948	T 0.875	25.080

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	20:44:53	2.932	51.070	51.390	100.667%	56.010
2	20:44:57	2.834	51.320	51.050	101.256%	54.230
3	20:45:01	2.803	49.940	50.290	102.454%	54.820
x		2.856	50.780	50.910	101.459%	55.020
σ		0.068	0.735	0.565	0.911%	0.911
%RSD		2.366	1.447	1.109	0.898	1.655

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:52:07	49.320	48.760	98.390	13480.000	12240.000	2475.000	295.000	M 26570.000	947.600	T 1258000.000
2	20:52:10	48.360	47.340	98.340	13580.000	12400.000	2509.000	306.100	M 26610.000	983.500	T 1242000.000
3	20:52:14	47.500	46.800	93.290	13820.000	12350.000	2504.000	291.500	M 26350.000	998.700	T 1244000.000
x		48.390	47.630	96.670	13630.000	12330.000	2496.000	297.600	M 26510.000	976.600	T 1248000.000
σ		0.911	1.014	2.932	174.300	81.930	18.460	7.614	M 137.300	26.240	T 9030.000
%RSD		1.882	2.129	3.033	1.279	0.664	0.740	2.559	M 0.518	2.687	T 0.724

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:52:07	TM 94890.000	5392.000	95.793%	96.977%	49.970	50.290	49.470	12.600	2594.000	51.750
2	20:52:10	TM 94800.000	5803.000	95.549%	97.797%	50.680	51.710	50.630	11.120	2625.000	52.430
3	20:52:14	TM 95350.000	5599.000	94.872%	98.206%	51.840	51.150	50.330	11.760	2616.000	52.500
x		TM 95010.000	5598.000	95.405%	97.660%	50.830	51.050	50.140	11.830	2612.000	52.230
σ		TM 291.500	205.500	0.477%	0.626%	0.947	0.717	0.602	0.743	15.990	0.415
%RSD		TM 0.307	3.671	0.500	0.641	1.863	1.405	1.200	6.278	0.612	0.794

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:52:07	50.180	51.940	53.960	259.400	92.389%	51.660	55.970	52.880	96.795%	18.170
2	20:52:10	50.330	53.060	53.860	260.600	93.287%	51.040	55.520	52.760	97.520%	18.180
3	20:52:14	49.300	52.070	53.050	257.700	97.187%	50.020	53.660	53.490	95.906%	18.310
x		49.940	52.360	53.620	259.200	94.287%	50.910	55.050	53.040	96.740%	18.220
σ		0.560	0.613	0.503	1.437	2.551%	0.825	1.223	0.394	0.808%	0.078
%RSD		1.121	1.170	0.937	0.554	2.705	1.621	2.222	0.743	0.836	0.430

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:52:07	47.480	0.033	27.260	52.810	97.470%	78.330	52.280	51.220	T 100.454%	0.016
2	20:52:10	48.100	0.046	27.130	53.200	99.197%	78.490	53.550	50.610	T 100.351%	0.030
3	20:52:14	48.350	-0.000	27.370	54.440	98.319%	79.270	55.610	51.330	T 99.391%	0.020
x		47.970	0.026	27.250	53.480	98.329%	78.690	53.810	51.050	T 100.065%	0.022
σ		0.448	0.024	0.118	0.849	0.863%	0.501	1.682	0.388	T 0.586%	0.007
%RSD		0.933	90.080	0.434	1.587	0.878	0.637	3.126	0.759	T 0.586	33.680

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	20:52:07	3.006	51.690	51.690	96.682%	55.800
2	20:52:10	3.034	51.110	51.140	98.244%	55.740
3	20:52:14	3.050	50.840	51.080	98.738%	56.220
x		3.030	51.210	51.300	97.888%	55.920
σ		0.022	0.434	0.337	1.073%	0.264
%RSD		0.731	0.848	0.656	1.097	0.472

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:18	46.580	47.280	91.540	13340.000	12030.000	2472.000	297.000	24880.000	960.800	T 1150000.000
2	20:59:22	46.830	48.620	89.990	13650.000	12280.000	2533.000	286.900	M 25630.000	921.100	T 1162000.000
3	20:59:25	46.260	48.550	92.740	13710.000	12410.000	2579.000	287.200	M 25830.000	896.500	T 1163000.000
x		46.560	48.150	91.420	13570.000	12240.000	2528.000	290.400	M 25440.000	926.100	T 1159000.000
σ		0.285	0.753	1.379	196.700	191.600	53.510	5.727	M 502.500	32.450	T 7268.000
%RSD		0.613	1.564	1.509	1.450	1.565	2.117	1.972	M 1.975	3.504	T 0.627

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:18	TM 93500.000	3560.000	96.055%	98.805%	48.570	49.220	49.410	13.890	2549.000	50.180
2	20:59:22	TM 95130.000	3658.000	95.083%	99.149%	47.210	51.530	50.330	11.150	2601.000	51.560
3	20:59:25	TM 95420.000	3576.000	93.938%	100.256%	48.790	50.590	49.890	13.350	2608.000	51.130
x		TM 94690.000	3598.000	95.025%	99.403%	48.190	50.450	49.880	12.800	2586.000	50.960
σ		TM 1034.000	52.910	1.059%	0.758%	0.852	1.163	0.461	1.451	32.370	0.710
%RSD		TM 1.093	1.470	1.115	0.763	1.769	2.305	0.923	11.340	1.252	1.394

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:18	48.590	51.580	51.040	252.200	99.893%	52.690	56.800	50.930	96.748%	49.710
2	20:59:22	49.280	53.170	51.750	258.800	101.455%	51.790	54.670	51.330	97.213%	50.630
3	20:59:25	49.110	53.090	51.410	254.600	101.621%	50.480	54.720	52.100	95.791%	51.250
x		48.990	52.610	51.400	255.200	100.990%	51.650	55.400	51.450	96.584%	50.530
σ		0.361	0.898	0.358	3.315	0.954%	1.109	1.213	0.596	0.725%	0.773
%RSD		0.738	1.706	0.697	1.299	0.944	2.147	2.189	1.158	0.751	1.529

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:18	46.320	0.052	25.550	53.670	97.414%	87.740	54.470	50.860	T 97.893%	-0.005
2	20:59:22	46.770	0.031	25.430	54.040	98.003%	87.990	56.000	51.400	T 97.021%	-0.018
3	20:59:25	46.960	0.004	25.550	55.080	97.257%	T 87.970	57.090	51.690	T 96.969%	0.004
x		46.680	0.029	25.510	54.270	97.558%	T 87.900	55.850	51.320	T 97.294%	-0.006
σ		0.328	0.024	0.069	0.730	0.393%	T 0.137	1.312	0.424	T 0.519%	0.011
%RSD		0.703	83.850	0.270	1.344	0.403	T 0.156	2.349	0.826	T 0.534	182.600

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	20:59:18	3.191	49.530	50.140	97.525%	53.780
2	20:59:22	3.112	49.090	49.490	100.222%	53.870
3	20:59:25	3.141	49.540	49.770	99.847%	54.170
x		3.148	49.390	49.800	99.198%	53.940
σ		0.040	0.259	0.329	1.461%	0.204
%RSD		1.263	0.525	0.661	1.473	0.379

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:32	101.600	99.420	98.640	4972.000	4995.000	4931.000	5065.000	4814.000	72.760	T 1356000.000
2	21:06:36	102.100	99.770	101.400	4977.000	4987.000	4938.000	5081.000	5086.000	79.140	T 1356000.000
3	21:06:39	100.900	97.810	100.000	5033.000	4980.000	4962.000	4845.000	4957.000	72.400	T 1354000.000
x		101.500	99.000	100.000	4994.000	4987.000	4943.000	4997.000	4952.000	74.770	T 1355000.000
σ		0.598	1.049	1.395	34.080	7.453	16.360	131.800	136.300	3.795	T 1564.000
%RSD		0.589	1.060	1.395	0.682	0.149	0.331	2.637	2.752	5.076	T 0.115

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:32	4986.000	4918.000	90.664%	91.143%	101.000	97.210	98.420	18.970	4934.000	100.100
2	21:06:36	4987.000	4930.000	92.151%	91.001%	99.520	98.430	98.980	18.510	4921.000	99.230
3	21:06:39	4994.000	4846.000	92.250%	91.730%	98.460	100.800	101.100	17.830	4944.000	99.410
x		4989.000	4898.000	91.689%	91.292%	99.660	98.820	99.510	18.440	4933.000	99.580
σ		4.464	45.600	0.889%	0.387%	1.279	1.829	1.426	0.571	11.180	0.458
%RSD		0.089	0.931	0.969	0.423	1.284	1.851	1.433	3.098	0.227	0.460

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:32	100.100	100.200	99.930	101.700	89.705%	103.200	104.100	99.020	91.178%	98.350
2	21:06:36	99.390	97.910	99.060	100.000	90.707%	99.610	101.900	100.700	92.247%	101.000
3	21:06:39	98.700	97.730	97.630	97.460	94.140%	95.910	99.050	102.500	91.444%	104.300
x		99.410	98.610	98.870	99.710	91.517%	99.580	101.700	100.700	91.623%	101.200
σ		0.717	1.376	1.160	2.120	2.326%	3.652	2.528	1.749	0.556%	2.961
%RSD		0.722	1.396	1.174	2.126	2.541	3.667	2.487	1.736	0.607	2.926

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:06:32	96.370	99.000	50.580	101.400	93.465%	100.700	99.540	101.500	T 94.820%	101.000
2	21:06:36	99.270	99.600	50.190	101.600	95.764%	98.730	99.010	98.870	T 96.733%	100.200
3	21:06:39	101.900	102.000	50.850	104.300	96.595%	100.400	101.400	98.780	T 96.909%	98.460
x		99.180	100.200	50.540	102.400	95.275%	99.950	99.980	99.700	T 96.154%	99.860
σ		2.768	1.562	0.333	1.633	1.622%	1.062	1.255	1.523	T 1.159%	1.276
%RSD		2.791	1.559	0.658	1.595	1.702	1.063	1.255	1.527	T 1.205	1.277

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	21:06:32	5.124	102.900	102.900	95.458%	T 104.200
2	21:06:36	4.870	103.800	103.200	97.219%	T 105.100
3	21:06:39	4.708	102.000	101.500	98.866%	T 104.200
x		4.901	102.900	102.500	97.181%	T 104.500
σ		0.210	0.861	0.911	1.704%	T 0.539
%RSD		4.278	0.837	0.889	1.753	T 0.516

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:13:47	0.106	0.117	0.594	7.754	5.740	4.602	-0.196	-2.781	64.980	T 1287000.000
2	21:13:50	0.103	0.059	0.438	5.584	3.976	4.525	-1.436	3.112	75.150	T 1278000.000
3	21:13:54	0.100	0.070	0.625	3.582	1.609	3.578	2.049	3.144	72.590	T 1274000.000
x		0.103	0.082	0.552	5.640	3.775	4.235	0.139	1.158	70.910	T 1280000.000
σ		0.003	0.031	0.101	2.086	2.073	0.571	1.767	3.412	5.288	T 6704.000
%RSD		2.975	37.520	18.200	36.990	54.920	13.470	1272.000	294.600	7.458	T 0.524

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:13:47	22.380	10.600	93.319%	92.522%	0.160	-0.046	0.087	5.050	5.421	0.088
2	21:13:50	17.770	3.997	94.325%	93.102%	0.091	0.086	0.065	4.520	4.148	0.068
3	21:13:54	5.511	1.126	94.266%	94.409%	0.025	-0.033	0.026	4.632	2.259	0.026
x		15.220	5.241	93.970%	93.344%	0.092	0.002	0.059	4.734	3.943	0.061
σ		8.716	4.859	0.564%	0.966%	0.067	0.073	0.031	0.280	1.591	0.032
%RSD		57.280	92.700	0.601	1.035	73.020	3537.000	52.310	5.903	40.350	51.890

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:13:47	0.080	0.082	0.131	0.185	92.902%	0.089	0.130	0.067	93.188%	0.083
2	21:13:50	0.060	0.047	0.113	0.158	94.552%	0.065	0.164	0.066	94.476%	0.055
3	21:13:54	0.028	0.025	0.052	0.102	93.052%	0.024	0.032	0.019	95.188%	0.026
x		0.056	0.051	0.098	0.148	93.502%	0.060	0.109	0.051	94.284%	0.055
σ		0.026	0.029	0.041	0.042	0.912%	0.033	0.068	0.028	1.014%	0.028
%RSD		47.040	56.040	42.100	28.250	0.976	55.350	62.960	54.970	1.075	51.600

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:13:47	0.102	0.062	0.025	0.074	96.179%	0.084	0.073	0.071	T 99.278%	0.093
2	21:13:50	0.082	0.044	0.033	0.061	95.948%	0.090	0.076	0.068	T 99.467%	0.044
3	21:13:54	0.040	0.045	0.022	0.026	95.464%	0.041	0.031	0.051	T 98.389%	0.021
x		0.074	0.050	0.027	0.054	95.864%	0.072	0.060	0.063	T 99.045%	0.052
σ		0.031	0.010	0.006	0.025	0.365%	0.026	0.025	0.011	T 0.576%	0.037
%RSD		42.140	19.440	20.500	46.890	0.381	36.860	42.460	17.610	T 0.581	70.150

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	21:13:47	0.022	0.121	0.086	98.172%	0.075
2	21:13:50	0.000	0.104	0.066	99.557%	0.062
3	21:13:54	0.000	0.066	0.035	97.721%	0.025
x		0.007	0.097	0.063	98.483%	0.054
σ		0.013	0.028	0.025	0.957%	0.026
%RSD		169.100	28.730	40.640	0.971	48.640

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:21:00	0.102	-0.001	0.186	3870.000	2487.000	7.790	49.260	21440.000	953.600	T 1253000.000
2	21:21:04	0.109	-0.012	0.310	3947.000	2524.000	8.897	47.670	21580.000	954.400	T 1261000.000
3	21:21:07	0.133	0.002	0.392	3714.000	2384.000	8.178	47.400	21000.000	942.100	T 1214000.000
x		0.115	-0.004	0.296	3844.000	2465.000	8.288	48.110	21340.000	950.000	T 1242000.000
σ		0.016	0.008	0.104	118.800	72.420	0.561	1.009	302.200	6.876	T 24860.000
%RSD		14.240	211.900	35.150	3.090	2.938	6.773	2.097	1.416	0.724	T 2.001

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:21:00	TM 37960.000	770.300	102.364%	100.556%	-0.365	0.066	0.482	4.918	39.700	1.722
2	21:21:04	TM 38500.000	793.900	102.803%	101.745%	-0.101	-0.008	0.484	5.076	41.880	1.809
3	21:21:07	TM 36700.000	712.200	108.143%	102.856%	-0.297	0.017	0.499	4.808	38.550	1.731
x		TM 37720.000	758.800	104.437%	101.719%	-0.255	0.025	0.488	4.934	40.040	1.754
σ		TM 925.200	42.030	3.217%	1.150%	0.137	0.038	0.009	0.135	1.690	0.048
%RSD		TM 2.453	5.539	3.081	1.131	53.870	153.400	1.830	2.726	4.221	2.722

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:21:00	0.443	0.405	2.359	50.410	106.302%	0.467	1.859	0.779	100.552%	0.059
2	21:21:04	0.442	0.365	2.427	52.780	106.241%	0.540	1.931	0.751	100.443%	0.076
3	21:21:07	0.389	0.379	2.304	50.990	108.824%	0.454	1.620	0.712	107.169%	0.053
x		0.424	0.383	2.363	51.390	107.123%	0.487	1.803	0.748	102.721%	0.062
σ		0.031	0.020	0.061	1.237	1.474%	0.047	0.163	0.034	3.852%	0.012
%RSD		7.318	5.223	2.595	2.406	1.376	9.551	9.046	4.514	3.750	19.050

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:21:00	0.102	0.034	0.015	0.051	102.155%	35.600	0.047	0.106	T 102.886%	0.079
2	21:21:04	0.101	0.024	0.022	0.035	102.759%	37.200	0.066	0.097	T 102.359%	0.079
3	21:21:07	0.110	-0.009	0.002	0.025	107.629%	35.240	0.040	0.061	T 105.252%	0.059
x		0.105	0.016	0.013	0.037	104.181%	36.010	0.051	0.088	T 103.499%	0.072
σ		0.005	0.023	0.010	0.014	3.001%	1.040	0.014	0.024	T 1.541%	0.011
%RSD		4.466	140.300	77.570	36.460	2.881	2.888	26.570	26.940	T 1.489	15.760

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	21:21:00	1.165	0.082	0.061	101.869%	0.041
2	21:21:04	1.235	0.078	0.051	102.339%	0.044
3	21:21:07	1.089	0.062	0.037	104.346%	0.028
x		1.163	0.074	0.049	102.852%	0.038
σ		0.073	0.011	0.012	1.316%	0.009
%RSD		6.273	14.550	24.160	1.279	23.450

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:14	0.054	-0.016	0.389	776.300	501.100	1.910	11.720	4315.000	245.600	T 1311000.000
2	21:28:17	0.047	-0.001	0.700	787.500	524.800	1.752	14.550	4097.000	245.300	T 1298000.000
3	21:28:21	0.042	-0.001	0.615	781.800	510.600	2.173	14.040	4202.000	264.100	T 1304000.000
x		0.048	-0.006	0.568	781.900	512.200	1.945	13.430	4205.000	251.700	T 1304000.000
σ		0.006	0.009	0.161	5.599	11.910	0.213	1.510	108.900	10.730	T 6064.000
%RSD		12.410	147.200	28.300	0.716	2.326	10.950	11.240	2.591	4.264	T 0.465

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:14	7493.000	159.900	99.266%	100.714%	0.120	-0.189	0.157	5.711	7.158	0.356
2	21:28:17	7595.000	173.900	98.203%	100.931%	-0.089	-0.109	0.150	5.406	7.140	0.359
3	21:28:21	7665.000	153.000	99.777%	101.190%	-0.066	-0.046	0.124	5.453	7.915	0.371
x		7584.000	162.200	99.082%	100.945%	-0.012	-0.115	0.144	5.524	7.404	0.362
σ		86.280	10.680	0.803%	0.238%	0.114	0.072	0.017	0.164	0.442	0.008
%RSD		1.138	6.580	0.811	0.236	962.400	62.790	12.110	2.976	5.974	2.125

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:14	0.067	0.068	0.495	10.390	100.559%	0.138	0.413	0.146	98.462%	0.010
2	21:28:17	0.080	0.101	0.469	10.620	103.445%	0.125	0.266	0.162	98.116%	0.002
3	21:28:21	0.069	0.062	0.465	10.050	106.081%	0.118	0.186	0.136	99.794%	0.012
x		0.072	0.077	0.476	10.350	103.362%	0.127	0.288	0.148	98.791%	0.008
σ		0.007	0.021	0.016	0.286	2.762%	0.010	0.115	0.013	0.886%	0.005
%RSD		9.829	27.330	3.377	2.760	2.672	7.864	39.980	8.938	0.897	68.320

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:14	0.022	-0.020	-0.014	-0.009	101.098%	7.517	0.002	0.020	T 103.432%	0.015
2	21:28:17	0.012	-0.003	-0.008	0.002	99.903%	7.271	0.012	0.016	T 99.281%	0.014
3	21:28:21	0.027	-0.023	-0.008	-0.005	100.714%	7.505	-0.004	0.001	T 99.846%	0.015
x		0.020	-0.016	-0.010	-0.004	100.572%	7.431	0.003	0.012	T 100.853%	0.015
σ		0.007	0.011	0.003	0.006	0.610%	0.139	0.008	0.010	T 2.251%	0.001
%RSD		36.520	68.640	34.520	150.000	0.607	1.867	233.000	80.150	T 2.232	5.556

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	21:28:14	0.203	-0.000	-0.002	101.125%	-0.003
2	21:28:17	0.212	0.000	-0.003	103.703%	-0.002
3	21:28:21	0.242	-0.002	-0.002	104.370%	-0.004
x		0.219	-0.001	-0.003	103.066%	-0.003
σ		0.021	0.001	0.001	1.714%	0.001
%RSD		9.363	164.600	31.000	1.663	35.040

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:28	0.057	-0.027	0.080	4318.000	2387.000	6.136	40.250	21710.000	968.200	T 1200000.000
2	21:35:32	0.058	-0.016	0.127	4295.000	2453.000	5.459	39.650	21460.000	998.700	T 1196000.000
3	21:35:36	0.055	-0.024	0.231	4155.000	2407.000	5.554	34.330	21810.000	967.400	T 1191000.000
x		0.057	-0.022	0.146	4256.000	2416.000	5.716	38.080	21660.000	978.100	T 1196000.000
σ		0.002	0.005	0.077	88.390	34.260	0.366	3.261	179.700	17.850	T 4336.000
%RSD		3.262	24.470	52.840	2.077	1.418	6.411	8.564	0.830	1.825	T 0.363

