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ANALYTICAL REPORT

Job Number: 280-168095-1

Job Description: Basin School Chemicals ER - Basin, WY

For:
Tetra Tech, Inc.
1560 Broadway
Suite 1400
Denver, CO 80202

Attention: Maura McAleese

Approved for release.
Shelby R Turner
Project Manager I
10/28/2022 3:57 PM

Shelby R Turner, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
Shelby.Turner@et.eurofinsus.com
10/28/2022

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

Eurofins Denver
4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.EurofinsUS.com

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Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 280-168095-1
Project/Site: Basin School Chemicals ER - Basin, WY

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
V	Serial Dilution exceeds the control limits
W	PS: Post-digestion spike was outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Basin School Chemicals ER - Basin, WY

Report Number: 280-168095-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/21/2022 3:15 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 24.9º C.

The following samples were received at the laboratory outside the required temperature criteria at 24.9C: BS-T-01-BIG (280-168095-1), BS-T-02-SMALL (280-168095-2), BS-DISPOSAL-01 (280-168095-3), BS-T-01-BIG (280-168095-4) and BS-T-02-SMALL (280-168095-5). This does not meet regulatory requirements. It can be noted that the samples requesting 8082A PCBs are considered out of temp at receipt. The sample requesting TCLP RCRA Metals is out of temp for 7470A TCLP Mercury. 6010D TCLP RCRA Metals and Moisture due not require thermal preservation. The laboratory will proceed with analysis unless instructed otherwise.

1 x 4oz soil jars submitted for samples BS-T-01-BIG (280-168095-1) and BS-T-02-SMALL (280-168095-2) were received filled with about 1/3 volume. The laboratory will proceed with analysis from the limited volume.

Samples BS-T-01-BIG and BS-T-02-SMALL were logged for 4 BD turnaround time and will be reported under SDG 280-168095-2. Results are due 10/27/22. Sample BS-DISPOSAL-01 is logged for 4 BD turnaround time and will be reported under SDG 280-168095-1.

TCLP METALS

Sample BS-DISPOSAL-01 (280-168095-3) was analyzed for TCLP metals in accordance with 6010D. The samples were leached on 10/26/2022, prepared on 10/26/2022 and analyzed on 10/27/2022.

Lead was detected in method blank LB2 280-591261/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP MERCURY

Sample BS-DISPOSAL-01 (280-168095-3) was analyzed for TCLP mercury in accordance with EPA SW-846 Methods 1311/7470A. The samples were leached on 10/26/2022, and prepared and analyzed on 10/27/2022.

Mercury was detected in method blank LB2 280-591261/1-C at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Mercury and Mercury failed the recovery criteria low for the MS and MSD of sample BS-DISPOSAL-01 (280-168095-3) in batch 280-591623. Additional dilutions and a post-digestion spike (PDS) were also analyzed, but with no spike recovery. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Job ID: 280-168095-1
Project/Site: Basin School Chemicals ER - Basin, WY

Client Sample ID: BS-DISPOSAL-01 — Lab Sample ID: 280-168095-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.060	J	0.50	0.0098	mg/L	1		6010D	TCLP
Barium	0.74	J	1.0	0.0041	mg/L	1		6010D	TCLP
Chromium	19		0.50	0.0033	mg/L	1		6010D	TCLP
Lead	0.068	J B	0.50	0.014	mg/L	1		6010D	TCLP
Selenium	0.038	J	0.10	0.032	mg/L	1		6010D	TCLP

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Basin School Chemicals ER - Basin, WY

Job ID: 280-168095-1

Client Sample ID: BS-DISPOSAL-01

Lab Sample ID: 280-168095-3

Date Collected: 10/19/22 15:50
Matrix: Solid
Date Received: 10/21/22 15:15

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.060**	**J**	0.50	0.0098	mg/L		10/26/22 23:06	10/27/22 17:40	1
Arsenic	0.022	U	0.50	0.022	mg/L		10/26/22 23:06	10/27/22 17:40	1
Barium	**0.74**	**J**	1.0	0.0041	mg/L		10/26/22 23:06	10/27/22 17:40	1
Cadmium	0.00065	U	0.10	0.00065	mg/L		10/26/22 23:06	10/27/22 17:40	1
Chromium	**19**		0.50	0.0033	mg/L		10/26/22 23:06	10/27/22 17:40	1
Lead	**0.068**	**J B**	0.50	0.014	mg/L		10/26/22 23:06	10/27/22 17:40	1
Selenium	**0.038**	**J**	0.10	0.032	mg/L		10/26/22 23:06	10/27/22 17:40	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00018	U F1	0.0060	0.00018	mg/L		10/27/22 12:30	10/27/22 18:23	1

Default Detection Limits

Client: Tetra Tech, Inc.
Job ID: 280-168095-1
Project/Site: Basin School Chemicals ER - Basin, WY

Method: 6010D - Metals (ICP) - TCLP

Prep: 3010A
Leach: 1311

Analyte	RL	MDL	Units
Arsenic	0.50	0.022	mg/L
Barium	1.0	0.0041	mg/L
Cadmium	0.10	0.00065	mg/L
Chromium	0.50	0.0033	mg/L
Lead	0.50	0.014	mg/L
Selenium	0.10	0.032	mg/L
Silver	0.50	0.0098	mg/L

Method: 7470A - Mercury (CVAA) - TCLP

Prep: 7470A
Leach: 1311

Analyte	RL	MDL	Units
Mercury	0.0020	0.000060	mg/L

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Basin School Chemicals ER - Basin, WY

Job ID: 280-168095-1

Method: 6010D - Metals (ICP)

Lab Sample ID: LB2 280-591261/1-B
Matrix: Solid
Analysis Batch: 591586

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 591384

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.0098	U	0.50	0.0098	mg/L		10/26/22 23:06	10/27/22 17:32	1
Arsenic	0.022	U	0.50	0.022	mg/L		10/26/22 23:06	10/27/22 17:32	1
Barium	0.0041	U	1.0	0.0041	mg/L		10/26/22 23:06	10/27/22 17:32	1
Cadmium	0.00065	U	0.10	0.00065	mg/L		10/26/22 23:06	10/27/22 17:32	1
Chromium	0.0033	U	0.50	0.0033	mg/L		10/26/22 23:06	10/27/22 17:32	1
Lead	0.0285	J	0.50	0.014	mg/L		10/26/22 23:06	10/27/22 17:32	1
Selenium	0.032	U	0.10	0.032	mg/L		10/26/22 23:06	10/27/22 17:32	1

Lab Sample ID: LCS 280-591261/2-B
Matrix: Solid
Analysis Batch: 591586

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 591384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	1.25	1.27		mg/L		101	80 - 120
Arsenic	8.00	8.05		mg/L		101	80 - 118
Barium	15.0	15.5		mg/L		103	80 - 120
Cadmium	6.00	6.12		mg/L		102	80 - 117
Chromium	10.0	10.4		mg/L		104	80 - 120
Lead	10.0	10.2		mg/L		102	80 - 120
Selenium	6.00	5.98		mg/L		100	80 - 119

Lab Sample ID: 280-168095-3 MS
Matrix: Solid
Analysis Batch: 591586

Client Sample ID: BS-DISPOSAL-01
Prep Type: TCLP
Prep Batch: 591384

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.060	J	1.25	1.41		mg/L		108	75 - 120
Arsenic	0.022	U	8.00	8.34		mg/L		104	75 - 125
Barium	0.74	J	15.0	16.2		mg/L		103	75 - 120
Cadmium	0.00065	U	6.00	5.91		mg/L		99	75 - 121
Chromium	19		10.0	28.0		mg/L		90	75 - 123
Lead	0.068	J B	10.0	10.0		mg/L		100	75 - 119
Selenium	0.038	J	6.00	6.31		mg/L		104	75 - 121

Lab Sample ID: 280-168095-3 MSD
Matrix: Solid
Analysis Batch: 591586

Client Sample ID: BS-DISPOSAL-01
Prep Type: TCLP
Prep Batch: 591384

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	0.060	J	1.25	1.41		mg/L		108	75 - 120	0	20
Arsenic	0.022	U	8.00	8.34		mg/L		104	75 - 125	0	20
Barium	0.74	J	15.0	16.2		mg/L		103	75 - 120	0	20
Cadmium	0.00065	U	6.00	5.89		mg/L		98	75 - 121	0	20
Chromium	19		10.0	28.3		mg/L		93	75 - 123	1	20
Lead	0.068	J B	10.0	10.0		mg/L		99	75 - 119	0	20
Selenium	0.038	J	6.00	6.24		mg/L		103	75 - 121	1	20

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Basin School Chemicals ER - Basin, WY

Job ID: 280-168095-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LB2 280-591261/1-C — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 591623 — **Prep Batch: 591441**

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000647	J	0.0020	0.000060	mg/L		10/27/22 12:30	10/27/22 17:57	1

Lab Sample ID: LCS 280-591261/2-C — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 591623 — **Prep Batch: 591441**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00500	0.00532		mg/L		106	80 - 120		

Lab Sample ID: 280-168095-3 MS — **Client Sample ID: BS-DISPOSAL-01**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 591623 — **Prep Batch: 591441**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.00018	U F1	0.0150	0.00018	U F1	mg/L		0	80 - 120		

Lab Sample ID: 280-168095-3 MS — **Client Sample ID: BS-DISPOSAL-01**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 591623 — **Prep Batch: 591441**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.0018	U F1	0.0150	0.0018	U F1	mg/L		0	80 - 120		

Lab Sample ID: 280-168095-3 MS — **Client Sample ID: BS-DISPOSAL-01**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 591623 — **Prep Batch: 591441**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.018	U	0.0150	0.018	U	mg/L		NC	80 - 120		

Lab Sample ID: 280-168095-3 MSD — **Client Sample ID: BS-DISPOSAL-01**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 591623 — **Prep Batch: 591441**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00018	U F1	0.0150	0.00018	U F1	mg/L		0	80 - 120	NC	10

Lab Sample ID: 280-168095-3 MSD — **Client Sample ID: BS-DISPOSAL-01**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 591623 — **Prep Batch: 591441**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.0018	U F1	0.0150	0.0018	U F1	mg/L		0	80 - 120	NC	10

Lab Sample ID: 280-168095-3 MSD — **Client Sample ID: BS-DISPOSAL-01**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 591623 — **Prep Batch: 591441**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.018	U	0.0150	0.018	U	mg/L		NC	80 - 120	NC	10

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Basin School Chemicals ER - Basin, WY

Job ID: 280-168095-1

Metals

Leach Batch: 591261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-168095-3	BS-DISPOSAL-01	TCLP	Solid	1311	
LB2 280-591261/1-B	Method Blank	TCLP	Solid	1311	
LB2 280-591261/1-C	Method Blank	TCLP	Solid	1311	
LCS 280-591261/2-B	Lab Control Sample	TCLP	Solid	1311	
LCS 280-591261/2-C	Lab Control Sample	TCLP	Solid	1311	
280-168095-3 MS	BS-DISPOSAL-01	TCLP	Solid	1311	
280-168095-3 MSD	BS-DISPOSAL-01	TCLP	Solid	1311	

Prep Batch: 591384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-168095-3	BS-DISPOSAL-01	TCLP	Solid	3010A	591261
LB2 280-591261/1-B	Method Blank	TCLP	Solid	3010A	591261
LCS 280-591261/2-B	Lab Control Sample	TCLP	Solid	3010A	591261
280-168095-3 MS	BS-DISPOSAL-01	TCLP	Solid	3010A	591261
280-168095-3 MSD	BS-DISPOSAL-01	TCLP	Solid	3010A	591261

Prep Batch: 591441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-168095-3	BS-DISPOSAL-01	TCLP	Solid	7470A	591261
LB2 280-591261/1-C	Method Blank	TCLP	Solid	7470A	591261
LCS 280-591261/2-C	Lab Control Sample	TCLP	Solid	7470A	591261
280-168095-3 MS	BS-DISPOSAL-01	TCLP	Solid	7470A	591261
280-168095-3 MSD	BS-DISPOSAL-01	TCLP	Solid	7470A	591261

Analysis Batch: 591586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-168095-3	BS-DISPOSAL-01	TCLP	Solid	6010D	591384
LB2 280-591261/1-B	Method Blank	TCLP	Solid	6010D	591384
LCS 280-591261/2-B	Lab Control Sample	TCLP	Solid	6010D	591384
280-168095-3 MS	BS-DISPOSAL-01	TCLP	Solid	6010D	591384
280-168095-3 MSD	BS-DISPOSAL-01	TCLP	Solid	6010D	591384

Analysis Batch: 591623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-168095-3	BS-DISPOSAL-01	TCLP	Solid	7470A	591441
LB2 280-591261/1-C	Method Blank	TCLP	Solid	7470A	591441
LCS 280-591261/2-C	Lab Control Sample	TCLP	Solid	7470A	591441
280-168095-3 MS	BS-DISPOSAL-01	TCLP	Solid	7470A	591441
280-168095-3 MS	BS-DISPOSAL-01	TCLP	Solid	7470A	591441
280-168095-3 MS	BS-DISPOSAL-01	TCLP	Solid	7470A	591441
280-168095-3 MSD	BS-DISPOSAL-01	TCLP	Solid	7470A	591441
280-168095-3 MSD	BS-DISPOSAL-01	TCLP	Solid	7470A	591441
280-168095-3 MSD	BS-DISPOSAL-01	TCLP	Solid	7470A	591441

Lab Chronicle

Client: Tetra Tech, Inc.
Job ID: 280-168095-1
Project/Site: Basin School Chemicals ER - Basin, WY

Client Sample ID: BS-DISPOSAL-01
Lab Sample ID: 280-168095-3

Date Collected: 10/19/22 15:50
Matrix: Solid
Date Received: 10/21/22 15:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			1.0 g	1.0 mL	591261	10/26/22 00:08	DFB1	EET DEN
TCLP	Prep	3010A			10 mL	50 mL	591384	10/26/22 23:06	MCR	EET DEN
TCLP	Analysis	6010D		1			591586	10/27/22 17:40	KRP	EET DEN
TCLP	Leach	1311			1.0 g	1.0 mL	591261	10/26/22 00:08	DFB1	EET DEN
TCLP	Prep	7470A			10 mL	50 mL	591441	10/27/22 12:30	KMS	EET DEN
TCLP	Analysis	7470A		1			591623	10/27/22 18:23	KMS	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: Tetra Tech, Inc. Job ID: 280-168095-1
Project/Site: Basin School Chemicals ER - Basin, WY

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Utah	NELAP	CO000262019-11	07-31-23

Method Summary

Client: Tetra Tech, Inc.
Job ID: 280-168095-1
Project/Site: Basin School Chemicals ER - Basin, WY

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET DEN
7470A	Mercury (CVAA)	SW846	EET DEN
1311	TCLP Extraction	SW846	EET DEN
3010A	Preparation, Total Metals	SW846	EET DEN
7470A	Preparation, Mercury	SW846	EET DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Basin School Chemicals ER - Basin, WY

Job ID: 280-168095-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-168095-3	BS-DISPOSAL-01	Solid	10/19/22 15:50	10/21/22 15:15

