Case Narrative

Analysis: ICP Metals
Preparation SOP#: OSHA ID-1003 Mod

Analysis SOP#: OSHA ID-1003 Mod
Analysis Batch: IICP/13210

Client: Weston Solutions
Matrix: SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester)
ALS WorkOrder IDs: 1703278
HBN: 184732

General Set Information: There were eleven field samples in this workorder that were analyzed in this HBN. The samples were analyzed for phosphorus and reported as phosphine by OSHA ID-1003 Mod.

Method Summary: Each sample was digested on a hotblock in the presence of 2 mL of concentrated sulfuric acid, followed by the addition of 3 mL of 30% hydrogen peroxide in a dropwise manner. The resulting digest was analyzed using a Perkin Elmer Optima 3100 DV "ICP02" Analyzer equipped with a Perkin Elmer AS 91autosampler and WinLab 32 software.

Sample Preparation: Each sample was transferred to 50 mL centrifuge tube and digested in the presence of 2 mL of concentrated sulfuric acid. Each sample was digested in a hot block set at 95 ºC for 60 minutes. After the samples were allowed to cool for at least two hours, 3 mL of 30% hydrogen peroxide was in a dropwise manner until the sample color changed from brown to clear/yellow. The digestion solution was diluted to 25 mL final volume with ASTM Type II water.

Instrument Calibration: Instrument calibration was performed in accordance with published procedures.

Initial and Continuing Calibration Data: Initial and Continuing calibrations were performed in accordance with published procedures.

Dilutions: No dilutions were required.

Method and Sample QC Data: The reagent blank concentration is less than the reporting limit for the requested analyte. The LMB 535775 was above the reporting limit for phosphorus (6.15 µg/sample) so the LCS 535776 and LCSD 535777 results have been media blank corrected for phosphorus with LMB 535775.

The LCS and LCSD results are within method control limits of ± 20% for the requested analyte.

NC/CAR: None required.

Flagging Codes: Refer to the last page of the report for all applicable flagging codes.

Sample Calculation:

Method 7300mod: $C \times \frac{Vf}{sample} \times DF = Concentration(\mu g/sample)$

Where,

C = Instrument value in µg/L (The average of all replicate integrations).

Vf = Final digestion volume (L)

DF = Dilution Factor

Miscellaneous Comments: None.

Peter P. Steen 1 February 2017

ANALYTICAL REPORT

Report Date: February 02, 2017

Jeff Wright
Weston Solutions, Inc.
13702 Coursey Blvd.
Baton Rouge, LA 70817

Phone: (225) 297-5415

E-mail: jeff.wright@westonsolutions.com

Workorder: **34-1703278**
Client Project ID: PH3-BR1-28012017-81 012817
Purchase Order: 6-013017-075134-0001
Project Manager: Paul Pope

Analytical Results

Sample ID: **PH3-BR1-28012017-81** Collected: 01/28/2017
Lab ID: 1703278001 Sampling Location: Bedroom 1 Received: 01/31/2017

Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	**6.3**	**0.026**	**0.019**	5.5

Sample ID: **PH3-BR2-28012017-81** Collected: 01/28/2017
Lab ID: 1703278002 Sampling Location: Bedroom 2 Received: 01/31/2017

Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	**6.4**	**0.027**	**0.019**	5.5

Sample ID: **PH3-BR3-28012017-81** Collected: 01/28/2017
Lab ID: 1703278003 Sampling Location: Bedroom 3 Received: 01/31/2017

Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	<5.5	<0.023	<0.016	5.5

ANALYTICAL REPORT

Workorder: **34-1703278**
Client Project ID: PH3-BR1-28012017-81 012817
Purchase Order: 6-013017-075134-0001
Project Manager: Paul Pope

Analytical Results

Sample ID: **PH3-BTH1-28012017-81** Collected: 01/28/2017
Lab ID: 1703278004 Sampling Location: Bathroom 1 Received: 01/31/2017

Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	**5.8**	**0.024**	**0.018**	5.5

Sample ID: **PH3-BTH1-28012017-82** Collected: 01/28/2017
Lab ID: 1703278005 Sampling Location: Bathroom 1 Received: 01/31/2017

Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	**7.1**	**0.030**	**0.021**	5.5

Sample ID: **PH3-BTH2-28012017-81** Collected: 01/28/2017
Lab ID: 1703278006 Sampling Location: Bathroom 2 Received: 01/31/2017

Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	<5.5	<0.023	<0.016	5.5

Sample ID: **PH3-FB-28012017-85** Collected: 01/28/2017
Lab ID: 1703278007 Received: 01/31/2017

Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume Not Applicable** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	**6.6**	NA	NA	5.5

ANALYTICAL REPORT

Workorder: **34-1703278**
Client Project ID: PH3-BR1-28012017-81 012817
Purchase Order: 6-013017-075134-0001
Project Manager: Paul Pope

Analytical Results

Sample ID: **PH3-HVAC-28012017-81** Collected: 01/28/2017
Lab ID: 1703278008 Sampling Location: HVAC System Received: 01/31/2017
Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	**7.9**	**0.033**	**0.024**	5.5

Sample ID: **PH3-KTCH-28012017-81** Collected: 01/28/2017
Lab ID: 1703278009 Sampling Location: Kitchen Received: 01/31/2017
Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	**5.7**	**0.024**	**0.017**	5.5

Sample ID: **PH3-LAUN-28012017-81** Collected: 01/28/2017
Lab ID: 1703278010 Sampling Location: Laundry Room Received: 01/31/2017
Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	**7.1**	**0.029**	**0.021**	5.5

Sample ID: **PH3-LR-28012017-81** Collected: 01/28/2017
Lab ID: 1703278011 Sampling Location: Laundry Room Received: 01/31/2017
Method: **OSHA 1003 Mod.** **Media:** SKC 225-9018, Glass fiber & polyester filter (Mercuric chloride on polyester) **Prepared:** 01/31/2017
Sampling Parameter: **Air Volume 240 L** **Analyzed:** 02/01/2017

Analyte	Result (ug/sample)	Result (mg/m³)	Result (ppm)	RL (ug/sample)
Phosphine	**5.6**	**0.024**	**0.017**	5.5

Comments

Workorder: **1703278**

The reported results for phosphine [PH3] are based upon analysis for elemental phosphorus that has been calculated by mathematical conversion of the elemental result using the molecular weight ratio and molar ratio of phosphorus to phosphine. The reported value presumes that all phosphorus present is in the form of phosphine.

ANALYTICAL REPORT

Workorder: **34-1703278**
Client Project ID: PH3-BR1-28012017-81 012817
Purchase Order: 6-013017-075134-0001
Project Manager: Paul Pope

Comments

Quality Control: OSHA 1003 Mod. - (HBN: 184732)

LMB 535775 was above the reporting limit for phosphorus (6.15 µg/sample) so the LCS 535776 and LCSD 535777 results have been media blank corrected for phosphorus with LMB 535775.

Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method	Analyst	Peer Review
OSHA 1003 Mod.	/S/ Peter P. Steen 02/01/2017 12:38	/S/ Lauren Jones 02/02/2017 11:21

Laboratory Contact Information

ALS Environmental
960 W Levoy Drive
Salt Lake City, Utah 84123

Phone: (801) 266-7700
Email: alslt.lab@ALSGlobal.com
Web: www.alsslc.com

General Lab Comments

The results provided in this report relate only to the items tested.
Samples were received in acceptable condition unless otherwise noted.
Samples have not been blank corrected unless otherwise noted.
This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Environmental	ANAB (DoD ELAP)	ADE-1420	http://www.anab.org/accredited-organizations/
	Utah (NELAC)	DATA1	http://health.utah.gov/lab/labimp/
	Nevada	UT00009	http://ndep.nv.gov/bsdw/labservice.htm
	Oklahoma	UT00009	http://www.deq.state.ok.us/CSDnew/
	Iowa	IA# 376	http://www.iowadnr.gov/InsideDNR/RegulatoryWater.aspx
	Texas (TNI)	T104704456-11-1	http://www.tceq.texas.gov/field/qa/lab_accred_certif.html
	Washington	C596-16	http://www.ecy.wa.gov/programs/eap/labs/index.html
	Kansas	E-10416	http://www.kdheks.gov/lipo/index.html
Industrial Hygiene	AIHA LAP LLC (ISO 17025 & IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
	Washington	C596-16	http://www.ecy.wa.gov/programs/eap/labs/index.html
Lead Testing:			
CPSC	ANAB (ISO 17025, CPSC)	ADE-1420	http://www.anab.org/accredited-organizations/
Soil, Dust, Paint ,Air	AIHA LAP LLC (ISO 17025 & IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
Dietary Supplements	ACLASS (ISO 17025)	ADE-1420	http://www.aclasscorp.com

ANALYTICAL REPORT

Workorder: **34-1703278**
Client Project ID: PH3-BR1-28012017-81 012817
Purchase Order: 6-013017-075134-0001
Project Manager: Paul Pope

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.
LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.
ND = Not Detected, Testing result not detected above the LOD or LOQ.
NA = Not Applicable.
** No result could be reported, see sample comments for details.
< This testing result is less than the numerical value.
( ) This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.

Quality Control Sample
Batch Report

Analysis Information

Workorder: **1703278**

Limits: Historical/Performance
Basis: ALS Laboratory Group

Preparation: OSHA 1003, Prep
Batch: IIPX/20999 (HBN: 184640)
Prepared By: Brian S. Stites

Analysis: OSHA 1003 Mod.
Batch: IICP/13210 (HBN: 184732)
Analyzed By: Peter P. Steen

Blank

LRB: 535774
Analyzed: 02/01/2017 10:56
Units: ug/sample

Analyte	Result	MDL	RL
Phosphorus	ND	1.5	5.00

LMB: 535775
Analyzed: 02/01/2017 10:59
Units: ug/sample

Analyte	Result	MDL	RL
Phosphorus	6.15	1.5	5.00

Laboratory Control Sample - Laboratory Control Sample Duplicate

LCS: 535776
Analyzed: 02/01/2017 11:03
Dilution: 1
Units: ug/sample

LCSD: 535777
Analyzed: 02/01/2017 11:06
Dilution: 1
Units: ug/sample

Analyte	Result	Target	% Rec	QC Limits		Result	% Rec	RPD	QC Limits	
Phosphorus	112	100	112	83.7	123.7	111	111	0.981	0.0	20.0

Initial Calibration Verification

ICV: 535984
Analyzed: 02/01/2017 10:36
Units: ug/L
Criteria: ± 10%

Analyte	Result	Target	% Rec.
Phosphorus	2080	2000	104

Continuing Calibration Verification

CCV: 535989
Analyzed: 02/01/2017 11:16
Units: ug/L
Criteria: ± 15%

CCV: 535991
Analyzed: 02/01/2017 11:51
Units: ug/L
Criteria: ± 15%

CCV: 535995
Analyzed: 02/01/2017 12:12
Units: ug/L
Criteria: ± 15%

Analyte	Result	Target	% Rec.	Result	Target	% Rec.	Result	Target	% Rec.
Phosphorus	26000	25000	104	25700	25000	103	27100	25000	108

CRDL Standard

CRDL: 535988
Analyzed: 02/01/2017 10:53
Units: ug/L
Criteria: ± 50%

Analyte	Result	Target	% Rec.	MDL	RL
Phosphorus	168	200	84.1	NA	NA

Quality Control Sample
Batch Report

Analysis Information

Workorder: **1703278**

Limits: Historical/Performance
Basis: ALS Laboratory Group

Preparation: OSHA 1003, Prep
Batch: IIPX/20999 (HBN: 184640)
Prepared By: Brian S. Stites

Analysis: OSHA 1003 Mod.
Batch: IICP/13210 (HBN: 184732)
Analyzed By: Peter P. Steen

Initial Calibration Blank

ICB: 535985
Analyzed: 02/01/2017 10:40
Units: ug/L

Analyte	Result	Qual.
Phosphorus	ND	U

Continuing Calibration Blank

CCB: 535990			CCB: 535992		CCB: 535996	
Analyzed: 02/01/2017 11:21			Analyzed: 02/01/2017 11:56		Analyzed: 02/01/2017 12:17	
Units: ug/L			Units: ug/L		Units: ug/L	
Analyte	**Result**	**Qual.**	**Result**	**Qual.**	**Result**	**Qual.**
Phosphorus	ND	U	ND	U	ND	U

Interference Check Sample

ICSA: 535986				ICSAB: 535987		
Analyzed:				Analyzed: 02/01/2017 10:48		
Units:				Units: ug/L		
Criteria: ± 50				Criteria: ± 50%		
Analyte	**Result**	**Target**	**% Rec.**	**Result**	**Target**	**% Rec.**
Phosphorus				584	500	117

ICSA: 535993				ICSAB: 535994		
Analyzed:				Analyzed: 02/01/2017 12:07		
Units:				Units: ug/L		
Criteria: ± 50				Criteria: ± 50%		
Analyte	**Result**	**Target**	**% Rec.**	**Result**	**Target**	**% Rec.**
Phosphorus				594	500	119

Comments

LMB 535775 was above the reporting limit for phosphorus (6.15 µg/sample) so the LCS 535776 and LCSD 535777 results have been media blank corrected for phosphorus with LMB 535775.

QC Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Analyst	Peer Review
/S/ Peter P. Steen	/S/ Lauren Jones
02/01/2017 14:15	02/02/2017 11:21

Symbols and Definitions

- * - Analyte above reporting limit or outside of control limits
- ▲ - Sample result is greater than 4 times the spike added
- ◆ - Sample and Matrix Duplicate less than 5 times the reporting limit
- ● - Result is above the calibration range
- # - The Matrix Spike, Matrix Spike duplicate or Matrix Duplicate is reported for your information only. The sample matrix may be inappropriate for the method selected.

RPD - Relative % Difference (Spike / Spike Duplicate)
ND - Not Detected (U - Qualifier also flags analyte as not detected)
NA - Not Applicable
QC results are not adjusted for moisture correction, where applicable

1703278

DateShipped: 1/30/2017
CarrierName: FedEx
AirbillNo: 8102 7130 9794

RUSH

17110/2

1703878

CHAIN OF CUSTODY RECORD

Site #: 11973
Contact Name: Jose Ojeda
Contact Phone: (469) 666-5506

No: 6-013017-075134-0001

Cooler #: 1 of 1
Lab: ALS Environmental
Lab Phone: 801-266-7700

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Volume	Vol Units	Lab QC	Total_Time
—	PH3-BR1-28012017-81	Bedroom 1	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	240
—	PH3-BR2-28012017-81	Bedroom 2	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	240
—	PH3-BR3-28012017-81	Bedroom 3	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	240
—	PH3-BTH1-28012017-81	Bathroom 1	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	240
—	PH3-BTH1-28012017-82	Bathroom 1	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	240
—	PH3-BTH2-28012017-81	Bathroom 2	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	240
—	PH3-FB-28012017-85	Field Blank	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	0
—	PH3-HVAC-28012017-81	HVAC System	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	240
—	PH3-KTCH-28012017-81	Kitchen	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	240
—	PH3-LAUN-28012017-81	Laundry Room	OSHA 1003 for Phosphine	Air	1/28/2017	1	MCE Cassette	4 C	240	Liters	N	240

— PH3-LR-28012017-81

Special Instructions:
rec'd sample PH3-LR-28012017-81, not listed, added to COC! HT 01-31-17

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
11 samples	[signature] for EPA	01/30/2017 0928	[signature]	01-31-17	10:30 good

ALS - SALT LAKE CITY-RELATED INFORMATION REPORT (CRIR)

COOLER OR CONTAINER INFORMATION CHECKLIST (Fill In or Circle)

Client Name: Weston Solutions

Project/Task/Site: _____

Date/Time of Receipt: 01-31-17 10:30

Number of Coolers Received: 1

Condition of Coolers:	Acceptable/Unacceptable	Temperature Control:	Present/Not Included
Cooler Custody Seals:	Present/Absent/NA Intact/Broken/NA	Location Temp Taken:	Control/Between Samples
Container Custody Seals:	Present/Absent/NA Intact/Broken/NA	Are all temperatures within project specific guidelines?	Yes/No/NA
Ice Present:	Yes/No/NA Frozen/Melted/NA	VOA Headspace Present?	Yes/No/NA

pH Check Performed:							
	Metals	Yes/No/NA	Total Phenolics	Yes/No/NA	NO3/NO2	Yes/No/NA
	Cyanide	Yes/No/NA	TPH – 418.1	Yes/No/NA	Oil & Grease	Yes/No/NA
	Sulfide	Yes/No/NA	COD	Yes/No/NA	Total Phosphorous	Yes/No/NA
	Ammonia	Yes/No/NA	TKN	Yes/No/NA	TOC Preserved	Yes/No/NA

Cooler Received	ALS Cooler No.	Temp.	Cooler Received	ALS Cooler No.	Temp.	Cooler Received	ALSL Cooler No.	Temp.
1	C17- 0851	NA °C	4	C17-	°C	7	C17-	°C
2	C17-	°C	5	C17-	°C	8	C17-	°C
3	C17-	°C	6	C17-	°C	9	C17-	°C

Taken By: Tanir Vaughn Tassell (Signature) Tanir Vaughn Tassell (Printed Name) 01-31-17 (Date)

CLIENT-RELATED INFORMATION

- ☐ Missing Cooler
- ☐ Cooler Conditions
- ☐ Missing Paperwork
- ☐ Missing/Incorrect Bottle Labels
- ☐ Missing Samples/Bottles
- ☐ Broken/Leaking Samples
- ☐ Incorrect Bottle Type
- ☐ Cooler Temperatures Out of Range
- ☐ Incorrect Preservation
- ☐ pH Criteria Not Met
- ☐ Residual Chlorine Present
- ☐ Head Space in Bottles
- ☐ Insufficient Sample Volume
- ☐ Chain of Custody Problems
- ☐ Other:

BRIEFLY DESCRIBE THE PROBLEM AND THE ACTION TAKEN:

E-mailed to Client? YES ☐ NO ☐

Response Required Within 24 Hours

PROJECT MANAGEMENT

PROJECT MANAGER COMMENTS:

ALS Project Manager: _____ (Printed Name) Returned to Sample Receipt by: _____ (Signature) Date: _____

Batch Worklist

Batch: IICP/ 13210 **Created:** 2/1/2017 12:30 **Instrument:** ICP02 **HBN:** 184732

Rule: OSHA 1003, Air **Analyst:** P. Steen **Status:** WP

Workorder: 1703278

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	535981	STD0 for HBN 184732 (IICP/1321				STD0	3		O1003..C3Q			4/2/2017	2/1/2017
2	535982	STD1 for HBN 184732 (IICP/1321				STD1	3		O1003..C3Q			4/2/2017	2/1/2017
3	535983	STD4 for HBN 184732 (IICP/1321				STD4	3		O1003..C3Q			4/2/2017	2/1/2017
4	535984	ICV for HBN 184732 (IICP/13210				ICV	3		O1003..C3Q			4/2/2017	2/1/2017
5	535985	ICB for HBN 184732 (IICP/13210				ICB	3		O1003..C3Q			4/2/2017	2/1/2017
6	535986	ICSA for HBN 184732 (IICP/1321				ICSA	3		O1003..C3Q			4/2/2017	2/1/2017
7	535987	ICSAB for HBN 184732 (IICP/132				ICSAB	3		O1003..C3Q			4/2/2017	2/1/2017
8	535988	CRI for HBN 184732 (IICP/13210				CRI	3		O1003..C3Q			4/2/2017	2/1/2017
9	535774	LRB for HBN 184640 [IIPX/20999	1 filter	25 mL		LRB	1		O1003...1Q	6201		2/1/2017	2/1/2017
10	535775	LMB for HBN 184640 [IIPX/20999	1 filter	25 mL		LMB	1		O1003...1Q	6201		2/1/2017	2/1/2017
11	535776	LCS for HBN 184640 [IIPX/20999	1 filter	25 mL		LCS	1		O1003...1Q	6201		2/1/2017	2/1/2017
12	535777	LCSD for HBN 184640 [IIPX/2099	1 filter	25 mL		LCSD	1		O1003...1Q	6201		2/1/2017	2/1/2017
13	1703278001	PH3-BR1-28012017-81	1 filter	25 mL		SAMPLE	1	1703278001-A	O1003....1	5975		2/1/2017	2/1/2017
14	1703278002	PH3-BR2-28012017-81	1 filter	25 mL		SAMPLE	1	1703278002-A	O1003....1	5975		2/1/2017	2/1/2017
15	535989	CCV1 for HBN 184732 (IICP/1321				CCV1	3		O1003..C3Q			4/2/2017	2/1/2017
16	535990	CCB for HBN 184732 (IICP/13210				CCB	3		O1003..C3Q			4/2/2017	2/1/2017
17	1703278003	PH3-BR3-28012017-81	1 filter	25 mL		SAMPLE	1	1703278003-A	O1003....1	5975		2/1/2017	2/1/2017
18	1703278004	PH3-BTH1-28012017-81	1 filter	25 mL		SAMPLE	1	1703278004-A	O1003....1	5975		2/1/2017	2/1/2017
19	1703278005	PH3-BTH1-28012017-82	1 filter	25 mL		SAMPLE	1	1703278005-A	O1003....1	5975		2/1/2017	2/1/2017
20	1703278006	PH3-BTH2-28012017-81	1 filter	25 mL		SAMPLE	1	1703278006-A	O1003....1	5975		2/1/2017	2/1/2017
21	1703278007	PH3-FB-28012017-85	1 filter	25 mL		FLDBK	1	1703278007-A	O1003....1	5975		2/1/2017	2/1/2017
22	1703278008	PH3-HVAC-28012017-81	1 filter	25 mL		SAMPLE	1	1703278008-A	O1003....1	5975		2/1/2017	2/1/2017
23	1703278009	PH3-KTCH-28012017-81	1 filter	25 mL		SAMPLE	1	1703278009-A	O1003....1	5975		2/1/2017	2/1/2017
24	1703278010	PH3-LAUN-28012017-81	1 filter	25 mL		SAMPLE	1	1703278010-A	O1003....1	5975		2/1/2017	2/1/2017
25	535991	CCV1 for HBN 184732 (IICP/1321				CCV1	3		O1003..C3Q			4/2/2017	2/1/2017
26	535992	CCB for HBN 184732 (IICP/13210				CCB	3		O1003..C3Q			4/2/2017	2/1/2017
27	1703278011	PH3-LR-28012017-81	1 filter	25 mL		SAMPLE	1	1703278011-A	O1003....1	5975		2/1/2017	2/1/2017
28	535993	ICSA for HBN 184732 (IICP/1321				ICSA	3		O1003..C3Q			4/2/2017	2/1/2017
29	535994	ICSAB for HBN 184732 (IICP/132				ICSAB	3		O1003..C3Q			4/2/2017	2/1/2017

Batch Worklist

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
30	535995	CCV1 for HBN 184732 (IICP/1321				CCV1	3		O1003..C3Q			4/2/2017	2/1/2017
31	535996	CCB for HBN 184732 (IICP/13210				CCB	3		O1003..C3Q			4/2/2017	2/1/2017

Raw Data File: H17007 **Analysis HBN#** 184732

Workorder ID	Sample #(s)	Matrix	Prep HBN #	Prep Date/Time	Analytes	Prep Method
1703278	001-011	SKC 225-9018	184640	1/31/2017 14:00	Phosphorus as Phosphine	OSHA 1003 Mod

Conversion Factor(s):

µg P/L to µg PH_3/sample: (µg P/L)(33.998 µg PH_3/30.974 µg P)(0.025 L/sample) = µg PH_3/sample
Where, 33.998 is the MW for PH_3 and 30.974 is the MW for phosphorus (P).

Calibration and QC Standards used:

STD	Std ID#
STD0/ICB/CCB	8% H_2SO_4/EMD Lot 55172
S1/CCV1	34632
S4/CCV4	34796
ICV	33540
ICSA	34033
ICSAB	35415
CRI	33133
Rinse	10% HNO3/Lot 00000145075

Analysis Method: OSHA 1003 Mod
Analysis Date: 2/1/2017
Instrument ID: ICP02
Analyst: Peter P. Steen

ANALYSIS PARAMETERS:
Plasma Gas Flow = 15 L/min
Auxiliary Gas Flow = 0.5 L/min
Nebulizer Gas Flow = 0.60 L/min
RF Power = 1400 W
Pump Rate = 2.00 mL/min

Dilutions: No dilutions were required.

Comments: SKC 225-9018 media is mercuric chloride treated polyester filter and glass fiber filter (pre-filter). Note that phosphate was not requested so the pre-filters were discarded.

The reporting limit is 220 µg PH_3/L, 5.5 µg PH_3/sample (200 µg P/L, 5 µg P/sample).

Note that the S4 standard is in 20% HNO_3 because it does not contain P.

All field samples and QC samples were filtered to reduce/remove particulate matter prior to analysis.

All QC samples results were posted and reported as phosphorus.

The phosphorus result was posted for all field samples (treated filter) after changing the analyte name to phosphine (7803-51-2) in the autopost pipe.

The µg PH_3/L were calculated by multiplying µg P/L result by 1.0976, conversion performed by Horizon.

LMB 535775 was above the reporting limit for phosphorus (6.15 µg/sample) so the LCS 535776 and LCSD 535777 results have been media blank corrected for phosphorus with LMB 535775.

Batch Worklist

Lvl 7 RUSH Hood:19 1425-1525
ICP/13210 (184732) 95.0°C 96.2°C 02/01/17 0915 0935

Batch: IIPX/ 20999 **Created:** 1/31/2017 13:40 **Instrument:** **HBN:** 184640
Rule: OSHA 1003, Prep **Analyst:** B. Stites **Status:** NA

Workorder: 1703278 – PH_3

Over: 02/01/17 Spike: 35284

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	535774	LRB for HBN 184640 [IIPX/20999				LRB	1		O1003...1P	6201		1/31/2017	
2	535775	LMB for HBN 184640 [IIPX/20999				LMB	1		O1003...1P	6201		1/31/2017	
3	535776	LCS for HBN 184640 [IIPX/20999				LCS	1		O1003...1P	6201		1/31/2017	
4	535777	LCSD for HBN 184640 [IIPX/2099				LCSD	1		O1003...1P	6201		1/31/2017	
5	1703278001	PH3-BR1-28012017-81				SAMPLE	1	1703278001-A	O1003...1P	5975		1/31/2017	
6	1703278002	PH3-BR2-28012017-81				SAMPLE	1	1703278002-A	O1003...1P	5975		1/31/2017	
7	1703278003	PH3-BR3-28012017-81				SAMPLE	1	1703278003-A	O1003...1P	5975		1/31/2017	
8	1703278004	PH3-BTH1-28012017-81				SAMPLE	1	1703278004-A	O1003...1P	5975		1/31/2017	
9	1703278005	PH3-BTH1-28012017-82				SAMPLE	1	1703278005-A	O1003...1P	5975		1/31/2017	
10	1703278006	PH3-BTH2-28012017-81				SAMPLE	1	1703278006-A	O1003...1P	5975		1/31/2017	
11	1703278007	PH3-FB-28012017-85				FLDBK	1	1703278007-A	O1003...1P	5975		1/31/2017	
12	1703278008	PH3-HVAC-28012017-81				SAMPLE	1	1703278008-A	O1003...1P	5975		1/31/2017	
13	1703278009	PH3-KTCH-28012017-81				SAMPLE	1	1703278009-A	O1003...1P	5975		1/31/2017	
14	1703278010	PH3-LAUN-28012017-81				SAMPLE	1	1703278010-A	O1003...1P	5975		1/31/2017	
15	1703278011	PH3-LR-28012017-81				SAMPLE	1	1703278011-A	O1003...1P	5975		1/31/2017	

QC's lot # 11032 Exp. 03/2017

Samples lot # 11032 Exp 03/2017

OSHA 1003 PHOSPHINE Sample Hot Block Preparation Electronic Log

ALS Set ID	Sample ID	Analyte(s)
1703278	001-011	PH_3

Batch Information

Batch HBN:	184640
CLP Case:	NA
CLP SDG:	NA
Matrix:	Treated Polyester Filter
Start temp:	95.0°C
End temp:	96.2°C
Hood:	19

ALS QC ID	Matrix Source	Spike Source	Pipette ID	Spike Volume
Reagent Blank	Method Reagents	NA	NA	NA
LMB	Treated Polyester Filter	NA		
LCS and LCSD		Horizon # 35284	MK-11	100 µL

QC's spike by:	BS

Witness:	N/A

Method Reagents

QC Treated Filters Lo t# 11032 Exp: 03/2017
30% H_2O_2 Macron 0000134002
H_2SO_4 Lot # EMD 55172
ASTM Type II water
Sample Treated Filters Lot # 11032 Exp: 03/2017

Balance ID:	NA
Measured With:	NA
Digestion Vessel:	50 mL Polypropylene tubes
Final Container:	50 mL Polypropylene tubes
Amount of Sample:	Entire Treated Filter
Final Volume:	25 mL

Sample Preparation Description **METHOD: OSHA 1003 MOD**

Modified Method?	YES	NO X	If YES explain:

Brian Stites 01/31/2017, 1400. Samples transferred to 50 mL polypropylene tubes. QCs prepared as described above. Added 2 mL of conc. H_2SO_4 to all samples and heated on a hotblock at 1425 at approximately 95+/-5°C for at least 60 minutes. Samples removed from hotblock at 1525 and allowed to cool at least 2 hours. Brian Stites 02/01/2017, 0915. 30% H_2O_2 was added dropwise (3 mL total added - Maximum 3 mL) until sample changed color from brown to clear/yellow. Samples brought to a final volume of 25 mL with ASTM Type II water. Samples capped and shaken. Samples ready for analysis. Brian Stites 02/01/2017, 0935.

