



Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 40189616

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InOrganic

ICPMS

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July 03, 2019

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

RE: Project: 426800 JOHN SEVIER FOSSIL PLAN
Pace Project No.: 40189616

Dear Tyler Baker:

Enclosed are the analytical results for sample(s) received by the laboratory on June 18, 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@pacelabs.com
(920)469-2436
Project Manager

Enclosures

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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Green Bay Certification IDs

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

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SAMPLE SUMMARY

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40189616001	JSF-FH-CC-F-EB01-20190508	Tissue	05/08/19 12:45	06/18/19 09:05
40189616002	JSF-FH-CC-F-EB01-20190517	Tissue	05/17/19 07:20	06/18/19 09:05
40189616003	JSF-FH-CC-F-EB01-20190524	Tissue	05/24/19 09:00	06/18/19 09:05
40189616004	JSF-FH-CC-F-EB01-20190617	Tissue	06/17/19 13:30	06/18/19 09:05

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SAMPLE ANALYTE COUNT

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40189616001	JSF-FH-CC-F-EB01-20190508	EPA 6020	DS1	20
		EPA 7473	AJT	1
40189616002	JSF-FH-CC-F-EB01-20190517	EPA 6020	DS1	20
		EPA 7473	AJT	1
40189616003	JSF-FH-CC-F-EB01-20190524	EPA 6020	DS1	20
		EPA 7473	AJT	1
40189616004	JSF-FH-CC-F-EB01-20190617	EPA 6020	DS1	20
		EPA 7473	AJT	1

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PROJECT NARRATIVE

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Method: EPA 6020

Description: 6020 MET ICPMS

Client: TENNESSEE VALLEY AUTHORITY

Date: July 03, 2019

General Information:

4 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.

Additional Comments:

Batch Comments:

A matrix spike/matrix spike duplicate was not performed for this batch due to the sample matrix being blanks.

- QC Batch: 326093

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PROJECT NARRATIVE

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Method: EPA 7473

Description: 7473 Mercury, Tissue

Client: TENNESSEE VALLEY AUTHORITY

Date: July 03, 2019

General Information:

4 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.

H1: Analysis conducted outside the recognized method holding time.

- JSF-FH-CC-F-EB01-20190524 (Lab ID: 40189616003)

H3: Sample was received or analysis requested beyond the recognized method holding time.

- JSF-FH-CC-F-EB01-20190508 (Lab ID: 40189616001)
- JSF-FH-CC-F-EB01-20190517 (Lab ID: 40189616002)

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.

Additional Comments:

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

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ANALYTICAL RESULTS

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Sample: JSF-FH-CC-F-EB01-20190508 **Lab ID:** 40189616001 **Collected:** 05/08/19 12:45 **Received:** 06/18/19 09:05 **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	<0.016	mg/kg	0.10	0.016	1	06/28/19 10:02	07/02/19 12:56	7440-36-0	
Arsenic	<0.030	mg/kg	0.10	0.030	1	06/28/19 10:02	07/02/19 12:56	7440-38-2	
Barium	<0.031	mg/kg	0.10	0.031	1	06/28/19 10:02	07/02/19 12:56	7440-39-3	
Beryllium	<0.033	mg/kg	0.11	0.033	1	06/28/19 10:02	07/02/19 12:56	7440-41-7	
Boron	<0.70	mg/kg	2.3	0.70	1	06/28/19 10:02	07/02/19 12:56	7440-42-8	
Cadmium	<0.014	mg/kg	0.10	0.014	1	06/28/19 10:02	07/02/19 12:56	7440-43-9	
Calcium	<25.4	mg/kg	84.7	25.4	1	06/28/19 10:02	07/02/19 12:56	7440-70-2	
Chromium	<0.088	mg/kg	0.29	0.088	1	06/28/19 10:02	07/02/19 12:56	7440-47-3	
Cobalt	<0.0082	mg/kg	0.10	0.0082	1	06/28/19 10:02	07/02/19 12:56	7440-48-4	
Copper	<0.28	mg/kg	0.95	0.28	1	06/28/19 10:02	07/02/19 12:56	7440-50-8	
Lead	<0.026	mg/kg	0.087	0.026	1	06/28/19 10:02	07/02/19 12:56	7439-92-1	
Lithium	<0.021	mg/kg	0.10	0.021	1	06/28/19 10:02	07/02/19 12:56	7439-93-2	
Molybdenum	<0.036	mg/kg	0.12	0.036	1	06/28/19 10:02	07/02/19 12:56	7439-98-7	
Nickel	<0.041	mg/kg	0.14	0.041	1	06/28/19 10:02	07/02/19 12:56	7440-02-0	
Selenium	<0.051	mg/kg	0.17	0.051	1	06/28/19 10:02	07/02/19 12:56	7782-49-2	
Silver	<0.011	mg/kg	0.050	0.011	1	06/28/19 10:02	07/02/19 12:56	7440-22-4	
Strontium	<0.16	mg/kg	0.54	0.16	1	06/28/19 10:02	07/02/19 12:56	7440-24-6	
Thallium	<0.013	mg/kg	0.10	0.013	1	06/28/19 10:02	07/02/19 12:56	7440-28-0	
Vanadium	<0.033	mg/kg	0.11	0.033	1	06/28/19 10:02	07/02/19 12:56	7440-62-2	
Zinc	<1.7	mg/kg	5.7	1.7	1	06/28/19 10:02	07/02/19 12:56	7440-66-6	
7473 Mercury, Tissue									
Analytical Method: EPA 7473									
Mercury	<0.0031	mg/kg	0.019	0.0031	1		06/24/19 13:50	7439-97-6	H3

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ANALYTICAL RESULTS

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Sample: JSF-FH-CC-F-EB01-20190517 **Lab ID:** 40189616002 **Collected:** 05/17/19 07:20 **Received:** 06/18/19 09:05 **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	<0.016	mg/kg	0.099	0.016	1	06/28/19 10:02	07/02/19 13:03	7440-36-0	
Arsenic	<0.030	mg/kg	0.10	0.030	1	06/28/19 10:02	07/02/19 13:03	7440-38-2	
Barium	<0.030	mg/kg	0.10	0.030	1	06/28/19 10:02	07/02/19 13:03	7440-39-3	
Beryllium	<0.033	mg/kg	0.11	0.033	1	06/28/19 10:02	07/02/19 13:03	7440-41-7	
Boron	<0.69	mg/kg	2.3	0.69	1	06/28/19 10:02	07/02/19 13:03	7440-42-8	
Cadmium	<0.014	mg/kg	0.099	0.014	1	06/28/19 10:02	07/02/19 13:03	7440-43-9	
Calcium	<25.2	mg/kg	84.2	25.2	1	06/28/19 10:02	07/02/19 13:03	7440-70-2	
Chromium	<0.088	mg/kg	0.29	0.088	1	06/28/19 10:02	07/02/19 13:03	7440-47-3	
Cobalt	<0.0082	mg/kg	0.099	0.0082	1	06/28/19 10:02	07/02/19 13:03	7440-48-4	
Copper	<0.28	mg/kg	0.94	0.28	1	06/28/19 10:02	07/02/19 13:03	7440-50-8	
Lead	<0.026	mg/kg	0.087	0.026	1	06/28/19 10:02	07/02/19 13:03	7439-92-1	
Lithium	<0.021	mg/kg	0.099	0.021	1	06/28/19 10:02	07/02/19 13:03	7439-93-2	
Molybdenum	<0.036	mg/kg	0.12	0.036	1	06/28/19 10:02	07/02/19 13:03	7439-98-7	
Nickel	<0.041	mg/kg	0.14	0.041	1	06/28/19 10:02	07/02/19 13:03	7440-02-0	
Selenium	<0.050	mg/kg	0.17	0.050	1	06/28/19 10:02	07/02/19 13:03	7782-49-2	
Silver	<0.011	mg/kg	0.050	0.011	1	06/28/19 10:02	07/02/19 13:03	7440-22-4	
Strontium	<0.16	mg/kg	0.53	0.16	1	06/28/19 10:02	07/02/19 13:03	7440-24-6	
Thallium	<0.013	mg/kg	0.099	0.013	1	06/28/19 10:02	07/02/19 13:03	7440-28-0	
Vanadium	<0.033	mg/kg	0.11	0.033	1	06/28/19 10:02	07/02/19 13:03	7440-62-2	
Zinc	<1.7	mg/kg	5.7	1.7	1	06/28/19 10:02	07/02/19 13:03	7440-66-6	
7473 Mercury, Tissue									
Analytical Method: EPA 7473									
Mercury	<0.0031	mg/kg	0.019	0.0031	1		06/24/19 13:59	7439-97-6	H3

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ANALYTICAL RESULTS

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Sample: JSF-FH-CC-F-EB01-20190524 **Lab ID:** 40189616003 **Collected:** 05/24/19 09:00 **Received:** 06/18/19 09:05 **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	<0.016	mg/kg	0.10	0.016	1	06/28/19 10:02	07/02/19 13:10	7440-36-0	
Arsenic	<0.030	mg/kg	0.10	0.030	1	06/28/19 10:02	07/02/19 13:10	7440-38-2	
Barium	<0.031	mg/kg	0.10	0.031	1	06/28/19 10:02	07/02/19 13:10	7440-39-3	
Beryllium	<0.033	mg/kg	0.11	0.033	1	06/28/19 10:02	07/02/19 13:10	7440-41-7	
Boron	<0.70	mg/kg	2.3	0.70	1	06/28/19 10:02	07/02/19 13:10	7440-42-8	
Cadmium	<0.014	mg/kg	0.10	0.014	1	06/28/19 10:02	07/02/19 13:10	7440-43-9	
Calcium	<25.4	mg/kg	84.7	25.4	1	06/28/19 10:02	07/02/19 13:10	7440-70-2	
Chromium	<0.088	mg/kg	0.29	0.088	1	06/28/19 10:02	07/02/19 13:10	7440-47-3	
Cobalt	<0.0082	mg/kg	0.10	0.0082	1	06/28/19 10:02	07/02/19 13:10	7440-48-4	
Copper	<0.28	mg/kg	0.95	0.28	1	06/28/19 10:02	07/02/19 13:10	7440-50-8	
Lead	<0.026	mg/kg	0.087	0.026	1	06/28/19 10:02	07/02/19 13:10	7439-92-1	
Lithium	<0.021	mg/kg	0.10	0.021	1	06/28/19 10:02	07/02/19 13:10	7439-93-2	
Molybdenum	<0.036	mg/kg	0.12	0.036	1	06/28/19 10:02	07/02/19 13:10	7439-98-7	
Nickel	<0.041	mg/kg	0.14	0.041	1	06/28/19 10:02	07/02/19 13:10	7440-02-0	
Selenium	<0.051	mg/kg	0.17	0.051	1	06/28/19 10:02	07/02/19 13:10	7782-49-2	
Silver	<0.011	mg/kg	0.050	0.011	1	06/28/19 10:02	07/02/19 13:10	7440-22-4	
Strontium	<0.16	mg/kg	0.54	0.16	1	06/28/19 10:02	07/02/19 13:10	7440-24-6	
Thallium	<0.013	mg/kg	0.10	0.013	1	06/28/19 10:02	07/02/19 13:10	7440-28-0	
Vanadium	<0.033	mg/kg	0.11	0.033	1	06/28/19 10:02	07/02/19 13:10	7440-62-2	
Zinc	<1.7	mg/kg	5.7	1.7	1	06/28/19 10:02	07/02/19 13:10	7440-66-6	
7473 Mercury, Tissue									
Analytical Method: EPA 7473									
Mercury	<0.0031	mg/kg	0.020	0.0031	1		06/24/19 14:10	7439-97-6	H1

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ANALYTICAL RESULTS

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Sample: JSF-FH-CC-F-EB01-20190617 **Lab ID:** 40189616004 **Collected:** 06/17/19 13:30 **Received:** 06/18/19 09:05 **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	<0.016	mg/kg	0.10	0.016	1	06/28/19 10:02	07/02/19 13:18	7440-36-0	
Arsenic	<0.030	mg/kg	0.10	0.030	1	06/28/19 10:02	07/02/19 13:18	7440-38-2	
Barium	<0.031	mg/kg	0.10	0.031	1	06/28/19 10:02	07/02/19 13:18	7440-39-3	
Beryllium	<0.033	mg/kg	0.11	0.033	1	06/28/19 10:02	07/02/19 13:18	7440-41-7	
Boron	<0.70	mg/kg	2.3	0.70	1	06/28/19 10:02	07/02/19 13:18	7440-42-8	
Cadmium	<0.014	mg/kg	0.10	0.014	1	06/28/19 10:02	07/02/19 13:18	7440-43-9	
Calcium	29.2J	mg/kg	84.7	25.4	1	06/28/19 10:02	07/02/19 13:18	7440-70-2	
Chromium	<0.088	mg/kg	0.29	0.088	1	06/28/19 10:02	07/02/19 13:18	7440-47-3	
Cobalt	<0.0082	mg/kg	0.10	0.0082	1	06/28/19 10:02	07/02/19 13:18	7440-48-4	
Copper	<0.28	mg/kg	0.95	0.28	1	06/28/19 10:02	07/02/19 13:18	7440-50-8	
Lead	<0.026	mg/kg	0.087	0.026	1	06/28/19 10:02	07/02/19 13:18	7439-92-1	
Lithium	<0.021	mg/kg	0.10	0.021	1	06/28/19 10:02	07/02/19 13:18	7439-93-2	
Molybdenum	<0.036	mg/kg	0.12	0.036	1	06/28/19 10:02	07/02/19 13:18	7439-98-7	
Nickel	0.044J	mg/kg	0.14	0.041	1	06/28/19 10:02	07/02/19 13:18	7440-02-0	
Selenium	<0.051	mg/kg	0.17	0.051	1	06/28/19 10:02	07/02/19 13:18	7782-49-2	
Silver	<0.011	mg/kg	0.050	0.011	1	06/28/19 10:02	07/02/19 13:18	7440-22-4	
Strontium	<0.16	mg/kg	0.54	0.16	1	06/28/19 10:02	07/02/19 13:18	7440-24-6	
Thallium	<0.013	mg/kg	0.10	0.013	1	06/28/19 10:02	07/02/19 13:18	7440-28-0	
Vanadium	<0.033	mg/kg	0.11	0.033	1	06/28/19 10:02	07/02/19 13:18	7440-62-2	
Zinc	<1.7	mg/kg	5.7	1.7	1	06/28/19 10:02	07/02/19 13:18	7440-66-6	
7473 Mercury, Tissue Analytical Method: EPA 7473									
Mercury	<0.0031	mg/kg	0.020	0.0031	1		06/24/19 14:22	7439-97-6	

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QUALITY CONTROL DATA

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

QC Batch: 325348 Analysis Method: EPA 7473
QC Batch Method: EPA 7473 Analysis Description: 7473 Mercury
Associated Lab Samples: 40189616001, 40189616002, 40189616003, 40189616004

METHOD BLANK: 1889472 Matrix: Tissue
Associated Lab Samples: 40189616001, 40189616002, 40189616003, 40189616004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0032	0.020	0.0032	06/24/19 12:49	

LABORATORY CONTROL SAMPLE & LCSD: 1889473			1889474							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	mg/kg	0.25	0.29	0.29	114	113	80-120	1	20	

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.

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QUALITY CONTROL DATA

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

QC Batch: 325783 Analysis Method: EPA 6020
QC Batch Method: EPA 3050B Analysis Description: 6020 MET TISSUE
Associated Lab Samples: 40189616001, 40189616002, 40189616003, 40189616004

METHOD BLANK: 1891424 Matrix: Tissue
Associated Lab Samples: 40189616001, 40189616002, 40189616003, 40189616004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/kg	<0.016	0.10	0.016	07/02/19 12:49	
Arsenic	mg/kg	<0.030	0.10	0.030	07/02/19 12:49	
Barium	mg/kg	<0.031	0.10	0.031	07/02/19 12:49	
Beryllium	mg/kg	<0.033	0.11	0.033	07/02/19 12:49	
Boron	mg/kg	<0.70	2.3	0.70	07/02/19 12:49	
Cadmium	mg/kg	<0.014	0.10	0.014	07/02/19 12:49	
Calcium	mg/kg	<25.4	84.7	25.4	07/02/19 12:49	
Chromium	mg/kg	<0.088	0.29	0.088	07/02/19 12:49	
Cobalt	mg/kg	<0.0082	0.10	0.0082	07/02/19 12:49	
Copper	mg/kg	<0.28	0.95	0.28	07/02/19 12:49	
Lead	mg/kg	<0.026	0.087	0.026	07/02/19 12:49	
Lithium	mg/kg	<0.021	0.10	0.021	07/02/19 12:49	
Molybdenum	mg/kg	<0.036	0.12	0.036	07/02/19 12:49	
Nickel	mg/kg	<0.041	0.14	0.041	07/02/19 12:49	
Selenium	mg/kg	<0.051	0.17	0.051	07/02/19 12:49	
Silver	mg/kg	<0.011	0.050	0.011	07/02/19 12:49	
Strontium	mg/kg	<0.16	0.54	0.16	07/02/19 12:49	
Thallium	mg/kg	<0.013	0.10	0.013	07/02/19 12:49	
Vanadium	mg/kg	<0.033	0.11	0.033	07/02/19 12:49	
Zinc	mg/kg	<1.7	5.7	1.7	07/02/19 12:49	

LABORATORY CONTROL SAMPLE & LCSD: 1891427

1891428

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Antimony	mg/kg	5	5.5	5.5	110	111	80-120	1	20	
Arsenic	mg/kg	5	5.4	5.4	108	109	80-120	0	20	
Barium	mg/kg	5	5.1	5.1	101	102	80-120	1	20	
Beryllium	mg/kg	5	5.0	5.2	101	103	80-120	3	20	
Boron	mg/kg	10	10.1	10.3	101	103	80-120	2	20	
Cadmium	mg/kg	5	5.3	5.3	106	107	80-120	1	20	
Calcium	mg/kg	250	266	266	106	106	80-120	0	20	
Chromium	mg/kg	5	5.1	5.2	102	104	80-120	2	20	
Cobalt	mg/kg	5	5.2	5.2	103	104	80-120	1	20	
Copper	mg/kg	5	5.3	5.4	105	108	80-120	2	20	
Lead	mg/kg	5	5.0	5.0	99	101	80-120	2	20	
Lithium	mg/kg	5	5.1	5.2	101	104	80-120	3	20	
Molybdenum	mg/kg	5	5.0	5.0	100	101	80-120	0	20	
Nickel	mg/kg	5	5.2	5.2	103	104	80-120	1	20	
Selenium	mg/kg	5	5.7	5.8	115	115	80-120	0	20	
Silver	mg/kg	2.5	2.6	2.6	105	105	80-120	1	20	

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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Date: 07/03/2019 01:28 PM

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QUALITY CONTROL DATA

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

LABORATORY CONTROL SAMPLE & LCSD: 1891427			1891428							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Strontium	mg/kg	5	5.1	5.2	102	103	80-120	1	20	
Thallium	mg/kg	5	4.8	4.9	96	97	80-120	1	20	
Vanadium	mg/kg	5	5.3	5.4	106	107	80-120	2	20	
Zinc	mg/kg	20	22.0	22.1	110	110	80-120	0	20	

LABORATORY CONTROL SAMPLE: 1891426

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	59.5	72.3	121	80-126	
Cadmium	mg/kg	42.3	41.2	97	80-120	
Chromium	mg/kg	2	1.1	56	13-93	
Cobalt	mg/kg	1.1	1.1	104	80-120	
Copper	mg/kg	497	493	99	77-120	
Lead	mg/kg	0.22	0.21	92	79-120	
Molybdenum	mg/kg	3.4	3.1	90	80-120	
Nickel	mg/kg	5.3	4.7	90	76-120	
Selenium	mg/kg	10.9	12.6	116	80-130	
Strontium	mg/kg	36.5	30.6	84	79-120	
Vanadium	mg/kg	9.1	9.8	107	80-120	
Zinc	mg/kg	136	144	106	80-120	

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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QUALIFIERS

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

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.

BATCH QUALIFIERS

Batch: 326093

[1] A matrix spike/matrix spike duplicate was not performed for this batch due to the sample matrix being blanks.

ANALYTE QUALIFIERS

H1 Analysis conducted outside the recognized method holding time.

H3 Sample was received or analysis requested beyond the recognized method holding time.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 426800 JOHN SEVIER FOSSIL PLAN

Pace Project No.: 40189616

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40189616001	JSF-FH-CC-F-EB01-20190508	EPA 3050B	325783	EPA 6020	326093
40189616002	JSF-FH-CC-F-EB01-20190517	EPA 3050B	325783	EPA 6020	326093
40189616003	JSF-FH-CC-F-EB01-20190524	EPA 3050B	325783	EPA 6020	326093
40189616004	JSF-FH-CC-F-EB01-20190617	EPA 3050B	325783	EPA 6020	326093
40189616001	JSF-FH-CC-F-EB01-20190508	EPA 7473	325348		
40189616002	JSF-FH-CC-F-EB01-20190517	EPA 7473	325348		
40189616003	JSF-FH-CC-F-EB01-20190524	EPA 7473	325348		
40189616004	JSF-FH-CC-F-EB01-20190617	EPA 7473	325348		

REPORT OF LABORATORY ANALYSIS

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Tennessee Valley Authority

TVA Environmental Investigations

Chain-of-Custody / Analytical Request Document

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

COOLER No.:	1	of	1
COC No.:	JSF_FH 20190508_1A		
1 of 1 Pages			
Test Desc:	JSF_FH		

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:	1231 Bellevue Street	Project #:	428800	Sampling Company:	TVA
	Suite 9	Site Address:	611 Old Highway 70 S	Address:	TVA Chattanooga Power Service Center, 4801 N. Access Road
	Green Bay, WI 54302	City:	Rogersville	City/State:	Chattanooga, TN
Lab Manager Contact Information		State, Zip:	TN, 37857	Phone:	423-876-5733
Lab PM:	Tod Nollenmeyer	Site PM Name:	Roy Quinn	Sampling Team Number:	1
Phone/Fax:	920-469-2436	Phone/Fax:	423-751-3753	Send EDD/Hard Copy to:	tyler.baker@tva.com
Lab Email:	tod.nollenmeyer@paceanlabs.com	Site PM Email:	rqquinn@tva.gov		

ITEMS #	SAMPLE ID Samples IDs MUST BE UNIQUE	SAMPLE LOCATION	Sample Depth		MATRIX CODE G= GRAB C=COMP	SAMPLE TYPE	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	Comments/ Lab Sample I.D.	MS/MSD	Analysis		Preserve		Filtered	
			Start Depth	End Depth								JSF_FISH BLANKS	see comments				
1	JSF-FH-CC-F-EB01-20190508	NA	NA	NA	G	EB	5/8/2019	12:45	1	001		X					
2	JSF-FH-CC-F-EB01-20190517	NA	NA	NA	G	EB	5/17/2019	07:20	1	002		X					
3	JSF-FH-CC-F-EB01-20190524	NA	NA	NA	G	EB	5/24/2019	09:00	1	003		X					
4	JSF-FH-CC-F-EB01-20190617	NA	NA	NA	G	EB	6/17/2019	13:30	1	004		X					
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	

RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
TVA		6-17-19	15:05	TVA	6-17-19	15:05

SHIPPING METHOD:		FEDER	
Fedex		Tyler Baker	

SAMPLER NAME AND SIGNATURE		Tyler Baker	
----------------------------	--	-------------	--

Temperature in °C	Sample on Ice?	Sample Intact?	Trip Blank?
22			

Client Name:

TVA

Sample Preservation Receipt Form

Project #

40189616

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

Lab Lot# of pH paper: 10453581

Lab Std #ID of preservation (if pH adjusted):

Initial when completed: STW Date: 10/18/06

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


Page 1 of 2

Pace Lab #	Glass			Plastic			Vials			Jars		General		VOA Vials (>6mm) *			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	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2
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
015																																2.5 / 5 / 10
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	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
1 liter amber glass	1 liter amber glass HCL	125 mL amber glass H2SO4	120 mL amber glass unpres	100 mL amber glass unpres	500 mL amber glass H2SO4	250 mL clear glass unpres	1 liter plastic unpres	500 mL plastic HNO3	500 mL plastic NaOH, Znact	250 mL plastic unpres	250 mL plastic NaOH	250 mL plastic HNO3	250 mL plastic H2SO4	40 mL amber ascorbic	40 mL amber Na Thio	40 mL clear vial unpres	40 mL clear vial HCL	40 mL clear vial MeOH	40 mL clear vial DI	4 oz amber jar unpres	4 oz clear jar unpres	4 oz plastic jar unpres	120 mL plastic Na Thiosulfate	ziploc bag	

 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: TVA

Project #:

WO#: 40189616

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

Tracking #: 787940113068



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 - 9 Type of Ice: ☒ Wet ☐ Blue Dry None

☒ Samples on ice, cooling process has begun

Cooler Temperature: Uncorr: 1.5 / Corr: 2

Temp Blank Present: ☐ yes ☒ no

Biological Tissue is Frozen: ☐ yes ☐ no

Person examining contents:

Date: 6-18-19

Initials: SKW

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

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

Client Notification/ Resolution:

If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review:

AL for TN

Date:

6/18/19



CASE NARRATIVE - METALS ANALYSIS

Lab Report Number (SDG): 40189616

Client: TENNESSEE VALLEY AUTHORITY

Project Name: JOHN SEVIER FOSSIL PLANT

Project Number: 426800

1. RECEIPT

Samples were received on ice at 2°C. Samples JSF-FH-CC-F-EB01-20190508 and JSF-FH-CC-F-EB01-20190517 for the 7473 analysis were received past hold time and the "H3" data qualifier applied to the final report

2. HOLDING TIMES

- A. **Sample Preparation:** All method required holding times were met.
- B. **Sample Analysis:** All method required holding times were met with the following exception. Sample JSF-FH-CC-F-EB01-20190524 for the 7473 analysis was analyzed past hold time and the "H1" data qualifier applied to the final report.

3. METHOD

Preparation: SW846 3050B, 7473

Analysis: SW846 6020, 7473

4. PREPARATION

Sample preparation proceeded normally. Although the samples in this SDG were blanks consisting of water, the samples were prepared per the client's instructions as if they were tissue samples.

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, Copper and Strontium are based on the water reporting limits rather than the tissue reporting limits and appear to recover two (Ca) and five (Cu,Sr) 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, Nickel, 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 / Duplicate (LCS/LCSD):** The associated LCS/LCSD met all in-house accuracy and precision criteria.
 - 2. **SRM:** A Standard Reference Material was analyzed with this analytical batch.
 - 3. **Matrix Spike / Duplicate (MS/MSD):** A batch MS/MSD pair was not performed with the 7473 or 6020 samples due to insufficient sample volume submitted to the laboratory. A LCS and LCSD were performed to demonstrate analytical accuracy and precision.
- 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. **Samples:** Sample analyses proceeded normally.
- H. **Dilutions:** None required for this SDG.
- I. **Reanalysis:** None required for this SDG.
- J. **Comments:** No additional comments are needed.

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: 07/03/19
Name: Jill A Duranceau Position: Quality Assurance Auditor

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

JSF-FH-CC-F-EB01-
20190508

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL
Lab Sample ID: 40189616001 Percent Moisture: _____

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.016	U	mg/kg	1	07/02/2019 12:56
7440-38-2	Arsenic	<0.030	U	mg/kg	1	07/02/2019 12:56
7440-39-3	Barium	<0.031	U	mg/kg	1	07/02/2019 12:56
7440-41-7	Beryllium	<0.033	U	mg/kg	1	07/02/2019 12:56
7440-42-8	Boron	<0.70	U	mg/kg	1	07/02/2019 12:56
7440-43-9	Cadmium	<0.014	U	mg/kg	1	07/02/2019 12:56
7440-70-2	Calcium	<25.4	U	mg/kg	1	07/02/2019 12:56
7440-47-3	Chromium	<0.088	U	mg/kg	1	07/02/2019 12:56
7440-48-4	Cobalt	<0.0082	U	mg/kg	1	07/02/2019 12:56
7440-50-8	Copper	<0.28	U	mg/kg	1	07/02/2019 12:56
7439-92-1	Lead	<0.026	U	mg/kg	1	07/02/2019 12:56
7439-93-2	Lithium	<0.021	U	mg/kg	1	07/02/2019 12:56
7439-98-7	Molybdenum	<0.036	U	mg/kg	1	07/02/2019 12:56
7440-02-0	Nickel	<0.041	U	mg/kg	1	07/02/2019 12:56
7782-49-2	Selenium	<0.051	U	mg/kg	1	07/02/2019 12:56
7440-22-4	Silver	<0.011	U	mg/kg	1	07/02/2019 12:56
7440-24-6	Strontium	<0.16	U	mg/kg	1	07/02/2019 12:56
7440-28-0	Thallium	<0.013	U	mg/kg	1	07/02/2019 12:56
7440-62-2	Vanadium	<0.033	U	mg/kg	1	07/02/2019 12:56
7440-66-6	Zinc	<1.7	U	mg/kg	1	07/02/2019 12:56

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

JSF-FH-CC-F-EB01-
20190517

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL
Lab Sample ID: 40189616002 Percent Moisture: _____

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.016	U	mg/kg	1	07/02/2019 13:03
7440-38-2	Arsenic	<0.030	U	mg/kg	1	07/02/2019 13:03
7440-39-3	Barium	<0.030	U	mg/kg	1	07/02/2019 13:03
7440-41-7	Beryllium	<0.033	U	mg/kg	1	07/02/2019 13:03
7440-42-8	Boron	<0.69	U	mg/kg	1	07/02/2019 13:03
7440-43-9	Cadmium	<0.014	U	mg/kg	1	07/02/2019 13:03
7440-70-2	Calcium	<25.2	U	mg/kg	1	07/02/2019 13:03
7440-47-3	Chromium	<0.088	U	mg/kg	1	07/02/2019 13:03
7440-48-4	Cobalt	<0.0082	U	mg/kg	1	07/02/2019 13:03
7440-50-8	Copper	<0.28	U	mg/kg	1	07/02/2019 13:03
7439-92-1	Lead	<0.026	U	mg/kg	1	07/02/2019 13:03
7439-93-2	Lithium	<0.021	U	mg/kg	1	07/02/2019 13:03
7439-98-7	Molybdenum	<0.036	U	mg/kg	1	07/02/2019 13:03
7440-02-0	Nickel	<0.041	U	mg/kg	1	07/02/2019 13:03
7782-49-2	Selenium	<0.050	U	mg/kg	1	07/02/2019 13:03
7440-22-4	Silver	<0.011	U	mg/kg	1	07/02/2019 13:03
7440-24-6	Strontium	<0.16	U	mg/kg	1	07/02/2019 13:03
7440-28-0	Thallium	<0.013	U	mg/kg	1	07/02/2019 13:03
7440-62-2	Vanadium	<0.033	U	mg/kg	1	07/02/2019 13:03
7440-66-6	Zinc	<1.7	U	mg/kg	1	07/02/2019 13:03

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

JSF-FH-CC-F-EB01-
20190524

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL
Lab Sample ID: 40189616003 Percent Moisture: _____

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.016	U	mg/kg	1	07/02/2019 13:10
7440-38-2	Arsenic	<0.030	U	mg/kg	1	07/02/2019 13:10
7440-39-3	Barium	<0.031	U	mg/kg	1	07/02/2019 13:10
7440-41-7	Beryllium	<0.033	U	mg/kg	1	07/02/2019 13:10
7440-42-8	Boron	<0.70	U	mg/kg	1	07/02/2019 13:10
7440-43-9	Cadmium	<0.014	U	mg/kg	1	07/02/2019 13:10
7440-70-2	Calcium	<25.4	U	mg/kg	1	07/02/2019 13:10
7440-47-3	Chromium	<0.088	U	mg/kg	1	07/02/2019 13:10
7440-48-4	Cobalt	<0.0082	U	mg/kg	1	07/02/2019 13:10
7440-50-8	Copper	<0.28	U	mg/kg	1	07/02/2019 13:10
7439-92-1	Lead	<0.026	U	mg/kg	1	07/02/2019 13:10
7439-93-2	Lithium	<0.021	U	mg/kg	1	07/02/2019 13:10
7439-98-7	Molybdenum	<0.036	U	mg/kg	1	07/02/2019 13:10
7440-02-0	Nickel	<0.041	U	mg/kg	1	07/02/2019 13:10
7782-49-2	Selenium	<0.051	U	mg/kg	1	07/02/2019 13:10
7440-22-4	Silver	<0.011	U	mg/kg	1	07/02/2019 13:10
7440-24-6	Strontium	<0.16	U	mg/kg	1	07/02/2019 13:10
7440-28-0	Thallium	<0.013	U	mg/kg	1	07/02/2019 13:10
7440-62-2	Vanadium	<0.033	U	mg/kg	1	07/02/2019 13:10
7440-66-6	Zinc	<1.7	U	mg/kg	1	07/02/2019 13:10

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

JSF-FH-CC-F-EB01-
20190617

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL
Lab Sample ID: 40189616004 Percent Moisture: _____

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-36-0	Antimony	<0.016	U	mg/kg	1	07/02/2019 13:18
7440-38-2	Arsenic	<0.030	U	mg/kg	1	07/02/2019 13:18
7440-39-3	Barium	<0.031	U	mg/kg	1	07/02/2019 13:18
7440-41-7	Beryllium	<0.033	U	mg/kg	1	07/02/2019 13:18
7440-42-8	Boron	<0.70	U	mg/kg	1	07/02/2019 13:18
7440-43-9	Cadmium	<0.014	U	mg/kg	1	07/02/2019 13:18
7440-70-2	Calcium	29.2	J	mg/kg	1	07/02/2019 13:18
7440-47-3	Chromium	<0.088	U	mg/kg	1	07/02/2019 13:18
7440-48-4	Cobalt	<0.0082	U	mg/kg	1	07/02/2019 13:18
7440-50-8	Copper	<0.28	U	mg/kg	1	07/02/2019 13:18
7439-92-1	Lead	<0.026	U	mg/kg	1	07/02/2019 13:18
7439-93-2	Lithium	<0.021	U	mg/kg	1	07/02/2019 13:18
7439-98-7	Molybdenum	<0.036	U	mg/kg	1	07/02/2019 13:18
7440-02-0	Nickel	0.044	J	mg/kg	1	07/02/2019 13:18
7782-49-2	Selenium	<0.051	U	mg/kg	1	07/02/2019 13:18
7440-22-4	Silver	<0.011	U	mg/kg	1	07/02/2019 13:18
7440-24-6	Strontium	<0.16	U	mg/kg	1	07/02/2019 13:18
7440-28-0	Thallium	<0.013	U	mg/kg	1	07/02/2019 13:18
7440-62-2	Vanadium	<0.033	U	mg/kg	1	07/02/2019 13:18
7440-66-6	Zinc	<1.7	U	mg/kg	1	07/02/2019 13:18

FORM II INORGANIC-1
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Initial Calibration Verification Source: 229187

Continuing Calibration Verification Source: 229410

Concentration Units: ug/L Instrument ID: 40ICM2

	Initial Calibration Verification				Continuing Calibration Verification						
	07/02/2019 11:51				07/02/2019 12:34			07/02/2019 14:01			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Antimony	110	113	102.5	90-110	100	102	101.9	100	101	100.9	90-110
Arsenic	110	109	98.8	90-110	100	103	103.0	100	103	103.1	90-110
Barium	110	109	99.5	90-110	100	99.6	99.6	100	98.5	98.5	90-110
Beryllium	110	111	100.6	90-110	100	101	100.9	100	101	101.3	90-110
Boron	110	109	98.8	90-110	100	97.3	97.3	100	101	100.8	90-110
Cadmium	110	111	101.0	90-110	100	102	102.1	100	102	101.6	90-110
Calcium	5500	5630	102.4	90-110	5000	4960	99.2	5000	5150	103.1	90-110
Chromium	110	110	99.8	90-110	100	101	100.8	100	100	100.1	90-110
Cobalt	110	109	99.2	90-110	100	100	100.5	100	99.8	99.8	90-110
Copper	110	112	102.3	90-110	100	104	104.1	100	103	103.2	90-110
Lead	110	109	99.0	90-110	100	100	100.1	100	99.5	99.5	90-110
Lithium	110	109	98.8	90-110	100	101	101.2	100	103	103.0	90-110
Molybdenum	110	103	93.3	90-110	100	100	100.2	100	99.6	99.6	90-110
Nickel	110	110	99.9	90-110	100	103	102.7	100	102	101.7	90-110
Selenium	110	113	102.5	90-110	100	102	101.5	100	101	101.3	90-110
Silver	55	55.3	100.5	90-110	50	51.0	102.0	50	50.7	101.4	90-110
Strontium	110	110	99.6	90-110	100	100	100.5	100	100	100.3	90-110
Thallium	110	104	94.8	90-110	100	96.9	96.9	100	96.1	96.1	90-110
Vanadium	110	110	100.2	90-110	100	99.6	99.6	100	100	100.1	90-110
Zinc	110	115	104.5	90-110	100	106	105.7	100	104	103.8	90-110

FORM II INORGANIC-2
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Initial Calibration Verification Source: _____

Continuing Calibration Verification Source: 229410

Concentration Units: ug/L Instrument ID: 40ICM2

Analyte	Continuing Calibration Verification						
	07/02/2019 15:13			07/02/2019 15:57			Control Limit
	True	Found	%R	True	Found	%R	
Antimony	100	102	102.0	100	102	102.5	90-110
Arsenic	100	103	103.2	100	103	102.9	90-110
Barium	100	99.7	99.7	100	98.5	98.5	90-110
Beryllium	100	94.6	94.6	100	96.1	96.1	90-110
Boron	100	93.8	93.8	100	96.6	96.6	90-110
Cadmium	100	104	104.1	100	104	104.2	90-110
Calcium	5000	5060	101.2	5000	5010	100.2	90-110
Chromium	100	103	102.6	100	102	102.2	90-110
Cobalt	100	102	102.3	100	102	101.6	90-110
Copper	100	107	106.9	100	106	106.5	90-110
Lead	100	98.6	98.6	100	97.4	97.4	90-110
Lithium	100	97.7	97.7	100	102	101.9	90-110
Molybdenum	100	103	102.8	100	102	102.4	90-110
Nickel	100	105	105.0	100	103	103.4	90-110
Selenium	100	99.1	99.1	100	99.8	99.8	90-110
Silver	50	52.7	105.5	50	52.7	105.3	90-110
Strontium	100	99.7	99.7	100	98.6	98.6	90-110
Thallium	100	96.7	96.7	100	96.8	96.8	90-110
Vanadium	100	102	101.8	100	100	100.2	90-110
Zinc	100	106	106.3	100	107	107.0	90-110

FORM II INORGANIC-1
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

CRDL Check Standard Source: 229405 Analysis Date/Time: 07/02/2019 12:05

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	0.99	99.2	70-130
Arsenic	1.0	0.92	92.1	70-130
Barium	1.0	1.0	102.5	70-130
Beryllium	1.0	0.98	98.2	70-130
Cadmium	1.0	1.0	101.3	70-130
Chromium	1.0	0.98	98.5	70-130
Cobalt	1.0	1.0	103.7	70-130
Lead	1.0	1.0	104.5	70-130
Lithium	1.0	1.0	102.8	70-130
Molybdenum	1.0	1.1	109.4	70-130
Nickel	1.0	1.0	104.9	70-130
Selenium	1.0	1.0	99.5	70-130
Silver	0.5	0.48	96.6	70-130
Thallium	1.0	1.0	103.7	70-130
Vanadium	1.0	1.1	105.1	70-130

FORM II INORGANIC-1
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

CRDL Check Standard Source: 229406 Analysis Date/Time: 07/02/2019 12:13

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Boron	5.0	4.7	94.6	70-130
Calcium	250	490	195.9	70-130
Copper	1.0	5.2	519.3	70-130
Strontium	1.0	5.1	509.7	70-130
Zinc	5.0	5.9	117.7	70-130

FORM II INORGANIC-1
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

CRDL Check Standard Source: 229405 Analysis Date/Time: 07/02/2019 15:28

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Antimony	1.0	1.0	100.7	70-130
Arsenic	1.0	0.96	95.6	70-130
Barium	1.0	0.98	98.0	70-130
Beryllium	1.0	0.87	86.7	70-130
Cadmium	1.0	1.0	104.2	70-130
Chromium	1.0	1.0	103.3	70-130
Cobalt	1.0	1.0	104.8	70-130
Lead	1.0	1.0	100.8	70-130
Lithium	1.0	0.95	95.1	70-130
Molybdenum	1.0	1.1	106.4	70-130
Nickel	1.0	1.1	108.6	70-130
Selenium	1.0	1.0	101.7	70-130
Silver	0.5	0.49	98.4	70-130
Thallium	1.0	0.98	98.5	70-130
Vanadium	1.0	1.1	112.2	70-130