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
CPI TCLP Spk_00005	01/19/23		CPI, Lot 10098101-1		(Purchased Reagent)		Arsenic	300 ug/mL
							Barium	1000 ug/mL
							Cadmium	100 ug/mL
							Chromium	500 ug/mL
							Cu	200 ug/mL
							Lead	500 ug/mL
							Selenium	100 ug/mL
							Silver	100 ug/mL
Hg Biwk ICV_00371	10/31/22	10/17/22	1% HNO3, Lot K23022	100 mL	Hg CPI Stock_00001	0.04 mL	Mercury	400 ppb
.Hg CPI Stock_00001	09/17/23		CPI International, Lot 25-90HGY		(Purchased Reagent)		Mercury	1000 ug/mL
Hg Daily Spk_03218	10/28/22	10/27/22	1% HNO3, Lot K23022	100 mL	Hg Mnth Spike_00192	1 mL	Mercury	100 ppb
.Hg Mnth Spike_00192	11/10/22	10/10/22	1% HNO3, Lot K23022	100 mL	Hg EE 1000ppm_00006	1 mL	Mercury	10 mg/L
..Hg EE 1000ppm_00006	09/07/23		Environmental Express, Lot 2107432		(Purchased Reagent)		Mercury	1000 ug/mL
ICP CCV_00667	11/24/22	10/24/22	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL1A_00977	250 mL	Arsenic	0.5 mg/L
							Barium	0.5 mg/L
							Cadmium	0.5 mg/L
							Chromium	0.5 mg/L
							Lead	0.5 mg/L
							Selenium	0.5 mg/L
							Silver	0.5 mg/L
.ICP ICAL1A_00977	11/24/22	10/24/22	5%/5% HCL/HNO3, Lot SEE LOGBOOK	1000 mL	CAL STD 1_00001	10 mL	Arsenic	1 mg/L
							Barium	1 mg/L
							Cadmium	1 mg/L
							Chromium	1 mg/L
							Lead	1 mg/L
							Selenium	1 mg/L
					ICP CAL STD 4_00011	10 mL	Silver	1 mg/L
..CAL STD 1_00001	11/24/22		CPI, Lot 1134924-1		(Purchased Reagent)		Arsenic	100 mg/L
							Barium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Lead	100 mg/L
							Selenium	100 mg/L
..ICP CAL STD 4_00011	12/18/22		CPI, Lot 1010610-3		(Purchased Reagent)		Silver	100 mg/L
ICP ICSA_00238	12/14/22	10/18/22	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	Icp stk ICSA_00037	25 mL	Al	500 mg/L
							Ca	500 mg/L
							Fe	200 mg/L
							Mg	500 mg/L
.Icp stk ICSA_00037	06/14/23		IV, Lot p2-meb688011		(Purchased Reagent)		Al	5000 mg/L
							Ca	5000 mg/L
							Fe	2000 mg/L
							Mg	5000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ICP ICSAB_00272	12/30/22	10/24/22	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	1000 Li_00043	0.25 mL	Li	1 mg/L
					1000 Zr_00023	0.25 mL	Zr	1 mg/L
					10000 S_00016	0.25 mL	Sulfur	10 mg/L
					10000 Th_00027	0.05 mL	Th	2 mg/L
					ICP ICSAB 1_00006	2.5 mL	Mo	1 mg/L
							Sb	1 mg/L
							Si	10 mg/L
							Sn	1 mg/L
							Ti	1 mg/L
					ICP ICSAB 2_00006	2.5 mL	Arsenic	1 mg/L
							B	10 mg/L
							Barium	1 mg/L
							Be	0.5 mg/L
							Cadmium	1 mg/L
							Chromium	1 mg/L
							Co	1 mg/L
							Cu	1 mg/L
							K	10 mg/L
							Lead	1 mg/L
							Mn	1 mg/L
							Na	10 mg/L
							Ni	1 mg/L
							P	10 mg/L
							Selenium	1 mg/L
							Silver	1 mg/L
							Sr	1 mg/L
							Tl	1 mg/L
							V	1 mg/L
							Zn	1 mg/L
					Icp stk ICSA_00037	25 mL	Al	500 mg/L
							Ca	500 mg/L
							Fe	200 mg/L
							Mg	500 mg/L
.1000 Li_00043	12/30/22	CPI, Lot 1094768-5			(Purchased Reagent)		Li	1000 mg/L
.1000 Zr_00023	01/22/23	CPI, Lot 1097984-16			(Purchased Reagent)		Zr	1000 mg/L
.10000 S_00016	08/07/23	CPI, Lot 1155439-6			(Purchased Reagent)		Sulfur	10000 mg/L
.10000 Th_00027	09/24/23	CPI, Lot 1161822-1			(Purchased Reagent)		Th	10000 mg/L
.ICP ICSAB 1_00006	11/27/23	CPI, Lot 1242348-1			(Purchased Reagent)		Mo	100 mg/L
							Sb	100 mg/L
							Si	1000 mg/L
							Sn	100 mg/L
							Ti	100 mg/L
.ICP ICSAB 2_00006	11/27/23	CPI, Lot 1133580-1			(Purchased Reagent)		Arsenic	100 mg/L
							B	1000 mg/L
							Barium	100 mg/L
							Be	50 mg/L
							Cadmium	100 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chromium	100 mg/L
							Co	100 mg/L
							Cu	100 mg/L
							K	1000 mg/L
							Lead	100 mg/L
							Mn	100 mg/L
							Na	1000 mg/L
							Ni	100 mg/L
							P	1000 mg/L
							Selenium	100 mg/L
							Silver	100 mg/L
							Sr	100 mg/L
							Tl	100 mg/L
							V	100 mg/L
							Zn	100 mg/L
.Icp stk ICSA_00037	06/14/23	IV, Lot p2-meb688011			(Purchased Reagent)		Al	5000 mg/L
							Ca	5000 mg/L
							Fe	2000 mg/L
							Mg	5000 mg/L
ICP ICV_01517	02/26/23	10/27/22	5%HNO3/5% HCl, Lot SEE LOGBOOK	100 mL	ICP ICV STD 4_00002	0.25 mL	Silver	0.25 ppm
					MS icvMIX-1_00006	0.25 mL	Arsenic	0.25 ppm
							Barium	0.25 ppm
							Cadmium	0.25 ppm
							Chromium	0.25 ppm
							Lead	0.25 ppm
							Selenium	0.25 ppm
.ICP ICV STD 4_00002	01/31/24	CPI, Lot 220537			(Purchased Reagent)		Silver	100 mg/L
.MS icvMIX-1_00006	02/26/23	CPI, Lot 1128717-1			(Purchased Reagent)		Arsenic	100 mg/L
							Barium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Lead	100 mg/L
							Selenium	100 mg/L
ICP LLCCV_03498	10/28/22	10/27/22	5%HNO3/5% HCl, Lot SEE LOGBOOK	100 mL	ICP LLCCV-4_00016	1 mL	Silver	10 ppb
							Arsenic	15 ppb
							Barium	10 ppb
							Cadmium	5 ppb
							Chromium	10 ppb
							Lead	9 ppb
							Selenium	20 ppb
.ICP LLCCV-4_00016	12/30/22	10/06/22	1% HNO3, Lot 215109	500 mL	1000 Ag_00018	0.5 mL	Silver	1 ppm
					1000 As_00026	0.75 mL	Arsenic	1.5 ppm
					1000 Ba_00021	0.5 mL	Barium	1 ppm
					1000 Cd_00015	0.25 mL	Cadmium	0.5 ppm
					1000 Cr_00015	0.5 mL	Chromium	1 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					1000 Pb_00029	0.45 mL	Lead	0.9 ppm
					1000 Se_00024	1 mL	Selenium	2 ppm
..1000 Ag_00018	03/27/24	CPI, Lot 1211976-35			(Purchased Reagent)		Silver	1000 mg/L
..1000 As_00026	03/13/23	CPI, Lot 1103713-62			(Purchased Reagent)		Arsenic	1000 mg/L
..1000 Ba_00021	01/19/24	CPI, Lot 1112442-75			(Purchased Reagent)		Barium	1000 mg/L
..1000 Cd_00015	09/24/23	CPI, Lot 1199704-9			(Purchased Reagent)		Cadmium	1000 mg/L
..1000 Cr_00015	03/21/23	CPI, Lot 1011874-115			(Purchased Reagent)		Chromium	1000 mg/L
..1000 Pb_00029	04/15/23	CPI, Lot 981329-210			(Purchased Reagent)		Lead	1000 mg/L
..1000 Se_00024	03/27/24	CPI, Lot 1135995-76			(Purchased Reagent)		Selenium	1000 mg/L
ICP PDS 1_00036	03/31/24	CPI International, Lot 220731			(Purchased Reagent)		Arsenic	20 mg/L
							Barium	10 mg/L
							Cadmium	5 mg/L
							Chromium	5 mg/L
							Lead	10 mg/L
							Selenium	20 mg/L
							Silver	5 mg/L
ICP SPK 1 IV_00001	08/05/23	Inorganic Ventures, Lot T2-MEB724325			(Purchased Reagent)		Mo	100 ug/mL
							Sb	100 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sn	100 ug/mL
							Ti	100 ug/mL
							Zr	100 ug/mL
ICP SPK 2 IV_00001	08/05/23	Inorganic Ventures, Lot T2-MEB724326			(Purchased Reagent)		Al	1000 ug/mL
							Arsenic	100 ug/mL
							B	200 ug/mL
							Barium	100 ug/mL
							Be	100 ug/mL
							Ca	5000 ug/mL
							Cadmium	100 ug/mL
							Chromium	100 ug/mL
							Co	100 ug/mL
							Cu	100 ug/mL
							Fe	1000 ug/mL
							K	5000 ug/mL
							Lead	100 ug/mL
							Li	100 ug/mL
							Mg	5000 ug/mL
							Mn	100 ug/mL
							Na	5000 ug/mL
							Ni	100 ug/mL
							P	2000 ug/mL
							Selenium	100 ug/mL
							Silver	5 ug/mL
							Sr	100 ug/mL
							Sulfur	2000 ug/mL
							Tl	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							V	100 ug/mL
							Zn	100 ug/mL

Reagent

1000 Ag_00018

7396303
ID: 1000 Ag_00018
Exp:03/27/24 Prpd:LRD Opn:10/06/22
1000 Ag CPI

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-1000511

SE Std Silver (Ag) – 1000 µg/mL

Product Lot #: 1211976-35

Matrix: 5% HNO_3

Source Material Lot #: X24E070

Element	Certified Concentration & Uncertainty
Ag	1006 ± 2 µg/mL (w/v)
	999.0 ± 2.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.999% pure silver (Ag) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3151, lot #160729**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	MAJOR	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	0.6	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	0.6	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	<2
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

September 27, 2022
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

www.cpiinternational.com

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

1000 As_00026

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Arsenic (As) – 1000 µg/mL

Matrix: 5% HNO_3

6969126
ID: 1000 As_00026
Exp:03/13/23 Prpd:PNS Opn:12/01/21
1000 As CPI

Product #: TA-100031

Product Lot #: 1103713-62

Source Material Lot #: ASE082018B1

Element	Certified Concentration & Uncertainty
As	1003 ± 5 µg/mL (w/v)
	989.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001, ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.999% pure arsenic (As) metal dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3103a, lot #100818**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	MAJOR	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	1	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	1	Tb	<0.5	Zn	<2
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau, Certifying Officer

September 13, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

1000 Ba_00021

CPI INTERNATIONAL

7307329
ID: 1000 Ba_00021
Exp:01/19/23 Prpd:LMT Opn:08/01/22
1000 Ba

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-100041

SE Std Barium (Ba) – 1000 µg/mL

Product Lot #: 1112442-75

Matrix: 5% HNO_3

Source Material Lot #: R18E042/W21E066

Element	Certified Concentration & Uncertainty
Ba	**996.0 ± 5.0 µg/mL (w/v)**
	983.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.999% pure barium nitrate [$Ba(NO_3)_2$] dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3104a, lot #140909**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<5	Co	<10	Ge	<5	Lu	<2	P	<1000	Sb	<5	Te	<10
Al	<20	Cs	<5	Hf	<2	Mg	<50	Pb	<10	Sc	<50	Ti	<20
As	<20	Cr	<5	Hg	<5	Mn	<10	Pd	<5	Se	<20	Tl	<5
Au	<5	Cu	<10	Ho	<2	Mo	<5	Pr	<2	Si	<1000	Tm	<2
B	<50	Dy	<2	In	nd	Na	<250	Pt	<5	Sm	<2	V	<10
Ba	MAJOR	Er	<2	Ir	<2	Nb	<5	Rb	<5	Sn	<5	W	<5
Bi	<2	Eu	<2	K	<250	Nd	<2	Re	<2	Sr	11	Y	<5
Ca	<250	Fe	<100	La	13	Ni	<20	Rh	<5	Ta	<5	Yb	<2
Cd	<5	Ga	<5	Li	<20	Os	<5	Ru	<5	Tb	<5	Zn	<2
Ce	<2	Gd	<2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

July 19, 2022
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard
Santa Rosa, CA 95403
P: 707.525.5788
P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P
1013BG Amsterdam
The Netherlands
P: +31 20 638 05 97
F: +31 20 420 28 36

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

1000 Cd_00015

7084656
ID: 1000 Cd_00015
Exp:09/24/23 Prpd:LRD Opn:03/07/22
1000 Cd CPI

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Cadmium (Cd) – 1000 µg/mL

Matrix: 5% HNO_3

Product #: TA-100081

Product Lot #: 1199704-9

Source Material Lot #: N15E017

Element	Certified Concentration & Uncertainty
Cd	**999.0 ± 3.0 µg/mL (w/v)**
	994.0 ± 3.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.9997% pure cadmium (Cd) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3108, lot #130116**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	8	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	4	Mn	1	Pd	0.9	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	0.7	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	MAJOR	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	3
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

February 24, 2022
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

1000 Cr_00015

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Chromium (Cr) – 1000 µg/mL

Matrix: 5% HNO_3

6969388
ID: 1000 Cr_00015
Exp:03/21/23 Prpd:PNS Opn:12/01/21
1000 Cr CPI

Product #: TA-1000121

Lot #: 1011874-115

Source Material Lot #: 1008672

Element	Certified Concentration & Uncertainty
Cr	1000 ± 3 µg/mL (w/v)
	992 ± 3 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.996% pure chromium (Cr) metal dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3112a, lot #030730.** The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	MAJOR	Hg	2	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	2	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	2
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	<2
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

September 21, 2021

Chuck Goudreau, Certifying Officer **Certification Date**

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

1000 Li_00043

Li

Standard Verification Form

Verification (New vendor or problematic Standard)	☐	Re-Verification	☑
TALS Reagent Record			
New	☐	Copied	☑
COA Reviewed against formulary report		☑	

Document instrument verification if need (Initial or re-verification):

Department	Acceptance Criteria	
	Standard Analytes	Poor Performers* and Esterified Analytes
GC/HPLC	≤ 15 %D	≤ 35 %D or ≤ 50 %D for dinoseb
GCMS/LCMS	≤ 35 %D	≤ 55 %D
MSVOA	≤ 25 %D	≤ 55 %D
Metals	≤ 8 %D	NA
Wet Chemistry	≤ 5 %D	NA

Standard Name	1000 Li	Standard ID	6557053	
Verified by	MAB	Instrument ID	METS1	
Verification Date	6/14/22	Method Reference	6010	
Reference Standard ID	7243567	Batch #	578203	
Analyte/Mix	Prepared Concentration	Verification Concentration	% Diff	Pass/Fail
See attatched				
New Expiration Date:	12/30/22	New TALS ID	7244491	

New expiration date can be no greater than ½ the designated standards shelf life from the date of re-verification. Standards can only be re-verified one time.

Comment:	

1st Level Review MAB Date: 6/20/22

2nd Level Review [illegible] Date: 6/20/22

QA Review (Re-verification only)	[illegible]	Date: 6/20/22

Attach form, supporting documentation and original CoA to new verified or re-verified standard record in TALS.

*See analytical SOP for details on poor performing analytes.