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:28	TM 38850.000	781.000	102.608%	103.404%	-0.074	0.025	0.615	5.436	41.690	1.884
2	21:35:32	TM 38860.000	824.200	104.646%	104.146%	-0.383	0.069	0.590	5.591	40.460	1.845
3	21:35:36	TM 38250.000	784.800	106.422%	104.340%	-0.326	0.115	0.614	5.666	40.980	1.844
x		TM 38650.000	796.700	104.558%	103.963%	-0.261	0.070	0.606	5.564	41.040	1.858
σ		TM 350.000	23.890	1.908%	0.494%	0.164	0.045	0.014	0.117	0.618	0.023
%RSD		TM 0.906	2.999	1.825	0.475	62.920	65.220	2.366	2.112	1.506	1.216

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:28	0.272	0.326	3.482	58.630	108.183%	0.068	1.191	0.676	101.420%	0.027
2	21:35:32	0.266	0.346	3.493	57.970	107.789%	0.129	1.285	0.661	103.062%	0.017
3	21:35:36	0.251	0.292	3.489	58.310	104.995%	0.083	1.513	0.622	104.965%	0.019
x		0.263	0.321	3.488	58.300	106.989%	0.093	1.330	0.653	103.149%	0.021
σ		0.011	0.027	0.006	0.333	1.738%	0.031	0.166	0.028	1.774%	0.005
%RSD		4.020	8.522	0.162	0.570	1.624	33.540	12.470	4.287	1.720	24.080

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:35:28	0.030	-0.020	0.011	0.002	102.687%	32.780	0.015	0.104	T 104.122%	0.013
2	21:35:32	0.049	-0.021	0.001	0.003	105.291%	33.120	0.005	0.109	T 105.107%	0.016
3	21:35:36	0.035	-0.031	0.005	-0.009	106.758%	31.890	0.021	0.121	T 108.217%	0.018
x		0.038	-0.024	0.006	-0.001	104.912%	32.600	0.013	0.111	T 105.815%	0.016
σ		0.010	0.006	0.005	0.007	2.062%	0.634	0.008	0.009	T 2.137%	0.002
%RSD		26.730	25.560	86.550	542.000	1.965	1.945	62.450	8.098	T 2.020	14.660

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	21:35:28	1.515	0.022	0.030	103.409%	-0.005
2	21:35:32	1.454	0.015	0.031	104.829%	-0.006
3	21:35:36	1.525	0.019	0.031	103.680%	-0.005
x		1.498	0.019	0.031	103.973%	-0.005
σ		0.038	0.004	0.001	0.754%	0.000
%RSD		2.556	19.540	3.000	0.725	5.780

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:42	0.045	-0.013	0.117	4326.000	2400.000	8.101	40.140	22290.000	1003.000	T 1234000.000
2	21:42:46	0.069	-0.020	0.604	4259.000	2397.000	8.304	42.880	22200.000	995.900	T 1218000.000
3	21:42:49	0.075	-0.024	0.056	4286.000	2430.000	7.098	39.460	22480.000	948.600	T 1219000.000
x		0.063	-0.019	0.259	4290.000	2409.000	7.834	40.830	22320.000	982.600	T 1224000.000
σ		0.016	0.006	0.300	33.590	18.480	0.646	1.807	144.400	29.630	T 8875.000
%RSD		25.250	29.820	115.900	0.783	0.767	8.241	4.427	0.647	3.016	T 0.725

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:42	TM 39640.000	699.800	102.825%	103.729%	-0.259	-0.018	0.521	5.988	39.840	1.437
2	21:42:46	TM 39040.000	690.300	104.275%	104.089%	-0.296	0.124	0.483	5.678	38.020	1.413
3	21:42:49	TM 39150.000	737.200	104.203%	104.857%	-0.551	0.051	0.472	5.556	38.010	1.476
x		TM 39280.000	709.100	103.768%	104.225%	-0.369	0.052	0.492	5.741	38.620	1.442
σ		TM 322.300	24.780	0.817%	0.576%	0.159	0.071	0.025	0.223	1.054	0.032
%RSD		TM 0.821	3.495	0.788	0.553	43.110	136.000	5.183	3.878	2.728	2.230

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:42	0.228	0.386	3.325	63.130	106.234%	0.194	1.582	0.603	102.175%	0.025
2	21:42:46	0.206	0.320	3.300	61.980	108.846%	0.200	1.593	0.554	104.344%	0.002
3	21:42:49	0.218	0.421	3.299	62.530	109.584%	0.227	1.890	0.616	104.141%	0.010
x		0.218	0.376	3.308	62.550	108.221%	0.207	1.688	0.591	103.553%	0.012
σ		0.011	0.051	0.015	0.577	1.760%	0.018	0.175	0.032	1.198%	0.011
%RSD		4.955	13.640	0.451	0.923	1.626	8.603	10.370	5.482	1.157	93.800

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:42:42	0.054	-0.012	-0.017	-0.003	103.136%	34.830	0.008	0.040	T 104.451%	0.028
2	21:42:46	0.062	-0.010	-0.009	-0.002	104.419%	35.100	0.011	0.057	T 104.669%	0.036
3	21:42:49	0.050	-0.023	-0.005	-0.004	105.294%	34.660	0.012	0.065	T 104.536%	0.033
x		0.055	-0.015	-0.011	-0.003	104.283%	34.860	0.011	0.054	T 104.552%	0.032
σ		0.006	0.007	0.006	0.001	1.085%	0.226	0.002	0.013	T 0.110%	0.004
%RSD		10.900	49.250	56.340	32.810	1.041	0.647	18.410	23.290	T 0.105	13.470

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	21:42:42	2.673	0.009	0.007	103.042%	-0.009
2	21:42:46	2.665	0.009	0.005	103.845%	-0.008
3	21:42:49	2.687	0.006	0.008	104.154%	-0.008
x		2.675	0.008	0.007	103.681%	-0.008
σ		0.011	0.002	0.002	0.574%	0.000
%RSD		0.417	20.650	27.030	0.554	2.847

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:49:54	0.071	-0.014	-0.088	3502.000	5061.000	9.581	54.820	M 64610.000	1406.000	T 1273000.000
2	21:49:57	0.062	-0.014	0.012	3525.000	5032.000	10.010	54.160	M 62760.000	1410.000	T 1250000.000
3	21:50:01	0.065	-0.026	-0.007	3461.000	4967.000	10.550	49.520	M 63570.000	1455.000	T 1259000.000
x		0.066	-0.018	-0.028	3496.000	5020.000	10.050	52.830	M 63650.000	1424.000	T 1261000.000
σ		0.004	0.007	0.053	32.240	48.290	0.486	2.890	M 926.000	27.280	T 11190.000
%RSD		6.763	38.280	192.000	0.922	0.962	4.834	5.470	M 1.455	1.916	T 0.888

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:49:54	T 23190.000	9623.000	91.680%	94.206%	-0.244	0.176	0.397	5.265	157.300	29.650
2	21:49:57	T 23160.000	9557.000	92.444%	94.492%	-0.685	0.054	0.412	5.262	159.700	30.080
3	21:50:01	T 23150.000	9201.000	92.368%	95.161%	-0.010	0.175	0.433	5.140	158.300	29.710
x		T 23170.000	9460.000	92.164%	94.620%	-0.313	0.135	0.414	5.222	158.400	29.810
σ		T 17.630	227.300	0.420%	0.490%	0.343	0.070	0.018	0.071	1.186	0.232
%RSD		T 0.076	2.403	0.456	0.517	109.400	51.760	4.456	1.364	0.749	0.778

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:49:54	0.654	0.276	10.160	460.500	94.651%	0.231	8.730	16.020	94.677%	0.000
2	21:49:57	0.694	0.259	10.170	463.900	96.863%	0.220	9.287	16.130	94.345%	0.001
3	21:50:01	0.693	0.279	9.952	457.800	94.569%	0.197	8.635	16.080	94.933%	-0.005
x		0.680	0.271	10.100	460.700	95.361%	0.216	8.884	16.080	94.652%	-0.001
σ		0.023	0.011	0.124	3.024	1.301%	0.018	0.352	0.056	0.295%	0.003
%RSD		3.381	4.029	1.231	0.656	1.365	8.156	3.963	0.347	0.312	233.700

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:49:54	0.069	0.026	0.006	-0.003	96.423%	33.120	0.013	1.290	T 99.642%	0.013
2	21:49:57	0.094	-0.016	0.003	-0.003	97.104%	34.490	0.018	1.293	T 99.981%	0.019
3	21:50:01	0.071	0.005	0.002	-0.012	96.977%	34.170	0.018	1.280	T 100.613%	0.017
x		0.078	0.005	0.004	-0.006	96.834%	33.930	0.016	1.287	T 100.079%	0.016
σ		0.014	0.021	0.002	0.005	0.362%	0.713	0.003	0.007	T 0.493%	0.003
%RSD		17.820	431.500	64.060	92.200	0.374	2.103	17.620	0.550	T 0.493	16.650

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	21:49:54	0.139	0.006	0.071	97.893%	-0.008
2	21:49:57	0.137	0.007	0.074	101.538%	-0.009
3	21:50:01	0.117	0.002	0.080	100.513%	-0.009
x		0.131	0.005	0.075	99.981%	-0.009
σ		0.012	0.003	0.004	1.880%	0.000
%RSD		9.364	58.050	5.754	1.880	4.975

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:07	0.104	-0.021	0.057	4215.000	4428.000	10.270	53.970	M 59660.000	1334.000	T 1210000.000
2	21:57:11	0.113	-0.034	0.243	4217.000	4383.000	11.690	52.800	M 59050.000	1281.000	T 1185000.000
3	21:57:15	0.094	-0.026	0.431	4168.000	4416.000	10.900	52.730	M 59810.000	1310.000	T 1198000.000
x		0.103	-0.027	0.243	4200.000	4409.000	10.950	53.170	M 59510.000	1308.000	T 1198000.000
σ		0.009	0.007	0.187	27.400	23.620	0.709	0.698	M 398.500	26.130	T 12610.000
%RSD		9.169	25.120	76.840	0.652	0.536	6.475	1.313	M 0.670	1.997	T 1.053

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:07	T 23080.000	8981.000	88.658%	85.851%	-0.383	-0.045	0.471	6.115	143.300	26.550
2	21:57:11	T 22650.000	8497.000	89.294%	90.525%	-0.442	0.000	0.464	5.747	146.600	27.260
3	21:57:15	T 22820.000	T 16040.000	90.870%	92.480%	-0.422	0.026	0.467	6.292	141.900	26.460
x		T 22850.000	T 11170.000	89.607%	89.619%	-0.416	-0.006	0.468	6.052	143.900	26.760
σ		T 216.000	T 4222.000	1.139%	3.406%	0.030	0.036	0.004	0.278	2.404	0.438
%RSD		T 0.945	T 37.790	1.271	3.801	7.186	584.200	0.775	4.593	1.670	1.636

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:07	0.698	1.051	11.440	403.200	91.805%	0.204	9.651	14.290	91.242%	-0.003
2	21:57:11	0.682	1.192	11.570	411.500	93.254%	0.142	9.146	14.110	92.075%	0.002
3	21:57:15	0.675	1.062	10.980	402.500	93.615%	0.166	9.690	14.260	92.572%	0.001
x		0.685	1.102	11.330	405.700	92.891%	0.171	9.496	14.220	91.963%	-0.000
σ		0.012	0.078	0.312	5.023	0.958%	0.031	0.304	0.098	0.672%	0.003
%RSD		1.694	7.118	2.750	1.238	1.032	18.140	3.198	0.688	0.731	3551.000

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:07	0.075	0.064	0.004	-0.008	92.793%	35.220	0.069	2.030	T 98.382%	-0.007
2	21:57:11	0.080	0.010	0.007	-0.012	95.935%	34.720	0.067	2.025	T 99.015%	0.007
3	21:57:15	0.082	0.052	0.004	0.001	95.266%	35.250	0.044	2.001	T 98.359%	-0.003
x		0.079	0.042	0.005	-0.006	94.665%	35.060	0.060	2.019	T 98.585%	-0.001
σ		0.003	0.028	0.002	0.007	1.655%	0.299	0.014	0.015	T 0.373%	0.007
%RSD		4.426	66.690	34.610	107.800	1.748	0.853	22.670	0.765	T 0.378	817.100

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	21:57:07	0.225	-0.002	0.115	98.666%	-0.005
2	21:57:11	0.181	-0.001	0.103	100.382%	-0.004
3	21:57:15	0.158	-0.003	0.099	100.062%	-0.004
x		0.188	-0.002	0.106	99.703%	-0.004
σ		0.034	0.001	0.008	0.913%	0.001
%RSD		18.090	55.620	7.810	0.915	18.270

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:20	0.054	-0.022	0.161	10940.000	1846.000	26.080	54.200	M 31880.000	858.500	T 1258000.000
2	22:04:24	0.062	-0.030	0.026	11150.000	1875.000	25.200	52.760	M 32870.000	845.900	T 1277000.000
3	22:04:28	0.061	-0.018	-0.028	11120.000	1891.000	26.190	51.330	M 32630.000	862.200	T 1265000.000
x		0.059	-0.023	0.053	11070.000	1871.000	25.820	52.760	M 32460.000	855.600	T 1266000.000
σ		0.005	0.006	0.097	112.300	22.640	0.543	1.434	M 516.300	8.563	T 9736.000
%RSD		7.672	26.140	183.900	1.015	1.210	2.101	2.718	M 1.591	1.001	T 0.769

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:20	TM 30170.000	464.500	93.842%	94.166%	-0.124	2.165	0.548	4.950	3116.000	14.450
2	22:04:24	TM 30880.000	512.900	94.469%	94.597%	-0.250	2.203	0.573	5.049	3179.000	14.740
3	22:04:28	TM 30580.000	541.700	93.917%	94.072%	-0.029	2.159	0.525	5.204	3174.000	14.680
x		TM 30540.000	506.400	94.076%	94.278%	-0.135	2.176	0.549	5.068	3156.000	14.630
σ		TM 353.500	39.010	0.343%	0.280%	0.111	0.024	0.024	0.128	35.040	0.156
%RSD		TM 1.158	7.703	0.364	0.297	82.540	1.108	4.422	2.525	1.110	1.067

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:20	1.198	0.259	17.340	219.900	94.099%	0.335	11.700	0.655	94.279%	0.009
2	22:04:24	1.243	0.300	17.150	222.400	98.752%	0.247	10.470	0.669	95.793%	0.001
3	22:04:28	1.224	0.307	17.200	223.000	97.088%	0.202	11.190	0.690	96.790%	0.002
x		1.222	0.289	17.230	221.700	96.646%	0.262	11.120	0.671	95.620%	0.004
σ		0.022	0.026	0.097	1.654	2.358%	0.068	0.622	0.018	1.264%	0.005
%RSD		1.818	8.891	0.560	0.746	2.439	25.950	5.594	2.641	1.322	112.600

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:20	1.311	0.007	-0.004	0.256	96.723%	32.310	0.021	0.079	T 101.099%	0.008
2	22:04:24	1.375	-0.017	-0.001	0.276	99.169%	33.230	0.014	0.084	T 101.132%	0.003
3	22:04:28	1.387	0.032	-0.002	0.232	98.196%	32.600	0.019	0.065	T 100.750%	-0.001
x		1.357	0.007	-0.002	0.255	98.029%	32.710	0.018	0.076	T 100.994%	0.003
σ		0.041	0.024	0.001	0.022	1.231%	0.474	0.004	0.010	T 0.212%	0.004
%RSD		3.017	338.500	74.740	8.674	1.256	1.451	21.930	12.750	T 0.209	124.800

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	22:04:20	3.853	0.107	0.567	97.784%	-0.005
2	22:04:24	3.611	0.108	0.562	100.919%	-0.004
3	22:04:28	3.826	0.111	0.560	99.984%	-0.005
x		3.763	0.109	0.563	99.562%	-0.005
σ		0.133	0.002	0.004	1.610%	0.001
%RSD		3.523	2.112	0.703	1.617	14.380

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:11:32	0.081	-0.030	0.175	11460.000	1575.000	47.160	75.610	M 29570.000	827.600	T 1260000.000
2	22:11:36	0.088	-0.023	0.305	11650.000	1592.000	47.220	73.330	M 30290.000	823.200	T 1271000.000
3	22:11:39	0.068	-0.004	0.203	11720.000	1626.000	48.410	77.240	M 30010.000	878.000	T 1279000.000
x		0.079	-0.019	0.228	11610.000	1598.000	47.600	75.390	M 29960.000	842.900	T 1270000.000
σ		0.010	0.014	0.069	134.900	26.160	0.706	1.960	M 361.600	30.460	T 9204.000
%RSD		13.030	72.010	30.190	1.162	1.638	1.483	2.600	M 1.207	3.613	T 0.725

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:11:32	TM 29920.000	499.500	99.581%	97.257%	-0.032	6.417	0.500	5.237	4438.000	20.240
2	22:11:36	TM 30120.000	512.300	101.757%	98.289%	-0.317	6.610	0.537	4.858	4459.000	20.140
3	22:11:39	TM 30690.000	519.900	100.259%	98.767%	-0.315	6.471	0.492	5.157	4509.000	20.570
x		TM 30240.000	510.600	100.532%	98.104%	-0.221	6.499	0.510	5.084	4469.000	20.320
σ		TM 398.000	10.310	1.113%	0.772%	0.164	0.099	0.024	0.200	36.670	0.222
%RSD		TM 1.316	2.020	1.107	0.787	74.090	1.528	4.755	3.933	0.821	1.093

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:11:32	1.884	0.389	25.510	256.700	101.001%	0.673	16.270	0.937	100.192%	0.015
2	22:11:36	1.918	0.363	25.060	250.600	104.779%	0.633	14.770	0.981	101.996%	0.004
3	22:11:39	1.986	0.331	25.350	260.400	105.930%	0.707	14.320	0.986	102.338%	0.024
x		1.930	0.361	25.310	255.900	103.903%	0.671	15.120	0.968	101.509%	0.014
σ		0.052	0.029	0.229	4.937	2.578%	0.037	1.022	0.027	1.153%	0.010
%RSD		2.697	8.049	0.903	1.929	2.481	5.470	6.760	2.789	1.136	66.210

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:11:32	1.942	0.007	-0.007	0.790	101.186%	31.260	0.042	0.135	T 102.220%	0.011
2	22:11:36	1.942	-0.029	0.000	0.836	104.462%	30.890	0.051	0.146	T 104.380%	0.006
3	22:11:39	2.004	-0.003	-0.001	0.809	102.673%	31.310	0.062	0.144	T 100.777%	-0.006
x		1.963	-0.008	-0.002	0.812	102.774%	31.160	0.052	0.142	T 102.459%	0.004
σ		0.036	0.019	0.004	0.023	1.640%	0.232	0.010	0.006	T 1.813%	0.009
%RSD		1.833	220.100	161.900	2.825	1.596	0.745	19.260	4.280	T 1.770	216.000

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	22:11:32	5.058	0.059	1.163	99.617%	0.004
2	22:11:36	5.080	0.059	1.158	101.813%	0.005
3	22:11:39	5.030	0.058	1.133	101.751%	0.004
x		5.056	0.059	1.151	101.061%	0.004
σ		0.025	0.001	0.016	1.250%	0.000
%RSD		0.500	1.253	1.390	1.237	10.720

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:18:46	0.075	-0.023	0.324	9554.000	2089.000	106.700	92.580	M 33710.000	910.500	T 1229000.000
2	22:18:50	0.074	-0.020	0.500	9279.000	2045.000	108.800	97.830	M 33970.000	939.200	T 1210000.000
3	22:18:54	0.075	-0.027	0.402	9575.000	2126.000	106.000	95.220	M 33790.000	939.300	T 1198000.000
x		0.075	-0.023	0.409	9469.000	2087.000	107.200	95.210	M 33820.000	929.700	T 1212000.000
σ		0.001	0.004	0.088	165.000	40.530	1.458	2.628	M 132.800	16.570	T 15340.000
%RSD		1.304	16.010	21.610	1.742	1.942	1.361	2.760	M 0.393	1.782	T 1.265

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:18:46	TM 33310.000	803.500	99.918%	100.395%	-0.374	7.401	0.596	4.365	8145.000	15.390
2	22:18:50	TM 32510.000	835.500	102.282%	101.661%	-0.021	7.388	0.580	5.124	8273.000	15.760
3	22:18:54	TM 32290.000	802.000	102.403%	102.027%	-0.075	7.415	0.628	4.792	8099.000	15.460
x		TM 32700.000	813.700	101.534%	101.361%	-0.157	7.401	0.602	4.760	8172.000	15.540
σ		TM 539.800	18.950	1.401%	0.857%	0.190	0.014	0.024	0.380	90.390	0.194
%RSD		TM 1.651	2.329	1.380	0.845	121.300	0.184	4.064	7.990	1.106	1.247