FORM II INORGANIC-1
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

CRDL Check Standard Source: 229406 Analysis Date/Time: 07/02/2019 15:35

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Boron	5.0	4.7	93.2	70-130
Calcium	250	568	227.1	70-130
Copper	1.0	5.5	546.3	70-130
Strontium	1.0	5.0	503.3	70-130
Zinc	5.0	6.5	129.6	70-130

FORM III INORGANIC-1
BLANKS

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract : 426800 JOHN SEVIER FOSSIL PLAN

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	
	07/02/2019 11:58	C	07/02/2019 12:41	C	07/02/2019 14:08	C	07/02/2019 15:20	C	1891424	C
Antimony	0.16	U	0.16	U	0.16	U	0.16	U	<0.016	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	0.10	U	0.10	U	0.10	U	<0.014	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	0.10	U	0.10	U	0.10	U	<0.0082	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	<0.026	U
Lithium	1.0	U	1.0	U	1.0	U	1.0	U	<0.021	U
Molybdenum	0.13	U	0.13	U	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	-0.026		-0.032		-0.035		-0.037		<0.011	U
Strontium	0.24	U	0.24	U	0.24	U	0.24	U	<0.16	U
Thallium	0.11	U	0.11	U	0.11	U	0.11	U	<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	<1.7	U

FORM III INORGANIC-2
BLANKS

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract : 426800 JOHN SEVIER FOSSIL PLAN

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	07/02/2019 16:04	C		C		C	1891425	C
Antimony			0.16	U					<0.016	U
Arsenic			0.14	U					<0.030	U
Barium			0.38	U					<0.031	U
Beryllium			0.22	U					<0.033	U
Boron			1.7	U					<0.70	U
Cadmium			0.10	U					<0.014	U
Calcium			500	U					45.6	J
Chromium			1.4	U					0.13	J
Cobalt			0.10	U					<0.0082	U
Copper			0.64	U					0.35	J
Lead			0.29	U					<0.026	U
Lithium			1.0	U					<0.021	U
Molybdenum			0.13	U					<0.036	U
Nickel			0.65	U					0.082	J
Selenium			0.81	U					0.18	
Silver			-0.032						<0.011	U
Strontium			0.24	U					<0.16	U
Thallium			0.11	U					<0.013	U
Vanadium			0.40	U					<0.033	U
Zinc			18.9	U					8.0	

FORM IV INORGANIC-1
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Instrument ID: 40ICM2

Solution A Run Date: 07/02/2019 12:20

ICS Source: 229411,229412

Solution AB Run Date: 07/02/2019 12:27

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	50000	50000	53460	106.9	53280	106.6	80-120
Antimony		100	0.097		102.8	102.8	80-120
Arsenic		100	0.012		105.8	105.8	80-120
Barium		100	0.086		101.4	101.4	80-120
Beryllium		100	-0.005		102.7	102.7	80-120
Boron		100	0.281		99.96	100	80-120
Cadmium		100	0.016		101.1	101.1	80-120
Calcium	50000	50000	52280	104.6	52700	105.4	80-120
Chromium		100	0.133		105.6	105.6	80-120
Cobalt		100	0.029		102.3	102.3	80-120
Copper		100	0.126		102	102	80-120
Iron	50000	50000	52040	104.1	51450	102.9	80-120
Lead		100	0.054		101.8	101.8	80-120
Lithium		100	0.236		103.7	103.7	80-120
Magnesium	50000	50000	51800	103.6	52260	104.5	80-120
Molybdenum	1000	1100	1012	101.2	1105	100.5	80-120
Nickel		100	0.052		101.7	101.7	80-120
Phosphorus	50000	55000	55420	110.8	59880	108.9	80-120
Potassium	50000	50000	53620	107.2	53600	107.2	80-120
Selenium		100	0.031		105	105	80-120
Silver		50	-0.037		48.39	96.8	80-120
Sodium	50000	50000	52890	105.8	53270	106.5	80-120
Strontium		100	0.433		104	104	80-120
Thallium		100	0.008		99.73	99.7	80-120
Titanium	1000	1100	1061	106.1	1165	105.9	80-120
Vanadium		100	0.044		106.2	106.2	80-120
Zinc		100	0.118		108.7	108.7	80-120

FORM IV INORGANIC-2
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Instrument ID: 40ICM2

Solution A Run Date: 07/02/2019 15:42

ICS Source: 229411,229412

Solution AB Run Date: 07/02/2019 15:49

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	50000	50000	54610	109.2	54810	109.6	80-120
Antimony		100	0.07		103.1	103.1	80-120
Arsenic		100	-0.094		105.3	105.3	80-120
Barium		100	0.086		99.93	99.9	80-120
Beryllium		100	-0.002		94.81	94.8	80-120
Boron		100	-0.029		93.89	93.9	80-120
Cadmium		100	-0.015		103.5	103.5	80-120
Calcium	50000	50000	51810	103.6	52600	105.2	80-120
Chromium		100	0.113		108.1	108.1	80-120
Cobalt		100	0.016		104.2	104.2	80-120
Copper		100	0.15		105.2	105.2	80-120
Iron	50000	50000	53590	107.2	53200	106.4	80-120
Lead		100	0.06		103.1	103.1	80-120
Lithium		100	0.242		101.4	101.4	80-120
Magnesium	50000	50000	53140	106.3	53870	107.7	80-120
Molybdenum	1000	1100	1085	108.5	1209	109.9	80-120
Nickel		100	0.036		104.2	104.2	80-120
Phosphorus	50000	55000	54980	110	59690	108.5	80-120
Potassium	50000	50000	54200	108.4	54600	109.2	80-120
Selenium		100	0.017		104.1	104.1	80-120
Silver		50	-0.032		50.39	100.8	80-120
Sodium	50000	50000	56090	112.2	56510	113	80-120
Strontium		100	0.435		102.7	102.7	80-120
Thallium		100	-0.002		100.6	100.6	80-120
Titanium	1000	1100	1050	105	1168	106.2	80-120
Vanadium		100	0.017		107.6	107.6	80-120
Zinc		100	0.431		110	110	80-120

FORM VI INORGANIC-1
DUPLICATES

1891428LCSD

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSILMatrix: Tissue Concentration Units: mg/kgPercent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Antimony	20	5.5	5.5	1
Arsenic	20	5.4	5.4	0
Barium	20	5.1	5.1	1
Beryllium	20	5.0	5.2	3
Boron	20	10.1	10.3	2
Cadmium	20	5.3	5.3	1
Calcium	20	266	266	0
Chromium	20	5.1	5.2	2
Cobalt	20	5.2	5.2	1
Copper	20	5.3	5.4	2
Lead	20	5.0	5.0	2
Lithium	20	5.1	5.2	3
Molybdenum	20	5.0	5.0	0
Nickel	20	5.2	5.2	1
Selenium	20	5.7	5.8	0
Silver	20	2.6	2.6	1
Strontium	20	5.1	5.2	1
Thallium	20	4.8	4.9	1
Vanadium	20	5.3	5.4	2
Zinc	20	22.0	22.1	0

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

SAMPLE NO.

1891426SRM

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL

Matrix: Tissue

Analyte	Units	True	Found	%R	Limits	
Arsenic	mg/kg	59.5	72.3	121	80	126
Cadmium	mg/kg	42.3	41.2	97	80	120
Chromium	mg/kg	2.0	1.1	56	13	93
Cobalt	mg/kg	1.1	1.1	104	80	120
Copper	mg/kg	497	493	99	77	120
Lead	mg/kg	0.22	0.21	92	79	120
Molybdenum	mg/kg	3.4	3.1	90	80	120
Nickel	mg/kg	5.3	4.7	90	76	120
Selenium	mg/kg	10.9	12.6	116	80	130
Strontium	mg/kg	36.5	30.6	84	79	120
Vanadium	mg/kg	9.1	9.8	107	80	120
Zinc	mg/kg	136	144	106	80	120

FORM VII INORGANIC-2
LABORATORY CONTROL SAMPLE

SAMPLE NO.

1891427LCS

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL

Matrix: Tissue

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	5.0	5.5	110	80	120
Arsenic	mg/kg	5.0	5.4	108	80	120
Barium	mg/kg	5.0	5.1	101	80	120
Beryllium	mg/kg	5.0	5.0	101	80	120
Boron	mg/kg	10.0	10.1	101	80	120
Cadmium	mg/kg	5.0	5.3	106	80	120
Calcium	mg/kg	250	266	106	80	120
Chromium	mg/kg	5.0	5.1	102	80	120
Cobalt	mg/kg	5.0	5.2	103	80	120
Copper	mg/kg	5.0	5.3	105	80	120
Lead	mg/kg	5.0	5.0	99	80	120
Lithium	mg/kg	5.0	5.1	101	80	120
Molybdenum	mg/kg	5.0	5.0	100	80	120
Nickel	mg/kg	5.0	5.2	103	80	120
Selenium	mg/kg	5.0	5.7	115	80	120
Silver	mg/kg	2.5	2.6	105	80	120
Strontium	mg/kg	5.0	5.1	102	80	120
Thallium	mg/kg	5.0	4.8	96	80	120
Vanadium	mg/kg	5.0	5.3	106	80	120
Zinc	mg/kg	20.0	22.0	110	80	120

FORM VII INORGANIC-3
LABORATORY CONTROL SAMPLE

SAMPLE NO.

1891428LCSD

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL

Matrix: Tissue

Analyte	Units	True	Found	%R	Limits	
Antimony	mg/kg	5.0	5.5	111	80	120
Arsenic	mg/kg	5.0	5.4	109	80	120
Barium	mg/kg	5.0	5.1	102	80	120
Beryllium	mg/kg	5.0	5.2	103	80	120
Boron	mg/kg	10.0	10.3	103	80	120
Cadmium	mg/kg	5.0	5.3	107	80	120
Calcium	mg/kg	250	266	106	80	120
Chromium	mg/kg	5.0	5.2	104	80	120
Cobalt	mg/kg	5.0	5.2	104	80	120
Copper	mg/kg	5.0	5.4	108	80	120
Lead	mg/kg	5.0	5.0	101	80	120
Lithium	mg/kg	5.0	5.2	104	80	120
Molybdenum	mg/kg	5.0	5.0	101	80	120
Nickel	mg/kg	5.0	5.2	104	80	120
Selenium	mg/kg	5.0	5.8	115	80	120
Silver	mg/kg	2.5	2.6	105	80	120
Strontium	mg/kg	5.0	5.2	103	80	120
Thallium	mg/kg	5.0	4.9	97	80	120
Vanadium	mg/kg	5.0	5.4	107	80	120
Zinc	mg/kg	20.0	22.1	110	80	120

FORM IX INORGANIC-1
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

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. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Preparation Method: EPA 3050B Instrument ID: 40ICM2

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Antimony	0.10	0.016	09/04/2018
Arsenic	0.10	0.030	09/04/2018
Barium	0.10	0.031	09/04/2018
Beryllium	0.11	0.033	09/04/2018
Boron	2.3	0.70	09/04/2018
Cadmium	0.10	0.014	09/04/2018
Calcium	84.7	25.4	09/04/2018
Chromium	0.29	0.088	09/04/2018
Cobalt	0.10	0.0082	09/04/2018
Copper	0.95	0.28	09/04/2018
Lead	0.087	0.026	09/04/2018
Lithium	0.10	0.021	09/04/2018
Molybdenum	0.12	0.036	09/04/2018
Nickel	0.14	0.041	09/04/2018
Selenium	0.17	0.051	09/04/2018
Silver	0.050	0.011	09/04/2018
Strontium	0.54	0.16	09/04/2018
Thallium	0.10	0.013	09/04/2018
Vanadium	0.11	0.033	09/04/2018
Zinc	5.7	1.7	09/04/2018

FORM XI - INORGANIC-1
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract : 426800 JOHN SEVIER FOSSIL
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. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Preparation Method: EPA 3050B Batch: MPRP 20480

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
1891424	1891424BLANK	06/28/2019	0.5	50
1891425	1891425SBLK	06/28/2019	0.5	50
1891426	1891426SRM	06/28/2019	0.5	50
1891427	1891427LCS	06/28/2019	0.5	50
1891428	1891428LCSD	06/28/2019	0.5	50
40189616001	JSF-FH-CC-F-EB01-20190508	06/28/2019	0.5	50
40189616002	JSF-FH-CC-F-EB01-20190517	06/28/2019	0.503	50
40189616003	JSF-FH-CC-F-EB01-20190524	06/28/2019	0.5	50
40189616004	JSF-FH-CC-F-EB01-20190617	06/28/2019	0.5	50

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Instrument ID: 40ICM2 Analysis Method: EPA 6020

Start Date: 07/02/2019 11:08 End Date: 07/02/2019 16:04

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
12458355CAL0	12458355CAL0	1	07/02/2019	11:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458356CAL1	12458356CAL1	1	07/02/2019	11:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458357CAL2	12458357CAL2	1	07/02/2019	11:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458358CAL3	12458358CAL3	1	07/02/2019	11:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458359CAL4	12458359CAL4	1	07/02/2019	11:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458360CAL5	12458360CAL5	1	07/02/2019	11:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458361ICV	12458361ICV	1	07/02/2019	11:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458362ICB	12458362ICB	1	07/02/2019	11:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458363CRDL	12458363CRDL	1	07/02/2019	12:05	X	X		X	X		X	X	X		X	X	X	X	X	X
12458364CRDL	12458364CRDL	1	07/02/2019	12:13			X			X				X						
12458365ICSA	12458365ICSA	1	07/02/2019	12:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458366ICSAB	12458366ICSAB	1	07/02/2019	12:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458367CCV	12458367CCV	1	07/02/2019	12:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458368CCB	12458368CCB	1	07/02/2019	12:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1891424BLANK	1891424	1	07/02/2019	12:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-F-EB01-20190508	40189616001	1	07/02/2019	12:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-F-EB01-20190517	40189616002	1	07/02/2019	13:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-F-EB01-20190524	40189616003	1	07/02/2019	13:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JSF-FH-CC-F-EB01-20190617	40189616004	1	07/02/2019	13:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458369CCV	12458369CCV	1	07/02/2019	14:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458370CCB	12458370CCB	1	07/02/2019	14:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1891425SBLK	1891425	1	07/02/2019	14:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1891427LCS	1891427	1	07/02/2019	14:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1891428LCSD	1891428	1	07/02/2019	14:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1891426SRM	1891426	1	07/02/2019	15:06		X					X	X	X	X		X	X	X		X
12458371CCV	12458371CCV	1	07/02/2019	15:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458372CCB	12458372CCB	1	07/02/2019	15:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458373CRDL	12458373CRDL	1	07/02/2019	15:28	X	X		X	X		X	X	X		X	X	X	X	X	X
12458374CRDL	12458374CRDL	1	07/02/2019	15:35			X			X				X						
12458375ICSA	12458375ICSA	1	07/02/2019	15:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458376ICSAB	12458376ICSAB	1	07/02/2019	15:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458377CCV	12458377CCV	1	07/02/2019	15:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12458378CCB	12458378CCB	1	07/02/2019	16:04	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. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Instrument ID: 40ICM2

Analysis Method: EPA 6020

Start Date: 07/02/2019 11:08

End Date: 07/02/2019 16:04

Sample Name	Lab Sample ID	D/F	Date	Time	Sr	Tl	V	Zn
12458355CAL0	12458355CAL0	1	07/02/2019	11:08	X	X	X	X
12458356CAL1	12458356CAL1	1	07/02/2019	11:15	X	X	X	X
12458357CAL2	12458357CAL2	1	07/02/2019	11:22	X	X	X	X
12458358CAL3	12458358CAL3	1	07/02/2019	11:29	X	X	X	X
12458359CAL4	12458359CAL4	1	07/02/2019	11:36	X	X	X	X
12458360CAL5	12458360CAL5	1	07/02/2019	11:44	X	X	X	X
12458361ICV	12458361ICV	1	07/02/2019	11:51	X	X	X	X
12458362ICB	12458362ICB	1	07/02/2019	11:58	X	X	X	X
12458363CRDL	12458363CRDL	1	07/02/2019	12:05		X	X	
12458364CRDL	12458364CRDL	1	07/02/2019	12:13	X			X
12458365ICSA	12458365ICSA	1	07/02/2019	12:20	X	X	X	X
12458366ICSAB	12458366ICSAB	1	07/02/2019	12:27	X	X	X	X
12458367CCV	12458367CCV	1	07/02/2019	12:34	X	X	X	X
12458368CCB	12458368CCB	1	07/02/2019	12:41	X	X	X	X
1891424BLANK	1891424	1	07/02/2019	12:49	X	X	X	X
JSF-FH-CC-F-EB01-20190508	40189616001	1	07/02/2019	12:56	X	X	X	X
JSF-FH-CC-F-EB01-20190517	40189616002	1	07/02/2019	13:03	X	X	X	X
JSF-FH-CC-F-EB01-20190524	40189616003	1	07/02/2019	13:10	X	X	X	X
JSF-FH-CC-F-EB01-20190617	40189616004	1	07/02/2019	13:18	X	X	X	X
12458369CCV	12458369CCV	1	07/02/2019	14:01	X	X	X	X
12458370CCB	12458370CCB	1	07/02/2019	14:08	X	X	X	X
1891425SBLK	1891425	1	07/02/2019	14:37	X	X	X	X
1891427LCS	1891427	1	07/02/2019	14:44	X	X	X	X
1891428LCSD	1891428	1	07/02/2019	14:52	X	X	X	X
1891426SRM	1891426	1	07/02/2019	15:06	X		X	X
12458371CCV	12458371CCV	1	07/02/2019	15:13	X	X	X	X
12458372CCB	12458372CCB	1	07/02/2019	15:20	X	X	X	X
12458373CRDL	12458373CRDL	1	07/02/2019	15:28		X	X	
12458374CRDL	12458374CRDL	1	07/02/2019	15:35	X			X
12458375ICSA	12458375ICSA	1	07/02/2019	15:42	X	X	X	X
12458376ICSAB	12458376ICSAB	1	07/02/2019	15:49	X	X	X	X
12458377CCV	12458377CCV	1	07/02/2019	15:57	X	X	X	X
12458378CCB	12458378CCB	1	07/02/2019	16:04	X	X	X	X

Performance Report

Sample details

Acquired at : 7/2/2019 7:43:41 AM

Report name : EPA 40ICM2 SN 01301C [2/27/2013 1:40:34 PM]

Mass Calibration verification

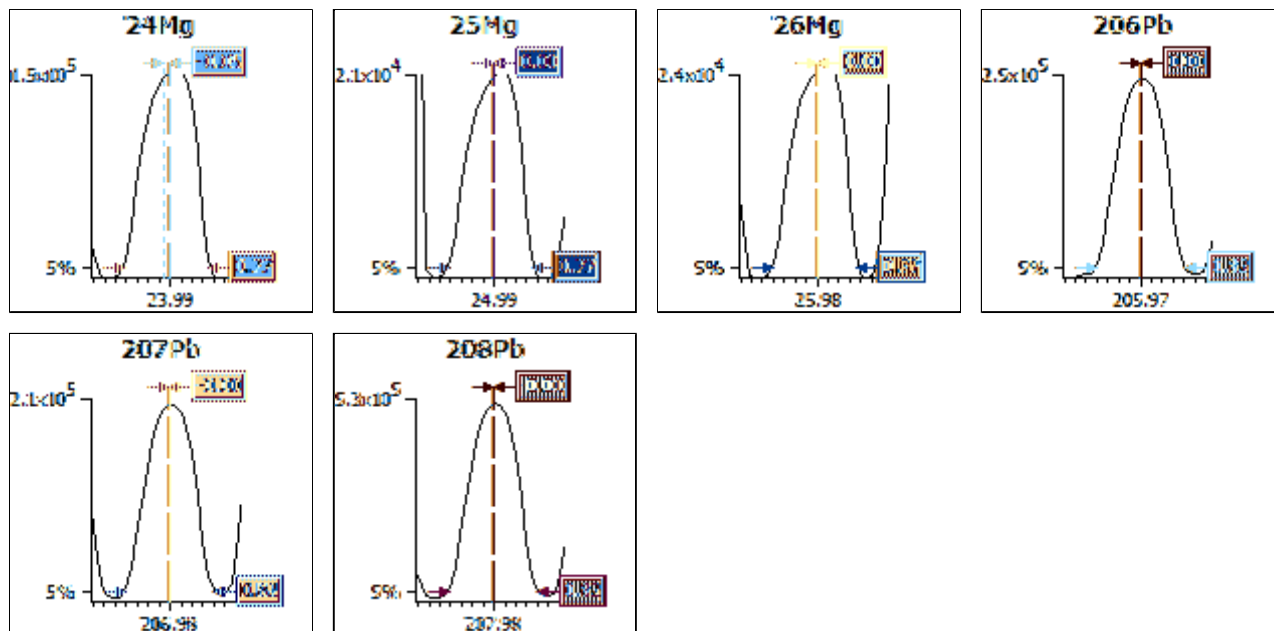
Acquisition parameters

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	0.77	-0.05
25Mg	0.85	0.65	0.10	0.77	0.00
26Mg	0.85	0.65	0.10	0.77	0.00
206Pb	0.85	0.65	0.10	0.82	0.00
207Pb	0.85	0.65	0.10	0.82	-0.00
208Pb	0.85	0.65	0.10	0.82	-0.00

Sample details

Acquired at : 7/2/2019 7:43:41 AM

Report name : EPA 40ICM2 SN 01301C [2/27/2013 1:40:34 PM]

Tune conditions

Major		Minor		Global		Add. Gases	
Extraction	-137.3	Lens 3	-191.4	Standard resolution	125	CCT-He	0.00
Lens 1	-1231	Forward power	1404	High resolution	60	CCT-He	0.00
Lens 2	-82.4	Horizontal	86	Analogue Detector	1820		
Focus	12.9	Vertical	595	PC Detector	2820		
D1	-41.6	DA	-29.8				
D2	-140	Cool	13.0				
Pole Bias	0.1	Auxiliary	0.70				
Hexapole Bias	-3.5	Sampling Depth	145				
Nebuliser	0.80						

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	7:44:04 AM	0.000	86196.104	151716.06	21181.126	25123.375	328339.67	2445.882	696093.63	84760.686
2	7:44:49 AM	0.000	87060.281	151260.79	21321.293	25429.522	331214.90	2374.444	687961.71	84459.263
3	7:45:34 AM	0.057	87364.619	151479.78	20863.610	25197.765	335482.02	2374.444	692735.32	84961.638
4	7:46:20 AM	0.057	85975.042	151485.54	20992.332	25466.718	340035.51	2474.457	686967.36	83804.762
5	7:47:06 AM	0.000	86790.401	150747.91	21095.310	24562.596	341843.84	2497.317	685723.76	84938.672
x		0.023	86677.289	151338.02	21090.734	25155.995	335383.19	2433.309	689896.36	84585.004
σ		0.03	582.36	367.07	175.08	362.73	5709.20	56.74	4364.58	480.20
%RSD		136.931	0.672	0.243	0.830	1.442	1.702	2.332	0.633	0.568

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	7:44:04 AM	550269.66	754069.31	12149.846	248227.65	208582.54	518338.12	0.000	1020105.2
2	7:44:49 AM	544617.43	745982.93	11472.255	246582.23	208307.94	515541.75	0.000	997862.62
3	7:45:34 AM	554288.26	752442.81	13279.221	245962.34	211565.90	519632.06	0.114	1017143.2
4	7:46:20 AM	546787.98	740823.23	12890.365	245096.27	208206.77	517335.38	0.000	1021888.7
5	7:47:06 AM	548469.83	745652.40	13270.644	246124.56	207874.36	513633.64	0.057	1007127.4
x		548886.63	747794.13	12612.466	246398.61	208907.50	516896.19	0.034	1012825.4
σ		3670.65	5418.69	785.67	1155.49	1507.53	2357.74	0.05	10125.90
%RSD		0.669	0.725	6.229	0.469	0.722	0.456	149.071	1.000

Ratio results

Run	Time	137Ba++/137Ba	156Ce O/140Ce
Ratio limits		<0.0300	<0.0200
1	7:44:04 AM	0.029	0.016
2	7:44:49 AM	0.028	0.015
3	7:45:34 AM	0.028	0.018
4	7:46:20 AM	0.030	0.017
5	7:47:06 AM	0.029	0.018
x		0.0288	0.0169
σ		0.00	0.00
%RSD		2.5104	6.3192

Result : The performance report passed.

Performance Report

Sample details

Acquired at : 7/2/2019 7:54:41 AM

Report name : Xt CCT 40ICM2 SN 01301C [2/27/2013 1:40:34 PM]

Tune conditions

Major		Minor		Global		Add. Gases	
Extraction	-137.3	Lens 3	-195.3	Standard resolution	125	CCT-He	0.00
Lens 1	-1231	Forward power	1404	High resolution	60	CCT-He	0.31
Lens 2	-82.4	Horizontal	86	Analogue Detector	1820		
Focus	9.4	Vertical	595	PC Detector	2820		
D1	-46.3	DA	-29.8				
D2	-143	Cool	13.0				
Pole Bias	-9.0	Auxiliary	0.70				
Hexapole Bias	-4.0	Sampling Depth	145				
Nebuliser	0.80						

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	7:54:42 AM	29352.994	9220.157	9878.287
2	7:54:45 AM	29735.849	9311.316	10011.695
3	7:54:48 AM	29272.862	9186.807	10053.941
4	7:54:51 AM	28896.695	9031.172	9953.885
5	7:54:54 AM	29657.942	9133.446	10036.153
x		29383.268	9176.580	9986.792
σ		335.27	103.88	71.45
%RSD		1.141	1.132	0.715

Result : The performance report passed.

Performance Report

Sample details

Acquired at : 7/2/2019 8:01:29 AM

Report name : Xt CCT-KED 40ICM2 SN01301C [2/27/2013 1:40:34 PM]

Tune conditions

Major		Minor		Global		Add. Gases	
Extraction	-137.3	Lens 3	-195.3	Standard resolution	125	CCT-He	0.00
Lens 1	-1231	Forward power	1404	High resolution	60	CCT-He	3.88
Lens 2	-82.4	Horizontal	86	Analogue Detector	1820		
Focus	-7.1	Vertical	595	PC Detector	2820		
D1	-58.8	DA	-29.8				
D2	-143	Cool	13.0				
Pole Bias	-17.0	Auxiliary	0.70				
Hexapole Bias	-20.0	Sampling Depth	145				
Nebuliser	0.80						

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	8:01:30 AM	13.714	276791.54	469905.27	4282.799
2	8:01:37 AM	9.714	278062.49	467394.95	4255.936
3	8:01:45 AM	11.143	282035.50	464779.43	4277.084
4	8:01:53 AM	7.429	281582.72	466336.38	4367.963
5	8:02:01 AM	9.714	280743.95	461742.14	4315.379
x		10.343	279843.24	466031.63	4299.832
σ		2.31	2298.21	3038.27	43.64
%RSD		22.306	0.821	0.652	1.015

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0200
1	8:01:30 AM	0.009
2	8:01:37 AM	0.009
3	8:01:45 AM	0.009
4	8:01:53 AM	0.009
5	8:02:01 AM	0.009
x		0.0092
σ		0.00
%RSD		1.3456

Result : The performance report passed.

FORM XV INORGANIC-1
INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Instrument ID: 40ICM2 Start Date: 07/02/2019 11:08 End Date: 07/02/2019 16:04

Sample Name	Time	Bi-209	Ge-72	In-115	Sc-45-CCT	Sc-45-KED	Tb-159	Y-89
12458355CAL0	11:08	100.0	100.0	100.0	100.0	100.0	100.0	100.0
12458356CAL1	11:15	100.2	103.1	102.5	101.8	100.6	100.6	100.4
12458357CAL2	11:22	101.1	101.4	101.3	100.1	99.0	100.1	98.9
12458358CAL3	11:29	101.4	98.1	99.2	96.1	96.6	98.6	96.4
12458359CAL4	11:36	100.5	98.2	99.6	97.4	97.1	98.6	96.7
12458360CAL5	11:44	99.9	95.1	98.4	95.7	93.7	97.5	94.4
12458361ICV	11:51	100.5	95.6	97.1	93.8	92.1	97.4	93.6
12458362ICB	11:58	99.8	91.2	94.5	90.7	90.4	96.9	92.8
12458363CRDL	12:05	100.0	96.1	98.4	94.0	93.4	98.3	94.8
12458364CRDL	12:13	101.2	97.5	99.9	95.2	95.6	99.2	96.6
12458365ICSA	12:20	92.8	83.8	89.6	85.7	78.5	90.9	84.1
12458366ICSAB	12:27	95.7	87.0	92.3	83.0	80.5	92.6	86.3
12458367CCV	12:34	105.6	98.4	100.5	97.8	96.9	101.5	96.9
12458368CCB	12:41	106.5	99.7	101.3	103.7	100.9	102.7	100.3
1891424BLANK	12:49	105.8	105.1	103.8	107.2	103.2	103.5	101.9
JSF-FH-CC-F-EB01-	12:56	108.7	105.9	104.5	106.9	103.7	104.5	102.3
JSF-FH-CC-F-EB01-	13:03	107.3	106.1	105.0	107.6	105.5	104.3	103.1
JSF-FH-CC-F-EB01-	13:10	109.5	106.2	104.8	107.5	105.0	103.9	103.2
JSF-FH-CC-F-EB01-	13:18	106.6	105.6	103.9	108.2	104.2	103.5	101.8
12458369CCV	14:01	103.4	101.2	101.2	101.5	100.7	101.5	98.6
12458370CCB	14:08	102.4	97.5	98.3	99.7	98.7	101.5	97.9
1891425SBLK	14:37	110.3	104.6	103.5	113.6	101.9	106.0	102.4
1891427LCS	14:44	110.3	110.2	108.6	113.8	108.5	110.6	108.8
1891428LCSD	14:52	110.6	109.5	108.1	114.4	107.0	110.1	107.5
1891426SRM	15:06	103.3	100.4	101.5	99.4	87.9	107.1	109.2
12458371CCV	15:13	117.3	111.4	110.4	112.4	110.1	112.1	107.7
12458372CCB	15:20	117.6	111.5	109.0	119.6	113.9	113.2	109.8
12458373CRDL	15:28	116.2	115.2	111.9	121.3	114.3	113.3	110.9
12458374CRDL	15:35	116.3	113.2	110.8	121.0	112.6	111.6	109.0
12458375ICSA	15:42	100.7	91.2	96.1	98.7	86.7	101.3	90.6
12458376ICSAB	15:49	102.4	92.5	96.7	95.2	86.6	101.4	91.1
12458377CCV	15:57	117.0	106.1	105.7	110.5	104.8	110.2	103.0
12458378CCB	16:04	118.5	107.2	106.1	114.2	108.0	112.5	105.8

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	7/3/2019 6:59:04 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	Result cells	Data warning flags
No flag	Internal Standard	I - Invalid calibration
Semi Quant	Excluded	T - Tripped
Standard Addition	QC Warning	F - Interference correction failed
Multi Element	QC Failure	M - Result over max
	Transient TRA only:	V - Valley integration failed
	Peak Not Found	D - Different method used
	Manually Edited	
	Merged Peak	

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
229404_9800_Cal0	3	7	7	7	8	8	8	8	8	8	8
229405_9800_Cal1	3	7	7	7	8	8	8	8	8	8	8
229406_9800_Cal2	3	7	7	7	8	8	8	8	8	8	8
229407_9800_Cal3	3	7	7	7	8	8	8	8	8	8	8
229408_9800_Cal4	3	7	7	7	8	8	8	8	8	8	8
229409_9800_Cal5	3	7	7	7	8	8	8	8	8	8	8
229187_9800_ICV	3	7	7	7	8	8	8	8	8	8	8
229404_9800_ICBTVA	3	7	7	7	8	8	8	8	8	8	8
229405_9800_CRDL_A1	3	7	7	7	8	8	8	8	8	8	8
229406_9800_CRDL_B1	3	7	7	7	8	8	8	8	8	8	8
229411_9800_ICSA1	3	7	7	7	8	8	8	8	8	8	8
229412_9800_ICSAB1	3	7	7	7	8	8	8	8	8	8	8
229410_9800_CCV1	3	7	7	7	8	8	8	8	8	8	8
229404_9800_CCBTVA1	3	7	7	7	8	8	8	8	8	8	8
1891424_9792	3	7	7	7	8	8	8	8	8	8	8
40189616001_9792	3	7	7	7	8	8	8	8	8	8	8
40189616002_9792	3	7	7	7	8	8	8	8	8	8	8
40189616003_9792	3	7	7	7	8	8	8	8	8	8	8
40189616004_9792	3	7	7	7	8	8	8	8	8	8	8
40189618001_9792	3	7	7	7	8	8	8	8	8	8	8
40189618002_9792	3	7	7	7	8	8	8	8	8	8	8
40189618003_9792	3	7	7	7	8	8	8	8	8	8	8
40189618004_9792	3	7	7	7	8	8	8	8	8	8	8
40189618005_9792	3	7	7	7	8	8	8	8	8	8	8
229410_9800_CCV2	3	7	7	7	8	8	8	8	8	8	8
229404_9800_CCBTVA2	3	7	7	7	8	8	8	8	8	8	8
40189618006_9792	3	7	7	7	8	8	8	8	8	8	8

40189618007_9792	3	7	7	7	8	8	8	8	8	8	8
40189618008_9792	3	7	7	7	8	8	8	8	8	8	8
1891425_9792	3	7	7	7	8	8	8	8	8	8	8
1891427_9792	3	7	7	7	8	8	8	8	8	8	8
1891428_9792	3	7	7	7	8	8	8	8	8	8	8
1891426_9792x2	3	7	7	7	8	8	8	8	8	8	8
1891426_9792	3	7	7	7	8	8	8	8	8	8	8
229410_9800_CCV3	3	7	7	7	8	8	8	8	8	8	8
229404_9800_CCBTVA3	3	7	7	7	8	8	8	8	8	8	8
229405_9800_CRDL_A2	3	7	7	7	8	8	8	8	8	8	8
229406_9800_CRDL_B2	3	7	7	7	8	8	8	8	8	8	8
229411_9800_ICSA2	3	7	7	7	8	8	8	8	8	8	8
229412_9800_ICSAB2	3	7	7	7	8	8	8	8	8	8	8
229410_9800_CCV4	3	7	7	7	8	8	8	8	8	8	8
229404_9800_CCBTVA4	3	7	7	7	8	8	8	8	8	8	8
Label	Config	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
229404_9800_Cal0	3	8	8	8	7	8	8	8	8	8	8
229405_9800_Cal1	3	8	8	8	7	8	8	8	8	8	8
229406_9800_Cal2	3	8	8	8	7	8	8	8	8	8	8
229407_9800_Cal3	3	8	8	8	7	8	8	8	8	8	8
229408_9800_Cal4	3	8	8	8	7	8	8	8	8	8	8
229409_9800_Cal5	3	8	8	8	7	8	8	8	8	8	8
229187_9800_ICV	3	8	8	8	7	8	8	8	8	8	8
229404_9800_ICBTVA	3	8	8	8	7	8	8	8	8	8	8
229405_9800_CRDL_A1	3	8	8	8	7	8	8	8	8	8	8
229406_9800_CRDL_B1	3	8	8	8	7	8	8	8	8	8	8
229411_9800_ICSA1	3	8	8	8	7	8	8	8	8	8	8
229412_9800_ICSAB1	3	8	8	8	7	8	8	8	8	8	8
229410_9800_CCV1	3	8	8	8	7	8	8	8	8	8	8
229404_9800_CCBTVA1	3	8	8	8	7	8	8	8	8	8	8
1891424_9792	3	8	8	8	7	8	8	8	8	8	8
40189616001_9792	3	8	8	8	7	8	8	8	8	8	8
40189616002_9792	3	8	8	8	7	8	8	8	8	8	8
40189616003_9792	3	8	8	8	7	8	8	8	8	8	8
40189616004_9792	3	8	8	8	7	8	8	8	8	8	8
40189618001_9792	3	8	8	8	7	8	8	8	8	8	8
40189618002_9792	3	8	8	8	7	8	8	8	8	8	8
40189618003_9792	3	8	8	8	7	8	8	8	8	8	8
40189618004_9792	3	8	8	8	7	8	8	8	8	8	8
40189618005_9792	3	8	8	8	7	8	8	8	8	8	8
229410_9800_CCV2	3	8	8	8	7	8	8	8	8	8	8
229404_9800_CCBTVA2	3	8	8	8	7	8	8	8	8	8	8
40189618006_9792	3	8	8	8	7	8	8	8	8	8	8
40189618007_9792	3	8	8	8	7	8	8	8	8	8	8
40189618008_9792	3	8	8	8	7	8	8	8	8	8	8
1891425_9792	3	8	8	8	7	8	8	8	8	8	8
1891427_9792	3	8	8	8	7	8	8	8	8	8	8
1891428_9792	3	8	8	8	7	8	8	8	8	8	8
1891426_9792x2	3	8	8	8	7	8	8	8	8	8	8
1891426_9792	3	8	8	8	7	8	8	8	8	8	8
229410_9800_CCV3	3	8	8	8	7	8	8	8	8	8	8
229404_9800_CCBTVA3	3	8	8	8	7	8	8	8	8	8	8
229405_9800_CRDL_A2	3	8	8	8	7	8	8	8	8	8	8
229406_9800_CRDL_B2	3	8	8	8	7	8	8	8	8	8	8
229411_9800_ICSA2	3	8	8	8	7	8	8	8	8	8	8
229412_9800_ICSAB2	3	8	8	8	7	8	8	8	8	8	8
229410_9800_CCV4	3	8	8	8	7	8	8	8	8	8	8
229404_9800_CCBTVA4	3	8	8	8	7	8	8	8	8	8	8
Label	Config	59Co	60Ni	63Cu	66Zn	72Ge	73Ge	75As	78Se	83Kr	88Sr
229404_9800_Cal0	3	8	8	8	8	8	8	8	8	8	8
229405_9800_Cal1	3	8	8	8	8	8	8	8	8	8	8
229406_9800_Cal2	3	8	8	8	8	8	8	8	8	8	8
229407_9800_Cal3	3	8	8	8	8	8	8	8	8	8	8
229408_9800_Cal4	3	8	8	8	8	8	8	8	8	8	8
229409_9800_Cal5	3	8	8	8	8	8	8	8	8	8	8
229187_9800_ICV	3	8	8	8	8	8	8	8	8	8	8
229404_9800_ICBTVA	3	8	8	8	8	8	8	8	8	8	8
229405_9800_CRDL_A1	3	8	8	8	8	8	8	8	8	8	8
229406_9800_CRDL_B1	3	8	8	8	8	8	8	8	8	8	8
229411_9800_ICSA1	3	8	8	8	8	8	8	8	8	8	8