Sample Name: Li

Date: 6/14/2022 2:39:23 PM Rack:Tube: 3:12

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.723377	ppm	0.003051	0.42	1554360.911359	Y 377.433
Ag (328.068 nm)	0.060026 n	ppm	0.027340	45.55	2982.090000	Y 377.433
Al (167.019 nm)	0.006117	ppm	0.004034	65.96	1.670920	Y_R 377.433
Al H (396.152 nm)	-0.055798 u	ppm	0.005478	9.82	14.172908	Y_R 377.433
As (188.980 nm)	0.000701 u	ppm	0.001341	> 100.00	-2.847550	Y 242.219
B (249.678 nm)	0.035649	ppm	0.004499	12.62	1028.040000	Y 242.219
Ba (493.408 nm)	0.000166 u	ppm	0.000328	> 100.00	74.939000	Y_R 488.368
Be (234.861 nm)	0.000035	ppm	0.000010	29.94	-22.647900	Y_R 488.368
Bi (223.061 nm)	0.035718	ppm	0.005951	16.66	108.332000	Y 377.433
Ca (315.887 nm)	0.016417	ppm	0.006344	38.64	-5.225336	Y_R 377.433
Cd (214.439 nm)	0.000047 u	ppm	0.000052	> 100.00	-4.383480	Y 377.433
Co (228.615 nm)	-0.000153 u	ppm	0.000101	65.79	-17.889200	Y 242.219
Cr (205.560 nm)	0.000098	ppm	0.000127	> 100.00	1.537170	Y 377.433
Cu (324.754 nm)	0.003436	ppm	0.000171	4.96	1429.090000	Y 377.433
Fe (238.204 nm)	0.012048	ppm	0.001650	13.70	62.723079	Y_R 377.433
Fe H (259.940 nm)	-0.218120 u	ppm	0.001636	0.75	39.083900	Y_R 377.433
K (766.491 nm)	0.782369	ppm	0.101064	12.92	64.000300	Y_R2 488.368
Li (670.783 nm)	0.978662	ppm	0.007348	0.75	30629.000000	Y_R2 488.368
Mg (279.078 nm)	0.054324	ppm	0.028554	52.56	340.893000	Y 377.433
Mn (257.610 nm)	0.000148	ppm	0.000013	8.83	75.602800	Y 377.433
Mo (202.032 nm)	0.000332 u	ppm	0.000336	> 100.00	5.899930	Y 377.433
Na (589.592 nm)	0.228503	ppm	0.026711	11.69	2071.540000	Y_R2 488.368
Na H (589.593 nm)	-0.096198 u	ppm	0.071996	74.84	6768.473169	Y_R 488.368
Ni (231.604 nm)	-0.000240 u	ppm	0.000393	> 100.00	1.540340	Y 377.433
P (213.618 nm)	-0.002277 u	ppm	0.002310	> 100.00	7.395750	Y 242.219
Pb (220.353 nm)	0.001480	ppm	0.000650	43.89	-2.441540	Y 242.219
S (181.972 nm)	-0.000496 u	ppm	0.001217	> 100.00	3.506411	Y 377.433
Sb (206.834 nm)	0.000050 u	ppm	0.001060	> 100.00	-2.717430	Y 377.433
Se (196.026 nm)	-0.000862 u	ppm	0.001987	> 100.00	6.009260	Y 242.219
Si (288.158 nm)	0.000630 u	ppm	0.000916	> 100.00	754.751000	Y 377.433
Sn (189.925 nm)	0.001801	ppm	0.000576	31.97	8.656810	Y 377.433
Sr (421.552 nm)	-0.000050 u	ppm	0.000054	> 100.00	28.915212	Y_R 488.368
Th (288.505 nm)	-0.004658 u	ppm	0.000612	13.14	71.837400	Y 377.433
Ti (336.122 nm)	0.000265	ppm	0.000033	12.31	-133.498000	Y 377.433
Tl (190.794 nm)	0.000515 u	ppm	0.000705	> 100.00	-1.937670	Y 377.433
U (409.013 nm)	0.005072	ppm	0.002860	56.38	2.911690	Y 377.433
V (292.401 nm)	0.000137	ppm	0.000049	35.97	9.505770	Y 377.433
Zn (206.200 nm)	0.003206	ppm	0.001275	39.76	22.941100	Y 377.433
Zr (343.823 nm)	0.062022	ppm	0.006641	10.71	8710.300000	Y 377.433

98%

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-1000291

SE Std Lithium (Li) – 1000 µg/mL

Product Lot #: 1094768-5

Matrix: 5% HNO_3

Source Material Lot #: 1084156

6557053
ID: 1000 Li_00042
Exp:06/30/22 Prpd:LMT Opn:02/24/21
1000 Li CPI

Element	Certified Concentration & Uncertainty
Li	993 ± 5 µg/mL (w/v)
	983 ± 5 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.999% pure lithium carbonate (Li_2CO_3) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3129a, lot #100714**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	42	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	27	Cs	0.6	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	44	Pt	<0.5	Sm	<0.2	V	<1
Ba	2	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	0.7	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	2	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	MAJOR	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	3
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

December 31, 2020
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard
Santa Rosa, CA 95403
P: 707.525.5788
P: 800.878.7654
F: 707.545.7901

www.cpiinternational.com

Europe
Nieuwe Hemweg 7P
1013BG Amsterdam
The Netherlands
P: +31 20 638 05 97
F: +31 20 420 28 36

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

1000 Pb_00029

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

SE Std Lead (Pb) – 1000 µg/mL

Matrix: 5% HNO_3

6969194
ID: 1000 Pb_00029
Exp:04/15/23 Prod:PNS Opn:12/01/21
1000 Pb CPI

Product #: TA-1000281

Product Lot #: 981329-210

Source Material Lot #: U28D031

Element	Certified Concentration & Uncertainty
Pb	1009 ± 2 µg/mL (w/v)
	1003 ± 2 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001, ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.999% pure lead (Pb) metal dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3128, lot #101026.** The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	1	Hf	<0.2	Mg	<5	Pb	MAJOR	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	<0.5	Mn	<1	Pd	<0.5	Se	<2	Tl	0.9
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	<2
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

October 15, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

1000 Se_00024

CPI INTERNATIONAL

7396306
ID: 1000 Se_00024
Exp:03/27/24 Prpd:LRD Opn:10/06/22
1000 Se CPI

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-1000491

SE Std Selenium (Se) – 1000 µg/mL

Product Lot #: 1135995-76

Matrix: 5% HNO_3

Source Material Lot #: SEV042018A1

Element	Certified Concentration & Uncertainty
Se	1010 ± 7 µg/mL (w/v)
	1001 ± 7 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.999% pure selenium (Se) dissolved in high purity nitric acid (HNO_3) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3149, lot #100901**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<0.5	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	0.9	Te	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mg	<5	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	2	Hg	<0.5	Mn	<1	Pd	<0.5	Se	MAJOR	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	<2
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

September 27, 2022
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

1000 Zr_00023

CPI INTERNATIONAL

6884103
ID: 1000 Zr_00023
Exp: 01/22/23 Prpd: LRD
1000 Zr CPI

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: S4400-1000691

Zirconium (Zr) – 1000 µg/mL

Lot #: 1097984-16

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty
Zr	991.0 ± 4.0 µg/mL (w/v)
	984.0 ± 4.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034, ISO/IEC 17025 and ISO 9001**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.994% pure zirconium dinitrate oxide hydrate ($N_2O_7Zr{\cdot}xH_2O$). The solution was diluted with filtered (0.22um), 18 M-ohm water and stabilized with the appropriate high-purity acid as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3169, lot #130920**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	18	Co	<1	Ge	<0.5	Lu	2	P	<100	Sb	<0.5	Te	<1
Al	21	Cs	<0.5	Hf	28	Mg	<5	Pb	<1	Sc	<10	Ti	<2
As	<2	Cr	2	Hg	<0.5	Mn	<1	Pd	<0.5	Se	13	Tl	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<100	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	2	Rb	<0.5	Sn	22	W	<0.5
Bi	<0.2	Eu	<0.2	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	<25	Fe	20	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	0.7	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	<2
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

July 22, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

10000 S_00016

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Sulfur (S) – 10,000 µg/mL

Matrix: H_2O

7064817

ID: 10000 S_00016
Exp:08/07/23 Prpd:LRD Opn:02/21/22
10000 Sulfur CPI

Product #: S4400-10M544

Lot #: 1154439-6

Element	Certified Concentration & Uncertainty
S	10,009 ± 54 µg/mL (w/v)
	9824 ± 53 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034, ISO/IEC 17025 and ISO 9001**. This CRM was prepared to a nominal concentration of 10,000 µg/mL by gravimetric methods using 99.999% pure Ammonium Sulfate [$(NH_4)_2SO_4$]. The solution was diluted with filtered (0.22um), 18 M-ohm water and stabilized with the appropriate high-purity acid as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3154, lot #892205.** The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<5	Co	<10	Ge	<5	Lu	<2	P	<50	Sb	<5	Te	<10
Al	<20	Cs	33	Hf	<2	Mg	<50	Pb	<10	Sc	<50	Ti	<20
As	<20	Cr	8	Hg	<5	Mn	<10	Pd	<5	Se	<20	Tl	<5
Au	<5	Cu	<10	Ho	<2	Mo	<5	Pr	<2	Si	<25	Tm	<2
B	<50	Dy	<2	In	nd	Na	<250	Pt	<5	Sm	<2	V	<10
Ba	<10	Er	<2	Ir	<2	Nb	<5	Rb	<0.5	Sn	<5	W	9
Bi	<2	Eu	<2	K	330	Nd	<2	Re	<2	Sr	<10	Y	<5
Ca	<250	Fe	<100	La	<5	Ni	<20	Rh	<5	Ta	<5	Yb	<2
Cd	<5	Ga	<5	Li	<20	Os	<5	Ru	<5	Tb	<5	Zn	<20
Ce	<2	Gd	<2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

February 7, 2022
Certification Date

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

10000 Th_00027

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous RM

Thorium (Th) – 10,000 µg/mL

Matrix: 3% HNO_3

7084654
ID: 10000 Th_00027
Exp:09/24/23 Prpd:LRD Opn:03/07/22
10,000 Th CPI

Product #: S4400-10M591

Lot #: 1161822-1

Element	Certified Concentration & Uncertainty
Th	9971 ± 49 µg/mL (w/v)
	9064 ± 44 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (RM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This RM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to, **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This RM was prepared to a nominal concentration of 10,000 µg/mL by gravimetric methods using pure thorium nitrate [$Th(NO_3)_4$]. The solution was diluted with filtered (0.22um), 18 M-ohm water and stabilized with the appropriate high-purity acid as indicated in the listed matrix. The balances used in the preparation of this RM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable method against an alternate lot as NIST SRM is not available. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	<5	Co	<10	Ge	<5	Lu	<2	P	<1000	Sb	<5	Te	<10
Al	<20	Cs	<5	Hf	<2	Mg	<50	Pb	<10	Sc	<50	Ti	<20
As	<20	Cr	7	Hg	<5	Mn	<10	Pd	<5	Se	<20	Tl	<5
Au	<5	Cu	<10	Ho	<2	Mo	<5	Pr	5	Si	<1000	Tm	<2
B	<50	Dy	<2	In	nd	Na	<250	Pt	<5	Sm	<2	V	<10
Ba	<10	Er	<2	Ir	<2	Nb	<5	Rb	<5	Sn	<5	W	<5
Bi	<2	Eu	<2	K	<250	Nd	15	Re	<2	Sr	<10	Y	<5
Ca	<250	Fe	<100	La	17	Ni	<20	Rh	<5	Ta	<5	Yb	<2
Cd	<5	Ga	<5	Li	<20	Os	<5	Ru	<5	Tb	<5	Zn	<20
Ce	31	Gd	<2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the RM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original RM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

February 24, 2022
Certification Date

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034:2016 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025:2017 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001:2015 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

CAL STD 1_00001

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

7043157
ID: ICP CAL STD 1_00012
Exp: 11/24/22 Prpd: LRD
ICP CAL STD 1 PRIMARY

Product #: TA-CAL1

ICP ICPMS CAL Mix # 1

Lot #: 1134924-1

Matrix: 5% HNO_3/tr. HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
As	99.99 ± 0.50 mg/L	Li	99.99 ± 0.50 mg/L	Si	1000 ± 5 mg/L
Ba	100.0 ± 0.5 mg/L	Mn	100.0 ± 0.5 mg/L	Sn	100.0 ± 0.5 mg/L
Be	100.0 ± 0.5 mg/L	Mo	100.0 ± 0.5 mg/L	Sr	100.0 ± 0.5 mg/L
Cd	100.0 ± 0.5 mg/L	Ni	100.0 ± 0.5 mg/L	Ti	99.99 ± 0.50 mg/L
Co	100.0 ± 0.5 mg/L	Pb	100.0 ± 0.5 mg/L	Tl	100.0 ± 0.5 mg/L
Cr	100.0 ± 0.5 mg/L	Sb	100.0 ± 0.5 mg/L	V	99.99 ± 0.50 mg/L
Cu	100.0 ± 0.5 mg/L	Se	99.98 ± 0.50 mg/L		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
As	981756	Li	1062674	Si	1004988
Ba	1052674	Mn	985851	Sn	1025087
Be	989234	Mo	175215	Sr	1065634
Cd	983033	Ni	752769	Ti	984754
Co	1084160	Pb	1035677	Tl	1059794
Cr	880115	Sb	978317	V	1035777
Cu	1063159	Se	929078		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see final page)**. The solution was stabilized using high purity nitric acid (HNO_3), trace hydrofluoric acid (HF) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see final page)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

May 24, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI international for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

CPI TCLP Spk_00005

CPI INTERNATIONAL

6801638
ID: CPI TCLP Spk_00005
Exp:01/19/23 Prpd:CJB Opn:08/16/21
TCLP Spike from CPI

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-MAY19-DEN1

Custom Guide 34 TCLP Spiking Solution

Lot #: 10098101-3

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	100.0 ± 0.5 µg/mL	Cd	100.0 ± 0.5 µg/mL	Pb	499.7 ± 2.5 µg/mL
As	299.9 ± 1.5 µg/mL	Cr	499.9 ± 2.5 µg/mL	Se	99.99 ± 0.50 µg/mL
Ba	999.9 ± 5.0 µg/mL	Cu	200.1 ± 1.0 µg/mL		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
Ag	983032	Cd	983033	Pb	1035677
As	981756	Cr	880115	Se	1086448
Ba	1052674	Cu	1063159		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034, ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see final page).** The solution was diluted with filtered (0.22 µm), 18 M-ohm deionized water and stabilized the appropriate high-purity acid(s) as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see final page).** The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

July 19, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
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www.cpiinternational.com

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Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

Hg CPI Stock_00001

7352612
ID: Hg CPI Stock_00001
Exp:09/19/23 Prpd:CEH Opn:09/19/22
Hg ICV Stock CPI 1000ppm

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: S4400-1000331

Mercury (Hg) – 1000 µg/mL

Lot #: 1141387-41

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty
Hg	991.0 ± 5.0 µg/mL (w/v)
	976.0 ± 5.0 µg/g (w/w)

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034, ISO/IEC 17025 and ISO 9001**. This CRM was prepared to a nominal concentration of 1000 µg/mL by gravimetric methods using 99.999% pure mercury (Hg). The solution was diluted with filtered (0.22um), 18 M-ohm water and stabilized with the appropriate high-purity acid as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentration and uncertainty were determined using the "High Performance ICP-OES" protocol developed by NIST, and both the certified concentration and uncertainty values are traceable to **NIST SRM 3133, lot #160921**. The uncertainty associated with the certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Indicative Values: ICP-MS was used to determine trace metal concentrations for this product (nd = not determined).

Trace Concentrations (µg/L)

Ag	2	Co	<1	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	4	Cs	<0.5	Hf	<0.2	Mg	14	Pb	<1	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	MAJOR	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	<0.5	Cu	1	Ho	<0.2	Mo	<0.5	Pr	<0.2	Si	<10	Tm	<0.2
B	<5	Dy	<0.2	In	nd	Na	<25	Pt	<0.5	Sm	<0.2	V	<1
Ba	<1	Er	<0.2	Ir	<0.2	Nb	<0.5	Rb	<0.5	Sn	<0.5	W	<0.5
Bi	<0.2	Eu	0.3	K	<25	Nd	<0.2	Re	<0.2	Sr	<1	Y	<0.5
Ca	126	Fe	<10	La	<0.5	Ni	<2	Rh	<0.5	Ta	<0.5	Yb	<0.2
Cd	<0.5	Ga	<0.5	Li	<2	Os	<0.5	Ru	<0.5	Tb	<0.5	Zn	<2
Ce	<0.2	Gd	<0.2										

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

May 27, 2022
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
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1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
    - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

Reagent

Hg EE 1000ppm_00006

hps Distributed by environmental express
7221 Investment Drive • North Charleston, SC 29418 • 843.767.7900
info@highpuritystandards.com • highpuritystandards.com

7352603
ID: Hg EE 1000ppm_00006
Exp:09/07/23 Prpd:CEH Opn:09/07/22
EE Hg 1000ppm Primary Sto

Certificate of Analysis

Certified Reference Material

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER
ISO 17034:2016 (RMP) Accreditation Certificate Number AR-1436

Product Description: Mercury

Product Number:	**HP100033-1-100**
Lot Number:	**2213850-100**
Matrix:	2% HNO3
Density:	1.014 g/mL ± 0.002 g/mL @ 21.5°C ± 0.3°C

Certified Value:

Element	µg/mL	SRM ID
Hg	1000 ± 6	3133

The Certified value is based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.
* Refer to Traceability Information, Section 4

Uncertified Values:

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot via ICP-OES/ICP-MS analysis. The values are reported in µg/L.