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:18:46	1.988	0.399	29.560	267.600	105.757%	0.763	13.670	1.295	100.275%	0.063
2	22:18:50	2.076	0.377	30.170	271.400	101.472%	0.838	14.500	1.281	102.739%	0.094
3	22:18:54	2.072	0.321	29.670	268.000	105.063%	0.797	14.190	1.267	101.447%	0.076
x		2.045	0.365	29.800	269.000	104.097%	0.799	14.120	1.281	101.487%	0.078
σ		0.050	0.040	0.329	2.089	2.300%	0.038	0.422	0.014	1.232%	0.016
%RSD		2.441	11.010	1.102	0.777	2.210	4.711	2.992	1.071	1.214	20.380

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:18:46	2.742	0.010	0.003	0.940	101.507%	33.720	0.106	0.348	T 102.487%	0.003
2	22:18:50	2.722	0.007	-0.005	0.948	103.200%	33.580	0.092	0.288	T 104.908%	-0.014
3	22:18:54	2.669	-0.011	-0.004	0.917	104.563%	33.650	0.107	0.293	T 104.935%	0.006
x		2.711	0.002	-0.002	0.935	103.090%	33.650	0.101	0.310	T 104.110%	-0.002
σ		0.038	0.011	0.004	0.016	1.531%	0.069	0.009	0.033	T 1.405%	0.011
%RSD		1.405	519.100	214.500	1.736	1.485	0.204	8.419	10.720	T 1.350	613.300

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	22:18:46	7.567	0.072	1.979	102.581%	0.020
2	22:18:50	7.650	0.082	2.048	101.610%	0.019
3	22:18:54	7.618	0.078	2.061	102.729%	0.021
x		7.612	0.077	2.029	102.307%	0.020
σ		0.042	0.005	0.044	0.608%	0.001
%RSD		0.547	6.395	2.162	0.594	4.681

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:00	0.067	-0.013	-0.123	13640.000	1474.000	24.830	78.000	M 27250.000	904.500	T 1232000.000
2	22:26:03	0.061	-0.027	0.095	13650.000	1478.000	23.990	76.500	M 27420.000	946.300	T 1230000.000
3	22:26:07	0.071	-0.038	0.313	T 13420.000	1474.000	23.850	76.190	M 27290.000	936.600	T 1219000.000
x		0.066	-0.026	0.095	T 13570.000	1475.000	24.220	76.900	M 27320.000	929.100	T 1227000.000
σ		0.005	0.013	0.218	T 132.300	2.229	0.531	0.971	M 88.490	21.890	T 6804.000
%RSD		7.933	48.710	229.900	T 0.975	0.151	2.190	1.262	M 0.324	2.356	T 0.554

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:00	TM 26860.000	544.200	102.716%	104.063%	-0.357	2.102	0.529	4.568	3232.000	13.430
2	22:26:03	TM 26860.000	521.900	104.109%	104.814%	-0.410	2.021	0.525	5.101	3245.000	13.350
3	22:26:07	TM 26690.000	515.500	105.454%	105.410%	-0.119	1.986	0.494	4.915	3220.000	13.410
x		TM 26800.000	527.200	104.093%	104.762%	-0.295	2.036	0.516	4.862	3233.000	13.400
σ		TM 97.930	15.040	1.369%	0.675%	0.155	0.060	0.019	0.271	12.550	0.043
%RSD		TM 0.365	2.854	1.315	0.644	52.590	2.923	3.704	5.566	0.388	0.324

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:00	1.859	0.329	22.860	260.800	106.031%	0.414	15.820	0.854	101.042%	-0.010
2	22:26:03	1.901	0.381	22.820	263.300	107.596%	0.463	15.580	0.872	103.224%	-0.005
3	22:26:07	1.908	0.339	22.810	267.000	107.696%	0.466	16.310	0.824	105.161%	-0.014
x		1.889	0.350	22.830	263.700	107.108%	0.448	15.910	0.850	103.142%	-0.010
σ		0.026	0.028	0.029	3.133	0.933%	0.029	0.370	0.024	2.060%	0.004
%RSD		1.401	7.979	0.125	1.188	0.872	6.533	2.329	2.872	1.997	44.680

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:00	1.864	-0.024	0.002	0.253	103.853%	31.160	0.021	0.099	T 106.357%	0.004
2	22:26:03	1.788	-0.032	-0.000	0.289	105.865%	31.380	0.009	0.067	T 106.389%	0.013
3	22:26:07	1.811	0.035	-0.002	0.304	105.721%	31.130	0.005	0.095	T 106.479%	0.010
x		1.821	-0.007	-0.000	0.282	105.146%	31.220	0.012	0.087	T 106.408%	0.009
σ		0.039	0.036	0.002	0.026	1.122%	0.140	0.008	0.017	T 0.063%	0.005
%RSD		2.148	519.200	950.500	9.221	1.067	0.447	71.290	19.950	T 0.059	52.400

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	22:26:00	2.954	0.072	0.467	103.706%	-0.007
2	22:26:03	3.000	0.078	0.462	105.157%	-0.006
3	22:26:07	3.169	0.075	0.472	104.203%	-0.007
x		3.041	0.075	0.467	104.355%	-0.007
σ		0.113	0.003	0.005	0.737%	0.001
%RSD		3.721	3.730	1.102	0.706	11.940

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:13	94.800	93.690	95.730	5032.000	5002.000	4979.000	5061.000	5036.000	74.500	T 1411000.000
2	22:33:17	93.670	92.980	93.870	4980.000	4928.000	4920.000	5091.000	5130.000	67.450	T 1394000.000
3	22:33:20	93.230	92.470	93.980	4958.000	4943.000	4930.000	4976.000	5094.000	79.080	T 1385000.000
x		93.900	93.050	94.530	4990.000	4957.000	4943.000	5043.000	5087.000	73.680	T 1397000.000
σ		0.811	0.609	1.044	38.160	39.220	31.440	59.590	46.990	5.857	T 13420.000
%RSD		0.864	0.654	1.105	0.765	0.791	0.636	1.182	0.924	7.949	T 0.961

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:13	5073.000	5199.000	103.950%	108.142%	99.590	100.900	101.800	19.020	5038.000	101.600
2	22:33:17	5008.000	5038.000	104.478%	108.725%	98.810	99.740	100.800	20.400	4988.000	99.820
3	22:33:20	5047.000	4718.000	103.625%	108.687%	99.230	100.600	101.900	19.910	5014.000	100.900
x		5043.000	4985.000	104.018%	108.518%	99.210	100.400	101.500	19.780	5013.000	100.800
σ		32.710	244.600	0.431%	0.326%	0.393	0.596	0.568	0.698	24.880	0.905
%RSD		0.649	4.907	0.414	0.301	0.396	0.593	0.560	3.531	0.496	0.898

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:13	102.500	102.900	102.200	101.400	103.570%	103.700	103.600	101.700	102.021%	102.400
2	22:33:17	100.800	101.900	100.400	99.970	104.718%	99.620	100.700	100.600	103.146%	102.200
3	22:33:20	101.700	102.500	101.300	101.000	105.554%	101.000	102.700	101.200	102.279%	103.200
x		101.700	102.400	101.300	100.800	104.614%	101.400	102.300	101.200	102.482%	102.600
σ		0.833	0.498	0.901	0.747	0.996%	2.067	1.486	0.549	0.589%	0.517
%RSD		0.819	0.486	0.890	0.742	0.952	2.037	1.452	0.542	0.575	0.504

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:33:13	102.000	103.600	52.460	104.300	103.568%	102.000	103.500	102.400	T 103.436%	103.800
2	22:33:17	100.700	102.600	51.190	104.600	105.551%	101.200	102.700	100.600	T 105.078%	101.600
3	22:33:20	101.600	102.500	51.730	105.000	104.514%	102.500	106.600	101.200	T 102.974%	104.000
x		101.400	102.900	51.800	104.700	104.544%	101.900	104.300	101.400	T 103.829%	103.100
σ		0.643	0.611	0.637	0.338	0.992%	0.686	2.045	0.914	T 1.106%	1.360
%RSD		0.634	0.594	1.229	0.323	0.949	0.673	1.962	0.902	T 1.065	1.318

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	22:33:13	5.144	104.200	104.100	101.704%	T 105.400
2	22:33:17	5.122	102.400	102.300	104.451%	T 103.700
3	22:33:20	5.068	102.100	102.200	103.431%	T 103.400
x		5.111	102.900	102.900	103.195%	T 104.200
σ		0.039	1.142	1.083	1.389%	T 1.067
%RSD		0.772	1.110	1.052	1.346	T 1.024

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:40:29	0.095	0.077	0.097	11.990	6.184	6.492	3.238	8.077	66.530	T 1307000.000
2	22:40:33	0.087	0.041	0.043	7.825	4.883	5.071	0.626	1.342	69.120	T 1290000.000
3	22:40:37	0.092	0.031	0.219	4.360	4.463	3.683	-1.906	-0.824	64.010	T 1297000.000
x		0.092	0.050	0.120	8.059	5.177	5.082	0.653	2.865	66.550	T 1298000.000
σ		0.004	0.024	0.090	3.822	0.897	1.405	2.572	4.642	2.553	T 8598.000
%RSD		4.351	49.310	75.440	47.420	17.330	27.640	394.000	162.000	3.836	T 0.662

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:40:29	19.120	6.321	100.381%	104.625%	0.020	0.010	0.129	4.271	8.164	0.120
2	22:40:33	17.110	0.516	101.962%	104.787%	0.236	-0.102	0.045	4.546	6.389	0.085
3	22:40:37	9.658	12.660	102.414%	104.195%	-0.011	-0.034	0.047	4.281	4.105	0.043
x		15.300	6.499	101.585%	104.536%	0.081	-0.042	0.074	4.366	6.219	0.083
σ		4.985	6.073	1.067%	0.306%	0.135	0.057	0.048	0.156	2.035	0.039
%RSD		32.590	93.460	1.051	0.293	165.200	135.000	65.270	3.571	32.720	46.550

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:40:29	0.109	0.116	0.171	0.282	103.445%	0.129	0.043	0.108	100.924%	0.081
2	22:40:33	0.098	0.058	0.149	0.190	103.123%	0.069	0.156	0.067	102.012%	0.060
3	22:40:37	0.046	0.055	0.095	0.152	104.642%	0.023	0.092	0.036	102.288%	0.055
x		0.084	0.076	0.139	0.208	103.737%	0.074	0.097	0.070	101.741%	0.066
σ		0.034	0.034	0.039	0.067	0.800%	0.053	0.057	0.036	0.721%	0.014
%RSD		40.160	44.880	28.220	32.090	0.771	71.990	58.450	51.490	0.709	21.200

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:40:29	0.116	0.078	0.045	0.109	101.358%	0.118	0.109	0.093	T 103.569%	0.104
2	22:40:33	0.080	0.056	0.030	0.069	102.081%	0.090	0.096	0.074	T 104.217%	0.081
3	22:40:37	0.054	0.023	0.016	0.072	102.107%	0.084	0.055	0.045	T 103.544%	0.046
x		0.083	0.052	0.030	0.083	101.848%	0.097	0.087	0.071	T 103.777%	0.077
σ		0.031	0.028	0.015	0.022	0.425%	0.018	0.028	0.024	T 0.381%	0.029
%RSD		37.000	53.620	48.310	26.380	0.418	18.550	32.430	34.050	T 0.367	38.170

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	22:40:29	0.010	0.157	0.139	100.882%	0.104
2	22:40:33	-0.003	0.114	0.086	101.904%	0.083
3	22:40:37	0.013	0.072	0.053	103.297%	0.050
x		0.007	0.114	0.092	102.028%	0.079
σ		0.008	0.042	0.043	1.212%	0.027
%RSD		125.500	36.970	46.680	1.188	34.700

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:44	0.087	0.002	0.219	10490.000	1829.000	56.810	66.630	M 32340.000	851.300	T 1287000.000
2	22:47:48	0.104	-0.008	0.042	10550.000	1847.000	56.490	70.020	M 32960.000	892.800	T 1271000.000
3	22:47:51	0.083	0.002	0.219	10480.000	1837.000	58.090	75.460	M 32620.000	878.300	T 1283000.000
x		0.092	-0.001	0.160	10510.000	1838.000	57.130	70.700	M 32640.000	874.200	T 1280000.000
σ		0.011	0.006	0.102	39.310	9.326	0.846	4.454	M 312.600	21.060	T 8054.000
%RSD		12.190	596.000	64.090	0.374	0.507	1.481	6.300	M 0.958	2.409	T 0.629

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:44	TM 32040.000	354.900	109.564%	111.373%	-0.370	4.289	0.652	4.456	3070.000	15.330
2	22:47:48	TM 31730.000	381.200	110.718%	111.986%	-0.897	4.244	0.655	4.836	3055.000	15.120
3	22:47:51	TM 32130.000	396.200	110.488%	111.386%	-0.479	4.332	0.696	4.275	3070.000	15.200
x		TM 31970.000	377.400	110.257%	111.582%	-0.582	4.288	0.668	4.522	3065.000	15.220
σ		TM 210.200	20.880	0.610%	0.350%	0.278	0.044	0.025	0.286	8.651	0.105
%RSD		TM 0.657	5.532	0.554	0.314	47.780	1.033	3.685	6.331	0.282	0.688

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:44	1.692	0.277	24.890	241.100	113.162%	0.329	14.550	0.686	107.676%	0.090
2	22:47:48	1.665	0.268	24.900	240.900	115.756%	0.322	14.210	0.729	108.680%	0.080
3	22:47:51	1.646	0.270	25.400	240.100	115.633%	0.311	13.580	0.668	109.310%	0.064
x		1.668	0.272	25.060	240.700	114.850%	0.321	14.110	0.694	108.555%	0.078
σ		0.023	0.005	0.288	0.506	1.463%	0.009	0.488	0.031	0.824%	0.013
%RSD		1.406	1.763	1.148	0.210	1.274	2.835	3.455	4.458	0.759	16.530

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:47:44	1.539	0.010	0.037	0.605	107.384%	33.870	0.069	0.124	T 105.758%	0.048
2	22:47:48	1.698	-0.014	0.020	0.514	108.837%	34.140	0.073	0.145	T 106.931%	0.059
3	22:47:51	1.549	-0.026	0.019	0.597	109.150%	33.850	0.071	0.105	T 107.033%	0.039
x		1.595	-0.010	0.026	0.572	108.457%	33.950	0.071	0.125	T 106.574%	0.049
σ		0.089	0.018	0.010	0.050	0.942%	0.164	0.002	0.020	T 0.709%	0.010
%RSD		5.578	183.200	38.900	8.761	0.869	0.483	2.624	16.060	T 0.665	20.770

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	22:47:44	4.626	0.140	0.854	105.295%	0.033
2	22:47:48	4.928	0.131	0.863	106.149%	0.037
3	22:47:51	5.005	0.127	0.836	106.149%	0.028
x		4.853	0.133	0.851	105.864%	0.032
σ		0.201	0.007	0.014	0.493%	0.005
%RSD		4.136	4.999	1.593	0.466	14.330

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:54:57	0.085	-0.018	0.132	T 13060.000	1851.000	32.640	59.190	M 32050.000	847.500	T 1240000.000
2	22:55:01	0.087	-0.031	0.190	T 13020.000	1821.000	33.010	53.500	M 32470.000	865.400	T 1213000.000
3	22:55:04	0.067	-0.012	-0.041	T 13290.000	1861.000	33.090	53.900	M 32290.000	834.200	T 1229000.000
x		0.080	-0.020	0.094	T 13120.000	1844.000	32.920	55.530	M 32270.000	849.000	T 1227000.000
σ		0.011	0.010	0.120	T 144.900	20.800	0.239	3.178	M 207.100	15.680	T 13680.000
%RSD		13.470	49.760	128.500	T 1.104	1.128	0.727	5.723	M 0.642	1.847	T 1.114

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:54:57	TM 30240.000	530.300	110.158%	113.050%	-1.017	2.838	0.498	4.589	2847.000	15.910
2	22:55:01	TM 29770.000	527.000	111.993%	113.317%	-0.768	2.902	0.476	4.200	2830.000	15.720
3	22:55:04	TM 30230.000	510.300	110.831%	113.387%	-0.550	2.895	0.482	4.205	2842.000	15.820
x		TM 30080.000	522.500	110.994%	113.251%	-0.778	2.878	0.485	4.331	2839.000	15.820
σ		TM 267.200	10.750	0.928%	0.178%	0.234	0.035	0.011	0.223	8.851	0.092
%RSD		TM 0.888	2.057	0.836	0.157	29.990	1.219	2.302	5.150	0.312	0.582

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:54:57	1.231	0.421	19.010	225.800	113.601%	0.410	14.330	0.683	108.072%	0.009
2	22:55:01	1.217	0.361	19.040	225.800	115.109%	0.356	14.540	0.697	107.894%	0.033
3	22:55:04	1.189	0.388	19.190	225.500	115.651%	0.394	14.180	0.722	108.389%	0.007
x		1.212	0.390	19.080	225.700	114.787%	0.387	14.350	0.701	108.118%	0.016
σ		0.021	0.030	0.094	0.175	1.062%	0.028	0.177	0.020	0.251%	0.014
%RSD		1.772	7.733	0.492	0.077	0.925	7.188	1.231	2.877	0.232	89.370

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:54:57	1.648	-0.015	0.011	0.279	108.418%	32.870	0.033	0.245	T 107.663%	0.016
2	22:55:01	1.665	-0.059	0.022	0.324	108.672%	32.770	0.033	0.230	T 108.415%	0.019
3	22:55:04	1.704	-0.047	0.014	0.327	108.067%	33.230	0.027	0.247	T 106.571%	0.015
x		1.672	-0.041	0.015	0.310	108.386%	32.960	0.031	0.241	T 107.550%	0.017
σ		0.028	0.023	0.006	0.026	0.304%	0.240	0.003	0.009	T 0.927%	0.002
%RSD		1.700	56.040	37.950	8.547	0.280	0.728	10.520	3.793	T 0.862	11.750

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	22:54:57	10.270	0.088	0.539	100.407%	0.013
2	22:55:01	10.410	0.089	0.541	104.638%	0.017
3	22:55:04	10.220	0.092	0.527	105.490%	0.011
x		10.300	0.090	0.536	103.512%	0.014
σ		0.097	0.002	0.007	2.722%	0.003
%RSD		0.941	2.379	1.380	2.630	23.120

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:10	0.046	-0.021	-0.157	4564.000	2608.000	7.695	40.210	23610.000	1111.000	T 1250000.000
2	23:02:13	0.030	-0.018	0.259	4589.000	2603.000	8.707	34.930	23600.000	1130.000	T 1237000.000
3	23:02:17	0.026	-0.028	0.154	4555.000	2603.000	8.211	38.800	23560.000	1145.000	T 1229000.000
x		0.034	-0.022	0.085	4569.000	2605.000	8.205	37.980	23590.000	1129.000	T 1239000.000
σ		0.011	0.005	0.216	17.960	3.226	0.506	2.732	24.650	17.290	T 10420.000
%RSD		31.510	22.610	254.700	0.393	0.124	6.168	7.193	0.105	1.532	T 0.841

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:10	TM 42500.000	1431.000	108.853%	112.416%	-0.348	-0.006	0.503	5.550	41.420	0.888
2	23:02:13	TM 41860.000	1575.000	110.292%	112.452%	-0.302	-0.163	0.471	5.855	43.290	0.754
3	23:02:17	TM 41820.000	1435.000	110.445%	111.798%	-0.244	-0.025	0.465	5.418	42.970	0.820
x		TM 42060.000	1480.000	109.864%	112.222%	-0.298	-0.065	0.480	5.608	42.560	0.821
σ		TM 383.800	82.070	0.878%	0.368%	0.052	0.085	0.021	0.224	1.001	0.067
%RSD		TM 0.913	5.544	0.800	0.328	17.370	131.900	4.332	3.992	2.351	8.188

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:10	0.032	0.543	3.568	33.820	111.074%	2.457	2.743	1.089	107.801%	0.000
2	23:02:13	0.029	0.501	3.507	33.740	111.027%	2.480	2.698	1.118	108.628%	-0.008
3	23:02:17	0.029	0.467	3.497	33.980	112.653%	2.457	2.374	1.054	108.806%	0.002
x		0.030	0.503	3.524	33.850	111.584%	2.465	2.605	1.087	108.412%	-0.002
σ		0.001	0.038	0.038	0.119	0.926%	0.014	0.201	0.032	0.536%	0.005
%RSD		4.982	7.540	1.081	0.352	0.830	0.548	7.716	2.922	0.495	259.100