229412_9800_ICSAB1	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV1	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA1	3	8	8	8	8	8	8	8	8	8	8
1891424_9792	3	8	8	8	8	8	8	8	8	8	8
40189616001_9792	3	8	8	8	8	8	8	8	8	8	8
40189616002_9792	3	8	8	8	8	8	8	8	8	8	8
40189616003_9792	3	8	8	8	8	8	8	8	8	8	8
40189616004_9792	3	8	8	8	8	8	8	8	8	8	8
40189618001_9792	3	8	8	8	8	8	8	8	8	8	8
40189618002_9792	3	8	8	8	8	8	8	8	8	8	8
40189618003_9792	3	8	8	8	8	8	8	8	8	8	8
40189618004_9792	3	8	8	8	8	8	8	8	8	8	8
40189618005_9792	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV2	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA2	3	8	8	8	8	8	8	8	8	8	8
40189618006_9792	3	8	8	8	8	8	8	8	8	8	8
40189618007_9792	3	8	8	8	8	8	8	8	8	8	8
40189618008_9792	3	8	8	8	8	8	8	8	8	8	8
1891425_9792	3	8	8	8	8	8	8	8	8	8	8
1891427_9792	3	8	8	8	8	8	8	8	8	8	8
1891428_9792	3	8	8	8	8	8	8	8	8	8	8
1891426_9792x2	3	8	8	8	8	8	8	8	8	8	8
1891426_9792	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV3	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA3	3	8	8	8	8	8	8	8	8	8	8
229405_9800_CRDL_A2	3	8	8	8	8	8	8	8	8	8	8
229406_9800_CRDL_B2	3	8	8	8	8	8	8	8	8	8	8
229411_9800_ICSA2	3	8	8	8	8	8	8	8	8	8	8
229412_9800_ICSAB2	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV4	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA4	3	8	8	8	8	8	8	8	8	8	8
Label	Config	89Y	90Zr	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba
229404_9800_Cal0	3	8	8	8	8	8	8	8	8	8	8
229405_9800_Cal1	3	8	8	8	8	8	8	8	8	8	8
229406_9800_Cal2	3	8	8	8	8	8	8	8	8	8	8
229407_9800_Cal3	3	8	8	8	8	8	8	8	8	8	8
229408_9800_Cal4	3	8	8	8	8	8	8	8	8	8	8
229409_9800_Cal5	3	8	8	8	8	8	8	8	8	8	8
229187_9800_ICV	3	8	8	8	8	8	8	8	8	8	8
229404_9800_ICBTVA	3	8	8	8	8	8	8	8	8	8	8
229405_9800_CRDL_A1	3	8	8	8	8	8	8	8	8	8	8
229406_9800_CRDL_B1	3	8	8	8	8	8	8	8	8	8	8
229411_9800_ICSA1	3	8	8	8	8	8	8	8	8	8	8
229412_9800_ICSAB1	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV1	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA1	3	8	8	8	8	8	8	8	8	8	8
1891424_9792	3	8	8	8	8	8	8	8	8	8	8
40189616001_9792	3	8	8	8	8	8	8	8	8	8	8
40189616002_9792	3	8	8	8	8	8	8	8	8	8	8
40189616003_9792	3	8	8	8	8	8	8	8	8	8	8
40189616004_9792	3	8	8	8	8	8	8	8	8	8	8
40189618001_9792	3	8	8	8	8	8	8	8	8	8	8
40189618002_9792	3	8	8	8	8	8	8	8	8	8	8
40189618003_9792	3	8	8	8	8	8	8	8	8	8	8
40189618004_9792	3	8	8	8	8	8	8	8	8	8	8
40189618005_9792	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV2	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA2	3	8	8	8	8	8	8	8	8	8	8
40189618006_9792	3	8	8	8	8	8	8	8	8	8	8
40189618007_9792	3	8	8	8	8	8	8	8	8	8	8
40189618008_9792	3	8	8	8	8	8	8	8	8	8	8
1891425_9792	3	8	8	8	8	8	8	8	8	8	8
1891427_9792	3	8	8	8	8	8	8	8	8	8	8
1891428_9792	3	8	8	8	8	8	8	8	8	8	8
1891426_9792x2	3	8	8	8	8	8	8	8	8	8	8
1891426_9792	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV3	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA3	3	8	8	8	8	8	8	8	8	8	8
229405_9800_CRDL_A2	3	8	8	8	8	8	8	8	8	8	8
229406_9800_CRDL_B2	3	8	8	8	8	8	8	8	8	8	8

229411_9800_ICSA2	3	8	8	8	8	8	8	8	8	8	8
229412_9800_ICSAB2	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV4	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA4	3	8	8	8	8	8	8	8	8	8	8
Label	Config	159Tb	184W	195Pt	201Hg	205Ti	206Pb	207Pb	208Pb	209Bi	238U
229404_9800_Cal0	3	8	8	8	8	8	8	8	8	8	8
229405_9800_Cal1	3	8	8	8	8	8	8	8	8	8	8
229406_9800_Cal2	3	8	8	8	8	8	8	8	8	8	8
229407_9800_Cal3	3	8	8	8	8	8	8	8	8	8	8
229408_9800_Cal4	3	8	8	8	8	8	8	8	8	8	8
229409_9800_Cal5	3	8	8	8	8	8	8	8	8	8	8
229187_9800_ICV	3	8	8	8	8	8	8	8	8	8	8
229404_9800_ICBTVA	3	8	8	8	8	8	8	8	8	8	8
229405_9800_CRDL_A1	3	8	8	8	8	8	8	8	8	8	8
229406_9800_CRDL_B1	3	8	8	8	8	8	8	8	8	8	8
229411_9800_ICSA1	3	8	8	8	8	8	8	8	8	8	8
229412_9800_ICSAB1	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV1	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA1	3	8	8	8	8	8	8	8	8	8	8
1891424_9792	3	8	8	8	8	8	8	8	8	8	8
40189616001_9792	3	8	8	8	8	8	8	8	8	8	8
40189616002_9792	3	8	8	8	8	8	8	8	8	8	8
40189616003_9792	3	8	8	8	8	8	8	8	8	8	8
40189616004_9792	3	8	8	8	8	8	8	8	8	8	8
40189618001_9792	3	8	8	8	8	8	8	8	8	8	8
40189618002_9792	3	8	8	8	8	8	8	8	8	8	8
40189618003_9792	3	8	8	8	8	8	8	8	8	8	8
40189618004_9792	3	8	8	8	8	8	8	8	8	8	8
40189618005_9792	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV2	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA2	3	8	8	8	8	8	8	8	8	8	8
40189618006_9792	3	8	8	8	8	8	8	8	8	8	8
40189618007_9792	3	8	8	8	8	8	8	8	8	8	8
40189618008_9792	3	8	8	8	8	8	8	8	8	8	8
1891425_9792	3	8	8	8	8	8	8	8	8	8	8
1891427_9792	3	8	8	8	8	8	8	8	8	8	8
1891428_9792	3	8	8	8	8	8	8	8	8	8	8
1891426_9792x2	3	8	8	8	8	8	8	8	8	8	8
1891426_9792	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV3	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA3	3	8	8	8	8	8	8	8	8	8	8
229405_9800_CRDL_A2	3	8	8	8	8	8	8	8	8	8	8
229406_9800_CRDL_B2	3	8	8	8	8	8	8	8	8	8	8
229411_9800_ICSA2	3	8	8	8	8	8	8	8	8	8	8
229412_9800_ICSAB2	3	8	8	8	8	8	8	8	8	8	8
229410_9800_CCV4	3	8	8	8	8	8	8	8	8	8	8
229404_9800_CCBTVA4	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 07022019	-137.00	-1230.00	-82.40	-195.30	-9.00	145.00	86.00	595.00	13.00	0.70
8	CCTKED Mode 07022019	-137.00	-1230.00	-82.40	-195.30	-17.00	145.00	86.00	595.00	13.00	0.70
Id	Description	Nebuliser	Forward power	D1	Focus	CCT Gas 1	CCT Gas 2	D2	DA	Hexapole Bias	

7	CCT Mode 07022019	0.80	1400.00	-46.30	9.40	0.00	0.30	-143.00	-29.80	-4.00
8	CCTKED Mode 07022019	0.80	1400.00	-58.80	-7.10	0.00	3.90	-143.00	-29.80	-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	229404_9800_Cal0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	229405_9800_Cal1	1.000	1.000		250.000	250.000	250.000	50.000	50.000	250.000	250.000
3	229406_9800_Cal2	5.000	5.000	5.000	500.000	500.000	500.000	250.000	250.000	500.000	500.000
4	229407_9800_Cal3	50.000	50.000	50.000	2500.000	2500.000	2500.000	2500.000	2500.000	2500.000	2500.000
5	229408_9800_Cal4	250.000	250.000	250.000	12500.000	12500.000	12500.000	12500.000	12500.000	12500.000	12500.000
6	229409_9800_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	229404_9800_Cal0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	229405_9800_Cal1	1.000	1.000	1.000	1.000	250.000	1.000	1.000	1.000		1.000
3	229406_9800_Cal2	5.000	5.000	5.000	5.000	500.000	5.000	5.000	5.000	5.000	5.000
4	229407_9800_Cal3	50.000	50.000	50.000	50.000	2500.000	50.000	50.000	50.000	50.000	50.000
5	229408_9800_Cal4	250.000	250.000	250.000	250.000	12500.000	250.000	250.000	250.000	250.000	250.000
6	229409_9800_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	229404_9800_Cal0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	229405_9800_Cal1	1.000	1.000	1.000	1.000	1.000	0.500	1.000	1.000	1.000	1.000
3	229406_9800_Cal2	5.000	5.000	5.000	5.000	5.000	2.500	5.000	5.000	5.000	5.000
4	229407_9800_Cal3	50.000	50.000	50.000	50.000	50.000	25.000	50.000	50.000	50.000	50.000
5	229408_9800_Cal4	250.000	250.000	250.000	250.000	250.000	125.000	250.000	250.000	250.000	250.000
6	229409_9800_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	229404_9800_Cal0	0.000	0.000	0.000	0.000	0.000					
2	229405_9800_Cal1	1.000	0.200	1.000	1.000	1.000					
3	229406_9800_Cal2	5.000	0.500	5.000	5.000	5.000					
4	229407_9800_Cal3	50.000	1.000	50.000	50.000	50.000					
5	229408_9800_Cal4	250.000	10.000	250.000	250.000	250.000					
6	229409_9800_Cal5	500.000	25.000	500.000	500.000	500.000					

Calibration Technique

Use External Drift Correction - No
Calibrate by - Isotope

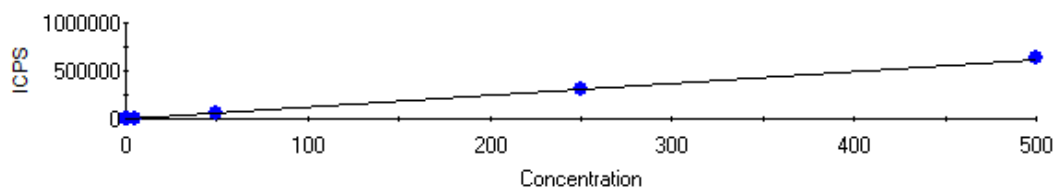
Symbol	Interference Correction	RSF	Calibration Method	Line Fit	Weighting	Forcing	Use for Semi-Quant	Max Error	Minimum Correlation
7Li	Yes	0.36	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
9Be	Yes	0.07	Fully-Quantified	Linear	Absolute SD	None	Yes		0.998000
10B	Yes	0.13	Fully-Quantified	Linear	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

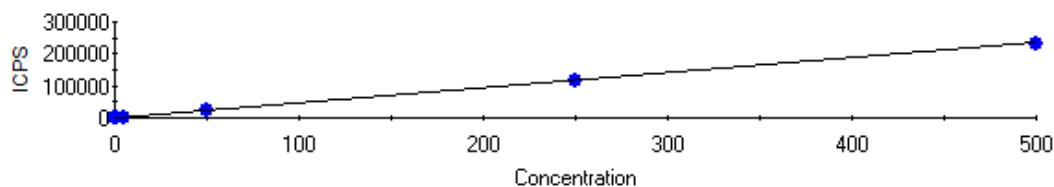
No	Label	Type	Weight	Rack	Row	Col	Height
1	229404_9800_Cal0	Fully Quant Standard	1.000	0	1	8	144
2	229405_9800_Cal1	Fully Quant Standard	1.000	0	1	2	144
3	229406_9800_Cal2	Fully Quant Standard	1.000	0	1	3	144
4	229407_9800_Cal3	Fully Quant Standard	1.000	0	1	4	144
5	229408_9800_Cal4	Fully Quant Standard	1.000	0	1	5	144
6	229409_9800_Cal5	Fully Quant Standard	1.000	0	1	6	144
7	229187_9800_ICV	Unknown	1.000	1	1	1	144
8	229404_9800_ICBTVA	Unknown	1.000	0	1	8	144
9	229405_9800_CRDL_A1	Unknown	1.000	0	1	2	144
10	229406_9800_CRDL_B1	Unknown	1.000	0	1	3	144
11	229411_9800_ICSA1	Unknown	1.000	1	1	4	144
12	229412_9800_ICSAB1	Unknown	1.000	1	1	5	144
13	229410_9800_CCV1	Unknown	1.000	0	1	9	144
14	229404_9800_CCBTV1	Unknown	1.000	0	1	10	144
15	1891424_9792	Unknown	1.000	1	2	1	144
16	40189616001_9792	Unknown	1.000	1	2	7	144
17	40189616002_9792	Unknown	1.000	1	2	8	144
18	40189616003_9792	Unknown	1.000	1	2	9	144
19	40189616004_9792	Unknown	1.000	1	2	10	144
20	40189618001_9792	Unknown	1.000	1	2	11	144
21	40189618002_9792	Unknown	1.000	1	2	12	144
22	40189618003_9792	Unknown	1.000	1	3	1	144
23	40189618004_9792	Unknown	1.000	1	3	2	144
24	40189618005_9792	Unknown	1.000	1	3	3	144
25	229410_9800_CCV2	Unknown	1.000	0	1	9	144
26	229404_9800_CCBTV2	Unknown	1.000	0	1	10	144
27	40189618006_9792	Unknown	1.000	1	3	4	144
28	40189618007_9792	Unknown	1.000	1	3	5	144
29	40189618008_9792	Unknown	1.000	1	3	6	144
30	1891425_9792	Unknown	1.000	1	2	2	144
31	1891427_9792	Unknown	1.000	1	2	3	144
32	1891428_9792	Unknown	1.000	1	2	4	144
33	1891426_9792x2	Unknown	1.000	1	2	5	144
34	1891426_9792	Unknown	1.000	1	2	6	144
35	229410_9800_CCV3	Unknown	1.000	0	1	9	144
36	229404_9800_CCBTV3	Unknown	1.000	0	1	10	144
37	229405_9800_CRDL_A2	Unknown	1.000	0	1	2	144
38	229406_9800_CRDL_B2	Unknown	1.000	0	1	3	144
39	229411_9800_ICSA2	Unknown	1.000	1	1	4	144
40	229412_9800_ICSAB2	Unknown	1.000	1	1	5	144
41	229410_9800_CCV4	Unknown	1.000	0	1	9	144
42	229404_9800_CCBTV4	Unknown	1.000	0	1	10	144

Fully Quant Calibration

7Li FQ Block 1

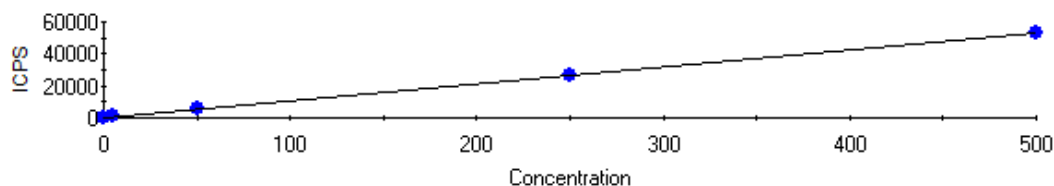
Intercept CPS=41.394031 Intercept Conc=0.033304
Sensitivity=1242.901026 Correlation Coeff=0.999986

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	0.004	0.004	45.91	0.00
229405_9800_Cal1	1.000	1.013	0.013	1300.51	1.30
229406_9800_Cal2	5.000	4.885	0.115	6112.96	2.30
229407_9800_Cal3	50.000	49.772	0.228	61902.57	0.46
229408_9800_Cal4	250.000	252.993	2.993	314486.30	1.20
229409_9800_Cal5	500.000	511.424	11.424	635691.20	2.28

9Be FQ Block 1

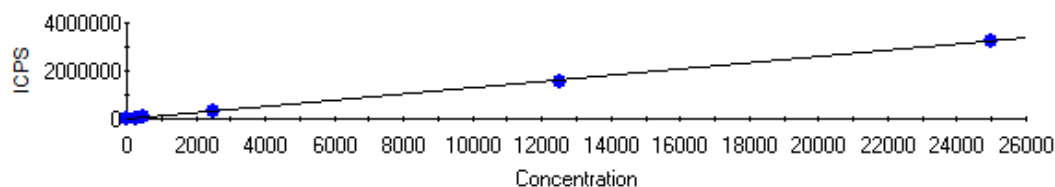
Intercept CPS=16.822758 Intercept Conc=0.035998
Sensitivity=467.325452 Correlation Coeff=0.999970

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.006	0.006	14.07	0.00
229405_9800_Cal1	1.000	1.037	0.037	501.41	3.69
229406_9800_Cal2	5.000	4.937	0.063	2324.09	1.26
229407_9800_Cal3	50.000	49.968	0.032	23368.25	0.06
229408_9800_Cal4	250.000	251.761	1.761	117671.12	0.70
229409_9800_Cal5	500.000	495.404	4.596	231531.92	0.92

10B FQ Block 1

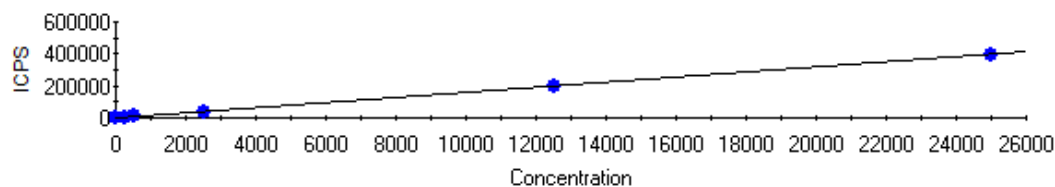
Intercept CPS=120.105816 Intercept Conc=1.143229
Sensitivity=105.058396 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.340	0.340	84.43	0.00
229406_9800_Cal2	5.000	5.086	0.086	654.43	1.72
229407_9800_Cal3	50.000	49.215	0.785	5290.52	1.57
229408_9800_Cal4	250.000	249.614	0.386	26344.17	0.15
229409_9800_Cal5	500.000	500.021	0.021	52651.53	0.00

23Na FQ Block 1

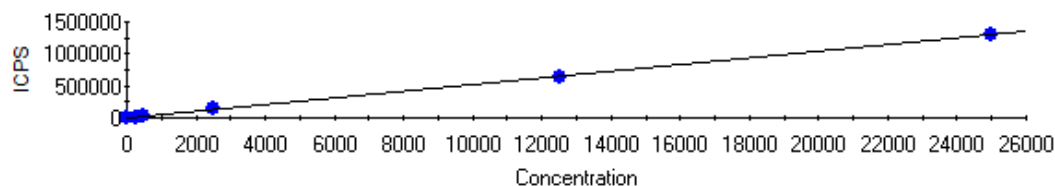
Intercept CPS=635.694571 Intercept Conc=4.928735
Sensitivity=128.977233 Correlation Coeff=0.999875

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	0.022	0.022	638.54	0.00
229405_9800_Cal1	250.000	250.847	0.847	32989.27	0.34
229406_9800_Cal2	500.000	495.004	4.996	64479.97	1.00
229407_9800_Cal3	2500.000	2476.327	23.673	320025.53	0.95
229408_9800_Cal4	12500.000	12154.508	345.492	1568290.56	2.76
229409_9800_Cal5	25000.000	25136.178	136.178	3242630.35	0.54

25Mg FQ Block 1

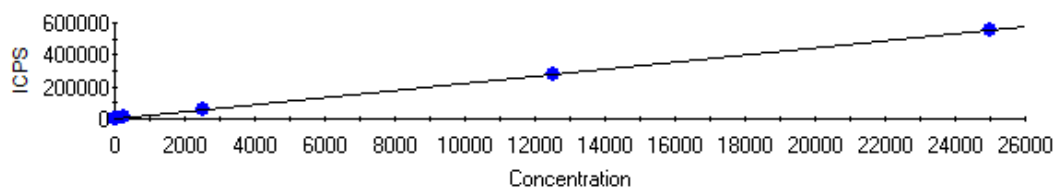
Intercept CPS=52.325049 Intercept Conc=3.308468
Sensitivity=15.815492 Correlation Coeff=0.999970

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.075	0.075	51.14	0.00
229405_9800_Cal1	250.000	261.013	11.013	4180.38	4.41
229406_9800_Cal2	500.000	504.003	4.003	8023.38	0.80
229407_9800_Cal3	2500.000	2525.273	25.273	39990.75	1.01
229408_9800_Cal4	12500.000	12313.456	186.544	194795.68	1.49
229409_9800_Cal5	25000.000	25008.699	8.699	395577.19	0.03

27Al FQ Block 1

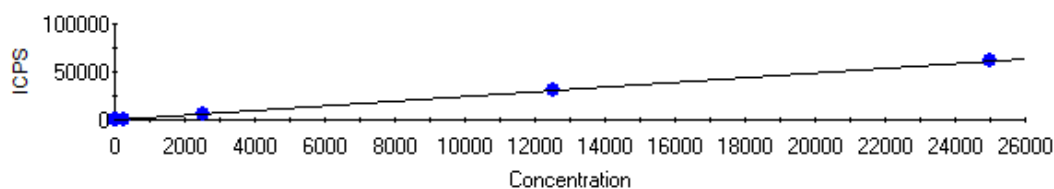
Intercept CPS=194.832955 Intercept Conc=3.771827
Sensitivity=51.654797 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.156	0.156	186.76	0.00
229405_9800_Cal1	250.000	264.608	14.608	13863.10	5.84
229406_9800_Cal2	500.000	510.744	10.744	26577.19	2.15
229407_9800_Cal3	2500.000	2545.993	45.993	131707.57	1.84
229408_9800_Cal4	12500.000	12424.180	75.820	641963.33	0.61
229409_9800_Cal5	25000.000	25044.255	44.255	1293850.77	0.18

28Si FQ Block 1

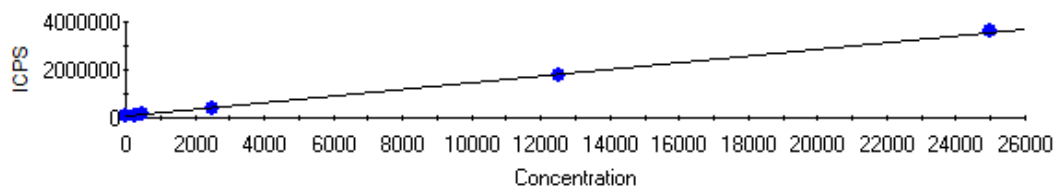
Intercept CPS=292.874397 Intercept Conc=13.126893
Sensitivity=22.311023 Correlation Coeff=0.999963

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-3.732	3.732	209.60	0.00
229405_9800_Cal1	50.000	51.666	1.666	1445.60	3.33
229406_9800_Cal2	250.000	258.206	8.206	6053.72	3.28
229407_9800_Cal3	2500.000	2554.800	54.800	57293.08	2.19
229408_9800_Cal4	12500.000	12495.072	4.928	279070.71	0.04
229409_9800_Cal5	25000.000	24565.052	434.948	548364.30	1.74

31P FQ Block 1

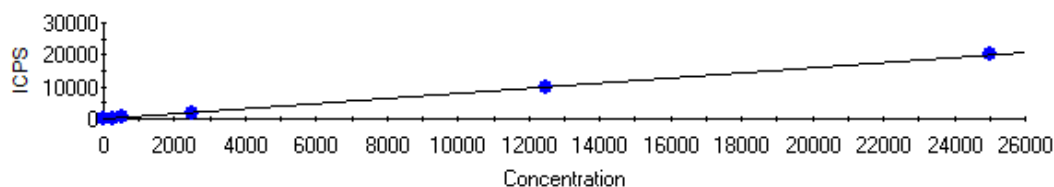
Intercept CPS=99.726385 Intercept Conc=40.378920
Sensitivity=2.469764 Correlation Coeff=0.999966

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.850	0.850	97.63	0.00
229405_9800_Cal1	50.000	50.579	0.579	224.64	1.16
229406_9800_Cal2	250.000	257.462	7.462	735.60	2.98
229407_9800_Cal3	2500.000	2509.443	9.443	6297.46	0.38
229408_9800_Cal4	12500.000	12609.556	109.556	31242.35	0.88
229409_9800_Cal5	25000.000	24784.215	215.785	61310.88	0.86

39K FQ Block 1

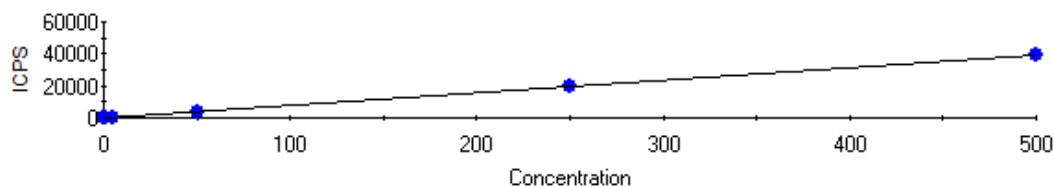
Intercept CPS=51401.309503 Intercept Conc=363.397158
Sensitivity=141.446647 Correlation Coeff=0.999891

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-3.452	3.452	50913.01	0.00
229405_9800_Cal1	250.000	259.205	9.205	88064.93	3.68
229406_9800_Cal2	500.000	498.994	1.006	121982.28	0.20
229407_9800_Cal3	2500.000	2476.448	23.552	401686.58	0.94
229408_9800_Cal4	12500.000	12149.551	350.449	1769914.52	2.80
229409_9800_Cal5	25000.000	25063.859	63.859	3596600.13	0.26

43Ca FQ Block 1

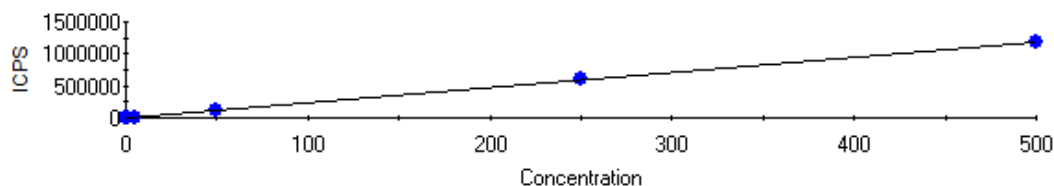
Intercept CPS=5.505468 Intercept Conc=6.813143
Sensitivity=0.808066 Correlation Coeff=0.999954

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	0.877	0.877	6.21	0.00
229405_9800_Cal1	250.000	244.809	5.191	203.33	2.08
229406_9800_Cal2	500.000	514.702	14.702	421.42	2.94
229407_9800_Cal3	2500.000	2479.048	20.952	2008.74	0.84
229408_9800_Cal4	12500.000	12306.531	193.469	9949.99	1.55
229409_9800_Cal5	25000.000	25108.954	108.954	20295.19	0.44

47Ti FQ Block 1

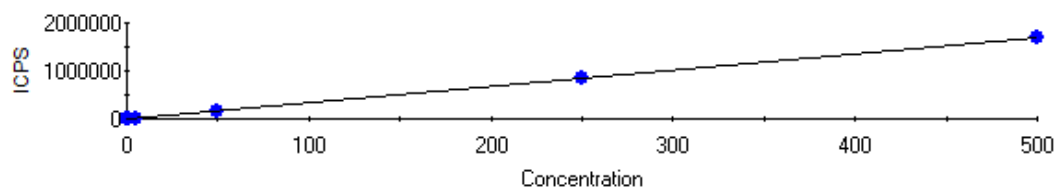
Intercept CPS=31.359692 Intercept Conc=0.404186
Sensitivity=77.587290 Correlation Coeff=0.999895

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	0.002	0.002	31.48	0.00
229405_9800_Cal1	1.000	1.051	0.051	112.91	5.11
229406_9800_Cal2	5.000	4.709	0.291	396.72	5.82
229407_9800_Cal3	50.000	49.472	0.528	3869.74	1.06
229408_9800_Cal4	250.000	247.586	2.414	19240.87	0.97
229409_9800_Cal5	500.000	510.782	10.782	39661.52	2.16

51V FQ Block 1

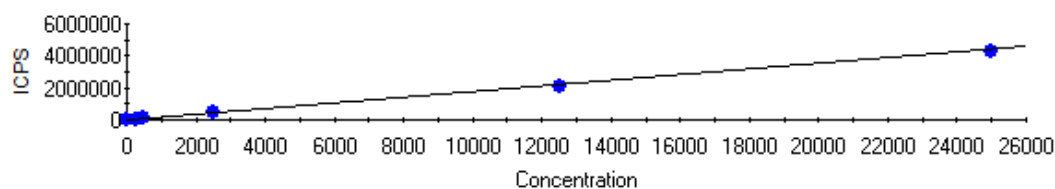
Intercept CPS=167.380174 Intercept Conc=0.070229
Sensitivity=2383.334891 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	0.025	0.025	226.46	0.00
229405_9800_Cal1	1.000	0.996	0.004	2540.75	0.42
229406_9800_Cal2	5.000	5.168	0.168	12484.22	3.36
229407_9800_Cal3	50.000	49.252	0.748	117550.46	1.50
229408_9800_Cal4	250.000	248.646	1.354	592773.12	0.54
229409_9800_Cal5	500.000	501.332	1.332	1195008.48	0.27

52Cr FQ Block 1

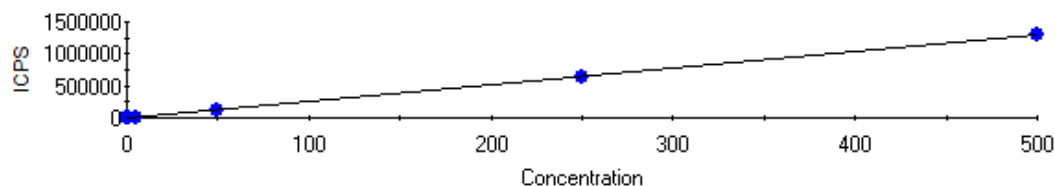
Intercept CPS=187.317337 Intercept Conc=0.055602
Sensitivity=3368.876291 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.016	0.016	134.01	0.00
229405_9800_Cal1	1.000	1.006	0.006	3575.79	0.58
229406_9800_Cal2	5.000	5.061	0.061	17236.73	1.22
229407_9800_Cal3	50.000	49.759	0.241	167820.32	0.48
229408_9800_Cal4	250.000	249.301	0.699	840053.04	0.28
229409_9800_Cal5	500.000	501.064	1.064	1688208.85	0.21

54Fe FQ Block 1

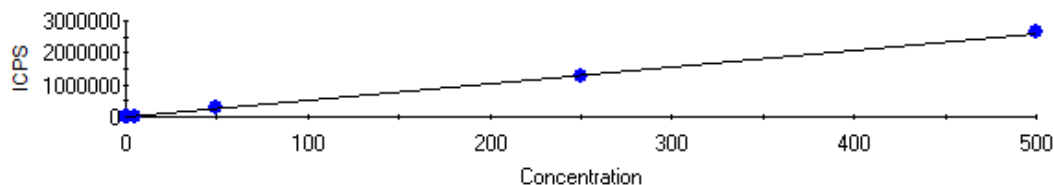
Intercept CPS=889.592114 Intercept Conc=5.071865
Sensitivity=175.397431 Correlation Coeff=0.999896

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.096	0.096	872.76	0.00
229405_9800_Cal1	250.000	254.487	4.487	45525.87	1.79
229406_9800_Cal2	500.000	496.907	3.093	88045.74	0.62
229407_9800_Cal3	2500.000	2474.400	25.600	434893.02	1.02
229408_9800_Cal4	12500.000	11908.862	591.138	2089673.43	4.73
229409_9800_Cal5	25000.000	24534.165	465.835	4304119.10	1.86

55Mn FQ Block 1

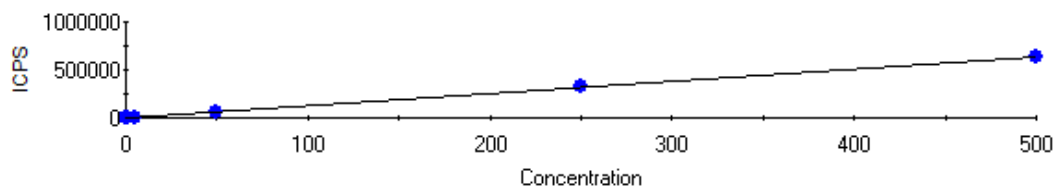
Intercept CPS=53.537260 Intercept Conc=0.020673
Sensitivity=2589.686770 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.001	0.001	49.91	0.00
229405_9800_Cal1	1.000	1.020	0.020	2694.11	1.96
229406_9800_Cal2	5.000	5.059	0.059	13153.56	1.17
229407_9800_Cal3	50.000	49.609	0.391	128525.39	0.78
229408_9800_Cal4	250.000	248.309	1.691	643095.55	0.68
229409_9800_Cal5	500.000	500.272	0.272	1295602.53	0.05

59Co FQ Block 1

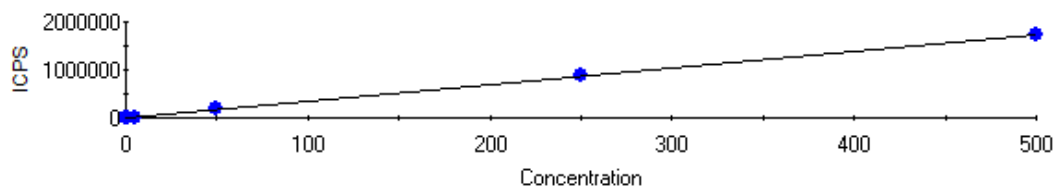
Intercept CPS=53.696089 Intercept Conc=0.010235
Sensitivity=5246.296855 Correlation Coeff=0.999949

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.000	0.000	53.29	0.00
229405_9800_Cal1	1.000	1.019	0.019	5399.41	1.90
229406_9800_Cal2	5.000	5.079	0.079	26699.86	1.58
229407_9800_Cal3	50.000	49.633	0.367	260445.27	0.73
229408_9800_Cal4	250.000	246.272	3.728	1292071.96	1.49
229409_9800_Cal5	500.000	503.203	3.203	2640003.52	0.64

60Ni FQ Block 1

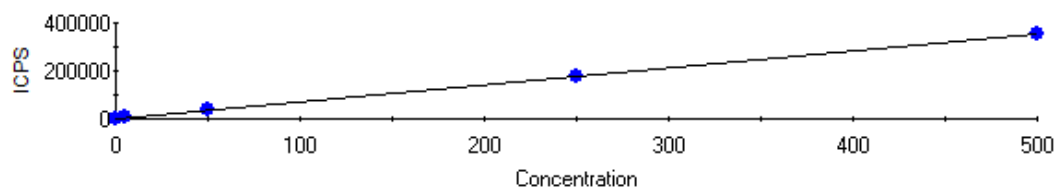
Intercept CPS=96.753829 Intercept Conc=0.076203
Sensitivity=1269.690456 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.002	0.002	93.96	0.00
229405_9800_Cal1	1.000	1.032	0.032	1406.72	3.17
229406_9800_Cal2	5.000	5.039	0.039	6495.23	0.79
229407_9800_Cal3	50.000	50.514	0.514	64233.55	1.03
229408_9800_Cal4	250.000	249.836	0.164	317311.43	0.07
229409_9800_Cal5	500.000	498.529	1.471	633073.70	0.29

63Cu FQ Block 1

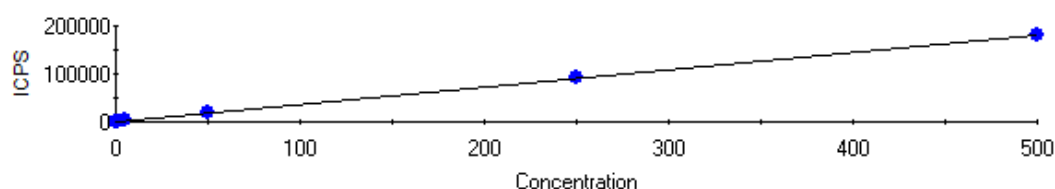
Intercept CPS=526.481117 Intercept Conc=0.151559
Sensitivity=3473.775399 Correlation Coeff=0.999965

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.046	0.046	368.18	0.00
229405_9800_Cal1	1.000	1.032	0.032	4111.34	3.20
229406_9800_Cal2	5.000	5.215	0.215	18642.04	4.30
229407_9800_Cal3	50.000	51.473	1.473	179331.79	2.95
229408_9800_Cal4	250.000	252.461	2.461	877520.36	0.98
229409_9800_Cal5	500.000	496.468	3.532	1725143.52	0.71

66Zn FQ Block 1

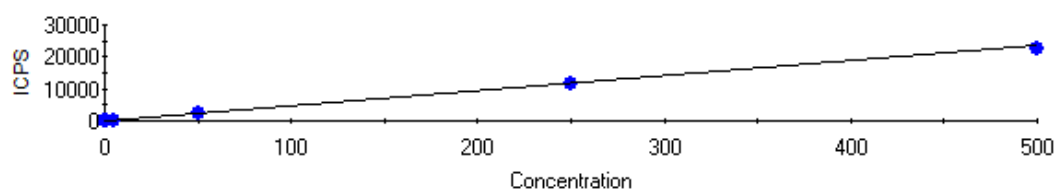
Intercept CPS=846.715498 Intercept Conc=1.199438
Sensitivity=705.927102 Correlation Coeff=0.999938

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.029	0.029	826.00	0.00
229406_9800_Cal2	5.000	5.537	0.537	4755.78	10.75
229407_9800_Cal3	50.000	51.966	1.966	37530.86	3.93
229408_9800_Cal4	250.000	254.520	4.520	180518.96	1.81
229409_9800_Cal5	500.000	497.769	2.231	352235.53	0.45

75As FQ Block 1

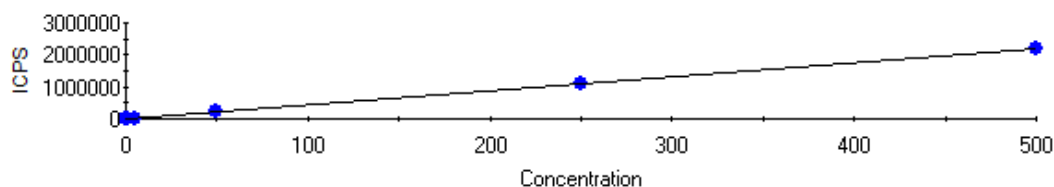
Intercept CPS=247.115814 Intercept Conc=0.683617
Sensitivity=361.482973 Correlation Coeff=0.999928

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.130	0.130	200.02	0.00
229405_9800_Cal1	1.000	1.000	0.000	608.42	0.05
229406_9800_Cal2	5.000	5.244	0.244	2142.58	4.87
229407_9800_Cal3	50.000	51.927	1.927	19017.77	3.85
229408_9800_Cal4	250.000	254.647	4.647	92297.56	1.86
229409_9800_Cal5	500.000	496.944	3.056	179883.77	0.61

78Se FQ Block 1

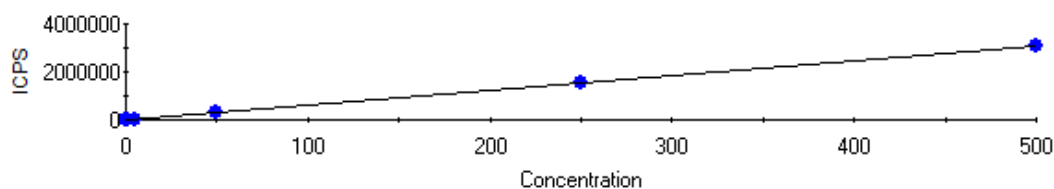
Intercept CPS=8.944463 Intercept Conc=0.189648
Sensitivity=47.163411 Correlation Coeff=0.999802

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.059	0.059	6.18	0.00
229405_9800_Cal1	1.000	0.987	0.013	55.48	1.32
229406_9800_Cal2	5.000	5.347	0.347	261.13	6.94
229407_9800_Cal3	50.000	52.502	2.502	2485.13	5.00
229408_9800_Cal4	250.000	250.262	0.262	11812.13	0.10
229409_9800_Cal5	500.000	481.068	18.932	22697.75	3.79

88Sr FQ Block 1

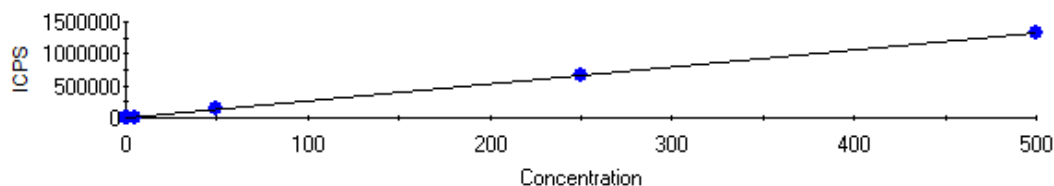
Intercept CPS=444.922113 Intercept Conc=0.101909
Sensitivity=4365.858136 Correlation Coeff=1.000000