Ag	7	Cu	<0.02	La	<0.02	Pt	<0.02	Te	<0.02
Al	<0.05	Dy	<0.02	Li	<0.02	Rb	<1	Th	<0.02
As	na	Er	<0.02	Lu	<0.02	Re	<0.02	Ti	<0.02
Au	<0.02	Eu	<0.02	Mg	<0.9	Rh	<0.02	Tl	<0.02
B	<1	Fe	<1	Mn	<0.8	Ru	<0.9	Tm	<0.02
Ba	<0.02	Ga	<0.02	Mo	<2	Sb	<0.02	U	<0.05
Be	<0.02	Gd	<0.02	Na	<3	Sc	<0.02	V	<0.05
Bi	<0.02	Ge	<0.02	Nb	<0.02	Se	<9	W	<0.02
Ca	<1	Hf	<0.02	Nd	<0.02	Si	<5	Y	<0.02
Cd	<0.02	Hg	M	Ni	<1	Sm	<0.02	Yb	<0.02
Ce	<0.02	Ho	<0.02	Os	<0.02	Sn	<0.5	Zn	<0.02
Co	<0.05	In	<0.02	Pb	<0.05	Sr	<0.02	Zr	<0.02
Cr	<0.05	Ir	<0.02	Pd	<0.02	Ta	<0.02		
Cs	na	K	<1	Pr	<0.02	Tb	<0.02		

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for eighteen months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: July 2022
Expiration Date: January 31, 2024
Certificate Issue Date: May 26, 2022

Moven Mututuvari
Moven Mututuvari, Ph. D, VP Manufacturing

Preparation Information:

This Certified Reference Material is prepared using **99.9993%** pure **Mercury Metal** which was purchased from a qualified vendor per ISO 9001 guidelines and assayed by analytical methods for conformity prior to use. This standard was manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. Stability of this product is based upon rigorous short-term and long-term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If, during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

Homogeneity:

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO 17034 and ISO Guide 35.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

1. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in 'NIST Weights and Measures Measurement Assurance Program' with a certificate of measurement traceability to NIST primary standards. The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.
2. **Volumetric Device**
   The calibrations of volumetric vessels are verified using the ASTM method E542.
3. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.
4. **Calibration Standards**
   The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If an SRM is not available, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

Reagent

ICP CAL STD 4_00011

CAL 4

Standard Verification Form

Verification (New vendor or problematic Standard)	☐	Re-Verification	☑
TALS Reagent Record			
New	☐	Copied	☑
COA Reviewed against formulary report		☑	

Document instrument verification if need (Initial or re-verification):		
Department	**Acceptance Criteria**	
	Standard Analytes	**Poor Performers* and Esterified Analytes**
GC/HPLC	≤ 15 %D	≤ 35 %D or ≤ 50 %D for dinoseb
GCMS/LCMS	≤ 35 %D	≤ 55 %D
MSVOA	≤ 25 %D	≤ 55 %D
Metals	≤ 8 %D	NA
Wet Chemistry	≤ 5 %D	NA

Standard Name	ICP CAL STD 4	Standard ID	7201209/7201210/6557466	
Verified by	MAB	Instrument ID	MET-51	
Verification Date	6/14/22	Method Reference	6010	
Reference Standard ID	ICP ICV 7243585	Batch #	578203	
Analyte/Mix	Prepared Concentration	Verification Concentration	% Diff	Pass/Fail
See attatched				
	+2 MAB 6/20/22			
New Expiration Date:	12/14/22	New TALS ID	7252251 – 7252253	

New expiration date can be no greater than ½ the designated standards shelf life from the date of re-verification. Standards can only be re-verified one time.

Comment:	

1st Level Review MAB Date: 6/20/22

2nd Level Review [illegible] Date: 6/20/22

QA Review (Re-verification only)	[illegible]	Date: 6/20/22

Attach form, supporting documentation and original CoA to new verified or re-verified standard record in TALS.

*See analytical SOP for details on poor performing analytes.

51A061422.esws

Wednesday, June 15, 2022 2:35 PM

User: denmet

Workstation: DENPC582

Sample Name: 7201209@20

Date: 6/14/2022 6:34:29 PM

Rack:Tube: 1:15

Weight (g): 1

Volume (mL): 1

Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard	
(Li-A) (670.783 nm)	0.001545	ppm	0.000051	3.29	1952.018300	Y 377.433	
Ag (328.068 nm)	4.983520 nbo	ppm	0.002914	0.06	262079.000000	Y 377.433	100%
Al (167.019 nm)	4.725180 o	ppm	0.016552	0.35	2366.590000	Y_R 377.433	~~95%~~ MAB 6/20/22
Al H (396.152 nm)	5.149437	ppm	0.003357	0.07	14190.878146	Y_R 377.433	103%
As (188.980 nm)	0.000577	ppm	0.000270	46.79	-2.993720	Y 242.219	
B (249.678 nm)	4.977760 o	ppm	0.005015	0.10	130387.000000	Y 242.219	100%
Ba (493.408 nm)	0.004788	ppm	0.000324	6.76	615.409000	Y_R 488.368	
Be (234.861 nm)	-0.000079 u	ppm	0.000021	26.04	374.739000	Y_R 488.368	
Bi (223.061 nm)	10.099800 o	ppm	0.005607	0.06	25195.300000	Y 377.433	101%
Ca (315.887 nm)	47.534466 o	ppm	0.051907	0.11	43595.154656	Y_R 377.433	95%
Cd (214.439 nm)	-0.000181 u	ppm	0.000081	44.60	5.330060	Y 377.433	
Co (228.615 nm)	-0.000469 u	ppm	0.000137	29.14	-23.678500	Y 242.219	
Cr (205.560 nm)	0.000202	ppm	0.000114	56.15	-3.419070	Y 377.433	
Cu (324.754 nm)	0.001658	ppm	0.000208	12.54	1311.070000	Y 377.433	
Fe (238.204 nm)	23.959875 o	ppm	0.024307	0.10	86113.521265	Y_R 377.433	
Fe H (259.940 nm)	25.099900	ppm	0.040244	0.16	50935.700000	Y_R 377.433	100%
K (766.491 nm)	485.911000 o	ppm	1.782990	0.37	502084.000000	Y_R2 488.368	97%
Li (670.783 nm)	-0.001075 u	ppm	0.001301	> 100.00	-1637.960000	Y_R2 488.368	
Mg (279.078 nm)	197.012000 o	ppm	0.551263	0.28	1139200.000000	Y 377.433	99%
Mn (257.610 nm)	0.000745	ppm	0.000012	1.58	218.711000	Y 377.433	
Mo (202.032 nm)	0.000380 u	ppm	0.000487	> 100.00	6.297810	Y 377.433	
Na (589.592 nm)	253.184000	ppm	1.466880	0.58	1505190.000000	Y_R2 488.368	
Na H (589.593 nm)	256.426753	ppm	0.686430	0.27	946473.752453	Y_R 488.368	103%
Ni (231.604 nm)	-0.003002 u	ppm	0.000574	19.12	-13.194200	Y 377.433	
P (213.618 nm)	0.000799 u	ppm	0.002021	> 100.00	13.608400	Y 242.219	
Pb (220.353 nm)	0.001431	ppm	0.000585	40.85	-2.386820	Y 242.219	
S (181.972 nm)	-0.006496 u	ppm	0.002001	30.81	1.039412	Y 377.433	
Sb (206.834 nm)	0.002877	ppm	0.001128	39.22	-15.331700	Y 377.433	
Se (196.026 nm)	-0.003981 u	ppm	0.003750	94.20	-0.497367	Y 242.219	
Si (288.158 nm)	0.011586	ppm	0.000167	1.45	850.250000	Y 377.433	
Sn (189.925 nm)	0.002538	ppm	0.001735	68.38	10.128200	Y 377.433	
Sr (421.552 nm)	0.001906	ppm	0.000029	1.54	466.960353	Y_R 488.368	
Th (288.505 nm)	0.013405	ppm	0.006752	50.37	122.267000	Y 377.433	
Ti (336.122 nm)	0.000131	ppm	0.000027	20.85	-4.815970	Y 377.433	
Tl (190.794 nm)	0.001036	ppm	0.000613	59.17	-1.458330	Y 377.433	
U (409.013 nm)	0.024528	ppm	0.003400	13.86	-300.529000	Y 377.433	
V (292.401 nm)	0.000106	ppm	0.000069	65.29	11.454200	Y 377.433	
Zn (206.200 nm)	4.674580 o	ppm	0.012535	0.27	23316.300000	Y 377.433	93%
Zr (343.823 nm)	4.850770 o	ppm	0.011302	0.23	681136.000000	Y 377.433	

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-FEB19-DEN1-500+

Custom ISO G34 Standard

Lot #: 10106410-3

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	100.1 ± 0.5 µg/mL	Ca	1000 ± 10 µg/mL	Na	5000 ± 50 µg/mL
Al	100.0 ± 0.5 µg/mL	Fe	500.2 ± 2.5 µg/mL	Zn	100.0 ± 0.5 µg/mL
B	100.1 ± 0.5 µg/mL	K	10,000 ± 50 µg/mL	Zr	100.2 ± 0.5 µg/mL
Bi	200.3 ± 1.0 µg/mL	Mg	4001 ± 40 µg/mL		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot#
Ag	983032	Ca	1038472	Na	1077206
Al	1077245	Fe	1034257	Zn	1025088
B	992346	K	1073557	Zr	1004984
Bi	753003	Mg	1075231		

Intended Use: This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 17034**, **ISO/IEC 17025** and **ISO 9001**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see final page)**. The solution was diluted with filtered (0.22 µm), 18 M-ohm deionized water and stabilized the appropriate high-purity acid(s) as indicated in the listed matrix. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see final page)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

December 18, 2020
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

Reagent

ICP ICV STD 4_00002

CPI INTERNATIONAL

Certificate of Analysis

Second Source Custom Standard

Catalog Number: TA-CM-FEB19-DEN1-SS
Lot Number: 220537
Manufacture Date: 06/15/22

Expiration: 01/31/2024
Matrix: 5% HNO3
Hazards: Irritant, Corrosive

Analyte	Certified Concentration (ppm)
Aluminum (Al)	100 ± 0.575
Bismuth (Bi)	200 ± 1.15
Boron (B)	100 ± 0.575
Calcium (Ca)	1000 ± 5.75
Iron (Fe)	500 ± 2.88
Magnesium (Mg)	4000 ± 23.0
Potassium (K)	10000 ± 57.5
Silver (Ag)	100 ± 0.575
Sodium (Na)	5000 ± 28.8
Zinc (Zn)	100 ± 0.575
Zirconium (Zr)	100 ± 0.575

Packaging, Storage, Instructions For Use

Store at room temperature (15-30°C).

This certified reference material (CRM) is packaged in HDPE as a whole volume ready to use sample. No secondary preparative steps are necessary. Allow to equilibrate to room temperature before use. Small aliquots should be poured out of the bottle rather than directly pipetted out of bottle in order to prevent contamination or premature degradation. This CRM was manufactured by NSI Lab Solutions following quality procedures meeting the requirements of ISO 9001, ISO 17025, and ISO 17034.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this CRM.

Method: This CRM was verified by ICP.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

CPI INTERNATIONAL

Catalog Number: TA-CM-FEB19-DEN1-SS
Lot Number: 220537

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Uncertainty

The ± uncertainty associated with the concentration is the expanded manufacturing uncertainty at 95% confidence interval (CI) with K=2.

Homogeneity

This CRM was thoroughly mixed in production and is guaranteed homogeneous.

Ewart Morris

Ewart Morris, Inorganics Technical Manager

Mark Hammersla

Mark Hammersla, President

Reagent

ICP PDS 1_00036

CPI INTERNATIONAL

Certificate of Analysis

ICP PDS 1

Catalog Number: TA-CM-OCT18-DEN3
Lot Number: 220731
Manufacture Date: 08/12/22

Expiration: 03/31/2024
Matrix: 5% HNO3
Hazards: Irritant, Corrosive

Analyte	Certified Concentration (ppm)
Aluminum (Al)	100 ± 0.575
Arsenic (As)	20.0 ± 0.115
Barium (Ba)	10.0 ± 0.058
Beryllium (Be)	5.00 ± 0.029
Cadmium (Cd)	5.00 ± 0.029
Calcium (Ca)	2000 ± 11.5
Chromium (Cr)	5.00 ± 0.029
Cobalt (Co)	5.00 ± 0.029
Copper (Cu)	5.00 ± 0.029
Iron (Fe)	100 ± 0.575
Lead (Pb)	10.0 ± 0.058
Lithium (Li)	10.0 ± 0.058
Magnesium (Mg)	2000 ± 11.5
Manganese (Mn)	5.00 ± 0.029
Nickel (Ni)	5.00 ± 0.029
Potassium (K)	2000 ± 11.5
Phosphorus (P)	200 ± 1.15
Selenium (Se)	20.0 ± 0.115
Silver (Ag)	5.00 ± 0.029
Sodium (Na)	2000 ± 11.5
Strontium (Sr)	5.00 ± 0.029
Thallium (Tl)	20.0 ± 0.115
Thorium (Th)	20.0 ± 0.115
Uranium (U)	50.0 ± 0.288
Vanadium (V)	5.00 ± 0.029
Zinc (Zn)	20.0 ± 0.115

CPI INTERNATIONAL

Catalog Number: TA-CM-OCT18-DEN3
Lot Number: 220731

Packaging, Storage, Instructions For Use

Store at room temperature (15-30°C).

This certified reference material (CRM) is packaged in HDPE as a whole volume ready to use sample. No secondary preparative steps are necessary. Allow to equilibrate to room temperature before use. Small aliquots should be poured out of the bottle rather than directly pipetted out of bottle in order to prevent contamination or premature degradation. This CRM was manufactured by NSI Lab Solutions following quality procedures meeting the requirements of ISO 9001, ISO 17025, and ISO 17034.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this CRM.

Method: This CRM was verified by ICP.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Uncertainty

The ± uncertainty associated with the concentration is the expanded manufacturing uncertainty at 95% confidence interval (CI) with K=2.

Homogeneity

This CRM was thoroughly mixed in production and is guaranteed homogeneous.