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:10	0.029	-0.030	-0.006	-0.006	107.522%	38.750	0.011	0.041	T 108.300%	-0.000
2	23:02:13	0.038	-0.019	-0.009	-0.009	109.185%	39.200	0.012	0.046	T 109.230%	0.016
3	23:02:17	0.045	-0.031	-0.008	-0.009	108.766%	39.140	0.010	0.061	T 109.287%	-0.003
x		0.037	-0.027	-0.008	-0.008	108.491%	39.030	0.011	0.049	T 108.939%	0.004
σ		0.008	0.007	0.002	0.002	0.865%	0.246	0.001	0.010	T 0.554%	0.010
%RSD		21.720	24.900	21.890	25.310	0.797	0.629	9.181	21.000	T 0.509	240.300

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	23:02:10	3.759	0.015	0.039	102.896%	-0.007
2	23:02:13	3.330	0.013	0.031	104.654%	-0.007
3	23:02:17	3.523	0.012	0.037	105.263%	-0.007
x		3.537	0.014	0.036	104.271%	-0.007
σ		0.215	0.002	0.004	1.229%	0.000
%RSD		6.074	11.500	10.680	1.179	4.800

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:09:26	0.037	-0.031	0.407	3547.000	2878.000	6.963	49.190	22280.000	1204.000	T 1217000.000
2	23:09:30	0.050	-0.028	-0.010	3652.000	2957.000	6.299	38.750	22990.000	1206.000	T 1233000.000
3	23:09:33	0.047	-0.008	0.141	3675.000	2960.000	5.940	42.980	22670.000	1234.000	T 1226000.000
x		0.044	-0.022	0.179	3625.000	2932.000	6.401	43.640	22650.000	1215.000	T 1225000.000
σ		0.007	0.013	0.211	68.470	46.490	0.519	5.253	357.600	16.810	T 7892.000
%RSD		15.130	56.880	117.600	1.889	1.586	8.110	12.040	1.579	1.384	T 0.644

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:09:26	TM 43440.000	945.700	110.362%	111.115%	-0.292	-0.018	0.541	5.704	25.870	0.838
2	23:09:30	TM 44370.000	909.700	110.346%	112.343%	-0.471	0.054	0.554	5.298	26.350	0.850
3	23:09:33	TM 44340.000	995.700	109.732%	111.781%	-0.479	0.025	0.552	5.649	26.850	0.898
x		TM 44050.000	950.400	110.147%	111.746%	-0.414	0.021	0.549	5.550	26.360	0.862
σ		TM 527.700	43.190	0.359%	0.615%	0.105	0.036	0.007	0.221	0.493	0.031
%RSD		TM 1.198	4.544	0.326	0.550	25.460	177.800	1.231	3.976	1.869	3.644

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:09:26	0.090	1.222	2.568	46.270	112.258%	1.465	1.910	0.477	108.425%	0.009
2	23:09:30	0.086	1.270	2.728	48.010	111.921%	1.549	1.868	0.492	109.138%	-0.007
3	23:09:33	0.081	1.352	2.555	47.040	113.648%	1.458	1.976	0.457	110.042%	-0.003
x		0.086	1.281	2.617	47.100	112.609%	1.491	1.918	0.475	109.202%	-0.000
σ		0.004	0.066	0.096	0.875	0.915%	0.050	0.054	0.018	0.811%	0.009
%RSD		5.144	5.133	3.677	1.857	0.813	3.385	2.836	3.747	0.742	4744.000

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:09:26	0.049	-0.037	-0.010	-0.007	108.604%	33.850	0.012	0.029	T 109.987%	0.017
2	23:09:30	0.042	-0.036	-0.010	-0.009	109.446%	35.190	0.007	0.024	T 109.048%	0.003
3	23:09:33	0.027	-0.026	-0.017	-0.007	110.062%	35.190	0.010	0.025	T 110.474%	0.007
x		0.039	-0.033	-0.012	-0.008	109.371%	34.740	0.010	0.026	T 109.837%	0.009
σ		0.011	0.006	0.004	0.001	0.732%	0.771	0.002	0.003	T 0.725%	0.007
%RSD		28.820	18.720	30.930	12.130	0.669	2.219	25.840	11.010	T 0.660	76.990

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	23:09:26	3.244	0.013	0.020	104.029%	-0.007
2	23:09:30	3.099	0.013	0.017	105.198%	-0.009
3	23:09:33	3.215	0.011	0.010	105.832%	-0.008
x		3.186	0.012	0.016	105.020%	-0.008
σ		0.077	0.002	0.005	0.914%	0.001
%RSD		2.410	12.380	34.760	0.871	8.867

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:16:41	0.026	-0.024	-0.153	4173.000	2759.000	5.268	38.210	22410.000	1082.000	T 1195000.000
2	23:16:44	0.034	-0.024	0.018	4168.000	2749.000	6.138	37.000	22240.000	1095.000	T 1188000.000
3	23:16:48	0.037	-0.028	0.015	4207.000	2833.000	6.703	38.490	22590.000	1108.000	T 1197000.000
x		0.032	-0.026	-0.040	4183.000	2780.000	6.037	37.900	22410.000	1095.000	T 1194000.000
σ		0.006	0.002	0.098	21.060	46.070	0.723	0.791	171.500	13.070	T 4643.000
%RSD		17.570	7.923	243.800	0.504	1.657	11.980	2.087	0.765	1.193	T 0.389

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:16:41	TM 41990.000	1503.000	107.698%	109.252%	-0.189	0.060	0.987	5.347	75.410	1.357
2	23:16:44	TM 42040.000	1602.000	108.639%	110.079%	-0.305	0.039	0.957	5.757	77.070	1.396
3	23:16:48	TM 42210.000	1557.000	107.304%	110.452%	-0.545	0.022	1.004	5.640	77.270	1.357
x		TM 42080.000	1554.000	107.880%	109.928%	-0.346	0.040	0.983	5.582	76.580	1.370
σ		TM 116.300	49.650	0.686%	0.614%	0.182	0.019	0.023	0.212	1.020	0.023
%RSD		TM 0.277	3.195	0.636	0.559	52.410	47.760	2.387	3.791	1.331	1.661

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:16:41	0.078	0.596	4.164	40.040	111.484%	1.392	2.516	1.034	107.550%	0.008
2	23:16:44	0.086	0.561	4.076	39.390	113.315%	1.298	2.214	1.042	108.307%	-0.008
3	23:16:48	0.091	0.580	4.134	39.430	113.792%	1.338	2.308	1.099	107.622%	0.016
x		0.085	0.579	4.125	39.620	112.864%	1.343	2.346	1.058	107.826%	0.005
σ		0.007	0.017	0.045	0.365	1.218%	0.047	0.155	0.035	0.418%	0.012
%RSD		7.661	3.002	1.090	0.921	1.079	3.504	6.590	3.329	0.388	224.400

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:16:41	0.113	-0.055	-0.013	-0.011	107.480%	35.850	0.009	0.038	T 107.744%	-0.004
2	23:16:44	0.142	-0.054	-0.015	-0.004	109.152%	35.260	0.009	0.054	T 108.357%	0.011
3	23:16:48	0.095	-0.028	-0.007	-0.009	109.324%	35.410	0.008	0.038	T 108.927%	0.003
x		0.117	-0.046	-0.012	-0.008	108.652%	35.510	0.008	0.043	T 108.343%	0.003
σ		0.024	0.015	0.004	0.003	1.019%	0.306	0.001	0.009	T 0.591%	0.007
%RSD		20.570	33.550	33.080	43.440	0.938	0.862	7.345	21.490	T 0.546	214.000

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	23:16:41	3.850	0.004	0.018	102.961%	-0.010
2	23:16:44	3.930	0.004	0.011	105.376%	-0.010
3	23:16:48	3.975	0.003	0.005	105.542%	-0.011
x		3.918	0.004	0.011	104.627%	-0.010
σ		0.064	0.001	0.006	1.445%	0.001
%RSD		1.621	24.860	58.190	1.381	5.410

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:23:54	0.018	-0.024	-0.231	4105.000	2935.000	9.451	40.970	22560.000	1118.000	T 1180000.000
2	23:23:58	0.026	-0.028	-0.158	4106.000	2947.000	10.050	40.530	22370.000	1106.000	T 1191000.000
3	23:24:01	0.018	-0.031	-0.002	4083.000	2914.000	9.233	40.860	22440.000	1143.000	T 1179000.000
x		0.021	-0.028	-0.130	4098.000	2932.000	9.579	40.790	22460.000	1122.000	T 1183000.000
σ		0.004	0.004	0.117	13.210	16.360	0.425	0.232	91.600	19.060	T 6846.000
%RSD		20.350	12.750	89.880	0.322	0.558	4.432	0.568	0.408	1.699	T 0.579

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:23:54	TM 41200.000	2587.000	104.839%	107.184%	-0.320	0.042	0.482	5.518	22.240	0.884
2	23:23:58	TM 41660.000	2487.000	103.082%	107.849%	-0.538	0.040	0.485	5.538	23.710	0.910
3	23:24:01	TM 41260.000	2489.000	105.051%	107.411%	-0.435	-0.037	0.490	5.958	23.270	0.872
x		TM 41380.000	2521.000	104.324%	107.481%	-0.431	0.015	0.486	5.671	23.070	0.888
σ		TM 252.100	57.330	1.081%	0.338%	0.110	0.045	0.004	0.249	0.758	0.019
%RSD		TM 0.609	2.274	1.036	0.315	25.410	295.500	0.837	4.383	3.287	2.189

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:23:54	0.094	0.507	2.885	41.560	107.161%	0.106	2.337	2.117	103.782%	-0.010
2	23:23:58	0.086	0.479	2.954	42.000	108.636%	0.137	2.451	2.078	103.368%	-0.007
3	23:24:01	0.083	0.459	2.722	41.860	108.156%	0.152	2.657	2.062	104.770%	-0.005
x		0.088	0.482	2.854	41.810	107.985%	0.132	2.482	2.086	103.973%	-0.007
σ		0.006	0.024	0.119	0.224	0.753%	0.024	0.162	0.029	0.720%	0.002
%RSD		6.377	4.998	4.161	0.535	0.697	17.870	6.524	1.374	0.693	33.740

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:23:54	0.047	-0.042	-0.009	-0.014	105.128%	35.620	-0.002	0.064	T 106.840%	0.009
2	23:23:58	0.046	-0.044	-0.011	-0.009	104.684%	35.790	0.001	0.064	T 105.816%	0.024
3	23:24:01	0.041	-0.016	-0.015	-0.012	106.405%	36.130	-0.002	0.064	T 106.834%	0.018
x		0.044	-0.034	-0.012	-0.012	105.405%	35.840	-0.001	0.064	T 106.497%	0.017
σ		0.003	0.016	0.003	0.003	0.894%	0.264	0.002	0.000	T 0.590%	0.007
%RSD		7.193	46.710	28.480	22.730	0.848	0.735	166.700	0.663	T 0.554	42.670

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	23:23:54	4.522	-0.001	0.026	102.508%	-0.011
2	23:23:58	4.363	-0.003	0.023	103.805%	-0.010
3	23:24:01	4.314	-0.004	0.022	102.905%	-0.011
x		4.400	-0.003	0.024	103.073%	-0.011
σ		0.109	0.002	0.002	0.664%	0.000
%RSD		2.476	67.510	8.980	0.645	3.958

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:31:07	0.020	-0.027	-0.045	4392.000	2993.000	11.370	51.160	23890.000	1213.000	T 1208000.000
2	23:31:11	0.014	-0.031	-0.162	4265.000	2969.000	11.040	51.430	23640.000	1214.000	T 1182000.000
3	23:31:15	0.022	-0.038	-0.102	4373.000	2997.000	10.190	58.660	23870.000	1229.000	T 1194000.000
x		0.019	-0.032	-0.103	4343.000	2986.000	10.870	53.750	23800.000	1219.000	T 1195000.000
σ		0.004	0.005	0.059	68.770	15.120	0.606	4.252	137.600	8.697	T 13130.000
%RSD		20.430	16.820	56.880	1.583	0.506	5.573	7.911	0.578	0.714	T 1.099

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:31:07	TM 44720.000	1783.000	102.142%	106.127%	-0.210	-0.082	0.542	6.517	24.810	1.030
2	23:31:11	TM 43840.000	1892.000	106.414%	106.199%	-0.299	-0.108	0.510	6.781	26.660	1.113
3	23:31:15	TM 44520.000	1868.000	104.502%	107.053%	-0.293	-0.019	0.482	6.485	26.440	1.033
x		TM 44360.000	1847.000	104.353%	106.459%	-0.268	-0.070	0.511	6.594	25.970	1.058
σ		TM 462.300	57.190	2.140%	0.515%	0.050	0.046	0.030	0.163	1.009	0.047
%RSD		TM 1.042	3.096	2.050	0.484	18.610	65.980	5.825	2.468	3.885	4.470

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:31:07	0.116	0.322	2.590	44.770	106.279%	1.795	2.519	1.389	103.334%	-0.006
2	23:31:11	0.113	0.275	2.577	45.820	106.637%	1.804	2.295	1.399	105.055%	-0.004
3	23:31:15	0.113	0.306	2.609	47.000	108.038%	1.740	2.273	1.411	105.023%	0.001
x		0.114	0.301	2.592	45.860	106.985%	1.780	2.362	1.400	104.471%	-0.003
σ		0.002	0.024	0.016	1.120	0.929%	0.035	0.136	0.011	0.984%	0.004
%RSD		1.752	7.998	0.613	2.441	0.869	1.964	5.758	0.798	0.942	110.300

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:31:07	0.048	-0.022	-0.006	-0.007	103.754%	35.560	0.005	0.076	T 108.225%	0.016
2	23:31:11	0.036	-0.009	-0.013	-0.009	106.763%	35.750	0.006	0.063	T 108.195%	0.021
3	23:31:15	0.050	0.021	-0.009	-0.009	106.053%	36.620	0.005	0.077	T 107.039%	-0.001
x		0.045	-0.003	-0.009	-0.008	105.524%	35.970	0.006	0.072	T 107.819%	0.012
σ		0.008	0.022	0.003	0.001	1.573%	0.565	0.001	0.007	T 0.676%	0.012
%RSD		17.800	627.400	32.610	13.180	1.491	1.569	11.760	10.290	T 0.627	96.560

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	23:31:07	3.135	0.007	0.036	102.009%	-0.010
2	23:31:11	3.101	0.008	0.037	103.457%	-0.011
3	23:31:15	3.074	0.005	0.038	104.316%	-0.011
x		3.103	0.007	0.037	103.261%	-0.011
σ		0.031	0.002	0.001	1.166%	0.000
%RSD		0.992	24.830	2.804	1.129	3.564

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:38:22	0.023	-0.035	-0.105	4668.000	2930.000	4.434	44.320	21790.000	1113.000	T 1219000.000
2	23:38:26	0.025	-0.028	-0.127	4705.000	2944.000	5.564	42.660	21710.000	1075.000	T 1212000.000
3	23:38:30	0.026	-0.024	-0.022	4677.000	2951.000	4.494	46.790	21860.000	1102.000	T 1197000.000
x		0.025	-0.029	-0.085	4683.000	2942.000	4.831	44.590	21790.000	1097.000	T 1209000.000
σ		0.001	0.005	0.055	19.630	10.600	0.636	2.080	74.960	19.540	T 11170.000
%RSD		5.619	18.700	65.110	0.419	0.360	13.160	4.665	0.344	1.781	T 0.924

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:38:22	TM 41530.000	2198.000	103.660%	105.381%	-0.362	0.095	0.639	6.294	43.830	1.419
2	23:38:26	TM 41640.000	2067.000	104.301%	106.820%	0.330	-0.035	0.674	6.458	44.950	1.379
3	23:38:30	TM 41070.000	2221.000	105.076%	106.628%	-0.316	0.036	0.661	6.534	43.910	1.413
x		TM 41420.000	2162.000	104.346%	106.276%	-0.116	0.032	0.658	6.429	44.230	1.403
σ		TM 303.500	82.890	0.709%	0.781%	0.387	0.065	0.018	0.122	0.627	0.021
%RSD		TM 0.733	3.834	0.680	0.735	334.100	203.000	2.692	1.904	1.419	1.506

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:38:22	0.112	0.299	1.765	44.840	106.094%	0.127	2.492	1.787	103.070%	-0.004
2	23:38:26	0.123	0.364	1.760	44.070	108.626%	0.102	2.298	1.826	104.521%	0.001
3	23:38:30	0.116	0.331	1.700	44.590	107.899%	0.130	2.084	1.805	104.092%	-0.006
x		0.117	0.331	1.742	44.500	107.540%	0.120	2.291	1.806	103.894%	-0.003
σ		0.005	0.032	0.036	0.395	1.304%	0.015	0.204	0.020	0.745%	0.004
%RSD		4.502	9.740	2.086	0.888	1.212	12.740	8.901	1.085	0.718	122.600

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:38:22	0.037	-0.018	-0.014	-0.012	104.395%	34.010	0.002	0.030	T 106.666%	-0.012
2	23:38:26	0.045	0.007	-0.008	-0.007	106.120%	33.770	0.003	0.024	T 107.333%	-0.006
3	23:38:30	0.045	-0.001	-0.014	-0.012	105.822%	34.190	-0.004	0.028	T 106.769%	-0.003
x		0.042	-0.004	-0.012	-0.011	105.446%	33.990	0.000	0.027	T 106.923%	-0.007
σ		0.004	0.013	0.004	0.003	0.922%	0.206	0.004	0.003	T 0.359%	0.004
%RSD		10.590	308.600	30.660	27.890	0.875	0.608	1537.000	11.550	T 0.336	62.920

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	23:38:22	4.233	-0.006	0.001	102.351%	-0.011
2	23:38:26	4.115	-0.003	-0.004	103.638%	-0.011
3	23:38:30	4.440	-0.005	-0.005	104.113%	-0.011
x		4.263	-0.005	-0.003	103.367%	-0.011
σ		0.165	0.002	0.003	0.912%	0.000
%RSD		3.859	35.990	119.300	0.882	1.230

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:35	0.019	-0.024	0.072	6901.000	4203.000	9.059	39.800	M 45370.000	1355.000	T 1258000.000
2	23:45:39	0.023	-0.024	-0.021	6874.000	4207.000	7.714	45.770	M 45090.000	1306.000	T 1249000.000
3	23:45:43	0.026	-0.024	-0.183	6755.000	4155.000	9.120	42.370	M 44940.000	1296.000	T 1238000.000
x		0.022	-0.024	-0.044	6843.000	4188.000	8.631	42.650	M 45140.000	1319.000	T 1248000.000
σ		0.004	0.000	0.129	77.810	28.970	0.795	2.994	M 218.200	31.480	T 9677.000
%RSD		16.010	0.480	291.000	1.137	0.692	9.207	7.020	M 0.483	2.387	T 0.775

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:35	TM 38990.000	652.500	106.619%	109.545%	-0.758	0.042	0.770	7.093	164.900	5.389
2	23:45:39	TM 38710.000	710.000	108.261%	108.399%	-0.420	0.111	0.828	6.880	169.400	5.415
3	23:45:43	TM 38540.000	639.100	109.196%	110.235%	-1.177	0.059	0.752	6.851	164.800	5.315
x		TM 38750.000	667.200	108.025%	109.393%	-0.785	0.071	0.783	6.941	166.300	5.373
σ		TM 229.900	37.650	1.304%	0.927%	0.379	0.036	0.039	0.132	2.650	0.052
%RSD		TM 0.593	5.643	1.207	0.847	48.280	50.510	5.036	1.902	1.593	0.966

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:35	0.206	0.437	12.790	308.800	111.135%	5.114	6.648	1.246	106.402%	0.006
2	23:45:39	0.212	0.386	13.040	314.500	111.786%	5.335	6.525	1.264	107.610%	0.009
3	23:45:43	0.211	0.433	12.950	313.700	112.546%	5.284	6.733	1.322	108.195%	0.004
x		0.210	0.419	12.930	312.300	111.822%	5.244	6.636	1.278	107.403%	0.007
σ		0.003	0.029	0.128	3.120	0.706%	0.116	0.104	0.040	0.914%	0.003
%RSD		1.567	6.855	0.988	0.999	0.632	2.204	1.574	3.103	0.851	40.430

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:35	0.157	-0.021	-0.002	-0.009	106.614%	34.830	0.001	0.314	T 108.704%	0.010
2	23:45:39	0.174	-0.024	-0.010	-0.011	107.807%	35.360	0.007	0.325	T 108.071%	0.001
3	23:45:43	0.134	-0.017	-0.008	-0.012	107.773%	35.890	0.002	0.315	T 107.893%	-0.010
x		0.155	-0.021	-0.007	-0.011	107.398%	35.360	0.003	0.318	T 108.223%	0.000
σ		0.020	0.004	0.004	0.002	0.679%	0.533	0.004	0.006	T 0.426%	0.010
%RSD		12.880	17.160	58.180	15.980	0.632	1.507	115.600	2.013	T 0.394	2029.000