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.002	0.002	436.24	0.00
229405_9800_Cal1	1.000	1.045	0.045	5006.35	4.48
229406_9800_Cal2	5.000	5.096	0.096	22691.75	1.91
229407_9800_Cal3	50.000	50.211	0.211	219660.71	0.42
229408_9800_Cal4	250.000	249.721	0.279	1090692.89	0.11
229409_9800_Cal5	500.000	498.689	1.311	2177648.94	0.26

90Zr FQ Block 1

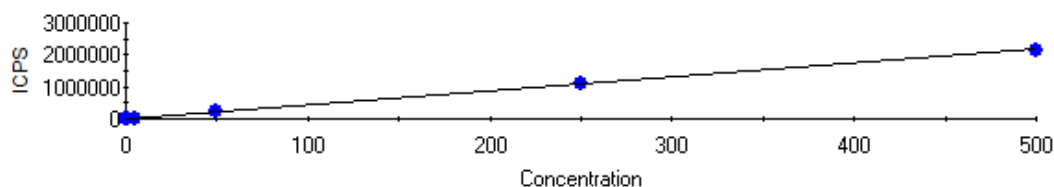
Intercept CPS=531.168690 Intercept Conc=0.086529
Sensitivity=6138.638898 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.004	0.004	509.17	0.00
229405_9800_Cal1	1.000	1.013	0.013	6750.04	1.31
229406_9800_Cal2	5.000	5.137	0.137	32067.99	2.75
229407_9800_Cal3	50.000	49.825	0.175	306391.91	0.35
229408_9800_Cal4	250.000	248.424	1.576	1525517.57	0.63
229409_9800_Cal5	500.000	501.051	1.051	3076301.68	0.21

95Mo FQ Block 1

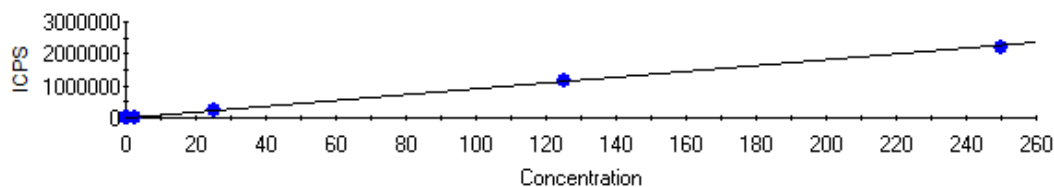
Intercept CPS=46.700707 Intercept Conc=0.017494
Sensitivity=2669.541700 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.007	0.007	28.79	0.00
229405_9800_Cal1	1.000	1.007	0.007	2733.87	0.66
229406_9800_Cal2	5.000	5.016	0.016	13437.70	0.32
229407_9800_Cal3	50.000	49.317	0.683	131699.16	1.37
229408_9800_Cal4	250.000	249.552	0.448	666235.55	0.18
229409_9800_Cal5	500.000	500.310	0.310	1335645.07	0.06

105Pd FQ Block 1

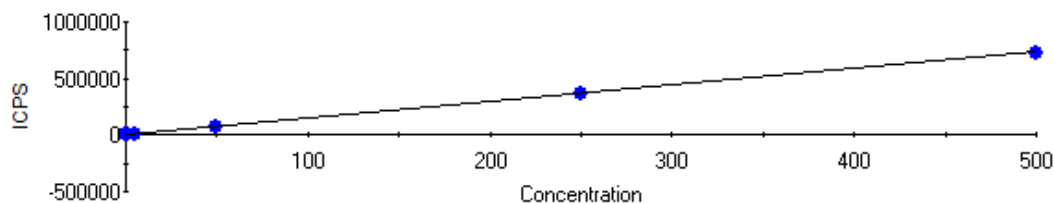
Intercept CPS=1323.380448 Intercept Conc=0.305588
Sensitivity=4330.601133 Correlation Coeff=0.999903

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.022	0.022	1228.48	0.00
229405_9800_Cal1	1.000	1.017	0.017	5729.63	1.75
229406_9800_Cal2	5.000	5.164	0.164	23685.75	3.28
229407_9800_Cal3	50.000	50.852	0.852	221544.19	1.70
229408_9800_Cal4	250.000	250.463	0.463	1085978.89	0.19
229409_9800_Cal5	500.000	486.704	13.296	2109044.74	2.66

107Ag FQ Block 1

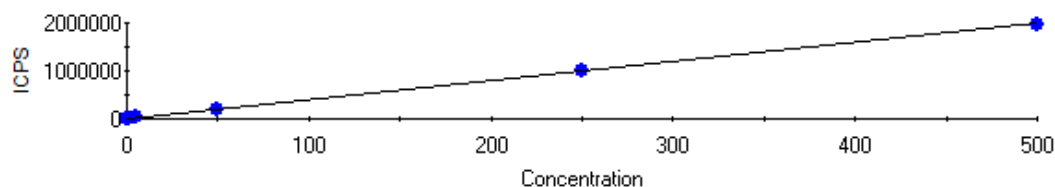
Intercept CPS=1023.761648 Intercept Conc=0.111629
Sensitivity=9171.087790 Correlation Coeff=0.999868

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.039	0.039	664.19	0.00
229405_9800_Cal1	0.500	0.478	0.022	5409.18	4.36
229406_9800_Cal2	2.500	2.553	0.053	24437.01	2.12
229407_9800_Cal3	25.000	25.244	0.244	232536.82	0.98
229408_9800_Cal4	125.000	123.833	1.167	1136711.33	0.93
229409_9800_Cal5	250.000	239.538	10.462	2197847.78	4.18

111Cd FQ Block 1

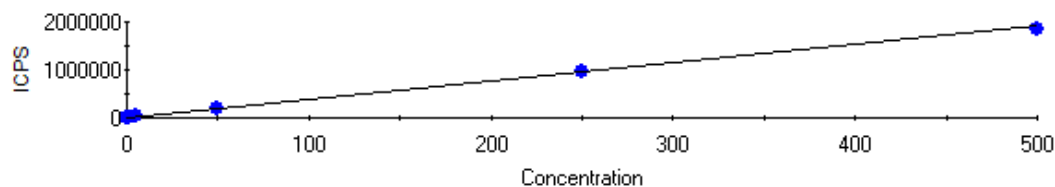
Intercept CPS=1.327337 Intercept Conc=0.000897
Sensitivity=1479.936736 Correlation Coeff=0.999894

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.000	0.000	1.20	0.00
229405_9800_Cal1	1.000	1.043	0.043	1544.38	4.26
229406_9800_Cal2	5.000	5.158	0.158	7635.38	3.17
229407_9800_Cal3	50.000	50.559	0.559	74825.17	1.12
229408_9800_Cal4	250.000	249.507	0.493	369256.44	0.20
229409_9800_Cal5	500.000	484.195	15.805	716579.71	3.16

118Sn FQ Block 1

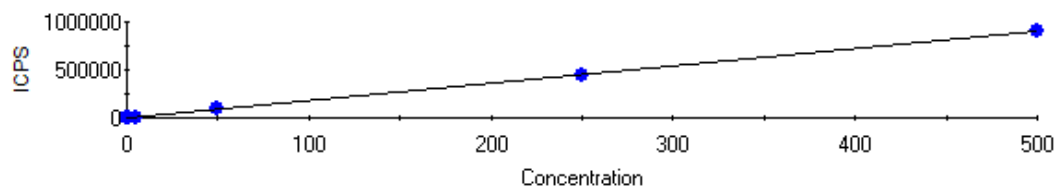
Intercept CPS=663.354249 Intercept Conc=0.166646
Sensitivity=3980.611099 Correlation Coeff=0.999969

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	0.440	0.440	2412.96	0.00
229405_9800_Cal1	1.000	0.856	0.144	4071.68	14.38
229406_9800_Cal2	5.000	4.930	0.070	20287.79	1.40
229407_9800_Cal3	50.000	50.018	0.018	199767.41	0.04
229408_9800_Cal4	250.000	249.506	0.494	993851.35	0.20
229409_9800_Cal5	500.000	490.785	9.215	1954288.41	1.84

121Sb FQ Block 1

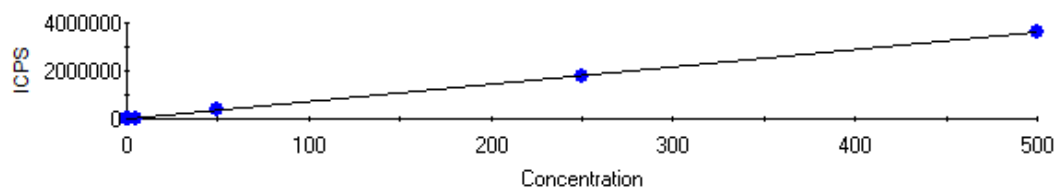
Intercept CPS=215.131533 Intercept Conc=0.056233
Sensitivity=3825.717250 Correlation Coeff=0.999879

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.002	0.002	208.33	0.00
229405_9800_Cal1	1.000	1.036	0.036	4178.81	3.61
229406_9800_Cal2	5.000	5.184	0.184	20048.31	3.68
229407_9800_Cal3	50.000	50.670	0.670	194065.51	1.34
229408_9800_Cal4	250.000	249.063	0.937	953058.16	0.37
229409_9800_Cal5	500.000	482.368	17.632	1845619.16	3.53

137Ba FQ Block 1

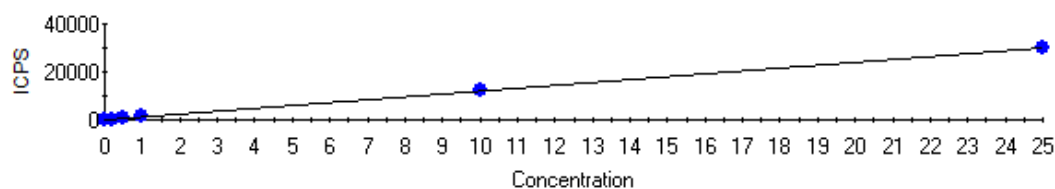
Intercept CPS=44.097770 Intercept Conc=0.024431
Sensitivity=1804.977471 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	0.000	0.000	44.46	0.00
229405_9800_Cal1	1.000	0.985	0.015	1821.87	1.51
229406_9800_Cal2	5.000	4.996	0.004	9061.59	0.08
229407_9800_Cal3	50.000	49.669	0.331	89695.91	0.66
229408_9800_Cal4	250.000	250.065	0.065	451406.36	0.03
229409_9800_Cal5	500.000	497.316	2.684	897688.14	0.54

195Pt FQ Block 1

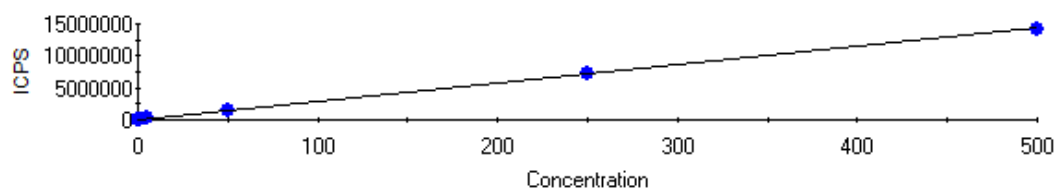
Intercept CPS=298.227015 Intercept Conc=0.041040
Sensitivity=7266.709151 Correlation Coeff=0.999986

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.003	0.003	279.26	0.00
229405_9800_Cal1	1.000	1.045	0.045	7893.52	4.52
229406_9800_Cal2	5.000	5.167	0.167	37844.46	3.34
229407_9800_Cal3	50.000	50.171	0.171	364878.39	0.34
229408_9800_Cal4	250.000	247.955	2.045	1802115.50	0.82
229409_9800_Cal5	500.000	501.388	1.388	3643737.90	0.28

201Hg FQ Block 1

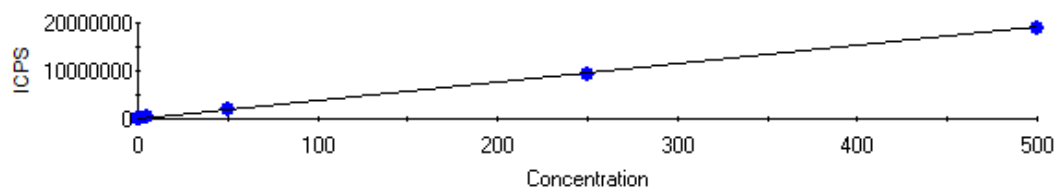
Intercept CPS=34.065732 Intercept Conc=0.028525
Sensitivity=1194.258461 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.007	0.007	25.95	0.00
229405_9800_Cal1	0.200	0.217	0.017	293.37	8.56
229406_9800_Cal2	0.500	0.546	0.046	685.67	9.12
229407_9800_Cal3	1.000	1.062	0.062	1302.30	6.19
229408_9800_Cal4	10.000	10.000	0.000	11977.22	0.00
229409_9800_Cal5	25.000	24.923	0.077	29798.55	0.31

205Tl FQ Block 1

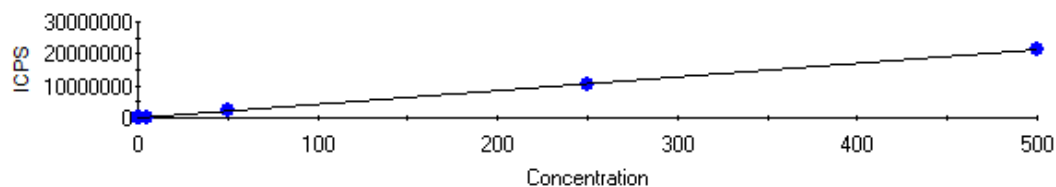
Intercept CPS=399.876727 Intercept Conc=0.013839
Sensitivity=28894.337100 Correlation Coeff=1.000000

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.002	0.002	354.86	0.00
229405_9800_Cal1	1.000	1.017	0.017	29785.27	1.70
229406_9800_Cal2	5.000	5.030	0.030	145732.13	0.60
229407_9800_Cal3	50.000	49.096	0.904	1418987.06	1.81
229408_9800_Cal4	250.000	244.992	5.008	7079280.86	2.00
229409_9800_Cal5	500.000	490.299	9.701	14167266.22	1.94

208Pb FQ Block 1

Intercept CPS=926.722595 Intercept Conc=0.024331
Sensitivity=38088.351647 Correlation Coeff=0.999991

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.001	0.001	898.39	0.00
229405_9800_Cal1	1.000	1.050	0.050	40935.85	5.04
229406_9800_Cal2	5.000	5.146	0.146	196927.38	2.92
229407_9800_Cal3	50.000	50.161	0.161	1911458.84	0.32
229408_9800_Cal4	250.000	247.187	2.813	9415864.54	1.13
229409_9800_Cal5	500.000	498.496	1.504	18987829.32	0.30

238U FQ Block 1

Intercept CPS=44.202211 Intercept Conc=0.001044
Sensitivity=42349.085277 Correlation Coeff=0.999976

Label	Defined	Measured	Error	Mean CPS	% Error
229404_9800_Cal0	0.000	-0.000	0.000	43.70	0.00
229405_9800_Cal1	1.000	1.016	0.016	43055.82	1.56
229406_9800_Cal2	5.000	5.048	0.048	213803.92	0.95
229407_9800_Cal3	50.000	49.112	0.888	2079896.26	1.78
229408_9800_Cal4	250.000	249.954	0.046	10585371.84	0.02
229409_9800_Cal5	500.000	506.881	6.881	21466004.48	1.38

Dilution Corrected Concentrations

229404_9800_Cal0 7/2/2019 11:08:04 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	11:08:08	-0.003	-0.012	-0.357	-0.830	0.405	-0.317	-3.002	-2.879	131.300	<u>1728000.000</u>
2	11:08:12	0.004	0.016	-0.488	1.168	0.006	-0.558	-2.946	7.376	125.400	<u>1701000.000</u>
3	11:08:15	0.009	-0.022	-0.173	-0.271	-0.636	0.406	-5.249	-7.047	163.100	<u>1737000.000</u>
x		0.004	-0.006	-0.340	0.022	-0.075	-0.156	-3.732	-0.850	139.900	<u>1722000.000</u>
σ		0.006	0.020	0.158	1.031	0.525	0.502	1.314	7.423	20.300	<u>18840.000</u>
%RSD		169.300	336.200	46.580	4669.000	701.500	321.000	35.200	873.100	14.510	<u>1.094</u>
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	11:08:08	-2.989	9.365	98.375%	99.588%	-0.001	-0.018	-0.027	6.928	-0.243	-0.006
2	11:08:12	-4.517	-2.060	101.744%	100.098%	0.127	0.064	-0.021	6.790	-0.009	0.005
3	11:08:15	-2.851	-4.674	99.880%	100.314%	-0.121	0.028	0.001	6.671	-0.035	-0.003
x		-3.452	0.877	100.000%	100.000%	0.002	0.025	-0.016	6.796	-0.096	-0.001
σ		0.925	7.466	1.688%	0.373%	0.124	0.041	0.015	0.128	0.128	0.005
%RSD		26.790	851.400	1.688	0.373	7762.000	165.400	92.240	1.890	133.400	388.300
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:08:08	0.001	-0.000	-0.040	-0.000	98.788%	-0.119	-0.064	-0.007	99.345%	0.001
2	11:08:12	-0.001	-0.012	-0.036	-0.039	100.662%	-0.170	-0.017	0.005	100.165%	-0.003
3	11:08:15	-0.000	0.006	-0.061	-0.049	100.551%	-0.102	-0.095	-0.004	100.490%	-0.008
x		-0.000	-0.002	-0.046	-0.029	100.000%	-0.130	-0.059	-0.002	100.000%	-0.004
σ		0.001	0.009	0.014	0.026	1.051%	0.036	0.040	0.006	0.590%	0.004
%RSD		1272.000	418.200	29.740	87.490	1.051	27.370	67.560	307.100	0.590	125.200
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:08:08	-0.002	-0.009	-0.037	0.000	98.884%	0.417	0.001	0.004	<u>99.372%</u>	-0.003
2	11:08:12	-0.010	-0.027	-0.046	-0.001	100.175%	0.445	-0.003	-0.005	<u>100.645%</u>	-0.006
3	11:08:15	-0.008	-0.030	-0.034	0.000	100.941%	0.457	-0.003	0.001	<u>99.983%</u>	0.002
x		-0.007	-0.022	-0.039	-0.000	100.000%	0.440	-0.002	0.000	<u>100.000%</u>	-0.003
σ		0.004	0.012	0.006	0.001	1.040%	0.021	0.002	0.005	<u>0.637%</u>	0.004
%RSD		57.950	52.500	15.810	1031.000	1.040	4.672	114.000	2290.000	<u>0.637</u>	154.300
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	11:08:08	-0.000	-0.001	-0.002	99.466%	-0.000					
2	11:08:12	-0.006	-0.003	0.000	100.241%	0.000					
3	11:08:15	-0.014	-0.001	-0.000	100.293%	-0.000					
x		-0.007	-0.002	-0.001	100.000%	-0.000					
σ		0.007	0.001	0.001	0.463%	0.000					
%RSD		97.420	68.860	158.600	0.463	1348.000					

229405_9800_Cal1 7/2/2019 11:15:17 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	11:15:21	0.989	0.991	0.776	254.100	257.000	270.100	50.560	72.880	135.400	1779000.000
2	11:15:25	1.011	1.056	1.233	250.300	257.200	264.400	52.410	44.320	131.200	1780000.000
3	11:15:28	1.038	1.064	1.438	248.200	268.800	259.300	52.030	34.530	139.700	1776000.000
x		1.013	1.037	1.149	250.800	261.000	264.600	51.670	50.580	135.400	1778000.000
σ		0.024	0.040	0.339	2.998	6.785	5.373	0.977	19.930	4.266	2055.000
%RSD		2.414	3.857	29.490	1.195	2.600	2.030	1.891	39.400	3.150	0.116
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:15:21	258.400	263.800	100.097%	101.402%	0.877	0.995	1.020	6.928	254.800	0.991
2	11:15:25	258.300	239.400	100.919%	101.482%	1.208	1.007	1.045	7.154	255.100	1.040
3	11:15:28	260.900	231.100	100.894%	102.453%	1.068	0.985	0.952	7.369	253.500	1.028
x		259.200	244.800	100.637%	101.779%	1.051	0.996	1.006	7.150	254.500	1.020
σ		1.488	17.000	0.468%	0.585%	0.166	0.011	0.049	0.221	0.828	0.026
%RSD		0.574	6.945	0.465	0.575	15.780	1.101	4.826	3.087	0.325	2.536
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:15:21	1.041	1.073	1.045	1.611	103.050%	1.000	0.995	0.995	100.145%	0.999
2	11:15:25	1.018	0.987	1.033	1.480	103.538%	1.005	0.843	1.052	100.724%	1.027
3	11:15:28	0.998	1.035	1.019	1.620	102.834%	0.994	1.122	1.088	100.399%	1.013
x		1.019	1.032	1.032	1.570	103.141%	1.000	0.987	1.045	100.423%	1.013
σ		0.022	0.043	0.013	0.079	0.361%	0.006	0.140	0.047	0.290%	0.014
%RSD		2.145	4.166	1.260	5.011	0.350	0.559	14.170	4.497	0.289	1.403
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:15:21	1.009	1.016	0.474	1.052	101.947%	0.844	1.026	1.032	100.828%	1.031
2	11:15:25	1.008	1.030	0.484	1.017	102.845%	0.868	1.056	0.990	100.604%	1.036
3	11:15:28	1.002	1.007	0.477	1.058	102.736%	0.857	1.026	0.933	100.414%	1.069
x		1.007	1.017	0.478	1.043	102.509%	0.856	1.036	0.985	100.615%	1.045
σ		0.004	0.011	0.005	0.022	0.490%	0.012	0.017	0.050	0.207%	0.021
%RSD		0.385	1.121	1.095	2.128	0.478	1.438	1.688	5.035	0.206	1.974
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	11:15:21	0.195	1.012	1.036	100.512%	1.020					
2	11:15:25	0.226	1.010	1.063	100.308%	1.009					
3	11:15:28	0.231	1.029	1.053	99.738%	1.018					
x		0.217	1.017	1.050	100.186%	1.016					
σ		0.019	0.010	0.014	0.401%	0.006					
%RSD		8.756	1.017	1.312	0.401	0.609					

229406_9800_Cal2 7/2/2019 11:22:31 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	11:22:34	4.860	4.879	5.097	504.900	504.300	517.700	263.300	271.400	146.200	<u>1785000.000</u>
2	11:22:38	4.875	4.907	5.003	491.700	515.200	515.100	258.300	277.200	125.400	<u>1762000.000</u>
3	11:22:42	4.920	5.025	5.158	488.400	492.500	499.500	253.000	223.800	136.000	<u>1743000.000</u>
x		4.885	4.937	5.086	495.000	504.000	510.700	258.200	257.500	135.800	<u>1763000.000</u>
σ		0.031	0.078	0.078	8.768	11.360	9.848	5.135	29.260	10.440	<u>21010.000</u>
%RSD		0.638	1.573	1.533	1.771	2.253	1.928	1.989	11.360	7.686	<u>1.192</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:34	510.600	556.400	97.841%	101.013%	4.473	5.074	5.030	7.431	499.500	5.027
2	11:22:38	498.700	524.300	99.177%	100.147%	5.333	5.247	5.068	6.974	495.300	5.119
3	11:22:42	487.700	463.400	100.119%	99.031%	4.321	5.183	5.085	6.736	495.900	5.029
x		499.000	514.700	99.046%	100.064%	4.709	5.168	5.061	7.047	496.900	5.059
σ		11.460	47.230	1.144%	0.994%	0.546	0.088	0.028	0.353	2.307	0.053
%RSD		2.297	9.176	1.156	0.993	11.590	1.696	0.559	5.014	0.464	1.044
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:34	5.126	5.102	5.172	5.480	101.812%	5.281	5.226	5.093	98.954%	5.145
2	11:22:38	5.057	5.080	5.163	5.677	102.042%	5.267	5.335	5.038	98.387%	5.167
3	11:22:42	5.055	4.936	5.310	5.455	100.384%	5.183	5.480	5.156	99.422%	5.100
x		5.079	5.039	5.215	5.537	101.413%	5.244	5.347	5.096	98.921%	5.137
σ		0.040	0.091	0.082	0.122	0.899%	0.053	0.127	0.059	0.518%	0.034
%RSD		0.796	1.798	1.576	2.198	0.886	1.009	2.377	1.157	0.524	0.663
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:22:34	5.029	5.074	2.547	5.226	100.840%	4.956	5.194	4.978	<u>99.705%</u>	5.231
2	11:22:38	5.049	5.280	2.555	5.039	101.540%	4.920	5.157	4.962	<u>100.287%</u>	5.128
3	11:22:42	4.971	5.138	2.557	5.210	101.424%	4.914	5.202	5.047	<u>100.377%</u>	5.142
x		5.016	5.164	2.553	5.158	101.268%	4.930	5.184	4.996	<u>100.123%</u>	5.167
σ		0.040	0.105	0.005	0.103	0.375%	0.023	0.024	0.045	<u>0.365%</u>	0.056
%RSD		0.805	2.038	0.211	2.003	0.371	0.463	0.468	0.903	<u>0.364</u>	1.078
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	11:22:34	0.545	5.031	5.166	100.389%	5.055					
2	11:22:38	0.568	5.034	5.151	101.240%	5.019					
3	11:22:42	0.524	5.024	5.121	101.545%	5.069					
x		0.546	5.030	5.146	101.058%	5.048					
σ		0.022	0.005	0.023	0.599%	0.026					
%RSD		4.017	0.098	0.449	0.593	0.505					

229407_9800_Cal3 7/2/2019 11:29:44 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	11:29:47	49.320	49.910	47.540	2451.000	2481.000	2503.000	2531.000	2538.000	130.300	<u>1775000.000</u>
2	11:29:50	49.880	49.390	50.220	2490.000	2553.000	2567.000	2570.000	2556.000	150.300	<u>1783000.000</u>
3	11:29:54	50.120	50.600	49.880	2488.000	2543.000	2568.000	2563.000	2435.000	135.100	<u>1798000.000</u>
x		49.770	49.970	49.210	2476.000	2525.000	2546.000	2555.000	2509.000	138.600	<u>1785000.000</u>
σ		0.411	0.608	1.459	22.160	39.040	37.090	20.780	65.430	10.480	<u>11720.000</u>
%RSD		0.825	1.216	2.965	0.895	1.546	1.457	0.813	2.608	7.561	<u>0.656</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:29:47	2457.000	2466.000	97.498%	96.119%	49.380	48.500	49.560	15.950	2446.000	49.200
2	11:29:50	2466.000	2400.000	96.597%	96.249%	48.410	49.390	49.650	13.100	2481.000	49.720
3	11:29:54	2506.000	2572.000	95.591%	96.070%	50.620	49.870	50.070	14.020	2495.000	49.910
x		2476.000	2479.000	96.562%	96.146%	49.470	49.250	49.760	14.360	2474.000	49.610
σ		25.990	86.920	0.954%	0.092%	1.106	0.693	0.271	1.451	25.250	0.369
%RSD		1.049	3.506	0.988	0.096	2.235	1.408	0.543	10.110	1.021	0.744
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:29:47	49.490	50.590	51.310	51.780	97.982%	52.160	52.970	50.220	96.182%	49.600
2	11:29:50	49.500	50.800	51.720	52.520	97.879%	51.940	52.290	50.040	96.864%	49.810
3	11:29:54	49.900	50.150	51.390	51.600	98.300%	51.690	52.250	50.370	96.087%	50.070
x		49.630	50.510	51.470	51.970	98.054%	51.930	52.500	50.210	96.378%	49.830
σ		0.233	0.334	0.222	0.487	0.219%	0.237	0.403	0.168	0.424%	0.237
%RSD		0.470	0.661	0.431	0.936	0.223	0.457	0.767	0.334	0.440	0.476
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:29:47	49.330	50.700	25.090	50.750	99.095%	50.040	50.620	49.320	<u>98.561%</u>	50.410
2	11:29:50	48.890	51.100	25.240	50.340	99.362%	50.000	50.430	49.600	<u>98.961%</u>	49.980
3	11:29:54	49.730	50.760	25.400	50.580	99.222%	50.020	50.960	50.080	<u>98.290%</u>	50.120
x		49.320	50.850	25.240	50.560	99.226%	50.020	50.670	49.670	<u>98.604%</u>	50.170
σ		0.419	0.216	0.152	0.205	0.134%	0.021	0.270	0.384	<u>0.337%</u>	0.219
%RSD		0.850	0.425	0.602	0.405	0.135	0.042	0.532	0.774	<u>0.342</u>	0.437
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	11:29:47	1.043	49.460	50.470	100.523%	49.380					
2	11:29:50	1.010	48.770	49.970	101.847%	49.010					
3	11:29:54	1.132	49.060	50.040	101.700%	48.940					
x		1.062	49.100	50.160	101.357%	49.110					
σ		0.063	0.351	0.273	0.726%	0.235					
%RSD		5.949	0.714	0.544	0.716	0.479					

229408_9800_Cal4

7/2/2019 11:36:55 AM

User Pre-dilution: 1.000

Test File Filename: 12026											
Run	Time	7Li	9Be	10B	23Na	25Mg	27Al	28Si	31P	34S	35Cl
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:36:59	252.900	251.500	249.200	<u>12180.000</u>	12420.000	12450.000	12480.000	12600.000	132.400	<u>2051000.000</u>
2	11:37:03	251.600	252.400	251.100	<u>12300.000</u>	12280.000	12450.000	12550.000	12740.000	136.100	<u>2059000.000</u>
3	11:37:07	254.500	251.300	248.600	11990.000	12240.000	12370.000	12450.000	12490.000	132.700	<u>2041000.000</u>
x		<u>253.000</u>	<u>251.800</u>	<u>249.600</u>	<u>12150.000</u>	<u>12310.000</u>	<u>12420.000</u>	<u>12500.000</u>	<u>12610.000</u>	<u>133.700</u>	<u>2050000.000</u>
σ		1.448	0.608	1.332	<u>157.000</u>	93.630	44.740	52.220	127.700	2.071	<u>9123.000</u>
%RSD		0.572	0.241	0.533	<u>1.292</u>	0.760	0.360	0.418	1.013	1.548	<u>0.445</u>
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	11:36:59	<u>12150.000</u>	12510.000	96.717%	97.080%	247.500	250.400	250.200	45.390	12020.000	251.200
2	11:37:03	<u>12210.000</u>	12340.000	97.234%	97.751%	249.000	248.000	248.700	42.860	11910.000	247.100
3	11:37:07	12090.000	12070.000	97.341%	97.298%	246.200	247.500	249.000	44.310	11800.000	246.700
x		<u>12150.000</u>	<u>12310.000</u>	<u>97.097%</u>	<u>97.376%</u>	<u>247.600</u>	<u>248.600</u>	<u>249.300</u>	<u>44.190</u>	<u>11910.000</u>	<u>248.300</u>
σ		<u>63.370</u>	224.600	0.333%	0.342%	1.417	1.549	0.761	1.272	112.700	2.474
%RSD		<u>0.522</u>	1.825	0.343	0.352	0.572	0.623	0.305	2.878	0.947	0.996
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:36:59	247.700	251.100	253.700	255.600	97.407%	256.400	250.100	250.200	96.711%	248.500
2	11:37:03	245.800	249.400	251.300	252.900	98.462%	253.800	250.500	249.500	96.893%	247.600
3	11:37:07	245.300	249.000	252.400	255.100	98.636%	253.700	250.200	249.500	96.593%	249.300
x		<u>246.300</u>	<u>249.800</u>	<u>252.500</u>	<u>254.500</u>	<u>98.168%</u>	<u>254.600</u>	<u>250.300</u>	<u>249.700</u>	<u>96.733%</u>	<u>248.400</u>
σ		1.224	1.144	1.189	1.412	0.665%	1.515	0.210	0.391	0.151%	0.858
%RSD		0.497	0.458	0.471	0.555	0.677	0.595	0.084	0.156	0.156	0.345
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:36:59	249.100	249.700	123.500	249.600	99.560%	249.000	248.800	249.800	<u>98.545%</u>	247.000
2	11:37:03	249.400	251.200	123.900	248.900	99.767%	248.900	248.900	250.100	<u>98.484%</u>	248.400
3	11:37:07	250.200	250.400	124.100	250.000	99.532%	250.600	249.500	250.300	<u>98.636%</u>	248.400
x		<u>249.600</u>	<u>250.500</u>	<u>123.800</u>	<u>249.500</u>	<u>99.620%</u>	<u>249.500</u>	<u>249.100</u>	<u>250.100</u>	<u>98.555%</u>	<u>248.000</u>
σ		0.599	0.773	0.286	0.531	0.129%	0.982	0.375	0.238	<u>0.077%</u>	0.824
%RSD		0.240	0.309	0.231	0.213	0.129	0.394	0.151	0.095	<u>0.078</u>	0.332
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	11:36:59	9.705	<u>244.800</u>	<u>247.600</u>	100.162%	<u>249.900</u>					
2	11:37:03	10.200	<u>244.600</u>	<u>246.400</u>	100.769%	<u>250.200</u>					
3	11:37:07	10.100	<u>245.500</u>	<u>247.500</u>	100.564%	<u>249.800</u>					
x		<u>10.000</u>	<u>245.000</u>	<u>247.200</u>	<u>100.498%</u>	<u>250.000</u>					
σ		0.261	<u>0.484</u>	<u>0.659</u>	0.309%	<u>0.193</u>					
%RSD		2.611	<u>0.198</u>	<u>0.267</u>	0.308	<u>0.077</u>					

229409_9800_Cal5

7/2/2019 11:44:09 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	11:44:12	M 506.200	493.800	497.400	TM 25150.000	24970.000	24980.000	24430.000	M 25020.000	153.600	T 2411000.000
2	11:44:16	M 513.900	496.200	M 501.200	TM 25030.000	M 25000.000	M 25120.000	24730.000	24530.000	144.800	T 2419000.000
3	11:44:20	M 514.100	496.200	M 501.500	TM 25240.000	M 25050.000	M 25040.000	24530.000	24800.000	144.300	T 2401000.000
X		M 511.400	495.400	M 500.000	TM 25140.000	M 25010.000	M 25040.000	24570.000	M 24780.000	147.600	T 2410000.000
σ		M 4.504	1.408	M 2.265	TM 105.700	M 38.170	M 72.960	153.800	M 242.500	5.228	T 9174.000
%RSD		M 0.881	0.284	M 0.453	TM 0.421	M 0.153	M 0.291	0.626	M 0.978	3.542	T 0.381
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	11:44:12	TM 25160.000	M 25030.000	93.838%	96.195%	M 509.800	M 503.500	M 501.500	90.760	T 24520.000	M 501.700
2	11:44:16	TM 25080.000	M 25360.000	93.996%	95.581%	M 507.300	499.200	498.400	99.610	T 24410.000	500.000
3	11:44:20	T 24950.000	24940.000	93.190%	95.453%	M 515.200	M 501.400	M 503.400	95.880	T 24670.000	499.100
X		TM 25060.000	M 25110.000	93.674%	95.743%	M 510.800	M 501.300	M 501.100	95.420	T 24530.000	M 500.300
σ		TM 106.000	M 220.400	0.427%	0.397%	M 4.070	M 2.147	M 2.531	4.444	T 132.300	M 1.318
%RSD		TM 0.423	M 0.878	0.456	0.414	M 0.797	M 0.428	M 0.505	4.658	T 0.539	M 0.264
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:12	TM 504.600	498.300	496.300	496.800	95.107%	496.100	483.300	496.000	95.022%	T 496.500
2	11:44:16	TM 501.600	496.900	495.700	497.800	95.286%	497.200	480.600	498.300	94.343%	TM 502.500
3	11:44:20	TM 503.500	M 500.400	497.400	498.700	94.859%	497.500	479.300	M 501.800	93.888%	TM 504.100
X		TM 503.200	M 498.500	496.500	497.800	95.084%	496.900	481.100	M 498.700	94.418%	TM 501.100
σ		TM 1.536	M 1.750	0.880	0.979	0.214%	0.761	2.000	M 2.936	0.571%	TM 3.975
%RSD		TM 0.305	M 0.351	0.177	0.197	0.225	0.153	0.416	M 0.589	0.605	TM 0.793
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:12	497.700	484.500	238.900	479.100	99.086%	486.600	477.600	494.100	T 98.121%	TM 500.600
2	11:44:16	499.900	486.600	239.100	485.800	97.903%	493.700	486.000	498.100	T 97.360%	TM 500.100
3	11:44:20	M 503.400	489.000	240.700	487.700	98.118%	492.000	483.500	499.700	T 97.157%	TM 503.500
X		M 500.300	486.700	239.500	484.200	98.369%	490.800	482.400	497.300	T 97.546%	TM 501.400
σ		M 2.892	2.247	0.991	4.491	0.630%	3.683	4.275	2.903	T 0.508%	TM 1.860
%RSD		M 0.578	0.462	0.414	0.928	0.640	0.750	0.886	0.584	T 0.521	TM 0.371
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	11:44:12	24.810	T 489.900	T 498.100	99.154%	TM 506.900					
2	11:44:16	24.840	T 487.600	T 496.200	T 100.574%	TM 503.700					
3	11:44:20	M 25.110	T 493.400	TM 501.200	100.082%	TM 510.100					
X		M 24.920	T 490.300	TM 498.500	T 99.937%	TM 506.900					
σ		M 0.163	T 2.897	TM 2.511	T 0.721%	TM 3.206					
%RSD		M 0.654	T 0.591	TM 0.504	T 0.722	TM 0.633					

229187_9800_ICV 7/2/2019 11:51:23 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	11:51:26	108.700	111.700	110.300	5603.000	5623.000	5628.000	5780.000	5748.000	119.800	<u>1687000.000</u>
2	11:51:30	108.200	109.900	106.000	5639.000	5701.000	5759.000	5838.000	5830.000	123.600	<u>1701000.000</u>
3	11:51:34	109.200	110.400	109.700	5511.000	5615.000	5657.000	5780.000	5699.000	141.200	<u>1703000.000</u>
x		108.700	110.700	108.700	5584.000	5646.000	5681.000	5799.000	5759.000	128.200	<u>1697000.000</u>
σ		0.477	0.896	2.284	65.930	47.120	68.830	33.330	66.020	11.430	<u>18591.000</u>
%RSD		0.439	0.809	2.102	1.181	0.835	1.212	0.575	1.146	8.914	<u>10.506</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:26	5461.000	5544.000	92.176%	93.154%	106.300	110.400	109.700	21.520	5499.000	109.300
2	11:51:30	5569.000	5490.000	91.061%	93.886%	108.800	111.100	110.600	20.150	5517.000	109.600
3	11:51:34	5552.000	5859.000	92.993%	94.246%	108.600	109.200	109.000	24.020	5465.000	109.800
x		5527.000	5631.000	92.077%	93.762%	107.900	110.200	109.800	21.900	5494.000	109.600
σ		57.860	199.200	0.970%	0.557%	1.358	0.979	0.821	1.965	26.420	0.215
%RSD		1.047	3.537	1.053	0.594	1.258	0.888	0.748	8.971	0.481	0.196
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:26	108.500	109.200	112.100	114.600	95.586%	108.700	112.000	110.200	93.303%	110.800
2	11:51:30	109.600	110.500	113.000	115.500	95.544%	108.200	113.300	108.900	93.245%	110.700
3	11:51:34	109.100	110.200	112.200	114.600	95.787%	109.300	113.200	109.600	94.252%	111.100
x		109.100	109.900	112.500	114.900	95.639%	108.700	112.800	109.600	93.600%	110.900
σ		0.535	0.678	0.508	0.509	0.130%	0.539	0.733	0.608	0.565%	0.205
%RSD		0.491	0.617	0.452	0.443	0.136	0.496	0.649	0.555	0.604	0.185
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:26	102.500	106.300	55.600	111.000	97.172%	113.200	112.400	109.100	<u>197.422%</u>	106.500
2	11:51:30	102.600	106.000	55.270	111.400	96.385%	113.800	113.100	109.300	<u>197.027%</u>	107.600
3	11:51:34	102.700	106.200	54.970	110.800	97.805%	114.300	112.600	109.700	<u>197.825%</u>	106.200
x		102.600	106.200	55.280	111.100	97.121%	113.700	112.700	109.400	<u>197.425%</u>	106.800
σ		0.114	0.163	0.315	0.302	0.712%	0.556	0.363	0.282	<u>10.399%</u>	0.712
%RSD		0.111	0.153	0.570	0.272	0.733	0.489	0.322	0.258	<u>10.409</u>	0.666
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	11:51:26	4.138	<u>1105.300</u>	108.900	99.870%	<u>1110.700</u>					
2	11:51:30	4.135	102.900	109.100	100.265%	<u>1109.500</u>					
3	11:51:34	4.191	<u>1104.700</u>	108.600	101.323%	<u>1108.900</u>					
x		4.154	<u>1104.300</u>	108.900	100.486%	<u>1109.700</u>					
σ		0.031	<u>11.254</u>	0.248	0.751%	<u>10.935</u>					
%RSD		0.755	<u>11.202</u>	0.228	0.748	<u>10.852</u>					