Ewart Morris

Ewart Morris, Inorganics Technical Manager

Mark Hammersla

Mark Hammersla, President

ISO 9001:2015 UL Registered Firm - Certificate # 10002343 QM15

Reagent

ICP SPK 1 IV_00001

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

7412293
ID: ICP SPK 1 IV_00001
Exp.08/05/23 Prpd LMT Opn.08/05/22
ICP PREP SPK 1 IV

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 653.01
ACCREDITED Reference Material Producer Certificate 653.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	35-EURF1
Lot Number:	T2-MEB724325
Matrix:	5% (v/v) HNO3 0.4% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon, 100 µg/mL ea: Tin, Titanium, Zirconium, Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	100.0 ± 0.8 µg/mL	Molybdenum, Mo	100.0 ± 0.7 µg/mL
Silicon, Si	1 000 ± 6 µg/mL	Tin, Sn	100.0 ± 0.7 µg/mL
Titanium, Ti	100.0 ± 0.7 µg/mL	Zirconium, Zr	100.2 ± 0.8 µg/mL

Density: 1.030 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Sb	ICP Assay	3102a	140911
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	3162a	130925
Zr	ICP Assay	3169	130920

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 22, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

ICP SPK 2 IV_00001

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

7412294
ID: ICP SPK 2 IV_00001
Exp.08/05/23 Prpd.LMT Opn.08/05/22
ICP PREP SPK 2 IV

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	35-EURF2
Lot Number:	T2-MEB724326
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Calcium, Potassium, Magnesium, Sodium,
	2 000 µg/mL ea: Sulfur, Phosphorus,
	1 000 µg/mL ea: Iron, Aluminum,
	200 µg/mL ea: Boron,
	100 µg/mL ea: Barium, Beryllium, Arsenic, Cadmium, Cobalt, Chromium, Copper, Lithium, Nickel, Manganese, Lead, Selenium, Strontium, Thallium, Vanadium, Zinc,
	5 µg/mL ea: Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 4 µg/mL	Arsenic, As	100.0 ± 0.9 µg/mL
Barium, Ba	100.0 ± 0.4 µg/mL	Beryllium, Be	100.0 ± 0.5 µg/mL
Boron, B	200.0 ± 1.2 µg/mL	Cadmium, Cd	100.0 ± 0.4 µg/mL
Calcium, Ca	5 000 ± 22 µg/mL	Chromium, Cr	100.0 ± 0.8 µg/mL
Cobalt, Co	100.0 ± 0.6 µg/mL	Copper, Cu	100.0 ± 0.5 µg/mL
Iron, Fe	1 000 ± 4 µg/mL	Lead, Pb	100.0 ± 0.6 µg/mL
Lithium, Li	100.0 ± 0.4 µg/mL	Magnesium, Mg	5 000 ± 20 µg/mL
Manganese, Mn	100.0 ± 0.5 µg/mL	Nickel, Ni	100.0 ± 0.5 µg/mL
Phosphorus, P	2 000 ± 9 µg/mL	Potassium, K	5 001 ± 22 µg/mL
Selenium, Se	100.0 ± 0.7 µg/mL	Silver, Ag	4.999 ± 0.034 µg/mL
Sodium, Na	4 999 ± 23 µg/mL	Strontium, Sr	100.0 ± 0.4 µg/mL
Sulfur, S	2 000 ± 10 µg/mL	Thallium, Tl	100.0 ± 0.5 µg/mL
Vanadium, V	100.0 ± 0.5 µg/mL	Zinc, Zn	100.0 ± 0.5 µg/mL

Density: 1.107 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
B	ICP Assay	3107	190605
Ba	ICP Assay	3104a	140909
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Calculated		See Sec. 4.2
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	Traceable to 3152A	S2-NA700842
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Sr	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928

Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 23, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- September 23, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

Icp stk ICSA_00037

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com
tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-ICS-A
Lot Number:	P2-MEB688011
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Aluminum, Calcium, Magnesium, 2 000 µg/mL ea: Iron

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**4 993 ± 16 µg/mL**	**Calcium, Ca**	**4 995 ± 20 µg/mL**
Iron, Fe	**1 997 ± 8 µg/mL**	**Magnesium, Mg**	**4 993 ± 20 µg/mL**

Density: 1.082 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001300	M	Eu	<	0.000110	O	Na		0.051000	M	Se	<	0.011000	M	Zn	<	0.003300
s	Al	<		s	Fe	<		M	Nb	<	0.000110	O	Si		0.067000	M	Zr	<	0.001300
M	As		0.002100	M	Ga	<	0.003800	M	Nd	<	0.000510	M	Sm	<	0.000110				
M	Au	<	0.000110	M	Gd	<	0.000110	O	Ni		0.005200	M	Sn	<	0.000760				
M	B		0.009100	O	Ge		0.110000	M	Os	<	0.000320	O	Sr		0.030000				
M	Ba	<	0.000870	M	Hf	<	0.000220	O	P		0.049000	M	Ta	<	0.000110				
M	Be	<	0.000870	M	Hg	<	0.000440	M	Pb		0.000870	M	Tb	<	0.000110				
M	Bi	<	0.000110	M	Ho	<	0.000110	M	Pd	<	0.000440	M	Te	<	0.000980				
s	Ca	<		M	In	<	0.000760	M	Pr	<	0.000110	M	Th	<	0.000110				
M	Cd	<	0.000110	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti	<	0.002500				
M	Ce	<	0.000650	O	K		0.033000	M	Rb	<	0.000910	M	Tl	<	0.000110				
O	Co		0.003900	M	La	<	0.000440	M	Re	<	0.003300	M	Tm	<	0.000110				
O	Cr		0.012000	O	Li		0.012000	M	Rh	<	0.000110	M	U	<	0.002000				
M	Cs	<	0.000330	M	Lu	<	0.000110	M	Ru	<	0.000110	M	V	<	0.001100				
M	Cu		0.007000	s	Mg	<		O	S		0.280000	M	W	<	0.000640				
M	Dy	<	0.000760	M	Mn	<	0.027000	M	Sb	<	0.000440	M	Y	<	0.000440				
M	Er	<	0.000110	M	Mo	<	0.002500	M	Sc	<	0.003700	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 26, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 26, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Reagent

MS icvMIX-1_00006

CPI INTERNATIONAL

6836948
ID: MS icvMIX-1_00005
Exp:02/26/23 Prpd:LMT Opn:09/13/21
ICP-MS ICV Std 1 CPI new

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CAL1-SS

ICP ICPMS CAL Mix # 1

Lot #: 1128717-1

Matrix: 5% HNO_3/tr. HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
As	99.80 ± 0.50 mg/L	Li	99.89 ± 0.50 mg/L	Si	999.9 ± 5.0 mg/L
Ba	99.98 ± 0.50 mg/L	Mn	99.86 ± 0.50 mg/L	Sn	99.86 ± 0.50 mg/L
Be	100.0 ± 0.5 mg/L	Mo	99.96 ± 0.50 mg/L	Sr	99.97 ± 0.50 mg/L
Cd	99.97 ± 0.50 mg/L	Ni	100.0 ± 0.5 mg/L	Ti	99.99 ± 0.50 mg/L
Co	99.99 ± 0.50 mg/L	Pb	99.98 ± 0.50 mg/L	Tl	100.0 ± 0.5 mg/L
Cr	99.98 ± 0.50 mg/L	Sb	99.97 ± 0.50 mg/L	V	99.89 ± 0.50 mg/L
Cu	99.97 ± 0.50 mg/L	Se	99.99 ± 0.50 mg/L		

Source Material Lot # Chart

Element	Source Material Lot #	Element	Source Material Lot #	Element	Source Material Lot #
As	AM18-92ASX	Li	AY18-54LIX	Si	AQ18-71SIX
Ba	AO18-63BAX	Mn	AO18-58MNX	Sn	AI18-100SNX
Be	AQ18-86BEX	Mo	2011930	Sr	AP18-82SRX
Cd	AP18-90CDX	Ni	AQ18-40NIX	Ti	1929801
Co	AQ18-68COX	Pb	AQ18-65PBX	Tl	1927327
Cr	AL18-66CRX	Sb	1916107	V	AM18-32VX
Cu	AV18-101CUX	Se	AO18-110SEX		

Intended Use: This solution is intended for use as a second source certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

Certification & Traceability: This CRM was manufactured, processed, and/or certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO 17034**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see final page)**. The solution was stabilized using high purity nitric acid (HNO_3), trace hydrofluoric acid (HF) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see final page)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

Period of Validity: CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

August 26, 2021
Certification Date

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

Health and Safety Information: Refer to the Safety Data Sheet (SDS).

Homogeneity: This solution was determined to be homogeneous by procedures consistent with the requirements of ISO 17034 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with internal procedures for the assessment of homogeneity and stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

Quality Manual Rev: No. 7, July 24, 2019

Further Information: Please contact CPI International for further information about this material.

Quality Certifications: This material was prepared under a quality management system that is registered/accredited to the following:

- ISO 17034 Accredited: Reference Materials Producer, A2LA Certificate No. 2848.02 – General Requirements for the Competence of Reference Material Producers
  - ISO 17034 references additional requirements specified in ISO Guide 31 and ISO Guide 35
- ISO/IEC 17025 Accredited: Chemical Testing, A2LA Certificate No. 2848.01 – General Requirements for the Competence of Testing and Calibration Laboratories
- ISO 9001 Certified: Quality Management Systems, Certificate Registration No. 56 100 19560101 – Requirements *(Registrar: TUV NORD)*

This CRM is traceable to the following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	-	Hf	3122	-	S	3154	2770
Al	3101a	-	Hg	3133	3133	Sb	3102a	3102a
As	3103a	3103a	Ho	3123a	-	Sc	3148a	3148a
Au	3121	-	In	3124a	3124a	Se	3149	3149
B	3107	3107	K	3141a	3141a	Si	3150	-
Ba	3104a	-	La	3127a	3127a	Sm	3147a	-
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	-
Bi	3106	3106	Lu	3130a	-	SO_4^{-2}	3181	-
Br^-	3184	-	Mg	3131a	3131a	Sr	3153a	3153a
Ca	3109a	3109a	Mn	3132	3132	Ta	3155	-
Cd	3108	-	Mo	3134	3134	Tb	3157a	-
Ce	3110	3110	Na	3152a	-	Te	3156	-
Cl^-	3182	1818a	Nb	3137	-	Th	-	-
Co	3113	3113	Nd	3135a	-	Ti	3162a	3162a
Cr	3112a	-	Ni	3136	-	Tl	3158	3158
Cs	3111a	-	NO_3^-	3185	-	Tm	3160a	-
Cu	3114	-	P	3139a	3139a	U	3164	-
Dy	3115a	-	Pb	3128	-	V	3165	-
Er	3116a	-	Pd	3138	-	W	3163	3163
Eu	3117a	-	PO_4^{-3}	3186	-	Y	3167a	3167a
F^-	3183	-	Pr	3142a	-	Yb	3166a	-
Fe	3126a	-	Pt	3140	3140	Zn	3168a	3168a
Ga	3119a	-	Rb	3145a	-	Zr	3169	3169
Gd	3118a	-	Re	3143	-			
Ge	3120a	-	Rh	3144	3144			

METALS

COVER PAGE
METALS

Lab Name: Eurofins Denver Job Number: 280-168095-1

SDG No.:

Project: Basin School Chemicals ER - Basin, WY

Client Sample ID	Lab Sample ID
BS-DISPOSAL-01	280-168095-3

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TCLP

Client Sample ID: BS-DISPOSAL-01

Lab Sample ID: 280-168095-3

Lab Name: Eurofins Denver

Job No.: 280-168095-1

SDG ID.:

Matrix: Solid

Date Sampled: 10/19/2022 15:50

Reporting Basis: WET

Date Received: 10/21/2022 15:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.060	0.50	0.0098	mg/L	J		1	6010D
7440-38-2	Arsenic	0.022	0.50	0.022	mg/L	U		1	6010D
7440-39-3	Barium	0.74	1.0	0.0041	mg/L	J		1	6010D
7440-43-9	Cadmium	0.00065	0.10	0.00065	mg/L	U		1	6010D
7440-47-3	Chromium	19	0.50	0.0033	mg/L			1	6010D
7439-92-1	Lead	0.068	0.50	0.014	mg/L	J	B	1	6010D
7782-49-2	Selenium	0.038	0.10	0.032	mg/L	J		1	6010D
7439-97-6	Mercury	0.00018	0.0060	0.00018	mg/L	U	F1	1	7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

ICV Source: ICP ICV_01517 Concentration Units: mg/L

CCV Source: ICP CCV_00667

Analyte	ICV 280-591586/7 10/27/2022 16:27				CCV 280-591586/17 10/27/2022 17:08				CCV 280-591586/31 10/27/2022 18:05			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	0.237	J	0.250	95	0.502		0.500	100	0.503		0.500	101
Barium	0.253	J	0.250	101	0.504	J	0.500	101	0.509	J	0.500	102
Cadmium	0.255		0.250	102	0.523		0.500	105	0.526		0.500	105
Chromium	0.258	J	0.250	103	0.522		0.500	104	0.525		0.500	105
Lead	0.254	J	0.250	102	0.508		0.500	102	0.506		0.500	101
Selenium	0.245		0.250	98	0.501		0.500	100	0.502		0.500	100
Silver	0.248	J	0.250	99	0.503		0.500	101	0.506		0.500	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

ICV Source: Hg Biwk ICV_00371 Concentration Units: mg/L

CCV Source: Hg Daily Spk_03218

Analyte	ICV 280-591442/9-A 10/27/2022 17:44				CCV 280-591442/12-A 10/27/2022 17:52				CCV 280-591442/12-A 10/27/2022 18:38			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00376		0.00400	94	0.00469		0.00500	94	0.00459		0.00500	92

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

ICV Source: Hg Biwk ICV_00371 Concentration Units: mg/L

CCV Source: Hg Daily Spk_03218

Analyte	CCV 280-591442/12-A 10/27/2022 19:04				CCV 280-591442/12-A 10/27/2022 19:36							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00470		0.00500	94	0.00472		0.00500	94				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

ICV Source: Hg Biwk ICV_00371 Concentration Units: mg/L

CCV Source: Hg Daily Spk_03218

Analyte	ICV 280-591442/9-A 10/28/2022 14:31				CCV 280-591442/12-A 10/28/2022 14:51				CCV 280-591442/12-A 10/28/2022 15:02			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00400		0.00400	100	0.00498		0.00500	100	0.00472		0.00500	94

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Method: 6010D Instrument ID: MT_051

Lab Sample ID: CRI 280-591586/12 Concentration Units: mg/L

CRQL Check Standard Source: ICP LLCCV_03498

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	0.0100	0.0103	J	103	50-150
Arsenic	0.0150	0.0130	J	87	50-150
Barium	0.0100	0.0103	J	103	50-150
Cadmium	0.00500	0.00522	J	104	50-150
Chromium	0.0100	0.0105	J	105	50-150
Lead	0.00900	0.00811	J	90	50-150
Selenium	0.0200	0.0193	J	96	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Method: 7470A Instrument ID: MT_036

Lab Sample ID: CRA 280-591442/11-A Concentration Units: mg/L

CRQL Check Standard Source: Hg Daily Spk_03218

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.000200	0.000244	J	122	50-150

Lab Sample ID: CRA 280-591442/11-A Concentration Units: mg/L

CRQL Check Standard Source: Hg Daily Spk_03218

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.000200	0.000226	J	113	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 280-591586/11 10/27/2022 16:43		CCB 280-591586/18 10/27/2022 17:12		CCB 280-591586/32 10/27/2022 18:09			
		Found	C	Found	C	Found	C	Found	C
Arsenic	0.50	0.0044	U	0.0044	U	0.0044	U		
Barium	1.0	0.00082	U	0.00082	U	0.00082	U		
Cadmium	0.10	0.00013	U	0.00013	U	0.00013	U		
Chromium	0.50	0.00066	U	0.00066	U	0.00066	U		
Lead	0.50	0.0028	U	0.0028	U	0.0028	U		
Selenium	0.10	0.0064	U	0.0064	U	0.0064	U		
Silver	0.50	0.0020	U	0.0020	U	0.0020	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 280-591442/10-A 10/27/2022 17:47		CCB 280-591442/13-A 10/27/2022 17:54		CCB 280-591442/13-A 10/27/2022 18:41		CCB 280-591442/13-A 10/27/2022 19:06	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.0020	0.000060	U	0.000060	U	0.000060	U	0.000060	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 280-591442/13-A 10/27/2022 19:38							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.0020	0.000060	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 280-591442/10-A 10/28/2022 14:34		CCB 280-591442/13-A 10/28/2022 14:54		CCB 280-591442/13-A 10/28/2022 15:04			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.0020	0.000060	U	0.000060	U	0.000060	U		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: LB2 280-591261/1-B

Instrument Code: MT_051 Batch No.: 591586

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	0.0098	U		6010D
7440-38-2	Arsenic	0.022	U		6010D
7440-39-3	Barium	0.0041	U		6010D
7440-43-9	Cadmium	0.00065	U		6010D
7440-47-3	Chromium	0.0033	U		6010D
7439-92-1	Lead	0.0285	J		6010D
7782-49-2	Selenium	0.032	U		6010D

FORM III-IN

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: LB2 280-591261/1-C

Instrument Code: MT_036 Batch No.: 591623

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.0000647	J		7470A

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Lab Sample ID: ICSA 280-591586/13 Instrument ID: MT_051

Lab File ID: 51A102722E.csv ICS Source: ICP ICSA_00238

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**-0.0041**	
Barium		**0.0000**	
Cadmium		**-0.0005**	
Chromium		**0.0024**	
Lead		**-0.0018**	
Selenium		**-0.0049**	
Silver		**0.0009**	
Aluminum	*500*	*519*	*104*
Antimony		*0.0099*	
Beryllium		*0.0001*	
Boron		*0.0031*	
Calcium	*500*	*501*	*100*
Cobalt		*-0.0016*	
Copper		*-0.0023*	
Iron	*200*	*198*	*99*
Li		*0.0059*	
Magnesium	*500*	*527*	*105*
Manganese		*0.0004*	
Molybdenum		*-0.0001*	
Nickel		*-0.0054*	
P		*0.0151*	
Potassium		*0.111*	
Silicon		*0.0241*	
Sodium		*0.106*	
Strontium		*0.0048*	
Sulfur		*0.0123*	
Thallium		*0.0007*	
Thorium		*0.0036*	
Tin		*0.0016*	
Titanium		*-0.0004*	
Vanadium		*0.0012*	
Zinc		*0.0014*	
Zirconium		*0.0000*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Lab Sample ID: ICSAB 280-591586/14 Instrument ID: MT_051