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	23:45:35	0.192	0.019	0.008	105.058%	-0.010
2	23:45:39	0.184	0.019	0.012	106.618%	-0.010
3	23:45:43	0.186	0.021	0.007	105.390%	-0.010
x		0.187	0.020	0.009	105.689%	-0.010
σ		0.004	0.001	0.003	0.822%	0.000
%RSD		2.029	4.437	29.330	0.778	1.552

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:52:48	0.017	-0.035	0.017	9659.000	3151.000	7.364	37.290	M 39790.000	1257.000	T 1169000.000
2	23:52:51	0.029	-0.038	-0.075	9657.000	3188.000	8.303	39.560	M 39790.000	1305.000	T 1180000.000
3	23:52:55	0.017	-0.021	-0.086	9740.000	3205.000	8.164	39.730	M 40110.000	1291.000	T 1176000.000
x		0.021	-0.031	-0.048	9685.000	3181.000	7.943	38.860	M 39900.000	1284.000	T 1175000.000
σ		0.007	0.009	0.057	47.310	27.330	0.507	1.365	M 186.600	24.240	T 5271.000
%RSD		34.550	29.420	118.900	0.488	0.859	6.378	3.512	M 0.468	1.887	T 0.449

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:52:48	TM 31300.000	1046.000	107.561%	108.297%	-0.605	-0.060	0.438	6.233	183.100	19.800
2	23:52:51	TM 31910.000	975.400	106.906%	108.806%	-0.566	0.032	0.434	5.690	184.200	19.780
3	23:52:55	TM 31950.000	1125.000	106.770%	108.548%	-0.874	-0.006	0.457	5.860	185.400	19.730
x		TM 31720.000	1049.000	107.079%	108.551%	-0.681	-0.011	0.443	5.928	184.200	19.770
σ		TM 364.500	74.920	0.423%	0.254%	0.168	0.046	0.013	0.278	1.185	0.034
%RSD		TM 1.149	7.143	0.395	0.234	24.570	404.100	2.849	4.691	0.643	0.171

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:52:48	0.624	0.423	17.440	367.100	110.770%	2.714	7.623	1.714	105.848%	-0.007
2	23:52:51	0.594	0.439	17.650	375.500	113.203%	2.886	7.024	1.711	106.982%	0.000
3	23:52:55	0.616	0.441	17.960	373.100	113.705%	2.683	7.272	1.723	107.034%	-0.009
x		0.611	0.435	17.680	371.900	112.559%	2.761	7.306	1.716	106.621%	-0.005
σ		0.016	0.010	0.264	4.320	1.569%	0.110	0.301	0.006	0.670%	0.005
%RSD		2.556	2.238	1.492	1.162	1.394	3.967	4.118	0.359	0.628	93.950

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:52:48	0.241	-0.058	-0.004	-0.009	107.514%	35.130	0.001	0.232	T 107.819%	0.010
2	23:52:51	0.263	-0.015	0.001	-0.011	107.208%	35.100	-0.003	0.213	T 105.564%	0.010
3	23:52:55	0.219	-0.036	0.003	-0.011	107.706%	35.380	-0.000	0.241	T 106.032%	0.004
x		0.241	-0.036	0.000	-0.010	107.476%	35.210	-0.001	0.229	T 106.472%	0.008
σ		0.022	0.021	0.003	0.001	0.251%	0.154	0.002	0.014	T 1.190%	0.004
%RSD		9.037	59.000	6479.000	9.767	0.234	0.439	258.300	6.272	T 1.118	43.730

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	23:52:48	0.250	0.024	0.014	103.746%	-0.011
2	23:52:51	0.188	0.022	0.013	104.866%	-0.011
3	23:52:55	0.219	0.019	0.011	105.818%	-0.011
x		0.219	0.022	0.012	104.810%	-0.011
σ		0.031	0.002	0.002	1.037%	0.000
%RSD		14.290	11.170	15.040	0.990	1.453

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User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:01	94.680	93.130	94.990	5054.000	4971.000	4954.000	5022.000	5248.000	77.570	T 1396000.000
2	00:00:05	92.660	92.340	91.500	5004.000	4969.000	4919.000	4970.000	5060.000	73.430	T 1384000.000
3	00:00:08	92.490	92.280	93.020	4987.000	4945.000	4908.000	4967.000	5134.000	78.690	T 1383000.000
x		93.280	92.580	93.170	5015.000	4962.000	4927.000	4987.000	5148.000	76.560	T 1388000.000
σ		1.218	0.475	1.750	35.150	14.390	24.330	30.820	94.520	2.768	T 7462.000
%RSD		1.306	0.513	1.878	0.701	0.290	0.494	0.618	1.836	3.615	T 0.538

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:01	5098.000	5164.000	100.361%	104.904%	96.450	102.200	102.000	18.370	4984.000	100.300
2	00:00:05	5042.000	5027.000	100.990%	105.318%	99.250	100.300	100.800	19.590	5029.000	101.000
3	00:00:08	5038.000	5106.000	101.016%	105.361%	98.930	100.100	100.900	18.930	4942.000	99.700
x		5060.000	5099.000	100.789%	105.194%	98.210	100.800	101.200	18.970	4985.000	100.300
σ		33.170	69.010	0.371%	0.253%	1.533	1.186	0.693	0.609	43.880	0.657
%RSD		0.656	1.354	0.368	0.240	1.561	1.176	0.684	3.212	0.880	0.655

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:01	100.800	101.200	100.400	100.200	101.885%	99.680	100.100	100.100	99.802%	101.900
2	00:00:05	101.000	101.300	100.500	101.500	102.837%	100.900	100.600	101.000	100.058%	100.600
3	00:00:08	99.720	100.400	99.320	100.700	103.510%	98.700	98.450	101.100	99.648%	102.700
x		100.500	101.000	100.100	100.800	102.744%	99.770	99.700	100.700	99.836%	101.700
σ		0.676	0.483	0.658	0.637	0.817%	1.123	1.104	0.529	0.207%	1.040
%RSD		0.672	0.478	0.657	0.632	0.795	1.126	1.108	0.525	0.208	1.022

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:01	100.700	102.000	51.210	103.600	102.453%	101.000	102.800	99.460	T 102.713%	101.000
2	00:00:05	100.300	101.600	51.270	104.700	102.259%	101.700	104.000	101.400	T 102.325%	101.800
3	00:00:08	101.700	102.500	51.430	103.600	102.370%	101.900	104.800	99.990	T 101.976%	101.800
x		100.900	102.000	51.300	104.000	102.360%	101.500	103.900	100.300	T 102.338%	101.500
σ		0.702	0.468	0.112	0.603	0.098%	0.483	0.987	0.978	T 0.369%	0.450
%RSD		0.696	0.458	0.218	0.580	0.095	0.476	0.950	0.975	T 0.360	0.443

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	00:00:01	5.128	101.900	102.300	101.289%	T 106.500
2	00:00:05	5.253	101.700	101.500	102.243%	T 103.600
3	00:00:08	5.001	101.600	102.000	102.728%	T 104.500
x		5.127	101.700	101.900	102.087%	T 104.900
σ		0.126	0.170	0.425	0.732%	T 1.463
%RSD		2.462	0.167	0.417	0.717	T 1.396

242471_10399_CCBTVA4 12/13/2019 12:07:12 AM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:16	0.092	0.053	0.154	7.838	5.468	5.552	3.059	1.268	71.110	T 1313000.000
2	00:07:19	0.064	0.029	-0.031	4.801	2.919	4.514	9.282	9.169	56.020	T 1303000.000
3	00:07:23	0.090	0.018	0.006	3.907	3.281	3.181	-0.173	-8.992	69.560	T 1303000.000
x		0.082	0.033	0.043	5.515	3.889	4.416	4.056	0.482	65.560	T 1306000.000
σ		0.015	0.018	0.098	2.061	1.379	1.189	4.805	9.106	8.304	T 5845.000
%RSD		18.660	53.000	227.300	37.370	35.470	26.920	118.500	1890.000	12.670	T 0.448

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:16	21.570	9.998	97.949%	99.553%	0.150	0.046	0.067	4.180	4.731	0.081
2	00:07:19	9.694	6.811	100.209%	100.231%	0.083	0.088	0.070	4.286	4.447	0.046
3	00:07:23	9.324	6.891	100.726%	100.751%	0.334	-0.019	0.043	4.528	2.907	0.042
x		13.530	7.900	99.628%	100.179%	0.189	0.038	0.060	4.331	4.028	0.056
σ		6.968	1.817	1.477%	0.601%	0.130	0.054	0.015	0.178	0.982	0.022
%RSD		51.500	23.000	1.482	0.600	68.760	141.000	25.110	4.117	24.370	38.500

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:16	0.073	0.043	0.121	0.206	100.763%	0.069	0.126	0.064	98.636%	0.081
2	00:07:19	0.065	0.044	0.109	0.182	101.845%	0.077	0.013	0.047	100.369%	0.064
3	00:07:23	0.044	0.024	0.085	0.142	101.283%	0.064	0.087	0.031	100.453%	0.036
x		0.061	0.037	0.105	0.177	101.297%	0.070	0.076	0.047	99.819%	0.060
σ		0.015	0.011	0.018	0.032	0.541%	0.006	0.058	0.017	1.026%	0.022
%RSD		24.930	30.730	17.390	18.350	0.534	9.102	76.190	35.640	1.028	37.040

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:16	0.107	0.054	0.041	0.089	99.332%	0.109	0.087	0.094	T 101.980%	0.076
2	00:07:19	0.073	0.038	0.021	0.049	100.140%	0.070	0.069	0.064	T 102.913%	0.053
3	00:07:23	0.057	-0.004	0.010	0.038	100.036%	0.067	0.041	0.058	T 102.505%	0.043
x		0.079	0.029	0.024	0.059	99.836%	0.082	0.066	0.072	T 102.466%	0.057
σ		0.025	0.030	0.015	0.027	0.440%	0.024	0.023	0.019	T 0.468%	0.016
%RSD		32.120	101.500	64.210	45.870	0.441	28.740	35.410	26.800	T 0.457	28.710

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	00:07:16	0.019	0.121	0.096	99.885%	0.081
2	00:07:19	0.013	0.092	0.062	100.905%	0.058
3	00:07:23	0.008	0.064	0.043	101.534%	0.039
x		0.013	0.092	0.067	100.775%	0.059
σ		0.005	0.028	0.027	0.832%	0.021
%RSD		41.860	30.680	40.080	0.826	35.300

242472_10399_CRDL_A2 12/13/2019 12:14:26 AM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:29	0.930	0.950	1.249	251.200	251.700	251.500	55.630	49.200	68.270	T 1349000.000
2	00:14:33	0.871	0.849	1.425	243.500	253.900	239.700	52.410	44.990	63.910	T 1317000.000
3	00:14:37	0.948	1.001	1.007	242.500	251.600	241.700	60.460	15.370	67.450	T 1317000.000
x		0.916	0.934	1.227	245.700	252.400	244.300	56.160	36.520	66.550	T 1328000.000
σ		0.040	0.078	0.210	4.769	1.276	6.306	4.052	18.440	2.319	T 18570.000
%RSD		4.417	8.313	17.120	1.941	0.505	2.581	7.214	50.480	3.484	T 1.398

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:29	269.000	256.400	103.222%	106.284%	0.969	0.905	0.973	4.848	249.500	1.009
2	00:14:33	255.900	281.800	105.782%	106.538%	0.887	0.883	0.982	4.768	244.000	0.992
3	00:14:37	255.900	234.700	106.302%	106.847%	0.885	1.014	1.013	4.943	247.600	0.970
x		260.200	257.600	105.102%	106.556%	0.914	0.934	0.989	4.853	247.000	0.990
σ		7.580	23.600	1.648%	0.282%	0.048	0.070	0.021	0.088	2.773	0.019
%RSD		2.913	9.162	1.568	0.265	5.292	7.536	2.137	1.805	1.123	1.956

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:29	0.992	0.979	1.053	1.172	108.871%	1.076	1.073	0.997	103.749%	0.994
2	00:14:33	0.995	0.978	1.054	1.057	109.491%	1.040	1.031	0.989	105.509%	0.990
3	00:14:37	0.995	1.070	1.046	0.948	109.185%	1.042	1.173	0.973	105.082%	0.980
x		0.994	1.009	1.051	1.059	109.182%	1.053	1.092	0.986	104.780%	0.988
σ		0.002	0.053	0.004	0.112	0.310%	0.020	0.073	0.012	0.918%	0.007
%RSD		0.189	5.254	0.409	10.600	0.284	1.902	6.665	1.248	0.876	0.727

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:29	1.017	0.963	0.496	1.037	104.272%	0.960	1.048	0.961	T 104.272%	0.987
2	00:14:33	0.966	0.978	0.514	1.005	105.941%	1.017	1.066	0.934	T 104.728%	1.037
3	00:14:37	0.967	1.014	0.505	1.110	106.224%	1.005	1.068	1.055	T 103.904%	1.003
x		0.983	0.985	0.505	1.051	105.479%	0.994	1.061	0.983	T 104.302%	1.009
σ		0.029	0.026	0.009	0.054	1.055%	0.030	0.011	0.064	T 0.413%	0.025
%RSD		2.954	2.621	1.814	5.136	1.000	3.000	1.001	6.465	T 0.396	2.510

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	00:14:29	0.196	0.992	1.014	100.170%	1.005
2	00:14:33	0.247	0.994	0.979	102.253%	0.967
3	00:14:37	0.215	1.007	1.022	101.220%	0.987
x		0.220	0.998	1.005	101.214%	0.986
σ		0.026	0.008	0.023	1.041%	0.019
%RSD		11.710	0.848	2.297	1.029	1.954

242473_10399_CRDL_B2 12/13/2019 12:21:38 AM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:41	4.492	4.734	4.873	499.500	505.500	504.200	261.900	269.700	77.850	T 1339000.000
2	00:21:45	4.554	4.782	4.557	507.600	499.300	500.300	258.800	233.400	70.970	T 1323000.000
3	00:21:49	4.637	4.592	4.835	493.800	512.000	504.800	261.800	227.200	86.830	T 1330000.000
x		4.561	4.703	4.755	500.300	505.600	503.100	260.800	243.400	78.550	T 1331000.000
σ		0.073	0.099	0.172	6.947	6.372	2.446	1.793	22.980	7.953	T 8052.000
%RSD		1.598	2.102	3.619	1.389	1.260	0.486	0.687	9.439	10.120	T 0.605

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:41	517.900	500.700	102.102%	105.584%	4.944	5.045	5.099	5.141	502.500	5.025
2	00:21:45	506.000	451.100	103.923%	105.631%	4.921	4.910	5.082	6.053	498.100	4.876
3	00:21:49	512.900	482.600	103.344%	106.550%	5.065	4.827	5.066	5.649	496.600	4.897
x		512.200	478.100	103.123%	105.922%	4.977	4.928	5.082	5.614	499.100	4.933
σ		5.957	25.100	0.931%	0.545%	0.077	0.110	0.017	0.457	3.075	0.081
%RSD		1.163	5.248	0.902	0.514	1.547	2.234	0.330	8.143	0.616	1.633

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:41	4.956	5.036	5.005	5.137	106.942%	5.309	4.802	4.996	101.751%	5.076
2	00:21:45	4.962	4.987	5.053	5.037	107.780%	4.891	5.076	4.910	102.686%	5.059
3	00:21:49	4.936	5.043	5.087	4.866	109.188%	4.976	5.065	5.000	102.471%	5.066
x		4.951	5.022	5.048	5.013	107.970%	5.058	4.981	4.969	102.303%	5.067
σ		0.014	0.031	0.041	0.137	1.135%	0.221	0.155	0.051	0.490%	0.009
%RSD		0.277	0.608	0.814	2.738	1.051	4.363	3.112	1.022	0.479	0.177

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:41	4.822	5.096	2.576	5.265	101.699%	5.115	5.322	5.105	T 101.059%	5.052
2	00:21:45	5.059	5.039	2.570	5.210	104.463%	5.000	5.185	4.957	T 104.404%	4.967
3	00:21:49	4.923	5.159	2.655	5.305	103.022%	5.148	5.220	4.916	T 102.391%	5.074
x		4.935	5.098	2.600	5.260	103.061%	5.088	5.242	4.993	T 102.618%	5.031
σ		0.119	0.060	0.047	0.048	1.383%	0.078	0.071	0.099	T 1.684%	0.056
%RSD		2.415	1.177	1.815	0.906	1.342	1.525	1.352	1.992	T 1.641	1.117

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	00:21:41	0.564	4.882	4.930	99.800%	4.904
2	00:21:45	0.523	5.030	5.015	101.760%	5.031
3	00:21:49	0.486	4.991	4.987	100.964%	4.934
x		0.524	4.968	4.977	100.841%	4.956
σ		0.039	0.077	0.043	0.985%	0.066
%RSD		7.453	1.548	0.864	0.977	1.341

242124_10399_ICSA2 12/13/2019 12:28:51 AM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:55	0.270	-0.025	0.548	TM 49060.000	M 47480.000	M 47630.000	5.944	M 51060.000	2293.000	T 1297000.000
2	00:28:59	0.261	0.012	0.180	TM 49850.000	M 48120.000	M 48200.000	6.377	M 51200.000	2228.000	T 1309000.000
3	00:29:02	0.268	-0.011	0.356	TM 49820.000	M 48130.000	M 48240.000	6.945	M 51340.000	2274.000	T 1306000.000
x		0.266	-0.008	0.361	TM 49580.000	M 47910.000	M 48020.000	6.422	M 51200.000	2265.000	T 1304000.000
σ		0.005	0.018	0.184	TM 452.700	M 372.500	M 341.700	0.502	M 141.200	33.670	T 6052.000
%RSD		1.819	230.800	50.900	TM 0.913	M 0.777	M 0.712	7.819	M 0.276	1.487	T 0.464

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:55	TM 49830.000	M 49850.000	77.279%	83.030%	M 988.600	-0.137	0.198	4.802	TM 50670.000	-0.034
2	00:28:59	TM 50540.000	M 49870.000	75.387%	83.316%	M 1004.000	-0.203	0.199	4.713	TM 50970.000	0.012
3	00:29:02	TM 50760.000	M 50550.000	74.778%	82.471%	M 985.500	-0.111	0.175	4.206	TM 50530.000	-0.053
x		TM 50380.000	M 50090.000	75.815%	82.939%	M 992.600	-0.150	0.191	4.574	TM 50730.000	-0.025
σ		TM 483.700	M 400.200	1.304%	0.430%	M 9.799	0.048	0.013	0.322	TM 226.100	0.034
%RSD		TM 0.960	M 0.799	1.720	0.518	M 0.987	31.850	7.048	7.033	TM 0.446	134.000

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:55	0.025	0.036	0.202	-0.240	72.697%	0.037	0.043	0.520	77.254%	0.130
2	00:28:59	0.034	0.036	0.181	-0.137	74.341%	0.117	-0.029	0.543	76.812%	0.106
3	00:29:02	0.029	0.036	0.173	-0.385	74.196%	0.089	0.168	0.480	76.204%	0.098
x		0.029	0.036	0.186	-0.254	73.745%	0.081	0.060	0.514	76.757%	0.112
σ		0.004	0.000	0.015	0.124	0.910%	0.040	0.100	0.032	0.527%	0.017
%RSD		14.660	0.493	8.020	49.050	1.234	49.990	164.800	6.225	0.687	15.000

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:55	M 1034.000	0.074	0.000	-0.049	80.754%	0.152	0.100	0.121	83.382%	0.008
2	00:28:59	M 1024.000	0.033	-0.000	0.004	80.685%	0.163	0.086	0.144	83.369%	0.041
3	00:29:02	M 1037.000	0.035	-0.007	0.018	80.851%	0.151	0.095	0.104	83.142%	0.018
x		M 1032.000	0.047	-0.002	-0.009	80.763%	0.156	0.093	0.123	83.298%	0.022
σ		M 6.709	0.023	0.004	0.035	0.084%	0.007	0.007	0.020	0.135%	0.017
%RSD		M 0.650	48.730	169.800	388.800	0.104	4.265	7.305	16.230	0.162	75.540

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	00:28:55	0.006	-0.003	0.039	82.176%	0.001
2	00:28:59	0.015	-0.004	0.037	83.515%	0.002
3	00:29:02	-0.004	-0.005	0.032	83.582%	0.002
x		0.006	-0.004	0.036	83.091%	0.002
σ		0.010	0.001	0.004	0.793%	0.000
%RSD		164.000	22.480	9.757	0.955	12.260

242125_10399_ICSAB2 12/13/2019 12:36:06 AM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:10	95.000	93.640	93.130	TM 50060.000	M 48780.000	M 48750.000	4916.000	M 55690.000	2330.000	T 1414000.000
2	00:36:13	94.410	92.530	93.730	TM 48810.000	M 47520.000	M 47810.000	4777.000	M 54480.000	2278.000	T 1381000.000
3	00:36:16	93.940	91.280	93.010	TM 49680.000	M 48610.000	M 48690.000	4893.000	M 55220.000	2339.000	T 1397000.000
x		94.450	92.480	93.290	TM 49520.000	M 48300.000	M 48420.000	4862.000	M 55130.000	2316.000	T 1397000.000
σ		0.534	1.184	0.386	TM 640.300	M 683.900	M 524.600	74.470	M 609.600	32.730	T 16600.000
%RSD		0.566	1.280	0.413	TM 1.293	M 1.416	M 1.084	1.532	M 1.106	1.413	T 1.188