229404_9800_ICBTVA 7/2/2019 11:58:38 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	11:58:41	0.063	0.016	0.655	-0.031	1.095	0.032	-3.317	-9.161	130.700	<u>1669000.000</u>
2	11:58:45	0.077	0.069	0.398	0.399	0.081	0.663	-1.768	-8.805	119.900	<u>1672000.000</u>
3	11:58:48	0.057	0.068	0.948	-0.068	0.872	-0.359	0.592	-5.678	124.600	<u>1691000.000</u>
x		0.066	0.051	0.667	0.100	0.683	0.112	-1.498	-7.881	125.100	<u>1678000.000</u>
σ		0.010	0.030	0.275	0.260	0.533	0.515	1.969	1.917	5.450	<u>11630.000</u>
%RSD		15.680	58.780	41.250	259.600	78.020	460.200	131.500	24.320	4.358	<u>0.693</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:41	-17.390	20.150	89.350%	90.601%	0.040	-0.013	-0.013	4.582	0.693	0.018
2	11:58:45	-15.800	1.509	91.192%	90.573%	-0.031	-0.006	-0.011	4.777	-0.012	0.021
3	11:58:48	-11.180	1.382	90.752%	91.042%	0.191	0.159	-0.018	4.279	0.366	0.023
x		-14.790	7.680	90.431%	90.739%	0.067	0.047	-0.014	4.546	0.349	0.021
σ		3.227	10.800	0.962%	0.263%	0.114	0.097	0.003	0.251	0.353	0.002
%RSD		21.820	140.600	1.064	0.290	170.600	208.700	24.370	5.517	101.000	11.250
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:41	0.023	0.011	-0.013	0.497	91.602%	-0.084	0.010	0.014	91.986%	0.001
2	11:58:45	0.014	0.002	-0.005	0.400	91.619%	-0.095	0.091	0.012	93.126%	0.010
3	11:58:48	0.023	0.012	-0.009	0.340	90.501%	-0.124	0.094	0.039	93.294%	0.016
x		0.020	0.008	-0.009	0.413	91.241%	-0.101	0.065	0.022	92.802%	0.009
σ		0.005	0.006	0.004	0.079	0.641%	0.021	0.048	0.015	0.712%	0.007
%RSD		24.410	65.870	46.110	19.190	0.702	20.530	73.060	68.160	0.767	81.390
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:41	0.013	-0.060	-0.018	0.013	93.630%	0.474	0.004	0.027	<u>96.771%</u>	0.013
2	11:58:45	0.005	-0.027	-0.038	0.008	95.095%	0.509	0.014	0.002	<u>96.964%</u>	0.008
3	11:58:48	0.005	-0.033	-0.022	0.023	94.778%	0.464	0.019	0.006	<u>97.090%</u>	0.008
x		0.007	-0.040	-0.026	0.015	94.501%	0.482	0.012	0.012	<u>96.942%</u>	0.010
σ		0.005	0.018	0.011	0.007	0.771%	0.023	0.007	0.013	<u>0.161%</u>	0.003
%RSD		64.940	44.190	41.570	48.940	0.816	4.838	60.930	110.800	<u>0.166</u>	31.560
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	11:58:41	-0.004	0.079	0.032	99.310%	0.015					
2	11:58:45	0.009	0.073	0.030	99.623%	0.016					
3	11:58:48	0.005	0.062	0.030	100.486%	0.014					
x		0.003	0.071	0.031	99.806%	0.015					
σ		0.007	0.008	0.001	0.609%	0.001					
%RSD		202.300	11.640	3.883	0.610	5.188					

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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	12:05:55	1.059	1.020	1.025	254.300	249.600	254.500	53.910	49.480	126.200	<u>1754000.000</u>
2	12:05:58	1.020	0.962	1.201	254.800	253.600	257.200	52.910	47.290	119.200	<u>1726000.000</u>
3	12:06:02	1.005	0.964	1.248	245.300	247.500	257.000	54.500	53.750	145.900	<u>1742000.000</u>
x		1.028	0.982	1.158	251.500	250.200	256.200	53.770	50.170	130.400	<u>1741000.000</u>
σ		0.028	0.033	0.117	5.362	3.074	1.546	0.804	3.287	13.830	<u>14440.000</u>
%RSD		2.686	3.379	10.110	2.132	1.228	0.604	1.495	6.551	10.610	<u>0.829</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:55	251.400	236.600	92.125%	93.633%	0.991	0.994	0.999	5.002	254.200	1.025
2	12:05:58	245.800	271.300	94.427%	93.850%	0.745	1.003	0.959	5.385	252.900	1.007
3	12:06:02	253.600	253.000	93.679%	94.666%	1.088	1.156	0.997	4.819	256.400	1.060
x		250.200	253.700	93.410%	94.050%	0.941	1.051	0.985	5.068	254.500	1.030
σ		4.011	17.370	1.174%	0.545%	0.177	0.091	0.022	0.289	1.782	0.027
%RSD		1.603	6.848	1.257	0.579	18.780	8.652	2.275	5.699	0.700	2.626
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:55	1.029	1.024	1.038	1.964	95.418%	0.898	1.074	1.050	94.166%	1.015
2	12:05:58	1.046	1.055	1.015	1.888	96.568%	0.907	0.871	1.057	95.201%	1.029
3	12:06:02	1.035	1.068	0.996	1.827	96.332%	0.957	1.039	1.055	95.178%	1.065
x		1.037	1.049	1.017	1.893	96.106%	0.921	0.995	1.054	94.849%	1.036
σ		0.009	0.023	0.021	0.069	0.607%	0.032	0.109	0.003	0.592%	0.026
%RSD		0.845	2.199	2.086	3.634	0.632	3.460	10.930	0.327	0.624	2.469
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:55	1.111	0.962	0.506	1.064	98.120%	0.860	0.969	1.005	<u>97.771%</u>	0.999
2	12:05:58	1.078	0.923	0.485	0.991	98.331%	0.883	0.983	0.982	<u>98.084%</u>	1.026
3	12:06:02	1.093	1.011	0.458	0.986	98.900%	0.918	1.024	1.089	<u>99.180%</u>	1.053
x		1.094	0.965	0.483	1.013	98.450%	0.887	0.992	1.025	<u>98.345%</u>	1.026
σ		0.016	0.044	0.024	0.044	0.404%	0.029	0.029	0.056	<u>0.740%</u>	0.027
%RSD		1.494	4.571	4.937	4.292	0.410	3.324	2.898	5.504	<u>0.753</u>	2.647
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	12:05:55	0.221	1.028	1.044	99.271%	1.034					
2	12:05:58	0.198	1.051	1.050	100.563%	1.020					
3	12:06:02	0.193	1.034	1.040	100.254%	1.019					
x		0.204	1.037	1.045	100.029%	1.024					
σ		0.015	0.012	0.005	0.675%	0.008					
%RSD		7.462	1.136	0.497	0.675	0.771					

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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	12:13:07	4.908	4.826	4.597	484.900	497.200	505.900	258.300	239.600	136.600	<u>1762000.000</u>
2	12:13:11	4.682	4.786	4.515	486.600	492.200	503.800	253.300	262.600	120.800	<u>1750000.000</u>
3	12:13:14	4.823	4.986	5.075	476.600	492.500	500.500	253.900	248.600	129.500	<u>1738000.000</u>
x		4.805	4.866	4.729	482.700	494.000	503.400	255.200	250.300	129.000	<u>1750000.000</u>
σ		0.114	0.106	0.302	5.356	2.800	2.706	2.689	11.560	7.896	<u>12060.000</u>
%RSD		2.373	2.172	6.392	1.110	0.567	0.538	1.054	4.617	6.121	<u>0.689</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:07	494.300	515.700	94.152%	95.065%	4.402	4.732	4.949	6.648	498.800	5.114
2	12:13:11	483.100	501.500	97.122%	94.573%	4.674	4.952	5.011	6.033	497.200	4.936
3	12:13:14	485.100	452.200	95.574%	95.925%	5.170	4.883	5.005	6.016	495.400	5.038
x		487.500	489.800	95.616%	95.188%	4.749	4.856	4.988	6.233	497.100	5.029
σ		6.004	33.310	1.485%	0.684%	0.389	0.112	0.034	0.360	1.718	0.090
%RSD		1.232	6.800	1.554	0.719	8.194	2.315	0.686	5.780	0.346	1.780
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:07	5.000	5.221	5.199	5.777	97.046%	5.128	5.167	5.029	95.727%	5.099
2	12:13:11	5.080	4.882	5.161	6.087	97.676%	5.042	5.320	5.122	97.327%	5.025
3	12:13:14	5.064	4.986	5.218	5.798	97.704%	5.153	4.997	5.140	96.738%	5.084
x		5.048	5.030	5.193	5.887	97.475%	5.107	5.161	5.097	96.597%	5.069
σ		0.042	0.174	0.029	0.174	0.372%	0.058	0.161	0.060	0.809%	0.039
%RSD		0.831	3.449	0.557	2.947	0.382	1.137	3.125	1.176	0.838	0.764
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:07	4.858	4.998	2.538	5.039	99.084%	4.815	5.026	5.195	<u>98.655%</u>	5.063
2	12:13:11	4.746	5.096	2.521	5.121	100.536%	4.901	5.121	4.898	<u>99.574%</u>	5.094
3	12:13:14	4.886	5.202	2.506	5.020	100.015%	4.849	5.094	5.088	<u>99.257%</u>	5.074
x		4.830	5.099	2.521	5.060	99.879%	4.855	5.081	5.060	<u>99.162%</u>	5.077
σ		0.074	0.102	0.016	0.054	0.736%	0.043	0.049	0.150	<u>0.467%</u>	0.016
%RSD		1.524	2.004	0.631	1.060	0.737	0.893	0.965	2.972	<u>0.471</u>	0.306
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	12:13:07	0.531	5.007	5.111	100.673%	5.045					
2	12:13:11	0.511	5.002	5.102	101.296%	5.120					
3	12:13:14	0.525	4.983	5.082	101.505%	5.069					
x		0.523	4.997	5.099	101.158%	5.078					
σ		0.010	0.013	0.015	0.433%	0.038					
%RSD		1.990	0.256	0.289	0.428	0.753					

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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	12:20:20	0.255	-0.014	0.165	<u>TM 52850.000</u>	<u>M 51780.000</u>	<u>TM 53730.000</u>	7.846	<u>M 55640.000</u>	4161.000	<u>T 1850000.000</u>
2	12:20:24	0.243	-0.003	0.307	<u>TM 53410.000</u>	<u>M 51980.000</u>	<u>TM 53800.000</u>	14.780	<u>M 55500.000</u>	4090.000	<u>T 1826000.000</u>
3	12:20:28	0.210	0.003	0.370	<u>TM 52410.000</u>	<u>M 51660.000</u>	<u>TM 52860.000</u>	5.110	<u>M 55130.000</u>	4167.000	<u>T 1819000.000</u>
X		0.236	-0.005	0.281	<u>TM 52890.000</u>	<u>M 51800.000</u>	<u>TM 53460.000</u>	9.244	<u>M 55420.000</u>	4139.000	<u>T 1832000.000</u>
σ		0.023	0.009	0.105	<u>TM 502.800</u>	<u>M 161.200</u>	<u>TM 521.200</u>	4.982	<u>M 261.500</u>	43.000	<u>T 16450.000</u>
%RSD		9.846	188.200	37.390	<u>TM 0.951</u>	<u>M 0.311</u>	<u>TM 0.975</u>	53.900	<u>M 0.472</u>	1.039	<u>T 0.898</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:20	<u>TM 53870.000</u>	<u>M 52600.000</u>	79.312%	85.699%	<u>M 1057.000</u>	0.007	0.136	5.814	<u>TM 52190.000</u>	0.086
2	12:20:24	<u>TM 53640.000</u>	<u>M 52620.000</u>	78.175%	86.063%	<u>M 1069.000</u>	0.039	0.149	6.210	<u>TM 52140.000</u>	-0.005
3	12:20:28	<u>TM 53370.000</u>	<u>M 51620.000</u>	78.099%	85.291%	<u>M 1057.000</u>	0.085	0.113	5.575	<u>TM 51790.000</u>	0.080
X		<u>TM 53620.000</u>	<u>M 52280.000</u>	78.529%	85.684%	<u>M 1061.000</u>	0.044	0.133	5.866	<u>TM 52040.000</u>	0.054
σ		<u>TM 252.300</u>	<u>M 573.600</u>	0.679%	0.386%	<u>M 6.779</u>	0.039	0.019	0.321	<u>TM 215.200</u>	0.051
%RSD		<u>TM 0.471</u>	<u>M 1.097</u>	0.865	0.451	<u>M 0.639</u>	89.210	13.990	5.473	<u>TM 0.414</u>	94.850
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:20	0.031	0.033	0.126	0.286	84.122%	0.052	-0.020	0.433	84.505%	0.080
2	12:20:24	0.035	0.071	0.125	0.070	83.353%	-0.009	0.016	0.435	83.721%	0.045
3	12:20:28	0.022	0.052	0.127	0.000	83.894%	-0.007	0.097	0.430	84.080%	0.057
X		0.029	0.052	0.126	0.119	83.790%	0.012	0.031	0.433	84.102%	0.061
σ		0.007	0.019	0.001	0.149	0.395%	0.035	0.060	0.003	0.392%	0.018
%RSD		22.760	36.210	0.864	125.600	0.471	281.000	193.100	0.630	0.467	29.480
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:20	<u>M 1014.000</u>	0.023	-0.037	0.018	89.675%	0.037	0.066	0.082	<u>T 90.952%</u>	0.012
2	12:20:24	<u>M 1013.000</u>	0.005	-0.036	0.042	89.887%	0.027	0.117	0.102	<u>T 90.995%</u>	0.004
3	12:20:28	<u>M 1008.000</u>	0.010	-0.039	-0.011	89.144%	0.010	0.108	0.073	<u>T 90.636%</u>	0.013
X		<u>M 1012.000</u>	0.013	-0.037	0.016	89.569%	0.025	0.097	0.086	<u>T 90.861%</u>	0.010
σ		<u>M 3.396</u>	0.009	0.002	0.026	0.382%	0.013	0.027	0.015	<u>T 0.196%</u>	0.005
%RSD		<u>M 0.336</u>	73.160	4.429	163.100	0.427	53.940	27.970	17.550	<u>T 0.216</u>	51.320
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	12:20:20	-0.002	0.007	0.055	92.058%	0.000					
2	12:20:24	-0.006	0.009	0.056	93.007%	0.001					
3	12:20:28	0.001	0.008	0.052	93.342%	0.001					
X		-0.002	0.008	0.054	92.803%	0.000					
σ		0.004	0.001	0.002	0.666%	0.000					
%RSD		163.900	16.000	3.471	0.718	40.140					

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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	12:27:34	101.400	100.600	98.660	<u>TM 53050.000</u>	<u>M 52430.000</u>	<u>TM 53870.000</u>	5393.000	<u>M 60180.000</u>	4171.000	<u>T 2004000.000</u>
2	12:27:38	101.000	100.500	97.330	<u>TM 52960.000</u>	<u>M 51920.000</u>	<u>TM 52630.000</u>	5392.000	<u>M 59630.000</u>	4078.000	<u>T 1980000.000</u>
3	12:27:42	108.700	106.900	103.900	<u>TM 53790.000</u>	<u>M 52420.000</u>	<u>TM 53360.000</u>	5363.000	<u>M 59820.000</u>	3989.000	<u>T 1979000.000</u>
X		103.700	102.700	99.960	<u>TM 53270.000</u>	<u>M 52260.000</u>	<u>TM 53280.000</u>	5382.000	<u>M 59880.000</u>	4079.000	<u>T 1988000.000</u>
σ		4.308	3.672	3.469	<u>TM 456.000</u>	<u>M 291.300</u>	<u>TM 619.600</u>	17.180	<u>M 277.400</u>	90.790	<u>T 14200.000</u>
%RSD		4.153	3.576	3.470	<u>TM 0.856</u>	<u>M 0.557</u>	<u>TM 1.163</u>	0.319	<u>M 0.463</u>	2.226	<u>T 0.714</u>
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	12:27:34	<u>TM 53870.000</u>	<u>M 53080.000</u>	80.529%	84.138%	<u>M 1180.000</u>	106.100	105.300	22.150	<u>TM 51440.000</u>	104.900
2	12:27:38	<u>TM 53150.000</u>	<u>M 52460.000</u>	80.627%	84.414%	<u>M 1149.000</u>	106.300	105.300	21.170	<u>TM 51260.000</u>	104.400
3	12:27:42	<u>TM 53780.000</u>	<u>M 52560.000</u>	80.242%	80.349%	<u>M 1168.000</u>	106.300	106.300	22.200	<u>TM 51650.000</u>	105.400
X		<u>TM 53600.000</u>	<u>M 52700.000</u>	80.466%	82.967%	<u>M 1165.000</u>	106.200	105.600	21.840	<u>TM 51450.000</u>	104.900
σ		<u>TM 393.200</u>	<u>M 331.500</u>	0.200%	2.271%	<u>M 15.620</u>	0.170	0.569	0.583	<u>TM 195.000</u>	0.464
%RSD		<u>TM 0.734</u>	<u>M 0.629</u>	0.249	2.738	<u>M 1.341</u>	0.160	0.539	2.671	<u>TM 0.379</u>	0.442
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:34	101.400	101.700	101.700	108.000	87.664%	105.800	103.100	103.600	86.811%	100.600
2	12:27:38	102.700	101.600	101.600	108.500	86.634%	105.600	104.100	104.200	86.364%	101.000
3	12:27:42	102.800	101.900	102.500	109.700	86.832%	106.000	107.900	104.200	85.754%	101.500
X		102.300	101.700	102.000	108.700	87.043%	105.800	105.000	104.000	86.310%	101.000
σ		0.755	0.192	0.499	0.863	0.546%	0.210	2.538	0.340	0.530%	0.440
%RSD		0.738	0.189	0.489	0.793	0.628	0.198	2.416	0.327	0.615	0.436
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:34	<u>M 1100.000</u>	98.540	48.080	101.400	92.451%	101.300	102.400	101.700	<u>T 92.648%</u>	102.900
2	12:27:38	<u>M 1103.000</u>	100.100	48.420	101.200	92.298%	100.700	102.700	101.100	<u>T 92.849%</u>	103.700
3	12:27:42	<u>M 1113.000</u>	100.200	48.680	100.800	92.029%	102.500	103.300	101.300	<u>T 92.340%</u>	104.400
X		<u>M 1105.000</u>	99.630	48.390	101.100	92.259%	101.500	102.800	101.400	<u>T 92.613%</u>	103.700
σ		<u>M 6.947</u>	0.945	0.299	0.336	0.214%	0.955	0.464	0.300	<u>T 0.256%</u>	0.711
%RSD		<u>M 0.629</u>	0.949	0.618	0.332	0.232	0.941	0.452	0.296	<u>T 0.277</u>	0.686
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	12:27:34	5.170	99.350	101.300	95.724%	<u>T 104.200</u>					
2	12:27:38	5.373	99.780	102.000	95.732%	<u>T 105.200</u>					
3	12:27:42	5.253	100.000	102.100	95.700%	<u>T 106.300</u>					
X		5.266	99.730	101.800	95.719%	<u>T 105.300</u>					
σ		0.102	0.351	0.404	0.016%	<u>T 1.051</u>					
%RSD		1.939	0.352	0.397	0.017	<u>T 0.998</u>					

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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	12:34:48	101.500	99.970	96.580	5002.000	5079.000	5075.000	5101.000	5176.000	130.300	<u>1822000.000</u>
2	12:34:52	101.900	101.200	98.150	5005.000	5100.000	5071.000	5067.000	5081.000	126.600	<u>1818000.000</u>
3	12:34:56	100.100	101.500	97.170	4900.000	5015.000	5023.000	5071.000	5154.000	152.100	<u>1804000.000</u>
x		101.200	100.900	97.300	4969.000	5064.000	5056.000	5080.000	5137.000	136.300	<u>1815000.000</u>
σ		0.910	0.793	0.793	59.720	44.330	29.120	18.550	49.860	13.790	<u>19517.000</u>
%RSD		0.899	0.786	0.815	1.202	0.875	0.576	0.365	0.971	10.120	<u>10.524</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:48	4902.000	5090.000	96.270%	97.673%	96.330	98.970	100.400	21.950	4906.000	99.600
2	12:34:52	4952.000	4801.000	96.513%	97.491%	103.000	101.000	101.700	20.460	4936.000	102.000
3	12:34:56	4858.000	4985.000	97.942%	98.225%	99.870	98.890	100.200	19.190	4875.000	99.930
x		4904.000	4959.000	96.908%	97.796%	99.720	99.610	100.800	20.530	4906.000	100.500
σ		47.130	146.000	0.904%	0.382%	3.315	1.175	0.816	1.385	30.630	1.318
%RSD		0.961	2.944	0.932	0.390	3.325	1.179	0.809	6.743	0.624	1.311
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:48	100.100	101.900	103.300	106.100	98.252%	102.100	100.000	100.200	96.575%	100.100
2	12:34:52	101.700	104.000	105.000	106.800	97.637%	103.800	103.500	100.700	97.337%	100.200
3	12:34:56	99.820	102.300	104.100	104.300	99.317%	103.200	100.900	100.500	96.816%	100.700
x		100.500	102.700	104.100	105.700	98.402%	103.000	101.500	100.500	96.909%	100.300
σ		1.001	1.132	0.875	1.296	0.850%	0.875	1.819	0.256	0.390%	0.343
%RSD		0.996	1.102	0.841	1.226	0.864	0.849	1.793	0.255	0.402	0.342
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:34:48	100.100	102.800	50.820	101.500	100.751%	100.800	101.400	99.070	<u>101.659%</u>	101.300
2	12:34:52	100.100	103.300	50.800	102.000	100.342%	101.200	101.900	99.680	<u>101.872%</u>	100.400
3	12:34:56	100.200	103.500	51.400	102.800	100.350%	101.900	102.300	99.920	<u>100.837%</u>	101.500
x		100.200	103.200	51.010	102.100	100.481%	101.300	101.900	99.560	<u>101.456%</u>	101.100
σ		0.052	0.359	0.343	0.642	0.234%	0.532	0.442	0.440	<u>10.547%</u>	0.626
%RSD		0.052	0.348	0.672	0.629	0.233	0.526	0.434	0.442	<u>10.539</u>	0.619
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	12:34:48	5.121	97.070	100.500	105.204%	<u>100.400</u>					
2	12:34:52	4.926	96.850	99.770	106.147%	<u>100.400</u>					
3	12:34:56	5.042	96.750	99.980	105.485%	<u>100.600</u>					
x		5.030	96.890	100.100	105.612%	<u>100.500</u>					
σ		0.098	0.163	0.351	0.484%	<u>10.139</u>					
%RSD		1.953	0.168	0.351	0.458	<u>10.139</u>					

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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	12:42:03	0.044	0.085	-0.233	0.221	0.611	0.171	-2.708	-11.690	114.200	<u>1706000.000</u>
2	12:42:06	0.049	0.043	0.199	-0.093	-0.670	-0.285	-2.988	-9.256	126.600	<u>1725000.000</u>
3	12:42:10	0.057	0.058	0.308	0.006	0.716	-0.543	-3.389	-15.500	124.400	<u>1723000.000</u>
x		0.050	0.062	0.091	0.045	0.219	-0.219	-3.028	-12.150	121.700	<u>1718000.000</u>
σ		0.007	0.021	0.286	0.160	0.772	0.362	0.342	3.147	6.574	<u>10760.000</u>
%RSD		13.980	34.440	313.000	359.900	352.600	165.100	11.300	25.900	5.400	<u>0.626</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:03	-13.510	-1.901	100.379%	102.214%	0.107	0.020	-0.001	5.540	1.105	-0.002
2	12:42:06	-5.692	6.214	101.185%	102.473%	-0.039	0.170	-0.004	5.003	0.480	0.005
3	12:42:10	-5.033	0.694	101.262%	106.380%	0.017	0.079	-0.011	5.443	0.343	-0.000
x		-8.078	1.669	100.942%	103.689%	0.028	0.090	-0.005	5.329	0.643	0.001
σ		4.715	4.144	0.489%	2.334%	0.074	0.076	0.005	0.286	0.406	0.003
%RSD		58.360	248.300	0.485	2.251	261.400	84.720	93.720	5.375	63.230	428.900
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:03	0.005	0.005	-0.029	0.868	98.938%	-0.157	-0.033	-0.010	99.692%	-0.003
2	12:42:06	0.007	-0.003	-0.032	0.648	100.332%	-0.131	-0.071	-0.010	100.078%	-0.006
3	12:42:10	0.005	0.018	-0.037	0.518	99.713%	-0.115	0.001	0.001	101.019%	-0.008
x		0.005	0.006	-0.033	0.678	99.661%	-0.135	-0.034	-0.006	100.263%	-0.006
σ		0.001	0.011	0.004	0.177	0.699%	0.021	0.036	0.007	0.682%	0.003
%RSD		22.100	167.100	11.410	26.090	0.701	15.870	105.700	106.800	0.680	45.020
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:03	0.022	-0.055	-0.029	0.000	100.958%	-0.120	-0.003	0.003	<u>102.474%</u>	0.003
2	12:42:06	0.016	-0.066	-0.035	-0.001	101.110%	-0.121	-0.010	-0.008	<u>102.749%</u>	0.002
3	12:42:10	0.011	-0.048	-0.033	0.003	101.806%	-0.129	-0.003	0.001	<u>102.905%</u>	0.003
x		0.016	-0.056	-0.032	0.001	101.291%	-0.124	-0.005	-0.001	<u>102.709%</u>	0.003
σ		0.005	0.009	0.003	0.002	0.452%	0.005	0.004	0.006	<u>0.218%</u>	0.000
%RSD		31.450	15.930	9.396	249.900	0.446	4.021	82.920	518.100	<u>0.212</u>	17.620
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	12:42:03	0.007	0.037	0.025	104.932%	0.005					
2	12:42:06	-0.011	0.031	0.022	<u>109.362%</u>	0.002					
3	12:42:10	-0.009	0.031	0.017	105.102%	0.004					
x		-0.004	0.033	0.021	<u>106.465%</u>	0.003					
σ		0.010	0.004	0.004	<u>2.510%</u>	0.001					
%RSD		227.000	11.470	20.970	<u>2.358</u>	37.610					

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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	12:49:17	0.003	0.004	-0.097	19.540	1.836	15.590	9.235	22.910	120.300	<u>1765000.000</u>
2	12:49:21	0.018	0.004	0.237	20.350	0.639	17.440	7.331	40.690	130.800	<u>1779000.000</u>
3	12:49:24	-0.003	0.004	0.079	21.190	0.802	16.700	9.797	17.530	135.900	<u>1804000.000</u>
x		0.006	0.004	0.073	20.360	1.093	16.580	8.788	27.050	129.000	<u>1783000.000</u>
σ		0.011	0.000	0.167	0.820	0.649	0.935	1.293	12.120	7.942	<u>19860.000</u>
%RSD		180.400	0.571	229.000	4.029	59.410	5.637	14.710	44.810	6.156	<u>1.114</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:17	33.070	3.488	103.781%	107.174%	0.170	0.049	0.344	6.163	0.524	0.037
2	12:49:21	35.010	0.877	103.217%	107.264%	0.255	-0.059	0.324	6.417	0.996	0.047
3	12:49:24	40.220	6.260	102.541%	107.288%	0.009	0.058	0.320	6.385	0.542	0.031
x		36.100	3.541	103.179%	107.242%	0.145	0.016	0.329	6.322	0.687	0.038
σ		3.695	2.692	0.621%	0.060%	0.125	0.065	0.013	0.138	0.267	0.008
%RSD		10.240	76.020	0.602	0.056	86.310	408.700	3.929	2.186	38.860	20.140
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:17	0.011	0.289	0.092	2.672	104.382%	-0.136	-0.016	-0.053	101.438%	-0.001
2	12:49:21	0.007	0.248	0.090	2.405	105.847%	-0.113	0.061	-0.052	101.696%	-0.012
3	12:49:24	0.009	0.236	0.098	2.546	104.927%	-0.126	-0.063	-0.048	102.676%	-0.001
x		0.009	0.258	0.093	2.541	105.052%	-0.125	-0.006	-0.051	101.937%	-0.005
σ		0.002	0.028	0.004	0.134	0.741%	0.011	0.062	0.003	0.653%	0.006
%RSD		23.270	10.770	4.560	5.262	0.705	9.178	1067.000	5.326	0.641	129.200
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:17	0.058	-0.039	-0.024	0.005	103.371%	42.280	0.034	-0.002	<u>103.802%</u>	0.014
2	12:49:21	0.062	-0.042	-0.028	-0.001	103.686%	42.600	0.046	-0.001	<u>103.706%</u>	0.021
3	12:49:24	0.056	-0.039	-0.024	0.002	104.399%	42.320	0.033	-0.002	<u>103.040%</u>	0.022
x		0.059	-0.040	-0.025	0.002	103.818%	42.400	0.038	-0.001	<u>103.516%</u>	0.019
σ		0.003	0.001	0.002	0.003	0.527%	0.173	0.007	0.001	<u>0.415%</u>	0.004
%RSD		5.634	3.720	9.647	161.400	0.507	0.408	18.590	45.660	<u>0.401</u>	22.210
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	12:49:17	-0.013	0.010	0.023	105.629%	0.001					
2	12:49:21	-0.000	0.009	0.018	105.919%	0.001					
3	12:49:24	-0.011	0.008	0.016	105.816%	0.000					
x		-0.008	0.009	0.019	105.788%	0.001					
σ		0.007	0.001	0.004	0.147%	0.000					
%RSD		83.840	11.210	18.980	0.139	78.200					

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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	12:56:29	-0.003	0.004	0.025	10.980	1.712	11.520	3.416	31.730	145.900	<u>1819000.000</u>
2	12:56:32	0.008	-0.000	0.120	10.790	2.992	12.580	4.348	35.920	125.900	<u>1845000.000</u>
3	12:56:36	0.007	0.026	-0.033	9.472	2.175	12.530	2.707	33.280	127.000	<u>1812000.000</u>
x		0.004	0.010	0.037	10.410	2.293	12.210	3.490	33.650	132.900	<u>1825000.000</u>
σ		0.006	0.014	0.077	0.821	0.648	0.601	0.823	2.118	11.260	<u>17730.000</u>
%RSD		155.600	144.100	207.000	7.881	28.260	4.919	23.590	6.295	8.468	<u>10.971</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:56:29	41.030	14.060	103.562%	106.805%	0.226	0.010	0.396	6.769	2.426	1.361
2	12:56:32	49.360	-4.561	102.594%	107.162%	0.175	-0.027	0.434	7.005	3.107	1.310
3	12:56:36	42.460	8.517	105.053%	106.711%	0.080	-0.061	0.443	6.803	2.171	1.344
x		44.290	6.005	103.736%	106.893%	0.160	-0.026	0.424	6.859	2.568	1.338
σ		4.455	9.560	1.239%	0.238%	0.074	0.036	0.025	0.128	0.484	0.026
%RSD		10.060	159.200	1.194	0.223	46.160	137.200	5.837	1.862	18.840	1.933
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:56:29	0.011	0.276	0.026	1.722	104.811%	-0.112	-0.002	-0.041	101.977%	-0.001
2	12:56:32	0.004	0.291	0.041	1.806	105.918%	-0.082	0.005	-0.033	102.339%	-0.012
3	12:56:36	0.012	0.222	0.024	2.201	106.975%	-0.112	-0.028	-0.040	102.699%	0.005
x		0.009	0.263	0.030	1.910	105.901%	-0.102	-0.008	-0.038	102.338%	-0.003
σ		0.004	0.036	0.010	0.256	1.082%	0.017	0.017	0.004	0.361%	0.009
%RSD		45.690	13.720	31.740	13.410	1.022	16.810	209.800	11.750	0.353	339.600
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:56:29	0.064	-0.045	-0.038	0.003	103.911%	43.010	0.057	0.013	<u>104.794%</u>	0.018
2	12:56:32	0.043	-0.034	-0.038	0.003	104.678%	42.730	0.053	0.013	<u>103.726%</u>	0.010
3	12:56:36	0.049	-0.062	-0.030	0.000	104.820%	42.380	0.051	0.020	<u>105.070%</u>	0.026
x		0.052	-0.047	-0.035	0.002	104.470%	42.710	0.054	0.016	<u>104.530%</u>	0.018
σ		0.011	0.014	0.004	0.002	0.489%	0.313	0.003	0.004	<u>10.710%</u>	0.008
%RSD		20.250	30.640	12.150	73.130	0.468	0.732	5.496	25.170	<u>10.679</u>	46.090
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	12:56:29	-0.013	0.002	0.009	<u>109.946%</u>	-0.000					
2	12:56:32	-0.005	0.002	0.012	<u>109.886%</u>	-0.000					
3	12:56:36	-0.016	0.002	0.020	106.366%	-0.000					
x		-0.011	0.002	0.014	<u>108.732%</u>	-0.000					
σ		0.006	0.000	0.005	<u>12.049%</u>	0.000					
%RSD		53.280	15.920	38.220	<u>1.885</u>	56.880					

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7/2/2019 1:03:40 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	13:03:43	0.013	0.004	-0.005	9.998	1.730	8.732	1.536	38.590	151.700	<u>1804000.000</u>
2	13:03:47	0.011	0.012	0.319	10.600	2.167	8.658	0.032	43.430	144.600	<u>1833000.000</u>
3	13:03:50	0.007	0.009	0.106	9.123	1.355	7.814	3.308	34.710	135.700	<u>1836000.000</u>
x		0.010	0.008	0.140	9.906	1.751	8.402	1.625	38.910	144.000	<u>1824000.000</u>
σ		0.003	0.004	0.165	0.741	0.406	0.510	1.640	4.370	8.033	<u>17980.000</u>
%RSD		30.500	52.230	117.500	7.479	23.210	6.071	100.900	11.230	5.578	<u>10.986</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	32.510	11.000	105.969%	107.784%	0.023	0.077	0.324	6.624	0.257	0.043
2	13:03:47	46.870	-1.919	105.215%	108.504%	-0.030	0.133	0.324	6.432	0.418	0.043
3	13:03:50	41.790	13.730	105.454%	106.657%	0.160	-0.015	0.327	7.397	0.968	0.041
x		40.390	7.602	105.546%	107.648%	0.051	0.065	0.325	6.818	0.547	0.042
σ		7.281	8.358	0.385%	0.931%	0.098	0.075	0.002	0.511	0.373	0.002
%RSD		18.030	109.900	0.365	0.865	192.100	115.000	0.466	7.491	68.070	3.859
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	0.007	0.259	0.038	2.334	104.794%	-0.096	-0.118	-0.044	102.817%	-0.005
2	13:03:47	0.008	0.336	0.022	1.926	106.063%	-0.146	0.047	-0.047	103.353%	-0.001
3	13:03:50	0.006	0.290	0.031	1.822	107.461%	-0.045	0.074	-0.049	103.182%	-0.005
x		0.007	0.295	0.030	2.027	106.106%	-0.096	0.001	-0.047	103.117%	-0.003
σ		0.001	0.039	0.008	0.271	1.334%	0.050	0.104	0.003	0.274%	0.002
%RSD		9.587	13.050	25.980	13.350	1.257	52.530	11250.000	5.770	0.266	63.580
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:03:43	0.058	-0.049	-0.043	-0.001	104.811%	42.490	0.055	-0.002	<u>103.782%</u>	0.020
2	13:03:47	0.044	-0.050	-0.037	0.002	105.077%	43.180	0.045	-0.006	<u>104.629%</u>	0.025
3	13:03:50	0.042	-0.036	-0.041	0.002	105.122%	42.540	0.050	0.003	<u>104.580%</u>	0.021
x		0.048	-0.045	-0.040	0.001	105.003%	42.740	0.050	-0.002	<u>104.330%</u>	0.022
σ		0.009	0.008	0.003	0.002	0.168%	0.383	0.005	0.004	<u>104.476%</u>	0.003
%RSD		18.350	16.990	8.283	202.400	0.160	0.895	9.407	241.100	<u>104.456</u>	12.620
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	13:03:43	-0.013	-0.001	0.019	105.588%	-0.001					
2	13:03:47	-0.011	0.001	0.018	106.230%	-0.001					
3	13:03:50	-0.008	-0.002	0.012	<u>110.143%</u>	-0.001					
x		-0.011	-0.001	0.016	<u>107.320%</u>	-0.001					
σ		0.002	0.002	0.004	<u>2.466%</u>	0.000					
%RSD		21.770	224.500	23.290	<u>2.298</u>	8.734					

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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	13:10:57	0.005	-0.001	-0.138	22.220	1.534	15.050	5.562	31.120	150.800	<u>1831000.000</u>
2	13:11:01	0.005	-0.001	-0.104	20.000	1.634	15.570	5.053	44.300	149.800	<u>1818000.000</u>
3	13:11:05	-0.000	0.004	-0.080	22.820	-0.643	16.920	3.878	32.160	168.700	<u>1834000.000</u>
x		0.003	0.001	-0.107	21.680	0.842	15.850	4.831	35.860	156.400	<u>1828000.000</u>
σ		0.003	0.003	0.029	1.486	1.287	0.963	0.864	7.329	10.670	<u>18739.000</u>
%RSD		86.790	303.800	27.440	6.855	152.900	6.078	17.870	20.440	6.818	<u>10.478</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:57	40.870	8.686	104.458%	107.332%	-0.111	0.074	0.347	7.343	1.050	0.040
2	13:11:01	34.890	0.744	105.195%	107.874%	0.077	0.031	0.322	7.366	1.257	0.041
3	13:11:05	39.680	-4.493	105.430%	107.386%	0.158	0.012	0.339	7.445	0.832	0.030
x		38.480	1.646	105.028%	107.531%	0.041	0.039	0.336	7.384	1.046	0.037
σ		3.165	6.636	0.507%	0.298%	0.138	0.032	0.013	0.053	0.212	0.006
%RSD		8.226	403.200	0.483	0.278	335.200	82.940	3.869	0.723	20.300	16.130
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:57	0.003	0.297	0.077	2.705	105.217%	-0.084	-0.034	-0.054	102.985%	0.110
2	13:11:01	0.008	0.286	0.090	2.542	107.438%	-0.111	-0.020	-0.055	103.142%	0.089
3	13:11:05	0.004	0.299	0.074	2.306	105.995%	-0.054	0.042	-0.055	103.598%	0.111
x		0.005	0.294	0.080	2.518	106.217%	-0.083	-0.004	-0.054	103.242%	0.103
σ		0.003	0.008	0.008	0.201	1.127%	0.029	0.041	0.001	0.318%	0.012
%RSD		50.320	2.567	10.280	7.968	1.061	34.550	1053.000	1.554	0.308	12.050
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:57	0.050	-0.060	-0.047	-0.001	104.800%	42.700	0.040	0.005	<u>103.482%</u>	0.016
2	13:11:01	0.047	-0.037	-0.043	0.000	104.693%	42.740	0.037	0.004	<u>103.561%</u>	0.017
3	13:11:05	0.038	-0.048	-0.032	0.000	105.014%	42.780	0.049	0.001	<u>104.510%</u>	0.019
x		0.045	-0.048	-0.041	-0.000	104.836%	42.740	0.042	0.003	<u>103.851%</u>	0.017
σ		0.006	0.011	0.008	0.001	0.163%	0.040	0.006	0.002	<u>105.72%</u>	0.001
%RSD		14.290	23.610	19.410	566.700	0.156	0.094	15.110	54.340	<u>105.51</u>	6.491
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	13:10:57	-0.001	-0.005	0.021	<u>109.447%</u>	-0.001					
2	13:11:01	-0.015	-0.004	0.014	<u>109.160%</u>	-0.001					
3	13:11:05	-0.008	-0.005	0.013	<u>109.801%</u>	-0.001					
x		-0.008	-0.005	0.016	<u>109.470%</u>	-0.001					
σ		0.007	0.000	0.004	<u>103.21%</u>	0.000					
%RSD		86.080	6.446	26.220	<u>102.93</u>	11.300					