Lab File ID: 51A102722E.csv ICS Source: ICP ICSAB_00272

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Arsenic	**1.00**	**1.05**	**105**
Barium	**1.00**	**1.04**	**104**
Cadmium	**1.00**	**0.997**	**100**
Chromium	**1.00**	**1.04**	**104**
Lead	**1.00**	**0.987**	**99**
Selenium	**1.00**	**1.03**	**103**
Silver	**1.00**	**1.14**	**114**
Aluminum	*500*	*521*	*104*
Antimony	*1.00*	*1.15*	*115*
Beryllium	*0.500*	*0.525*	*105*
Boron	*10.0*	*10.6*	*106*
Calcium	*500*	*500*	*100*
Cobalt	*1.00*	*0.950*	*95*
Copper	*1.00*	*1.11*	*111*
Iron	*200*	*198*	*99*
Li	*1.00*	*1.08*	*108*
Magnesium	*500*	*528*	*106*
Manganese	*1.00*	*1.03*	*103*
Molybdenum	*1.00*	*1.03*	*103*
Nickel	*1.00*	*0.987*	*99*
P	*10.0*	*10.3*	*103*
Potassium	*10.0*	*11.2*	*112*
Silicon	*10.0*	*10.5*	*105*
Sodium	*10.0*	*11.3*	*113*
Strontium	*1.00*	*1.02*	*102*
Sulfur	*10.0*	*10.5*	*105*
Thallium	*1.00*	*0.997*	*100*
Thorium	*2.00*	*2.11*	*105*
Tin	*1.00*	*1.02*	*102*
Titanium	*1.00*	*1.04*	*104*
Vanadium	*1.00*	*1.04*	*104*
Zinc	*1.00*	*0.984*	*98*
Zirconium	*1.00*	*0.848*	*85*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TCLP

Client ID: BS-DISPOSAL-01 MS

Lab ID: 280-168095-3 MS

Lab Name: Eurofins Denver

Job No.: 280-168095-1

SDG No.:

Matrix: Solid

Concentration Units: mg/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	1.41		0.060	J	1.25	108	75-120		6010D
Arsenic	8.34		0.022	U	8.00	104	75-125		6010D
Barium	16.2		0.74	J	15.0	103	75-120		6010D
Cadmium	5.91		0.00065	U	6.00	99	75-121		6010D
Chromium	28.0		19		10.0	90	75-123		6010D
Lead	10.0		0.068	J	10.0	100	75-119		6010D
Selenium	6.31		0.038	J	6.00	104	75-121		6010D
Mercury	0.00018	U	0.00018	U	0.0150	0	80-120	F1	7470A
Mercury	0.0018	U	0.0018	U	0.0150	0	80-120	F1	7470A
Mercury	0.018	U	0.018	U	0.0150	NC	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TCLP

Client ID: BS-DISPOSAL-01 MSD

Lab ID: 280-168095-3 MSD

Lab Name: Eurofins Denver

Job No.: 280-168095-1

SDG No.:

Matrix: Solid

Concentration Units: mg/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Silver	1.41		1.25	108	75-120	0	20		6010D
Arsenic	8.34		8.00	104	75-125	0	20		6010D
Barium	16.2		15.0	103	75-120	0	20		6010D
Cadmium	5.89		6.00	98	75-121	0	20		6010D
Chromium	28.3		10.0	93	75-123	1	20		6010D
Lead	10.0		10.0	99	75-119	0	20		6010D
Selenium	6.24		6.00	103	75-121	1	20		6010D
Mercury	0.00018	U	0.0150	0	80-120	NC	10	F1	7470A
Mercury	0.0018	U	0.0150	0	80-120	NC	10	F1	7470A
Mercury	0.018	U	0.0150	NC	80-120	NC	10		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - TCLP

Client ID: BS-DISPOSAL-01 PDS
Lab ID: 280-168095-3 PDS
Lab Name: Eurofins Denver
Job No.: 280-168095-1
SDG No.:
Matrix: Solid
Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	0.313	J	0.060	J	0.250	101	80-120		6010D
Arsenic	1.08		0.022	U	1.00	108	80-120		6010D
Barium	1.26		0.74	J	0.500	105	80-120		6010D
Cadmium	0.261		0.00065	U	0.250	104	80-120		6010D
Chromium	19.0		19		0.250	NC	80-120		6010D
Lead	0.585		0.068	J	0.500	103	80-120		6010D
Selenium	1.11		0.038	J	1.00	108	80-120		6010D
Mercury	0.00018	U	0.00018	U	0.0150	-2	85-115	W	7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TCLP

Lab ID: LCS 280-591261/2-B

Lab Name: Eurofins Denver Job No.: 280-168095-1

Sample Matrix: Solid LCS Source: ICP SPK 2 IV_00001

Analyte	Solid(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	1.25	1.27		101	80	120		6010D
Arsenic	8.00	8.05		101	80	118		6010D
Barium	15.0	15.5		103	80	120		6010D
Cadmium	6.00	6.12		102	80	117		6010D
Chromium	10.0	10.4		104	80	120		6010D
Lead	10.0	10.2		102	80	120		6010D
Selenium	6.00	5.98		100	80	119		6010D

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TCLP

Lab ID: LCS 280-591261/2-C

Lab Name: Eurofins Denver Job No.: 280-168095-1

Sample Matrix: Solid LCS Source: Hg Daily Spk_03218

Analyte	Solid(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.00500	0.00532		106	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TCLP

Lab ID: 280-168095-3

SDG No:

Lab Name: Eurofins Denver Job No: 280-168095-1

Matrix: Solid Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	0.060	J	0.0785	J	NC		6010D
Arsenic	0.022	U	0.11	U	NC		6010D
Barium	0.74	J	0.614	J	17	V	6010D
Cadmium	0.00065	U	0.0033	U	NC		6010D
Chromium	19		21.8		14	V	6010D
Lead	0.068	J	0.070	U	NC		6010D
Selenium	0.038	J	0.16	U	NC		6010D

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: Eurofins Denver Job Number: 280-168095-1

SDG Number:

Matrix: Solid Instrument ID: MT_051

Method: 6010D MDL Date: 03/29/2022 14:49

Prep Method: 3010A

Leach Method: 1311

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Arsenic	189	0.5	0.022
Barium	455.4	1	0.0041
Cadmium	228.8	0.1	0.00065
Chromium	205.5	0.5	0.0033
Lead	220.3	0.5	0.014
Selenium	196	0.1	0.032
Silver	328	0.5	0.0098

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TCLP

Lab Name: Eurofins Denver Job Number: 280-168095-1

SDG Number:

Matrix: Solid Instrument ID: MT_051

Method: 6010D XMDL Date: 03/29/2022 14:51

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Arsenic	189	0.5	0.022
Barium	455.4	1	0.0041
Cadmium	228.8	0.1	0.00065
Chromium	205.5	0.5	0.0033
Lead	220.3	0.5	0.014
Selenium	196	0.1	0.032
Silver	328	0.5	0.0098

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: Eurofins Denver Job Number: 280-168095-1

SDG Number:

Matrix: Solid Instrument ID: MT_036

Method: 7470A MDL Date: 04/11/2022 16:43

Prep Method: 7470A

Leach Method: 1311

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Mercury	253.7	0.002	0.00006

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TCLP

Lab Name: Eurofins Denver Job Number: 280-168095-1

SDG Number:

Matrix: Solid Instrument ID: MT_036

Method: 7470A XMDL Date: 04/11/2022 16:43

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Mercury		0.002	0.00006

FORM IX - IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Denver Job No: 280-168095-1

SDG No.:

Instrument ID: MT_051 Date: 10/11/2019 08:29

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Silver		2.5	6010D
Arsenic		10	6010D
Barium		25	6010D
Cadmium		25	6010D
Chromium		10	6010D
Lead		50	6010D
Selenium		10	6010D

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB2 280-591261/1-B	10/26/2022 23:06	591384		10	50
LCS 280-591261/2-B	10/26/2022 23:06	591384		10	50
280-168095-3	10/26/2022 23:06	591384		10	50
280-168095-3 MS	10/26/2022 23:06	591384		10	50
280-168095-3 MSD	10/26/2022 23:06	591384		10	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB2 280-591261/1-C	10/27/2022 12:30	591441		30	50
LCS 280-591261/2-C	10/27/2022 12:30	591441		30	50
280-168095-3	10/27/2022 12:30	591441		10	50
280-168095-3 MS	10/27/2022 12:30	591441		10	50
280-168095-3 MSD	10/27/2022 12:30	591441		10	50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Instrument ID: MT_051 Analysis Method: 6010D

Start Date: 10/27/2022 13:06 End Date: 10/27/2022 23:02

Lab Sample Id	D/F	Type	Time	Analytes																							
				Ag	As	Ba	Cd	Cr	Pb	Se																	
ICIS 280-591586/1	1		13:06	X	X	X	X	X	X	X																	
IC 280-591586/2			13:10	X	X	X	X	X	X	X																	
IC 280-591586/3			13:14	X	X	X	X	X	X	X																	
ZZZZZZ			13:18																								
ZZZZZZ			13:22																								
ICVH 280-591586/6	1		13:26	X	X	X	X	X	X	X																	
ICV 280-591586/7	1		16:27	X	X	X	X	X	X	X																	
ICV 280-591586/8			16:31																								
CCVH 280-591586/9			16:35																								
CCV 280-591586/10			16:39																								
ICB 280-591586/11	1		16:43	X	X	X	X	X	X	X																	
CRI 280-591586/12	1		16:48	X	X	X	X	X	X	X																	
ICSA 280-591586/13	1		16:52	X	X	X	X	X	X	X																	
ICSAB 280-591586/14	1		16:56	X	X	X	X	X	X	X																	
LRA 280-591586/15			17:00																								
CCVH 280-591586/16	1		17:04	X	X	X	X	X	X	X																	
CCV 280-591586/17	1		17:08	X	X	X	X	X	X	X																	
CCB 280-591586/18	1		17:12	X	X	X	X	X	X	X																	
CCVL 280-591586/19			17:16																								
ZZZZZZ			17:20																								
ZZZZZZ			17:24																								
ZZZZZZ			17:28																								
LB2 280-591261/1-B	1	P	17:32	X	X	X	X	X	X	X																	
LCS 280-591261/2-B	1	P	17:36	X	X	X	X	X	X	X																	
280-168095-3	1	P	17:40	X	X	X	X	X	X	X																	
280-168095-3 SD	5	P	17:44	X	X	X	X	X	X	X																	
280-168095-3 MS	1	P	17:48	X	X	X	X	X	X	X																	
280-168095-3 MSD	1	P	17:52	X	X	X	X	X	X	X																	
280-168095-3 PDS	1	P	17:57	X	X	X	X	X	X	X																	
CCVH 280-591586/30	1		18:01	X	X	X	X	X	X	X																	
CCV 280-591586/31	1		18:05	X	X	X	X	X	X	X																	
CCB 280-591586/32	1		18:09	X	X	X	X	X	X	X																	
CCVL 280-591586/33			18:13																								
ZZZZZZ			18:17																								
ZZZZZZ			18:21																								
ZZZZZZ			18:25																								
ZZZZZZ			18:29																								
ZZZZZZ			18:33																								
ZZZZZZ			18:37																								
ZZZZZZ			18:41																								
ZZZZZZ			18:45																								
ZZZZZZ			18:49																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Instrument ID: MT_051 Analysis Method: 6010D

Start Date: 10/27/2022 13:06 End Date: 10/27/2022 23:02

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ZZZZZZ			18:53																									
CCVH 280-591586/44			18:57																									
CCV 280-591586/45			19:01																									
CCB 280-591586/46			19:05																									
CCVL 280-591586/47			19:10																									
ZZZZZZ			19:14																									
ZZZZZZ			19:18																									
ZZZZZZ			19:28																									
ZZZZZZ			19:32																									
ZZZZZZ			19:36																									
ZZZZZZ			19:40																									
ZZZZZZ			19:44																									
ZZZZZZ			19:48																									
ZZZZZZ			19:52																									
ZZZZZZ			19:56																									
CCVH 280-591586/58			20:00																									
CCV 280-591586/59			20:04																									
CCB 280-591586/60			20:08																									
CCVL 280-591586/61			20:12																									
ZZZZZZ			20:16																									
ZZZZZZ			20:20																									
ZZZZZZ			20:24																									
ZZZZZZ			20:28																									
ZZZZZZ			20:33																									
ZZZZZZ			20:37																									
ZZZZZZ			20:41																									
ZZZZZZ			20:45																									
ZZZZZZ			20:49																									
ZZZZZZ			20:53																									
CCVH 280-591586/72			20:57																									
CCV 280-591586/73			21:01																									
CCB 280-591586/74			21:05																									
CCVL 280-591586/75			21:09																									
ZZZZZZ			21:13																									
ZZZZZZ			21:17																									
ZZZZZZ			21:21																									
ZZZZZZ			21:25																									
ZZZZZZ			21:29																									
ZZZZZZ			21:33																									
ZZZZZZ			21:37																									
ZZZZZZ			21:41																									
ZZZZZZ			21:45																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Instrument ID: MT_051 Analysis Method: 6010D

Start Date: 10/27/2022 13:06 End Date: 10/27/2022 23:02

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Cd	Cr	Pb	Se																		
ZZZZZZ			21:50																									
CCVH 280-591586/86			21:54																									
CCV 280-591586/87			21:58																									
CCB 280-591586/88			22:02																									
CCVL 280-591586/89			22:06																									
ZZZZZZ			22:10																									
ZZZZZZ			22:14																									
ZZZZZZ			22:18																									
CCVH 280-591586/93			22:50																									
CCV 280-591586/94			22:54																									
CCB 280-591586/95			22:58																									
CCVL 280-591586/96			23:02																									

Prep Types:
P = TCLP

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Instrument ID: MT_036 Analysis Method: 7470A

Start Date: 10/27/2022 17:22 End Date: 10/27/2022 19:38

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
STD0 280-591623/1 IC			17:22	X																							
STD1 280-591623/2 IC			17:24	X																							
STD2 280-591623/3 IC			17:27	X																							
STD3 280-591623/4 IC			17:30	X																							
STD4 280-591623/5 IC			17:32	X																							
STD5 280-591623/6 IC			17:35	X																							
STD6 280-591623/7 IC			17:37	X																							
STD7 280-591623/8 IC			17:40	X																							
ICV 280-591442/9-A	1		17:44	X																							
ICB 280-591442/10-A	1		17:47	X																							
CRA 280-591442/11-A	1		17:49	X																							
CCV 280-591442/12-A	1		17:52	X																							
CCB 280-591442/13-A	1		17:54	X																							
LB2 280-591261/1-C	1	P	17:57	X																							
LCS 280-591261/2-C	1	P	17:59	X																							
280-168095-3	1	P	18:23	X																							
280-168095-3 MS	1	P	18:26	X																							
280-168095-3 MSD	1	P	18:28	X																							
ZZZZZZ			18:31																								
ZZZZZZ			18:33																								
ZZZZZZ			18:36																								
CCV 280-591442/12-A	1		18:38	X																							
CCB 280-591442/13-A	1		18:41	X																							
ZZZZZZ			18:43																								
ZZZZZZ			18:46																								
ZZZZZZ			18:48																								
ZZZZZZ			18:51																								
ZZZZZZ			18:53																								
ZZZZZZ			18:56																								
ZZZZZZ			18:58																								
ZZZZZZ			19:01																								
CCV 280-591442/12-A	1		19:04	X																							
CCB 280-591442/13-A	1		19:06	X																							
ZZZZZZ			19:09																								
ZZZZZZ			19:12																								
280-168095-3 MS	10	P	19:14	X																							
280-168095-3 MSD	10	P	19:17	X																							
ZZZZZZ			19:19																								
ZZZZZZ			19:22																								
ZZZZZZ			19:26																								
280-168095-3 MS	100	P	19:28	X																							
280-168095-3 MSD	100	P	19:31	X																							

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Instrument ID: MT_036 Analysis Method: 7470A

Start Date: 10/27/2022 17:22 End Date: 10/27/2022 19:38

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
ZZZZZZ			19:33																								
CCV 280-591442/12-A	1		19:36	X																							
CCB 280-591442/13-A	1		19:38	X																							

Prep Types:
P = TCLP

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Instrument ID: MT_036 Analysis Method: 7470A