Project No. _____

TITLE ALS Environmental ICP02 Instrument Log

Book No. 3946

From Page No. ____

Date	Start Time	End Time	Total Time (hrs)	Initials	Tubing Changed	Mn Pro File Intensity	Calibration As/Se, Be, Pb	Horizon HBNs, Workorder, Comments, etc.	Method	File
12/7/2016	14:00	1645	2¾	PS	-	—	1165325	181906, 181978, 181981	BeH13	H16322
12/15/2016	13:30	14:30	1.0	PS	-	2076 200034	2075480	182501	BeH13	H16323
12/20/2016	09:00	11:30	2½	PS	-	4004 201974	2886/2257	182503	7300H12	H16324
12/20/2016	14:00	15:30	1½	PS	-	—	2209489	182729, 182730	BeH13	H16325
12/21/2016	12:00	14:00	2.0	PS	-	4126 204088	2791/2150	182760, 182759	7300H12	H16326
12.27.2016	1015	1130	1¼	~~DA~~	✓	4184 202713	2059874	182907 8% H_2SO_4	BeH13	H16327
12/27/2016	12:30	1500	2½	PS	-	—	2739/2023	182970, 182908	7300H12	H16328
12.28.2016	1030	1245	2¼	~~DA~~	✓	4104 211213	2954/2280	182984, 182980	7300H12	H16329
12/28/2016	13:00	15:45	2¼	PS	-	—	Pb 9449	183043, 183056	HPb2015	H16330
12.29.2016	1500	1600	1.0	~~DA~~	-	4122 207908	2795/2229	1635761001 screening	7300H12	H16331
12/30/2016	10:00	13:15	3¼	PS	-	3975 199962	Pb 9515	183163, 183209	HPb2015	H16332
1.3.2017	1115	1500	3¾	~~DA~~	-	3890 202479	Pb 9235	183227, 183118	HPb2015	H17001
1.4.2017	0730	0915	1¾	~~DA~~	-	3729 207688	1978717	183322	BeH13	H17002
1.4.2017	1045	1200	1¼	~~DA~~	-	—	—	183319	BeH13	H17002
1.30.2017	1400	1745	3¾	~~DA~~	✓	239697	Pb 10704	184445, 184467	HPb2015	H17004
1.31.2017	0900	1030	1½	~~DA~~	-	3524 188321	Pb 8531	184467	HPb2015	H17005
1.31.2017	1300	1500	2.0	~~DA~~	-	3587 189836	Pb 8256	JK ELLAP Paint + Soil	HPb2015	H17006
2/1/2017	10:30	12:30	2.0	PS	-	3590 200014	2770/3316	189640 8% H_2SO_4	7300H12	H17007

To Page No. _____

Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by	

Analytical Sequence

Method : 7300H12

Seq.	Loc.		Sample ID
1	1		STD0
2	2		STD1
3	3		STD4
4	4		ICV
5	1		ICB
6	9		ICSA
7	10		ICSAB
8	11		CRI
9	12		535774 LRB
10	13		535775 LMB
11	14		535776 LCS
12	15		535777 LCSD
13	16		1703278001
14	17		1703278002
15	2		CCV1
16	1		CCB
17	18		1703278003
18	19		1703278004
19	20		1703278005
20	21		1703278006
21	22		1703278007
22	23		1703278008
23	24		1703278009
24	25		1703278010
25	2		CCV1
26	1		CCB
27	26		1703278011
28	9		ICSA
29	10		ICSAB
30	2		CCV1
31	1		CCB
32	27		0

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	70466.6
-1.6	15.0	104776.3
-1.2	15.0	141689.4
-0.8	15.0	171824.2
-0.4	15.0	189162.8
0.0	15.0	195493.6
0.4	15.0	189111.0
0.8	15.0	168210.2
1.2	15.0	140893.9
1.6	15.0	114825.2
2.0	15.0	87478.6
0.0	10.0	2878.2
0.0	10.5	4390.0
0.0	11.0	8894.8
0.0	11.5	13970.4
0.0	12.0	21270.7
0.0	12.5	43711.9
0.0	13.0	65554.5
0.0	13.5	92547.6
0.0	14.0	122708.8
0.0	14.5	180860.5
0.0	15.0	195405.8
0.0	15.5	196416.4
0.0	16.0	173266.0
0.0	16.5	119430.7
0.0	17.0	87189.0
0.0	17.5	58759.4
0.0	18.0	41034.4
0.0	18.5	24461.5
0.0	19.0	9122.3
0.0	19.5	5691.3
0.0	20.0	3222.3
-0.8	15.5	178179.9
-0.4	15.5	191038.7
0.0	15.5	194759.0
0.4	15.5	184997.1
0.8	15.5	166699.8
0.0	13.5	96891.5
0.0	14.0	127772.0
0.0	14.5	178805.9
0.0	15.0	198312.0
0.0	15.5	200014.5
0.0	16.0	179109.9
0.0	16.5	121752.5
0.0	17.0	89455.3
0.0	17.5	57030.5

2/1/2017 10:13:36 AM aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 200014.5 for Axial viewing
Y viewing position set to 15.5 mm having Peak intensity 200014.5 for Axial viewing

Align View X Radial for analyte Mn 257.610

X-position	Y-position	Intensity
-7.0	15.0	9.6
-5.6	15.0	28.8
-4.2	15.0	111.2
-2.8	15.0	512.6
-1.4	15.0	2016.3
0.0	15.0	3590.2
1.4	15.0	2208.9
2.8	15.0	936.4
4.2	15.0	239.3
5.6	15.0	90.5
7.0	15.0	62.4

2/1/2017 10:18:06 AM aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 3590.2 for Radial viewing

2/1/2017 10:19:48 AM Hg ReAlign... Actual peak offset (nm): -0.016
Drift (nm): -0.000 Slit adjustment: -2

Analysis Begun

Start Time: 2/1/2017 10:25:28 AM
Logged In Analyst: ALSLT.ICP
Spectrometer Model: Optima 3000 DV

Plasma On Time: 2/1/2017 8:49:49 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\Sample.sif
Results Data Set: H17007
Results Library: C:\pe\Administrator\Results\Results.mdb

Method Loaded
Method Name: 7300H12
IEC File: 7300H2012IEC.iec
Method Description: Full Scan w/W 7300Mod (Lowest Reporting Limits)

Method Last Saved: 2/8/2016 1:56:49 PM
MSF File:

Sequence No.: 1
Sample ID: STD0
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 2/1/2017 10:25:28 AM
Sample Prep Volume:
Data Type: Original

Mean Data: STD0

2/1/2017

P as PH_3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	9.6	3.62	37.58%	[0.00]	µg/L
Sb 206.833	2.4	3.76	156.20%	[0.00]	µg/L
As 188.978	44.8	14.91	33.28%	[0.00]	µg/L
Ba 233.527	-112.4	19.56	17.41%	[0.00]	µg/L
Be 313.042	343.5	51.35	14.95%	[0.00]	µg/L
Bi 223.058	21.2	3.60	16.99%	[0.00]	µg/L
B 249.773	1218.1	7.42	0.61%	[0.00]	µg/L
Cd 226.499	-168.1	4.41	2.62%	[0.00]	µg/L
Ca 315.887	-5826.2	93.95	1.61%	[0.00]	µg/L
Co 228.616	-46.7	14.68	31.44%	[0.00]	µg/L
Cr 267.716	181.6	13.25	7.30%	[0.00]	µg/L
Cu 324.754	6513.9	141.46	2.17%	[0.00]	µg/L
Fe 259.935 radial	107.5	3.77	3.51%	[0.00]	µg/L
Pb 220.350	51.5	6.06	11.78%	[0.00]	µg/L
Li 670.784 radial	24.3	7.17	29.45%	[0.00]	µg/L
Mg 279.079	410.2	10.75	2.62%	[0.00]	µg/L
Mn 260.568	241.6	19.89	8.23%	[0.00]	µg/L
Mo 202.030	3.2	3.80	120.04%	[0.00]	µg/L
Ni 231.604	171.0	14.90	8.71%	[0.00]	µg/L
P 178.221	148.6	3.92	2.64%	[0.00]	µg/L
K 766.490 radial	-259.0	41.26	15.93%	[0.00]	µg/L
Pt 265.945	96.9	21.60	22.28%	[0.00]	µg/L
Se 196.026	-13.3	6.48	48.59%	[0.00]	µg/L
Si 212.412	190.8	7.04	3.69%	[0.00]	µg/L
Ag 328.068	21.9	37.45	171.05%	[0.00]	µg/L
Na 589.592 radial	4.4	1.76	40.03%	[0.00]	µg/L
Sr 421.552 radial	-1.7	1.65	96.95%	[0.00]	µg/L
Te 214.281	-52.4	5.94	11.34%	[0.00]	µg/L
Tl 190.800	1.3	8.38	638.73%	[0.00]	µg/L
Sn 189.933	5.5	15.52	280.43%	[0.00]	µg/L
Ti 334.941	870.9	7.59	0.87%	[0.00]	µg/L
U 409.014	-218.4	61.50	28.15%	[0.00]	µg/L
V 292.402	-730.5	39.26	5.37%	[0.00]	µg/L
Y 371.030	-357.9	54.19	15.14%	[0.00]	µg/L
Zn 206.200	69.5	6.07	8.73%	[0.00]	µg/L
Zr 339.197	-838.7	139.20	16.60%	[0.00]	µg/L

Sequence No.: 2 Autosampler Location: 2

Sample ID: STD1 **Date Collected: 2/1/2017 10:28:43 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: STD1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	3201.7	48.18	1.50%	[50000]	µg/L
Sb 206.833	8849.8	27.84	0.31%	[25000]	µg/L
As 188.978	2770.3	24.31	0.88%	[5000]	µg/L
Ba 233.527	937.1	534.91	57.08%	[5000]	µg/L
Be 313.042	1886784.9	19454.19	1.03%	[2500]	µg/L
Bi 223.058	2554.9	18.24	0.71%	[5000]	µg/L
B 249.773	554310.1	9342.94	1.69%	[12500]	µg/L
Cd 226.499	51623.9	79.73	0.15%	[2500]	µg/L
Ca 315.887	2201710.4	22117.07	1.00%	[50000]	µg/L
Co 228.616	31072.3	87.33	0.28%	[5000]	µg/L
Cr 267.716	218447.4	344.43	0.16%	[5000]	µg/L
Cu 324.754	3727713.9	58369.33	1.57%	[25000]	µg/L
Fe 259.935 radial	66205.1	2608.39	3.94%	[50000]	µg/L
Pb 220.350	1009.6	52.97	5.25%	[5000]	µg/L
Li 670.784 radial	2737.3	29.65	1.08%	[5000]	µg/L
Mg 279.079	321026.9	492.90	0.15%	[50000]	µg/L
Mn 260.568	754841.6	8783.92	1.16%	[5000]	µg/L
Mo 202.030	52020.0	187.55	0.36%	[25000]	µg/L
Ni 231.604	35380.8	146.17	0.41%	[5000]	µg/L
P 178.221	5514.6	37.06	0.67%	[25000]	µg/L
K 766.490 radial	-5999.9	195.19	3.25%	[50000]	µg/L
The standards were not analyzed in the same order as the entered (actual) concentrations.					
Se 196.026	3316.8	15.38	0.46%	[5000]	µg/L
Si 212.412	15371.9	56.38	0.37%	[12500]	µg/L
Ag 328.068	230928.6	1116.28	0.48%	[2000]	µg/L
Na 589.592 radial	1233.2	10.34	0.84%	[50000]	µg/L
Sr 421.552 radial	4884.6	69.25	1.42%	[5000]	µg/L
Te 214.281	5169.4	48.54	0.94%	[10000]	µg/L
Tl 190.800	741.6	8.26	1.11%	[2500]	µg/L
Sn 189.933	4375.7	51.50	1.18%	[5000]	µg/L
Ti 334.941	1806841.7	22621.77	1.25%	[5000]	µg/L
U 409.014	65275.2	154.41	0.24%	[5000]	µg/L
V 292.402	395554.8	1169.48	0.30%	[5000]	µg/L
Y 371.030	1517030.1	21689.82	1.43%	[2000.00]	µg/L
Zn 206.200	147014.9	191.17	0.13%	[25000]	µg/L
Zr 339.197	1108229.0	15109.46	1.36%	[5000]	µg/L

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: STD4 **Date Collected: 2/1/2017 10:33:45 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: STD4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Pt 265.945	57758.0	606.54	1.05%	[10000]	µg/L
Sn 189.933	10581.9	86.51	0.82%	[10000.00]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	1	Lin, Calc Int	0.0	0.0640	0.00000	1.000000	
Sb 206.833	1	Lin, Calc Int	0.0	0.3540	0.00000	1.000000	
As 188.978	1	Lin, Calc Int	0.0	0.5541	0.00000	1.000000	
Ba 233.527	1	Lin, Calc Int	0.0	0.1874	0.00000	1.000000	
Be 313.042	1	Lin, Calc Int	0.0	754.7	0.00000	1.000000	
Bi 223.058	1	Lin, Calc Int	0.0	0.5110	0.00000	1.000000	
B 249.773	1	Lin, Calc Int	0.0	44.34	0.00000	1.000000	
Cd 226.499	1	Lin, Calc Int	0.0	20.65	0.00000	1.000000	

Ca 315.887	1	Lin, Calc Int	0.0	44.03	0.00000	1.000000
Co 228.616	1	Lin, Calc Int	0.0	6.214	0.00000	1.000000
Cr 267.716	1	Lin, Calc Int	0.0	43.69	0.00000	1.000000
Cu 324.754	1	Lin, Calc Int	-0.0	149.1	0.00000	1.000000
Fe 259.935	radial 1	Lin, Calc Int	-0.0	1.324	0.00000	1.000000
Pb 220.350	1	Lin, Calc Int	0.0	0.2019	0.00000	1.000000
Li 670.784	radial 1	Lin, Calc Int	0.0	0.5475	0.00000	1.000000
Mg 279.079	1	Lin, Calc Int	0.0	6.421	0.00000	1.000000
Mn 260.568	1	Lin, Calc Int	0.0	151.0	0.00000	1.000000
Mo 202.030	1	Lin, Calc Int	0.0	2.081	0.00000	1.000000
Ni 231.604	1	Lin, Calc Int	0.0	7.076	0.00000	1.000000
P 178.221	1	Lin, Calc Int	0.0	0.2206	0.00000	1.000000
K 766.490	radial 1	Lin, Calc Int	0.0	0.0000	0.00000	-1.000000
Pt 265.945	1	Lin, Calc Int	0.0	5.776	0.00000	1.000000
Se 196.026	1	Lin, Calc Int	0.0	0.6634	0.00000	1.000000
Si 212.412	1	Lin, Calc Int	0.0	1.230	0.00000	1.000000
Ag 328.068	1	Lin, Calc Int	0.0	115.5	0.00000	1.000000
Na 589.592	radial 1	Lin, Calc Int	0.0	0.0247	0.00000	1.000000
Sr 421.552	radial 1	Lin, Calc Int	-0.0	0.9769	0.00000	1.000000
Te 214.281	1	Lin, Calc Int	0.0	0.5169	0.00000	1.000000
Tl 190.800	1	Lin, Calc Int	-0.0	0.2966	0.00000	1.000000
Sn 189.933	2	Lin, Calc Int	-305.1	1.058	0.00000	0.995050
Ti 334.941	1	Lin, Calc Int	-0.0	361.4	0.00000	1.000000
U 409.014	1	Lin, Calc Int	0.0	13.06	0.00000	1.000000
V 292.402	1	Lin, Calc Int	0.0	79.11	0.00000	1.000000
Y 371.030	1	Lin, Calc Int	0.0	758.5	0.00000	1.000000
Zn 206.200	1	Lin, Calc Int	0.0	5.881	0.00000	1.000000
Zr 339.197	1	Lin, Calc Int	0.0	221.6	0.00000	1.000000

Sequence No.: 4
Sample ID: ICV
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 2/1/2017 10:36:30 AM
Sample Prep Volume:
Data Type: Original

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	645.7	10047.3	µg/L	187.33	10047.3	µg/L	187.33	1.86%
QC value within limits for Al 308.215 Recovery = 100.47%								
Sb 206.833	709.2	2016.92	µg/L	42.756	2016.92	µg/L	42.756	2.12%
QC value within limits for Sb 206.833 Recovery = 100.85%								
As 188.978	1123.3	2021.94	µg/L	10.470	2021.94	µg/L	10.470	0.52%
QC value within limits for As 188.978 Recovery = 101.10%								
Ba 233.527	628.8	3352.96	µg/L	441.123	3352.96	µg/L	441.123	13.16%
QC value greater than the upper limit for Ba 233.527 Recovery = 167.65%								
Be 313.042	384395.9	509.330	µg/L	2.4945	509.330	µg/L	2.4945	0.49%
QC value within limits for Be 313.042 Recovery = 101.87%								
Bi 223.058	551.9	1091.64	µg/L	10.116	1091.64	µg/L	10.116	0.93%
QC value within limits for Bi 223.058 Recovery = 109.16%								
B 249.773	90956.8	2011.55	µg/L	38.199	2011.55	µg/L	38.199	1.90%
QC value within limits for B 249.773 Recovery = 100.58%								
Cd 226.499	10615.9	513.070	µg/L	4.8878	513.070	µg/L	4.8878	0.95%
QC value within limits for Cd 226.499 Recovery = 102.61%								
Ca 315.887	452722.1	10277.9	µg/L	184.53	10277.9	µg/L	184.53	1.80%
QC value within limits for Ca 315.887 Recovery = 102.78%								
Co 228.616	3183.7	513.261	µg/L	6.0488	513.261	µg/L	6.0488	1.18%
QC value within limits for Co 228.616 Recovery = 102.65%								
Cr 267.716	24011.0	523.089	µg/L	9.4712	523.089	µg/L	9.4712	1.81%
QC value within limits for Cr 267.716 Recovery = 104.62%								
Cu 324.754	74423.9	496.451	µg/L	10.2887	496.451	µg/L	10.2887	2.07%
QC value within limits for Cu 324.754 Recovery = 99.29%								
Fe 259.935 radial	13637.8	10308.0	µg/L	29.23	10308.0	µg/L	29.23	0.28%
QC value within limits for Fe 259.935 radial Recovery = 103.08%								
Pb 220.350	864.2	4282.97	µg/L	115.112	4282.97	µg/L	115.112	2.69%
QC value greater than the upper limit for Pb 220.350 Recovery = 214.15%								
Li 670.784 radial	292.8	534.819	µg/L	0.4644	534.819	µg/L	0.4644	0.09%
QC value within limits for Li 670.784 radial Recovery = 106.96%								
Mg 279.079	65366.8	10225.0	µg/L	200.25	10225.0	µg/L	200.25	1.96%
QC value within limits for Mg 279.079 Recovery = 102.25%								

```
Mn 260.568              78223.6     520.055 µg/L        9.5020     520.055 µg/L        9.5020   1.83%
   QC value within limits for Mn 260.568  Recovery = 104.01%
Mo 202.030               4175.7     2013.06 µg/L        17.012     2013.06 µg/L        17.012   0.85%
   QC value within limits for Mo 202.030  Recovery = 100.65%
Ni 231.604               3705.9     528.445 µg/L        4.9605     528.445 µg/L        4.9605   0.94%
   QC value within limits for Ni 231.604  Recovery = 105.69%
P 178.221                 458.8     2078.47 µg/L         6.728     2078.47 µg/L         6.728   0.32%
   QC value within limits for P 178.221  Recovery = 103.92%
K 766.490  radial       -1186.1     0.00000 µg/L      0.000000     0.00000 µg/L      0.000000   0.00%
   QC value less than the lower limit for K 766.490  radial  Recovery = 0.00%
Pt 265.945              26429.6     4545.79 µg/L        81.159     4545.79 µg/L        81.159   1.79%
   QC value within limits for Pt 265.945  Recovery = 90.92%
Se 196.026               1349.6     2040.13 µg/L        23.004     2040.13 µg/L        23.004   1.13%
   QC value within limits for Se 196.026  Recovery = 102.01%
Si 212.412               2505.8     1978.93 µg/L        12.929     1978.93 µg/L        12.929   0.65%
   QC value within limits for Si 212.412  Recovery = 98.95%
Ag 328.068              39910.3     351.526 µg/L        6.2949     351.526 µg/L        6.2949   1.79%
   QC value less than the lower limit for Ag 328.068  Recovery = 70.31%
Na 589.592 radial         247.2     10024.5 µg/L        169.79     10024.5 µg/L        169.79   1.69%
   QC value within limits for Na 589.592 radial  Recovery = 100.24%
Sr 421.552  radial        515.1     527.226 µg/L        5.7300     527.226 µg/L        5.7300   1.09%
   QC value within limits for Sr 421.552  radial  Recovery = 105.45%
Te 214.281                -41.6    -75.4026 µg/L      20.08198    -75.4026 µg/L      20.08198  26.63%
   QC value less than the lower limit for Te 214.281  Recovery = -3.77%
Tl 190.800                593.2     1996.68 µg/L        27.655     1996.68 µg/L        27.655   1.39%
   QC value within limits for Tl 190.800  Recovery = 99.83%
Sn 189.933               1792.8     1988.28 µg/L        13.020     1988.28 µg/L        13.020   0.65%
   QC value within limits for Sn 189.933  Recovery = 99.41%
Ti 334.941             182402.9     504.376 µg/L        8.6659     504.376 µg/L        8.6659   1.72%
   QC value within limits for Ti 334.941  Recovery = 100.88%
U 409.014               11842.9     894.306 µg/L       22.1845     894.306 µg/L       22.1845   2.48%
   QC value less than the lower limit for U 409.014  Recovery = 89.43%
V 292.402               40600.8     519.544 µg/L        8.3730     519.544 µg/L        8.3730   1.61%
   QC value within limits for V 292.402  Recovery = 103.91%
Y 371.030              766199.4     1010.25 µg/L         7.733     1010.25 µg/L         7.733   0.77%
   QC value within limits for Y 371.030  Recovery = 101.02%
Zn 206.200               3029.4     522.635 µg/L        5.8110     522.635 µg/L        5.8110   1.11%
   QC value within limits for Zn 206.200  Recovery = 104.53%
Zr 339.197             223517.6     1006.25 µg/L        16.693     1006.25 µg/L        16.693   1.66%
   QC value within limits for Zr 339.197  Recovery = 100.62%
QC Failed.  Continue with analysis.
```