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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	13:18:12	0.013	-0.014	-0.113	31.130	65.870	13.610	36.390	45.980	138.400	<u>1816000.000</u>
2	13:18:16	0.010	-0.005	0.064	30.900	70.810	13.460	41.030	31.710	156.400	<u>1818000.000</u>
3	13:18:20	0.003	-0.005	0.042	30.940	63.840	12.390	34.090	43.020	138.700	<u>1819000.000</u>
x		0.009	-0.008	-0.002	30.990	66.840	13.150	37.170	40.240	144.500	<u>1818000.000</u>
σ		0.005	0.005	0.097	0.119	3.583	0.669	3.534	7.527	10.340	<u>1243.000</u>
%RSD		59.760	64.060	4246.000	0.384	5.361	5.088	9.508	18.710	7.158	<u>0.068</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:12	45.440	294.000	104.192%	108.836%	0.248	0.061	0.387	7.673	1.314	0.082
2	13:18:16	47.640	281.700	104.837%	106.876%	-0.082	-0.004	0.378	7.929	0.976	0.065
3	13:18:20	47.130	301.300	103.578%	108.837%	0.004	0.143	0.386	7.443	0.693	0.082
x		46.740	292.300	104.202%	108.183%	0.057	0.067	0.384	7.682	0.994	0.076
σ		1.155	9.903	0.630%	1.132%	0.172	0.073	0.005	0.243	0.311	0.010
%RSD		2.471	3.388	0.604	1.046	302.800	110.200	1.287	3.165	31.280	13.180
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:12	0.011	0.432	0.148	4.542	105.674%	-0.128	-0.076	0.775	101.761%	0.002
2	13:18:16	0.012	0.427	0.135	4.412	105.873%	-0.035	-0.037	0.772	101.900%	-0.002
3	13:18:20	0.014	0.446	0.131	4.176	105.277%	-0.106	-0.067	0.748	101.849%	-0.004
x		0.012	0.435	0.138	4.376	105.608%	-0.090	-0.060	0.765	101.836%	-0.002
σ		0.001	0.010	0.009	0.186	0.304%	0.049	0.020	0.015	0.070%	0.003
%RSD		11.900	2.313	6.287	4.238	0.288	54.590	34.120	1.925	0.069	178.700
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:12	0.052	-0.040	-0.031	0.000	104.276%	43.340	0.033	0.149	<u>103.439%</u>	0.022
2	13:18:16	0.042	-0.045	-0.035	0.005	104.204%	43.710	0.031	0.151	<u>103.729%</u>	0.025
3	13:18:20	0.054	-0.052	-0.039	-0.001	103.358%	43.520	0.060	0.172	<u>103.320%</u>	0.020
x		0.049	-0.046	-0.035	0.001	103.946%	43.520	0.041	0.157	<u>103.496%</u>	0.022
σ		0.007	0.006	0.004	0.003	0.510%	0.185	0.016	0.013	<u>0.210%</u>	0.003
%RSD		13.270	13.380	11.660	228.600	0.491	0.424	38.730	8.258	<u>0.203</u>	12.740
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	13:18:12	-0.013	-0.005	0.030	104.824%	-0.001					
2	13:18:16	-0.021	-0.004	0.028	105.400%	-0.001					
3	13:18:20	-0.006	-0.006	0.023	<u>109.547%</u>	-0.001					
x		-0.013	-0.005	0.027	<u>106.591%</u>	-0.001					
σ		0.008	0.001	0.003	<u>2.577%</u>	0.000					
%RSD		57.070	17.320	12.440	<u>2.417</u>	13.400					

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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	13:25:27	-0.007	-0.023	-0.035	17.610	1.171	14.760	6.597	32.630	153.700	<u>1827000.000</u>
2	13:25:30	-0.000	-0.010	-0.006	19.140	1.410	14.640	5.604	39.910	150.600	<u>1786000.000</u>
3	13:25:34	-0.010	0.009	0.088	19.410	1.634	14.590	8.935	28.910	143.700	<u>1809000.000</u>
x		-0.006	-0.008	0.016	18.720	1.405	14.660	7.045	33.820	149.300	<u>1807000.000</u>
σ		0.005	0.016	0.064	0.973	0.232	0.089	1.710	5.597	5.166	<u>20760.000</u>
%RSD		89.070	200.100	411.600	5.199	16.490	0.605	24.270	16.550	3.459	<u>1.149</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:25:27	42.390	11.540	103.522%	106.869%	0.060	0.120	0.329	7.587	1.743	0.040
2	13:25:30	35.480	0.775	104.224%	107.910%	0.056	0.081	0.306	7.356	1.529	0.035
3	13:25:34	37.530	-1.906	105.192%	106.514%	-0.056	0.111	0.305	7.228	0.987	0.037
x		38.470	3.469	104.313%	107.097%	0.020	0.104	0.313	7.390	1.420	0.037
σ		3.547	7.115	0.839%	0.725%	0.066	0.021	0.013	0.182	0.390	0.003
%RSD		9.221	205.100	0.804	0.677	330.700	19.860	4.216	2.457	27.460	7.053
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:25:27	0.008	0.239	0.066	2.514	105.924%	-0.091	0.056	-0.062	102.015%	-0.001
2	13:25:30	0.006	0.228	0.042	2.273	106.137%	-0.126	-0.015	-0.048	101.735%	-0.002
3	13:25:34	0.014	0.267	0.046	1.796	106.538%	-0.062	-0.035	-0.049	102.724%	-0.002
x		0.010	0.245	0.051	2.194	106.200%	-0.093	0.002	-0.053	102.158%	-0.002
σ		0.004	0.020	0.013	0.365	0.312%	0.032	0.048	0.008	0.510%	0.000
%RSD		42.710	8.271	24.750	16.640	0.293	34.200	2380.000	14.810	0.499	20.500
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:25:27	0.041	-0.055	-0.042	-0.001	103.675%	43.200	0.047	0.001	<u>103.527%</u>	0.026
2	13:25:30	0.044	-0.062	-0.035	0.000	103.377%	42.740	0.047	0.001	<u>103.678%</u>	0.028
3	13:25:34	0.051	-0.042	-0.049	0.003	104.493%	42.920	0.043	0.000	<u>103.288%</u>	0.027
x		0.045	-0.053	-0.042	0.001	103.849%	42.950	0.045	0.000	<u>103.498%</u>	0.027
σ		0.005	0.010	0.007	0.002	0.578%	0.232	0.002	0.000	<u>0.196%</u>	0.001
%RSD		11.270	18.930	17.000	261.200	0.557	0.539	4.993	9.263	<u>0.190</u>	3.040
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	13:25:27	-0.005	-0.006	0.022	105.293%	-0.001					
2	13:25:30	-0.011	-0.007	0.015	105.594%	-0.001					
3	13:25:34	-0.014	-0.005	0.010	105.384%	-0.001					
x		-0.010	-0.006	0.016	105.424%	-0.001					
σ		0.004	0.001	0.006	0.154%	0.000					
%RSD		43.640	16.270	35.160	0.146	21.430					

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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	13:32:42	-0.001	-0.000	-0.167	15.410	2.129	11.920	8.458	27.520	149.800	<u>1822000.000</u>
2	13:32:46	-0.003	0.009	-0.069	16.290	2.149	13.100	4.329	45.710	141.600	<u>1778000.000</u>
3	13:32:49	0.000	-0.018	-0.155	16.440	0.737	12.780	8.667	30.430	158.900	<u>1821000.000</u>
x		-0.001	-0.003	-0.131	16.050	1.672	12.600	7.151	34.550	150.100	<u>1807000.000</u>
σ		0.002	0.014	0.054	0.556	0.810	0.611	2.447	9.771	8.644	<u>125550.000</u>
%RSD		111.100	425.600	41.050	3.465	48.430	4.852	34.210	28.280	5.758	<u>1.414</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:32:42	35.340	16.830	103.364%	106.193%	0.033	0.065	0.320	7.267	0.954	0.128
2	13:32:46	30.630	5.859	105.563%	106.332%	0.050	0.095	0.298	7.318	0.655	0.107
3	13:32:49	38.760	6.058	104.201%	107.036%	0.139	0.051	0.286	7.577	1.592	0.117
x		34.910	9.583	104.376%	106.520%	0.074	0.070	0.301	7.387	1.067	0.117
σ		4.082	6.279	1.110%	0.452%	0.057	0.023	0.017	0.167	0.478	0.010
%RSD		11.690	65.520	1.063	0.424	76.570	32.320	5.668	2.256	44.840	8.697
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:32:42	0.012	0.241	0.046	2.736	105.316%	-0.097	-0.011	-0.053	102.003%	-0.001
2	13:32:46	0.001	0.234	0.044	2.239	106.489%	-0.097	-0.078	-0.043	102.286%	0.004
3	13:32:49	0.006	0.259	0.053	1.919	107.319%	-0.101	0.004	-0.049	102.900%	0.003
x		0.007	0.245	0.047	2.298	106.375%	-0.098	-0.029	-0.049	102.396%	0.002
σ		0.006	0.013	0.005	0.412	1.006%	0.002	0.044	0.005	0.459%	0.003
%RSD		83.980	5.359	9.763	17.910	0.946	2.201	152.600	10.130	0.448	151.600
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:32:42	0.039	-0.053	-0.035	0.000	103.180%	42.920	0.023	-0.003	<u>103.864%</u>	0.016
2	13:32:46	0.041	-0.058	-0.036	-0.001	103.956%	43.140	0.053	-0.001	<u>103.266%</u>	0.012
3	13:32:49	0.036	-0.057	-0.041	0.000	104.330%	42.980	0.031	-0.008	<u>104.150%</u>	0.014
x		0.039	-0.056	-0.037	-0.000	103.822%	43.010	0.035	-0.004	<u>103.760%</u>	0.014
σ		0.002	0.003	0.003	0.001	0.587%	0.112	0.016	0.004	<u>10.451%</u>	0.002
%RSD		5.627	5.169	8.480	721.900	0.565	0.260	44.970	95.050	<u>10.435</u>	15.500
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	13:32:42	-0.012	-0.006	0.025	104.157%	-0.001					
2	13:32:46	-0.018	-0.006	0.017	104.886%	-0.001					
3	13:32:49	-0.007	-0.007	0.014	104.846%	-0.001					
x		-0.013	-0.006	0.019	104.630%	-0.001					
σ		0.005	0.001	0.006	0.410%	0.000					
%RSD		42.590	11.150	29.970	0.391	20.360					

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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	13:39:55	-0.010	-0.032	-0.091	17.100	0.225	13.290	7.006	35.330	158.600	<u>1808000.000</u>
2	13:39:59	-0.002	-0.001	-0.121	14.200	1.390	13.620	9.618	28.400	152.600	<u>1818000.000</u>
3	13:40:02	0.004	-0.005	-0.168	15.520	1.893	15.090	8.334	23.670	159.700	<u>1809000.000</u>
x		-0.003	-0.012	-0.126	15.610	1.169	14.000	8.319	29.130	157.000	<u>1812000.000</u>
σ		0.007	0.017	0.039	1.452	0.856	0.963	1.306	5.861	3.836	<u>15426.000</u>
%RSD		261.600	136.800	30.740	9.304	73.190	6.876	15.700	20.120	2.444	<u>10.299</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:39:55	34.830	6.069	103.400%	106.492%	0.060	0.015	0.446	7.652	1.730	0.060
2	13:39:59	37.990	8.587	104.661%	107.579%	0.055	0.030	0.422	7.516	1.274	0.074
3	13:40:02	32.430	8.551	105.354%	106.231%	0.053	0.075	0.452	7.325	1.405	0.073
x		35.080	7.736	104.472%	106.767%	0.056	0.040	0.440	7.498	1.470	0.069
σ		2.786	1.444	0.990%	0.715%	0.004	0.031	0.016	0.164	0.235	0.008
%RSD		7.941	18.660	0.948	0.670	7.129	78.070	3.629	2.189	15.970	11.150
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:39:55	0.009	0.271	0.026	2.814	105.313%	-0.128	-0.064	-0.033	100.704%	-0.011
2	13:39:59	0.006	0.278	0.008	2.147	106.665%	-0.115	-0.052	-0.042	101.776%	-0.007
3	13:40:02	0.005	0.236	0.026	2.043	105.450%	-0.115	-0.068	-0.053	102.243%	0.001
x		0.006	0.262	0.020	2.335	105.809%	-0.119	-0.061	-0.043	101.574%	-0.005
σ		0.002	0.022	0.010	0.418	0.744%	0.008	0.008	0.010	0.789%	0.006
%RSD		33.900	8.593	50.140	17.910	0.703	6.300	12.940	22.850	0.777	104.400
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:39:55	0.047	-0.057	-0.037	0.000	103.126%	42.310	0.037	0.007	<u>103.486%</u>	0.007
2	13:39:59	0.055	-0.048	-0.032	0.005	104.086%	42.590	0.038	0.004	<u>103.466%</u>	0.006
3	13:40:02	0.042	-0.054	-0.038	-0.001	103.970%	42.920	0.049	-0.004	<u>104.216%</u>	0.003
x		0.048	-0.053	-0.036	0.001	103.727%	42.610	0.041	0.002	<u>103.723%</u>	0.006
σ		0.007	0.005	0.003	0.003	0.524%	0.306	0.007	0.006	<u>10.427%</u>	0.002
%RSD		14.000	8.706	9.723	226.000	0.505	0.718	16.860	274.700	<u>10.412</u>	35.380
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	13:39:55	-0.010	-0.008	0.026	<u>110.043%</u>	-0.001					
2	13:39:59	-0.020	-0.008	0.018	104.359%	-0.001					
3	13:40:02	-0.018	-0.007	0.009	104.619%	-0.001					
x		-0.016	-0.007	0.018	<u>106.340%</u>	-0.001					
σ		0.005	0.001	0.008	<u>13.210%</u>	0.000					
%RSD		33.450	6.905	46.840	<u>13.018</u>	21.150					

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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	13:47:07	-0.008	-0.005	0.012	12.010	3.368	7.743	-1.246	36.410	142.400	<u>1832000.000</u>
2	13:47:11	-0.010	-0.018	-0.212	11.350	3.219	9.218	1.139	20.580	148.300	<u>1834000.000</u>
3	13:47:15	0.012	-0.005	-0.149	9.563	0.883	7.903	-0.571	28.020	133.600	<u>1827000.000</u>
x		-0.002	-0.009	-0.116	10.970	2.490	8.288	-0.226	28.340	141.400	<u>1831000.000</u>
σ		0.012	0.008	0.116	1.267	1.394	0.810	1.230	7.919	7.428	<u>13357.000</u>
%RSD		627.800	84.930	99.530	11.550	55.970	9.769	544.300	27.950	5.252	<u>10.183</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:47:07	35.170	-4.453	103.120%	106.166%	0.145	0.202	0.349	7.004	0.589	0.078
2	13:47:11	44.150	19.490	103.329%	106.708%	-0.105	0.019	0.325	7.724	0.850	0.089
3	13:47:15	42.380	16.680	103.917%	106.379%	0.141	0.074	0.314	7.473	1.069	0.104
x		40.570	10.570	103.455%	106.418%	0.060	0.098	0.329	7.400	0.836	0.091
σ		4.761	13.090	0.413%	0.273%	0.143	0.094	0.018	0.365	0.240	0.013
%RSD		11.740	123.800	0.399	0.256	237.000	95.200	5.403	4.938	28.730	14.350
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:47:07	0.013	0.267	0.100	2.551	104.700%	-0.041	-0.035	-0.052	101.254%	-0.002
2	13:47:11	0.009	0.295	0.125	2.140	104.902%	-0.070	0.004	-0.050	101.236%	0.003
3	13:47:15	0.008	0.294	0.084	1.833	104.717%	-0.077	0.045	-0.049	101.389%	-0.002
x		0.010	0.286	0.103	2.174	104.773%	-0.063	0.005	-0.050	101.293%	-0.000
σ		0.003	0.016	0.021	0.360	0.112%	0.019	0.040	0.001	0.084%	0.003
%RSD		29.480	5.575	20.170	16.560	0.107	30.390	800.500	2.444	0.083	764.000
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:47:07	0.048	-0.022	-0.035	-0.001	102.960%	43.030	0.030	0.041	<u>102.753%</u>	0.020
2	13:47:11	0.025	-0.046	-0.046	0.000	103.495%	42.950	0.033	0.033	<u>103.310%</u>	0.015
3	13:47:15	0.038	-0.040	-0.043	-0.001	102.870%	43.450	0.037	0.034	<u>103.069%</u>	0.012
x		0.037	-0.036	-0.041	-0.001	103.108%	43.140	0.034	0.036	<u>103.044%</u>	0.015
σ		0.012	0.012	0.005	0.001	0.338%	0.266	0.004	0.005	<u>103.279%</u>	0.004
%RSD		31.140	34.450	12.960	139.700	0.328	0.617	10.910	12.900	<u>103.271</u>	25.940
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	13:47:07	-0.010	-0.007	0.035	102.836%	-0.001					
2	13:47:11	-0.014	-0.007	0.027	104.011%	-0.001					
3	13:47:15	-0.016	-0.008	0.023	103.879%	-0.001					
x		-0.014	-0.007	0.028	103.575%	-0.001					
σ		0.003	0.000	0.006	0.643%	0.000					
%RSD		20.920	4.082	21.340	0.621	6.171					

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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	13:54:21	0.006	-0.018	-0.261	4.822	1.644	4.400	0.623	39.790	143.200	<u>1814000.000</u>
2	13:54:24	-0.001	0.005	0.181	4.615	0.880	3.964	-0.868	33.160	139.100	<u>1781000.000</u>
3	13:54:28	-0.005	0.003	0.108	4.766	3.257	5.735	0.254	39.330	150.800	<u>1833000.000</u>
x		-0.000	-0.003	0.009	4.734	1.927	4.700	0.003	37.430	144.400	<u>1809000.000</u>
σ		0.006	0.013	0.237	0.107	1.214	0.923	0.776	3.700	5.902	<u>26320.000</u>
%RSD		1880.000	385.500	2584.000	2.267	62.980	19.640	23740.000	9.885	4.088	<u>1.455</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:21	33.550	9.011	102.137%	105.540%	0.177	-0.025	0.295	7.644	1.018	0.083
2	13:54:24	32.920	-7.148	103.995%	105.398%	0.086	0.191	0.314	7.183	0.595	0.093
3	13:54:28	38.050	-1.754	102.721%	96.391%	0.119	0.041	0.300	7.414	1.202	0.086
x		34.840	0.036	102.951%	102.443%	0.127	0.069	0.303	7.414	0.939	0.087
σ		2.797	8.227	0.950%	5.242%	0.046	0.110	0.010	0.230	0.312	0.005
%RSD		8.027	22730.000	0.923	5.117	36.520	159.900	3.305	3.104	33.190	5.860
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:21	0.006	0.277	0.117	2.298	104.862%	-0.102	-0.018	-0.048	100.614%	0.001
2	13:54:24	0.008	0.315	0.111	1.676	103.862%	-0.185	-0.075	-0.047	101.134%	0.004
3	13:54:28	0.011	0.315	0.126	1.686	105.319%	-0.113	-0.073	-0.054	101.580%	0.000
x		0.008	0.302	0.118	1.887	104.681%	-0.133	-0.055	-0.049	101.109%	0.002
σ		0.002	0.022	0.008	0.356	0.745%	0.045	0.033	0.004	0.484%	0.002
%RSD		26.740	7.297	6.457	18.870	0.712	33.850	58.900	7.849	0.478	89.290
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:21	0.044	-0.030	-0.045	0.000	101.672%	43.240	0.042	0.011	<u>101.979%</u>	0.021
2	13:54:24	0.035	-0.021	-0.043	0.002	102.684%	42.550	0.042	-0.001	<u>103.237%</u>	0.024
3	13:54:28	0.050	-0.049	-0.037	-0.001	103.059%	42.500	0.027	0.008	<u>102.625%</u>	0.025
x		0.043	-0.033	-0.042	0.000	102.472%	42.760	0.037	0.006	<u>102.614%</u>	0.023
σ		0.008	0.014	0.004	0.001	0.717%	0.409	0.009	0.006	<u>0.629%</u>	0.002
%RSD		17.870	42.500	10.150	392.600	0.700	0.956	23.630	97.040	<u>0.613</u>	9.378
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	13:54:21	-0.009	-0.008	0.040	102.941%	-0.001					
2	13:54:24	-0.023	-0.008	0.037	103.295%	-0.001					
3	13:54:28	-0.025	-0.008	0.025	103.568%	-0.001					
x		-0.019	-0.008	0.034	103.268%	-0.001					
σ		0.009	0.000	0.008	0.314%	0.000					
%RSD		47.350	0.713	23.380	0.304	4.193					

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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	14:01:33	102.600	101.000	100.400	4932.000	4953.000	4984.000	4998.000	5001.000	124.100	<u>1788000.000</u>
2	14:01:37	103.100	101.400	101.200	4989.000	5079.000	5060.000	5122.000	5030.000	116.400	<u>1835000.000</u>
3	14:01:40	103.200	101.600	100.700	4959.000	4970.000	5080.000	5146.000	5180.000	137.300	<u>1843000.000</u>
x		103.000	101.300	100.800	4960.000	5001.000	5041.000	5089.000	5070.000	125.900	<u>1822000.000</u>
σ		0.353	0.296	0.391	28.970	68.260	50.820	79.780	96.010	10.600	<u>29420.000</u>
%RSD		0.343	0.292	0.388	0.584	1.365	1.008	1.568	1.894	8.417	<u>1.615</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:33	4784.000	5132.000	100.643%	101.593%	96.820	99.930	99.990	20.670	4857.000	98.200
2	14:01:37	4905.000	5187.000	99.467%	101.416%	97.160	100.300	100.600	18.880	4871.000	100.300
3	14:01:40	4937.000	5142.000	101.853%	101.468%	99.590	100.100	99.570	18.400	4884.000	100.200
x		4875.000	5154.000	100.655%	101.492%	97.860	100.100	100.100	19.320	4871.000	99.550
σ		80.800	28.970	1.193%	0.091%	1.511	0.165	0.534	1.198	13.550	1.168
%RSD		1.657	0.562	1.185	0.090	1.544	0.165	0.533	6.201	0.278	1.174
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:33	98.890	102.300	102.800	104.800	100.503%	103.200	100.100	100.300	97.503%	100.700
2	14:01:37	100.600	102.300	104.600	103.900	100.765%	103.400	101.900	100.200	98.171%	100.500
3	14:01:40	99.810	100.600	102.300	102.600	102.291%	102.800	102.000	100.300	100.031%	100.000
x		99.760	101.700	103.200	103.800	101.186%	103.100	101.300	100.300	98.568%	100.400
σ		0.839	0.973	1.238	1.079	0.965%	0.306	1.083	0.049	1.310%	0.366
%RSD		0.841	0.956	1.199	1.040	0.954	0.297	1.069	0.049	1.329	0.364
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:33	100.300	103.000	51.030	101.800	100.185%	100.900	101.100	98.270	<u>100.265%</u>	99.770
2	14:01:37	99.700	102.500	50.420	101.800	101.149%	100.700	101.200	98.420	<u>101.883%</u>	100.200
3	14:01:40	98.740	101.600	50.700	101.300	102.256%	99.810	100.300	98.910	<u>102.394%</u>	99.760
x		99.580	102.400	50.720	101.600	101.196%	100.500	100.900	98.530	<u>101.514%</u>	99.920
σ		0.792	0.690	0.302	0.275	1.036%	0.565	0.485	0.335	<u>1.112%</u>	0.278
%RSD		0.796	0.674	0.595	0.270	1.024	0.563	0.481	0.340	<u>1.095</u>	0.279
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	14:01:33	4.896	95.980	99.180	103.335%	<u>100.500</u>					
2	14:01:37	4.962	96.600	99.450	103.174%	<u>100.100</u>					
3	14:01:40	4.771	95.740	99.810	103.741%	<u>100.600</u>					
x		4.876	96.100	99.480	103.416%	<u>100.400</u>					
σ		0.097	0.443	0.313	0.293%	<u>0.261</u>					
%RSD		1.984	0.461	0.315	0.283	<u>0.260</u>					

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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	14:08:49	0.015	0.031	0.087	-1.459	-0.593	-0.621	-4.313	-1.026	136.300	<u>1719000.000</u>
2	14:08:53	0.004	0.012	-0.023	-1.331	-0.064	-0.662	-2.528	-1.539	130.200	<u>1739000.000</u>
3	14:08:57	0.033	-0.003	-0.122	-1.101	0.272	-0.220	-2.772	-0.029	145.800	<u>1743000.000</u>
x		0.018	0.013	-0.019	-1.297	-0.129	-0.501	-3.205	-0.865	137.400	<u>1734000.000</u>
σ		0.015	0.017	0.105	0.182	0.436	0.244	0.968	0.768	7.885	<u>12720.000</u>
%RSD		83.630	126.100	543.200	14.000	339.100	48.720	30.200	88.790	5.738	<u>0.734</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:49	-14.290	-4.569	98.316%	99.694%	-0.059	-0.084	-0.003	5.353	-0.037	-0.004
2	14:08:53	-8.250	-4.656	99.615%	100.077%	-0.034	-0.083	-0.007	6.157	0.017	-0.004
3	14:08:57	-11.350	9.372	98.117%	99.448%	0.118	-0.137	-0.023	6.590	-0.103	0.005
x		-11.300	0.049	98.683%	99.740%	0.008	-0.101	-0.011	6.034	-0.041	-0.001
σ		3.021	8.074	0.814%	0.317%	0.095	0.031	0.011	0.628	0.060	0.005
%RSD		26.740	16470.000	0.825	0.318	1141.000	30.660	94.240	10.400	147.100	507.400
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:49	0.003	0.024	-0.035	1.262	97.197%	-0.069	-0.007	-0.012	97.603%	0.005
2	14:08:53	0.005	-0.004	-0.048	0.848	99.049%	-0.078	0.017	-0.004	98.802%	-0.008
3	14:08:57	0.000	0.025	-0.047	0.625	96.192%	-0.055	-0.016	0.001	97.295%	0.009
x		0.003	0.015	-0.043	0.912	97.480%	-0.067	-0.002	-0.005	97.900%	0.002
σ		0.002	0.016	0.007	0.323	1.449%	0.012	0.017	0.007	0.796%	0.009
%RSD		90.830	109.800	16.860	35.460	1.486	17.210	804.500	125.900	0.813	417.800
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:49	-0.012	-0.062	-0.039	0.004	97.389%	-0.111	-0.003	0.003	<u>100.798%</u>	0.002
2	14:08:53	-0.009	-0.042	-0.037	-0.001	99.327%	-0.113	-0.006	-0.005	<u>102.281%</u>	-0.006
3	14:08:57	-0.008	-0.048	-0.029	0.000	98.302%	-0.119	-0.009	0.011	<u>101.314%</u>	-0.006
x		-0.010	-0.051	-0.035	0.001	98.339%	-0.114	-0.006	0.003	<u>101.464%</u>	-0.003
σ		0.002	0.010	0.005	0.002	0.970%	0.004	0.003	0.008	<u>0.753%</u>	0.005
%RSD		22.590	20.630	15.500	240.000	0.986	3.764	52.550	260.500	<u>0.742</u>	139.500
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	14:08:49	-0.003	0.021	0.025	101.895%	0.003					
2	14:08:53	-0.023	0.017	0.018	103.115%	0.003					
3	14:08:57	-0.010	0.016	0.010	102.272%	0.001					
x		-0.012	0.018	0.018	102.428%	0.002					
σ		0.010	0.003	0.008	0.625%	0.001					
%RSD		84.370	16.960	42.980	0.610	49.770					

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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	14:16:01	-0.002	-0.013	0.055	17.960	1.829	15.530	7.347	27.200	130.800	<u>1787000.000</u>
2	14:16:05	0.012	-0.008	-0.421	17.530	0.925	14.420	6.279	41.850	135.100	<u>1797000.000</u>
3	14:16:08	-0.019	-0.008	0.129	17.030	1.674	14.660	1.393	31.410	134.100	<u>1777000.000</u>
x		-0.003	-0.010	-0.079	17.510	1.476	14.870	5.006	33.490	133.300	<u>1787000.000</u>
σ		0.016	0.003	0.298	0.463	0.484	0.585	3.175	7.545	2.237	<u>10380.000</u>
%RSD		522.400	28.730	378.600	2.642	32.760	3.931	63.410	22.530	1.678	<u>0.581</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:16:01	30.710	6.460	101.192%	102.379%	0.270	-0.024	0.288	6.014	1.460	0.075
2	14:16:05	34.590	6.663	99.571%	102.445%	0.106	-0.018	0.280	6.120	1.794	0.065
3	14:16:08	29.750	3.735	101.526%	101.412%	0.351	0.101	0.301	5.813	1.502	0.069
x		31.680	5.619	100.763%	102.078%	0.242	0.020	0.290	5.982	1.585	0.070
σ		2.562	1.635	1.046%	0.579%	0.125	0.070	0.011	0.156	0.182	0.005
%RSD		8.088	29.090	1.038	0.567	51.490	355.000	3.734	2.610	11.470	6.796
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:16:01	0.007	0.285	0.084	3.536	101.366%	-0.120	-0.049	-0.050	99.588%	-0.002
2	14:16:05	0.015	0.292	0.091	2.948	101.849%	-0.102	-0.024	-0.048	99.280%	0.007
3	14:16:08	0.002	0.281	0.066	2.462	102.317%	-0.104	-0.037	-0.055	99.500%	-0.004
x		0.008	0.286	0.080	2.982	101.844%	-0.109	-0.037	-0.051	99.456%	0.000
σ		0.006	0.006	0.013	0.537	0.476%	0.010	0.013	0.003	0.159%	0.006
%RSD		77.300	1.941	16.300	18.030	0.467	9.388	34.960	6.752	0.159	1836.000
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:16:01	0.053	-0.031	-0.048	0.000	102.707%	41.890	0.025	-0.014	<u>101.837%</u>	0.011
2	14:16:05	0.058	-0.064	-0.041	-0.001	100.597%	42.590	0.032	-0.012	<u>101.110%</u>	0.009
3	14:16:08	0.029	-0.044	-0.035	-0.001	102.537%	42.010	0.029	-0.004	<u>101.887%</u>	0.010
x		0.047	-0.046	-0.041	-0.001	101.947%	42.160	0.029	-0.010	<u>101.611%</u>	0.010
σ		0.015	0.016	0.007	0.001	1.172%	0.375	0.004	0.005	<u>0.435%</u>	0.001
%RSD		33.070	35.360	16.510	139.500	1.150	0.890	13.880	52.480	<u>0.428</u>	8.424
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	14:16:01	-0.012	-0.003	0.030	102.680%	0.000					
2	14:16:05	-0.003	-0.000	0.023	102.561%	0.000					
3	14:16:08	-0.018	0.000	0.014	103.255%	0.000					
x		-0.011	-0.001	0.022	102.832%	0.000					
σ		0.007	0.001	0.008	0.371%	0.000					
%RSD		67.240	141.700	36.050	0.361	75.600					

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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	14:23:14	0.010	-0.008	0.158	21.770	65.550	6.832	31.870	34.720	147.900	<u>1775000.000</u>
2	14:23:18	-0.009	0.005	-0.247	22.520	67.120	5.639	34.450	37.290	144.000	<u>1773000.000</u>
3	14:23:22	-0.012	0.015	-0.405	23.010	66.470	5.601	38.490	24.080	144.600	<u>1789000.000</u>
x		-0.004	0.004	-0.164	22.430	66.380	6.024	34.940	32.030	145.500	<u>1779000.000</u>
σ		0.012	0.011	0.290	0.622	0.792	0.700	3.337	7.002	2.068	<u>8712.000</u>
%RSD		326.600	291.200	176.600	2.774	1.194	11.620	9.550	21.860	1.421	<u>0.490</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:23:14	38.620	328.500	101.834%	102.405%	1.137	-0.164	0.325	7.100	0.623	0.076
2	14:23:18	36.670	281.900	101.948%	103.791%	0.039	0.007	0.313	6.190	0.378	0.077
3	14:23:22	36.060	290.400	101.895%	103.088%	0.096	0.092	0.345	6.437	0.799	0.062
x		37.120	300.200	101.892%	103.094%	0.424	-0.022	0.327	6.576	0.600	0.072
σ		1.337	24.810	0.057%	0.693%	0.618	0.130	0.016	0.471	0.212	0.008
%RSD		3.602	8.264	0.056	0.672	145.900	595.800	4.852	7.158	35.230	11.810
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:23:14	0.014	0.676	0.037	4.907	101.880%	-0.127	-0.026	0.716	99.979%	-0.001
2	14:23:18	0.008	0.659	0.014	4.323	103.899%	-0.113	-0.036	0.778	99.717%	-0.007
3	14:23:22	0.013	0.670	0.024	3.978	104.104%	-0.166	-0.011	0.722	100.687%	0.002
x		0.012	0.669	0.025	4.403	103.294%	-0.135	-0.024	0.739	100.127%	-0.002
σ		0.003	0.009	0.012	0.470	1.229%	0.027	0.013	0.034	0.502%	0.005
%RSD		28.900	1.293	45.440	10.660	1.190	20.360	52.870	4.640	0.501	219.900
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:23:14	0.040	-0.047	-0.039	0.000	101.688%	44.010	0.014	0.146	<u>101.201%</u>	0.009
2	14:23:18	0.032	-0.037	-0.039	-0.001	101.650%	44.220	0.032	0.132	<u>101.711%</u>	0.018
3	14:23:22	0.054	-0.046	-0.040	0.000	102.536%	43.850	0.017	0.152	<u>102.181%</u>	0.010
x		0.042	-0.043	-0.039	-0.000	101.958%	44.020	0.021	0.143	<u>101.698%</u>	0.013
σ		0.011	0.006	0.001	0.001	0.501%	0.186	0.010	0.011	<u>0.490%</u>	0.005
%RSD		26.330	13.400	2.265	787.000	0.491	0.423	46.730	7.330	<u>0.482</u>	40.060
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	14:23:14	-0.014	-0.004	0.042	103.424%	-0.001					
2	14:23:18	-0.016	-0.005	0.029	104.219%	-0.000					
3	14:23:22	-0.018	-0.005	0.025	<u>109.084%</u>	-0.001					
x		-0.016	-0.005	0.032	<u>105.576%</u>	-0.001					
σ		0.002	0.000	0.009	<u>3.064%</u>	0.000					
%RSD		12.760	8.612	27.010	<u>2.902</u>	34.020					

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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	14:30:27	-0.018	0.001	0.044	12.020	0.394	9.075	2.523	25.480	131.800	<u>1745000.000</u>
2	14:30:31	-0.003	-0.004	-0.155	11.670	0.713	11.470	5.353	37.760	144.900	<u>1789000.000</u>
3	14:30:35	0.002	-0.004	-0.216	12.450	2.067	10.620	4.852	32.880	150.300	<u>1778000.000</u>
x		-0.006	-0.003	-0.109	12.050	1.058	10.390	4.242	32.040	142.300	<u>1771000.000</u>
σ		0.011	0.003	0.136	0.391	0.889	1.214	1.510	6.185	9.541	<u>22560.000</u>
%RSD		176.600	113.500	124.300	3.242	83.980	11.690	35.600	19.300	6.703	<u>1.274</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:30:27	18.270	3.598	102.470%	103.379%	-0.074	0.103	0.286	6.394	2.228	0.063
2	14:30:31	34.110	3.724	101.329%	104.900%	0.126	0.135	0.280	6.400	2.706	0.067
3	14:30:35	27.910	14.470	101.938%	104.892%	0.207	-0.076	0.300	7.097	2.590	0.047
x		26.760	7.263	101.912%	104.390%	0.086	0.054	0.288	6.630	2.508	0.059
σ		7.980	6.240	0.571%	0.876%	0.145	0.114	0.010	0.404	0.249	0.011
%RSD		29.820	85.910	0.560	0.839	168.200	210.700	3.599	6.098	9.927	18.560
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:30:27	0.006	0.280	0.121	3.013	103.720%	-0.115	-0.106	-0.048	99.705%	0.000
2	14:30:31	0.009	0.284	0.110	2.497	103.442%	-0.132	-0.087	-0.050	100.621%	0.001
3	14:30:35	0.006	0.283	0.111	2.141	105.268%	-0.126	-0.032	-0.053	100.712%	-0.002
x		0.007	0.283	0.114	2.550	104.143%	-0.124	-0.075	-0.051	100.346%	-0.000
σ		0.002	0.002	0.006	0.438	0.984%	0.008	0.038	0.002	0.557%	0.002
%RSD		25.170	0.723	5.220	17.180	0.945	6.673	51.130	4.542	0.555	2740.000
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:30:27	0.050	-0.048	-0.038	0.000	102.092%	41.270	0.024	0.007	<u>102.205%</u>	0.012
2	14:30:31	0.040	-0.051	-0.042	0.002	102.410%	41.500	0.026	0.022	<u>102.263%</u>	0.017
3	14:30:35	0.043	-0.033	-0.037	-0.001	102.533%	42.160	0.037	0.026	<u>102.585%</u>	0.022
x		0.044	-0.044	-0.039	0.000	102.345%	41.640	0.029	0.018	<u>102.351%</u>	0.017
σ		0.005	0.009	0.002	0.001	0.228%	0.464	0.007	0.010	<u>0.205%</u>	0.005
%RSD		10.980	21.450	5.620	387.800	0.222	1.114	24.140	55.070	<u>0.200</u>	27.880
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	14:30:27	-0.012	-0.006	0.056	103.247%	-0.001					
2	14:30:31	-0.020	-0.007	0.046	103.262%	-0.001					
3	14:30:35	-0.016	-0.007	0.039	103.363%	-0.001					
x		-0.016	-0.007	0.047	103.291%	-0.001					
σ		0.004	0.001	0.008	0.063%	0.000					
%RSD		22.710	10.220	17.790	0.061	32.200					

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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	14:37:41	-0.007	-0.011	1.459	5311.000	3287.000	12.690	30.490	<u>M 26270.000</u>	1993.000	<u>T 1827000.000</u>
2	14:37:44	-0.005	-0.015	1.469	5255.000	3258.000	14.900	31.850	<u>M 26130.000</u>	1936.000	<u>T 1833000.000</u>
3	14:37:48	0.000	-0.006	1.484	5358.000	3337.000	13.380	35.200	<u>M 26660.000</u>	1943.000	<u>T 1842000.000</u>
X		-0.004	-0.011	1.471	5308.000	3294.000	13.660	32.520	<u>M 26350.000</u>	1957.000	<u>T 1834000.000</u>
σ		0.004	0.005	0.012	51.600	39.850	1.130	2.423	<u>M 272.100</u>	30.870	<u>T 7254.000</u>
%RSD		93.540	41.860	0.846	0.972	1.210	8.271	7.450	<u>M 1.033</u>	1.577	<u>T 0.396</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:41	<u>T M 41060.000</u>	436.300	101.383%	113.784%	-0.238	0.008	1.313	7.132	51.350	1.187
2	14:37:44	<u>T M 40910.000</u>	476.900	102.525%	114.991%	-0.471	0.089	1.349	6.413	52.850	1.288
3	14:37:48	<u>T M 41420.000</u>	456.100	101.813%	111.910%	-0.293	-0.033	1.338	7.042	52.330	1.291
X		<u>T M 41130.000</u>	456.400	101.907%	113.562%	-0.334	0.021	1.334	6.862	52.180	1.255
σ		<u>T M 263.700</u>	20.310	0.577%	1.552%	0.122	0.062	0.018	0.392	0.765	0.059
%RSD		<u>T M 0.641</u>	4.449	0.566	1.367	36.480	291.600	1.379	5.714	1.466	4.723
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:41	0.014	0.825	3.557	80.070	103.525%	-0.112	1.715	0.178	101.995%	0.004
2	14:37:44	0.016	0.815	3.505	78.910	104.712%	-0.108	1.888	0.187	101.819%	-0.004
3	14:37:48	0.022	0.834	3.515	79.890	105.476%	-0.072	1.813	0.166	103.264%	0.008
X		0.017	0.825	3.526	79.620	104.571%	-0.097	1.805	0.177	102.359%	0.003
σ		0.004	0.010	0.028	0.622	0.983%	0.022	0.087	0.010	0.789%	0.006
%RSD		22.380	1.176	0.789	0.781	0.940	22.830	4.797	5.868	0.770	219.900
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:41	0.368	-0.027	-0.035	0.005	102.176%	41.930	0.148	0.065	<u>T 104.736%</u>	0.006
2	14:37:44	0.327	-0.034	-0.045	0.006	104.374%	41.730	0.149	0.067	<u>T 106.136%</u>	0.005
3	14:37:48	0.358	-0.037	-0.034	0.003	103.962%	42.440	0.157	0.070	<u>T 107.076%</u>	-0.000
X		0.351	-0.033	-0.038	0.005	103.504%	42.030	0.152	0.067	<u>T 105.983%</u>	0.004
σ		0.021	0.005	0.006	0.001	1.168%	0.364	0.005	0.003	<u>T 1.177%</u>	0.003
%RSD		6.084	16.680	16.430	31.560	1.129	0.866	3.151	3.954	<u>T 1.111</u>	93.260
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	14:37:41	-0.011	-0.005	0.066	105.674%	-0.000					
2	14:37:44	-0.007	-0.005	0.046	<u>T 111.877%</u>	-0.000					
3	14:37:48	-0.010	-0.004	0.038	<u>T 113.340%</u>	0.000					
X		-0.009	-0.004	0.050	<u>T 110.297%</u>	-0.000					
σ		0.002	0.000	0.014	<u>T 4.070%</u>	0.000					
%RSD		24.280	7.581	28.650	<u>T 3.690</u>	387.100					