Start Date: 10/28/2022 12:43 End Date: 10/28/2022 15:04

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
STD0 280-591672/1 IC			12:43	X																							
STD1 280-591672/2 IC			12:45	X																							
STD2 280-591672/3 IC			12:48	X																							
STD3 280-591672/4 IC			12:51	X																							
STD4 280-591672/5 IC			12:53	X																							
STD5 280-591672/6 IC			12:56	X																							
STD6 280-591672/7 IC			12:58	X																							
STD7 280-591672/8 IC			13:01	X																							
ICV 280-591442/9-A	1		14:31	X																							
ICB 280-591442/10-A	1		14:34	X																							
CRA 280-591442/11-A	1		14:36	X																							
CCV 280-591442/12-A			14:39																								
CCV 280-591442/12-A			14:49																								
CCV 280-591442/12-A	1		14:51	X																							
CCB 280-591442/13-A	1		14:54	X																							
ZZZZZZ			14:57																								
280-168095-3 PDS	1	P	14:59	X																							
CCV 280-591442/12-A	1		15:02	X																							
CCB 280-591442/13-A	1		15:04	X																							

Prep Types:
P = TCLP

FORM XIII-IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.: Analysis Batch No.: 591586

ICP Instrument ID: MT_051 Start Date: 10/27/2022 End Date: 10/27/2022

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 242.219	Q	Element Y 377.433	Q	Element Y 488.368	Q	Element	Q	Element	Q
ICIS 280-591586/1	13:06										
ICVH 280-591586/6	13:26	99		98		100					
ICV 280-591586/7	16:27	98		96		99					
ICB 280-591586/11	16:43	98		95		98					
CRI 280-591586/12	16:48	97		95		99					
ICSA 280-591586/13	16:52	86		83		94					
ICSAB 280-591586/14	16:56	87		84		93					
CCVH 280-591586/16	17:04	96		93		100					
CCV 280-591586/17	17:08	96		93		100					
CCB 280-591586/18	17:12	97		95		101					
LB2 280-591261/1-B	17:32	100		98		105					
LCS 280-591261/2-B	17:36	95		93		100					
280-168095-3	17:40	90		88		98					
280-168095-3 SD	17:44	94		92		99					
280-168095-3 MS	17:48	89		87		97					
280-168095-3 MSD	17:52	88		86		95					
280-168095-3 PDS	17:57	89		87		96					
CCVH 280-591586/30	18:01	97		93		101					
CCV 280-591586/31	18:05	96		93		100					
CCB 280-591586/32	18:09	97		94		102					

FORM XV - IN

15A-IN
ICP INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.: Analysis Batch No.: 591586

ICP Instrument ID: MT_051 Start Date: 10/27/2022 End Date: 10/27/2022

Analyte	Wavelength	Internal Standard Used:				
		Element Y 242.219	Element Y 377.433	Element Y 377.433	Element Y 488.368	Element Y 488.368
Silver	328.068		X			
Arsenic	188.980	X				
Barium	493.408				X	
Cadmium	214.439		X			
Chromium	205.560		X			
Lead	220.353	X				
Selenium	196.026	X				
Aluminum	396.152			X		
Antimony	206.834		X			
Beryllium	234.861				X	
Boron	249.678	X				
Calcium	315.887			X		
Cobalt	228.615	X				
Copper	324.754		X			
Iron	259.940			X		
Li	670.783					X
Magnesium	279.078		X			
Manganese	257.610		X			
Molybdenum	202.032		X			
Nickel	231.604		X			
P	213.618	X				
Potassium	766.491					X
Silicon	288.158		X			
Sodium	589.592					X
Strontium	421.552				X	
Sulfur	181.972		X			
Thallium	190.794		X			
Thorium	288.505		X			
Tin	189.925		X			
Titanium	336.122		X			
Vanadium	292.401		X			
Zinc	206.200		X			
Zirconium	343.823		X			
Internal Standard Name on Instrument		Y 242.219	Y 377.433	Y_R 377.433	Y_R 488.368	Y_R2 488.368

FORM XV - IN

METALS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Batch Number: 591261 Batch Start Date: 10/26/22 00:08 Batch Analyst: Bourgery, David F

Batch Method: 1311 Batch End Date: 10/26/22 16:16

Lab Sample ID	Client Sample ID	Method Chain	Basis	ExtractFluid					
LB2 280-591261/1		1311, 3010A, 6010D		T2					
LCS 280-591261/2		1311, 3010A, 6010D		T2					
280-168095-A-3	BS-DISPOSAL-01	1311, 3010A, 6010D	P	T2					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Batch Number: 591261 Batch Start Date: 10/26/22 00:08 Batch Analyst: Bourgery, David F

Batch Method: 1311 Batch End Date: 10/26/22 16:16

Batch Notes	
Thermometer ID	311846
First Start time	10/26/22 00:08
First End time	10/26/22 16:16
Rotator ID	#1
Tumbler Rotations per Minute	30
Balance ID	42605617
pH Meter Calibration Slope	99.9
Room Temperature Thermometer ID	TCLP #2
Water Bath Thermometer ID	311846
Uncorrected Water Bath Temperature	50 Celsius
Water Bath Temperature	50 Degrees C
TCLP Fluid 1 ID	T1_0020
TCLP Fluid 1 pH	4.93
TCLP Fluid 2 ID	T2_00133
TCLP Fluid 2 pH	2.83
pH Buffer 1 ID	1111A47
pH Buffer 2 ID	1102110
pH Buffer 3 ID	M027-17
pH Buffer 4 ID	2109F59
1N HCl ID	1N HCl_00053
Uncorrected Maximum Temperature	22.9 Degrees C
Maximum Temperature	22.7 Degrees C
Uncorrected Minimum Temperature	22.0 Degrees C
Minimum Temperature	21.8 Degrees C
Analyst ID - Filtration	DB
Batch Comment	DV-OP-0011

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Analyst: DFB

Date: 10.25.22

DV-IP-0012
TCLP/SPLP Worksheet No. 1
Sample Description

eurofins | Environment Testing TestAmerica

Login No.	168095	550-192412		LB	LB2					
Sample No.	3	1								
A. Sample Description										
Number of phases	1	1								
1. Solid	X	X								
2. Liquid										
a. lighter than water										
b. water										
c. heavier than water										
B. Percent Solid Phase										
Balance ID										
1. Weight of filter (g)										
2. Weight of subsample										
a. gross weight (g)										
b. tare weight (g)										
c. net weight (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Weight of filtrate										
a. gross weight (g)										
b. tare weight (g)										
c. net weight (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d. density of filtrate (g/mL)										
4. Total weight wet solids (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Weight percent solids (wet) (%)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6. Weight percent solids (dry)										
a. gross dry weight 1 (g)										
b. gross dry weight 2 (g)										
c. percent dry solids (%)										
d. Oven Temp (observed) (°C)										
Thermometer Correction Factor										
Oven Temp Actual (°C)	0	0	0	0	0	0	0	0	0	0
7. Vol. of initial aqueous filtrate (mL)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
8. Vol. of initial organic filtrate (mL)										

Comments:

$$(\text{Weight percent dry solids, B.6.c}) = 100 \times \frac{(\text{Gross dry weight 2 or 1, B.6.b or B.6.a if B.6.a is blank}) - (\text{Weight of filter, B.1})}{(\text{Weight of subsample .B.2.c})}$$

(Net Weight of Subsample, B.2.c) = (gross weight, B.2.a) - (tare weight, B.2.b)

(Net Weight of Filtrate, B.3.c) = (gross weight, B.3.a) - (tare weight, B.3.b)

(Total weight wet solids, B.4) = (Weight subsample, B.2.c) - (Weight filtrate, B.3.c)

(Weight percent wet solids, B.5.) = 100 X (Total weight wet solids, B.4.) / (Weight of subsample, B.2.c.)

(Vol of initail filtrate, B.7) = (Weight of filtrate, B.3.c) / (Denisity of filtrate, B.3.d)

Recorder has been Downloaded 10/26/2022 3:19:23 PM

Note: All Date-Time values are in UTC -07:00 DayLight

Alarm Status

Lower	✓	OK
Upper	✓	OK

Recorder Info

Serial #: 2000144860 Model: TRIX-8 Battery: OK Trip #: 117
Description: TCLP 2 (-0.2)

Recorder Configuration

Start type :	Push button start	Temperature alarms	
Start delay :	1 Minute	Lower : 21.2 °C after 3 Consecutive	
Interval :	10 Minutes	or after 3 Accumulative	
Alert indicator :	Enabled lower & upper	Upper : 25.2 °C after 3 Consecutive	
OK indicator :	Enabled	or after 3 Accumulative	

Recorded Data

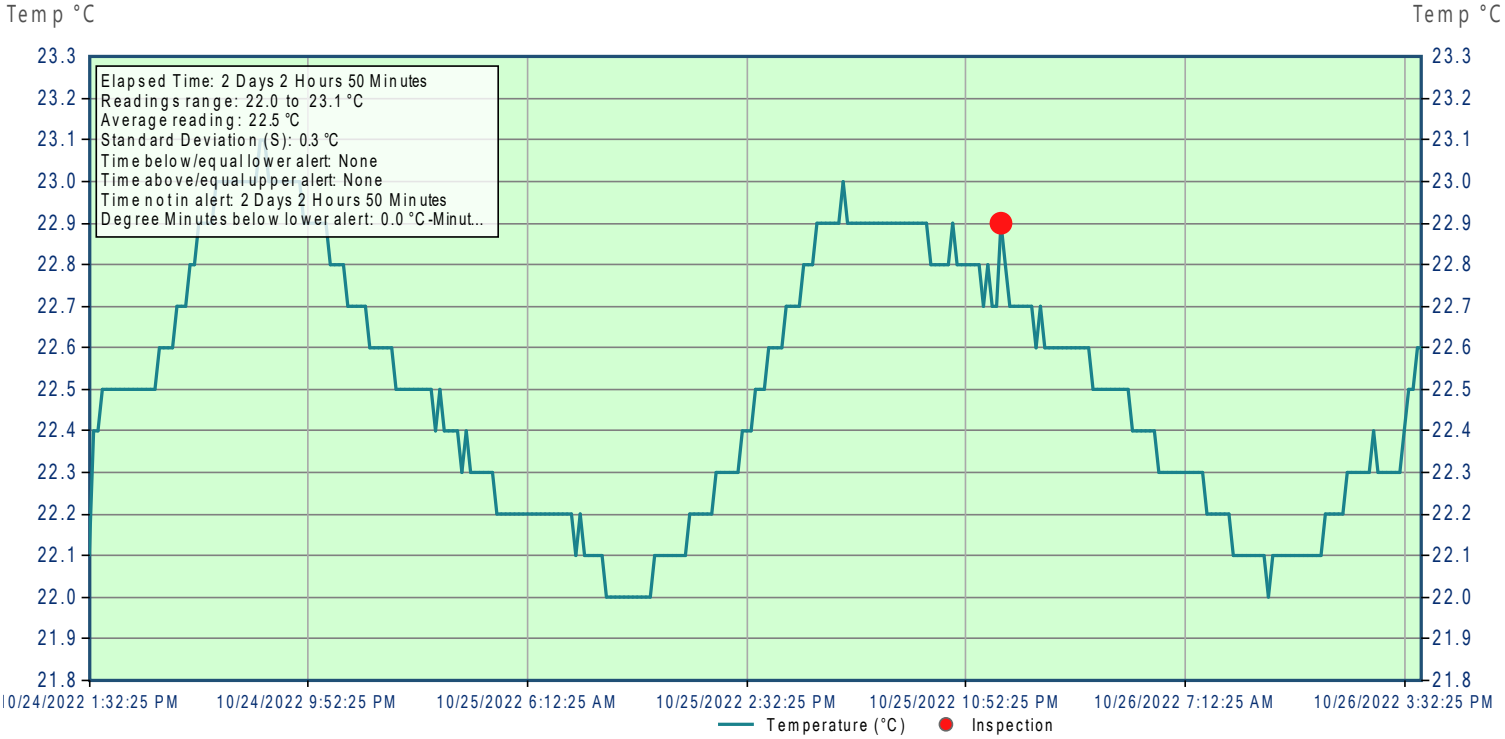
First reading :	10/24/2022 1:32:25 PM	Temperature statistics	
Last reading :	10/26/2022 4:12:25 PM	Lowest :	22.0 °C
Elapsed time :	2 Days 2 Hours 50 Minutes	@	10/25/2022 9:12:25 AM
Total readings :	305	Highest :	23.1 °C
First evaluated :	10/24/2022 1:32:25 PM	@	10/24/2022 8:02:25 PM
Last evaluated :	10/26/2022 4:12:25 PM	Average reading:	22.5 °C
Evaluated Time :	2 Days 2 Hours 50 Minutes	Standard Deviation:	0.3 °C(S)
Evaluated Readings :	305	MKT(ΔH 83.144):	22.5 °C

Lower Alarm

Triggered:	(none)
Time below/equal:	(none)
Occurrences :	0
°C - Minutes below :	0.00

Upper Alarm

Triggered:	(none)
Time above/equal:	(none)
Occurrences :	0
°C - Minutes above :	0.00



Source: TCLP 2 (-0.2)TRIX-8- 2000144860 Started 10_26_2022, Finished 10_26_20222D17121435.ltd
Created : 10/26/2022 4:20:43 PM

Events Info

10/26/2022 12:12:25 AM	Inspection

Analyst: DFB

Date: 10.25.22

DV-IP-0012
TCLP/SPLP Worksheet No. 1
Sample Description

eurofins | Environment Testing TestAmerica

Login No.	168095	550-192412		LB	LB2					
Sample No.	3	1								
A. Sample Description										
Number of phases	1	1								
1. Solid	X	X								
2. Liquid										
a. lighter than water										
b. water										
c. heavier than water										
B. Percent Solid Phase										
Balance ID										
1. Weight of filter (g)										
2. Weight of subsample										
a. gross weight (g)										
b. tare weight (g)										
c. net weight (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Weight of filtrate										
a. gross weight (g)										
b. tare weight (g)										
c. net weight (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d. density of filtrate (g/mL)										
4. Total weight wet solids (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Weight percent solids (wet) (%)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6. Weight percent solids (dry)										
a. gross dry weight 1 (g)										
b. gross dry weight 2 (g)										
c. percent dry solids (%)										
d. Oven Temp (observed) (°C)										
Thermometer Correction Factor										
Oven Temp Actual (°C)	0	0	0	0	0	0	0	0	0	0
7. Vol. of initial aqueous filtrate (mL)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
8. Vol. of initial organic filtrate (mL)										

Comments:

$$(\text{Weight percent dry solids, B.6.c}) = 100 \times \frac{(\text{Gross dry weight 2 or 1, B.6.b or B.6.a if B.6.a is blank}) - (\text{Weight of filter, B.1})}{(\text{Weight of subsample .B.2.c})}$$

(Net Weight of Subsample, B.2.c) = (gross weight, B.2.a) - (tare weight, B.2.b)

(Net Weight of Filtrate, B.3.c) = (gross weight, B.3.a) - (tare weight, B.3.b)

(Total weight wet solids, B.4) = (Weight subsample, B.2.c) - (Weight filtrate, B.3.c)

(Vol of initail filtrate, B.7) = (Weight of filtrate, B.3.c) / (Denisity of filtrate, B.3.d)

(Weight percent wet solids, B.5.) = 100 X (Total weight wet solids, B.4.) / (Weight of subsample, B.2.c.)