Sequence No.: 5 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 2/1/2017 10:40:10 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Al 308.215	-0.8	-12.4439	µg/L	85.46858	-12.4439	µg/L	85.46858	686.83%
QC value within limits for Al 308.215 Recovery = Not calculated								
Sb 206.833	-5.7	-15.8637	µg/L	18.54412	-15.8637	µg/L	18.54412	116.90%
QC value within limits for Sb 206.833 Recovery = Not calculated								
As 188.978	-8.4	-15.0987	µg/L	13.28494	-15.0987	µg/L	13.28494	87.99%
QC value within limits for As 188.978 Recovery = Not calculated								
Ba 233.527	4.8	25.8666	µg/L	27.76600	25.8666	µg/L	27.76600	107.34%
QC value greater than the upper limit for Ba 233.527 Recovery = Not calculated								
Be 313.042	77.5	0.10234	µg/L	0.102603	0.10234	µg/L	0.102603	100.25%
QC value within limits for Be 313.042 Recovery = Not calculated								
Bi 223.058	-2.0	-3.94137	µg/L	19.372588	-3.94137	µg/L	19.372588	491.52%
QC value within limits for Bi 223.058 Recovery = Not calculated								
B 249.773	987.3	22.2297	µg/L	0.85979	22.2297	µg/L	0.85979	3.87%
QC value within limits for B 249.773 Recovery = Not calculated								
Cd 226.499	9.3	0.44744	µg/L	0.206839	0.44744	µg/L	0.206839	46.23%
QC value within limits for Cd 226.499 Recovery = Not calculated								
Ca 315.887	79.7	1.82983	µg/L	1.445869	1.82983	µg/L	1.445869	79.02%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Co 228.616	-7.2	-1.14171	µg/L	1.089616	-1.14171	µg/L	1.089616	95.44%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716                 7.4     0.16677 µg/L      0.250335     0.16677 µg/L      0.250335 150.10%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.754               -11.4    -0.07967 µg/L      1.059409    -0.07967 µg/L      1.059409 >999.9%
   QC value within limits for Cu 324.754  Recovery = Not calculated
Fe 259.935 radial         12.3     9.33843 µg/L      5.671399     9.33843 µg/L      5.671399  60.73%
   QC value within limits for Fe 259.935 radial  Recovery = Not calculated
Pb 220.350                 7.1     35.2510 µg/L      17.82356     35.2510 µg/L      17.82356  50.56%
   QC value within limits for Pb 220.350  Recovery = Not calculated
Li 670.784  radial         6.3     11.4822 µg/L      15.99044     11.4822 µg/L      15.99044 139.26%
   QC value within limits for Li 670.784  radial  Recovery = Not calculated
Mg 279.079                25.1     4.04167 µg/L      3.675338     4.04167 µg/L      3.675338  90.94%
   QC value within limits for Mg 279.079  Recovery = Not calculated
Mn 260.568                 3.4     0.02666 µg/L      0.066734     0.02666 µg/L      0.066734 250.34%
   QC value within limits for Mn 260.568  Recovery = Not calculated
Mo 202.030                12.0     5.76636 µg/L      2.787492     5.76636 µg/L      2.787492  48.34%
   QC value within limits for Mo 202.030  Recovery = Not calculated
Ni 231.604                11.5     1.64547 µg/L      1.931341     1.64547 µg/L      1.931341 117.37%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 178.221                -17.1    -77.5008 µg/L      26.51362    -77.5008 µg/L      26.51362  34.21%
   QC value within limits for P 178.221  Recovery = Not calculated
K 766.490  radial         49.4     0.00000 µg/L      0.000000     0.00000 µg/L      0.000000   0.00%
   QC value within limits for K 766.490  radial  Recovery = Not calculated
Pt 265.945                 5.8     1.06449 µg/L      2.593473     1.06449 µg/L      2.593473 243.64%
   QC value within limits for Pt 265.945  Recovery = Not calculated
Se 196.026                -0.9    -1.31605 µg/L      7.489947    -1.31605 µg/L      7.489947 569.12%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 212.412               -20.0    -16.3941 µg/L       3.25425    -16.3941 µg/L       3.25425  19.85%
   QC value within limits for Si 212.412  Recovery = Not calculated
Ag 328.068                35.7     0.30972 µg/L      0.171859     0.30972 µg/L      0.171859  55.49%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Na 589.592 radial         -3.1    -125.489 µg/L       22.3040    -125.489 µg/L       22.3040  17.77%
   QC value within limits for Na 589.592 radial  Recovery = Not calculated
Sr 421.552  radial         2.7     2.76427 µg/L      2.608428     2.76427 µg/L      2.608428  94.36%
   QC value within limits for Sr 421.552  radial  Recovery = Not calculated
Te 214.281                -7.8    -15.0887 µg/L      29.88751    -15.0887 µg/L      29.88751 198.08%
   QC value within limits for Te 214.281  Recovery = Not calculated
Tl 190.800                -0.9    -3.04421 µg/L      5.640416    -3.04421 µg/L      5.640416 185.28%
   QC value within limits for Tl 190.800  Recovery = Not calculated
Sn 189.933                 6.1     294.092 µg/L       31.9685     294.092 µg/L       31.9685  10.87%
   QC value greater than the upper limit for Sn 189.933  Recovery = Not calculated
Ti 334.941                74.9     0.20873 µg/L      0.209064     0.20873 µg/L      0.209064 100.16%
   QC value within limits for Ti 334.941  Recovery = Not calculated
U 409.014                -44.2    -3.38802 µg/L      5.491077    -3.38802 µg/L      5.491077 162.07%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402                -16.0    -0.19710 µg/L      0.299490    -0.19710 µg/L      0.299490 151.95%
   QC value within limits for V 292.402  Recovery = Not calculated
Y 371.030                 79.2     0.10428 µg/L      0.069354     0.10428 µg/L      0.069354  66.51%
   QC value within limits for Y 371.030  Recovery = Not calculated
Zn 206.200                 2.2     0.37597 µg/L      0.556257     0.37597 µg/L      0.556257 147.95%
   QC value within limits for Zn 206.200  Recovery = Not calculated
Zr 339.197                52.4     0.19669 µg/L      0.167451     0.19669 µg/L      0.167451  85.14%
   QC value within limits for Zr 339.197  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 6 **Autosampler Location: 9**
Sample ID: ICSA **Date Collected: 2/1/2017 10:43:24 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	16262.2	253961	µg/L	180.2	253961	µg/L	180.2	0.07%
QC value within limits for Al 308.215 Recovery = 101.58%								
Sb 206.833	-8.4	-35.0807	µg/L	18.56733	-35.0807	µg/L	18.56733	52.93%
QC value within limits for Sb 206.833 Recovery = Not calculated								
As 188.978	4.8	8.61994	µg/L	7.137870	8.61994	µg/L	7.137870	82.81%
QC value within limits for As 188.978 Recovery = Not calculated								

```
Ba 233.527              -310.6    -1651.64 µg/L        70.323    -1651.64 µg/L        70.323   4.26%
   QC value less than the lower limit for Ba 233.527  Recovery = Not calculated
Be 313.042              -246.5    -0.19789 µg/L      0.029845    -0.19789 µg/L      0.029845  15.08%
   QC value within limits for Be 313.042  Recovery = Not calculated
Bi 223.058               -71.0    -156.787 µg/L       15.6476    -156.787 µg/L       15.6476   9.98%
   QC value less than the lower limit for Bi 223.058  Recovery = Not calculated
B 249.773              12985.7    -93.2436 µg/L      16.51167    -93.2436 µg/L      16.51167  17.71%
   QC value within limits for B 249.773  Recovery = Not calculated
Cd 226.499               124.8    -3.59579 µg/L      0.170358    -3.59579 µg/L      0.170358   4.74%
   QC value within limits for Cd 226.499  Recovery = Not calculated
Ca 315.887          11103584.1      252158 µg/L        5786.8      252158 µg/L        5786.8   2.29%
   QC value within limits for Ca 315.887  Recovery = 100.86%
Co 228.616               -58.7    -15.0002 µg/L       1.17009    -15.0002 µg/L       1.17009   7.80%
   QC value less than the lower limit for Co 228.616  Recovery = Not calculated
Cr 267.716              -383.7    -4.12835 µg/L      0.119458    -4.12835 µg/L      0.119458   2.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.754              -466.0    -3.27206 µg/L      0.495788    -3.27206 µg/L      0.495788  15.15%
   QC value within limits for Cu 324.754  Recovery = Not calculated
Fe 259.935 radial     132996.1      100442 µg/L        3124.7      100442 µg/L        3124.7   3.11%
   QC value within limits for Fe 259.935 radial  Recovery = 100.44%
Pb 220.350                46.4     222.758 µg/L       41.3746     222.758 µg/L       41.3746  18.57%
   QC value greater than the upper limit for Pb 220.350  Recovery = Not calculated
Li 670.784  radial         5.3     9.73864 µg/L      5.740142     9.73864 µg/L      5.740142  58.94%
   QC value within limits for Li 670.784  radial  Recovery = Not calculated
Mg 279.079           1786565.7      278243 µg/L        6219.8      278243 µg/L        6219.8   2.24%
   QC value within limits for Mg 279.079  Recovery = 111.30%
Mn 260.568             -1823.3     10.5213 µg/L       0.81687     10.5213 µg/L       0.81687   7.76%
   QC value greater than the upper limit for Mn 260.568  Recovery = Not calculated
Mo 202.030               -15.9    -3.03380 µg/L      2.068168    -3.03380 µg/L      2.068168  68.17%
   QC value within limits for Mo 202.030  Recovery = Not calculated
Ni 231.604               112.3     12.8072 µg/L       1.02313     12.8072 µg/L       1.02313   7.99%
   QC value greater than the upper limit for Ni 231.604  Recovery = Not calculated
P 178.221                  3.8    -25.0752 µg/L      46.52736    -25.0752 µg/L      46.52736 185.55%
   QC value within limits for P 178.221  Recovery = Not calculated
K 766.490  radial         22.7     0.00000 µg/L      0.000000     0.00000 µg/L      0.000000   0.00%
   QC value within limits for K 766.490  radial  Recovery = Not calculated
Pt 265.945              4091.2     200.787 µg/L       34.2294     200.787 µg/L       34.2294  17.05%
   QC value greater than the upper limit for Pt 265.945  Recovery = Not calculated
Se 196.026               -25.6     24.1061 µg/L      14.51039     24.1061 µg/L      14.51039  60.19%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 212.412               -24.2    -19.4912 µg/L      11.30597    -19.4912 µg/L      11.30597  58.01%
   QC value within limits for Si 212.412  Recovery = Not calculated
Ag 328.068              -962.2     10.2529 µg/L       0.77688     10.2529 µg/L       0.77688   7.58%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Na 589.592 radial         -0.6    -26.1918 µg/L     111.11462    -26.1918 µg/L     111.11462 424.23%
   QC value within limits for Na 589.592 radial  Recovery = Not calculated
Sr 421.552  radial         5.9     5.99344 µg/L      1.650649     5.99344 µg/L      1.650649  27.54%
   QC value within limits for Sr 421.552  radial  Recovery = Not calculated
Te 214.281               -24.2    -28.4365 µg/L      29.66769    -28.4365 µg/L      29.66769 104.33%
   QC value within limits for Te 214.281  Recovery = Not calculated
Tl 190.800               -11.4    -19.3289 µg/L      31.11468    -19.3289 µg/L      31.11468 160.97%
   QC value within limits for Tl 190.800  Recovery = Not calculated
Sn 189.933              -160.1     252.097 µg/L       36.7596     252.097 µg/L       36.7596  14.58%
   QC value greater than the upper limit for Sn 189.933  Recovery = Not calculated
Ti 334.941             -2580.4    -1.79445 µg/L      0.100375    -1.79445 µg/L      0.100375   5.59%
   QC value within limits for Ti 334.941  Recovery = Not calculated
U 409.014               -651.1    -54.6559 µg/L       5.45572    -54.6559 µg/L       5.45572   9.98%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402                396.4     7.73209 µg/L      0.129610     7.73209 µg/L      0.129610   1.68%
   QC value greater than the upper limit for V 292.402  Recovery = Not calculated
Y 371.030                103.0     0.13249 µg/L      0.032078     0.13249 µg/L      0.032078  24.21%
   QC value within limits for Y 371.030  Recovery = Not calculated
Zn 206.200                76.2     19.9592 µg/L       1.32725     19.9592 µg/L       1.32725   6.65%
   QC value within limits for Zn 206.200  Recovery = Not calculated
Zr 339.197              -627.0    -4.14162 µg/L      0.733483    -4.14162 µg/L      0.733483  17.71%
   QC value within limits for Zr 339.197  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 7 **Autosampler Location: 10**
Sample ID: ICSAB **Date Collected: 2/1/2017 10:48:15 AM**
Analyst:

Sample Wt:
Dilution:

Sample Prep Volume:
Data Type: Original

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Al 308.215	16738.9	261385	µg/L	3023.1	261385	µg/L	3023.1	1.16%
QC value within limits for Al 308.215 Recovery = 104.55%								
Sb 206.833	186.5	508.715	µg/L	25.3017	508.715	µg/L	25.3017	4.97%
QC value within limits for Sb 206.833 Recovery = 101.74%								
As 188.978	299.7	537.113	µg/L	27.9112	537.113	µg/L	27.9112	5.20%
QC value within limits for As 188.978 Recovery = 107.42%								
Ba 233.527	2895.2	15452.2	µg/L	295.77	15452.2	µg/L	295.77	1.91%
QC value greater than the upper limit for Ba 233.527 Recovery = 3090.44%								
Be 313.042	396636.7	525.679	µg/L	5.1608	525.679	µg/L	5.1608	0.98%
QC value within limits for Be 313.042 Recovery = 105.14%								
Bi 223.058	217.7	426.493	µg/L	27.2993	426.493	µg/L	27.2993	6.40%
QC value within limits for Bi 223.058 Recovery = 85.30%								
B 249.773	43237.5	572.007	µg/L	23.1659	572.007	µg/L	23.1659	4.05%
QC value within limits for B 249.773 Recovery = 114.40%								
Cd 226.499	10804.3	513.070	µg/L	1.5687	513.070	µg/L	1.5687	0.31%
QC value within limits for Cd 226.499 Recovery = 102.61%								
Ca 315.887	11191478.4	254153	µg/L	4524.4	254153	µg/L	4524.4	1.78%
QC value within limits for Ca 315.887 Recovery = 101.66%								
Co 228.616	3188.3	508.073	µg/L	1.0115	508.073	µg/L	1.0115	0.20%
QC value within limits for Co 228.616 Recovery = 101.61%								
Cr 267.716	22711.6	520.163	µg/L	11.5270	520.163	µg/L	11.5270	2.22%
QC value within limits for Cr 267.716 Recovery = 104.03%								
Cu 324.754	82166.6	550.240	µg/L	16.0766	550.240	µg/L	16.0766	2.92%
QC value within limits for Cu 324.754 Recovery = 110.05%								
Fe 259.935 radial	138874.8	104888	µg/L	2167.8	104888	µg/L	2167.8	2.07%
QC value within limits for Fe 259.935 radial Recovery = 104.89%								
Pb 220.350	564.0	2787.15	µg/L	33.456	2787.15	µg/L	33.456	1.20%
QC value greater than the upper limit for Pb 220.350 Recovery = 557.43%								
Li 670.784 radial	308.8	564.018	µg/L	21.1647	564.018	µg/L	21.1647	3.75%
QC value within limits for Li 670.784 radial Recovery = 112.80%								
Mg 279.079	1846642.7	287627	µg/L	3139.9	287627	µg/L	3139.9	1.09%
QC value within limits for Mg 279.079 Recovery = 115.05%								
Mn 260.568	77227.7	534.751	µg/L	12.5061	534.751	µg/L	12.5061	2.34%
QC value within limits for Mn 260.568 Recovery = 106.95%								
Mo 202.030	2157.5	1043.01	µg/L	6.424	1043.01	µg/L	6.424	0.62%
QC value within limits for Mo 202.030 Recovery = 104.30%								
Ni 231.604	3767.5	534.028	µg/L	2.2692	534.028	µg/L	2.2692	0.42%
QC value within limits for Ni 231.604 Recovery = 106.81%								
P 178.221	138.5	584.314	µg/L	36.5765	584.314	µg/L	36.5765	6.26%
QC value within limits for P 178.221 Recovery = 116.86%								
K 766.490 radial	36.7	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
QC value within limits for K 766.490 radial Recovery = Not calculated								
Pt 265.945	9368.1	1088.53	µg/L	30.482	1088.53	µg/L	30.482	2.80%
QC value within limits for Pt 265.945 Recovery = 108.85%								
Se 196.026	336.9	572.894	µg/L	5.3982	572.894	µg/L	5.3982	0.94%
QC value within limits for Se 196.026 Recovery = 114.58%								
Si 212.412	5310.6	4288.08	µg/L	15.969	4288.08	µg/L	15.969	0.37%
QC value greater than the upper limit for Si 212.412 Recovery = 428.81%								
Ag 328.068	63075.3	567.776	µg/L	12.3992	567.776	µg/L	12.3992	2.18%
QC value within limits for Ag 328.068 Recovery = 113.56%								
Na 589.592 radial	0.2	9.38417	µg/L	69.619308	9.38417	µg/L	69.619308	741.88%
QC value within limits for Na 589.592 radial Recovery = Not calculated								
Sr 421.552 radial	586.5	600.396	µg/L	10.1395	600.396	µg/L	10.1395	1.69%
QC value greater than the upper limit for Sr 421.552 radial Recovery = 120.08%								
Te 214.281	239.7	480.334	µg/L	20.3906	480.334	µg/L	20.3906	4.25%
QC value within limits for Te 214.281 Recovery = 96.07%								
Tl 190.800	147.5	513.581	µg/L	31.2145	513.581	µg/L	31.2145	6.08%
QC value within limits for Tl 190.800 Recovery = 102.72%								
Sn 189.933	272.6	664.157	µg/L	49.0864	664.157	µg/L	49.0864	7.39%
QC value greater than the upper limit for Sn 189.933 Recovery = 132.83%								
Ti 334.941	370902.2	1031.34	µg/L	25.035	1031.34	µg/L	25.035	2.43%
QC value within limits for Ti 334.941 Recovery = 103.13%								
U 409.014	6185.0	461.715	µg/L	11.7398	461.715	µg/L	11.7398	2.54%
QC value within limits for U 409.014 Recovery = 92.34%								
V 292.402	41750.7	534.112	µg/L	11.4794	534.112	µg/L	11.4794	2.15%

QC value within limits for V 292.402 Recovery = 106.82%

Y 371.030	372735.4	491.509 µg/L	12.4577	491.509 µg/L	12.4577	2.53%

QC value within limits for Y 371.030 Recovery = 98.30%

Zn 206.200	3163.6	550.664 µg/L	5.5690	550.664 µg/L	5.5690	1.01%

QC value within limits for Zn 206.200 Recovery = 110.13%

Zr 339.197	113528.3	510.200 µg/L	12.8135	510.200 µg/L	12.8135	2.51%

QC value within limits for Zr 339.197 Recovery = 102.04%

QC Failed. Continue with analysis.

Sequence No.: 8 **Autosampler Location: 11**
Sample ID: CRI **Date Collected: 2/1/2017 10:53:16 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	15.0	233.288	µg/L	62.6881	233.288	µg/L	62.6881	26.87%
QC value within limits for Al 308.215 Recovery = 116.64%								
Sb 206.833	22.4	64.0374	µg/L	10.71042	64.0374	µg/L	10.71042	16.73%
QC value within limits for Sb 206.833 Recovery = 106.73%								
As 188.978	56.3	101.630	µg/L	15.9223	101.630	µg/L	15.9223	15.67%
QC value within limits for As 188.978 Recovery = 101.63%								
Ba 233.527	202.1	1078.38	µg/L	91.266	1078.38	µg/L	91.266	8.46%
QC value greater than the upper limit for Ba 233.527 Recovery = 10783.81%								
Be 313.042	232.7	0.30752	µg/L	0.093644	0.30752	µg/L	0.093644	30.45%
QC value within limits for Be 313.042 Recovery = 123.01%								
Bi 223.058	53.3	104.424	µg/L	18.2065	104.424	µg/L	18.2065	17.44%
QC value within limits for Bi 223.058 Recovery = 104.42%								
B 249.773	2730.5	60.5072	µg/L	0.38143	60.5072	µg/L	0.38143	0.63%
QC value within limits for B 249.773 Recovery = 121.01%								
Cd 226.499	69.7	3.34709	µg/L	0.494634	3.34709	µg/L	0.494634	14.78%
QC value within limits for Cd 226.499 Recovery = 111.57%								
Ca 315.887	29063.5	660.007	µg/L	20.2583	660.007	µg/L	20.2583	3.07%
QC value within limits for Ca 315.887 Recovery = 110.00%								
Co 228.616	12.6	2.15127	µg/L	0.429898	2.15127	µg/L	0.429898	19.98%
QC value within limits for Co 228.616 Recovery = 71.71%								
Cr 267.716	518.1	10.9855	µg/L	0.42195	10.9855	µg/L	0.42195	3.84%
QC value within limits for Cr 267.716 Recovery = 109.86%								
Cu 324.754	2751.2	18.3915	µg/L	1.53693	18.3915	µg/L	1.53693	8.36%
QC value within limits for Cu 324.754 Recovery = 91.96%								
Fe 259.935 radial	367.6	277.719	µg/L	3.7862	277.719	µg/L	3.7862	1.36%
QC value within limits for Fe 259.935 radial Recovery = 138.86%								
Pb 220.350	81.5	403.769	µg/L	30.4177	403.769	µg/L	30.4177	7.53%
QC value greater than the upper limit for Pb 220.350 Recovery = 807.54%								
Li 670.784 radial	32.3	58.9333	µg/L	15.73405	58.9333	µg/L	15.73405	26.70%
QC value greater than the upper limit for Li 670.784 radial Recovery = 294.67%								
Mg 279.079	474.1	74.3037	µg/L	1.91360	74.3037	µg/L	1.91360	2.58%
QC value within limits for Mg 279.079 Recovery = 148.61%								
Mn 260.568	883.7	5.91419	µg/L	0.121852	5.91419	µg/L	0.121852	2.06%
QC value within limits for Mn 260.568 Recovery = 118.28%								
Mo 202.030	45.9	22.2582	µg/L	0.33047	22.2582	µg/L	0.33047	1.48%
QC value within limits for Mo 202.030 Recovery = 148.39%								
Ni 231.604	42.3	6.17171	µg/L	1.693422	6.17171	µg/L	1.693422	27.44%
QC value within limits for Ni 231.604 Recovery = 123.43%								
P 178.221	37.1	168.125	µg/L	40.5828	168.125	µg/L	40.5828	24.14%
QC value within limits for P 178.221 Recovery = 84.06%								
K 766.490 radial	-32.8	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
QC value less than the lower limit for K 766.490 radial Recovery = 0.00%								
Pt 265.945	845.9	146.276	µg/L	4.3014	146.276	µg/L	4.3014	2.94%
QC value within limits for Pt 265.945 Recovery = 97.52%								
Se 196.026	68.5	103.432	µg/L	7.3277	103.432	µg/L	7.3277	7.08%
QC value within limits for Se 196.026 Recovery = 103.43%								
Si 212.412	602.5	489.282	µg/L	8.2347	489.282	µg/L	8.2347	1.68%
QC value within limits for Si 212.412 Recovery = 97.86%								
Ag 328.068	1259.8	10.8404	µg/L	0.16300	10.8404	µg/L	0.16300	1.50%
QC value within limits for Ag 328.068 Recovery = 108.40%								
Na 589.592 radial	3.8	154.114	µg/L	224.7933	154.114	µg/L	224.7933	145.86%
QC value within limits for Na 589.592 radial Recovery = 102.74%								

Sr 421.552 radial	21.5	21.9748 µg/L	2.15900	21.9748 µg/L	2.15900	9.82%
QC value within limits for Sr 421.552 radial Recovery = 146.50%						
Te 214.281	40.3	78.1928 µg/L	5.30727	78.1928 µg/L	5.30727	6.79%
QC value greater than the upper limit for Te 214.281 Recovery = 156.39%						
Tl 190.800	13.2	44.7773 µg/L	18.95772	44.7773 µg/L	18.95772	42.34%
QC value within limits for Tl 190.800 Recovery = 89.55%						
Sn 189.933	98.1	381.284 µg/L	28.4057	381.284 µg/L	28.4057	7.45%
QC value greater than the upper limit for Sn 189.933 Recovery = 381.28%						
Ti 334.941	1211.9	3.36085 µg/L	0.149314	3.36085 µg/L	0.149314	4.44%
QC value within limits for Ti 334.941 Recovery = 112.03%						
U 409.014	62.2	4.48310 µg/L	4.870683	4.48310 µg/L	4.870683	108.65%
QC value less than the lower limit for U 409.014 Recovery = 4.48%						
V 292.402	199.4	2.60946 µg/L	0.258398	2.60946 µg/L	0.258398	9.90%
QC value within limits for V 292.402 Recovery = 86.98%						
Y 371.030	2562.2	3.37920 µg/L	0.068461	3.37920 µg/L	0.068461	2.03%
QC value within limits for Y 371.030 Recovery = 112.64%						
Zn 206.200	121.7	20.9976 µg/L	0.80772	20.9976 µg/L	0.80772	3.85%
QC value within limits for Zn 206.200 Recovery = 104.99%						
Zr 339.197	4798.6	21.5929 µg/L	0.73257	21.5929 µg/L	0.73257	3.39%
QC value within limits for Zr 339.197 Recovery = 107.96%						

QC Failed. Continue with analysis.

Sequence No.: 9 **Autosampler Location: 12**
Sample ID: 535774 LRB **Date Collected: 2/1/2017 10:56:32 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: 535774 LRB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	6.7	104.661	µg/L	45.9266	104.661	µg/L	45.9266	43.88%
Sb 206.833	-4.5	-12.6006	µg/L	8.76746	-12.6006	µg/L	8.76746	69.58%
As 188.978	5.9	10.6245	µg/L	18.08130	10.6245	µg/L	18.08130	170.18%
Ba 233.527	3.4	18.3914	µg/L	68.56960	18.3914	µg/L	68.56960	372.83%
Be 313.042	83.7	0.10962	µg/L	0.037035	0.10962	µg/L	0.037035	33.78%
Bi 223.058	-14.4	-28.2558	µg/L	32.53160	-28.2558	µg/L	32.53160	115.13%
B 249.773	699.7	15.9225	µg/L	0.87196	15.9225	µg/L	0.87196	5.48%
Cd 226.499	6.3	0.30833	µg/L	0.551172	0.30833	µg/L	0.551172	178.76%
Ca 315.887	701.1	15.9983	µg/L	0.91550	15.9983	µg/L	0.91550	5.72%
Co 228.616	-13.8	-2.20607	µg/L	0.791746	-2.20607	µg/L	0.791746	35.89%
Cr 267.716	3.4	0.08688	µg/L	0.059057	0.08688	µg/L	0.059057	67.97%
Cu 324.754	-242.0	-1.63128	µg/L	0.386078	-1.63128	µg/L	0.386078	23.67%
Fe 259.935 radial	-48.2	-36.4077	µg/L	3.38892	-36.4077	µg/L	3.38892	9.31%
Pb 220.350	0.9	4.39450	µg/L	35.657786	4.39450	µg/L	35.657786	811.42%
Li 670.784 radial	18.1	33.0914	µg/L	15.96326	33.0914	µg/L	15.96326	48.24%
Mg 279.079	132.0	20.6568	µg/L	4.38022	20.6568	µg/L	4.38022	21.20%
Mn 260.568	-23.1	-0.15585	µg/L	0.037059	-0.15585	µg/L	0.037059	23.78%
Mo 202.030	6.4	3.06420	µg/L	5.922829	3.06420	µg/L	5.922829	193.29%
Ni 231.604	12.7	1.81664	µg/L	1.260677	1.81664	µg/L	1.260677	69.40%
P 178.221	25.9	117.530	µg/L	32.1819	117.530	µg/L	32.1819	27.38%
K 766.490 radial	33.2	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	-1.7	-0.07222	µg/L	1.763088	-0.07222	µg/L	1.763088	>999.9%
Se 196.026	1.1	1.62589	µg/L	5.442880	1.62589	µg/L	5.442880	334.76%
Si 212.412	202.2	164.323	µg/L	5.0190	164.323	µg/L	5.0190	3.05%
Ag 328.068	10.4	0.08179	µg/L	0.172069	0.08179	µg/L	0.172069	210.37%
Na 589.592 radial	-0.6	-23.7547	µg/L	121.44213	-23.7547	µg/L	121.44213	511.23%
Sr 421.552 radial	2.6	2.63711	µg/L	2.972162	2.63711	µg/L	2.972162	112.71%
Te 214.281	0.3	0.59941	µg/L	13.729863	0.59941	µg/L	13.729863	>999.9%
Tl 190.800	-3.5	-11.8078	µg/L	23.69480	-11.8078	µg/L	23.69480	200.67%
Sn 189.933	68.7	353.186	µg/L	16.4170	353.186	µg/L	16.4170	4.65%
Ti 334.941	202.7	0.56800	µg/L	0.114909	0.56800	µg/L	0.114909	20.23%
U 409.014	-205.9	-15.7697	µg/L	7.71925	-15.7697	µg/L	7.71925	48.95%
V 292.402	-17.9	-0.24383	µg/L	0.056694	-0.24383	µg/L	0.056694	23.25%
Y 371.030	50.2	0.06532	µg/L	0.044678	0.06532	µg/L	0.044678	68.40%
Zn 206.200	4.0	0.63864	µg/L	1.124471	0.63864	µg/L	1.124471	176.07%
Zr 339.197	-15.2	-0.10989	µg/L	0.099947	-0.10989	µg/L	0.099947	90.95%

Sequence No.: 10 **Autosampler Location: 13**

Sample ID: 535775 LMB **Date Collected: 2/1/2017 10:59:48 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: 535775 LMB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	7.3	113.554	µg/L	88.8926	113.554	µg/L	88.8926	78.28%
Sb 206.833	37.5	103.468	µg/L	21.1927	103.468	µg/L	21.1927	20.48%
As 188.978	169.4	304.089	µg/L	30.8963	304.089	µg/L	30.8963	10.16%
Ba 233.527	47.9	255.459	µg/L	43.6483	255.459	µg/L	43.6483	17.09%
Be 313.042	-264124.0	-349.996	µg/L	5.2700	-349.996	µg/L	5.2700	1.51%
Bi 223.058	-3.1	9.63704	µg/L	17.868837	9.63704	µg/L	17.868837	185.42%
B 249.773	3163.6	70.6342	µg/L	0.37988	70.6342	µg/L	0.37988	0.54%
Cd 226.499	3.4	-0.05107	µg/L	0.453037	-0.05107	µg/L	0.453037	887.01%
Ca 315.887	20910.4	474.825	µg/L	8.2581	474.825	µg/L	8.2581	1.74%
Co 228.616	67.2	8.38481	µg/L	0.702511	8.38481	µg/L	0.702511	8.38%
Cr 267.716	144.3	3.32076	µg/L	0.265247	3.32076	µg/L	0.265247	7.99%
Cu 324.754	568.4	4.53576	µg/L	1.317151	4.53576	µg/L	1.317151	29.04%
Fe 259.935 radial	245.6	185.504	µg/L	2.0612	185.504	µg/L	2.0612	1.11%
Pb 220.350	1.0	5.05416	µg/L	53.764831	5.05416	µg/L	53.764831	>999.9%
Li 670.784 radial	5.3	9.75707	µg/L	30.233724	9.75707	µg/L	30.233724	309.86%
Mg 279.079	693.6	111.075	µg/L	5.6737	111.075	µg/L	5.6737	5.11%
Mn 260.568	461.5	3.08966	µg/L	0.024760	3.08966	µg/L	0.024760	0.80%
Mo 202.030	-3.9	-1.89957	µg/L	5.596690	-1.89957	µg/L	5.596690	294.63%
Ni 231.604	436.1	61.8084	µg/L	2.27793	61.8084	µg/L	2.27793	3.69%
P 178.221	54.3	245.975	µg/L	109.1145	245.975	µg/L	109.1145	44.36%
K 766.490 radial	21.2	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	-105.3	-18.4057	µg/L	2.50036	-18.4057	µg/L	2.50036	13.58%
Se 196.026	34.1	51.5010	µg/L	3.73685	51.5010	µg/L	3.73685	7.26%
Si 212.412	827.4	672.868	µg/L	9.3412	672.868	µg/L	9.3412	1.39%
Ag 328.068	77.2	0.69181	µg/L	0.049324	0.69181	µg/L	0.049324	7.13%
Na 589.592 radial	3.3	135.338	µg/L	32.8007	135.338	µg/L	32.8007	24.24%
Sr 421.552 radial	9.8	9.99481	µg/L	2.451045	9.99481	µg/L	2.451045	24.52%
Te 214.281	-22.5	-46.4766	µg/L	10.04603	-46.4766	µg/L	10.04603	21.62%
Tl 190.800	-76.6	-259.177	µg/L	23.6614	-259.177	µg/L	23.6614	9.13%
Sn 189.933	-2.5	288.620	µg/L	16.6675	288.620	µg/L	16.6675	5.77%
Ti 334.941	413726.5	1144.90	µg/L	22.499	1144.90	µg/L	22.499	1.97%
U 409.014	-34.0	-2.62798	µg/L	14.333659	-2.62798	µg/L	14.333659	545.43%
V 292.402	23.7	-0.50027	µg/L	0.193048	-0.50027	µg/L	0.193048	38.59%
Y 371.030	62.3	0.15159	µg/L	0.083671	0.15159	µg/L	0.083671	55.20%
Zn 206.200	487.1	83.0235	µg/L	1.12827	83.0235	µg/L	1.12827	1.36%
Zr 339.197	356.7	1.58267	µg/L	0.351976	1.58267	µg/L	0.351976	22.24%

Sequence No.: 11 **Autosampler Location: 14**
Sample ID: 535776 LCS **Date Collected: 2/1/2017 11:03:05 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: 535776 LCS

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	9.6	145.040	µg/L	53.2894	145.040	µg/L	53.2894	36.74%
Sb 206.833	1560.6	4408.37	µg/L	16.928	4408.37	µg/L	16.928	0.38%
As 188.978	200.1	357.978	µg/L	8.4491	357.978	µg/L	8.4491	2.36%
Ba 233.527	47.1	251.066	µg/L	59.4521	251.066	µg/L	59.4521	23.68%
Be 313.042	-319627.6	-423.737	µg/L	6.7755	-423.737	µg/L	6.7755	1.60%
Bi 223.058	-11.3	15.8420	µg/L	28.97049	15.8420	µg/L	28.97049	182.87%
B 249.773	3357.6	74.5794	µg/L	0.68780	74.5794	µg/L	0.68780	0.92%
Cd 226.499	-15.0	-0.82986	µg/L	0.224202	-0.82986	µg/L	0.224202	27.02%
Ca 315.887	69697.2	1566.07	µg/L	35.024	1566.07	µg/L	35.024	2.24%
Co 228.616	75.8	9.26967	µg/L	0.927115	9.26967	µg/L	0.927115	10.00%
Cr 267.716	138.7	0.36645	µg/L	0.251013	0.36645	µg/L	0.251013	68.50%
Cu 324.754	6127.3	42.0751	µg/L	0.49384	42.0751	µg/L	0.49384	1.17%
Fe 259.935 radial	25.0	20.3202	µg/L	3.84963	20.3202	µg/L	3.84963	18.94%
Pb 220.350	8.1	40.8693	µg/L	21.72429	40.8693	µg/L	21.72429	53.16%
Li 670.784 radial	6.2	11.2827	µg/L	29.52785	11.2827	µg/L	29.52785	261.71%

Mg 279.079	514.4	85.5060	µg/L	5.80425	85.5060	µg/L	5.80425	6.79%
Mn 260.568	498.4	2.65595	µg/L	0.030654	2.65595	µg/L	0.030654	1.15%
Mo 202.030	957.7	460.256	µg/L	6.1808	460.256	µg/L	6.1808	1.34%
Ni 231.604	40.0	5.95055	µg/L	0.671206	5.95055	µg/L	0.671206	11.28%
P 178.221	1039.2	4711.20	µg/L	57.562	4711.20	µg/L	57.562	1.22%
K 766.490 radial	37.3	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	-130.9	-80.6584	µg/L	3.97394	-80.6584	µg/L	3.97394	4.93%
Se 196.026	47.8	74.4200	µg/L	15.58113	74.4200	µg/L	15.58113	20.94%
Si 212.412	642.2	508.782	µg/L	8.9628	508.782	µg/L	8.9628	1.76%
Ag 328.068	3850.2	0.59296	µg/L	0.342980	0.59296	µg/L	0.342980	57.84%
Na 589.592 radial	8.2	331.667	µg/L	119.6534	331.667	µg/L	119.6534	36.08%
Sr 421.552 radial	13.2	13.5566	µg/L	2.60425	13.5566	µg/L	2.60425	19.21%
Te 214.281	978.3	1895.92	µg/L	12.239	1895.92	µg/L	12.239	0.65%
Tl 190.800	-87.5	-297.883	µg/L	14.6804	-297.883	µg/L	14.6804	4.93%
Sn 189.933	18.8	309.722	µg/L	15.1897	309.722	µg/L	15.1897	4.90%
Ti 334.941	492342.1	1360.76	µg/L	24.180	1360.76	µg/L	24.180	1.78%
U 409.014	51950.9	3953.67	µg/L	68.003	3953.67	µg/L	68.003	1.72%
V 292.402	-93.0	4.12569	µg/L	0.229164	4.12569	µg/L	0.229164	5.55%
Y 371.030	-164.9	0.25353	µg/L	0.038178	0.25353	µg/L	0.038178	15.06%
Zn 206.200	471.1	80.7093	µg/L	1.96992	80.7093	µg/L	1.96992	2.44%
Zr 339.197	994891.9	4487.67	µg/L	74.295	4487.67	µg/L	74.295	1.66%

Sequence No.: 12 **Autosampler Location: 15**
Sample ID: 535777 LCSD **Date Collected: 2/1/2017 11:06:24 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: 535777 LCSD

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	6.4	94.7636	µg/L	41.24403	94.7636	µg/L	41.24403	43.52%
Sb 206.833	1584.4	4475.86	µg/L	6.965	4475.86	µg/L	6.965	0.16%
As 188.978	199.1	356.452	µg/L	30.6978	356.452	µg/L	30.6978	8.61%
Ba 233.527	32.9	175.224	µg/L	59.6074	175.224	µg/L	59.6074	34.02%
Be 313.042	-303295.8	-402.096	µg/L	3.9054	-402.096	µg/L	3.9054	0.97%
Bi 223.058	-9.6	17.5191	µg/L	20.30512	17.5191	µg/L	20.30512	115.90%
B 249.773	3195.9	70.9651	µg/L	0.69340	70.9651	µg/L	0.69340	0.98%
Cd 226.499	-16.9	-0.88507	µg/L	0.095970	-0.88507	µg/L	0.095970	10.84%
Ca 315.887	25356.6	558.892	µg/L	0.4357	558.892	µg/L	0.4357	0.08%
Co 228.616	62.3	7.41411	µg/L	0.963885	7.41411	µg/L	0.963885	13.00%
Cr 267.716	189.1	1.47762	µg/L	0.503274	1.47762	µg/L	0.503274	34.06%
Cu 324.754	16451.4	111.206	µg/L	2.4579	111.206	µg/L	2.4579	2.21%
Fe 259.935 radial	8.1	7.56664	µg/L	7.714266	7.56664	µg/L	7.714266	101.95%
Pb 220.350	3.8	19.5625	µg/L	10.89527	19.5625	µg/L	10.89527	55.69%
Li 670.784 radial	0.1	0.13419	µg/L	32.325508	0.13419	µg/L	32.325508	>999.9%
Mg 279.079	594.9	97.6199	µg/L	2.89405	97.6199	µg/L	2.89405	2.96%
Mn 260.568	420.7	2.13077	µg/L	0.185602	2.13077	µg/L	0.185602	8.71%
Mo 202.030	967.6	465.015	µg/L	3.7249	465.015	µg/L	3.7249	0.80%
Ni 231.604	114.7	16.4785	µg/L	0.60448	16.4785	µg/L	0.60448	3.67%
P 178.221	1029.6	4667.59	µg/L	53.327	4667.59	µg/L	53.327	1.14%
K 766.490 radial	21.6	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	-115.4	-78.8046	µg/L	5.31466	-78.8046	µg/L	5.31466	6.74%
Se 196.026	18.8	30.7729	µg/L	4.49494	30.7729	µg/L	4.49494	14.61%
Si 212.412	935.7	747.286	µg/L	12.0342	747.286	µg/L	12.0342	1.61%
Ag 328.068	3998.7	1.37594	µg/L	0.103909	1.37594	µg/L	0.103909	7.55%
Na 589.592 radial	10.8	439.652	µg/L	117.3964	439.652	µg/L	117.3964	26.70%
Sr 421.552 radial	15.0	15.3563	µg/L	2.28547	15.3563	µg/L	2.28547	14.88%
Te 214.281	344.0	669.355	µg/L	12.9366	669.355	µg/L	12.9366	1.93%
Tl 190.800	-83.7	-284.991	µg/L	2.1259	-284.991	µg/L	2.1259	0.75%
Sn 189.933	44.2	332.942	µg/L	16.7513	332.942	µg/L	16.7513	5.03%
Ti 334.941	436133.4	1205.17	µg/L	12.629	1205.17	µg/L	12.629	1.05%
U 409.014	52672.6	4008.56	µg/L	31.880	4008.56	µg/L	31.880	0.80%
V 292.402	-102.9	4.20007	µg/L	0.088788	4.20007	µg/L	0.088788	2.11%
Y 371.030	-146.8	0.27353	µg/L	0.060651	0.27353	µg/L	0.060651	22.17%
Zn 206.200	380.8	65.3406	µg/L	0.71536	65.3406	µg/L	0.71536	1.09%
Zr 339.197	1010066.3	4556.12	µg/L	47.133	4556.12	µg/L	47.133	1.03%

Sequence No.: 13 **Autosampler Location: 16**

Sample ID: 1703278001 **Date Collected: 2/1/2017 11:09:43 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: 1703278001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	8.5	133.188	µg/L	82.0787	133.188	µg/L	82.0787	61.63%
Sb 206.833	32.3	89.0563	µg/L	12.08556	89.0563	µg/L	12.08556	13.57%
As 188.978	159.1	285.708	µg/L	7.9254	285.708	µg/L	7.9254	2.77%
Ba 233.527	36.4	194.168	µg/L	63.5768	194.168	µg/L	63.5768	32.74%
Be 313.042	-246182.9	-326.221	µg/L	7.2014	-326.221	µg/L	7.2014	2.21%
Bi 223.058	-2.9	8.06345	µg/L	23.623432	8.06345	µg/L	23.623432	292.97%
B 249.773	4440.6	100.097	µg/L	0.6962	100.097	µg/L	0.6962	0.70%
Cd 226.499	-2.5	-0.30768	µg/L	0.707518	-0.30768	µg/L	0.707518	229.95%
Ca 315.887	23984.2	544.640	µg/L	5.9421	544.640	µg/L	5.9421	1.09%
Co 228.616	66.3	8.56762	µg/L	0.334663	8.56762	µg/L	0.334663	3.91%
Cr 267.716	100.1	2.30005	µg/L	0.249991	2.30005	µg/L	0.249991	10.87%
Cu 324.754	988.4	7.25192	µg/L	0.796634	7.25192	µg/L	0.796634	10.99%
Fe 259.935 radial	16.1	12.1983	µg/L	3.37269	12.1983	µg/L	3.37269	27.65%
Pb 220.350	2.9	14.5467	µg/L	27.75018	14.5467	µg/L	27.75018	190.77%
Li 670.784 radial	-8.3	-15.1808	µg/L	27.64113	-15.1808	µg/L	27.64113	182.08%
Mg 279.079	670.8	107.138	µg/L	3.6872	107.138	µg/L	3.6872	3.44%
Mn 260.568	382.2	2.52791	µg/L	0.033019	2.52791	µg/L	0.033019	1.31%
Mo 202.030	-4.3	-2.07992	µg/L	2.355207	-2.07992	µg/L	2.355207	113.24%
Ni 231.604	35.4	5.16306	µg/L	1.019334	5.16306	µg/L	1.019334	19.74%
P 178.221	50.9	230.957	µg/L	46.2425	230.957	µg/L	46.2425	20.02%
K 766.490 radial	19.3	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	-96.1	-16.7525	µg/L	0.35482	-16.7525	µg/L	0.35482	2.12%
Se 196.026	30.0	45.2859	µg/L	9.32256	45.2859	µg/L	9.32256	20.59%
Si 212.412	868.6	706.405	µg/L	7.0672	706.405	µg/L	7.0672	1.00%
Ag 328.068	121.6	1.04052	µg/L	0.283933	1.04052	µg/L	0.283933	27.29%
Na 589.592 radial	4.8	193.219	µg/L	168.8359	193.219	µg/L	168.8359	87.38%
Sr 421.552 radial	13.9	14.1835	µg/L	3.97872	14.1835	µg/L	3.97872	28.05%
Te 214.281	-27.9	-56.5150	µg/L	6.81720	-56.5150	µg/L	6.81720	12.06%
Tl 190.800	-70.2	-237.557	µg/L	24.8174	-237.557	µg/L	24.8174	10.45%
Sn 189.933	42.8	331.142	µg/L	21.6413	331.142	µg/L	21.6413	6.54%
Ti 334.941	358752.2	992.773	µg/L	24.1238	992.773	µg/L	24.1238	2.43%
U 409.014	-76.8	-5.89489	µg/L	4.807531	-5.89489	µg/L	4.807531	81.55%
V 292.402	-14.0	-0.88251	µg/L	0.108837	-0.88251	µg/L	0.108837	12.33%
Y 371.030	-31.8	0.01823	µg/L	0.015470	0.01823	µg/L	0.015470	84.86%
Zn 206.200	478.4	81.5200	µg/L	0.70829	81.5200	µg/L	0.70829	0.87%
Zr 339.197	396.5	1.75858	µg/L	0.167147	1.75858	µg/L	0.167147	9.50%

Sequence No.: 14 **Autosampler Location: 17**
Sample ID: 1703278002 **Date Collected: 2/1/2017 11:13:05 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: 1703278002

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	4.9	77.1197	µg/L	44.11272	77.1197	µg/L	44.11272	57.20%
Sb 206.833	41.5	114.416	µg/L	7.5813	114.416	µg/L	7.5813	6.63%
As 188.978	171.6	307.790	µg/L	12.2740	307.790	µg/L	12.2740	3.99%
Ba 233.527	54.3	289.674	µg/L	71.5779	289.674	µg/L	71.5779	24.71%
Be 313.042	-237882.9	-315.232	µg/L	2.2758	-315.232	µg/L	2.2758	0.72%
Bi 223.058	4.5	26.8102	µg/L	13.85352	26.8102	µg/L	13.85352	51.67%
B 249.773	4708.5	106.082	µg/L	0.4010	106.082	µg/L	0.4010	0.38%
Cd 226.499	-15.7	-1.01666	µg/L	0.367529	-1.01666	µg/L	0.367529	36.15%
Ca 315.887	17396.3	395.051	µg/L	2.9086	395.051	µg/L	2.9086	0.74%
Co 228.616	70.4	8.61588	µg/L	2.925799	8.61588	µg/L	2.925799	33.96%
Cr 267.716	130.8	2.99056	µg/L	0.097271	2.99056	µg/L	0.097271	3.25%
Cu 324.754	286.4	2.68147	µg/L	0.385330	2.68147	µg/L	0.385330	14.37%
Fe 259.935 radial	36.4	27.4781	µg/L	6.96124	27.4781	µg/L	6.96124	25.33%
Pb 220.350	-1.7	-8.12328	µg/L	49.901260	-8.12328	µg/L	49.901260	614.30%
Li 670.784 radial	-3.5	-6.36918	µg/L	23.719905	-6.36918	µg/L	23.719905	372.42%

Mg 279.079	454.4	74.1733 µg/L	2.78535	74.1733 µg/L	2.78535	3.76%
Mn 260.568	427.2	2.82924 µg/L	0.071677	2.82924 µg/L	0.071677	2.53%
Mo 202.030	-12.9	-6.23912 µg/L	3.718418	-6.23912 µg/L	3.718418	59.60%
Ni 231.604	21.3	3.16811 µg/L	1.139572	3.16811 µg/L	1.139572	35.97%
P 178.221	51.6	233.859 µg/L	38.4144	233.859 µg/L	38.4144	16.43%
K 766.490 radial	6.0	0.00000 µg/L	0.000000	0.00000 µg/L	0.000000	0.00%
Pt 265.945	-106.9	-18.5108 µg/L	1.44493	-18.5108 µg/L	1.44493	7.81%
Se 196.026	48.0	72.3066 µg/L	13.67653	72.3066 µg/L	13.67653	18.91%
Si 212.412	3116.2	2534.17 µg/L	23.655	2534.17 µg/L	23.655	0.93%
Ag 328.068	79.1	0.68040 µg/L	0.319977	0.68040 µg/L	0.319977	47.03%
Na 589.592 radial	0.2	9.34815 µg/L	160.999079	9.34815 µg/L	160.999079	>999.9%
Sr 421.552 radial	10.5	10.7095 µg/L	2.15477	10.7095 µg/L	2.15477	20.12%
Te 214.281	-25.6	-52.8807 µg/L	21.02273	-52.8807 µg/L	21.02273	39.76%
Tl 190.800	-67.9	-230.005 µg/L	16.2243	-230.005 µg/L	16.2243	7.05%
Sn 189.933	17.6	307.939 µg/L	9.2968	307.939 µg/L	9.2968	3.02%
Ti 334.941	470229.4	1301.26 µg/L	7.846	1301.26 µg/L	7.846	0.60%
U 409.014	-132.5	-10.1571 µg/L	7.57389	-10.1571 µg/L	7.57389	74.57%
V 292.402	35.7	-0.48142 µg/L	0.248641	-0.48142 µg/L	0.248641	51.65%
Y 371.030	-97.8	-0.05030 µg/L	0.055229	-0.05030 µg/L	0.055229	109.81%
Zn 206.200	531.3	90.5860 µg/L	2.03791	90.5860 µg/L	2.03791	2.25%
Zr 339.197	212.5	0.93784 µg/L	0.204968	0.93784 µg/L	0.204968	21.86%

Sequence No.: 15 **Autosampler Location: 2**
Sample ID: CCV1 **Date Collected: 2/1/2017 11:16:22 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: CCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	3287.4	50832.6	µg/L	338.90	50832.6	µg/L	338.90	0.67%
QC value within limits for Al 308.215 Recovery = 101.67%								
Sb 206.833	9270.3	26089.1	µg/L	51.59	26089.1	µg/L	51.59	0.20%
QC value within limits for Sb 206.833 Recovery = 104.36%								
As 188.978	2920.6	5201.81	µg/L	37.074	5201.81	µg/L	37.074	0.71%
QC value within limits for As 188.978 Recovery = 104.04%								
Ba 233.527	433.4	2304.69	µg/L	99.685	2304.69	µg/L	99.685	4.33%
QC value less than the lower limit for Ba 233.527 Recovery = 46.09%								
Be 313.042	1975461.7	2617.69	µg/L	9.968	2617.69	µg/L	9.968	0.38%
QC value within limits for Be 313.042 Recovery = 104.71%								
Bi 223.058	2686.6	5435.42	µg/L	44.566	5435.42	µg/L	44.566	0.82%
QC value within limits for Bi 223.058 Recovery = 108.71%								
B 249.773	576279.4	12797.9	µg/L	127.73	12797.9	µg/L	127.73	1.00%
QC value within limits for B 249.773 Recovery = 102.38%								
Cd 226.499	54785.7	2648.14	µg/L	20.461	2648.14	µg/L	20.461	0.77%
QC value within limits for Cd 226.499 Recovery = 105.93%								
Ca 315.887	2318904.8	52644.7	µg/L	516.07	52644.7	µg/L	516.07	0.98%
QC value within limits for Ca 315.887 Recovery = 105.29%								
Co 228.616	32211.6	5200.66	µg/L	14.229	5200.66	µg/L	14.229	0.27%
QC value within limits for Co 228.616 Recovery = 104.01%								
Cr 267.716	229964.0	5273.79	µg/L	45.871	5273.79	µg/L	45.871	0.87%
QC value within limits for Cr 267.716 Recovery = 105.48%								
Cu 324.754	3888528.1	26065.5	µg/L	298.73	26065.5	µg/L	298.73	1.15%
QC value within limits for Cu 324.754 Recovery = 104.26%								
Fe 259.935 radial	68464.1	51809.7	µg/L	931.18	51809.7	µg/L	931.18	1.80%
QC value within limits for Fe 259.935 radial Recovery = 103.62%								
Pb 220.350	1012.4	5048.16	µg/L	44.857	5048.16	µg/L	44.857	0.89%
QC value within limits for Pb 220.350 Recovery = 100.96%								
Li 670.784 radial	2775.9	5070.57	µg/L	86.495	5070.57	µg/L	86.495	1.71%
QC value within limits for Li 670.784 radial Recovery = 101.41%								
Mg 279.079	341375.4	53761.8	µg/L	484.65	53761.8	µg/L	484.65	0.90%
QC value within limits for Mg 279.079 Recovery = 107.52%								
Mn 260.568	792286.9	5257.10	µg/L	50.717	5257.10	µg/L	50.717	0.96%
QC value within limits for Mn 260.568 Recovery = 105.14%								
Mo 202.030	55178.1	26523.3	µg/L	235.92	26523.3	µg/L	235.92	0.89%
QC value within limits for Mo 202.030 Recovery = 106.09%								
Ni 231.604	37143.3	5309.21	µg/L	23.318	5309.21	µg/L	23.318	0.44%
QC value within limits for Ni 231.604 Recovery = 106.18%								
P 178.221	5746.8	26044.3	µg/L	83.40	26044.3	µg/L	83.40	0.32%

QC value within limits for P 178.221 Recovery = 104.18%
K 766.490 radial -5943.7 0.00000 µg/L 0.000000 0.00000 µg/L 0.000000 0.00%
QC value less than the lower limit for K 766.490 radial Recovery = 0.00%
Pt 265.945 2529.9 302.597 µg/L 6.6996 302.597 µg/L 6.6996 2.21%
QC value greater than the upper limit for Pt 265.945 Recovery = Not calculated
Se 196.026 3468.9 5255.71 µg/L 15.787 5255.71 µg/L 15.787 0.30%
QC value within limits for Se 196.026 Recovery = 105.11%
Si 212.412 16060.0 12283.8 µg/L 26.79 12283.8 µg/L 26.79 0.22%
QC value within limits for Si 212.412 Recovery = 98.27%
Ag 328.068 240496.1 2082.82 µg/L 18.670 2082.82 µg/L 18.670 0.90%
QC value within limits for Ag 328.068 Recovery = 104.14%
Na 589.592 radial 1258.5 51025.8 µg/L 358.70 51025.8 µg/L 358.70 0.70%
QC value within limits for Na 589.592 radial Recovery = 102.05%
Sr 421.552 radial 4954.3 5071.35 µg/L 42.927 5071.35 µg/L 42.927 0.85%
QC value within limits for Sr 421.552 radial Recovery = 101.43%
Te 214.281 5393.0 10519.8 µg/L 58.16 10519.8 µg/L 58.16 0.55%
QC value within limits for Te 214.281 Recovery = 105.20%
Tl 190.800 776.7 2581.94 µg/L 20.978 2581.94 µg/L 20.978 0.81%
QC value within limits for Tl 190.800 Recovery = 103.28%
Sn 189.933 4665.2 4732.27 µg/L 47.597 4732.27 µg/L 47.597 1.01%
QC value within limits for Sn 189.933 Recovery = 94.65%
Ti 334.941 1885226.6 5212.65 µg/L 51.457 5212.65 µg/L 51.457 0.99%
QC value within limits for Ti 334.941 Recovery = 104.25%
U 409.014 68569.6 5185.04 µg/L 44.599 5185.04 µg/L 44.599 0.86%
QC value within limits for U 409.014 Recovery = 103.70%
V 292.402 411714.4 5271.28 µg/L 45.079 5271.28 µg/L 45.079 0.86%
QC value within limits for V 292.402 Recovery = 105.43%
Y 371.030 1574787.1 2076.95 µg/L 17.780 2076.95 µg/L 17.780 0.86%
QC value within limits for Y 371.030 Recovery = 103.85%
Zn 206.200 157314.1 26819.8 µg/L 231.06 26819.8 µg/L 231.06 0.86%
QC value within limits for Zn 206.200 Recovery = 107.28%
Zr 339.197 1154487.0 5180.66 µg/L 49.767 5180.66 µg/L 49.767 0.96%
QC value within limits for Zr 339.197 Recovery = 103.61%
QC Failed. Continue with analysis.

Sequence No.: 16 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/1/2017 11:21:27 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	5.6	87.5470	µg/L	57.01801	87.5470	µg/L	57.01801	65.13%
QC value within limits for Al 308.215 Recovery = Not calculated								
Sb 206.833	8.3	23.5448	µg/L	25.80030	23.5448	µg/L	25.80030	109.58%
QC value within limits for Sb 206.833 Recovery = Not calculated								
As 188.978	3.4	6.15519	µg/L	24.412554	6.15519	µg/L	24.412554	396.62%
QC value within limits for As 188.978 Recovery = Not calculated								
Ba 233.527	-5.0	-26.8128	µg/L	72.12850	-26.8128	µg/L	72.12850	269.01%
QC value less than the lower limit for Ba 233.527 Recovery = Not calculated								
Be 313.042	-1607.6	-2.12960	µg/L	0.094747	-2.12960	µg/L	0.094747	4.45%
QC value less than the lower limit for Be 313.042 Recovery = Not calculated								
Bi 223.058	-13.0	-25.3303	µg/L	26.80864	-25.3303	µg/L	26.80864	105.84%
QC value within limits for Bi 223.058 Recovery = Not calculated								
B 249.773	2202.9	49.6491	µg/L	1.99999	49.6491	µg/L	1.99999	4.03%
QC value within limits for B 249.773 Recovery = Not calculated								
Cd 226.499	2.7	0.13136	µg/L	0.295435	0.13136	µg/L	0.295435	224.91%
QC value within limits for Cd 226.499 Recovery = Not calculated								
Ca 315.887	-151.4	-3.45477	µg/L	0.904178	-3.45477	µg/L	0.904178	26.17%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Co 228.616	-9.7	-1.56588	µg/L	0.628717	-1.56588	µg/L	0.628717	40.15%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	12.5	0.28732	µg/L	0.302696	0.28732	µg/L	0.302696	105.35%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.754	314.3	2.10607	µg/L	0.235904	2.10607	µg/L	0.235904	11.20%
QC value within limits for Cu 324.754 Recovery = Not calculated								
Fe 259.935 radial	8.4	6.33212	µg/L	0.635030	6.33212	µg/L	0.635030	10.03%
QC value within limits for Fe 259.935 radial Recovery = Not calculated								