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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	14:44:52	50.370	49.550	99.180	<u>16200.000</u>	14120.000	2724.000	301.800	<u>32100.000</u>	1926.000	<u>1873000.000</u>
2	14:44:56	50.420	50.960	101.700	<u>16440.000</u>	14140.000	2741.000	306.900	<u>32490.000</u>	1886.000	<u>1877000.000</u>
3	14:45:00	50.800	50.510	102.900	<u>16220.000</u>	14080.000	2710.000	312.400	<u>32300.000</u>	1903.000	<u>1870000.000</u>
x		50.530	50.340	101.300	<u>16290.000</u>	14110.000	2725.000	307.000	<u>32300.000</u>	1905.000	<u>1873000.000</u>
σ		0.234	0.720	1.905	<u>134.900</u>	33.200	15.400	5.294	<u>196.000</u>	19.770	<u>3946.000</u>
%RSD		0.462	1.430	1.881	<u>0.828</u>	0.235	0.565	1.724	<u>0.607</u>	1.038	<u>0.211</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:52	<u>102700.000</u>	3067.000	108.382%	114.079%	53.430	52.940	52.440	15.550	2608.000	52.460
2	14:44:56	<u>103000.000</u>	3113.000	108.201%	113.935%	54.840	52.440	52.530	16.360	2636.000	52.990
3	14:45:00	<u>103100.000</u>	3169.000	109.020%	113.413%	54.500	53.050	52.070	15.120	2634.000	52.680
x		<u>103000.000</u>	3117.000	108.534%	113.809%	54.250	52.810	52.350	15.680	2626.000	52.710
σ		<u>204.300</u>	51.360	0.430%	0.350%	0.735	0.322	0.247	0.628	15.610	0.269
%RSD		<u>0.198</u>	1.648	0.396	0.308	1.354	0.609	0.472	4.006	0.595	0.510
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:52	51.610	52.790	56.820	300.600	108.383%	54.390	58.830	51.170	107.637%	13.210
2	14:44:56	51.570	51.940	55.620	299.200	110.704%	54.060	58.910	51.110	109.294%	13.070
3	14:45:00	51.460	52.290	55.790	299.200	111.439%	54.140	59.580	50.740	109.528%	13.250
x		51.550	52.340	56.080	299.700	110.176%	54.200	59.110	51.000	108.820%	13.180
σ		0.077	0.426	0.653	0.809	1.595%	0.173	0.414	0.230	1.031%	0.093
%RSD		0.149	0.813	1.164	0.270	1.448	0.319	0.700	0.451	0.947	0.703
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:52	50.220	-0.012	26.310	53.230	108.375%	78.350	54.860	50.420	<u>109.611%</u>	0.055
2	14:44:56	49.890	-0.043	26.190	52.610	108.183%	79.040	55.290	51.190	<u>110.861%</u>	0.049
3	14:45:00	50.260	-0.019	26.110	52.410	109.141%	79.480	54.780	50.290	<u>111.460%</u>	0.056
x		50.120	-0.025	26.200	52.750	108.566%	78.960	54.980	50.630	<u>110.644%</u>	0.053
σ		0.205	0.017	0.102	0.430	0.507%	0.569	0.270	0.486	<u>0.943%</u>	0.004
%RSD		0.409	66.850	0.387	0.816	0.467	0.721	0.492	0.960	<u>0.853</u>	7.014
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	14:44:52	0.469	49.060	50.820	106.954%	53.350					
2	14:44:56	0.398	47.510	48.730	<u>112.451%</u>	51.520					
3	14:45:00	0.487	47.960	49.470	<u>111.440%</u>	51.830					
x		0.451	48.180	49.670	<u>110.282%</u>	52.230					
σ		0.047	0.798	1.059	<u>2.926%</u>	0.980					
%RSD		10.490	1.656	2.131	<u>2.653</u>	1.876					

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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	14:52:05	52.520	52.010	101.600	<u>16330.000</u>	14240.000	2752.000	308.400	<u>32050.000</u>	1887.000	<u>1901000.000</u>
2	14:52:09	51.860	51.800	103.200	<u>16710.000</u>	14440.000	2782.000	318.000	<u>32300.000</u>	1955.000	<u>1914000.000</u>
3	14:52:13	51.880	51.140	104.000	<u>16300.000</u>	14040.000	2703.000	312.500	<u>32130.000</u>	1941.000	<u>1878000.000</u>
X		52.090	51.650	102.900	<u>16450.000</u>	14240.000	2745.000	313.000	<u>32160.000</u>	1928.000	<u>1898000.000</u>
σ		0.375	0.453	1.222	<u>231.300</u>	198.000	39.890	4.796	<u>125.700</u>	36.130	<u>18210.000</u>
%RSD		0.721	0.877	1.187	<u>1.406</u>	1.390	1.453	1.532	<u>0.391</u>	1.874	<u>0.960</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:52:05	<u>TM 102900.000</u>	3071.000	106.857%	113.840%	54.760	53.790	53.370	14.320	2663.000	53.020
2	14:52:09	<u>TM 103900.000</u>	3149.000	106.301%	114.607%	52.260	53.670	53.460	15.820	2668.000	53.110
3	14:52:13	<u>TM 102300.000</u>	3135.000	107.728%	114.862%	53.860	53.650	52.900	15.480	2639.000	52.860
X		<u>TM 103000.000</u>	3118.000	106.962%	114.436%	53.630	53.700	53.250	15.210	2656.000	53.000
σ		<u>TM 807.500</u>	41.370	0.719%	0.532%	1.264	0.073	0.298	0.785	15.470	0.127
%RSD		<u>TM 0.784</u>	1.327	0.673	0.465	2.357	0.135	0.561	5.164	0.582	0.239
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:52:05	51.910	53.400	57.400	300.900	108.938%	54.620	59.570	51.850	107.433%	11.020
2	14:52:09	52.030	53.270	57.110	300.200	110.040%	54.300	59.770	51.550	107.341%	11.180
3	14:52:13	51.960	52.460	57.460	300.200	109.464%	53.970	58.640	51.390	107.801%	10.780
X		51.970	53.040	57.320	300.400	109.481%	54.300	59.330	51.600	107.525%	11.000
σ		0.061	0.511	0.185	0.405	0.551%	0.326	0.602	0.236	0.243%	0.199
%RSD		0.117	0.964	0.323	0.135	0.503	0.600	1.014	0.458	0.226	1.813
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:52:05	50.040	-0.053	26.440	53.340	106.949%	79.270	55.270	51.410	<u>109.552%</u>	0.010
2	14:52:09	50.630	-0.036	26.340	53.100	108.831%	79.300	55.340	51.180	<u>110.644%</u>	0.014
3	14:52:13	50.410	-0.045	26.320	53.350	108.465%	79.220	55.350	51.160	<u>110.215%</u>	0.019
X		50.360	-0.045	26.370	53.260	108.082%	79.260	55.320	51.250	<u>110.137%</u>	0.014
σ		0.294	0.008	0.061	0.145	0.998%	0.039	0.043	0.140	<u>0.550%</u>	0.004
%RSD		0.584	18.800	0.232	0.273	0.923	0.049	0.077	0.274	<u>0.500</u>	28.350
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	14:52:05	0.415	49.840	51.590	107.538%	54.160					
2	14:52:09	0.316	47.780	49.690	<u>112.569%</u>	52.450					
3	14:52:13	0.367	48.340	50.210	<u>111.707%</u>	52.720					
X		0.366	48.650	50.500	<u>110.605%</u>	53.110					
σ		0.049	1.063	0.980	<u>2.691%</u>	0.915					
%RSD		13.470	2.186	1.940	<u>2.433</u>	1.722					

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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	14:59:19	1.577	0.020	15.530	<u>TM 103900.000</u>	5786.000	44.860	112.900	<u>M 59570.000</u>	5659.000	<u>T 1850000.000</u>
2	14:59:23	1.566	0.034	16.130	<u>TM 104300.000</u>	5799.000	46.290	115.000	<u>M 60270.000</u>	5760.000	<u>T 1849000.000</u>
3	14:59:26	1.483	0.057	15.610	<u>TM 102600.000</u>	5740.000	46.330	110.000	<u>M 59150.000</u>	5553.000	<u>T 1822000.000</u>
X		1.542	0.037	15.760	<u>TM 103600.000</u>	5775.000	45.830	112.600	<u>M 59660.000</u>	5658.000	<u>T 1840000.000</u>
σ		0.052	0.019	0.324	<u>TM 923.100</u>	31.080	0.837	2.495	<u>M 563.500</u>	103.500	<u>T 16060.000</u>
%RSD		3.342	51.230	2.053	<u>TM 0.891</u>	0.538	1.826	2.215	<u>M 0.945</u>	1.829	<u>T 0.872</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:59:19	<u>TM 73620.000</u>	12980.000	92.535%	102.375%	2.747	46.500	5.356	6.726	828.100	73.960
2	14:59:23	<u>TM 73730.000</u>	13080.000	92.295%	102.511%	2.232	46.610	5.329	6.687	843.700	74.210
3	14:59:26	<u>TM 72490.000</u>	12800.000	93.347%	102.249%	2.962	46.220	5.322	6.235	835.600	73.200
X		<u>TM 73280.000</u>	12950.000	92.726%	102.379%	2.647	46.440	5.336	6.549	835.800	73.790
σ		<u>TM 687.600</u>	144.600	0.552%	0.131%	0.375	0.199	0.018	0.273	7.799	0.525
%RSD		<u>TM 0.938</u>	1.116	0.595	0.128	14.160	0.429	0.342	4.164	0.933	0.711
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:59:19	5.458	23.150	<u>TM 2452.000</u>	<u>M 716.500</u>	98.020%	342.200	57.520	160.800	102.388%	0.206
2	14:59:23	5.377	23.700	<u>TM 2443.000</u>	<u>M 716.200</u>	98.133%	344.100	57.570	160.300	102.020%	0.226
3	14:59:26	5.330	23.400	<u>TM 2444.000</u>	<u>M 715.300</u>	97.934%	343.400	59.010	162.200	102.525%	0.202
X		5.388	23.410	<u>TM 2446.000</u>	<u>M 716.000</u>	98.029%	343.300	58.030	161.100	102.311%	0.211
σ		0.065	0.277	<u>TM 5.124</u>	<u>M 0.646</u>	0.100%	0.963	0.845	0.971	0.261%	0.013
%RSD		1.203	1.184	<u>TM 0.210</u>	<u>M 0.090</u>	0.102	0.281	1.456	0.602	0.255	6.305
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:59:19	15.780	-0.031	45.790	206.400	99.940%	21.400	0.367	1.126	<u>T 104.776%</u>	0.042
2	14:59:23	15.860	-0.012	46.000	207.100	99.657%	21.680	0.358	1.158	<u>T 104.507%</u>	0.042
3	14:59:26	15.990	-0.042	45.510	204.600	100.404%	21.790	0.360	1.151	<u>T 104.769%</u>	0.036
X		15.880	-0.028	45.770	206.100	100.000%	21.620	0.362	1.145	<u>T 104.684%</u>	0.040
σ		0.104	0.015	0.246	1.276	0.377%	0.198	0.005	0.017	<u>T 0.153%</u>	0.004
%RSD		0.654	54.320	0.537	0.619	0.377	0.914	1.338	1.471	<u>T 0.147</u>	8.836
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	14:59:19	1.160	0.074	1.066	102.522%	0.565					
2	14:59:23	1.092	0.074	1.048	103.209%	0.580					
3	14:59:26	1.225	0.066	1.058	102.819%	0.574					
X		1.159	0.071	1.057	102.850%	0.573					
σ		0.067	0.005	0.009	0.345%	0.008					
%RSD		5.740	6.503	0.881	0.335	1.330					

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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	15:06:33	2.859	0.089	27.000	<u>TM 220100.000</u>	12170.000	89.190	229.800	<u>M 130200.000</u>	12150.000	<u>T 2005000.000</u>
2	15:06:37	2.697	0.083	28.710	<u>TM 220600.000</u>	12160.000	86.860	217.200	<u>M 129600.000</u>	12330.000	<u>T 2006000.000</u>
3	15:06:41	2.801	0.036	28.110	<u>TM 224000.000</u>	12410.000	92.740	237.400	<u>M 133500.000</u>	12540.000	<u>T 2054000.000</u>
X		2.786	0.069	27.940	<u>TM 221600.000</u>	12250.000	89.600	228.100	<u>M 131100.000</u>	12340.000	<u>T 2022000.000</u>
σ		0.082	0.029	0.867	<u>TM 2087.000</u>	142.100	2.960	10.210	<u>M 2078.000</u>	195.000	<u>T 28190.000</u>
%RSD		2.957	41.670	3.103	<u>TM 0.942</u>	1.160	3.304	4.476	<u>M 1.585</u>	1.580	<u>T 1.394</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:06:33	<u>TM 155900.000</u>	<u>M 26220.000</u>	87.522%	99.148%	7.057	97.080	10.910	6.657	1732.000	152.700
2	15:06:37	<u>TM 157000.000</u>	<u>M 26960.000</u>	88.871%	100.208%	4.987	97.810	10.900	5.532	1734.000	151.600
3	15:06:41	<u>TM 160400.000</u>	<u>M 28210.000</u>	87.381%	98.994%	5.602	98.590	11.190	6.824	1762.000	155.600
X		<u>TM 157800.000</u>	<u>M 27130.000</u>	87.925%	99.450%	5.882	97.820	11.000	6.338	1743.000	153.300
σ		<u>TM 2347.000</u>	<u>M 1008.000</u>	0.822%	0.661%	1.063	0.756	0.163	0.703	16.900	2.066
%RSD		<u>TM 1.488</u>	<u>M 3.714</u>	0.935	0.665	18.080	0.773	1.485	11.090	0.970	1.348
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:06:33	10.960	47.510	<u>TM 4939.000</u>	<u>M 1446.000</u>	98.873%	<u>M 725.100</u>	126.200	304.800	108.779%	0.361
2	15:06:37	10.980	46.820	<u>TM 4895.000</u>	<u>M 1437.000</u>	101.002%	<u>M 718.900</u>	125.300	307.700	108.737%	0.359
3	15:06:41	11.130	48.120	<u>TM 4969.000</u>	<u>M 1451.000</u>	101.373%	<u>M 724.800</u>	126.400	307.100	110.010%	0.398
X		11.020	47.480	<u>TM 4934.000</u>	<u>M 1445.000</u>	100.416%	<u>M 722.900</u>	126.000	306.500	109.175%	0.372
σ		0.090	0.653	<u>TM 37.390</u>	<u>M 7.226</u>	1.349%	<u>M 3.532</u>	0.608	1.538	0.723%	0.022
%RSD		0.817	1.376	<u>TM 0.758</u>	<u>M 0.500</u>	1.343	<u>M 0.489</u>	0.482	0.502	0.662	5.886
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:06:33	30.680	-0.003	88.090	411.400	100.670%	43.880	0.692	2.326	<u>T 106.272%</u>	0.050
2	15:06:37	30.960	0.013	88.400	411.900	102.034%	43.460	0.667	2.316	<u>T 107.593%</u>	0.054
3	15:06:41	31.170	0.023	89.080	411.500	101.826%	43.490	0.667	2.259	<u>T 107.335%</u>	0.047
X		30.940	0.011	88.530	411.600	101.510%	43.610	0.675	2.300	<u>T 107.066%</u>	0.050
σ		0.247	0.013	0.507	0.267	0.735%	0.234	0.015	0.036	<u>T 0.700%</u>	0.003
%RSD		0.797	115.300	0.572	0.065	0.724	0.535	2.163	1.581	<u>T 0.654</u>	6.712
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	15:06:33	2.442	0.112	2.066	102.603%	1.134					
2	15:06:37	2.501	0.115	2.055	103.436%	1.127					
3	15:06:41	2.359	0.105	2.056	103.984%	1.129					
X		2.434	0.111	2.059	103.341%	1.130					
σ		0.071	0.005	0.006	0.695%	0.004					
%RSD		2.933	4.663	0.299	0.673	0.320					

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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	15:13:48	97.500	94.910	93.820	5153.000	5161.000	5097.000	5126.000	5123.000	151.800	1854000.000
2	15:13:51	97.060	93.700	93.170	5149.000	5124.000	5132.000	5184.000	5149.000	133.700	1848000.000
3	15:13:55	98.420	95.200	94.490	5200.000	5217.000	5111.000	5152.000	5181.000	122.800	1849000.000
x		97.660	94.610	93.830	5168.000	5167.000	5114.000	5154.000	5151.000	136.100	1851000.000
σ		0.694	0.798	0.659	28.550	47.040	17.610	28.720	29.100	14.630	3297.000
%RSD		0.710	0.843	0.703	0.552	0.910	0.344	0.557	0.565	10.750	0.178
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:48	4925.000	5052.000	109.803%	112.024%	99.480	102.000	102.500	22.050	4942.000	100.500
2	15:13:51	4936.000	5049.000	111.037%	112.618%	98.010	101.500	101.900	20.600	4925.000	99.500
3	15:13:55	4953.000	5082.000	109.514%	112.637%	97.810	102.000	103.300	22.710	4993.000	101.000
x		4938.000	5061.000	110.118%	112.427%	98.430	101.800	102.600	21.790	4953.000	100.300
σ		14.130	18.250	0.809%	0.349%	0.912	0.266	0.700	1.080	35.540	0.748
%RSD		0.286	0.361	0.735	0.310	0.926	0.262	0.682	4.958	0.718	0.746
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:48	102.200	104.700	106.800	106.100	110.902%	102.900	99.090	99.060	107.175%	101.600
2	15:13:51	101.200	104.500	106.400	106.600	112.361%	103.100	97.780	99.520	108.655%	101.400
3	15:13:55	103.500	105.700	107.700	106.200	110.946%	103.500	100.400	100.600	107.397%	102.700
x		102.300	105.000	106.900	106.300	111.403%	103.200	99.090	99.740	107.742%	101.900
σ		1.127	0.651	0.673	0.259	0.830%	0.302	1.315	0.817	0.798%	0.667
%RSD		1.101	0.621	0.630	0.244	0.745	0.292	1.327	0.819	0.741	0.654
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:48	102.800	106.200	52.630	104.000	110.041%	101.400	101.400	99.800	111.706%	101.800
2	15:13:51	102.500	106.400	52.530	103.700	110.734%	101.600	102.300	99.990	112.302%	101.300
3	15:13:55	103.200	107.200	53.020	104.700	110.286%	102.100	102.200	99.200	112.276%	101.400
x		102.800	106.600	52.730	104.100	110.354%	101.700	102.000	99.660	112.094%	101.500
σ		0.381	0.532	0.258	0.533	0.351%	0.355	0.471	0.410	0.337%	0.246
%RSD		0.371	0.499	0.490	0.512	0.318	0.350	0.462	0.412	0.301	0.243
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	15:13:48	4.952	97.590	99.010	116.063%	99.480					
2	15:13:51	5.089	96.490	98.220	117.674%	99.700					
3	15:13:55	5.223	96.140	98.570	118.148%	99.020					
x		5.088	96.740	98.600	117.295%	99.400					
σ		0.135	0.754	0.398	1.093%	0.344					
%RSD		2.657	0.780	0.404	0.932	0.346					

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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	15:21:02	-0.008	-0.004	0.154	0.872	-0.213	-0.473	-4.173	6.408	134.100	<u>1751000.000</u>
2	15:21:06	-0.005	0.011	0.011	1.113	0.549	-0.419	-3.601	-2.134	138.100	<u>1743000.000</u>
3	15:21:10	-0.003	-0.012	0.121	0.515	-0.381	-0.075	-3.357	-5.232	123.700	<u>1738000.000</u>
x		-0.005	-0.002	0.095	0.834	-0.015	-0.322	-3.710	-0.319	132.000	<u>1744000.000</u>
σ		0.002	0.012	0.075	0.301	0.495	0.216	0.419	6.029	7.415	<u>16690.000</u>
%RSD		42.350	729.900	78.450	36.090	3294.000	67.030	11.290	1888.000	5.618	<u>10.384</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:21:02	-9.392	9.595	113.464%	119.034%	0.097	0.090	0.021	6.446	-0.193	-0.000
2	15:21:06	-7.444	2.301	112.927%	120.938%	-0.027	0.064	-0.007	6.513	-0.011	0.001
3	15:21:10	-9.960	2.093	115.203%	118.817%	-0.034	0.048	0.001	6.309	-0.120	0.004
x		-8.932	4.663	113.865%	119.596%	0.012	0.067	0.005	6.423	-0.108	0.001
σ		1.320	4.273	1.189%	1.167%	0.074	0.021	0.014	0.104	0.092	0.002
%RSD		14.770	91.630	1.045	0.976	620.500	31.870	276.800	1.616	84.840	149.600
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:21:02	0.001	0.000	0.053	1.657	110.691%	-0.097	0.028	-0.009	109.715%	0.002
2	15:21:06	0.002	0.030	0.026	0.843	110.642%	-0.106	-0.050	0.002	109.934%	-0.008
3	15:21:10	0.003	0.005	0.038	0.400	113.071%	-0.126	0.056	0.006	109.721%	-0.003
x		0.002	0.012	0.039	0.967	111.468%	-0.110	0.011	-0.000	109.790%	-0.003
σ		0.001	0.016	0.013	0.638	1.389%	0.015	0.055	0.008	0.124%	0.005
%RSD		36.010	134.900	33.290	65.960	1.246	13.390	477.700	2538.000	0.113	169.000
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:21:02	-0.010	-0.045	-0.038	0.003	108.436%	-0.126	0.001	-0.006	<u>113.413%</u>	-0.001
2	15:21:06	-0.008	-0.067	-0.035	0.009	108.643%	-0.114	0.003	-0.010	<u>112.811%</u>	0.004
3	15:21:10	-0.013	-0.062	-0.037	0.007	109.940%	-0.135	0.002	0.001	<u>113.271%</u>	0.003
x		-0.010	-0.058	-0.037	0.006	109.007%	-0.125	0.002	-0.005	<u>113.165%</u>	0.002
σ		0.003	0.012	0.001	0.003	0.815%	0.010	0.001	0.005	<u>10.315%</u>	0.003
%RSD		26.180	20.220	3.467	45.650	0.748	8.387	42.090	112.800	<u>10.278</u>	124.400
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	15:21:02	-0.009	0.023	0.028	<u>117.846%</u>	0.002					
2	15:21:06	-0.011	0.020	0.017	<u>117.540%</u>	0.002					
3	15:21:10	-0.014	0.017	0.013	<u>117.413%</u>	0.003					
x		-0.012	0.020	0.019	<u>117.599%</u>	0.002					
σ		0.002	0.003	0.008	<u>10.222%</u>	0.000					
%RSD		20.860	15.260	40.220	<u>10.189</u>	19.920					

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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	15:28:18	0.971	0.914	0.666	260.200	267.800	269.000	55.630	50.070	132.000	<u>1780000.000</u>
2	15:28:22	0.927	0.851	1.098	262.500	266.100	257.300	52.430	50.010	127.600	<u>1772000.000</u>
3	15:28:25	0.956	0.835	1.102	260.600	259.300	261.400	49.860	40.130	136.400	<u>1781000.000</u>
x		0.951	0.867	0.955	261.100	264.400	262.600	52.640	46.740	132.000	<u>1778000.000</u>
σ		0.022	0.042	0.250	1.232	4.533	5.966	2.889	5.722	4.386	<u>14718.000</u>
%RSD		2.340	4.840	26.210	0.472	1.714	2.272	5.489	12.240	3.322	<u>10.265</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:28:18	252.300	235.700	112.414%	121.578%	0.990	1.146	1.029	6.693	257.500	1.050
2	15:28:22	248.400	219.800	115.470%	121.738%	1.152	1.033	1.037	6.838	253.200	1.003
3	15:28:25	248.900	199.000	115.116%	120.612%	1.109	1.188	1.034	6.778	254.500	1.029
x		249.900	218.200	114.333%	121.309%	1.084	1.122	1.033	6.770	255.100	1.027
σ		2.083	18.430	1.671%	0.609%	0.084	0.080	0.004	0.073	2.178	0.024
%RSD		0.834	8.446	1.462	0.502	7.746	7.168	0.406	1.080	0.854	2.288
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:28:18	1.076	1.025	1.098	2.587	114.633%	0.997	1.056	1.051	109.426%	1.019
2	15:28:22	1.024	1.077	1.074	2.200	115.937%	0.942	0.981	1.020	111.750%	1.030
3	15:28:25	1.043	1.157	1.090	1.875	114.945%	0.928	1.013	1.030	111.464%	1.007
x		1.048	1.086	1.087	2.221	115.171%	0.956	1.017	1.034	110.880%	1.019
σ		0.026	0.067	0.012	0.357	0.681%	0.036	0.038	0.016	1.267%	0.012
%RSD		2.520	6.158	1.111	16.060	0.591	3.796	3.699	1.510	1.143	1.147
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:28:18	1.057	1.043	0.475	1.034	111.274%	0.894	0.999	0.963	<u>113.242%</u>	1.018
2	15:28:22	1.084	1.034	0.504	0.984	112.117%	0.873	1.005	0.999	<u>112.829%</u>	1.023
3	15:28:25	1.051	1.047	0.496	1.109	112.167%	0.890	1.018	0.979	<u>113.725%</u>	0.995
x		1.064	1.041	0.492	1.042	111.853%	0.886	1.007	0.980	<u>113.265%</u>	1.012
σ		0.017	0.007	0.015	0.063	0.501%	0.011	0.010	0.018	<u>10.448%</u>	0.015
%RSD		1.639	0.652	3.050	6.018	0.448	1.273	0.970	1.856	<u>10.396</u>	1.474
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	15:28:18	0.202	0.980	1.009	<u>115.741%</u>	0.977					
2	15:28:22	0.196	0.998	1.013	<u>115.719%</u>	0.984					
3	15:28:25	0.197	0.977	1.001	<u>117.046%</u>	0.987					
x		0.198	0.985	1.008	<u>116.168%</u>	0.982					
σ		0.003	0.011	0.006	<u>10.760%</u>	0.005					
%RSD		1.728	1.160	0.612	<u>10.654</u>	0.526					

229406_9800_CRDL_B2

7/2/2019 3:35:26 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	15:35:30	4.719	4.760	4.556	505.600	511.400	507.300	253.900	268.900	136.400	<u>1770000.000</u>
2	15:35:34	4.826	4.625	5.021	525.400	525.600	524.400	270.200	290.600	133.000	<u>1819000.000</u>
3	15:35:37	4.834	4.704	4.399	518.000	526.200	511.700	267.800	236.400	146.800	<u>1791000.000</u>
x		4.793	4.697	4.659	516.300	521.100	514.500	264.000	265.300	138.700	<u>1793000.000</u>
σ		0.064	0.068	0.323	9.989	8.387	8.845	8.811	27.270	7.191	<u>24690.000</u>
%RSD		1.340	1.442	6.943	1.934	1.610	1.719	3.338	10.280	5.183	<u>1.377</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:30	489.900	533.300	113.159%	121.362%	5.484	5.079	5.005	7.043	495.000	5.024
2	15:35:34	513.100	615.300	111.995%	120.792%	4.618	5.244	5.286	7.364	505.800	5.148
3	15:35:37	497.900	554.900	112.789%	120.991%	4.283	4.995	5.220	8.050	505.900	5.145
x		500.300	567.800	112.648%	121.048%	4.795	5.106	5.170	7.486	502.300	5.105
σ		11.780	42.540	0.595%	0.289%	0.620	0.127	0.147	0.514	6.256	0.071
%RSD		2.356	7.492	0.528	0.239	12.920	2.484	2.843	6.868	1.246	1.386
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:30	5.202	5.296	5.518	7.039	112.919%	5.121	5.231	5.104	108.383%	5.141
2	15:35:34	5.247	5.479	5.432	6.391	113.225%	5.294	5.269	4.995	109.499%	5.110
3	15:35:37	5.270	5.237	5.439	6.003	113.560%	5.246	5.044	5.001	109.222%	5.090
x		5.240	5.337	5.463	6.478	113.235%	5.220	5.181	5.033	109.035%	5.114
σ		0.035	0.126	0.048	0.523	0.321%	0.089	0.120	0.061	0.581%	0.025
%RSD		0.663	2.361	0.878	8.079	0.283	1.712	2.321	1.212	0.533	0.498
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:30	5.171	5.322	2.661	5.236	110.037%	4.978	5.136	4.976	<u>112.031%</u>	5.058
2	15:35:34	5.031	5.222	2.658	5.220	110.978%	5.039	5.127	5.034	<u>111.816%</u>	5.041
3	15:35:37	5.098	5.357	2.671	5.228	111.300%	4.981	5.113	5.117	<u>111.060%</u>	5.110
x		5.100	5.301	2.663	5.228	110.772%	4.999	5.125	5.042	<u>111.635%</u>	5.070
σ		0.070	0.070	0.007	0.008	0.656%	0.034	0.012	0.071	<u>0.510%</u>	0.036
%RSD		1.369	1.324	0.256	0.152	0.593	0.685	0.225	1.400	<u>0.457</u>	0.711
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	15:35:30	0.484	4.813	4.929	<u>115.696%</u>	4.795					
2	15:35:34	0.490	4.795	4.895	<u>116.357%</u>	4.851					
3	15:35:37	0.515	4.827	4.884	<u>116.702%</u>	4.850					
x		0.496	4.812	4.903	<u>116.252%</u>	4.832					
σ		0.016	0.016	0.023	<u>0.511%</u>	0.032					
%RSD		3.300	0.332	0.476	<u>0.440</u>	0.663					

229411_9800_ICSA2 7/2/2019 3:42:41 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	15:42:44	0.239	-0.017	0.031	<u>TM 56250.000</u>	<u>M 53290.000</u>	<u>TM 54690.000</u>	8.571	<u>M 55200.000</u>	4087.000	<u>T 1848000.000</u>
2	15:42:49	0.247	0.007	-0.096	<u>TM 56120.000</u>	<u>M 53300.000</u>	<u>TM 54480.000</u>	7.707	<u>M 54980.000</u>	4022.000	<u>T 1838000.000</u>
3	15:42:52	0.240	0.003	-0.022	<u>TM 55890.000</u>	<u>M 52840.000</u>	<u>TM 54660.000</u>	3.260	<u>M 54750.000</u>	4021.000	<u>T 1817000.000</u>
X		0.242	-0.002	-0.029	<u>TM 56090.000</u>	<u>M 53140.000</u>	<u>TM 54610.000</u>	6.513	<u>M 54980.000</u>	4044.000	<u>T 1834000.000</u>
σ		0.004	0.013	0.064	<u>TM 181.200</u>	<u>M 262.900</u>	<u>TM 111.400</u>	2.850	<u>M 226.100</u>	38.040	<u>T 15630.000</u>
%RSD		1.718	568.000	220.800	<u>TM 0.323</u>	<u>M 0.495</u>	<u>TM 0.204</u>	43.760	<u>M 0.411</u>	0.941	<u>T 0.852</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:44	<u>TM 54640.000</u>	<u>M 52710.000</u>	86.759%	99.065%	<u>M 1048.000</u>	0.006	0.136	5.446	<u>TM 53740.000</u>	-0.072
2	15:42:49	<u>TM 54190.000</u>	<u>M 51280.000</u>	86.534%	98.934%	<u>M 1065.000</u>	0.010	0.109	5.553	<u>TM 53750.000</u>	-0.030
3	15:42:52	<u>TM 53770.000</u>	<u>M 51440.000</u>	86.919%	98.101%	<u>M 1039.000</u>	0.036	0.093	5.414	<u>TM 53270.000</u>	-0.049
X		<u>TM 54200.000</u>	<u>M 51810.000</u>	86.738%	98.700%	<u>M 1050.000</u>	0.017	0.113	5.471	<u>TM 53590.000</u>	-0.051
σ		<u>TM 436.800</u>	<u>M 779.900</u>	0.193%	0.523%	<u>M 13.100</u>	0.016	0.022	0.073	<u>TM 275.000</u>	0.021
%RSD		<u>TM 0.806</u>	<u>M 1.505</u>	0.223	0.529	<u>M 1.247</u>	94.290	19.170	1.327	<u>TM 0.513</u>	42.150
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:44	0.022	0.056	0.117	0.974	92.036%	-0.043	-0.019	0.440	90.503%	0.053
2	15:42:49	0.017	0.040	0.158	0.344	90.844%	-0.116	0.014	0.400	90.759%	0.062
3	15:42:52	0.009	0.013	0.174	-0.024	90.716%	-0.122	0.055	0.466	90.654%	0.068
X		0.016	0.036	0.150	0.431	91.199%	-0.094	0.017	0.435	90.639%	0.061
σ		0.007	0.021	0.029	0.505	0.728%	0.044	0.037	0.033	0.129%	0.007
%RSD		41.530	58.710	19.570	117.000	0.798	46.960	223.800	7.612	0.142	12.200
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:44	<u>TM 1110.000</u>	-0.034	-0.021	-0.005	96.418%	0.034	0.069	0.072	<u>T 100.979%</u>	0.017
2	15:42:49	<u>M 1037.000</u>	-0.025	-0.037	-0.029	95.895%	0.021	0.069	0.104	<u>T 102.286%</u>	0.013
3	15:42:52	<u>TM 1109.000</u>	-0.020	-0.038	-0.011	96.112%	0.019	0.072	0.083	<u>T 100.667%</u>	0.012
X		<u>TM 1085.000</u>	-0.026	-0.032	-0.015	96.142%	0.024	0.070	0.086	<u>T 101.311%</u>	0.014
σ		<u>TM 41.640</u>	0.007	0.010	0.013	0.263%	0.008	0.002	0.016	<u>T 0.859%</u>	0.003
%RSD		<u>TM 3.837</u>	26.910	30.320	85.990	0.273	32.790	2.415	18.810	<u>T 0.848</u>	18.470
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	15:42:44	-0.008	-0.002	0.071	100.487%	-0.000					
2	15:42:49	-0.010	-0.000	0.058	101.153%	-0.000					
3	15:42:52	-0.019	-0.004	0.051	100.590%	-0.000					
X		-0.013	-0.002	0.060	100.744%	-0.000					
σ		0.006	0.002	0.010	0.359%	0.000					
%RSD		47.000	89.670	16.260	0.356	45.340					

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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	15:49:58	101.100	94.610	95.330	<u>TM 57290.000</u>	<u>M 54340.000</u>	<u>TM 54890.000</u>	5336.000	<u>M 59960.000</u>	4166.000	<u>T 2009000.000</u>
2	15:50:02	102.400	95.250	92.610	<u>TM 56150.000</u>	<u>M 53490.000</u>	<u>TM 54500.000</u>	5312.000	<u>M 59330.000</u>	3971.000	<u>T 1980000.000</u>
3	15:50:05	100.700	94.570	93.730	<u>TM 56070.000</u>	<u>M 53790.000</u>	<u>TM 55030.000</u>	5336.000	<u>M 59780.000</u>	4079.000	<u>T 1988000.000</u>
X		101.400	94.810	93.890	<u>TM 56510.000</u>	<u>M 53870.000</u>	<u>TM 54810.000</u>	5328.000	<u>M 59690.000</u>	4072.000	<u>T 1992000.000</u>
σ		0.880	0.381	1.368	<u>TM 683.100</u>	<u>M 431.300</u>	<u>TM 276.400</u>	14.020	<u>M 325.700</u>	97.540	<u>T 14750.000</u>
%RSD		0.868	0.402	1.457	<u>TM 1.209</u>	<u>M 0.800</u>	<u>TM 0.504</u>	0.263	<u>M 0.546</u>	2.396	<u>T 0.740</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:58	<u>TM 54750.000</u>	<u>M 52280.000</u>	85.935%	95.598%	<u>M 1185.000</u>	108.400	108.600	20.940	<u>TM 53620.000</u>	105.000
2	15:50:02	<u>TM 54510.000</u>	<u>M 52510.000</u>	87.084%	95.573%	<u>M 1158.000</u>	106.600	107.400	22.560	<u>TM 53010.000</u>	105.100
3	15:50:05	<u>TM 54530.000</u>	<u>M 53000.000</u>	86.893%	94.472%	<u>M 1160.000</u>	107.700	108.400	21.170	<u>TM 52980.000</u>	105.500
X		<u>TM 54600.000</u>	<u>M 52600.000</u>	86.638%	95.214%	<u>M 1168.000</u>	107.600	108.100	21.560	<u>TM 53200.000</u>	105.200
σ		<u>TM 133.900</u>	<u>M 372.500</u>	0.615%	0.643%	<u>M 14.830</u>	0.892	0.646	0.875	<u>TM 361.800</u>	0.296
%RSD		<u>TM 0.245</u>	<u>M 0.708</u>	0.710	0.675	<u>M 1.270</u>	0.829	0.597	4.057	<u>TM 0.680</u>	0.281
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:58	104.400	104.300	106.000	110.600	92.034%	105.000	103.600	102.900	90.816%	102.900
2	15:50:02	103.600	103.600	104.800	109.600	92.789%	105.800	103.500	102.400	91.352%	103.200
3	15:50:05	104.500	104.600	104.900	109.800	92.565%	105.100	105.200	102.700	91.237%	103.000
X		104.200	104.200	105.200	110.000	92.463%	105.300	104.100	102.700	91.135%	103.000
σ		0.451	0.539	0.700	0.526	0.388%	0.433	0.953	0.267	0.282%	0.177
%RSD		0.433	0.517	0.665	0.478	0.419	0.411	0.915	0.260	0.310	0.172
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:49:58	<u>TM 1208.000</u>	103.600	50.470	103.800	96.581%	102.600	103.200	99.490	<u>T 101.466%</u>	106.900
2	15:50:02	<u>TM 1211.000</u>	103.300	50.200	103.100	96.824%	103.700	102.800	99.610	<u>T 100.883%</u>	106.800
3	15:50:05	<u>TM 1207.000</u>	103.800	50.510	103.500	96.637%	102.900	103.200	100.700	<u>T 101.835%</u>	106.800
X		<u>TM 1209.000</u>	103.600	50.390	103.500	96.681%	103.100	103.100	99.930	<u>T 101.394%</u>	106.800
σ		<u>TM 2.226</u>	0.208	0.168	0.363	0.127%	0.545	0.245	0.659	<u>T 0.480%</u>	0.087
%RSD		<u>TM 0.184</u>	0.201	0.333	0.350	0.132	0.529	0.238	0.659	<u>T 0.473</u>	0.082
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	15:49:58	5.338	100.300	103.300	102.374%	<u>T 109.600</u>					
2	15:50:02	5.308	100.600	103.000	102.312%	<u>T 109.200</u>					
3	15:50:05	5.421	100.800	103.200	102.398%	<u>T 108.500</u>					
X		5.356	100.600	103.100	102.362%	<u>T 109.100</u>					
σ		0.059	0.270	0.174	0.045%	<u>T 0.574</u>					
%RSD		1.099	0.269	0.169	0.044	<u>T 0.527</u>					