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:10	TM 50490.000	M 49950.000	75.890%	79.219%	M 1115.000	103.100	102.400	19.970	TM 50820.000	102.400
2	00:36:13	TM 49340.000	M 49070.000	77.919%	80.146%	M 1091.000	100.300	99.740	20.270	TM 49640.000	100.400
3	00:36:16	TM 50080.000	M 50180.000	76.549%	79.732%	M 1094.000	102.600	101.500	18.420	TM 50010.000	102.000
x		TM 49970.000	M 49730.000	76.786%	79.699%	M 1100.000	102.000	101.200	19.550	TM 50160.000	101.600
σ		TM 582.800	M 586.000	1.035%	0.464%	M 13.180	1.489	1.335	0.995	TM 603.500	1.034
%RSD		TM 1.166	M 1.178	1.348	0.582	M 1.198	1.460	1.319	5.090	TM 1.203	1.018

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:10	101.100	98.680	97.470	104.300	73.443%	104.200	107.000	103.000	76.883%	103.000
2	00:36:13	98.950	96.860	95.630	104.700	76.046%	103.500	106.900	103.400	77.840%	103.100
3	00:36:16	99.740	97.220	96.110	104.000	75.669%	103.900	102.100	103.700	77.881%	102.100
x		99.940	97.590	96.400	104.300	75.053%	103.900	105.300	103.400	77.535%	102.700
σ		1.098	0.964	0.951	0.340	1.407%	0.355	2.790	0.393	0.565%	0.540
%RSD		1.099	0.988	0.987	0.326	1.875	0.342	2.648	0.380	0.728	0.525

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:10	M 1149.000	97.180	47.910	103.200	81.812%	101.600	104.500	101.000	84.257%	104.800
2	00:36:13	M 1146.000	97.030	47.970	105.300	82.551%	102.200	105.800	101.200	84.592%	105.300
3	00:36:16	M 1137.000	96.680	47.920	104.600	82.357%	102.500	106.700	100.900	84.719%	105.200
x		M 1144.000	96.960	47.940	104.300	82.240%	102.100	105.600	101.000	84.523%	105.100
σ		M 6.443	0.258	0.030	1.052	0.383%	0.437	1.131	0.140	0.238%	0.241
%RSD		M 0.563	0.266	0.062	1.008	0.466	0.428	1.070	0.138	0.282	0.230

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	00:36:10	5.412	104.500	103.000	84.704%	111.300
2	00:36:13	5.662	104.000	103.100	85.810%	T 111.800
3	00:36:16	5.304	105.000	103.300	85.575%	T 111.900
x		5.459	104.500	103.100	85.363%	T 111.700
σ		0.183	0.507	0.149	0.583%	T 0.311
%RSD		3.360	0.486	0.144	0.682	T 0.279

242477_10399_CCV5 12/13/2019 12:43:20 AM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:43:23	100.600	100.100	98.930	5096.000	5077.000	4988.000	5085.000	5018.000	79.350	T 1382000.000
2	00:43:27	99.800	100.500	99.230	5074.000	5085.000	4997.000	5165.000	5132.000	80.140	T 1373000.000
3	00:43:31	99.830	100.900	98.420	4997.000	5039.000	4944.000	5122.000	5113.000	76.510	T 1369000.000
x		100.100	100.500	98.860	5055.000	5067.000	4976.000	5124.000	5088.000	78.670	T 1374000.000
σ		0.440	0.385	0.413	52.170	24.860	28.070	39.810	61.200	1.908	T 6333.000
%RSD		0.440	0.383	0.418	1.032	0.491	0.564	0.777	1.203	2.426	T 0.461

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:43:23	5055.000	4924.000	92.943%	92.641%	101.400	101.200	102.100	18.940	5036.000	100.600
2	00:43:27	5041.000	4961.000	93.559%	93.316%	99.620	100.800	101.300	20.240	5007.000	100.400
3	00:43:31	5002.000	4943.000	94.783%	93.751%	96.530	99.400	99.860	19.770	4951.000	99.190
x		5033.000	4942.000	93.762%	93.236%	99.170	100.500	101.100	19.650	4998.000	100.100
σ		27.290	18.320	0.937%	0.559%	2.444	0.947	1.138	0.660	43.460	0.788
%RSD		0.542	0.371	0.999	0.600	2.465	0.943	1.126	3.358	0.870	0.787

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:43:23	100.900	101.500	100.200	103.300	94.719%	101.200	101.000	101.100	92.379%	103.000
2	00:43:27	99.580	100.000	99.200	102.300	98.092%	99.430	100.700	100.300	94.170%	101.600
3	00:43:31	98.470	99.260	98.250	100.200	99.223%	100.200	99.600	99.930	94.321%	102.700
x		99.660	100.300	99.210	101.900	97.344%	100.300	100.400	100.500	93.623%	102.400
σ		1.240	1.158	0.972	1.558	2.343%	0.879	0.745	0.610	1.080%	0.728
%RSD		1.244	1.155	0.979	1.528	2.407	0.876	0.742	0.607	1.154	0.711

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:43:23	101.900	102.700	51.660	106.400	94.532%	103.200	107.300	101.800	T 95.247%	102.900
2	00:43:27	99.990	101.600	51.140	105.400	96.771%	101.600	106.200	101.000	T 96.301%	101.900
3	00:43:31	101.100	102.600	51.430	104.300	97.212%	102.400	106.700	100.900	T 96.850%	102.900
x		101.000	102.300	51.410	105.400	96.171%	102.400	106.700	101.200	T 96.133%	102.600
σ		0.954	0.626	0.259	1.038	1.437%	0.787	0.519	0.467	T 0.815%	0.565
%RSD		0.944	0.612	0.503	0.986	1.494	0.769	0.486	0.462	T 0.847	0.550

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	00:43:23	5.068	101.600	102.200	98.018%	T 105.200
2	00:43:27	5.430	101.200	101.400	99.324%	T 103.000
3	00:43:31	5.280	101.500	101.800	99.138%	T 103.000
x		5.259	101.400	101.800	98.827%	T 103.800
σ		0.182	0.205	0.422	0.707%	T 1.262
%RSD		3.461	0.202	0.415	0.715	T 1.216

242471_10399_CCBTVA5 12/13/2019 12:50:34 AM

User Pre-dilution: 1.000

Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:50:38	0.131	0.104	-0.040	30.000	36.670	30.310	5.037	23.700	73.200	T 1275000.000
2	00:50:41	0.144	0.060	0.241	14.660	18.090	17.830	2.977	7.079	54.450	T 1296000.000
3	00:50:45	0.134	0.079	0.309	9.748	10.520	10.100	-1.099	16.210	77.780	T 1279000.000
x		0.137	0.081	0.170	18.140	21.760	19.410	2.305	15.660	68.480	T 1283000.000
σ		0.007	0.022	0.185	10.560	13.450	10.200	3.123	8.323	12.360	T 10960.000
%RSD		5.106	27.320	108.800	58.240	61.830	52.550	135.500	53.140	18.050	T 0.854

Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cl O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:50:38	28.650	38.750	95.158%	95.647%	0.485	0.100	0.142	4.517	30.580	0.139
2	00:50:41	22.070	23.210	94.807%	96.290%	0.388	0.040	0.113	4.360	16.940	0.079
3	00:50:45	7.927	13.690	95.350%	96.630%	0.188	-0.079	0.056	4.767	10.650	0.048
x		19.550	25.220	95.105%	96.189%	0.353	0.020	0.103	4.548	19.390	0.089
σ		10.590	12.650	0.275%	0.499%	0.152	0.091	0.044	0.205	10.180	0.046
%RSD		54.170	50.170	0.290	0.519	42.900	452.500	42.550	4.517	52.530	52.270

Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:50:38	0.146	0.137	0.177	0.123	96.388%	0.145	0.219	0.126	95.706%	0.082
2	00:50:41	0.081	0.080	0.128	0.125	98.420%	0.060	0.057	0.074	95.185%	0.074
3	00:50:45	0.054	0.047	0.108	0.110	99.796%	0.010	-0.011	0.045	95.780%	0.055
x		0.094	0.088	0.138	0.119	98.201%	0.072	0.088	0.081	95.557%	0.071
σ		0.047	0.045	0.036	0.009	1.714%	0.068	0.118	0.041	0.325%	0.014
%RSD		50.480	51.380	26.000	7.187	1.746	95.590	133.300	50.380	0.340	19.520

Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:50:38	0.700	0.173	0.069	0.151	95.673%	0.145	0.152	0.142	T 98.051%	0.132
2	00:50:41	0.386	0.071	0.034	0.090	96.949%	0.083	0.094	0.080	T 100.256%	0.091
3	00:50:45	0.252	0.068	0.024	0.066	94.331%	0.050	0.059	0.052	T 96.597%	0.073
x		0.446	0.104	0.042	0.102	95.651%	0.093	0.102	0.091	T 98.301%	0.099
σ		0.230	0.060	0.024	0.044	1.309%	0.048	0.047	0.047	T 1.842%	0.030
%RSD		51.570	57.880	56.760	42.920	1.369	52.160	45.710	50.990	T 1.874	30.880

Run	Time	201Hg	205Tl	208Pb	209Bi	238U
		ppb	ppb	ppb	ppb	ppb
1	00:50:38	0.018	0.201	0.157	94.267%	0.143
2	00:50:41	0.003	0.127	0.084	97.153%	0.086
3	00:50:45	0.011	0.095	0.055	98.715%	0.053
x		0.011	0.141	0.099	96.712%	0.094
σ		0.007	0.054	0.053	2.257%	0.046
%RSD		68.890	38.640	53.400	2.333	48.580

Prep Log Report

Batch Information: MPRP 21824

Template Version: F-GB-M-035-Rev.03 (21Jun2016)

Prep Method	EPA 3050B	Analysis Method	EPA 6020	Extracted By	BTH	Instrument	40BAL1
Block ID	40HB06	Thermometer ID	151839407	Block Temp (C)	93.1	Correction Factor (C)	0
Corrected Temp. (C)	93.10	Acceptance Range:	95+/-5 C	Digestion Start Time	12/10/2019 08:23:51:679	Digestion End Time	12/10/2019 12:21:32:953
Solid Matrix Lot	230312	Digestion Vessel	241896	Metals Pipette 1	40PPT69	Reviewed By	KXS
Reviewed By Date	12/10/2019 13:43	Batch Notes	HBN 342862				

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Matrix	Initial Weight (g)	1:1 HNO3 (mL)	H2O2 (mL)	Conc. HCL (mL)	Final Volume (mL)	Due Date	Sample Notes	MDL / EQL	6000-SPKB (mL)	6000-SPKB2 (mL)
6020 T_P	BLANK	**1991164**	Y	Tissue	0.5	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	SBLK	**1991165**	Y	Tissue	0.5	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	LCS	**1991166**	Y	Tissue	0.5	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J	241953 (0.25)	239427 (1)
6020 T_P	SRM	**1991167**	Y	Tissue	0.5	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844001**	Y	Tissue	0.501	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	MS	**1991168**	Y	Tissue	0.5001	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J	241953 (0.25)	239427 (1)
6020 T_P	MSD	**1991169**	Y	Tissue	0.5003	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J	241953 (0.25)	239427 (1)
6020 T_P	PS	**40197844002**	Y	Tissue	0.5062	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844003**	Y	Tissue	0.5141	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844004**	Y	Tissue	0.525	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844005**	Y	Tissue	0.5005	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844006**	Y	Tissue	0.5281	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844007**	Y	Tissue	0.5291	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844008**	Y	Tissue	0.5274	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844009**	Y	Tissue	0.508	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844010**	Y	Tissue	0.5151	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844011**	Y	Tissue	0.5371	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Select	Matrix	Initial Weight (g)	1:1 HNO3 (mL)	H2O2 (mL)	Conc. HCL (mL)	Final Volume (mL)	Due Date	Sample Notes	MDL / EQL	6000-SPKB (mL)	6000-SPKB2 (mL)
6020 T_P	PS	**40197844012**	Y	Tissue	0.5332	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844013**	Y	Tissue	0.5072	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844014**	Y	Tissue	0.52	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844015**	Y	Tissue	0.5028	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844016**	Y	Tissue	0.5146	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844017**	Y	Tissue	0.5179	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844018**	Y	Tissue	0.5127	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844019**	Y	Tissue	0.5044	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844020**	Y	Tissue	0.5402	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		
6020 T_P	PS	**40197844021**	Y	Tissue	0.5013	241897 (10)	232182 (5)	234391 (2.5)	50	12/22/19		J		

QC Rule	Sample Type	Lab Sample ID	6000-SPKB3 (mL)	CAL-STD
6020 T_P	BLANK	**1991164**		
6020 T_P	SBLK	**1991165**		
6020 T_P	LCS	**1991166**	241952 (0.25)	
6020 T_P	SRM	**1991167**		236575 (.5)
6020 T_P	PS	**40197844001**		
6020 T_P	MS	**1991168**	241952 (0.25)	
6020 T_P	MSD	**1991169**	241952 (0.25)	
6020 T_P	PS	**40197844002**		
6020 T_P	PS	**40197844003**		

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	6000-SPKB3 (mL)	CAL-STD
6020 T_P	PS	**40197844004**		
6020 T_P	PS	**40197844005**		
6020 T_P	PS	**40197844006**		
6020 T_P	PS	**40197844007**		
6020 T_P	PS	**40197844008**		
6020 T_P	PS	**40197844009**		
6020 T_P	PS	**40197844010**		
6020 T_P	PS	**40197844011**		
6020 T_P	PS	**40197844012**		
6020 T_P	PS	**40197844013**		
6020 T_P	PS	**40197844014**		
6020 T_P	PS	**40197844015**		
6020 T_P	PS	**40197844016**		
6020 T_P	PS	**40197844017**		
6020 T_P	PS	**40197844018**		
6020 T_P	PS	**40197844019**		
6020 T_P	PS	**40197844020**		
6020 T_P	PS	**40197844021**		

Standard Notes:

236575: Metals SRM TORT-3 - Rec'd 10/2/19

239427: TVA Supplemental Spike

241952: Biota Spike Silver

241953: ICPMS Biota Spike

SAMPLE NO.

JSF-FH-CC-HRD-F-20190619

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.070		mg/kg	1	12/02/2019 14:21

SAMPLE NO.

JSF-FH-CC-HRU-F-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.23	E	mg/kg	1	12/02/2019 14:53

SAMPLE NO.

JSF-FH-CC-F-DUP01-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.25		mg/kg	1	12/02/2019 15:05

SAMPLE NO.

JSF-FH-CC-F-DUP02-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.42		mg/kg	1	12/02/2019 15:16

SAMPLE NO.

JSF-FH-CC-HRA1-O-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.021	J	mg/kg	1	12/02/2019 17:14

SAMPLE NO.

JSF-FH-CC-O-DUP02-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.031		mg/kg	1	12/02/2019 17:25

SAMPLE NO.

JSF-FH-CC-HRA1-L-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.37		mg/kg	1	12/02/2019 17:37

SAMPLE NO.

JSF-FH-CC-HRA2-L-20190611

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.43		mg/kg	1	12/02/2019 17:48

SAMPLE NO.

JSF-FH-CC-HRD-L-20190619

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.74		mg/kg	1	12/02/2019 17:59

SAMPLE NO.

JSF-FH-CC-HRU-L-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.26		mg/kg	1	12/02/2019 18:11

SAMPLE NO.

JSF-FH-CC-L-DUP01-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.44		mg/kg	1	12/02/2019 19:00

SAMPLE NO.

JSF-FH-CC-L-DUP02-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844012 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	1.0		mg/kg	1	12/02/2019 19:11

SAMPLE NO.

JSF-FH-SB-HRA1-F-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844013 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.59		mg/kg	1	12/02/2019 15:28

SAMPLE NO.

JSF-FH-LB-HRA2-F-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.54		mg/kg	1	12/02/2019 15:39

SAMPLE NO.

JSF-FH-LB-HRD-F-20190410

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.70		mg/kg	1	12/02/2019 16:28

SAMPLE NO.

JSF-FH-LB-HRU-F-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.79		mg/kg	1	12/02/2019 16:39

SAMPLE NO.

JSF-FH-LB-F-DUP01-20190410

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.58		mg/kg	1	12/02/2019 16:51

SAMPLE NO.

JSF-FH-LB-F-DUP02-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.74		mg/kg	1	12/02/2019 17:02

SAMPLE NO.

JSF-FH-SB-HRA1-O-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.025	J	mg/kg	1	12/02/2019 19:26

SAMPLE NO.

JSF-FH-LB-HRA2-O-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.024		mg/kg	1	12/02/2019 19:37

SAMPLE NO.

RINSE BLANK-A 11-19-19

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844021 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.0076	U	mg/kg	1	12/02/2019 19:49

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Initial Calibration Verification Source: 241285

Continuing Calibration Verification Source:

Concentration Units: mg/kg Instrument ID: 40HG4

	Initial Calibration Verification				Continuing Calibration Verification						
	12/02/2019 07:04				12/02/2019 12:45			12/02/2019 16:02			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
Mercury	5.0	5.1	102.7	90-110	4.19	4.4	103.9	4.19	4.4	105.5	80-120

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Initial Calibration Verification Source:

Continuing Calibration Verification Source:

Concentration Units: mg/kg Instrument ID: 40HG4

	Continuing Calibration Verification						
	12/02/2019 18:34			12/02/2019 20:11			Control Limit
Analyte	True	Found	%R	True	Found	%R	
Mercury	4.19	3.8	90.4	4.19	4.0	96.4	80-120

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Initial Calibration Verification Source: 241284

Continuing Calibration Verification Source:

Concentration Units: mg/kg Instrument ID: 40HG4

	Initial Calibration Verification				Continuing Calibration Verification						
	12/02/2019 06:51				12/02/2019 12:33			12/02/2019 15:51			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Mercury	0.3	0.29	98.0	90-110	0.29	0.31	106.2	0.29	0.32	109.4	80-120

FORM II INORGANIC-2

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Initial Calibration Verification Source:

Continuing Calibration Verification Source:

Concentration Units: mg/kg Instrument ID: 40HG4

	Continuing Calibration Verification						
	12/02/2019 18:22			12/02/2019 20:00			Control Limit
Analyte	True	Found	%R	True	Found	%R	
Mercury	0.29	0.28	95.8	0.29	0.29	101.6	80-120

FORM II INORGANIC-1

CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

CRDL Check Standard Source: 241283 Analysis Date/Time: 12/02/2019 07:43

Concentration Units: mg/kg

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.08	0.098	122.8	60-140

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract : 0779777 JOHN SEVIER FOSSIL PLA

Method Blank Matrix: Tissue Instrument ID: 40HG4

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (mg/kg)		Continuing Calibration Blank (mg/kg)						Method Blank	
	12/02/2019 07:28	C	12/02/2019 13:00	C	12/02/2019 16:17	C	12/02/2019 18:49	C	1987220	C
Mercury	0.020	U	0.020	U	0.020	U	0.020	U	<0.0076	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract : 0779777 JOHN SEVIER FOSSIL PLA

Method Blank Matrix: Instrument ID: 40HG4

Method Blank Concentration Units:

Analyte	Initial Calibration Blank		Continuing Calibration Blank (mg/kg)					
		C	12/02/2019 20:26	C		C		C
Mercury			0.020	U				

SAMPLE NO.

1987222MS

FORM V INORGANIC-1

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue Basis: Wet Parent Sample ID: JSF-FH-CC-HRD-F-20190619

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.44	0.070	0.14	257*

* Spike Recovery outside QC Limits

SAMPLE NO.

1987223MSD

FORM V INORGANIC-2

MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue Basis: Wet Parent Sample ID: JSF-FH-CC-HRD-F-20190619

Percent Moisture:

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.44	0.070	0.14	260*

* Spike Recovery outside QC Limits

SAMPLE NO.

1987223MSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue Concentration Units: mg/kg

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Mercury	20	0.44	0.44	1

SAMPLE NO.