```
Pb 220.350                  3.8     18.7293 µg/L      40.28895     18.7293 µg/L      40.28895 215.11%
   QC value within limits for Pb 220.350  Recovery = Not calculated
Li 670.784  radial         -2.3    -4.12339 µg/L      7.187999    -4.12339 µg/L      7.187999 174.32%
   QC value within limits for Li 670.784  radial  Recovery = Not calculated
Mg 279.079                 29.6     4.71977 µg/L      4.013300     4.71977 µg/L      4.013300  85.03%
   QC value within limits for Mg 279.079  Recovery = Not calculated
Mn 260.568                 15.4     0.10463 µg/L      0.135824     0.10463 µg/L      0.135824 129.82%
   QC value within limits for Mn 260.568  Recovery = Not calculated
Mo 202.030                 12.7     6.11704 µg/L      0.334135     6.11704 µg/L      0.334135   5.46%
   QC value within limits for Mo 202.030  Recovery = Not calculated
Ni 231.604                 13.8     1.95365 µg/L      2.063124     1.95365 µg/L      2.063124 105.60%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 178.221                   2.7     12.2553 µg/L      33.49263     12.2553 µg/L      33.49263 273.29%
   QC value within limits for P 178.221  Recovery = Not calculated
K 766.490  radial          26.1     0.00000 µg/L      0.000000     0.00000 µg/L      0.000000   0.00%
   QC value within limits for K 766.490  radial  Recovery = Not calculated
Pt 265.945                 -4.2    -0.80832 µg/L      3.355987    -0.80832 µg/L      3.355987 415.18%
   QC value within limits for Pt 265.945  Recovery = Not calculated
Se 196.026                  2.8     4.29671 µg/L      4.581898     4.29671 µg/L      4.581898 106.64%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 212.412                -30.9    -25.3152 µg/L       8.06975    -25.3152 µg/L       8.06975  31.88%
   QC value within limits for Si 212.412  Recovery = Not calculated
Ag 328.068                -33.9    -0.29498 µg/L      0.116553    -0.29498 µg/L      0.116553  39.51%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Na 589.592 radial          -1.0    -41.5630 µg/L     197.29157    -41.5630 µg/L     197.29157 474.68%
   QC value within limits for Na 589.592 radial  Recovery = Not calculated
Sr 421.552  radial          3.6     3.64037 µg/L      1.027115     3.64037 µg/L      1.027115  28.21%
   QC value within limits for Sr 421.552  radial  Recovery = Not calculated
Te 214.281                  1.4     2.72814 µg/L     13.034008     2.72814 µg/L     13.034008 477.76%
   QC value within limits for Te 214.281  Recovery = Not calculated
Tl 190.800                  2.7     9.13015 µg/L     15.204079     9.13015 µg/L     15.204079 166.53%
   QC value within limits for Tl 190.800  Recovery = Not calculated
Sn 189.933                  9.2     296.960 µg/L       11.6869     296.960 µg/L       11.6869   3.94%
   QC value greater than the upper limit for Sn 189.933  Recovery = Not calculated
Ti 334.941                144.8     0.39793 µg/L      0.152610     0.39793 µg/L      0.152610  38.35%
   QC value within limits for Ti 334.941  Recovery = Not calculated
U 409.014                  74.1     5.67337 µg/L     12.930950     5.67337 µg/L     12.930950 227.92%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402                 -17.9    -0.20764 µg/L      0.364287    -0.20764 µg/L      0.364287 175.44%
   QC value within limits for V 292.402  Recovery = Not calculated
Y 371.030                  80.2     0.10613 µg/L      0.035401     0.10613 µg/L      0.035401  33.35%
   QC value within limits for Y 371.030  Recovery = Not calculated
Zn 206.200                 10.9     1.81297 µg/L      0.794758     1.81297 µg/L      0.794758  43.84%
   QC value within limits for Zn 206.200  Recovery = Not calculated
Zr 339.197                136.2     0.57322 µg/L      0.504837     0.57322 µg/L      0.504837  88.07%
   QC value within limits for Zr 339.197  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 17 **Autosampler Location: 18**
Sample ID: 1703278003 **Date Collected: 2/1/2017 11:24:43 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: 1703278003