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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	15:57:12	101.800	96.730	98.250	5167.000	5263.000	5126.000	5071.000	5116.000	147.900	<u>1831000.000</u>
2	15:57:15	100.700	95.270	95.640	5140.000	5172.000	5079.000	5082.000	5022.000	140.000	<u>1825000.000</u>
3	15:57:19	103.100	96.370	96.070	5207.000	5227.000	5202.000	5206.000	5258.000	153.000	<u>1850000.000</u>
x		101.900	96.120	96.650	5171.000	5221.000	5136.000	5120.000	5132.000	147.000	<u>1835000.000</u>
σ		1.171	0.763	1.396	33.330	45.720	62.500	74.730	118.700	6.520	<u>12690.000</u>
%RSD		1.150	0.793	1.444	0.645	0.876	1.217	1.460	2.312	4.436	<u>0.692</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:12	4899.000	5061.000	104.004%	109.768%	101.100	100.800	102.700	22.380	4939.000	100.100
2	15:57:15	4866.000	5038.000	104.853%	111.037%	98.540	100.000	101.700	23.470	4966.000	100.100
3	15:57:19	4958.000	4926.000	105.440%	110.653%	98.480	99.760	102.200	21.800	4934.000	100.400
x		4908.000	5008.000	104.766%	110.486%	99.360	100.200	102.200	22.550	4946.000	100.200
σ		46.630	72.160	0.722%	0.651%	1.471	0.516	0.502	0.845	17.170	0.178
%RSD		0.950	1.441	0.689	0.589	1.481	0.515	0.491	3.749	0.347	0.177
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:12	102.000	103.700	106.900	106.700	105.027%	103.000	100.600	98.550	102.047%	101.600
2	15:57:15	101.700	103.900	106.900	108.200	105.535%	103.500	98.790	98.350	102.713%	101.100
3	15:57:19	101.000	102.700	105.700	106.200	107.630%	102.300	99.880	99.000	104.342%	101.300
x		101.600	103.400	106.500	107.000	106.064%	102.900	99.750	98.640	103.034%	101.300
σ		0.542	0.611	0.708	1.044	1.380%	0.596	0.905	0.331	1.181%	0.220
%RSD		0.533	0.591	0.664	0.975	1.301	0.579	0.907	0.336	1.146	0.217
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:12	103.300	106.300	52.770	104.200	105.237%	101.800	102.400	98.360	<u>109.660%</u>	101.400
2	15:57:15	102.500	106.800	52.880	104.600	105.493%	102.200	102.200	98.340	<u>110.257%</u>	101.600
3	15:57:19	101.600	106.100	52.330	103.800	106.518%	101.300	102.800	98.820	<u>110.757%</u>	99.780
x		102.400	106.400	52.660	104.200	105.749%	101.800	102.500	98.500	<u>110.225%</u>	100.900
σ		0.861	0.360	0.293	0.406	0.678%	0.461	0.312	0.274	<u>0.549%</u>	0.984
%RSD		0.841	0.338	0.557	0.390	0.641	0.453	0.304	0.278	<u>0.498</u>	0.976
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	15:57:12	5.035	<u>97.520</u>	97.550	<u>116.223%</u>	<u>99.230</u>					
2	15:57:15	4.954	<u>96.720</u>	97.210	<u>117.178%</u>	<u>99.630</u>					
3	15:57:19	5.039	<u>96.250</u>	97.300	<u>117.712%</u>	<u>99.590</u>					
x		5.009	<u>96.830</u>	97.350	<u>117.037%</u>	<u>99.480</u>					
σ		0.048	<u>0.642</u>	0.176	<u>0.754%</u>	<u>0.221</u>					
%RSD		0.952	<u>0.663</u>	0.180	<u>0.644</u>	<u>0.222</u>					

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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	16:04:26	-0.003	0.006	-0.063	0.495	0.114	0.984	-1.089	-6.658	131.000	<u>1743000.000</u>
2	16:04:30	0.026	-0.003	0.093	1.339	2.059	1.158	-2.619	-2.736	142.800	<u>1744000.000</u>
3	16:04:34	0.004	0.018	0.151	1.805	-0.563	0.792	-3.302	-5.213	136.600	<u>1763000.000</u>
x		0.009	0.007	0.061	1.213	0.537	0.978	-2.337	-4.869	136.800	<u>1750000.000</u>
σ		0.015	0.010	0.111	0.664	1.361	0.183	1.134	1.983	5.881	<u>11240.000</u>
%RSD		170.500	148.700	182.100	54.720	253.500	18.730	48.510	40.740	4.298	<u>0.642</u>
Run	Time	39K	43Ca	45Sc-KED	45Sc-CCT	47Ti	51V	52Cr	53Cr O	54Fe	55Mn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:26	-13.460	-2.220	106.732%	113.526%	-0.140	0.073	-0.023	5.726	1.296	0.005
2	16:04:30	-10.140	2.584	109.954%	114.595%	0.270	-0.027	0.007	5.725	0.979	0.003
3	16:04:34	-10.830	7.935	107.464%	114.367%	-0.035	-0.004	-0.008	5.731	0.945	0.010
x		-11.480	2.766	108.050%	114.163%	0.032	0.014	-0.008	5.728	1.073	0.006
σ		1.752	5.080	1.689%	0.563%	0.213	0.052	0.015	0.003	0.194	0.004
%RSD		15.260	183.600	1.563	0.494	667.000	378.100	190.100	0.053	18.050	65.920
Run	Time	59Co	60Ni	63Cu	66Zn	72Ge	75As	78Se	88Sr	89Y	90Zr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:26	0.008	0.042	-0.004	1.352	105.918%	-0.133	0.038	-0.010	104.954%	-0.000
2	16:04:30	0.009	0.013	0.010	0.775	108.784%	-0.129	-0.083	-0.001	106.362%	-0.005
3	16:04:34	0.007	0.025	0.014	0.532	106.759%	-0.084	-0.065	-0.003	105.934%	-0.001
x		0.008	0.027	0.007	0.886	107.154%	-0.115	-0.037	-0.005	105.750%	-0.002
σ		0.001	0.015	0.009	0.421	1.473%	0.027	0.065	0.005	0.722%	0.003
%RSD		12.810	53.990	140.400	47.540	1.375	23.480	176.900	102.000	0.682	148.900
Run	Time	95Mo	105Pd	107Ag	111Cd	115In	118Sn	121Sb	137Ba	159Tb	195Pt
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:26	0.035	-0.064	-0.036	0.015	105.538%	-0.108	-0.010	-0.005	<u>112.369%</u>	0.006
2	16:04:30	0.033	-0.055	-0.033	0.013	106.566%	-0.121	-0.015	-0.001	<u>112.217%</u>	0.006
3	16:04:34	0.037	-0.064	-0.027	0.010	106.107%	-0.127	-0.015	0.003	<u>112.955%</u>	0.007
x		0.035	-0.061	-0.032	0.013	106.070%	-0.119	-0.013	-0.001	<u>112.514%</u>	0.006
σ		0.002	0.005	0.005	0.002	0.515%	0.010	0.003	0.004	<u>0.390%</u>	0.001
%RSD		7.055	8.316	13.950	17.420	0.486	8.454	19.870	340.900	<u>0.346</u>	8.097
Run	Time	201Hg	205Tl	208Pb	209Bi	238U					
		ppb	ppb	ppb	ppb	ppb					
1	16:04:26	-0.002	0.036	0.035	<u>119.074%</u>	0.008					
2	16:04:30	-0.013	0.036	0.023	<u>118.469%</u>	0.007					
3	16:04:34	-0.005	0.027	0.019	<u>117.818%</u>	0.007					
x		-0.006	0.033	0.026	<u>118.454%</u>	0.007					
σ		0.006	0.005	0.008	<u>0.628%</u>	0.001					
%RSD		89.360	16.070	31.900	<u>0.530</u>	11.940					

Batch Information: MPRP 20480

Prep Method	EPA 3050B
Block ID	40HB11
Corrected Temp. (C)	92.50
Solid Matrix Lot	202021
Reviewed By Date	06/28/2019 14:34

Analysis Method	EPA 6020
Thermometer ID	151839407
Acceptance Range:	95+/-5 C
Digestion Vessel	227703
Batch Notes	HBN 325783

Extracted By	BTH
Block Temp (C)	92.5
Digestion Start Time	06/28/2019 10:02:01:835
Metals Pipette 1	40PPT69

Instrument	40BAL2
Correction Factor (C)	0
Digestion End Time	06/28/2019 13:34:36:810
Reviewed By	KXS

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

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	1891424	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	SBLK	1891425	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	SRM	1891426	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	LCS	1891427	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J	228365 (0.25)	214651 (1)
6020 T_P	LCSD	1891428	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J	228365 (0.25)	214651 (1)
6020 T_P	PS	40189616001	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189616002	Y	Tissue	0.503	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189616003	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189616004	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189618001	Y	Tissue	0.501	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189618002	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189618003	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189618004	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189618005	Y	Tissue	0.501	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189618006	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189618007	Y	Tissue	0.5	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		
6020 T_P	PS	40189618008	Y	Tissue	0.501	228885 (10)	214040 (5)	225130 (2.5)	50	7/17/19		J		

QC Rule	Sample Type	Lab Sample ID	6000-SPKB3 (mL)	CAL-STD
6020 T_P	BLANK	1891424		
6020 T_P	SBLK	1891425		
6020 T_P	SRM	1891426		218641 (.5)
6020 T_P	LCS	1891427	228366 (0.25)	
6020 T_P	LCSD	1891428	228366 (0.25)	
6020 T_P	PS	40189616001		
6020 T_P	PS	40189616002		
6020 T_P	PS	40189616003		
6020 T_P	PS	40189616004		
6020 T_P	PS	40189618001		
6020 T_P	PS	40189618002		
6020 T_P	PS	40189618003		
6020 T_P	PS	40189618004		
6020 T_P	PS	40189618005		
6020 T_P	PS	40189618006		
6020 T_P	PS	40189618007		
6020 T_P	PS	40189618008		

Standard Notes:

214651: TVA Supplemental Spike

218641: Metals SRM TORT-3 - Rec'd 02/25/19

228365: ICPMS Biota Spike

228366: Biota Spike Silver

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

JSF-FH-CC-F-EB01-
20190508

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL
Lab Sample ID: 40189616001 Percent Moisture: _____

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.0031	U	mg/kg	1	06/24/2019 13:50

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

JSF-FH-CC-F-EB01-
20190517

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL
Lab Sample ID: 40189616002 Percent Moisture: _____

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.0031	U	mg/kg	1	06/24/2019 13:59

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

JSF-FH-CC-F-EB01-
20190524

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL
Lab Sample ID: 40189616003 Percent Moisture: _____

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.0031	U	mg/kg	1	06/24/2019 14:10

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

JSF-FH-CC-F-EB01-
20190617

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL
Lab Sample ID: 40189616004 Percent Moisture: _____

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	<0.0031	U	mg/kg	1	06/24/2019 14:22

FORM II INORGANIC-1
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Initial Calibration Verification Source: 228669

Continuing Calibration Verification Source: _____

Concentration Units: mg/kg Instrument ID: 40HG4

	Initial Calibration Verification				Continuing Calibration Verification						
	06/24/2019 09:09				06/24/2019 12:17			06/24/2019 15:19			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Mercury	5.0	5.1	102.6	90-110	4.19	4.6	110.1	4.19	4.6	109.9	80-120

FORM II INORGANIC-1
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Initial Calibration Verification Source: 228668

Continuing Calibration Verification Source: _____

Concentration Units: mg/kg Instrument ID: 40HG4

	Initial Calibration Verification				Continuing Calibration Verification						
	06/24/2019 08:58				06/24/2019 12:07			06/24/2019 15:08			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Mercury	0.3	0.33	109.6	90-110	0.29	0.32	111.3	0.29	0.32	109.6	80-120

FORM II INORGANIC-1
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

CRDL Check Standard Source: 228667 Analysis Date/Time: 06/24/2019 09:54

Concentration Units: mg/kg

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.08	0.097	121.4	60-140

FORM III INORGANIC-1
BLANKS

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract : 426800 JOHN SEVIER FOSSIL PLAN

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	
	06/24/2019 09:30	C	06/24/2019 12:35	C	06/24/2019 15:38	C		C	1889472	C
Mercury	0.020	U	0.020	U	0.020	U			<0.0032	U

SAMPLE NO.

FORM VI INORGANIC-1
DUPLICATES

1889474LCSD

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSILMatrix: Tissue Concentration Units: mg/kgPercent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Mercury	20	0.29	0.29	1

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

SAMPLE NO.

1889473LCS

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL

Matrix: Tissue

Analyte	Units	True	Found	%R	Limits	
Mercury	mg/kg	0.25	0.29	114	80	120

FORM VII INORGANIC-2
LABORATORY CONTROL SAMPLE

SAMPLE NO.

1889474LCSD

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL

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. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

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
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Preparation Method: None Instrument ID: 40HG4

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Mercury	0.020	0.020	11/04/2011

FORM IX INORGANIC-3
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Preparation Method: _____ Instrument ID: 40HG4

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Mercury	0.020	0.0032	09/17/2018

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Green Bay SDG No. : 40189616 Contract: 426800 JOHN SEVIER FOSSIL PLAN

Instrument ID: 40HG4

Analysis Method: EPA 7473

Start Date: 06/20/2019 08:36







End Date: 06/24/2019 15:38

Sample Name	Lab Sample ID	D/F	Date	Time	Hg
12419470CAL0	12419470CAL0	1	06/20/2019	08:36	X
12419471CAL1	12419471CAL1	1	06/20/2019	08:48	X
12419472CAL2	12419472CAL2	1	06/20/2019	09:01	X
12419473CAL3	12419473CAL3	1	06/20/2019	09:12	X
12419475CAL4	12419475CAL4	1	06/20/2019	09:24	X
12419476CAL5	12419476CAL5	1	06/20/2019	09:36	X
12419477CAL6	12419477CAL6	1	06/20/2019	09:48	X
12419478CAL7	12419478CAL7	1	06/20/2019	09:59	X
12419479CAL8	12419479CAL8	1	06/20/2019	10:18	X
12419480CAL9	12419480CAL9	1	06/20/2019	10:44	X
12419481CAL10	12419481CAL10	1	06/20/2019	11:30	X
12442144ICVB	12442144ICVB	1	06/24/2019	08:58	X
12442145ICVA	12442145ICVA	1	06/24/2019	09:09	X
12442146ICB	12442146ICB	1	06/24/2019	09:30	X
12442147CRDL	12442147CRDL	1	06/24/2019	09:54	X
12442148CCVB	12442148CCVB	1	06/24/2019	12:07	X
12442149CCVA	12442149CCVA	1	06/24/2019	12:17	X
12442150CCB	12442150CCB	1	06/24/2019	12:35	X
1889472BLANK	1889472	1	06/24/2019	12:49	X
1889473LCS	1889473	1	06/24/2019	13:02	X
1889474LCSD	1889474	1	06/24/2019	13:14	X
JSF-FH-CC-F-EB01-20190508	40189616001	1	06/24/2019	13:50	X
JSF-FH-CC-F-EB01-20190517	40189616002	1	06/24/2019	13:59	X
JSF-FH-CC-F-EB01-20190524	40189616003	1	06/24/2019	14:10	X
JSF-FH-CC-F-EB01-20190617	40189616004	1	06/24/2019	14:22	X
12442151CCVB	12442151CCVB	1	06/24/2019	15:08	X
12442152CCVA	12442152CCVA	1	06/24/2019	15:19	X
12442153CCB	12442153CCB	1	06/24/2019	15:38	X

Sample listing "06202019A_40HG4_AJD.d80"

Created by "Administrator"
20.06.2019 12:03:50

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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 6-20-19 AJD 	0.0000 g 20.06.19 08:16	✓ B 20.06.19 08:17	0.0191	0.0000			1.0000	06202019CAL.c80 20.06.19 08:16	
- 2	PURGE 6-20-19 AJD	0.0000 g 20.06.19 08:17	✓ B 20.06.19 08:20	0.0005	0.0000			1.0000	06202019CAL.c80 20.06.19 08:16	
- 3	PURGE 6-20-19 AJD	0.0000 g 20.06.19 08:17	✓ B 20.06.19 08:23	0.0004	0.0000			1.0000	06202019CAL.c80 20.06.19 08:16	
1 4	CAL0 221678_11801	0.0253 g 20.06.19 08:33	✓ C 20.06.19 08:36	0.0041	0.0000	0.0000		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
1 5	CAL1 228454_11801	0.0259 g 20.06.19 08:47	✓ C 20.06.19 08:48	0.0985	2.0720	0.0800		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
1 6	CAL2 228455_11801	0.0258 g 20.06.19 09:00	✓ C 20.06.19 09:01	0.2416	5.1600	0.2000		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
1 7	CAL3 228456_11801	0.0258 g 20.06.19 09:11	✓ C 20.06.19 09:12	0.4630	10.3200	0.4000		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
1 8	CAL4 228457_11801	0.0257 g 20.06.19 09:23	✓ C 20.06.19 09:24	0.6387	15.4200	0.6000		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
1 9	CAL5 228458_11801	0.0262 g 20.06.19 09:36	✓ C 20.06.19 09:36	0.8018	20.9600	0.8000		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
1 10	CAL6 228459_11801	0.0258 g 20.06.19 09:47	✓ C 20.06.19 09:48	0.0437	51.6000	2.0000		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
1 11	CAL7 228460_11801	0.0255 g 20.06.19 09:59	✓ C 20.06.19 09:59	0.0882	102.0000	4.0000		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
- 12	- auto BV (1) 	0.0000 g 20.06.19 10:09	✓ B 20.06.19 10:09	0.1095	2.2235			1.0000	06202019CAL.c80 20.06.19 09:58	
- 13	- auto BV (2) 	0.0000 g 20.06.19 10:13	✓ B 20.06.19 10:13	0.0227	0.4465			1.0000	06202019CAL.c80 20.06.19 09:58	
1 14	CAL8 228461_11801	0.0251 g 20.06.19 10:17	✓ C 20.06.19 10:18	0.1249	150.6000	6.0000		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
- 15	- auto BV (1) 	0.0000 g 20.06.19 10:28	✓ B 20.06.19 10:27	0.1998	4.1588			1.0000	06202019CAL.c80 20.06.19 10:17	
- 16	- auto BV (2)	0.0000 g 20.06.19 10:31	✓ B 20.06.19 10:31	0.0494	0.9860			1.0000	06202019CAL.c80 20.06.19 10:17	
- 17	- auto BV (3)	0.0000 g 20.06.19 10:35	✓ B 20.06.19 10:34	0.0257	0.5067			1.0000	06202019CAL.c80 20.06.19 10:17	
- 18	- auto BV (4)	0.0000 g 20.06.19 10:38	✓ B 20.06.19 10:38	0.0182	0.3563			1.0000	06202019CAL.c80 20.06.19 10:17	
1 19	CAL9 228462_11801	0.0255 g 20.06.19 10:42	✓ C 20.06.19 10:44	0.1722	204.0000	8.0000		1.0000	<data not saved>	7473 Biota.m80 31.10.11 13:06
- 20	- auto BV (1) 	0.0000 g 20.06.19 10:54	✓ B 20.06.19 10:53	0.2755	5.8567			1.0000	06202019CAL.c80 20.06.19 10:42	
- 21	- auto BV (2) 	0.0000 g 20.06.19 10:57	✓ B 20.06.19 10:57	0.0724	1.4552			1.0000	06202019CAL.c80 20.06.19 10:42	

Sample listing "06202019A_40HG4_AJD.d80"

Created by "Administrator"
20.06.2019 12:03:50

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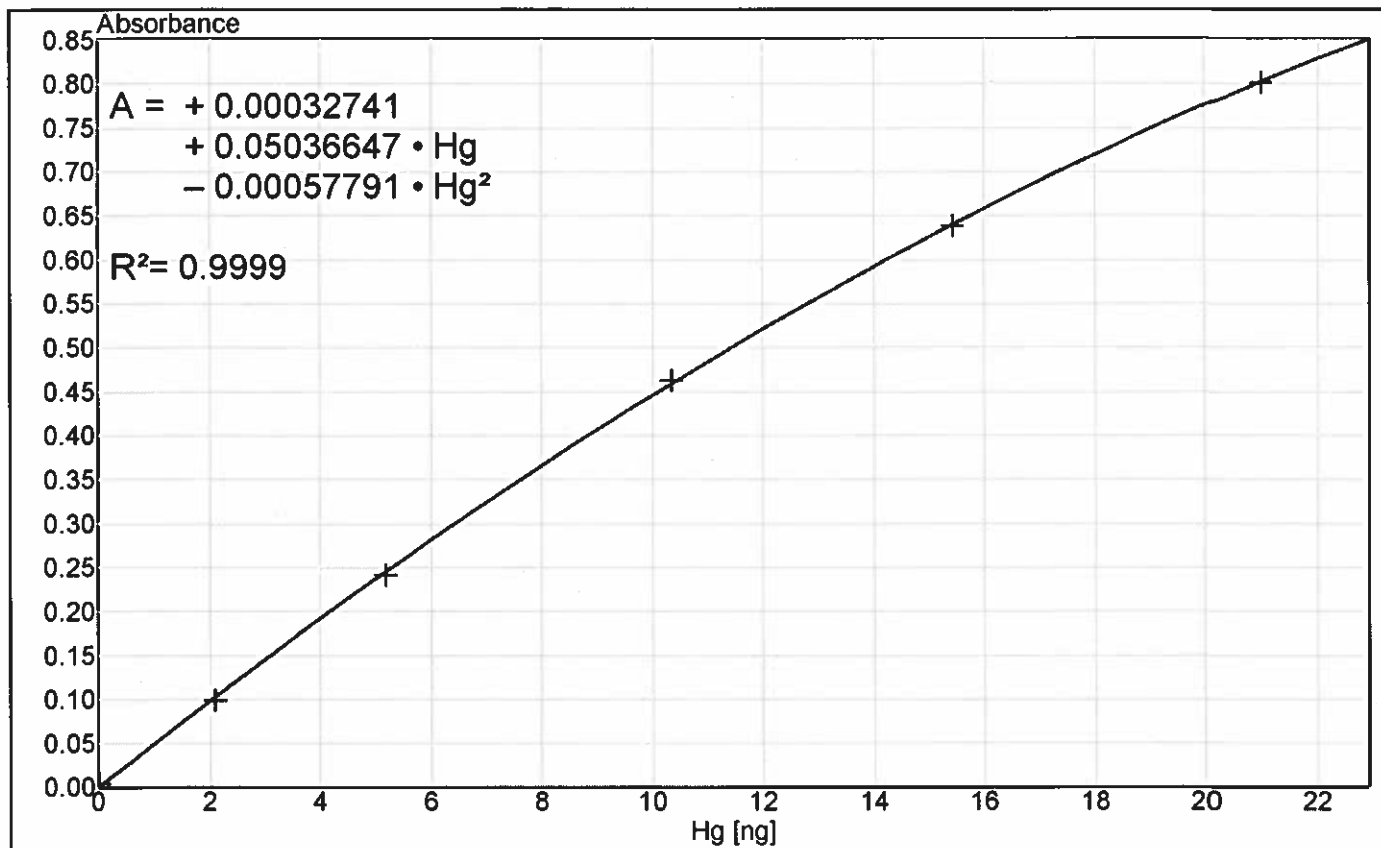
Pos Nr.	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [mg/kg]	Σ	Cal- Factor	Calibration file Date	Method file Date
- 22	auto BV (3) μ L	0.0000 g 20.06.19 11:01	✓ B 20.06.19 11:00	0.0389	0.7720			1.0000	06202019CAL.c80 20.06.19 10:42	
- 23	auto BV (4)	0.0000 g 20.06.19 11:04	✓ B 20.06.19 11:04	0.0280	0.5529			1.0000	06202019CAL.c80 20.06.19 10:42	
- 24	auto BV (5)	0.0000 g 20.06.19 11:08	✓ B 20.06.19 11:07	0.0218	0.4284			1.0000	06202019CAL.c80 20.06.19 10:42	
1 25	CAL10 228463_11801	0.0255 g 20.06.19 11:30	✓ C 20.06.19 11:30	0.2073	255.0000	10.0000		1.0000	<data not saved> 20.06.19 11:40	7473 Biota.m80 31.10.11 13:06
- 26	auto BV (1) μ L	0.0000 g 20.06.19 11:41	✓ B 20.06.19 11:40	0.3674	8.0267			1.0000	06202019CAL.c80 20.06.19 11:29	
- 27	auto BV (2)	0.0000 g 20.06.19 11:44	✓ B 20.06.19 11:44	0.1035	2.0983			1.0000	06202019CAL.c80 20.06.19 11:29	
- 28	auto BV (3)	0.0000 g 20.06.19 11:48	✓ B 20.06.19 11:47	0.0543	1.0851			1.0000	06202019CAL.c80 20.06.19 11:29	
- 29	auto BV (4)	0.0000 g 20.06.19 11:51	✓ B 20.06.19 11:51	0.0396	0.7868			1.0000	06202019CAL.c80 20.06.19 11:29	
- 30	auto BV (5)	0.0000 g 20.06.19 11:55	✓ B 20.06.19 11:54	0.0305	0.6032			1.0000	06202019CAL.c80 20.06.19 11:29	
- 31	auto BV (6)	0.0000 g 20.06.19 11:58	✓ B 20.06.19 11:58	0.0244	0.4797			1.0000	06202019CAL.c80 20.06.19 11:29	

Calibration data "06202019CAL.c80"

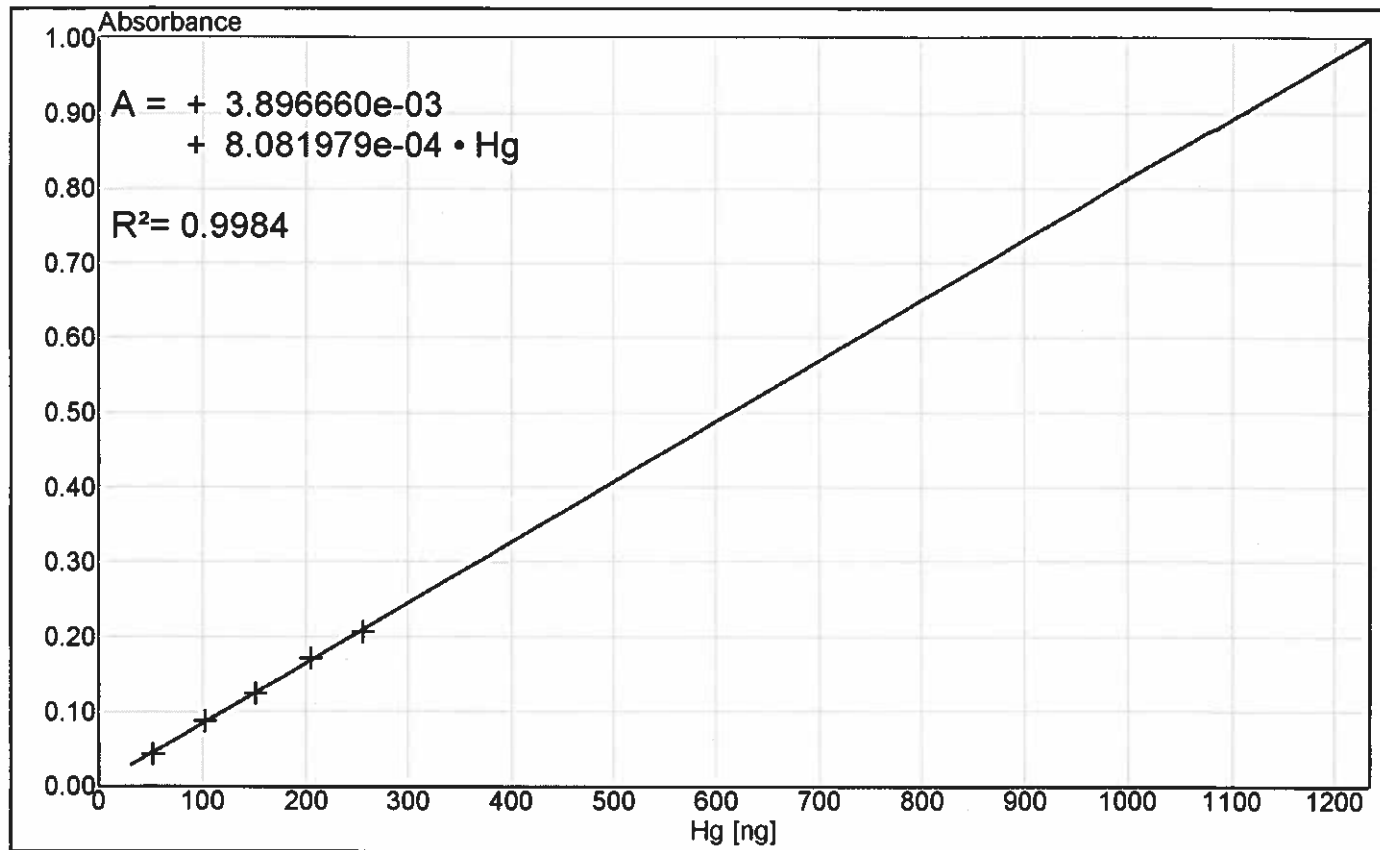
Created by "Administrator" at
20.06.2019 12:03:04

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Cell 1



Nr.		Hg [ng]	Height ^	Error ΔE [%]	Date	Remarks
1	✓	0.0000	0.0041	0.0038	20.06.2019 08:45:48	
2	✓	2.0720	0.0985	-0.0037	20.06.2019 08:58:04	
3	✓	5.1600	0.2416	-0.0032	20.06.2019 09:11:15	
4	✓	10.3200	0.4630	0.0044	20.06.2019 09:22:49	
5	✓	15.4200	0.6387	-0.0009	20.06.2019 09:34:18	
6	✓	20.9600	0.8018	-0.0004	20.06.2019 09:46:32	



Nr.		Hg [ng]	Height ^	Error ΔE [%]	Date	Remarks
1	✓	51.6000	0.0437	-0.0019	20.06.2019 09:58:28	
2	✓	102.0000	0.0882	0.0019	20.06.2019 10:09:59	
3	✓	150.6000	0.1249	-0.0007	20.06.2019 10:28:10	
4	✓	204.0000	0.1722	0.0034	20.06.2019 10:54:16	
5	✓	255.0000	0.2073	-0.0027	20.06.2019 11:41:12	

Sample listing "06242019A_40HG4_AJD.d80"

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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 6-24-19 AJD	0.0000 g 24.06.19 08:43	✓ B 24.06.19 08:43	0.0033	0.0591			1.0000	06202019CAL.c80 20.06.19 12:03	
2	PURGE 6-24-19 AJD	0.0000 g 24.06.19 08:43	✓ B 24.06.19 08:46	0.0033	0.0591			1.0000	06202019CAL.c80 20.06.19 12:03	
3	PURGE 6-24-19 AJD	0.0000 g 24.06.19 08:43	✓ B 24.06.19 08:50	0.0031	0.0551			1.0000	06202019CAL.c80 20.06.19 12:03	
4	ICVB 228668_11808 LOT NR 7473-ICVB EXP 24-JUN-19	1.0252 g 24.06.19 08:58	✓ 24.06.19 08:58	0.3779	8.2838	0.3287		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
5	ICVA 228669_11808 LOT NR 7473-ICVA EXP 24-JUN-19	1.0256 g 24.06.19 09:09	✓ 24.06.19 09:09	0.1100	131.2838	5.1283		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
6	auto BV (1)	0.0000 g 24.06.19 09:20	✓ B 24.06.19 09:19	0.1238	2.5242			1.0000	06202019CAL.c80 20.06.19 12:03	
7	auto BV (2)	0.0000 g 24.06.19 09:23	✓ B 24.06.19 09:23	0.0281	0.5543			1.0000	06202019CAL.c80 20.06.19 12:03	
8	auto BV (3)	0.0000 g 24.06.19 09:27	✓ B 24.06.19 09:26	0.0138	0.2883			1.0000	06202019CAL.c80 20.06.19 12:03	
9	ICB 228670_11808 LOT NR 7473-CBLB EXP 24-JUN-19	0.1000 g 24.06.19 09:30	✓ 24.06.19 09:30	0.0512	1.0220	0.0102		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
10	CRDL 228667_11808 LOT NR 7473-CBL1 EXP 24-JUN-19	0.0254 g 24.06.19 09:43	✓ 24.06.19 09:43	0.1467	3.0098	0.1185		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
11	CRDL 228667_11808	0.0256 g 24.06.19 09:54	✓ 24.06.19 09:54	0.1220	2.4861	0.0971		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
12	1889475_11807 202021 <0.02	0.1000 g 24.06.19 10:05	✓ 24.06.19 10:07	0.0545	1.0892	0.0109		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
13	1889476_11807 218069 114%	0.0490 g 24.06.19 10:18	✓ 24.06.19 10:20	0.6006	14.2459	0.2907		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
14	1889477_11807 218069 128% NR	0.0491 g 24.06.19 10:30	✓ 24.06.19 10:31	0.6398	15.4274	0.3142		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
15	1889477_11807 218069 118%	0.0490 g 24.06.19 10:42	✓ 24.06.19 10:43	0.6169	14.7305	0.3006		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
16	40189622001_11807	0.1036 g 24.06.19 10:53	✓ 24.06.19 10:56	0.0108	0.2084	0.0020		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
17	40189622002_11807	0.1025 g 24.06.19 10:53	✓ 24.06.19 11:06	0.0055	0.1028	0.0010		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
18	40189622003_11807	0.1020 g 24.06.19 10:53	✓ 24.06.19 11:17	0.0044	0.0809	0.0008		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
19	40189622004_11807	0.1026 g 24.06.19 10:54	✓ 24.06.19 11:29	0.0044	0.0809	0.0008		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
20	40189622005_11807	0.1024 g 24.06.19 10:54	✓ 24.06.19 11:40	0.0042	0.0770	0.0008		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
21	40189622006_11807	0.1021 g 24.06.19 10:54	✓ 24.06.19 11:52	0.0034	0.0610	0.0006		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06

Sample listing "06242019A_40HG4_AJD.d80"

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Pos Nr	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [mg/kg]	Σ	Cal- Factor	Calibration file Date	Method file Date
11	CCVB 218641_11808	0.0275 g 24.06.19 12:04	✓ 24.06.19 12:07	0.4020	8.8789	0.3229		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
12	CCVA 146935_11808	0.0270 g 24.06.19 12:06	✓ 24.06.19 12:17	0.1046	124.6023	4.6149		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
24	auto BV (1)	0.0000 g 24.06.19 12:29	✓ B 24.06.19 12:28	0.0505	1.0078			1.0000	06202019CAL.c80 20.06.19 12:03	
25	auto BV (2)	0.0000 g 24.06.19 12:32	✓ B 24.06.19 12:32	0.0059	0.1108			1.0000	06202019CAL.c80 20.06.19 12:03	
13	CCB 228670_11808	0.1000 g 24.06.19 12:08	✓ 24.06.19 12:35	0.0082	0.1566	0.0016		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
14	1889472_11806	0.1000 g 24.06.19 12:48	✓ 24.06.19 12:49	0.0130	0.2523	0.0025		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
15	1889473_11806	0.0490 g 24.06.19 13:01	✓ 24.06.19 13:02	0.5980	14.1707	0.2892		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
16	1889474_11806	0.0490 g 24.06.19 13:13	✓ 24.06.19 13:14	0.5952	14.0890	0.2875		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
17	40189616001_11806	0.1028 g 24.06.19 13:27	✓ 24.06.19 13:50	0.0092	0.1765	0.0017		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
18	40189616002_11806	0.1026 g 24.06.19 13:27	✓ 24.06.19 13:59	0.0031	0.0551	0.0005		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
19	40189616003_11806	0.1022 g 24.06.19 13:27	✓ 24.06.19 14:10	0.0040	0.0730	0.0007		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
20	40189616004_11806	0.1022 g 24.06.19 13:27	✓ 24.06.19 14:22	0.0042	0.0770	0.0008		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
21	40189618001_11806	0.1029 g 24.06.19 13:30	✓ 24.06.19 14:33	0.0020	0.0332	0.0003		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
22	40189618002_11806	0.1020 g 24.06.19 13:30	✓ 24.06.19 14:45	0.0028	0.0491	0.0005		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
23	40189618003_11806	0.1026 g 24.06.19 13:30	✓ 24.06.19 14:56	0.0026	0.0451	0.0004		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
24	CCVB 218641_11808	0.0274 g 24.06.19 13:32	✓ 24.06.19 15:08	0.3951	8.7083	0.3178		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
25	CCVA 146935_11808	0.0270 g 24.06.19 13:34	✓ 24.06.19 15:19	0.1044	124.3549	4.6057		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
39	auto BV (1)	0.0000 g 24.06.19 15:32	✓ B 24.06.19 15:31	0.0488	0.9731			1.0000	06202019CAL.c80 20.06.19 12:03	
40	auto BV (2)	0.0000 g 24.06.19 15:35	✓ B 24.06.19 15:34	0.0061	0.1148			1.0000	06202019CAL.c80 20.06.19 12:03	
26	CCB 228670_11808	0.1000 g 24.06.19 13:36	✓ 24.06.19 15:38	0.0079	0.1506	0.0015		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
27	40189618004_11806	0.1021 g 24.06.19 13:36	✓ 24.06.19 15:49	0.0041	0.0750	0.0007		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06

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Pos Nr.	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [mg/kg]	Σ	Cal- Factor	Calibration file Date	Method file Date
28	40189618005_11806	0.1026 g 24.06.19 13:36	✓ 24.06.19 16:00	0.0032	0.0571	0.0006		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
29	40189618006_11806	0.1033 g 24.06.19 13:36	✓ 24.06.19 16:12	0.0029	0.0511	0.0005		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
30	40189618007_11806	0.1026 g 24.06.19 13:36	✓ 24.06.19 16:23	0.0031	0.0551	0.0005		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
31	40189618008_11806	0.1027 g 24.06.19 13:36	✓ 24.06.19 16:35	0.0020	0.0332	0.0003		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
32	40189620001_11806	0.1026 g 24.06.19 13:39	✓ 24.06.19 16:46	0.0020	0.0332	0.0003		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
33	40189620002_11806	0.1024 g 24.06.19 13:39	✓ 24.06.19 16:58	0.0019	0.0312	0.0003		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
34	40189620003_11806	0.1021 g 24.06.19 13:39	✓ 24.06.19 17:09	0.0017	0.0273	0.0003		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
35	40189620004_11806	0.1020 g 24.06.19 13:40	✓ 24.06.19 17:21	0.0013	0.0193	0.0002		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
36	40189621001_11806	0.1021 g 24.06.19 13:40	✓ 24.06.19 17:32	0.0019	0.0312	0.0003		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
37	CCVB 218641_11808 112%	0.0271 g 24.06.19 13:43	✓ 24.06.19 17:44	0.4010	8.8546	0.3267		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
38	CCVA 146935_11808 110%	0.0270 g 24.06.19 13:44	✓ 24.06.19 17:55	0.1049	124.9735	4.6286		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
39	- auto BV (1)	0.0000 g 24.06.19 18:08	✓ B 24.06.19 18:06	0.0378	0.7504			1.0000	06202019CAL.c80 20.06.19 12:03	
40	- auto BV (2)	0.0000 g 24.06.19 18:11	✓ B 24.06.19 18:10	0.0045	0.0829			1.0000	06202019CAL.c80 20.06.19 12:03	
41	CCB 228670_11808 <0.02	0.1000 g 24.06.19 13:45	✓ 24.06.19 18:13	0.0062	0.1168	0.0012		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
42	40189621002_11806	0.1018 g 24.06.19 13:46	✓ 24.06.19 18:24	0.0038	0.0690	0.0007		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
43	1 40189621003_11806	0.1020 g 24.06.19 13:46	✓ 24.06.19 18:36	0.0027	0.0471	0.0005		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
44	CCVB 218641_11808 112%	0.0273 g 24.06.19 13:47	✓ 24.06.19 18:47	0.4031	8.9071	0.3263		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
45	CCVA 146935_11808 114%	0.0271 g 24.06.19 13:49	✓ 24.06.19 18:59	0.1093	130.4177	4.8125		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06
46	- auto BV (1)	0.0000 g 24.06.19 19:11	✓ B 24.06.19 19:10	0.0381	0.7565			1.0000	06202019CAL.c80 20.06.19 12:03	
47	- auto BV (2)	0.0000 g 24.06.19 19:15	✓ B 24.06.19 19:14	0.0045	0.0829			1.0000	06202019CAL.c80 20.06.19 12:03	
48	CCB 228670_11808 <0.02	0.1000 g 24.06.19 13:50	✓ 24.06.19 19:17	0.0067	0.1267	0.0013		1.0000	06202019CAL.c80 20.06.19 12:03	7473 Biota.m80 31.10.11 13:06