1987221LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue

Analyte	Units	True	Found	%R	Limits	
Mercury	mg/kg	0.25	0.29	113	80	120

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Preparation Method: None Instrument ID: 40HG4

Concentration Units: mg/kg

Analyte	PQL	IDL	IDL Date
Mercury	0.020	0.020	11/04/2011

FORM IX INORGANIC-2
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Preparation Method: Instrument ID: 40HG4

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Mercury	0.025	0.0076	07/15/2019

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40HG4 Analysis Method: EPA 7473

Start Date: 11/08/2019 08:41 End Date: 12/02/2019 20:26

Sample Name	Lab Sample ID	D/F	Date	Time	Hg
13007120CAL0	13007120CAL0	1	11/08/2019	08:41	X
13007126CAL1	13007126CAL1	1	11/08/2019	08:54	X
13007127CAL2	13007127CAL2	1	11/08/2019	09:09	X
13007128CAL3	13007128CAL3	1	11/08/2019	09:22	X
13007129CAL4	13007129CAL4	1	11/08/2019	09:36	X
13007130CAL5	13007130CAL5	1	11/08/2019	09:50	X
13007131CAL6	13007131CAL6	1	11/08/2019	10:04	X
13007132CAL7	13007132CAL7	1	11/08/2019	10:21	X
13007133CAL8	13007133CAL8	1	11/08/2019	10:33	X
13007134CAL9	13007134CAL9	1	11/08/2019	11:00	X
13007135CAL10	13007135CAL10	1	11/08/2019	11:36	X
13100592ICVB	13100592ICVB	1	12/02/2019	06:51	X
13100593ICVA	13100593ICVA	1	12/02/2019	07:04	X
13100594ICB	13100594ICB	1	12/02/2019	07:28	X
13100595CRDL	13100595CRDL	1	12/02/2019	07:43	X
13100599CCVB	13100599CCVB	1	12/02/2019	12:33	X
13100600CCVA	13100600CCVA	1	12/02/2019	12:45	X
13100601CCB	13100601CCB	1	12/02/2019	13:00	X
1987220BLANK	1987220	1	12/02/2019	13:17	X
1987221LCS	1987221	1	12/02/2019	13:30	X
JSF-FH-CC-HRD-F-20190619	40197844001	1	12/02/2019	14:21	X
1987222MS	1987222	1	12/02/2019	14:31	X
1987223MSD	1987223	1	12/02/2019	14:42	X
JSF-FH-CC-HRU-F-20190430	40197844002	1	12/02/2019	14:53	X
JSF-FH-CC-F-DUP01-	40197844003	1	12/02/2019	15:05	X
JSF-FH-CC-F-DUP02-	40197844004	1	12/02/2019	15:16	X
JSF-FH-SB-HRA1-F-	40197844013	1	12/02/2019	15:28	X
JSF-FH-LB-HRA2-F-20190409	40197844014	1	12/02/2019	15:39	X
13100602CCVB	13100602CCVB	1	12/02/2019	15:51	X
13100603CCVA	13100603CCVA	1	12/02/2019	16:02	X
13100604CCB	13100604CCB	1	12/02/2019	16:17	X
JSF-FH-LB-HRD-F-20190410	40197844015	1	12/02/2019	16:28	X
JSF-FH-LB-HRU-F-20190409	40197844016	1	12/02/2019	16:39	X
JSF-FH-LB-F-DUP01-	40197844017	1	12/02/2019	16:51	X
JSF-FH-LB-F-DUP02-	40197844018	1	12/02/2019	17:02	X
JSF-FH-CC-HRA1-O-	40197844005	1	12/02/2019	17:14	X
JSF-FH-CC-O-DUP02-	40197844006	1	12/02/2019	17:25	X
JSF-FH-CC-HRA1-L-	40197844007	1	12/02/2019	17:37	X
JSF-FH-CC-HRA2-L-	40197844008	1	12/02/2019	17:48	X
JSF-FH-CC-HRD-L-20190619	40197844009	1	12/02/2019	17:59	X
JSF-FH-CC-HRU-L-20190430	40197844010	1	12/02/2019	18:11	X
13100605CCVB	13100605CCVB	1	12/02/2019	18:22	X
13100606CCVA	13100606CCVA	1	12/02/2019	18:34	X
13100607CCB	13100607CCB	1	12/02/2019	18:49	X
JSF-FH-CC-L-DUP01-	40197844011	1	12/02/2019	19:00	X

FORM XIII INORGANIC-2
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER FOSSIL PLA

Instrument ID: 40HG4 Analysis Method: EPA 7473

Start Date: 11/08/2019 08:41 End Date: 12/02/2019 20:26

Sample Name	Lab Sample ID	D/F	Date	Time	Hg
JSF-FH-CC-L-DUP02-	40197844012	1	12/02/2019	19:11	X
JSF-FH-SB-HRA1-O-	40197844019	1	12/02/2019	19:26	X
JSF-FH-LB-HRA2-O-	40197844020	1	12/02/2019	19:37	X
RINSE BLANK-A 11-19-19	40197844021	1	12/02/2019	19:49	X
13100608CCVB	13100608CCVB	1	12/02/2019	20:00	X
13100609CCVA	13100609CCVA	1	12/02/2019	20:11	X
13100610CCB	13100610CCB	1	12/02/2019	20:26	X

Sample listing "11082019A_40HG4_AJD.d80"

Created by "Administrator"
08.11.2019 12:05:36

Pos Nr	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [mg/kg]	Σ	Cal-Factor	Calibration file Date	Method file Date
- 1	PURGE 11-8-19 AJD	0.0000 g 08.11.19 08:21	B 08.11.19 08:21	0.0003	0.0000			1.0000	11082019CAL.c80 08.11.19 08:20	
- 2	PURGE 11-8-19 AJD	0.0000 g 08.11.19 08:21	B 08.11.19 08:24	0.0002	0.0000			1.0000	11082019CAL.c80 08.11.19 08:20	
- 3	PURGE 11-8-19 AJD	0.0000 g 08.11.19 08:21	B 08.11.19 08:27	0.0003	0.0000			1.0000	11082019CAL.c80 08.11.19 08:20	
1 4	CAL0 236374_12232	0.0253 g 08.11.19 08:40	C 08.11.19 08:41	0.0012	0.0000	0.0000		1.0000	<data not saved> 08.11.19 08:51	7473 Biota.m80 31.10.11 13:06
1 5	CAL1 239772_12232	0.0245 g 08.11.19 08:54	C 08.11.19 08:54	0.0841	1.9600	0.0800		1.0000	<data not saved> 08.11.19 09:04	7473 Biota.m80 31.10.11 13:06
1 6	CAL2 239773_12232	0.0253 g 08.11.19 09:09	C 08.11.19 09:09	0.2258	5.0600	0.2000		1.0000	<data not saved> 08.11.19 09:19	7473 Biota.m80 31.10.11 13:06
1 7	CAL3 239774_12232	0.0248 g 08.11.19 09:21	C 08.11.19 09:22	0.4244	9.9200	0.4000		1.0000	<data not saved> 08.11.19 09:31	7473 Biota.m80 31.10.11 13:06
1 8	CAL4 239775_12232	0.0245 g 08.11.19 09:36	C 08.11.19 09:36	0.5999	14.7000	0.6000		1.0000	<data not saved> 08.11.19 09:46	7473 Biota.m80 31.10.11 13:06
1 9	CAL5 239776_12232	0.0248 g 08.11.19 09:49	C 08.11.19 09:50	0.7450	19.8400	0.8000		1.0000	<data not saved> 08.11.19 09:59	7473 Biota.m80 31.10.11 13:06
1 10	CAL6 239777_12232	0.0245 g 08.11.19 10:04	C 08.11.19 10:04	0.0430	49.0000	2.0000		1.0000	<data not saved> 08.11.19 10:13	7473 Biota.m80 31.10.11 13:06
1 11	CAL7 239778_12232	0.0248 g 08.11.19 10:21	C 08.11.19 10:21	0.0871	99.2000	4.0000		1.0000	<data not saved> 08.11.19 10:31	7473 Biota.m80 31.10.11 13:06
1 12	CAL8 239779_12232	0.0254 g 08.11.19 10:33	C 08.11.19 10:33	0.1337	152.4000	6.0000		1.0000	<data not saved> 08.11.19 10:42	7473 Biota.m80 31.10.11 13:06
- 13	auto BV (1)	0.0000 g 08.11.19 10:43	B 08.11.19 10:42	0.0553	1.2372			1.0000	11082019CAL.c80 08.11.19 10:32	
- 14	auto BV (2)	0.0000 g 08.11.19 10:47	B 08.11.19 10:46	0.0204	0.5064			1.0000	11082019CAL.c80 08.11.19 10:32	
- 15	auto BV (3)	0.0000 g 08.11.19 10:50	B 08.11.19 10:49	0.0138	0.3695			1.0000	11082019CAL.c80 08.11.19 10:32	
1 16	CAL9 239780_12232	0.0259 g 08.11.19 11:00	C 08.11.19 11:00	0.1760	207.2000	8.0000		1.0000	<data not saved> 08.11.19 11:09	7473 Biota.m80 31.10.11 13:06
- 17	auto BV (1)	0.0000 g 08.11.19 11:10	B 08.11.19 11:09	0.1023	2.2437			1.0000	11082019CAL.c80 08.11.19 10:59	
- 18	auto BV (2)	0.0000 g 08.11.19 11:14	B 08.11.19 11:13	0.0384	0.8822			1.0000	11082019CAL.c80 08.11.19 10:59	
- 19	auto BV (3)	0.0000 g 08.11.19 11:17	B 08.11.19 11:16	0.0258	0.6188			1.0000	11082019CAL.c80 08.11.19 10:59	
- 20	auto BV (4)	0.0000 g 08.11.19 11:20	B 08.11.19 11:19	0.0198	0.4940			1.0000	11082019CAL.c80 08.11.19 10:59	
1 21	CAL10 239781_12232	0.0252 g 08.11.19 11:36	C 08.11.19 11:36	0.2120	252.0000	10.0000		1.0000	<data not saved> 08.11.19 11:46	7473 Biota.m80 31.10.11 13:06

Sample listing "11082019A_40HG4_AJD.d80"

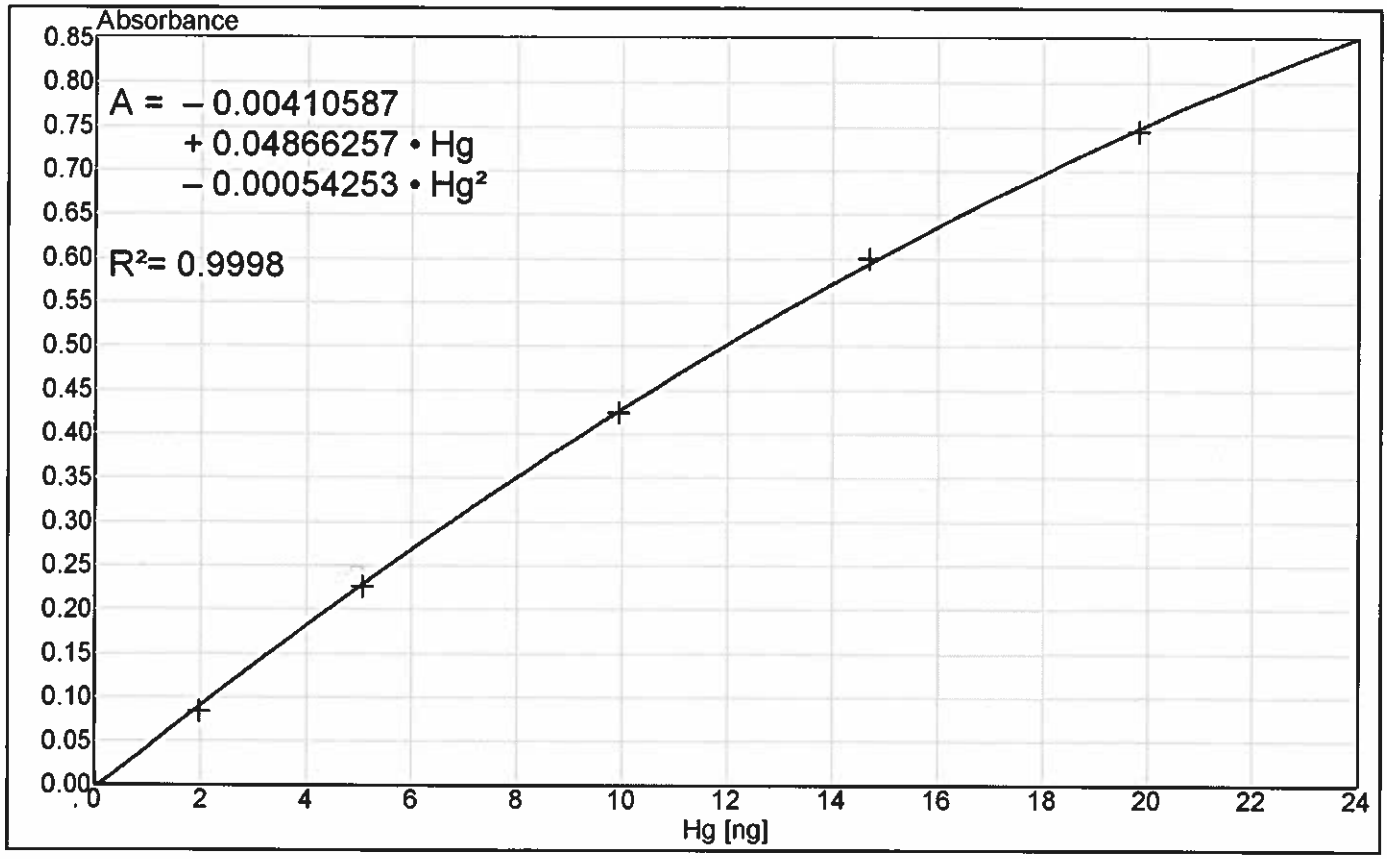
Created by "Administrator"
08.11.2019 12:05:36

Pos Nr.	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [mg/kg]	Σ	Cal-Factor	Calibration file Date	Method file Date
- 22	auto BV (1) µL	0.0000 g 08.11.19 11:47	✓ B 08.11.19 11:46	0.1215	2.6601			1.0000	11082019CAL.c80 08.11.19 11:35	
- 23	auto BV (2)	0.0000 g 08.11.19 11:50	✓ B 08.11.19 11:49	0.0471	1.0646			1.0000	11082019CAL.c80 08.11.19 11:35	
- 24	auto BV (3)	0.0000 g 08.11.19 11:54	✓ B 08.11.19 11:53	0.0334	0.7774			1.0000	11082019CAL.c80 08.11.19 11:35	
- 25	auto BV (4)	0.0000 g 08.11.19 11:57	✓ B 08.11.19 11:56	0.0256	0.6152			1.0000	11082019CAL.c80 08.11.19 11:35	
- 26	auto BV (5)	0.0000 g 08.11.19 12:01	✓ B 08.11.19 11:59	0.0197	0.4919			1.0000	11082019CAL.c80 08.11.19 11:35	

Calibration data "11082019CAL.c80"

Created by "Administrator" at
08.11.2019 12:03:52

Cell 1

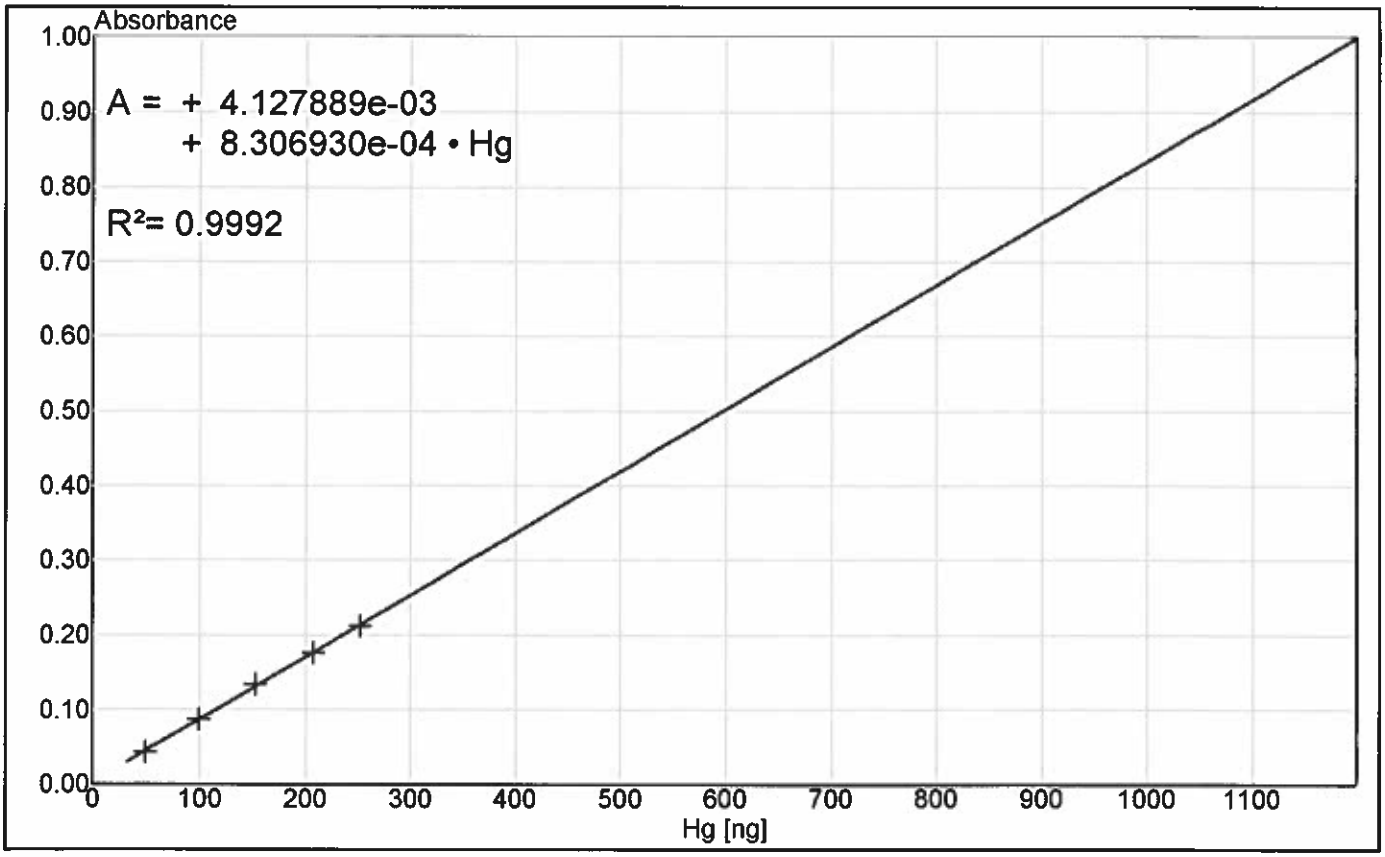


Nr.		Hg [ng]	Height ^	Error ⊿E [%]	Date	Remarks
1	✔	0.0000	0.0012	0.0053	08.11.2019 08:52:10	
2	✔	1.9600	0.0841	-0.0051	08.11.2019 09:05:05	
3	✔	5.0600	0.2258	-0.0024	08.11.2019 09:20:04	
4	✔	9.9200	0.4244	-0.0009	08.11.2019 09:32:24	
5	✔	14.7000	0.5999	0.0059	08.11.2019 09:46:57	
6	✔	19.8400	0.7450	-0.0028	08.11.2019 10:00:47	

Calibration data "11082019CAL.c80"

Created by "Administrator" at
08.11.2019 12:03:52

Cell 2



Nr.		Hg [ng]	Height ^	Error ΔE [%]	Date	Remarks
1	✔	49.0000	0.0430	-0.0018	08.11.2019 10:14:34	
2	✔	99.2000	0.0871	0.0006	08.11.2019 10:32:14	
3	✔	152.4000	0.1337	0.0030	08.11.2019 10:43:43	
4	✔	207.2000	0.1760	-0.0002	08.11.2019 11:10:44	
5	✔	252.0000	0.2120	-0.0015	08.11.2019 11:47:18	

Sample listing "12022019A_40HG4_AJD.d80"