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	6.1	94.8733	µg/L	47.95683	94.8733	µg/L	47.95683	50.55%
Sb 206.833	32.2	88.5751	µg/L	26.52954	88.5751	µg/L	26.52954	29.95%
As 188.978	176.1	316.351	µg/L	21.2356	316.351	µg/L	21.2356	6.71%
Ba 233.527	80.5	429.700	µg/L	67.5566	429.700	µg/L	67.5566	15.72%
Be 313.042	-243847.1	-323.126	µg/L	4.9868	-323.126	µg/L	4.9868	1.54%
Bi 223.058	-11.8	-8.99541	µg/L	19.952424	-8.99541	µg/L	19.952424	221.81%
B 249.773	4858.0	109.537	µg/L	0.6151	109.537	µg/L	0.6151	0.56%
Cd 226.499	-6.9	-0.52604	µg/L	0.273045	-0.52604	µg/L	0.273045	51.91%
Ca 315.887	25731.8	584.345	µg/L	8.8661	584.345	µg/L	8.8661	1.52%
Co 228.616	56.3	6.94689	µg/L	1.431392	6.94689	µg/L	1.431392	20.60%
Cr 267.716	158.1	3.64342	µg/L	0.422086	3.64342	µg/L	0.422086	11.58%
Cu 324.754	385.2	3.22104	µg/L	0.592349	3.22104	µg/L	0.592349	18.39%
Fe 259.935 radial	7.0	5.30409	µg/L	1.929819	5.30409	µg/L	1.929819	36.38%

Pb 220.350		12.1	60.3050	µg/L	69.10930	60.3050	µg/L	69.10930	114.60%
Li 670.784	radial	5.4	9.77632	µg/L	23.099094	9.77632	µg/L	23.099094	236.28%
Mg 279.079		549.6	88.4166	µg/L	2.94107	88.4166	µg/L	2.94107	3.33%
Mn 260.568		406.1	2.68646	µg/L	0.141041	2.68646	µg/L	0.141041	5.25%
Mo 202.030		3.7	1.77988	µg/L	2.649017	1.77988	µg/L	2.649017	148.83%
Ni 231.604		25.3	3.77034	µg/L	0.503266	3.77034	µg/L	0.503266	13.35%
P 178.221		42.3	191.789	µg/L	42.1637	191.789	µg/L	42.1637	21.98%
K 766.490	radial	36.9	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945		-112.9	-19.5997	µg/L	0.97456	-19.5997	µg/L	0.97456	4.97%
Se 196.026		28.1	42.3269	µg/L	18.93702	42.3269	µg/L	18.93702	44.74%
Si 212.412		875.5	711.868	µg/L	11.4037	711.868	µg/L	11.4037	1.60%
Ag 328.068		154.7	1.33401	µg/L	0.236106	1.33401	µg/L	0.236106	17.70%
Na 589.592	radial	5.1	205.893	µg/L	103.3272	205.893	µg/L	103.3272	50.18%
Sr 421.552	radial	12.4	12.7366	µg/L	1.84305	12.7366	µg/L	1.84305	14.47%
Te 214.281		-32.4	-65.3613	µg/L	18.22766	-65.3613	µg/L	18.22766	27.89%
Tl 190.800		-70.8	-239.516	µg/L	32.3592	-239.516	µg/L	32.3592	13.51%
Sn 189.933		9.9	300.151	µg/L	16.4850	300.151	µg/L	16.4850	5.49%
Ti 334.941		367982.5	1018.32	µg/L	19.962	1018.32	µg/L	19.962	1.96%
U 409.014		-88.8	-6.81078	µg/L	5.514660	-6.81078	µg/L	5.514660	80.97%
V 292.402		30.5	-0.32846	µg/L	0.180685	-0.32846	µg/L	0.180685	55.01%
Y 371.030		-23.1	0.03111	µg/L	0.015848	0.03111	µg/L	0.015848	50.94%
Zn 206.200		392.4	66.8653	µg/L	0.27967	66.8653	µg/L	0.27967	0.42%
Zr 339.197		170.6	0.74041	µg/L	0.454282	0.74041	µg/L	0.454282	61.36%

Sequence No.: 18
Sample ID: 1703278004
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 2/1/2017 11:28:02 AM
Sample Prep Volume:
Data Type: Original

Mean Data: 1703278004

Analyte		Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215		5.2	80.8102	µg/L	42.74442	80.8102	µg/L	42.74442	52.89%
Sb 206.833		44.4	123.131	µg/L	25.8385	123.131	µg/L	25.8385	20.98%
As 188.978		163.1	292.901	µg/L	26.6710	292.901	µg/L	26.6710	9.11%
Ba 233.527		32.0	170.635	µg/L	108.7748	170.635	µg/L	108.7748	63.75%
Be 313.042		-210269.0	-278.636	µg/L	1.8786	-278.636	µg/L	1.8786	0.67%
Bi 223.058		-1.7	11.6389	µg/L	17.88695	11.6389	µg/L	17.88695	153.68%
B 249.773		5645.0	127.137	µg/L	1.4348	127.137	µg/L	1.4348	1.13%
Cd 226.499		-9.0	-0.63776	µg/L	0.291060	-0.63776	µg/L	0.291060	45.64%
Ca 315.887		18473.0	419.449	µg/L	5.7202	419.449	µg/L	5.7202	1.36%
Co 228.616		73.5	9.53750	µg/L	1.034108	9.53750	µg/L	1.034108	10.84%
Cr 267.716		157.1	3.58613	µg/L	0.325732	3.58613	µg/L	0.325732	9.08%
Cu 324.754		3733.4	25.7144	µg/L	0.75004	25.7144	µg/L	0.75004	2.92%
Fe 259.935	radial	57.3	43.3249	µg/L	3.14956	43.3249	µg/L	3.14956	7.27%
Pb 220.350		6.1	30.3535	µg/L	60.77742	30.3535	µg/L	60.77742	200.23%
Li 670.784	radial	-0.3	-0.63539	µg/L	21.623966	-0.63539	µg/L	21.623966	>999.9%
Mg 279.079		447.3	72.5792	µg/L	1.91318	72.5792	µg/L	1.91318	2.64%
Mn 260.568		527.4	3.49423	µg/L	0.080122	3.49423	µg/L	0.080122	2.29%
Mo 202.030		-0.8	-0.37267	µg/L	5.989050	-0.37267	µg/L	5.989050	>999.9%
Ni 231.604		46.5	6.71627	µg/L	1.118493	6.71627	µg/L	1.118493	16.65%
P 178.221		47.0	213.181	µg/L	29.8909	213.181	µg/L	29.8909	14.02%
K 766.490	radial	29.6	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945		-86.7	-15.1975	µg/L	2.32136	-15.1975	µg/L	2.32136	15.27%
Se 196.026		31.7	47.8414	µg/L	2.93537	47.8414	µg/L	2.93537	6.14%
Si 212.412		994.4	808.632	µg/L	17.0789	808.632	µg/L	17.0789	2.11%
Ag 328.068		129.5	1.12407	µg/L	0.245585	1.12407	µg/L	0.245585	21.85%
Na 589.592	radial	2.8	112.291	µg/L	168.2603	112.291	µg/L	168.2603	149.84%
Sr 421.552	radial	10.2	10.4777	µg/L	0.75661	10.4777	µg/L	0.75661	7.22%
Te 214.281		-25.9	-52.8080	µg/L	14.03258	-52.8080	µg/L	14.03258	26.57%
Tl 190.800		-68.2	-230.997	µg/L	13.1803	-230.997	µg/L	13.1803	5.71%
Sn 189.933		2.3	293.020	µg/L	37.1178	293.020	µg/L	37.1178	12.67%
Ti 334.941		390464.0	1080.52	µg/L	7.269	1080.52	µg/L	7.269	0.67%
U 409.014		28.6	2.17671	µg/L	13.432150	2.17671	µg/L	13.432150	617.09%
V 292.402		54.7	-0.05597	µg/L	0.547776	-0.05597	µg/L	0.547776	978.63%
Y 371.030		7.3	0.07542	µg/L	0.051595	0.07542	µg/L	0.051595	68.41%
Zn 206.200		274.9	46.9413	µg/L	0.87369	46.9413	µg/L	0.87369	1.86%
Zr 339.197		194.1	0.84836	µg/L	0.167798	0.84836	µg/L	0.167798	19.78%

Sequence No.: 19
Sample ID: 1703278005
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 2/1/2017 11:31:22 AM

Sample Prep Volume:
Data Type: Original

Mean Data: 1703278005

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	7.3	113.704	µg/L	52.5003	113.704	µg/L	52.5003	46.17%
Sb 206.833	41.0	113.298	µg/L	43.0683	113.298	µg/L	43.0683	38.01%
As 188.978	172.7	309.960	µg/L	9.9130	309.960	µg/L	9.9130	3.20%
Ba 233.527	42.0	223.883	µg/L	11.7421	223.883	µg/L	11.7421	5.24%
Be 313.042	-233655.6	-309.627	µg/L	5.0292	-309.627	µg/L	5.0292	1.62%
Bi 223.058	-10.6	-4.54603	µg/L	17.973651	-4.54603	µg/L	17.973651	395.37%
B 249.773	4720.2	106.388	µg/L	1.3845	106.388	µg/L	1.3845	1.30%
Cd 226.499	-5.7	-0.49453	µg/L	0.394922	-0.49453	µg/L	0.394922	79.86%
Ca 315.887	17820.1	404.682	µg/L	6.1553	404.682	µg/L	6.1553	1.52%
Co 228.616	62.9	7.62299	µg/L	1.464922	7.62299	µg/L	1.464922	19.22%
Cr 267.716	98.3	2.24693	µg/L	0.083266	2.24693	µg/L	0.083266	3.71%
Cu 324.754	292.1	2.70564	µg/L	0.484011	2.70564	µg/L	0.484011	17.89%
Fe 259.935 radial	21.9	16.5481	µg/L	2.76447	16.5481	µg/L	2.76447	16.71%
Pb 220.350	14.1	70.3611	µg/L	42.26019	70.3611	µg/L	42.26019	60.06%
Li 670.784 radial	14.8	27.0658	µg/L	17.65420	27.0658	µg/L	17.65420	65.23%
Mg 279.079	491.6	79.8093	µg/L	0.98774	79.8093	µg/L	0.98774	1.24%
Mn 260.568	410.1	2.71517	µg/L	0.078904	2.71517	µg/L	0.078904	2.91%
Mo 202.030	2.6	1.21233	µg/L	4.095821	1.21233	µg/L	4.095821	337.85%
Ni 231.604	19.4	2.91316	µg/L	0.729834	2.91316	µg/L	0.729834	25.05%
P 178.221	57.2	259.353	µg/L	11.1993	259.353	µg/L	11.1993	4.32%
K 766.490 radial	36.3	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	-98.6	-17.0586	µg/L	3.35743	-17.0586	µg/L	3.35743	19.68%
Se 196.026	44.0	66.2813	µg/L	11.81165	66.2813	µg/L	11.81165	17.82%
Si 212.412	749.8	609.709	µg/L	3.5968	609.709	µg/L	3.5968	0.59%
Ag 328.068	104.4	0.89851	µg/L	0.194104	0.89851	µg/L	0.194104	21.60%
Na 589.592 radial	3.8	153.411	µg/L	45.3438	153.411	µg/L	45.3438	29.56%
Sr 421.552 radial	14.5	14.8591	µg/L	1.24639	14.8591	µg/L	1.24639	8.39%
Te 214.281	-35.6	-71.9450	µg/L	10.60684	-71.9450	µg/L	10.60684	14.74%
Tl 190.800	-75.2	-254.555	µg/L	13.3008	-254.555	µg/L	13.3008	5.23%
Sn 189.933	5.4	296.110	µg/L	15.8312	296.110	µg/L	15.8312	5.35%
Ti 334.941	426582.2	1180.48	µg/L	22.439	1180.48	µg/L	22.439	1.90%
U 409.014	-132.6	-10.1635	µg/L	12.10443	-10.1635	µg/L	12.10443	119.10%
V 292.402	29.8	-0.46195	µg/L	0.284424	-0.46195	µg/L	0.284424	61.57%
Y 371.030	-55.6	-0.00204	µg/L	0.083431	-0.00204	µg/L	0.083431	>999.9%
Zn 206.200	470.6	80.1957	µg/L	0.45870	80.1957	µg/L	0.45870	0.57%
Zr 339.197	200.3	0.87372	µg/L	0.042643	0.87372	µg/L	0.042643	4.88%

Sequence No.: 20
Sample ID: 1703278006
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 2/1/2017 11:34:43 AM

Sample Prep Volume:
Data Type: Original

Mean Data: 1703278006

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	8.9	138.649	µg/L	69.6719	138.649	µg/L	69.6719	50.25%
Sb 206.833	32.3	88.3282	µg/L	6.91759	88.3282	µg/L	6.91759	7.83%
As 188.978	152.6	273.459	µg/L	43.5736	273.459	µg/L	43.5736	15.93%
Ba 233.527	18.2	97.0425	µg/L	41.52436	97.0425	µg/L	41.52436	42.79%
Be 313.042	-224863.9	-297.982	µg/L	1.6567	-297.982	µg/L	1.6567	0.56%
Bi 223.058	-1.4	15.4706	µg/L	12.65846	15.4706	µg/L	12.65846	81.82%
B 249.773	5069.3	114.237	µg/L	1.2299	114.237	µg/L	1.2299	1.08%
Cd 226.499	-6.1	-0.54489	µg/L	0.415806	-0.54489	µg/L	0.415806	76.31%
Ca 315.887	16466.7	373.944	µg/L	3.8525	373.944	µg/L	3.8525	1.03%
Co 228.616	60.9	6.99373	µg/L	0.415922	6.99373	µg/L	0.415922	5.95%
Cr 267.716	142.8	3.25166	µg/L	0.436680	3.25166	µg/L	0.436680	13.43%
Cu 324.754	1777.9	12.7333	µg/L	1.01029	12.7333	µg/L	1.01029	7.93%
Fe 259.935 radial	29.8	22.5207	µg/L	4.71467	22.5207	µg/L	4.71467	20.93%

Pb 220.350		16.8	83.5766	µg/L	58.83914	83.5766	µg/L	58.83914	70.40%
Li 670.784	radial	10.5	19.2527	µg/L	8.34950	19.2527	µg/L	8.34950	43.37%
Mg 279.079		471.9	77.1078	µg/L	2.83886	77.1078	µg/L	2.83886	3.68%
Mn 260.568		287.1	1.90203	µg/L	0.095380	1.90203	µg/L	0.095380	5.01%
Mo 202.030		1.8	0.83438	µg/L	2.042790	0.83438	µg/L	2.042790	244.83%
Ni 231.604		37.2	5.40788	µg/L	1.990487	5.40788	µg/L	1.990487	36.81%
P 178.221		41.8	189.516	µg/L	32.7758	189.516	µg/L	32.7758	17.29%
K 766.490	radial	-5.0	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945		-98.2	-17.0044	µg/L	2.23799	-17.0044	µg/L	2.23799	13.16%
Se 196.026		25.7	38.7789	µg/L	17.87062	38.7789	µg/L	17.87062	46.08%
Si 212.412		1796.3	1460.68	µg/L	14.201	1460.68	µg/L	14.201	0.97%
Ag 328.068		94.0	0.80868	µg/L	0.096453	0.80868	µg/L	0.096453	11.93%
Na 589.592	radial	2.2	87.9401	µg/L	81.83726	87.9401	µg/L	81.83726	93.06%
Sr 421.552	radial	12.8	13.0731	µg/L	3.01401	13.0731	µg/L	3.01401	23.06%
Te 214.281		-23.3	-48.4877	µg/L	14.94108	-48.4877	µg/L	14.94108	30.81%
Tl 190.800		-71.5	-242.205	µg/L	31.8548	-242.205	µg/L	31.8548	13.15%
Sn 189.933		37.9	327.116	µg/L	20.8618	327.116	µg/L	20.8618	6.38%
Ti 334.941		478454.6	1324.02	µg/L	8.411	1324.02	µg/L	8.411	0.64%
U 409.014		-120.4	-9.23051	µg/L	3.015870	-9.23051	µg/L	3.015870	32.67%
V 292.402		39.0	-0.44233	µg/L	0.112683	-0.44233	µg/L	0.112683	25.47%
Y 371.030		-91.3	-0.04031	µg/L	0.043704	-0.04031	µg/L	0.043704	108.41%
Zn 206.200		554.8	94.5647	µg/L	1.15244	94.5647	µg/L	1.15244	1.22%
Zr 339.197		221.1	0.96572	µg/L	0.506904	0.96572	µg/L	0.506904	52.49%

Sequence No.: 21
Sample ID: 1703278007
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 2/1/2017 11:38:03 AM

Sample Prep Volume:
Data Type: Original

Mean Data: 1703278007

Analyte		Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215		2.3	35.3034	µg/L	18.76851	35.3034	µg/L	18.76851	53.16%
Sb 206.833		28.4	77.6650	µg/L	21.61611	77.6650	µg/L	21.61611	27.83%
As 188.978		175.0	314.147	µg/L	20.8838	314.147	µg/L	20.8838	6.65%
Ba 233.527		27.0	143.995	µg/L	73.4843	143.995	µg/L	73.4843	51.03%
Be 313.042		-246956.1	-327.249	µg/L	2.6370	-327.249	µg/L	2.6370	0.81%
Bi 223.058		-8.3	-0.84354	µg/L	9.859416	-0.84354	µg/L	9.859416	>999.9%
B 249.773		4781.2	107.769	µg/L	1.0277	107.769	µg/L	1.0277	0.95%
Cd 226.499		-12.6	-0.81864	µg/L	0.222623	-0.81864	µg/L	0.222623	27.19%
Ca 315.887		15741.7	357.475	µg/L	7.3825	357.475	µg/L	7.3825	2.07%
Co 228.616		64.0	7.92221	µg/L	0.692493	7.92221	µg/L	0.692493	8.74%
Cr 267.716		163.9	3.75522	µg/L	0.414029	3.75522	µg/L	0.414029	11.03%
Cu 324.754		1492.9	10.7227	µg/L	0.37739	10.7227	µg/L	0.37739	3.52%
Fe 259.935	radial	19.5	14.7433	µg/L	3.29647	14.7433	µg/L	3.29647	22.36%
Pb 220.350		8.7	43.6011	µg/L	23.39409	43.6011	µg/L	23.39409	53.65%
Li 670.784	radial	6.5	11.8048	µg/L	27.20535	11.8048	µg/L	27.20535	230.46%
Mg 279.079		438.2	71.3105	µg/L	3.28615	71.3105	µg/L	3.28615	4.61%
Mn 260.568		304.8	2.01673	µg/L	0.034576	2.01673	µg/L	0.034576	1.71%
Mo 202.030		2.2	1.04925	µg/L	4.421432	1.04925	µg/L	4.421432	421.39%
Ni 231.604		26.3	3.89469	µg/L	0.977912	3.89469	µg/L	0.977912	25.11%
P 178.221		52.7	238.851	µg/L	26.6916	238.851	µg/L	26.6916	11.18%
K 766.490	radial	-1.6	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945		-100.1	-17.3350	µg/L	1.81034	-17.3350	µg/L	1.81034	10.44%
Se 196.026		28.0	42.2123	µg/L	21.01259	42.2123	µg/L	21.01259	49.78%
Si 212.412		588.4	478.415	µg/L	10.8889	478.415	µg/L	10.8889	2.28%
Ag 328.068		132.4	1.14010	µg/L	0.121475	1.14010	µg/L	0.121475	10.65%
Na 589.592	radial	4.7	190.799	µg/L	129.4694	190.799	µg/L	129.4694	67.86%
Sr 421.552	radial	10.5	10.7834	µg/L	3.90583	10.7834	µg/L	3.90583	36.22%
Te 214.281		-26.4	-53.9880	µg/L	18.91359	-53.9880	µg/L	18.91359	35.03%
Tl 190.800		-79.2	-268.050	µg/L	14.6810	-268.050	µg/L	14.6810	5.48%
Sn 189.933		20.6	310.297	µg/L	38.1694	310.297	µg/L	38.1694	12.30%
Ti 334.941		403767.2	1117.34	µg/L	11.647	1117.34	µg/L	11.647	1.04%
U 409.014		-117.1	-8.97988	µg/L	8.940346	-8.97988	µg/L	8.940346	99.56%
V 292.402		31.4	-0.39014	µg/L	0.525761	-0.39014	µg/L	0.525761	134.76%
Y 371.030		-81.8	-0.04034	µg/L	0.039688	-0.04034	µg/L	0.039688	98.39%
Zn 206.200		301.7	51.4719	µg/L	1.09040	51.4719	µg/L	1.09040	2.12%
Zr 339.197		206.2	0.90090	µg/L	0.254531	0.90090	µg/L	0.254531	28.25%

Sequence No.: 22
Sample ID: 1703278008
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 2/1/2017 11:41:24 AM
Sample Prep Volume:
Data Type: Original

Mean Data: 1703278008

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	6.2	96.4936	µg/L	31.01800	96.4936	µg/L	31.01800	32.15%
Sb 206.833	45.8	127.279	µg/L	29.1984	127.279	µg/L	29.1984	22.94%
As 188.978	150.7	270.531	µg/L	14.4384	270.531	µg/L	14.4384	5.34%
Ba 233.527	39.0	208.074	µg/L	40.9803	208.074	µg/L	40.9803	19.70%
Be 313.042	-185777.5	-246.183	µg/L	1.4017	-246.183	µg/L	1.4017	0.57%
Bi 223.058	-1.2	11.5723	µg/L	26.82985	11.5723	µg/L	26.82985	231.85%
B 249.773	4625.1	104.290	µg/L	0.5242	104.290	µg/L	0.5242	0.50%
Cd 226.499	-6.9	-0.51776	µg/L	0.275095	-0.51776	µg/L	0.275095	53.13%
Ca 315.887	22557.6	512.246	µg/L	4.1405	512.246	µg/L	4.1405	0.81%
Co 228.616	64.7	8.28898	µg/L	1.221690	8.28898	µg/L	1.221690	14.74%
Cr 267.716	112.8	2.57989	µg/L	0.155623	2.57989	µg/L	0.155623	6.03%
Cu 324.754	334.0	2.87916	µg/L	0.888629	2.87916	µg/L	0.888629	30.86%
Fe 259.935 radial	5.1	3.81862	µg/L	9.632868	3.81862	µg/L	9.632868	252.26%
Pb 220.350	7.4	37.0577	µg/L	39.59429	37.0577	µg/L	39.59429	106.84%
Li 670.784 radial	2.6	4.76516	µg/L	34.114619	4.76516	µg/L	34.114619	715.92%
Mg 279.079	437.7	70.8515	µg/L	2.01650	70.8515	µg/L	2.01650	2.85%
Mn 260.568	376.6	2.48921	µg/L	0.045563	2.48921	µg/L	0.045563	1.83%
Mo 202.030	-5.2	-2.50769	µg/L	1.571405	-2.50769	µg/L	1.571405	62.66%
Ni 231.604	26.4	3.85418	µg/L	1.488104	3.85418	µg/L	1.488104	38.61%
P 178.221	63.2	286.358	µg/L	49.3554	286.358	µg/L	49.3554	17.24%
K 766.490 radial	31.3	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	-87.9	-15.2763	µg/L	1.16360	-15.2763	µg/L	1.16360	7.62%
Se 196.026	43.9	66.1608	µg/L	14.08885	66.1608	µg/L	14.08885	21.29%
Si 212.412	590.0	479.877	µg/L	13.0084	479.877	µg/L	13.0084	2.71%
Ag 328.068	105.1	0.90696	µg/L	0.309381	0.90696	µg/L	0.309381	34.11%
Na 589.592 radial	6.3	254.750	µg/L	127.1239	254.750	µg/L	127.1239	49.90%
Sr 421.552 radial	11.2	11.4389	µg/L	2.14596	11.4389	µg/L	2.14596	18.76%
Te 214.281	-28.2	-57.0813	µg/L	28.57346	-57.0813	µg/L	28.57346	50.06%
Tl 190.800	-55.1	-186.699	µg/L	10.7424	-186.699	µg/L	10.7424	5.75%
Sn 189.933	32.4	321.290	µg/L	17.9005	321.290	µg/L	17.9005	5.57%
Ti 334.941	363191.7	1005.06	µg/L	8.984	1005.06	µg/L	8.984	0.89%
U 409.014	-66.4	-5.09408	µg/L	8.768285	-5.09408	µg/L	8.768285	172.13%
V 292.402	29.6	-0.33825	µg/L	0.328164	-0.33825	µg/L	0.328164	97.02%
Y 371.030	-50.4	-0.00557	µg/L	0.053820	-0.00557	µg/L	0.053820	965.82%
Zn 206.200	330.8	56.4286	µg/L	1.21977	56.4286	µg/L	1.21977	2.16%
Zr 339.197	90.8	0.38163	µg/L	0.213635	0.38163	µg/L	0.213635	55.98%

Sequence No.: 23
Sample ID: 1703278009
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 2/1/2017 11:44:46 AM
Sample Prep Volume:
Data Type: Original

Mean Data: 1703278009

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	0.4	6.55246	µg/L	6.024852	6.55246	µg/L	6.024852	91.95%
Sb 206.833	29.7	81.5751	µg/L	30.48459	81.5751	µg/L	30.48459	37.37%
As 188.978	159.6	286.579	µg/L	23.7763	286.579	µg/L	23.7763	8.30%
Ba 233.527	35.3	188.268	µg/L	64.5566	188.268	µg/L	64.5566	34.29%
Be 313.042	-240393.4	-318.552	µg/L	2.9029	-318.552	µg/L	2.9029	0.91%
Bi 223.058	-5.0	4.82218	µg/L	22.554517	4.82218	µg/L	22.554517	467.72%
B 249.773	4590.6	103.408	µg/L	0.6372	103.408	µg/L	0.6372	0.62%
Cd 226.499	-8.0	-0.58657	µg/L	0.320769	-0.58657	µg/L	0.320769	54.69%
Ca 315.887	18169.3	412.608	µg/L	4.7898	412.608	µg/L	4.7898	1.16%
Co 228.616	66.4	8.44745	µg/L	1.595539	8.44745	µg/L	1.595539	18.89%
Cr 267.716	113.2	2.61905	µg/L	0.471000	2.61905	µg/L	0.471000	17.98%
Cu 324.754	526.0	4.19248	µg/L	0.535115	4.19248	µg/L	0.535115	12.76%
Fe 259.935 radial	41.3	31.2326	µg/L	3.83042	31.2326	µg/L	3.83042	12.26%