Created by "Administrator"
03.12.2019 06:06:16

Pos Nr.	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [mg/kg]	Σ	Cal-Factor	Calibration file Date	Method file Date
1	PURGE 12-2-19 AJD	0.0000 g 02.12.19 06:37	B 02.12.19 06:38	0.0009	0.1039			1.0000	11082019CAL.c80 08.11.19 12:03	
2	PURGE 12-2-19 AJD	0.0000 g 2.12.19 06:37	B 02.12.19 06:40	0.0003	0.0906			1.0000	11082019CAL.c80 08.11.19 12:03	
3	PURGE 12-2-19 AJI 241284 7473-ICVB LOT NA EXP 02-DEC-19	0.0000 g 2.12.19 06:37	B 02.12.19 06:44	0.0002	0.0886			1.0000	11082019CAL.c80 08.11.19 12:03	
4	ICVB 241284_12315 98%	0.0248 g 12.19 06:50	 02.12.19 06:51	0.3218	7.2888	0.2939		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
5	ICVA 241285_12315 241285 7473-ICVA LOT NA EXP 02-DEC-19 103%	.0248 g 12.19 07:04	 02.12.19 07:04	0.1099	127.3300	5.1343		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
6	auto BV (1) 241286 7473-CALB LOT NA EXP 02-DEC-19	0.0000 g 2.12.19 07:14	B 02.12.19 07:14	0.0328	0.7649			1.0000	11082019CAL.c80 08.11.19 12:03	
7	auto BV (2)	0.0000 g 02.12.19 07:18	B 02.12.19 07:17	0.0093	0.2763			1.0000	11082019CAL.c80 08.11.19 12:03	
8	ICB 241286_12315 241283 7473-CALI LOT NA EXP 02-DEC-19 <0.02	.1000 g 2.19 07:28	 02.12.19 07:28	0.0491	1.1070	0.0111		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
9	CRDL 241283_12315 123%	.0249 g 02.12.19 07:43	 02.12.19 07:43	0.1116	2.4443	0.0982		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
10	1987216_12313 230313 <0.02	0.1000 g 02.12.19 07:56	 02.12.19 07:57	0.0356	0.8235	0.0082		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
11	1987217_12313 218069 119%	0.0490 g 02.12.19 08:20	 02.12.19 08:21	0.5984	14.8346	0.3027		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
12	4019784301O_12313	0.1019 g 02.12.19 08:32	 02.12.19 09:06	0.0426	0.9703	0.0095		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
13	1987218_12313	0.1016 g 02.12.19 08:38	 02.12.19 09:16	0.6822	17.5285	0.1725		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
14	1987219_12313	0.1021 g 02.12.19 08:41	 02.12.19 09:27	0.6719	17.1834	0.1683		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
15	4019784300 7_12313	0.1064 g 02.12.19 08:43	 02.12.19 09:38	0.0544	1.2181	0.0114		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
16	4019784300 8_12313	0.1072 g 02.12.19 08:44	 02.12.19 09:50	0.0775	1.7096	0.0159		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
17	4019784300 9_12313	0.1003 g 02.12.19 08:46	 02.12.19 10:01	0.0569	1.2717	0.0127		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
18	4019784301 1_12313	0.1029 g 02.12.19 08:46	 02.12.19 10:13	0.0835	1.8379	0.0179		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
19	4019784301 2_12313	0.1050 g 02.12.19 08:48	 02.12.19 10:24	0.1071	2.3466	0.0223		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
20	CCVB 236575_12315 105%	0.0276 g 02.12.19 08:50	 02.12.19 10:36	0.3679	8.4385	0.3057		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
21	CCVA 146935_12315 109%	0.0274 g 02.12.19 08:51	 02.12.19 10:47	0.1078	124.8020	4.5548		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06

Sample listing "12022019A_40HG4_AJD.d80"

Created by "Administrator"
03.12.2019 06:06:16

Pos Nr.	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [mg/kg]	Σ	Cal-Factor	Calibration file Date	Method file Date
22	auto BV (1)	0.0000 g 02.12.19 10:59	B 02.12.19 10:59	0.0125	0.3426			1.0000	11082019CAL.c80 08.11.19 12:03	
23	CCB 241286_12315 <0.02	0.1000 g 02.12.19 08:54	 02.12.19 11:02	0.0039	0.1648	0.0016		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
24	4019784013_12313	0.1008 g 02.12.19 08:54	 02.12.19 11:13	0.3984	9.2193	0.0915		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
25	4019784014_12313	0.1016 g 02.12.19 08:55	 02.12.19 11:25	0.3898	8.9971	0.0886		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
26	4019784015_12313	0.1003 g 02.12.19 08:56	 02.12.19 11:36	0.4316	10.0893	0.1006		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
27	4019784016_12313 E	0.1041 g 02.12.19 08:58	 02.12.19 11:47	0.7810	21.0952	0.2026		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
28	4019784017_12313	0.1001 g 02.12.19 08:59	 02.12.19 11:59	0.5030	12.0362	0.1202		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
29	4019784018_12313 E	0.1018 g 02.12.19 09:01	 02.12.19 12:10	0.7893	21.4201	0.2104		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
30	4019784021_12313 rinse blank	0.1018 g 02.12.19 09:02	 02.12.19 12:22	0.0021	0.1277	0.0013		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
31	CCVB 236575_12315 105%	0.0272 g 02.12.19 09:03	 02.12.19 12:33	0.3655	8.3778	0.3080		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
32	CCVA 146935_12315 104%	0.0274 g 02.12.19 09:05	 02.12.19 12:45	0.1032	119.2644	4.3527		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
33	auto BV (1)	0.0000 g 02.12.19 12:57	B 02.12.19 12:56	0.0115	0.3219			1.0000	11082019CAL.c80 08.11.19 12:03	
34	CCB 241286_12315 <0.02	0.1000 g 02.12.19 09:06	 02.12.19 13:00	0.0043	0.1731	0.0017		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
35	1987220_12314 230312 <0.02	0.1000 g 02.12.19 13:16	 02.12.19 13:17	0.0056	0.1999	0.0020		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
36	1987221_12314 218069 113%	0.0490 g 02.12.19 13:27	 02.12.19 13:30	0.5718	14.0280	0.2863		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
37	4019784001_12314	0.1055 g 02.12.19 13:43	 02.12.19 14:21	0.3236	7.3341	0.0695		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
38	1987222_1231[illegible]	0.1051 g 02.12.19 13:45	 02.12.19 14:31	0.0422	45.8317	0.4361		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
39	1987223_1231[illegible]	0.1059 g 02.12.19 13:46	 02.12.19 14:42	0.0427	46.4337	0.4385		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
40	4019784002_12314 E	0.1030 g 02.12.19 13:49	 02.12.19 14:53	0.8346	23.2735	0.2260		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
41	4019784003_12314	0.1018 g 02.12.19 13:50	 02.12.19 15:05	0.0249	25.0058	0.2456		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
42	4019784004_12314	0.1084 g 02.12.19 13:51	 02.12.19 15:16	0.0417	45.2298	0.4172		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06

Sample listing "12022019A_40HG4_AJD.d80"

Created by "Administrator"
03.12.2019 06:06:16

Pos Nr.	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [mg/kg]	Σ	Cal-Factor	Calibration file Date	Method file Date
32 43	4019784013_12314	0.1061 g 02.12.19 13:51	✓ 02.12.19 15:28	0.0559	62.3240	0.5874		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
33 44	4019784014_12314	0.1059 g 02.12.19 13:53	✓ 02.12.19 15:39	0.0517	57.2680	0.5408		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
34 45	CCVB 236575_12315 109%	0.0274 g 02.12.19 13:54	✓ 02.12.19 15:51	0.3780	8.6950	0.3173		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
35 46	CCVA 146935_12315 105%	0.0272 g 02.12.19 13:56	✓ 02.12.19 16:02	0.1040	120.2275	4.4201		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
ML - 47	auto BV (1)	0.0000 g 02.12.19 16:14	✓ B 02.12.19 16:13	0.0125	0.3417			1.0000	11082019CAL.c80 08.11.19 12:03	
36 48	CCB 241286_12315 <0.02	0.1000 g 02.12.19 13:58	✓ 02.12.19 16:17	0.0045	0.1772	0.0018		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
37 49	4019784015_12314	0.1002 g 02.12.19 13:58	✓ 02.12.19 16:28	0.0620	69.6673	0.6953		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
38 50	4019784016_12314	0.1038 g 02.12.19 13:59	✓ 02.12.19 16:39	0.0725	82.3073	0.7929		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
39 51	4019784017_12314	0.1088 g 02.12.19 13:59	✓ 02.12.19 16:51	0.0563	62.8055	0.5773		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
40 52	4019784018_12314	0.1020 g 02.12.19 14:02	✓ 02.12.19 17:02	0.0666	75.2048	0.7373		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
1 53	4019784005_12314	0.1034 g 02.12.19 14:03	✓ 02.12.19 17:14	0.0998	2.1886	0.0212		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
2 54	4019784006_12314	0.1067 g 02.12.19 14:05	✓ 02.12.19 17:25	0.1489	3.2629	0.0306		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
3 55	4019784007_12314 ✓	0.1024 g 02.12.19 14:06	✓ 02.12.19 17:37	0.0354	37.6458	0.3676		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
4 56	4019784008_12314 ✓	0.1045 g 02.12.19 14:07	✓ 02.12.19 17:48	0.0417	45.2298	0.4328		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
5 57	4019784009_12314	0.1077 g 02.12.19 14:08	✓ 02.12.19 17:59	0.0705	79.8997	0.7419		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
6 58	4019784010_12314 ✓	0.1041 g 02.12.19 14:09	✓ 02.12.19 18:11	0.0270	27.5338	0.2645		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
7 59	CCVB 236575_12315 95%	0.0276 g 02.12.19 14:10	✓ 02.12.19 18:22	0.3371	7.6670	0.2778		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
8 60	CCVA 146935_12315 90%	0.0274 g 02.12.19 14:11	✓ 02.12.19 18:34	0.0903	103.7352	3.7860		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
ML - 61	auto BV (1)	0.0000 g 02.12.19 18:46	✓ B 02.12.19 18:45	0.0084	0.2577			1.0000	11082019CAL.c80 08.11.19 12:03	
9 62	CCB 241286_12315 <0.02	0.1000 g 02.12.19 14:12	✓ 02.12.19 18:49	0.0026	0.1380	0.0014		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
10 63	4019784011_12314 ✓	0.1000 g 02.12.19 14:12	✓ 02.12.19 19:00	0.0410	44.3872	0.4439		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06

Sample listing "12022019A_40HG4_AJD.d80"

Created by "Administrator"
03.12.2019 06:06:16

Pos Nr.	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [mg/kg]	Σ	Cal- Factor	Calibration file Date	Method file Date
11 64	4019784012_12314	0.1000 g 02.12.19 14:13	✓ 02.12.19 19:11	0.0878	100.7257	1.0073		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
65	auto BV (1)	0.0000 g 02.12.19 19:23	✓ B 02.12.19 19:23	0.0065	0.2185			1.0000	11082019CAL.c80 08.11.19 12:03	
12 66	4019784019_12314	0.1011 g 02.12.19 14:15	✓ 02.12.19 19:26	0.1148	2.5149	0.0249		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
13 67	4019784020_12314	0.1080 g 02.12.19 14:16	✓ 02.12.19 19:37	0.1182	2.5880	0.0240		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
14 68	4019784021_12314 rinse blank	0.1001 g 02.12.19 14:17	✓ 02.12.19 19:49	0.0014	0.1133	0.0011		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
15 69	CCVB 236575_12315 101%	0.0275 g 02.12.19 14:18	✓ 02.12.19 20:00	0.3544	8.0983	0.2945		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
16 70	CCVA 146935_12315 96%	0.0274 g 02.12.19 14:19	✓ 02.12.19 20:11	0.0961	110.7173	4.0408		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06
71	auto BV (1)	0.0000 g 02.12.19 20:24	✓ B 02.12.19 20:23	0.0100	0.2908			1.0000	11082019CAL.c80 08.11.19 12:03	
17 72	CCB 241286_12315 <0.02	0.1000 g 02.12.19 14:21	✓ 02.12.19 20:26	0.0025	0.1360	0.0014		1.0000	11082019CAL.c80 08.11.19 12:03	7473 Biota.m80 31.10.11 13:06

SAMPLE NO.

JSF-FH-CC-HRD-F-20190619

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	79.6		%	1	11/19/2019 09:19

SAMPLE NO.

JSF-FH-CC-HRU-F-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	76.7		%	1	11/19/2019 09:20

SAMPLE NO.

JSF-FH-CC-F-DUP01-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	80.4		%	1	11/19/2019 09:20

SAMPLE NO.

JSF-FH-CC-F-DUP02-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	77.9		%	1	11/19/2019 09:21

SAMPLE NO.

JSF-FH-CC-HRA1-O-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	58.2		%	1	11/19/2019 09:21

SAMPLE NO.

JSF-FH-CC-O-DUP02-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	59.9		%	1	11/19/2019 09:21

SAMPLE NO.

JSF-FH-CC-HRA1-L-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	80.4		%	1	11/19/2019 09:22

SAMPLE NO.

JSF-FH-CC-HRA2-L-20190611

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844008 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	80.7		%	1	11/19/2019 09:22

SAMPLE NO.

JSF-FH-CC-HRD-L-20190619

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844009 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	78.8		%	1	11/19/2019 09:22

SAMPLE NO.

JSF-FH-CC-HRU-L-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844010 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	80.4		%	1	11/19/2019 09:22

SAMPLE NO.

JSF-FH-CC-L-DUP01-20190507

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844011 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	79.9		%	1	11/19/2019 09:22

SAMPLE NO.

JSF-FH-CC-L-DUP02-20190430

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844012 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	81.5		%	1	11/19/2019 09:23

SAMPLE NO.

JSF-FH-SB-HRA1-F-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844013 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	79.6		%	1	11/19/2019 09:23

SAMPLE NO.

JSF-FH-LB-HRA2-F-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844014 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	81.2		%	1	11/19/2019 09:23

SAMPLE NO.

JSF-FH-LB-HRD-F-20190410

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844015 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	81.4		%	1	11/19/2019 09:23

SAMPLE NO.

JSF-FH-LB-HRU-F-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844016 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	81.0		%	1	11/19/2019 09:23

SAMPLE NO.

JSF-FH-LB-F-DUP01-20190410

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844017 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	80.6		%	1	11/19/2019 09:24

SAMPLE NO.

JSF-FH-LB-F-DUP02-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844018 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	81.7		%	1	11/19/2019 09:24

SAMPLE NO.

JSF-FH-SB-HRA1-O-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844019 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	59.5		%	1	11/19/2019 09:24

SAMPLE NO.

JSF-FH-LB-HRA2-O-20190409

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Lab Sample ID: 40197844020 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	67.7		%	1	11/19/2019 09:24

SAMPLE NO.

1980751DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Green Bay SDG No. : 40197844 Contract: 0779777 JOHN SEVIER

Matrix: Tissue Concentration Units: %

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Percent Moisture	10	79.6	79.6	0

Prep Log Report

Batch Information: TVA OEXT DRY WT 341138 40197844

Template Version: F-GB-C-034-Rev.05 (26Mar2018) Percent

Analysis Method	ASTM D2974-87	Analyzed By	CWN	Instrument	40BALL	Oven ID	40OVNK
Thermometer ID	40OVNK	Oven Temp Correction Factor	0	Oven Temp In1 (C) | Corr | Date/Time | Init	104.0 | 104.0 | 11/19/2019 09:42 | CWN	Oven Temp Out1 (C) | Corr | Date/Time | Init	104.0 | 104.0 | 11/20/2019 06:36 | CWN
Reviewed By	CAH	Reviewed By Date	11/20/2019 08:54	Batch Notes			

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	ID	TS Posted (%)	Percent Moisture	Run Date/Time	Posted Dry Weight /w Dish (g)	Dish Weight (g)	Wet Weight /w Dish (g)	Dry Weight 1 (g)	Dry Wt Use 1	Sample Notes
DRYWGT RPT	PS	**40197844001**	Y		20.45	79.55	11/19/2019 09:19:57	1.2793	0.9274	2.6485	1.2793	M	
DRYWGT RPT	DUP	**1980751**	Y		20.35	79.65	11/19/2019 09:20:10	1.3541	0.9385	2.9805	1.3541	M	
DRYWGT RPT	PS	**40197844002**	Y		23.29	76.71	11/19/2019 09:20:18	1.5197	0.9369	3.4388	1.5197	M	
DRYWGT RPT	PS	**40197844003**	Y		19.59	80.41	11/19/2019 09:20:34	1.3895	0.9308	3.2719	1.3895	M	
DRYWGT RPT	PS	**40197844004**	Y		22.12	77.88	11/19/2019 09:21:31	1.5413	0.9296	3.6944	1.5413	M	
DRYWGT RPT	PS	**40197844005**	Y		41.82	58.18	11/19/2019 09:21:42	1.9815	0.9276	3.4479	1.9815	M	
DRYWGT RPT	PS	**40197844006**	Y		40.12	59.88	11/19/2019 09:21:54	1.8666	0.928	3.2673	1.8666	M	
DRYWGT RPT	PS	**40197844007**	Y		19.58	80.42	11/19/2019 09:22:06	1.2449	0.9328	2.5265	1.2449	M	
DRYWGT RPT	PS	**40197844008**	Y		19.26	80.74	11/19/2019 09:22:15	1.2677	0.9293	2.6859	1.2677	M	
DRYWGT RPT	PS	**40197844009**	Y		21.17	78.83	11/19/2019 09:22:26	1.3556	0.9307	2.9376	1.3556	M	
DRYWGT RPT	PS	**40197844010**	Y		19.58	80.42	11/19/2019 09:22:37	1.3626	0.9309	3.1357	1.3626	M	
DRYWGT RPT	PS	**40197844011**	Y		20.06	79.94	11/19/2019 09:22:47	1.2238	0.9356	2.3726	1.2238	M	
DRYWGT RPT	PS	**40197844012**	Y		18.48	81.52	11/19/2019 09:23:01	1.3688	0.9376	3.2704	1.3688	M	
DRYWGT RPT	PS	**40197844013**	Y		20.39	79.61	11/19/2019 09:23:19	1.3989	0.9311	3.2255	1.3989	M	
DRYWGT RPT	PS	**40197844014**	Y		18.81	81.19	11/19/2019 09:23:33	1.3214	0.9288	3.016	1.3214	M	
DRYWGT RPT	PS	**40197844015**	Y		18.57	81.43	11/19/2019 09:23:46	1.2779	0.929	2.8075	1.2779	M	
DRYWGT RPT	PS	**40197844016**	Y		19.04	80.96	11/19/2019 09:23:55	1.5217	0.929	4.0414	1.5217	M	
DRYWGT RPT	PS	**40197844017**	Y		19.35	80.65	11/19/2019 09:24:04	1.4666	0.9354	3.68	1.4666	M	

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Select	ID	TS Posted (%)	Percent Moisture	Run Date/Time	Posted Dry Weight /w Dish (g)	Dish Weight (g)	Wet Weight /w Dish (g)	Dry Weight 1 (g)	Dry Wt Use 1	Sample Notes
DRYWGT RPT	PS	**40197844018**	Y		18.31	81.69	11/19/2019 09:24:14	1.3628	0.9346	3.2735	1.3628	M	
DRYWGT RPT	PS	**40197844019**	Y		40.46	59.54	11/19/2019 09:24:24	2.6781	0.9382	5.239	2.6781	M	
DRYWGT RPT	PS	**40197844020**	Y		32.32	67.68	11/19/2019 09:24:35	1.7433	0.9304	3.4453	1.7433	M	

Prep Log Report

Batch Information: TVA 40197844 341129

Template Version: F-GB-O-161-Rev.00 (29May2019)

40197844

Prep Method		Prepared By	CWN	Thaw Date/Time	11/19/2019 4:05:14:656	Thaw Location	Room Temp
Prep Date Date/Time	11/19/2019 10:07:57:879	Instrument	40BALR	Reviewed By	CAH	Reviewed By Date	11/19/2019 13:01
Batch Notes							

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Tissue Type	Nitrogen	Skin/Scale Prep	Portion	Picture Taken?	Total Weight (g)	Organs Intact?	Gender	Fillet Weight (g)	Fillet Selected	Picture Taken?
TISSUE_P	PS	**40197844001**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844002**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844003**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844004**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844005**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844006**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844007**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844008**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844009**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844010**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844011**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844012**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Select	Tissue Type	Nitrogen	Skin/Scale Prep	Portion	Picture Taken?	Total Weight (g)	Organs Intact?	Gender	Fillet Weight (g)	Fillet Selected	Picture Taken?
TISSUE_P	PS	**40197844013**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844014**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844015**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844016**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844017**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844018**	Y	FISH, EGGS, LIVERS	Yes	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844019**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA
TISSUE_P	PS	**40197844020**	Y	FISH, EGGS, LIVERS	No	NA	NA	NA	0	NA	NA	0	NA	NA

QC Rule	Sample Type	Lab Sample ID	Container Type	Container Lot #	# of Containers	Picture Taken?	Homoginized Weight (g)	Process Method	Sample Notes
TISSUE_P	PS	**40197844001**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844002**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844003**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844004**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844005**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*
TISSUE_P	PS	**40197844006**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Container Type	Container Lot #	# of Containers	Picture Taken?	Homoginized Weight (g)	Process Method	Sample Notes
TISSUE_P	PS	**40197844007**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*
TISSUE_P	PS	**40197844008**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*
TISSUE_P	PS	**40197844009**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*
TISSUE_P	PS	**40197844010**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*
TISSUE_P	PS	**40197844011**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*
TISSUE_P	PS	**40197844012**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*
TISSUE_P	PS	**40197844013**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844014**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844015**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844016**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844017**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844018**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Blender	1*
TISSUE_P	PS	**40197844019**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*
TISSUE_P	PS	**40197844020**	9oz Amber Glass	F-9-210-04AB	1	NA	0	Hand Diced	1*

Sample Notes:

1*: RINSE BLANK 40197844-021-A MADE. % MOISTURE DONE.