Pb 220.350		1.8	9.47131	µg/L	21.357188	9.47131	µg/L	21.357188	225.49%
Li 670.784	radial	7.4	13.5397	µg/L	43.25160	13.5397	µg/L	43.25160	319.44%
Mg 279.079		482.6	78.0254	µg/L	1.93218	78.0254	µg/L	1.93218	2.48%
Mn 260.568		319.8	2.11914	µg/L	0.097567	2.11914	µg/L	0.097567	4.60%
Mo 202.030		-2.0	-0.97897	µg/L	1.162960	-0.97897	µg/L	1.162960	118.79%
Ni 231.604		24.9	3.69205	µg/L	1.247924	3.69205	µg/L	1.247924	33.80%
P 178.221		45.7	207.097	µg/L	26.4795	207.097	µg/L	26.4795	12.79%
K 766.490	radial	22.0	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945		-114.6	-19.8434	µg/L	1.79329	-19.8434	µg/L	1.79329	9.04%
Se 196.026		32.5	48.9957	µg/L	6.50587	48.9957	µg/L	6.50587	13.28%
Si 212.412		893.3	726.427	µg/L	11.4990	726.427	µg/L	11.4990	1.58%
Ag 328.068		160.8	1.38630	µg/L	0.259815	1.38630	µg/L	0.259815	18.74%
Na 589.592	radial	4.1	164.692	µg/L	74.4182	164.692	µg/L	74.4182	45.19%
Sr 421.552	radial	11.9	12.1685	µg/L	0.94218	12.1685	µg/L	0.94218	7.74%
Te 214.281		-21.2	-43.7953	µg/L	5.67651	-43.7953	µg/L	5.67651	12.96%
Tl 190.800		-74.5	-252.161	µg/L	45.2498	-252.161	µg/L	45.2498	17.94%
Sn 189.933		27.7	316.894	µg/L	16.6653	316.894	µg/L	16.6653	5.26%
Ti 334.941		382328.8	1058.01	µg/L	9.963	1058.01	µg/L	9.963	0.94%
U 409.014		-131.2	-10.0569	µg/L	10.60030	-10.0569	µg/L	10.60030	105.40%
V 292.402		40.7	-0.23952	µg/L	0.283926	-0.23952	µg/L	0.283926	118.54%
Y 371.030		-67.1	-0.02467	µg/L	0.010791	-0.02467	µg/L	0.010791	43.75%
Zn 206.200		346.1	59.0093	µg/L	1.20589	59.0093	µg/L	1.20589	2.04%
Zr 339.197		303.0	1.33754	µg/L	0.093230	1.33754	µg/L	0.093230	6.97%

Sequence No.: 24
Sample ID: 1703278010
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 2/1/2017 11:48:03 AM

Sample Prep Volume:
Data Type: Original

Mean Data: 1703278010

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	3.0	47.2579	µg/L	32.34865	47.2579	µg/L	32.34865	68.45%
Sb 206.833	32.8	89.6177	µg/L	25.91097	89.6177	µg/L	25.91097	28.91%
As 188.978	162.6	291.492	µg/L	25.7995	291.492	µg/L	25.7995	8.85%
Ba 233.527	46.9	250.417	µg/L	116.7974	250.417	µg/L	116.7974	46.64%
Be 313.042	-224384.5	-297.349	µg/L	5.4180	-297.349	µg/L	5.4180	1.82%
Bi 223.058	-12.8	-5.43519	µg/L	17.470441	-5.43519	µg/L	17.470441	321.43%
B 249.773	4468.9	100.738	µg/L	0.5946	100.738	µg/L	0.5946	0.59%
Cd 226.499	-10.3	-0.76281	µg/L	0.335475	-0.76281	µg/L	0.335475	43.98%
Ca 315.887	26518.2	602.190	µg/L	13.5003	602.190	µg/L	13.5003	2.24%
Co 228.616	64.1	7.31276	µg/L	0.506343	7.31276	µg/L	0.506343	6.92%
Cr 267.716	172.9	3.92857	µg/L	0.570316	3.92857	µg/L	0.570316	14.52%
Cu 324.754	1636.6	11.8736	µg/L	0.72847	11.8736	µg/L	0.72847	6.14%
Fe 259.935 radial	15.7	11.8585	µg/L	0.63795	11.8585	µg/L	0.63795	5.38%
Pb 220.350	7.0	35.0317	µg/L	57.14176	35.0317	µg/L	57.14176	163.11%
Li 670.784 radial	-3.3	-5.97386	µg/L	14.833920	-5.97386	µg/L	14.833920	248.31%
Mg 279.079	663.7	107.104	µg/L	6.6756	107.104	µg/L	6.6756	6.23%
Mn 260.568	352.8	2.33273	µg/L	0.040388	2.33273	µg/L	0.040388	1.73%
Mo 202.030	-9.1	-4.40803	µg/L	6.385841	-4.40803	µg/L	6.385841	144.87%
Ni 231.604	56.4	8.12861	µg/L	1.121191	8.12861	µg/L	1.121191	13.79%
P 178.221	56.7	256.961	µg/L	37.3312	256.961	µg/L	37.3312	14.53%
K 766.490 radial	22.0	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	-98.7	-17.2395	µg/L	3.32700	-17.2395	µg/L	3.32700	19.30%
Se 196.026	44.9	67.6172	µg/L	8.00009	67.6172	µg/L	8.00009	11.83%
Si 212.412	889.0	723.048	µg/L	2.2177	723.048	µg/L	2.2177	0.31%
Ag 328.068	288.2	2.49182	µg/L	0.231862	2.49182	µg/L	0.231862	9.30%
Na 589.592 radial	11.4	463.158	µg/L	122.7519	463.158	µg/L	122.7519	26.50%
Sr 421.552 radial	14.6	14.9868	µg/L	1.37079	14.9868	µg/L	1.37079	9.15%
Te 214.281	-29.3	-60.3029	µg/L	16.69320	-60.3029	µg/L	16.69320	27.68%
Tl 190.800	-70.3	-238.349	µg/L	29.3991	-238.349	µg/L	29.3991	12.33%
Sn 189.933	17.4	308.099	µg/L	31.8070	308.099	µg/L	31.8070	10.32%
Ti 334.941	510957.2	1413.96	µg/L	26.538	1413.96	µg/L	26.538	1.88%
U 409.014	-58.9	-4.51977	µg/L	4.907766	-4.51977	µg/L	4.907766	108.58%
V 292.402	64.4	-0.18525	µg/L	0.109577	-0.18525	µg/L	0.109577	59.15%
Y 371.030	-98.8	-0.04450	µg/L	0.025422	-0.04450	µg/L	0.025422	57.13%
Zn 206.200	472.1	80.4829	µg/L	0.54301	80.4829	µg/L	0.54301	0.67%
Zr 339.197	152.4	0.66543	µg/L	0.137055	0.66543	µg/L	0.137055	20.60%

Sequence No.: 25
Sample ID: CCV1
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 2/1/2017 11:51:15 AM
Sample Prep Volume:
Data Type: Original

Mean Data: CCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	3271.7	50597.5	µg/L	335.19	50597.5	µg/L	335.19	0.66%
QC value within limits for Al 308.215 Recovery = 101.20%								
Sb 206.833	9164.5	25792.3	µg/L	242.05	25792.3	µg/L	242.05	0.94%
QC value within limits for Sb 206.833 Recovery = 103.17%								
As 188.978	2891.3	5150.40	µg/L	51.676	5150.40	µg/L	51.676	1.00%
QC value within limits for As 188.978 Recovery = 103.01%								
Ba 233.527	534.7	2844.97	µg/L	596.134	2844.97	µg/L	596.134	20.95%
QC value less than the lower limit for Ba 233.527 Recovery = 56.90%								
Be 313.042	1961293.0	2598.90	µg/L	39.925	2598.90	µg/L	39.925	1.54%
QC value within limits for Be 313.042 Recovery = 103.96%								
Bi 223.058	2639.7	5342.00	µg/L	51.419	5342.00	µg/L	51.419	0.96%
QC value within limits for Bi 223.058 Recovery = 106.84%								
B 249.773	568325.5	12624.3	µg/L	162.39	12624.3	µg/L	162.39	1.29%
QC value within limits for B 249.773 Recovery = 100.99%								
Cd 226.499	53693.3	2595.39	µg/L	42.187	2595.39	µg/L	42.187	1.63%
QC value within limits for Cd 226.499 Recovery = 103.82%								
Ca 315.887	2293589.6	52069.8	µg/L	714.67	52069.8	µg/L	714.67	1.37%
QC value within limits for Ca 315.887 Recovery = 104.14%								
Co 228.616	32273.2	5210.29	µg/L	101.519	5210.29	µg/L	101.519	1.95%
QC value within limits for Co 228.616 Recovery = 104.21%								
Cr 267.716	225493.6	5171.26	µg/L	78.339	5171.26	µg/L	78.339	1.51%
QC value within limits for Cr 267.716 Recovery = 103.43%								
Cu 324.754	3849082.2	25801.2	µg/L	393.27	25801.2	µg/L	393.27	1.52%
QC value within limits for Cu 324.754 Recovery = 103.20%								
Fe 259.935 radial	66485.1	50313.4	µg/L	1068.06	50313.4	µg/L	1068.06	2.12%
QC value within limits for Fe 259.935 radial Recovery = 100.63%								
Pb 220.350	1014.8	5059.52	µg/L	70.305	5059.52	µg/L	70.305	1.39%
QC value within limits for Pb 220.350 Recovery = 101.19%								
Li 670.784 radial	2761.5	5044.18	µg/L	54.223	5044.18	µg/L	54.223	1.07%
QC value within limits for Li 670.784 radial Recovery = 100.88%								
Mg 279.079	333435.3	52515.5	µg/L	909.74	52515.5	µg/L	909.74	1.73%
QC value within limits for Mg 279.079 Recovery = 105.03%								
Mn 260.568	785222.1	5209.95	µg/L	71.616	5209.95	µg/L	71.616	1.37%
QC value within limits for Mn 260.568 Recovery = 104.20%								
Mo 202.030	54224.3	26064.9	µg/L	412.26	26064.9	µg/L	412.26	1.58%
QC value within limits for Mo 202.030 Recovery = 104.26%								
Ni 231.604	36630.0	5235.72	µg/L	84.394	5235.72	µg/L	84.394	1.61%
QC value within limits for Ni 231.604 Recovery = 104.71%								
P 178.221	5668.0	25687.0	µg/L	221.27	25687.0	µg/L	221.27	0.86%
QC value within limits for P 178.221 Recovery = 102.75%								
K 766.490 radial	-5810.8	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
QC value less than the lower limit for K 766.490 radial Recovery = 0.00%								
Pt 265.945	2551.3	309.397	µg/L	13.4336	309.397	µg/L	13.4336	4.34%
QC value greater than the upper limit for Pt 265.945 Recovery = Not calculated								
Se 196.026	3447.4	5222.44	µg/L	51.048	5222.44	µg/L	51.048	0.98%
QC value within limits for Se 196.026 Recovery = 104.45%								
Si 212.412	15736.1	12033.9	µg/L	214.33	12033.9	µg/L	214.33	1.78%
QC value within limits for Si 212.412 Recovery = 96.27%								
Ag 328.068	236496.2	2047.98	µg/L	27.324	2047.98	µg/L	27.324	1.33%
QC value within limits for Ag 328.068 Recovery = 102.40%								
Na 589.592 radial	1245.4	50493.4	µg/L	752.11	50493.4	µg/L	752.11	1.49%
QC value within limits for Na 589.592 radial Recovery = 100.99%								
Sr 421.552 radial	4948.7	5065.57	µg/L	21.739	5065.57	µg/L	21.739	0.43%
QC value within limits for Sr 421.552 radial Recovery = 101.31%								
Te 214.281	5392.4	10517.0	µg/L	200.65	10517.0	µg/L	200.65	1.91%
QC value within limits for Te 214.281 Recovery = 105.17%								
Tl 190.800	763.3	2536.97	µg/L	62.302	2536.97	µg/L	62.302	2.46%
QC value within limits for Tl 190.800 Recovery = 101.48%								
Sn 189.933	4579.8	4651.22	µg/L	120.818	4651.22	µg/L	120.818	2.60%
QC value within limits for Sn 189.933 Recovery = 93.02%								
Ti 334.941	1868060.7	5165.23	µg/L	72.043	5165.23	µg/L	72.043	1.39%

QC value within limits for Ti 334.941 Recovery = 103.30%

U 409.014	67207.2	5081.42 µg/L	70.907	5081.42 µg/L	70.907	1.40%

QC value within limits for U 409.014 Recovery = 101.63%

V 292.402	407680.5	5219.04 µg/L	70.404	5219.04 µg/L	70.404	1.35%

QC value within limits for V 292.402 Recovery = 104.38%

Y 371.030	1560838.6	2058.55 µg/L	27.698	2058.55 µg/L	27.698	1.35%

QC value within limits for Y 371.030 Recovery = 102.93%

Zn 206.200	154311.4	26308.0 µg/L	492.77	26308.0 µg/L	492.77	1.87%

QC value within limits for Zn 206.200 Recovery = 105.23%

Zr 339.197	1144179.6	5134.64 µg/L	69.945	5134.64 µg/L	69.945	1.36%

QC value within limits for Zr 339.197 Recovery = 102.69%

QC Failed. Continue with analysis.

Sequence No.: 26 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/1/2017 11:56:18 AM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Al 308.215	7.6	118.675	µg/L	82.2997	118.675	µg/L	82.2997	69.35%
QC value within limits for Al 308.215 Recovery = Not calculated								
Sb 206.833	5.8	16.6202	µg/L	2.06021	16.6202	µg/L	2.06021	12.40%
QC value within limits for Sb 206.833 Recovery = Not calculated								
As 188.978	-2.9	-5.31453	µg/L	21.071820	-5.31453	µg/L	21.071820	396.49%
QC value within limits for As 188.978 Recovery = Not calculated								
Ba 233.527	-0.4	-1.96532	µg/L	45.446604	-1.96532	µg/L	45.446604	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.042	-2449.7	-3.24746	µg/L	0.042380	-3.24746	µg/L	0.042380	1.31%
QC value less than the lower limit for Be 313.042 Recovery = Not calculated								
Bi 223.058	-5.0	-9.92577	µg/L	12.625695	-9.92577	µg/L	12.625695	127.20%
QC value within limits for Bi 223.058 Recovery = Not calculated								
B 249.773	2556.3	57.6229	µg/L	1.16673	57.6229	µg/L	1.16673	2.02%
QC value within limits for B 249.773 Recovery = Not calculated								
Cd 226.499	5.4	0.26254	µg/L	0.440236	0.26254	µg/L	0.440236	167.68%
QC value within limits for Cd 226.499 Recovery = Not calculated								
Ca 315.887	-113.6	-2.49722	µg/L	0.832986	-2.49722	µg/L	0.832986	33.36%
QC value within limits for Ca 315.887 Recovery = Not calculated								
Co 228.616	-7.4	-1.18770	µg/L	0.979725	-1.18770	µg/L	0.979725	82.49%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	16.3	0.38647	µg/L	0.179803	0.38647	µg/L	0.179803	46.52%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.754	287.6	1.92619	µg/L	1.120696	1.92619	µg/L	1.120696	58.18%
QC value within limits for Cu 324.754 Recovery = Not calculated								
Fe 259.935 radial	9.3	7.02204	µg/L	9.518003	7.02204	µg/L	9.518003	135.54%
QC value within limits for Fe 259.935 radial Recovery = Not calculated								
Pb 220.350	3.9	19.2271	µg/L	4.80758	19.2271	µg/L	4.80758	25.00%
QC value within limits for Pb 220.350 Recovery = Not calculated								
Li 670.784 radial	14.8	27.0045	µg/L	17.62717	27.0045	µg/L	17.62717	65.27%
QC value within limits for Li 670.784 radial Recovery = Not calculated								
Mg 279.079	-10.2	-1.42371	µg/L	2.348046	-1.42371	µg/L	2.348046	164.92%
QC value within limits for Mg 279.079 Recovery = Not calculated								
Mn 260.568	24.1	0.16604	µg/L	0.084374	0.16604	µg/L	0.084374	50.82%
QC value within limits for Mn 260.568 Recovery = Not calculated								
Mo 202.030	13.1	6.31043	µg/L	3.178847	6.31043	µg/L	3.178847	50.37%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	10.5	1.51129	µg/L	0.632338	1.51129	µg/L	0.632338	41.84%
QC value within limits for Ni 231.604 Recovery = Not calculated								
P 178.221	-0.6	-2.63831	µg/L	42.038098	-2.63831	µg/L	42.038098	>999.9%
QC value within limits for P 178.221 Recovery = Not calculated								
K 766.490 radial	45.3	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
QC value within limits for K 766.490 radial Recovery = Not calculated								
Pt 265.945	-1.2	0.11917	µg/L	3.392369	0.11917	µg/L	3.392369	>999.9%
QC value within limits for Pt 265.945 Recovery = Not calculated								
Se 196.026	-3.6	-5.37200	µg/L	8.203466	-5.37200	µg/L	8.203466	152.71%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 212.412	-80.5	-65.6071	µg/L	3.46747	-65.6071	µg/L	3.46747	5.29%
QC value within limits for Si 212.412 Recovery = Not calculated								

Ag 328.068	-5.0	-0.04792 µg/L	0.145232	-0.04792 µg/L	0.145232	303.04%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Na 589.592 radial	0.0	0.96909 µg/L	114.457117	0.96909 µg/L	114.457117	>999.9%
QC value within limits for Na 589.592 radial Recovery = Not calculated						
Sr 421.552 radial	3.5	3.58027 µg/L	1.150430	3.58027 µg/L	1.150430	32.13%
QC value within limits for Sr 421.552 radial Recovery = Not calculated						
Te 214.281	-0.1	-0.16491 µg/L	4.846846	-0.16491 µg/L	4.846846	>999.9%
QC value within limits for Te 214.281 Recovery = Not calculated						
Tl 190.800	-4.7	-15.7796 µg/L	5.86326	-15.7796 µg/L	5.86326	37.16%
QC value within limits for Tl 190.800 Recovery = Not calculated						
Sn 189.933	8.6	296.396 µg/L	29.2683	296.396 µg/L	29.2683	9.87%
QC value greater than the upper limit for Sn 189.933 Recovery = Not calculated						
Ti 334.941	201.1	0.56428 µg/L	0.078239	0.56428 µg/L	0.078239	13.87%
QC value within limits for Ti 334.941 Recovery = Not calculated						
U 409.014	-247.1	-18.9293 µg/L	4.02674	-18.9293 µg/L	4.02674	21.27%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402	-25.2	-0.33378 µg/L	0.450467	-0.33378 µg/L	0.450467	134.96%
QC value within limits for V 292.402 Recovery = Not calculated						
Y 371.030	81.3	0.10620 µg/L	0.021164	0.10620 µg/L	0.021164	19.93%
QC value within limits for Y 371.030 Recovery = Not calculated						
Zn 206.200	12.7	2.15622 µg/L	0.505547	2.15622 µg/L	0.505547	23.45%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Zr 339.197	121.1	0.50723 µg/L	0.263038	0.50723 µg/L	0.263038	51.86%
QC value within limits for Zr 339.197 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 27
Sample ID: 1703278011
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 2/1/2017 11:59:32 AM
Sample Prep Volume:
Data Type: Original

Mean Data: 1703278011

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	6.8	105.825	µg/L	79.5521	105.825	µg/L	79.5521	75.17%
Sb 206.833	23.5	64.1617	µg/L	19.44035	64.1617	µg/L	19.44035	30.30%
As 188.978	170.2	305.806	µg/L	24.7574	305.806	µg/L	24.7574	8.10%
Ba 233.527	30.4	162.452	µg/L	60.0705	162.452	µg/L	60.0705	36.98%
Be 313.042	-252158.6	-334.138	µg/L	2.7680	-334.138	µg/L	2.7680	0.83%
Bi 223.058	-12.1	-10.2230	µg/L	10.97956	-10.2230	µg/L	10.97956	107.40%
B 249.773	5380.6	121.177	µg/L	1.9941	121.177	µg/L	1.9941	1.65%
Cd 226.499	-3.1	-0.32766	µg/L	0.549710	-0.32766	µg/L	0.549710	167.77%
Ca 315.887	19862.9	451.076	µg/L	5.7689	451.076	µg/L	5.7689	1.28%
Co 228.616	56.7	7.07436	µg/L	1.902167	7.07436	µg/L	1.902167	26.89%
Cr 267.716	97.3	2.23742	µg/L	0.222977	2.23742	µg/L	0.222977	9.97%
Cu 324.754	7101.8	48.2408	µg/L	0.98940	48.2408	µg/L	0.98940	2.05%
Fe 259.935 radial	56.9	42.9332	µg/L	2.79264	42.9332	µg/L	2.79264	6.50%
Pb 220.350	-3.0	-14.8111	µg/L	16.93814	-14.8111	µg/L	16.93814	114.36%
Li 670.784 radial	0.4	0.76039	µg/L	26.658994	0.76039	µg/L	26.658994	>999.9%
Mg 279.079	459.1	74.0278	µg/L	1.57394	74.0278	µg/L	1.57394	2.13%
Mn 260.568	266.1	1.76687	µg/L	0.109614	1.76687	µg/L	0.109614	6.20%
Mo 202.030	-9.2	-4.41816	µg/L	3.594834	-4.41816	µg/L	3.594834	81.36%
Ni 231.604	210.8	29.9444	µg/L	0.41033	29.9444	µg/L	0.41033	1.37%
P 178.221	45.4	205.875	µg/L	25.0860	205.875	µg/L	25.0860	12.19%
K 766.490 radial	48.8	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	-87.0	-15.0597	µg/L	3.03080	-15.0597	µg/L	3.03080	20.13%
Se 196.026	31.7	47.8401	µg/L	25.49078	47.8401	µg/L	25.49078	53.28%
Si 212.412	584.4	475.365	µg/L	15.8208	475.365	µg/L	15.8208	3.33%
Ag 328.068	92.3	0.79689	µg/L	0.362733	0.79689	µg/L	0.362733	45.52%
Na 589.592 radial	4.7	192.170	µg/L	85.2762	192.170	µg/L	85.2762	44.38%
Sr 421.552 radial	9.8	9.98892	µg/L	1.764152	9.98892	µg/L	1.764152	17.66%
Te 214.281	-24.9	-50.6775	µg/L	11.93816	-50.6775	µg/L	11.93816	23.56%
Tl 190.800	-74.6	-252.542	µg/L	29.4818	-252.542	µg/L	29.4818	11.67%
Sn 189.933	40.3	328.627	µg/L	15.6151	328.627	µg/L	15.6151	4.75%
Ti 334.941	348023.5	963.082	µg/L	11.1757	963.082	µg/L	11.1757	1.16%
U 409.014	-124.2	-9.52096	µg/L	1.389258	-9.52096	µg/L	1.389258	14.59%
V 292.402	34.3	-0.25663	µg/L	0.260773	-0.25663	µg/L	0.260773	101.62%
Y 371.030	33.2	0.10190	µg/L	0.059287	0.10190	µg/L	0.059287	58.18%
Zn 206.200	489.6	83.3701	µg/L	2.18109	83.3701	µg/L	2.18109	2.62%

Zr 339.197	306.8	1.35706 µg/L	0.172346	1.35706 µg/L	0.172346	12.70%

Sequence No.: 28
Sample ID: ICSA
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 2/1/2017 12:02:47 PM

Sample Prep Volume:
Data Type: Original

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Al 308.215	16684.3	260553	µg/L	622.4	260553	µg/L	622.4	0.24%
QC value within limits for Al 308.215 Recovery = 104.22%								
Sb 206.833	-0.2	-12.2741	µg/L	42.94320	-12.2741	µg/L	42.94320	349.87%
QC value within limits for Sb 206.833 Recovery = Not calculated								
As 188.978	12.6	22.8148	µg/L	26.15519	22.8148	µg/L	26.15519	114.64%
QC value within limits for As 188.978 Recovery = Not calculated								
Ba 233.527	-313.1	-1664.41	µg/L	49.471	-1664.41	µg/L	49.471	2.97%
QC value less than the lower limit for Ba 233.527 Recovery = Not calculated								
Be 313.042	-3415.1	-4.39019	µg/L	0.061612	-4.39019	µg/L	0.061612	1.40%
QC value less than the lower limit for Be 313.042 Recovery = Not calculated								
Bi 223.058	-77.4	-170.000	µg/L	4.2230	-170.000	µg/L	4.2230	2.48%
QC value less than the lower limit for Bi 223.058 Recovery = Not calculated								
B 249.773	14047.7	-86.6027	µg/L	11.68818	-86.6027	µg/L	11.68818	13.50%
QC value within limits for B 249.773 Recovery = Not calculated								
Cd 226.499	116.4	-4.43885	µg/L	0.127431	-4.43885	µg/L	0.127431	2.87%
QC value within limits for Cd 226.499 Recovery = Not calculated								
Ca 315.887	11488528.2	260900	µg/L	1430.4	260900	µg/L	1430.4	0.55%
QC value within limits for Ca 315.887 Recovery = 104.36%								
Co 228.616	-53.7	-14.4561	µg/L	0.68118	-14.4561	µg/L	0.68118	4.71%
QC value less than the lower limit for Co 228.616 Recovery = Not calculated								
Cr 267.716	-395.7	-4.11271	µg/L	0.178989	-4.11271	µg/L	0.178989	4.35%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.754	-543.0	-3.78844	µg/L	1.106782	-3.78844	µg/L	1.106782	29.21%
QC value within limits for Cu 324.754 Recovery = Not calculated								
Fe 259.935 radial	138957.8	104945	µg/L	1727.6	104945	µg/L	1727.6	1.65%
QC value within limits for Fe 259.935 radial Recovery = 104.94%								
Pb 220.350	55.5	267.204	µg/L	50.6151	267.204	µg/L	50.6151	18.94%
QC value greater than the upper limit for Pb 220.350 Recovery = Not calculated								
Li 670.784 radial	3.8	6.94537	µg/L	31.678076	6.94537	µg/L	31.678076	456.10%
QC value within limits for Li 670.784 radial Recovery = Not calculated								
Mg 279.079	1831132.6	285184	µg/L	5044.8	285184	µg/L	5044.8	1.77%
QC value within limits for Mg 279.079 Recovery = 114.07%								
Mn 260.568	-1927.3	10.8257	µg/L	0.44497	10.8257	µg/L	0.44497	4.11%
QC value greater than the upper limit for Mn 260.568 Recovery = Not calculated								
Mo 202.030	-21.4	-5.51884	µg/L	7.363831	-5.51884	µg/L	7.363831	133.43%
QC value within limits for Mo 202.030 Recovery = Not calculated								
Ni 231.604	107.7	12.0937	µg/L	1.75351	12.0937	µg/L	1.75351	14.50%
QC value greater than the upper limit for Ni 231.604 Recovery = Not calculated								
P 178.221	18.6	40.7763	µg/L	98.75310	40.7763	µg/L	98.75310	242.18%
QC value within limits for P 178.221 Recovery = Not calculated								
K 766.490 radial	6.3	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
QC value within limits for K 766.490 radial Recovery = Not calculated								
Pt 265.945	4192.9	205.668	µg/L	2.3224	205.668	µg/L	2.3224	1.13%
QC value greater than the upper limit for Pt 265.945 Recovery = Not calculated								
Se 196.026	-29.3	21.0580	µg/L	11.36943	21.0580	µg/L	11.36943	53.99%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 212.412	-80.9	-65.4565	µg/L	11.00415	-65.4565	µg/L	11.00415	16.81%
QC value within limits for Si 212.412 Recovery = Not calculated								
Ag 328.068	-1036.2	10.4478	µg/L	0.76792	10.4478	µg/L	0.76792	7.35%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Na 589.592 radial	-2.1	-83.2752	µg/L	118.29176	-83.2752	µg/L	118.29176	142.05%
QC value within limits for Na 589.592 radial Recovery = Not calculated								
Sr 421.552 radial	3.5	3.63197	µg/L	2.578749	3.63197	µg/L	2.578749	71.00%
QC value within limits for Sr 421.552 radial Recovery = Not calculated								
Te 214.281	-35.6	-50.0681	µg/L	51.22479	-50.0681	µg/L	51.22479	102.31%
QC value within limits for Te 214.281 Recovery = Not calculated								
Tl 190.800	-18.2	-41.8794	µg/L	9.26460	-41.8794	µg/L	9.26460	22.12%
QC value within limits for Tl 190.800 Recovery = Not calculated								
Sn 189.933	-191.5	226.478	µg/L	25.6697	226.478	µg/L	25.6697	11.33%

QC value greater than the upper limit for Sn 189.933 Recovery = Not calculated

Ti 334.941	-2616.1	-1.70971 µg/L	0.153606	-1.70971 µg/L	0.153606	8.98%
QC value within limits for Ti 334.941 Recovery = Not calculated						
U 409.014	-619.2	-52.4155 µg/L	9.48138	-52.4155 µg/L	9.48138	18.09%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402	408.9	8.01566 µg/L	0.285305	8.01566 µg/L	0.285305	3.56%
QC value greater than the upper limit for V 292.402 Recovery = Not calculated						
Y 371.030	145.4	0.18854 µg/L	0.236494	0.18854 µg/L	0.236494	125.43%
QC value within limits for Y 371.030 Recovery = Not calculated						
Zn 206.200	86.0	21.7764 µg/L	2.13531	21.7764 µg/L	2.13531	9.81%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Zr 339.197	-688.8	-4.47257 µg/L	0.130547	-4.47257 µg/L	0.130547	2.92%
QC value within limits for Zr 339.197 Recovery = Not calculated						

QC Failed. Continue with analysis.

Analysis Begun

Start Time: 2/1/2017 12:07:06 PM **Plasma On Time: 2/1/2017 8:49:49 AM**
Logged In Analyst: ALSLT.ICP **Technique: ICP Continuous**
Spectrometer Model: Optima 3000 DV **Autosampler Model: AS-91**

Sample Information File: C:\pe\Administrator\Sample Information\Sample.sif
Results Data Set: H17007
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 29 **Autosampler Location: 10**
Sample ID: ICSAB **Date Collected: 2/1/2017 12:07:06 PM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	16790.5	262192	µg/L	1164.5	262192	µg/L	1164.5	0.44%
QC value within limits for Al 308.215 Recovery = 104.88%								
Sb 206.833	198.0	541.061	µg/L	41.1237	541.061	µg/L	41.1237	7.60%
QC value within limits for Sb 206.833 Recovery = 108.21%								
As 188.978	311.3	557.999	µg/L	42.8393	557.999	µg/L	42.8393	7.68%
QC value within limits for As 188.978 Recovery = 111.60%								
Ba 233.527	2236.6	11938.3	µg/L	226.42	11938.3	µg/L	226.42	1.90%
QC value greater than the upper limit for Ba 233.527 Recovery = 2387.67%								
Be 313.042	404688.8	536.350	µg/L	7.6247	536.350	µg/L	7.6247	1.42%
QC value within limits for Be 313.042 Recovery = 107.27%								
Bi 223.058	241.5	473.396	µg/L	33.8335	473.396	µg/L	33.8335	7.15%
QC value within limits for Bi 223.058 Recovery = 94.68%								
B 249.773	44969.0	607.964	µg/L	16.4144	607.964	µg/L	16.4144	2.70%
QC value greater than the upper limit for B 249.773 Recovery = 121.59%								
Cd 226.499	11175.6	530.969	µg/L	3.0437	530.969	µg/L	3.0437	0.57%
QC value within limits for Cd 226.499 Recovery = 106.19%								
Ca 315.887	11632245.3	264162	µg/L	5013.9	264162	µg/L	5013.9	1.90%
QC value within limits for Ca 315.887 Recovery = 105.66%								
Co 228.616	3306.0	526.495	µg/L	2.7430	526.495	µg/L	2.7430	0.52%
QC value within limits for Co 228.616 Recovery = 105.30%								
Cr 267.716	23597.4	540.341	µg/L	4.4736	540.341	µg/L	4.4736	0.83%
QC value within limits for Cr 267.716 Recovery = 108.07%								
Cu 324.754	84652.4	566.898	µg/L	5.6479	566.898	µg/L	5.6479	1.00%
QC value within limits for Cu 324.754 Recovery = 113.38%								
Fe 259.935 radial	139940.6	105693	µg/L	1974.5	105693	µg/L	1974.5	1.87%
QC value within limits for Fe 259.935 radial Recovery = 105.69%								
Pb 220.350	585.3	2892.47	µg/L	12.552	2892.47	µg/L	12.552	0.43%
QC value greater than the upper limit for Pb 220.350 Recovery = 578.49%								
Li 670.784 radial	300.6	549.021	µg/L	27.5840	549.021	µg/L	27.5840	5.02%
QC value within limits for Li 670.784 radial Recovery = 109.80%								
Mg 279.079	1885344.6	293656	µg/L	4741.1	293656	µg/L	4741.1	1.61%
QC value within limits for Mg 279.079 Recovery = 117.46%								
Mn 260.568	80150.1	554.270	µg/L	6.4790	554.270	µg/L	6.4790	1.17%
QC value within limits for Mn 260.568 Recovery = 110.85%								
Mo 202.030	2197.8	1062.59	µg/L	6.856	1062.59	µg/L	6.856	0.65%

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   QC value within limits for Mo 202.030  Recovery = 106.26%
Ni 231.604              3851.3     545.439 µg/L        2.0167     545.439 µg/L        2.0167   0.37%
   QC value within limits for Ni 231.604  Recovery = 109.09%
P 178.221                140.7     594.241 µg/L       89.9540     594.241 µg/L       89.9540  15.14%
   QC value within limits for P 178.221  Recovery = 118.85%
K 766.490  radial         21.4     0.00000 µg/L      0.000000     0.00000 µg/L      0.000000   0.00%
   QC value within limits for K 766.490  radial  Recovery = Not calculated
Pt 265.945              9558.0     1110.10 µg/L        19.593     1110.10 µg/L        19.593   1.76%
   QC value within limits for Pt 265.945  Recovery = 111.01%
Se 196.026               346.9     588.497 µg/L        7.9929     588.497 µg/L        7.9929   1.36%
   QC value within limits for Se 196.026  Recovery = 117.70%
Si 212.412              5427.1     4382.25 µg/L        20.530     4382.25 µg/L        20.530   0.47%
   QC value greater than the upper limit for Si 212.412  Recovery = 438.22%
Ag 328.068             64720.1     582.249 µg/L        5.2217     582.249 µg/L        5.2217   0.90%
   QC value within limits for Ag 328.068  Recovery = 116.45%
Na 589.592 radial         -0.5    -19.3278 µg/L      53.54664    -19.3278 µg/L      53.54664 277.04%
   QC value within limits for Na 589.592 radial  Recovery = Not calculated
Sr 421.552  radial       589.9     603.826 µg/L        6.4901     603.826 µg/L        6.4901   1.07%
   QC value greater than the upper limit for Sr 421.552  radial  Recovery = 120.77%
Te 214.281               247.3     495.854 µg/L       23.3249     495.854 µg/L       23.3249   4.70%
   QC value within limits for Te 214.281  Recovery = 99.17%
Tl 190.800               144.8     504.325 µg/L       50.6299     504.325 µg/L       50.6299  10.04%
   QC value within limits for Tl 190.800  Recovery = 100.87%
Sn 189.933               327.9     721.079 µg/L       21.1342     721.079 µg/L       21.1342   2.93%
   QC value greater than the upper limit for Sn 189.933  Recovery = 144.22%
Ti 334.941            382922.1     1064.80 µg/L        11.587     1064.80 µg/L        11.587   1.09%
   QC value within limits for Ti 334.941  Recovery = 106.48%
U 409.014               6374.2     475.935 µg/L       17.2057     475.935 µg/L       17.2057   3.62%
   QC value within limits for U 409.014  Recovery = 95.19%
V 292.402              43202.8     552.588 µg/L        4.7188     552.588 µg/L        4.7188   0.85%
   QC value within limits for V 292.402  Recovery = 110.52%
Y 371.030             384673.9     507.252 µg/L        3.3797     507.252 µg/L        3.3797   0.67%
   QC value within limits for Y 371.030  Recovery = 101.45%
Zn 206.200              3287.0     571.895 µg/L        3.3421     571.895 µg/L        3.3421   0.58%
   QC value within limits for Zn 206.200  Recovery = 114.38%
Zr 339.197            116867.6     525.254 µg/L        4.2044     525.254 µg/L        4.2044   0.80%
   QC value within limits for Zr 339.197  Recovery = 105.05%
QC Failed.  Continue with analysis.
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Sequence No.: 30 **Autosampler Location: 2**
Sample ID: CCV1 **Date Collected: 2/1/2017 12:12:02 PM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: CCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	3419.9	52893.9	µg/L	436.14	52893.9	µg/L	436.14	0.82%
QC value within limits for Al 308.215 Recovery = 105.79%								
Sb 206.833	9574.3	26945.6	µg/L	197.60	26945.6	µg/L	197.60	0.73%
QC value within limits for Sb 206.833 Recovery = 107.78%								
As 188.978	3030.1	5398.39	µg/L	70.081	5398.39	µg/L	70.081	1.30%
QC value within limits for As 188.978 Recovery = 107.97%								
Ba 233.527	472.0	2510.35	µg/L	32.231	2510.35	µg/L	32.231	1.28%
QC value less than the lower limit for Ba 233.527 Recovery = 50.21%								
Be 313.042	2036442.5	2698.49	µg/L	44.719	2698.49	µg/L	44.719	1.66%
QC value within limits for Be 313.042 Recovery = 107.94%								
Bi 223.058	2752.4	5567.42	µg/L	11.316	5567.42	µg/L	11.316	0.20%
QC value greater than the upper limit for Bi 223.058 Recovery = 111.35%								
B 249.773	586314.3	13015.0	µg/L	204.72	13015.0	µg/L	204.72	1.57%
QC value within limits for B 249.773 Recovery = 104.12%								
Cd 226.499	56139.9	2713.50	µg/L	21.837	2713.50	µg/L	21.837	0.80%
QC value within limits for Cd 226.499 Recovery = 108.54%								
Ca 315.887	2370875.4	53824.3	µg/L	495.94	53824.3	µg/L	495.94	0.92%
QC value within limits for Ca 315.887 Recovery = 107.65%								
Co 228.616	33304.7	5376.75	µg/L	37.879	5376.75	µg/L	37.879	0.70%
QC value within limits for Co 228.616 Recovery = 107.53%								
Cr 267.716	235472.7	5400.21	µg/L	61.289	5400.21	µg/L	61.289	1.13%
QC value within limits for Cr 267.716 Recovery = 108.00%								

Cu 324.754	3964473.5	26574.6 µg/L	439.00	26574.6 µg/L	439.00	1.65%
QC value within limits for Cu 324.754 Recovery = 106.30%						
Fe 259.935 radial	71632.0	54204.1 µg/L	1480.05	54204.1 µg/L	1480.05	2.73%
QC value within limits for Fe 259.935 radial Recovery = 108.41%						
Pb 220.350	1040.5	5188.10 µg/L	13.152	5188.10 µg/L	13.152	0.25%
QC value within limits for Pb 220.350 Recovery = 103.76%						
Li 670.784 radial	2861.5	5226.83 µg/L	20.088	5226.83 µg/L	20.088	0.38%
QC value within limits for Li 670.784 radial Recovery = 104.54%						
Mg 279.079	349769.3	55079.6 µg/L	524.53	55079.6 µg/L	524.53	0.95%
QC value greater than the upper limit for Mg 279.079 Recovery = 110.16%						
Mn 260.568	809848.0	5373.84 µg/L	59.441	5373.84 µg/L	59.441	1.11%
QC value within limits for Mn 260.568 Recovery = 107.48%						
Mo 202.030	56147.6	26989.4 µg/L	349.38	26989.4 µg/L	349.38	1.29%
QC value within limits for Mo 202.030 Recovery = 107.96%						
Ni 231.604	38028.1	5435.29 µg/L	75.858	5435.29 µg/L	75.858	1.40%
QC value within limits for Ni 231.604 Recovery = 108.71%						
P 178.221	5982.0	27110.2 µg/L	318.90	27110.2 µg/L	318.90	1.18%
QC value within limits for P 178.221 Recovery = 108.44%						
K 766.490 radial	-6206.6	0.00000 µg/L	0.000000	0.00000 µg/L	0.000000	0.00%
QC value less than the lower limit for K 766.490 radial Recovery = 0.00%						
Pt 265.945	2603.6	311.866 µg/L	1.9254	311.866 µg/L	1.9254	0.62%
QC value greater than the upper limit for Pt 265.945 Recovery = Not calculated						
Se 196.026	3601.7	5457.06 µg/L	36.081	5457.06 µg/L	36.081	0.66%
QC value within limits for Se 196.026 Recovery = 109.14%						
Si 212.412	16191.2	12376.9 µg/L	104.04	12376.9 µg/L	104.04	0.84%
QC value within limits for Si 212.412 Recovery = 99.02%						
Ag 328.068	245529.0	2126.69 µg/L	31.654	2126.69 µg/L	31.654	1.49%
QC value within limits for Ag 328.068 Recovery = 106.33%						
Na 589.592 radial	1304.8	52903.1 µg/L	244.28	52903.1 µg/L	244.28	0.46%
QC value within limits for Na 589.592 radial Recovery = 105.81%						
Sr 421.552 radial	5198.6	5321.41 µg/L	25.588	5321.41 µg/L	25.588	0.48%
QC value within limits for Sr 421.552 radial Recovery = 106.43%						
Te 214.281	5513.6	10754.6 µg/L	168.39	10754.6 µg/L	168.39	1.57%
QC value within limits for Te 214.281 Recovery = 107.55%						
Tl 190.800	798.4	2653.80 µg/L	40.366	2653.80 µg/L	40.366	1.52%
QC value within limits for Tl 190.800 Recovery = 106.15%						
Sn 189.933	4794.1	4854.88 µg/L	58.860	4854.88 µg/L	58.860	1.21%
QC value within limits for Sn 189.933 Recovery = 97.10%						
Ti 334.941	1922680.0	5316.21 µg/L	65.830	5316.21 µg/L	65.830	1.24%
QC value within limits for Ti 334.941 Recovery = 106.32%						
U 409.014	69949.8	5289.23 µg/L	63.571	5289.23 µg/L	63.571	1.20%
QC value within limits for U 409.014 Recovery = 105.78%						
V 292.402	421047.9	5390.61 µg/L	62.942	5390.61 µg/L	62.942	1.17%
QC value within limits for V 292.402 Recovery = 107.81%						
Y 371.030	1609946.2	2123.32 µg/L	27.537	2123.32 µg/L	27.537	1.30%
QC value within limits for Y 371.030 Recovery = 106.17%						
Zn 206.200	161674.8	27562.9 µg/L	223.87	27562.9 µg/L	223.87	0.81%
QC value greater than the upper limit for Zn 206.200 Recovery = 110.25%						
Zr 339.197	1178789.5	5289.84 µg/L	64.666	5289.84 µg/L	64.666	1.22%
QC value within limits for Zr 339.197 Recovery = 105.80%						

QC Failed. Continue with analysis.

Sequence No.: 31
Sample ID: CCB
Analyst:
Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 2/1/2017 12:17:05 PM

Sample Prep Volume:
Data Type: Original

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	3.1	48.6907	µg/L	84.19805	48.6907	µg/L	84.19805	172.92%
QC value within limits for Al 308.215 Recovery = Not calculated								
Sb 206.833	1.6	4.80553	µg/L	16.226812	4.80553	µg/L	16.226812	337.67%
QC value within limits for Sb 206.833 Recovery = Not calculated								
As 188.978	-8.5	-15.3364	µg/L	6.26660	-15.3364	µg/L	6.26660	40.86%
QC value within limits for As 188.978 Recovery = Not calculated								
Ba 233.527	-10.1	-54.1373	µg/L	59.57772	-54.1373	µg/L	59.57772	110.05%
QC value less than the lower limit for Ba 233.527 Recovery = Not calculated								
Be 313.042	-1341.7	-1.77754	µg/L	0.027450	-1.77754	µg/L	0.027450	1.54%

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   QC value less than the lower limit for Be 313.042  Recovery = Not calculated
Bi 223.058                -6.7    -13.1072 µg/L      10.18655    -13.1072 µg/L      10.18655  77.72%
   QC value within limits for Bi 223.058  Recovery = Not calculated
B 249.773               3011.4     67.8567 µg/L       0.86766     67.8567 µg/L       0.86766   1.28%
   QC value within limits for B 249.773  Recovery = Not calculated
Cd 226.499                 6.7     0.32456 µg/L      0.684288     0.32456 µg/L      0.684288 210.83%
   QC value within limits for Cd 226.499  Recovery = Not calculated
Ca 315.887               380.9     8.64396 µg/L      2.334587     8.64396 µg/L      2.334587  27.01%
   QC value within limits for Ca 315.887  Recovery = Not calculated
Co 228.616                -9.1    -1.47018 µg/L      0.537737    -1.47018 µg/L      0.537737  36.58%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716                 5.9     0.14930 µg/L      0.521625     0.14930 µg/L      0.521625 349.37%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.754               485.6     3.25667 µg/L      0.677218     3.25667 µg/L      0.677218  20.79%
   QC value within limits for Cu 324.754  Recovery = Not calculated
Fe 259.935 radial         17.5     13.2439 µg/L       4.34969     13.2439 µg/L       4.34969  32.84%
   QC value within limits for Fe 259.935 radial  Recovery = Not calculated
Pb 220.350                 2.5     12.3431 µg/L       6.71097     12.3431 µg/L       6.71097  54.37%
   QC value within limits for Pb 220.350  Recovery = Not calculated
Li 670.784  radial         5.0     9.19924 µg/L     19.998058     9.19924 µg/L     19.998058 217.39%
   QC value within limits for Li 670.784  radial  Recovery = Not calculated
Mg 279.079                78.3     12.3179 µg/L       3.23987     12.3179 µg/L       3.23987  26.30%
   QC value within limits for Mg 279.079  Recovery = Not calculated
Mn 260.568                35.5     0.23935 µg/L      0.082524     0.23935 µg/L      0.082524  34.48%
   QC value within limits for Mn 260.568  Recovery = Not calculated
Mo 202.030                13.5     6.46837 µg/L      4.224174     6.46837 µg/L      4.224174  65.31%
   QC value within limits for Mo 202.030  Recovery = Not calculated
Ni 231.604                11.8     1.67719 µg/L      0.860757     1.67719 µg/L      0.860757  51.32%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 178.221                  7.1     32.1092 µg/L      58.18353     32.1092 µg/L      58.18353 181.21%
   QC value within limits for P 178.221  Recovery = Not calculated
K 766.490  radial         36.9     0.00000 µg/L      0.000000     0.00000 µg/L      0.000000   0.00%
   QC value within limits for K 766.490  radial  Recovery = Not calculated
Pt 265.945               -15.3    -2.70912 µg/L      3.290212    -2.70912 µg/L      3.290212 121.45%
   QC value within limits for Pt 265.945  Recovery = Not calculated
Se 196.026                -1.2    -1.86652 µg/L      6.447235    -1.86652 µg/L      6.447235 345.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 212.412               -84.0    -68.4575 µg/L      13.49220    -68.4575 µg/L      13.49220  19.71%
   QC value within limits for Si 212.412  Recovery = Not calculated
Ag 328.068                11.1     0.09773 µg/L      0.366552     0.09773 µg/L      0.366552 375.05%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Na 589.592 radial         -3.3    -133.157 µg/L       74.2181    -133.157 µg/L       74.2181  55.74%
   QC value within limits for Na 589.592 radial  Recovery = Not calculated
Sr 421.552  radial         3.2     3.30057 µg/L      1.238016     3.30057 µg/L      1.238016  37.51%
   QC value within limits for Sr 421.552  radial  Recovery = Not calculated
Te 214.281                 8.0     15.4440 µg/L      18.39108     15.4440 µg/L      18.39108 119.08%
   QC value within limits for Te 214.281  Recovery = Not calculated
Tl 190.800                -0.4    -1.43947 µg/L     37.536612    -1.43947 µg/L     37.536612 >999.9%
   QC value within limits for Tl 190.800  Recovery = Not calculated
Sn 189.933                 5.8     293.796 µg/L       16.2775     293.796 µg/L       16.2775   5.54%
   QC value greater than the upper limit for Sn 189.933  Recovery = Not calculated
Ti 334.941               166.9     0.46044 µg/L      0.055370     0.46044 µg/L      0.055370  12.03%
   QC value within limits for Ti 334.941  Recovery = Not calculated
U 409.014                 46.5     3.56108 µg/L      8.598096     3.56108 µg/L      8.598096 241.45%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402                 15.7     0.21411 µg/L      0.305804     0.21411 µg/L      0.305804 142.83%
   QC value within limits for V 292.402  Recovery = Not calculated
Y 371.030                108.1     0.14275 µg/L      0.045622     0.14275 µg/L      0.045622  31.96%
   QC value within limits for Y 371.030  Recovery = Not calculated
Zn 206.200                17.9     3.03254 µg/L      1.116184     3.03254 µg/L      1.116184  36.81%
   QC value within limits for Zn 206.200  Recovery = Not calculated
Zr 339.197               105.5     0.43438 µg/L      0.325252     0.43438 µg/L      0.325252  74.88%
   QC value within limits for Zr 339.197  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 32 **Autosampler Location: 27**
Sample ID: 0 **Date Collected: 2/1/2017 12:20:20 PM**
Analyst:
Sample Wt: **Sample Prep Volume:**
Dilution: **Data Type: Original**

Mean Data: 0

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	7.5	116.934	µg/L	37.7412	116.934	µg/L	37.7412	32.28%
Sb 206.833	-3.7	-10.2465	µg/L	16.69471	-10.2465	µg/L	16.69471	162.93%
As 188.978	-40.9	-73.7671	µg/L	13.11175	-73.7671	µg/L	13.11175	17.77%
Ba 233.527	-2.2	-11.6434	µg/L	93.43103	-11.6434	µg/L	93.43103	802.44%
Be 313.042	-1786.9	-2.36838	µg/L	0.080657	-2.36838	µg/L	0.080657	3.41%
Bi 223.058	-6.5	-12.7037	µg/L	21.40995	-12.7037	µg/L	21.40995	168.53%
B 249.773	3789.3	85.6363	µg/L	0.56417	85.6363	µg/L	0.56417	0.66%
Cd 226.499	4.6	0.22747	µg/L	0.320937	0.22747	µg/L	0.320937	141.09%
Ca 315.887	614.0	13.9846	µg/L	3.47453	13.9846	µg/L	3.47453	24.85%
Co 228.616	-1.2	-0.19235	µg/L	0.458841	-0.19235	µg/L	0.458841	238.54%
Cr 267.716	35.1	0.78748	µg/L	0.145774	0.78748	µg/L	0.145774	18.51%
Cu 324.754	426.3	2.84931	µg/L	0.936734	2.84931	µg/L	0.936734	32.88%
Fe 259.935 radial	-63.2	-47.7440	µg/L	0.97780	-47.7440	µg/L	0.97780	2.05%
Pb 220.350	28.2	139.561	µg/L	16.8019	139.561	µg/L	16.8019	12.04%
Li 670.784 radial	0.0	0.01854	µg/L	26.000427	0.01854	µg/L	26.000427	>999.9%
Mg 279.079	135.1	21.0666	µg/L	5.49429	21.0666	µg/L	5.49429	26.08%
Mn 260.568	-9.2	-0.06864	µg/L	0.017114	-0.06864	µg/L	0.017114	24.93%
Mo 202.030	-0.4	-0.16853	µg/L	3.013817	-0.16853	µg/L	3.013817	>999.9%
Ni 231.604	13.6	1.92751	µg/L	0.891218	1.92751	µg/L	0.891218	46.24%
P 178.221	-130.0	-589.512	µg/L	26.1674	-589.512	µg/L	26.1674	4.44%
K 766.490 radial	10.5	0.00000	µg/L	0.000000	0.00000	µg/L	0.000000	0.00%
Pt 265.945	15.6	2.83663	µg/L	2.742677	2.83663	µg/L	2.742677	96.69%
Se 196.026	-2.3	-3.53656	µg/L	6.473559	-3.53656	µg/L	6.473559	183.05%
Si 212.412	287.7	233.946	µg/L	4.5163	233.946	µg/L	4.5163	1.93%
Ag 328.068	-148.9	-1.29574	µg/L	0.091391	-1.29574	µg/L	0.091391	7.05%
Na 589.592 radial	-2.4	-96.5684	µg/L	52.15040	-96.5684	µg/L	52.15040	54.00%
Sr 421.552 radial	2.8	2.83151	µg/L	0.699823	2.83151	µg/L	0.699823	24.72%
Te 214.281	0.3	0.62510	µg/L	19.958539	0.62510	µg/L	19.958539	>999.9%
Tl 190.800	-2.8	-9.35341	µg/L	11.386998	-9.35341	µg/L	11.386998	121.74%
Sn 189.933	-9.1	279.685	µg/L	2.6320	279.685	µg/L	2.6320	0.94%
Ti 334.941	146.6	0.41025	µg/L	0.136656	0.41025	µg/L	0.136656	33.31%
U 409.014	-142.8	-10.9298	µg/L	5.79731	-10.9298	µg/L	5.79731	53.04%
V 292.402	-80.0	-1.02594	µg/L	0.253613	-1.02594	µg/L	0.253613	24.72%
Y 371.030	-61.4	-0.08161	µg/L	0.019993	-0.08161	µg/L	0.019993	24.50%
Zn 206.200	35.3	5.98423	µg/L	0.995435	5.98423	µg/L	0.995435	16.63%
Zr 339.197	-200.2	-0.93118	µg/L	0.361201	-0.93118	µg/L	0.361201	38.79%

STANDARD REPORT

Stock Standard - IHICPQC_B

IHICPQC_B	Description - IH ICP QC Spike Solution B

Standard: 35284
MFG: Inorganic Ventures
MFG Lot: K2-MEB652646
Part ID: ALS-11

Created By: J. Knudson
Create Date: 1/18/2017
Lab Lot: IH ICP QC Spike B

Amount: 250 mL
Expires: 1/18/2018
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7723-14-0	Phosphorus	1000 ug/mL
2	7440-36-0	Antimony	1000 ug/mL
3	13494-80-9	Tellurium	1000 ug/mL
4	7440-67-7	Zirconium	1000 ug/mL
5	7439-98-7	Molybdenum	100 ug/mL
6	7440-32-6	Titanium	100 ug/mL

STANDARD REPORT

Working Standard - ICPH2SO4ICV

ICPH2SO4ICV — Description - IH ICP ICV in 8% H2SO4

Standard: 33540
MFG: LAJ
MFG Lot:
Part ID:

Created By: L. Jones
Create Date: 09/20/2016
Lab Lot: ICPH2SO4ICV

Amount: 500 mL
Expires: 02/02/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-06-4	Platinum	5000 ug/L
2	7440-65-5	Yttrium	1000 ug/L
3	7429-90-5	Aluminum	10000 ug/L
4	7440-38-2	Arsenic	2000 ug/L
5	7440-39-3	Barium	2000 ug/L
6	7440-41-7	Beryllium	500 ug/L
7	7440-42-8	Boron	2000 ug/L
8	7440-43-9	Cadmium	500 ug/L
9	7440-70-2	Calcium	10000 ug/L
10	7440-47-3	Chromium	500 ug/L
11	7440-48-4	Cobalt	500 ug/L
12	7440-50-8	Copper	500 ug/L
13	7439-89-6	Iron	10000 ug/L
14	7439-92-1	Lead	2000 ug/L
15	7439-93-2	Lithium	500 ug/L
16	7439-95-4	Magnesium	10000 ug/L
17	7439-96-5	Manganese	500 ug/L
18	7440-02-0	Nickel	500 ug/L
19	7723-14-0	Phosphorus	2000 ug/L
20	7440-09-7	Potassium	10000 ug/L
21	7782-49-2	Selenium	2000 ug/L
22	7440-22-4	Silver	500 ug/L
23	7440-23-5	Sodium	10000 ug/L
24	7440-24-6	Strontium	500 ug/L
25	7440-28-0	Thallium	2000 ug/L
26	7440-62-2	Vanadium	500 ug/L
27	7440-66-6	Zinc	500 ug/L
28	7440-36-0	Antimony	2000 ug/L
29	7440-69-9	Bismuth	1000 ug/L
30	7439-98-7	Molybdenum	2000 ug/L
31	7440-21-3	Silicon	2000 ug/L
32	7440-31-5	Tin	2000 ug/L
33	7440-32-6	Titanium	500 ug/L
34	7440-61-1	Uranium	1000 ug/L
35	7440-67-7	Zirconium	1000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	452 mL	11/07/2025
29519	H2SO4	Concentrated Sulfuric Acid	H2S04 (54049)	40 mL	10/12/2020

STANDARD REPORT

Working Standard - ICPH2SO4ICV

ICPH2SO4ICV — **Description - IH ICP ICV in 8% H2SO4**

Standard: 33540
MFG: LAJ
MFG Lot:
Part ID:

Created By: L. Jones
Create Date: 09/20/2016
Lab Lot: ICPH2SO4ICV

Amount: 500 mL
Expires: 02/02/2017
Usable: Yes

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
30174	Y Low Stock	1,000 ug/mL Y Stock	IV Y 1,000 ug/mL	0.5 mL	02/03/2017
31018	LCS spike A	Soln A for ICP LCS/ICV	ICP	2.5 mL	02/02/2017
31019	LCS spike B	Soln B for ICP LCS/ICV	ICP	2.5 mL	03/01/2017
33393	Pt Low Stock	IV 1,000 ug/mL Pt	Pt 1,000 ug/mL	2.5 mL	09/09/2017

STANDARD REPORT

Working Standard - H2SO4 ICSAIH

H2SO4 ICSAIH — Description - 7300 IH ICSA in 8% H2SO4

Standard: 34033
MFG: LAJ
MFG Lot:
Part ID:

Created By: L. Jones
Create Date: 10/26/2016
Lab Lot: H2SO4 ICSAIH

Amount: 500 mL
Expires: 03/01/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	250 ug/mL
2	7440-70-2	Calcium	250 ug/mL
3	7439-89-6	Iron	100 ug/mL
4	7439-95-4	Magnesium	250 ug/mL

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	447.5 mL	11/07/2025
31013	ICSA Stock	ICSA Stock IH/ENV	ICSA Stock IH/ENV	12.5 mL	03/01/2017
34032	H2SO4	Concentrated Sulfuric Acid	H2S04 (55172)	40 mL	10/26/2026

STANDARD REPORT

Working Standard - H2SO4ICSAB

H2SO4ICSAB — Description - 7300 IH ICSAB in 8% H2SO4

Standard: 35415
MFG: LAJ
MFG Lot:
Part ID:

Created By: L. Jones
Create Date: 01/31/2017
Lab Lot: H2SO4ICSAB

Amount: 500 mL
Expires: 07/30/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-65-5	Yttrium	500 ug/L
2	7429-90-5	Aluminum	250000 ug/L
3	7440-70-2	Calcium	250000 ug/L
4	7439-89-6	Iron	100000 ug/L
5	7439-95-4	Magnesium	250000 ug/L
6	7440-06-4	Platinum	1000 ug/L
7	7440-33-7	Tungsten	1000 ug/L
8	13494-80-9	Tellurium	500 ug/L
9	7440-38-2	Arsenic	500 ug/L
10	7440-39-3	Barium	500 ug/L
11	7440-41-7	Beryllium	500 ug/L
12	7440-69-9	Bismuth	500 ug/L
13	7440-43-9	Cadmium	500 ug/L
14	7440-47-3	Chromium	500 ug/L
15	7440-48-4	Cobalt	500 ug/L
16	7440-50-8	Copper	500 ug/L
17	7439-92-1	Lead	500 ug/L
18	7439-93-2	Lithium	500 ug/L
19	7439-96-5	Manganese	500 ug/L
20	7440-02-0	Nickel	500 ug/L
21	7782-49-2	Selenium	500 ug/L
22	7440-22-4	Silver	500 ug/L
23	7440-24-6	Strontium	500 ug/L
24	7440-28-0	Thallium	500 ug/L
25	7440-61-1	Uranium	500 ug/L
26	7440-62-2	Vanadium	500 ug/L
27	7440-66-6	Zinc	500 ug/L
28	7440-36-0	Antimony	500 ug/L
29	7440-42-8	Boron	500 ug/L
30	7439-98-7	Molybdenum	1000 ug/L
31	7723-14-0	Phosphorus	500 ug/L
32	7440-21-3	Silicon	1000 ug/L
33	7440-31-5	Tin	500 ug/L
34	7440-32-6	Titanium	1000 ug/L
35	7440-67-7	Zirconium	500 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	432.475 mL	11/07/2025
33012	ICSAB-C	IH ICSAB Stock C Solution	IH ICSAB-C Stock	5 mL	08/01/2017

STANDARD REPORT

Working Standard - H2SO4ICSAB

H2SO4ICSAB — Description - 7300 IH ICSAB in 8% H2SO4

Standard: 35415
MFG: LAJ
MFG Lot:
Part ID:

Created By: L. Jones
Create Date: 01/31/2017
Lab Lot: H2SO4ICSAB

Amount: 500 mL
Expires: 07/30/2017
Usable: Yes

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
33246	ICSAB-A	IH/Env ICSAB Stock A Solution	IH/Env ICSAB-A Stock	5 mL	08/27/2017
33247	ICSAB-B	IH/Env ICSAB Stock B Solution	IH/Env ICSAB-B Stock	5 mL	08/27/2017
34032	H2SO4	Concentrated Sulfuric Acid	H2S04 (55172)	40 mL	10/26/2026
34169	Y Stock	10,000 ug/mL Y Stock	SPEX Y 10,000 ug/mL	0.025 mL	10/31/2017
34704	ICSA Stock	ICSA Stock IH/ENV	ICSA Stock IH/ENV	12.5 mL	12/12/2017

STANDARD REPORT

Working Standard - 7300H2SO4CRI

7300H2SO4CRI — **Description - NMAM 7300 IH CRI in 8% H2SO4**

Standard: 33133
MFG: LAJ
MFG Lot:
Part ID:

Created By: L. Jones
Create Date: 08/18/2016
Lab Lot: 7300H2SO4CRI

Amount: 500 mL
Expires: 02/18/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-39-3	Barium	10 ug/L
2	7440-41-7	Beryllium	0.25 ug/L
3	7440-69-9	Bismuth	100 ug/L
4	7440-43-9	Cadmium	3 ug/L
5	7440-48-4	Cobalt	3 ug/L
6	7440-47-3	Chromium	10 ug/L
7	7440-50-8	Copper	20 ug/L
8	7439-93-2	Lithium	20 ug/L
9	7439-96-5	Manganese	5 ug/L
10	7440-24-6	Strontium	15 ug/L
11	7440-62-2	Vanadium	3 ug/L
12	7440-65-5	Yttrium	3 ug/L
13	7440-66-6	Zinc	20 ug/L
14	7439-89-6	Iron	200 ug/L
15	7440-09-7	Potassium	500 ug/L
16	7439-95-4	Magnesium	50 ug/L
17	7440-02-0	Nickel	5 ug/L
18	7439-92-1	Lead	50 ug/L
19	7429-90-5	Aluminum	200 ug/L
20	7440-70-2	Calcium	600 ug/L
21	7440-06-4	Platinum	150 ug/L
22	7782-49-2	Selenium	100 ug/L
23	7440-28-0	Thallium	50 ug/L
24	7440-38-2	Arsenic	100 ug/L
25	7440-23-5	Sodium	150 ug/L
26	7440-61-1	Uranium	100 ug/L
27	7439-98-7	Molybdenum	15 ug/L
28	7440-32-6	Titanium	3 ug/L
29	7440-67-7	Zirconium	20 ug/L
30	7440-21-3	Silicon	500 ug/L
31	7440-42-8	Boron	50 ug/L
32	7440-36-0	Antimony	60 ug/L
33	7440-31-5	Tin	100 ug/L
34	13494-80-9	Tellurium	50 ug/L
35	7440-22-4	Silver	10 ug/L
36	7723-14-0	Phosphorus	200 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	450 mL	11/07/2025

STANDARD REPORT

Working Standard - 7300H2SO4CRI

7300H2SO4CRI	Description - NMAM 7300 IH CRI in 8% H2SO4

Standard: 33133
MFG: LAJ
MFG Lot:
Part ID:

Created By: L. Jones
Create Date: 08/18/2016
Lab Lot: 7300H2SO4CRI

Amount: 500 mL
Expires: 02/18/2017
Usable: Yes

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
29519	H2SO4	Concentrated Sulfuric Acid	H2S04 (54049)	40 mL	10/12/2020
31876	IHCRIA stock	NMAM 7300 CRI-A stock	IHCRIA stock	5 mL	05/18/2017
31877	IHCRIB stock	NMAM 7300 CRI-B stock	IHCRIB stock	5 mL	05/18/2017

STANDARD REPORT

Working Standard - ICPH2SO4STD1

ICPH2SO4STD1 — **Description - IH ICP Cal std 1 8% H2SO4**

Standard: 34632
MFG: LAJ
MFG Lot:
Part ID:

Created By: L. Jones
Create Date: 12/05/2016
Lab Lot: ICPH2SO4STD1

Amount: 500 mL
Expires: 06/05/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-22-4	Silver	2000 ug/L
2	13494-80-9	Tellurium	10000 ug/L
3	7440-65-5	Yttrium	2000 ug/L
4	7440-09-7	Potassium	50000 ug/L
5	7440-70-2	Calcium	50000 ug/L
6	7439-95-4	Magnesium	50000 ug/L
7	7429-90-5	Aluminum	50000 ug/L
8	7439-89-6	Iron	50000 ug/L
9	7440-61-1	Uranium	5000 ug/L
10	7440-23-5	Sodium	50000 ug/L
11	7440-66-6	Zinc	25000 ug/L
12	7440-02-0	Nickel	5000 ug/L
13	7440-39-3	Barium	5000 ug/L
14	7440-69-9	Bismuth	5000 ug/L
15	7440-48-4	Cobalt	5000 ug/L
16	7440-50-8	Copper	25000 ug/L
17	7439-93-2	Lithium	5000 ug/L
18	7782-49-2	Selenium	5000 ug/L
19	7440-24-6	Strontium	5000 ug/L
20	7440-28-0	Thallium	2500 ug/L
21	7440-62-2	Vanadium	5000 ug/L
22	7440-38-2	Arsenic	5000 ug/L
23	7440-47-3	Chromium	5000 ug/L
24	7439-96-5	Manganese	5000 ug/L
25	7439-92-1	Lead	5000 ug/L
26	7440-41-7	Beryllium	2500 ug/L
27	7440-43-9	Cadmium	2500 ug/L
28	7440-42-8	Boron	12500 ug/L
29	7723-14-0	Phosphorus	25000 ug/L
30	7440-36-0	Antimony	25000 ug/L
31	7440-21-3	Silicon	12500 ug/L
32	7439-98-7	Molybdenum	25000 ug/L
33	7440-31-5	Tin	5000 ug/L
34	7440-32-6	Titanium	5000 ug/L
35	7440-67-7	Zirconium	5000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	443.9 mL	11/07/2025
33615	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	1 mL	09/30/2017

STANDARD REPORT

Working Standard - ICPH2SO4STD1

ICPH2SO4STD1 — **Description - IH ICP Cal std 1 8% H2SO4**

Standard: 34632
MFG: LAJ
MFG Lot:
Part ID:

Created By: L. Jones
Create Date: 12/05/2016
Lab Lot: ICPH2SO4STD1

Amount: 500 mL
Expires: 06/05/2017
Usable: Yes

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
34032	H2SO4	Concentrated Sulfuric Acid	H2S04 (55172)	40 mL	10/26/2026
34082	Te Stock Low	1,000 ug/mL Te Stock	SPEX Te 1,000 ug/mL	5 mL	10/30/2017
34169	Y Stock	10,000 ug/mL Y Stock	SPEX Y 10,000 ug/mL	0.1 mL	10/31/2017
34599	ICP Stock A	ENV/IH ICP Stock Solution A	ICP Stock A	5 mL	12/02/2017
34600	ICP Stock B	ENV/IH ICP Stock Solution B	ICP Stock B	5 mL	12/02/2017

STANDARD REPORT

Constituent

Stock Standard - Y Low Stock

Y Low Stock	Description - 1,000 ug/mL Y Stock

Standard: 30174
MFG: Inorganic Ventures
MFG Lot: J2-Y02022
Part ID: CGY1-1

Created By: L. Jones
Create Date: 12/16/2015
Lab Lot: IV Y 1,000 ug/mL

Amount: 125 mL
Expires: 2/3/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-65-5	Yttrium	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - ICSA Stock

ICSA Stock	Description - ICSA Stock IH/ENV

Standard: 31013
MFG: Inorganic Ventures
MFG Lot: K2-MEB603080
Part ID: ALS-15

Created By: J. Sanchez
Create Date: 2/26/2016
Lab Lot: ICSA Stock IH/ENV

Amount: 500 mL
Expires: 3/1/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	10000 ug/mL
2	7440-70-2	Calcium	10000 ug/mL
3	7439-89-6	Iron	4000 ug/mL
4	7439-95-4	Magnesium	10000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - LCS spike A

LCS spike A	Description - Soln A for ICP LCS/ICV

Standard: 31018 **Created By:** S. Stewart **Amount:** 500 mL
MFG: Inorganic Ventures **Create Date:** 2/29/2016 **Expires:** 2/2/2017
MFG Lot: K2-MEB616096 **Lab Lot:** ICP **Usable:** No
Part ID: DATACHEM-STD-1A

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	2000 ug/mL
2	7440-38-2	Arsenic	400 ug/mL
3	7440-39-3	Barium	400 ug/mL
4	7440-41-7	Beryllium	100 ug/mL
5	7440-42-8	Boron	400 ug/mL
6	7440-43-9	Cadmium	100 ug/mL
7	7440-70-2	Calcium	2000 ug/mL
8	7440-47-3	Chromium	100 ug/mL
9	7440-48-4	Cobalt	100 ug/mL
10	7440-50-8	Copper	100 ug/mL
11	7439-89-6	Iron	2000 ug/mL
12	7439-92-1	Lead	400 ug/mL
13	7439-93-2	Lithium	100 ug/mL
14	7439-95-4	Magnesium	2000 ug/mL
15	7439-96-5	Manganese	100 ug/mL
16	7440-02-0	Nickel	100 ug/mL
17	7723-14-0	Phosphorus	400 ug/mL
18	7440-09-7	Potassium	2000 ug/mL
19	7782-49-2	Selenium	400 ug/mL
20	7440-22-4	Silver	100 ug/mL
21	7440-23-5	Sodium	2000 ug/mL
22	7440-24-6	Strontium	100 ug/mL
23	7440-28-0	Thallium	400 ug/mL
24	7440-62-2	Vanadium	100 ug/mL
25	7440-66-6	Zinc	100 ug/mL

STANDARD REPORT

Constituent

Stock Standard - LCS spike B

LCS spike B	Description - Soln B for ICP LCS/ICV

Standard: 31019
MFG: Inorganic Ventures
MFG Lot: H2-MEB548025
Part ID: DATACHEM-STD-2A

Created By: S. Stewart
Create Date: 2/29/2016
Lab Lot: ICP

Amount: 250 mL
Expires: 3/1/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-36-0	Antimony	400 ug/mL
2	7440-69-9	Bismuth	200 ug/mL
3	7439-98-7	Molybdenum	400 ug/mL
4	7440-21-3	Silicon	400 ug/mL
5	7440-31-5	Tin	400 ug/mL
6	7440-32-6	Titanium	100 ug/mL
7	7440-61-1	Uranium	200 ug/mL
8	7440-67-7	Zirconium	200 ug/mL

STANDARD REPORT

Constituent

Stock Standard - IHCRIA stock

IHCRIA stock — **Description - NMAM 7300 CRI-A stock**

Standard: 31876
MFG: Inorganic Ventures
MFG Lot: K2-MEB639036
Part ID: DATACHEM-CAL-7B-REV1

Created By: L. Jones
Create Date: 5/18/2016
Lab Lot: IHCRIA stock

Amount: 125 mL
Expires: 5/18/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-39-3	Barium	1 ug/mL
2	7440-41-7	Beryllium	0.025 ug/mL
3	7440-69-9	Bismuth	10 ug/mL
4	7440-43-9	Cadmium	0.3 ug/mL
5	7440-48-4	Cobalt	0.3 ug/mL
6	7440-47-3	Chromium	1 ug/mL
7	7440-50-8	Copper	2 ug/mL
8	7439-93-2	Lithium	2 ug/mL
9	7439-96-5	Manganese	0.5 ug/mL
10	7440-24-6	Strontium	1.5 ug/mL
11	7440-62-2	Vanadium	0.3 ug/mL
12	7440-65-5	Yttrium	0.3 ug/mL
13	7440-66-6	Zinc	2 ug/mL
14	7439-89-6	Iron	20 ug/mL
15	7440-09-7	Potassium	50 ug/mL
16	7439-95-4	Magnesium	5 ug/mL
17	7440-02-0	Nickel	0.5 ug/mL
18	7439-92-1	Lead	5 ug/mL
19	7429-90-5	Aluminum	20 ug/mL
20	7440-70-2	Calcium	60 ug/mL
21	7440-06-4	Platinum	15 ug/mL
22	7782-49-2	Selenium	10 ug/mL
23	7440-28-0	Thallium	5 ug/mL
24	7440-38-2	Arsenic	10 ug/mL
25	7440-23-5	Sodium	15 ug/mL
26	7440-61-1	Uranium	10 ug/mL

STANDARD REPORT

Constituent

Stock Standard - IHCRIB stock

IHCRIB stock	Description - NMAM 7300 CRI-B stock

Standard: 31877 **Created By:** L. Jones **Amount:** 125 mL
MFG: Inorganic Ventures **Create Date:** 5/18/2016 **Expires:** 5/18/2017
MFG Lot: K2-MEB639037 **Lab Lot:** IHCRIB stock **Usable:** Yes
Part ID: DATACHEM-CAL-8B

Pos.	Analyte	Name	Concentration
1	7439-98-7	Molybdenum	1.5 ug/mL
2	7440-32-6	Titanium	0.3 ug/mL
3	7440-67-7	Zirconium	2 ug/mL
4	7440-21-3	Silicon	50 ug/mL
5	7440-42-8	Boron	5 ug/mL
6	7440-36-0	Antimony	6 ug/mL
7	7440-31-5	Tin	10 ug/mL
8	13494-80-9	Tellurium	5 ug/mL
9	7440-22-4	Silver	1 ug/mL
10	7723-14-0	Phosphorus	20 ug/mL

STANDARD REPORT

Constituent

Stock Standard - ICSAB-C

ICSAB-C	Description - IH ICSAB Stock C Solution

Standard: 33012
MFG: Inorganic Ventures
MFG Lot: H2-MEB546068
Part ID: ALS-13

Created By: L. Jones
Create Date: 8/10/2016
Lab Lot: IH ICSAB-C Stock

Amount: 125 mL
Expires: 8/1/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-06-4	Platinum	100 ug/mL
2	7440-33-7	Tungsten	100 ug/mL
3	13494-80-9	Tellurium	50 ug/mL

STANDARD REPORT

Constituent

Stock Standard - ICSAB-A

ICSAB-A — **Description - IH/Env ICSAB Stock A Solution**

Standard: 33246
MFG: Inorganic Ventures
MFG Lot: K2-MEB651163
Part ID: ALS-16

Created By: L. Jones
Create Date: 8/27/2016
Lab Lot: IH/Env ICSAB-A Stock

Amount: 250 mL
Expires: 8/27/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-38-2	Arsenic	50 ug/mL
2	7440-39-3	Barium	50 ug/mL
3	7440-41-7	Beryllium	50 ug/mL
4	7440-69-9	Bismuth	50 ug/mL
5	7440-43-9	Cadmium	50 ug/mL
6	7440-47-3	Chromium	50 ug/mL
7	7440-48-4	Cobalt	50 ug/mL
8	7440-50-8	Copper	50 ug/mL
9	7439-92-1	Lead	50 ug/mL
10	7439-93-2	Lithium	50 ug/mL
11	7439-96-5	Manganese	50 ug/mL
12	7440-02-0	Nickel	50 ug/mL
13	7782-49-2	Selenium	50 ug/mL
14	7440-22-4	Silver	50 ug/mL
15	7440-24-6	Strontium	50 ug/mL
16	7440-28-0	Thallium	50 ug/mL
17	7440-61-1	Uranium	50 ug/mL
18	7440-62-2	Vanadium	50 ug/mL
19	7440-66-6	Zinc	50 ug/mL

STANDARD REPORT

Constituent

Stock Standard - ICSAB-B

ICSAB-B	Description - IH/Env ICSAB Stock B Solution

Standard: 33247 **Created By:** L. Jones **Amount:** 250 mL
MFG: Inorganic Ventures **Create Date:** 8/27/2016 **Expires:** 8/27/2017
MFG Lot: K2-MEB651162 **Lab Lot:** IH/Env ICSAB-B Stock **Usable:** Yes
Part ID: ALS-14

Pos.	Analyte	Name	Concentration
1	7440-36-0	Antimony	50 ug/mL
2	7440-42-8	Boron	50 ug/mL
3	7439-98-7	Molybdenum	100 ug/mL
4	7723-14-0	Phosphorus	50 ug/mL
5	7440-21-3	Silicon	100 ug/mL
6	7440-31-5	Tin	50 ug/mL
7	7440-32-6	Titanium	100 ug/mL
8	7440-67-7	Zirconium	50 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Pt Low Stock

Pt Low Stock	Description - IV 1,000 ug/mL Pt

Standard:	33393	**Created By:**	J. Sanchez	**Amount:**	125 mL
MFG:	Inorganic Ventures	**Create Date:**	9/9/2016	**Expires:**	9/9/2017
MFG Lot:	J2-PT02018	**Lab Lot:**	Pt 1,000 ug/mL	**Usable:**	Yes
Part ID:	CGPTN1				

Pos.	Analyte	Name	Concentration
1	7440-06-4	Platinum	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Ag Stock

Ag Stock	Description - 1,000 ug/mL Ag Stock

Standard: 33615
MFG: Spex CertiPrep
MFG Lot: 21-188AGY
Part ID: PLAG2-2Y

Created By: J. Sanchez
Create Date: 9/22/2016
Lab Lot: Ag 1,000 ug/mL

Amount: 125 mL
Expires: 9/30/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-22-4	Silver	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Te Stock Low

Te Stock Low	Description - 1,000 ug/mL Te Stock

Standard: 34082
MFG: SPEX CertiPrep
MFG Lot: 22-13TEX
Part ID: PLTE2-2X

Created By: L. Jones
Create Date: 10/27/2016
Lab Lot: SPEX Te 1,000 ug/mL

Amount: 500 mL
Expires: 10/30/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	13494-80-9	Tellurium	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Y Stock

Y Stock	Description - 10,000 ug/mL Y Stock

Standard: 34169 **Created By:** L. Jones **Amount:** 125 mL
MFG: SPEX CertiPrep **Create Date:** 11/2/2016 **Expires:** 10/31/2017
MFG Lot: AM16-118YY **Lab Lot:** SPEX Y 10,000 ug/mL **Usable:** Yes
Part ID: PLY2-3Y

Pos.	Analyte	Name	Concentration
1	7440-65-5	Yttrium	10000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - ICP Stock A

ICP Stock A — **Description - ENV/IH ICP Stock Solution A**

Standard: 34599
MFG: Inorganic Ventures
MFG Lot: K2-MEB630155
Part ID: ALS-24-REV1

Created By: S. Stewart
Create Date: 12/2/2016
Lab Lot: ICP Stock A

Amount: 250 mL
Expires: 12/2/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7440-09-7	Potassium	5000 ug/mL
2	7440-70-2	Calcium	5000 ug/mL
3	7439-95-4	Magnesium	5000 ug/mL
4	7429-90-5	Aluminum	5000 ug/mL
5	7439-89-6	Iron	5000 ug/mL
6	7440-61-1	Uranium	500 ug/mL
7	7440-23-5	Sodium	5000 ug/mL
8	7440-66-6	Zinc	2500 ug/mL
9	7440-02-0	Nickel	500 ug/mL
10	7440-39-3	Barium	500 ug/mL
11	7440-69-9	Bismuth	500 ug/mL
12	7440-48-4	Cobalt	500 ug/mL
13	7440-50-8	Copper	2500 ug/mL
14	7439-93-2	Lithium	500 ug/mL
15	7782-49-2	Selenium	500 ug/mL
16	7440-24-6	Strontium	500 ug/mL
17	7440-28-0	Thallium	250 ug/mL
18	7440-62-2	Vanadium	500 ug/mL
19	7440-38-2	Arsenic	500 ug/mL
20	7440-47-3	Chromium	500 ug/mL
21	7439-96-5	Manganese	500 ug/mL
22	7439-92-1	Lead	500 ug/mL
23	7440-41-7	Beryllium	250 ug/mL
24	7440-43-9	Cadmium	250 ug/mL

STANDARD REPORT

Constituent

Stock Standard - ICP Stock B

ICP Stock B	Description - ENV/IH ICP Stock Solution B

Standard: 34600 **Created By:** S. Stewart **Amount:** 250 mL
MFG: Inorganic Ventures **Create Date:** 12/2/2016 **Expires:** 12/2/2017
MFG Lot: K2-MEB630141 **Lab Lot:** ICP Stock B **Usable:** Yes
Part ID: ALS-23-REV1

Pos.	Analyte	Name	Concentration
1	7440-42-8	Boron	1250 ug/mL
2	7723-14-0	Phosphorus	2500 ug/mL
3	7440-36-0	Antimony	2500 ug/mL
4	7440-21-3	Silicon	1250 ug/mL
5	7439-98-7	Molybdenum	2500 ug/mL
6	7440-31-5	Tin	500 ug/mL
7	7440-32-6	Titanium	500 ug/mL
8	7440-67-7	Zirconium	500 ug/mL

STANDARD REPORT

Constituent

Stock Standard - ICSA Stock

ICSA Stock — Description - ICSA Stock IH/ENV

Standard: 34704
MFG: Inorganic Ventures
MFG Lot: K2-MEB653742
Part ID: ALS-15

Created By: S. Stewart
Create Date: 12/12/2016
Lab Lot: ICSA Stock IH/ENV

Amount: 500 mL
Expires: 12/12/2017
Usable: Yes

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	10000 ug/mL
2	7440-70-2	Calcium	10000 ug/mL
3	7439-89-6	Iron	4000 ug/mL
4	7439-95-4	Magnesium	10000 ug/mL

STANDARD REPORT

Constituent

Solvent Standard - ASTM H2O

ASTM H2O	Description - ASTM Type II Water

Standard:	109	**Created By:**	ALS Support (Lims)	**Amount:**	1000 L
MFG:	DCL In House	**Create Date:**	10/6/2005	**Expires:**	11/7/2025
MFG Lot:		**Lab Lot:**	LAB 109	**Usable:**	Yes
Part ID:					

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - H2SO4

H2SO4	Description - Concentrated Sulfuric Acid

Standard:	29519	**Created By:**	P. Steen	**Amount:**	2.5 L
MFG:	EMD	**Create Date:**	10/12/2015	**Expires:**	10/12/2020
MFG Lot:	54049	**Lab Lot:**	H2S04 (54049)	**Usable:**	Yes
Part ID:					

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - H2SO4

H2SO4	Description - Concentrated Sulfuric Acid

Standard:	34032	**Created By:**	L. Jones	**Amount:**	2.5 L
MFG:	EMD	**Create Date:**	10/26/2016	**Expires:**	10/26/2026
MFG Lot:	55172	**Lab Lot:**	H2S04 (55172)	**Usable:**	Yes
Part ID:					

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			