Recorder has been Downloaded 10/26/2022 3:19:23 PM

Note: All Date-Time values are in UTC -07:00 DayLight

Alarm Status

Lower	✓	OK
Upper	✓	OK

Recorder Info

Serial #: 2000144860 Model: TRIX-8 Battery: OK Trip #: 117
Description: TCLP 2 (-0.2)

Recorder Configuration

Start type :	Push button start	Temperature alarms	
Start delay :	1 Minute	Lower : 21.2 °C after 3 Consecutive	
Interval :	10 Minutes	or after 3 Accumulative	
Alert indicator :	Enabled lower & upper	Upper : 25.2 °C after 3 Consecutive	
OK indicator :	Enabled	or after 3 Accumulative	

Recorded Data

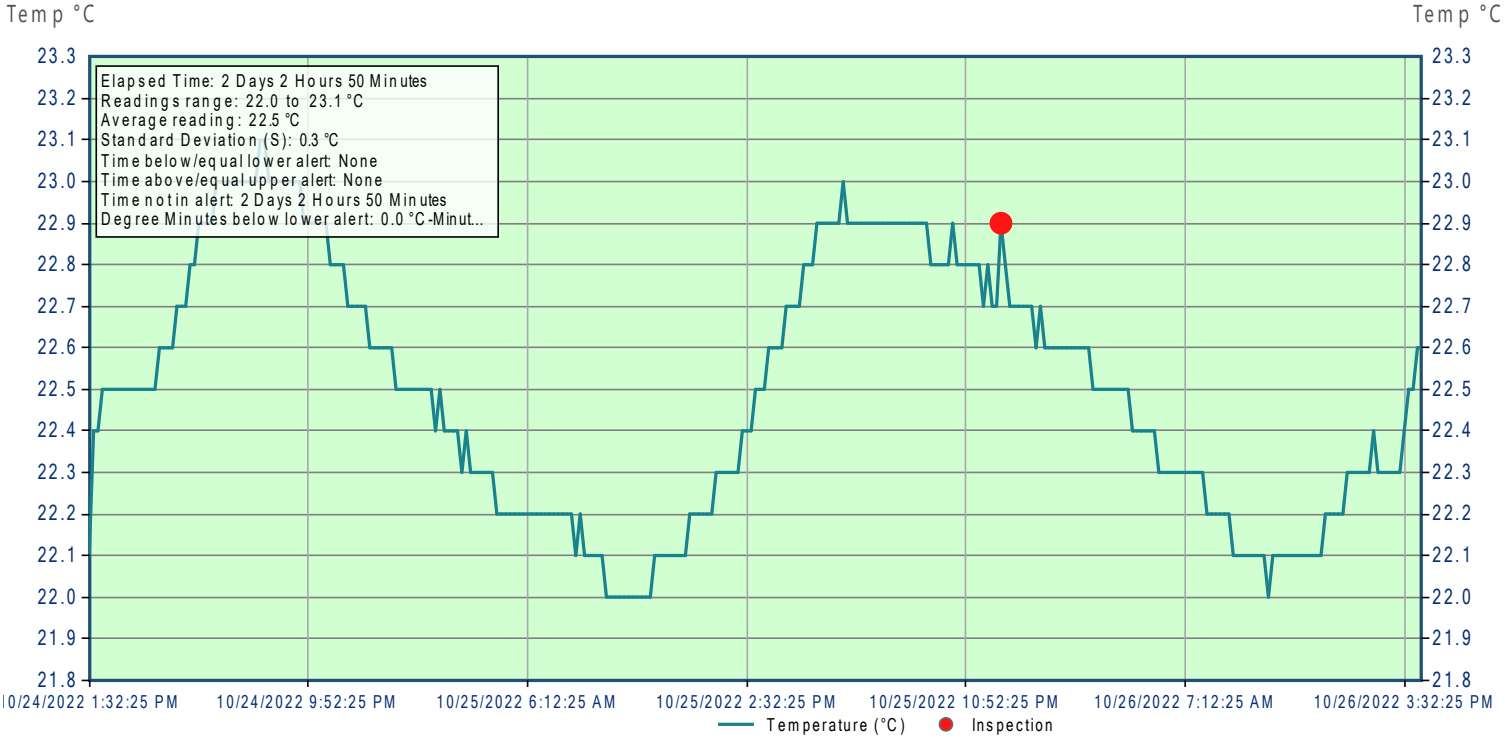
First reading :	10/24/2022 1:32:25 PM	Temperature statistics	
Last reading :	10/26/2022 4:12:25 PM	Lowest :	22.0 °C
Elapsed time :	2 Days 2 Hours 50 Minutes	@	10/25/2022 9:12:25 AM
Total readings :	305	Highest :	23.1 °C
First evaluated :	10/24/2022 1:32:25 PM	@	10/24/2022 8:02:25 PM
Last evaluated :	10/26/2022 4:12:25 PM	Average reading:	22.5 °C
Evaluated Time :	2 Days 2 Hours 50 Minutes	Standard Deviation:	0.3 °C(S)
Evaluated Readings :	305	MKT(ΔH 83.144):	22.5 °C

Lower Alarm

Triggered:	(none)
Time below/equal:	(none)
Occurrences :	0
°C - Minutes below :	0.00

Upper Alarm

Triggered:	(none)
Time above/equal:	(none)
Occurrences :	0
°C - Minutes above :	0.00



Source: TCLP 2 (-0.2)TRIX-8- 2000144860 Started 10_26_2022, Finished 10_26_20222D17121435.ltd
Created : 10/26/2022 4:20:43 PM

Events Info

10/26/2022 12:12:25 AM	Inspection

METALS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Batch Number: 591384 Batch Start Date: 10/26/22 23:06 Batch Analyst: Ratner, Maxwell C

Batch Method: 3010A Batch End Date: 10/27/22 05:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	CPI TCLP Spk 00005	ICP SPK 1 IV 00001	ICP SPK 2 IV 00001
LB2 280-591261/1-A		3010A, 6010D			10 mL	50 mL			
LCS 280-591261/2-A		3010A, 6010D			10 mL	50 mL	0.1 mL	0.5 mL	0.5 mL
280-168095-A-3-A	BS-DISPOSAL-01	3010A, 6010D	P	<2 SU	10 mL	50 mL			
280-168095-A-3-A MS	BS-DISPOSAL-01	3010A, 6010D	P	<2 SU	10 mL	50 mL	0.1 mL	0.5 mL	0.5 mL
280-168095-A-3-A MSD	BS-DISPOSAL-01	3010A, 6010D	P	<2 SU	10 mL	50 mL	0.1 mL	0.5 mL	0.5 mL

Batch Notes	
Balance ID	26950384
Digestion Tube/Cup ID	2206051
Pipette/Syringe/Dispenser ID	MET203
Analyst ID - Spike Analyst	MR
Sufficient Volume for Batch QC	YES
Hydrochloric Acid ID	218779-8/23
Nitric Acid ID	205109-8/23
Digestion Unit ID	D1
Thermometer ID	940346
Thermometer Location ID	L5
Temperature - Uncorrected - Start	94 Degrees C
Temperature - Corrected - Start	95 Degrees C
Digestion Start Time	10/26/2022 23:06
Digestion End Time	10/27/2022 05:35
Temperature - Uncorrected - End	90 Degrees C
Temperature - Corrected - End	91 Degrees C

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Batch Number: 591261 Batch Start Date: 10/26/22 00:08 Batch Analyst: Bourgery, David F

Batch Method: 1311 Batch End Date: 10/26/22 16:16

Lab Sample ID	Client Sample ID	Method Chain	Basis	ExtractFluid					
LB2 280-591261/1		1311, 7470A, 7470A		T2					
LCS 280-591261/2		1311, 7470A, 7470A		T2					
280-168095-A-3	BS-DISPOSAL-01	1311, 7470A, 7470A	P	T2					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Batch Number: 591261 Batch Start Date: 10/26/22 00:08 Batch Analyst: Bourgery, David F

Batch Method: 1311 Batch End Date: 10/26/22 16:16

Batch Notes	
Thermometer ID	311846
First Start time	10/26/22 00:08
First End time	10/26/22 16:16
Rotator ID	#1
Tumbler Rotations per Minute	30
Balance ID	42605617
pH Meter Calibration Slope	99.9
Room Temperature Thermometer ID	TCLP #2
Water Bath Thermometer ID	311846
Uncorrected Water Bath Temperature	50 Celsius
Water Bath Temperature	50 Degrees C
TCLP Fluid 1 ID	T1_0020
TCLP Fluid 1 pH	4.93
TCLP Fluid 2 ID	T2_00133
TCLP Fluid 2 pH	2.83
pH Buffer 1 ID	1111A47
pH Buffer 2 ID	1102110
pH Buffer 3 ID	M027-17
pH Buffer 4 ID	2109F59
1N HCl ID	1N HCl_00053
Uncorrected Maximum Temperature	22.9 Degrees C
Maximum Temperature	22.7 Degrees C
Uncorrected Minimum Temperature	22.0 Degrees C
Minimum Temperature	21.8 Degrees C
Analyst ID - Filtration	DB
Batch Comment	DV-OP-0011

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Analyst: DFB

Date: 10.25.22

DV-IP-0012
TCLP/SPLP Worksheet No. 1
Sample Description

eurofins | Environment Testing TestAmerica

Login No.	168095	550-192412		LB	LB2					
Sample No.	3	1								
A. Sample Description										
Number of phases	1	1								
1. Solid	X	X								
2. Liquid										
a. lighter than water										
b. water										
c. heavier than water										
B. Percent Solid Phase										
Balance ID										
1. Weight of filter (g)										
2. Weight of subsample										
a. gross weight (g)										
b. tare weight (g)										
c. net weight (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Weight of filtrate										
a. gross weight (g)										
b. tare weight (g)										
c. net weight (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d. density of filtrate (g/mL)										
4. Total weight wet solids (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Weight percent solids (wet) (%)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6. Weight percent solids (dry)										
a. gross dry weight 1 (g)										
b. gross dry weight 2 (g)										
c. percent dry solids (%)										
d. Oven Temp (observed) (°C)										
Thermometer Correction Factor										
Oven Temp Actual (°C)	0	0	0	0	0	0	0	0	0	0
7. Vol. of initial aqueous filtrate (mL)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
8. Vol. of initial organic filtrate (mL)										

Comments:

$$(\text{Weight percent dry solids, B.6.c}) = 100 \times \frac{(\text{Gross dry weight 2 or 1, B.6.b or B.6.a if B.6.a is blank}) - (\text{Weight of filter, B.1})}{(\text{Weight of subsample .B.2.c})}$$

(Net Weight of Subsample, B.2.c) = (gross weight, B.2.a) - (tare weight, B.2.b)

(Net Weight of Filtrate, B.3.c) = (gross weight, B.3.a) - (tare weight, B.3.b)

(Total weight wet solids, B.4) = (Weight subsample, B.2.c) - (Weight filtrate, B.3.c)

(Weight percent wet solids, B.5.) = 100 X (Total weight wet solids, B.4.) / (Weight of subsample, B.2.c.)

(Vol of initail filtrate, B.7) = (Weight of filtrate, B.3.c) / (Denisity of filtrate, B.3.d)

Recorder has been Downloaded 10/26/2022 3:19:23 PM

Note: All Date-Time values are in UTC -07:00 DayLight

Alarm Status

Lower	✓	OK
Upper	✓	OK

Recorder Info

Serial #: 2000144860 Model: TRIX-8 Battery: OK Trip #: 117
Description: TCLP 2 (-0.2)

Recorder Configuration

Start type :	Push button start	Temperature alarms	
Start delay :	1 Minute	Lower : 21.2 °C after 3 Consecutive	
Interval :	10 Minutes	or after 3 Accumulative	
Alert indicator :	Enabled lower & upper	Upper : 25.2 °C after 3 Consecutive	
OK indicator :	Enabled	or after 3 Accumulative	

Recorded Data

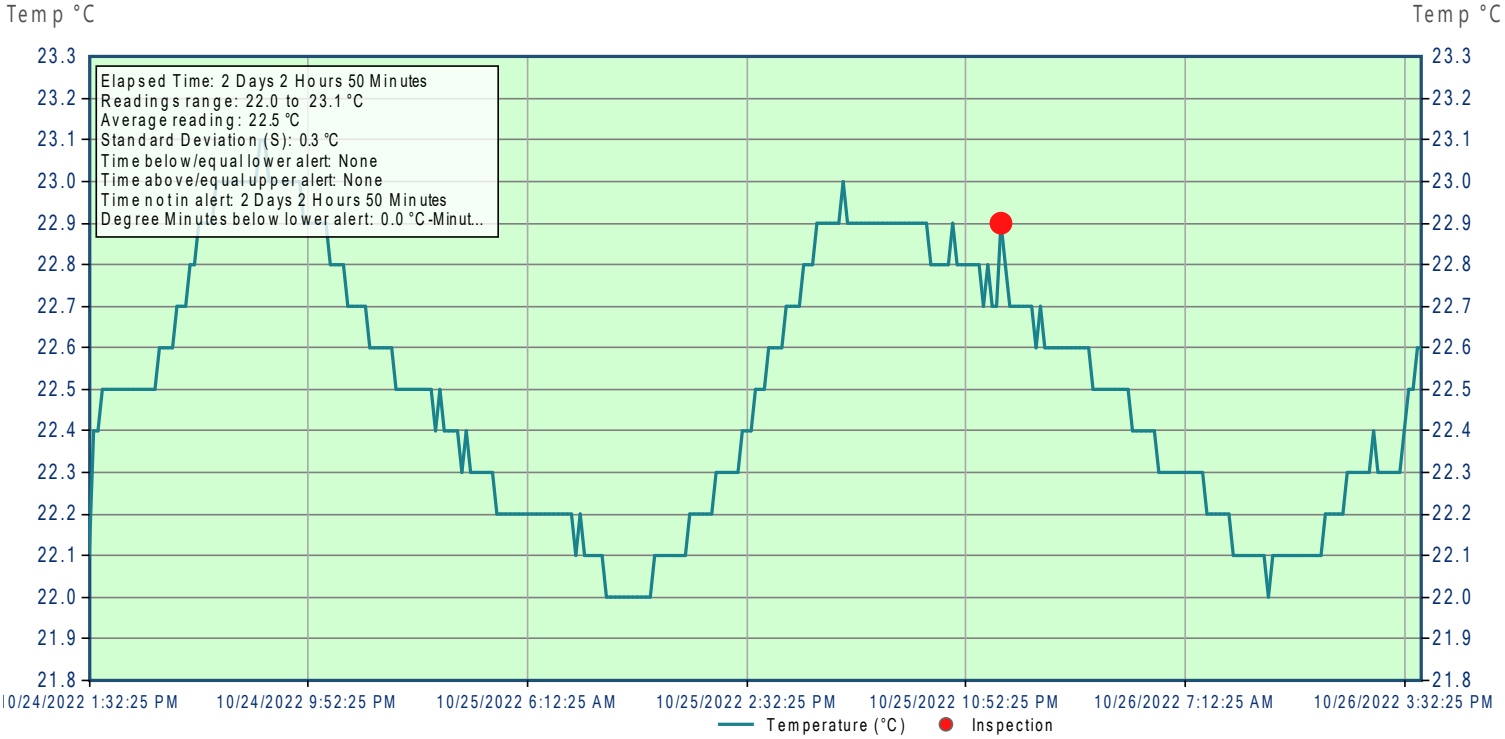
First reading :	10/24/2022 1:32:25 PM	Temperature statistics	
Last reading :	10/26/2022 4:12:25 PM	Lowest :	22.0 °C
Elapsed time :	2 Days 2 Hours 50 Minutes	@	10/25/2022 9:12:25 AM
Total readings :	305	Highest :	23.1 °C
First evaluated :	10/24/2022 1:32:25 PM	@	10/24/2022 8:02:25 PM
Last evaluated :	10/26/2022 4:12:25 PM	Average reading:	22.5 °C
Evaluated Time :	2 Days 2 Hours 50 Minutes	Standard Deviation:	0.3 °C(S)
Evaluated Readings :	305	MKT(ΔH 83.144):	22.5 °C

Lower Alarm

Triggered:	(none)
Time below/equal:	(none)
Occurrences :	0
°C - Minutes below :	0.00

Upper Alarm

Triggered:	(none)
Time above/equal:	(none)
Occurrences :	0
°C - Minutes above :	0.00



Source: TCLP 2 (-0.2)TRIX-8- 2000144860 Started 10_26_2022, Finished 10_26_20222D17121435.ltd
Created : 10/26/2022 4:20:43 PM

Events Info

10/26/2022 12:12:25 AM	Inspection

Analyst: DFB

Date: 10.25.22

DV-IP-0012
TCLP/SPLP Worksheet No. 1
Sample Description

eurofins | Environment Testing TestAmerica

Login No.	168095	550-192412		LB	LB2					
Sample No.	3	1								
A. Sample Description										
Number of phases	1	1								
1. Solid	X	X								
2. Liquid										
a. lighter than water										
b. water										
c. heavier than water										
B. Percent Solid Phase										
Balance ID										
1. Weight of filter (g)										
2. Weight of subsample										
a. gross weight (g)										
b. tare weight (g)										
c. net weight (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Weight of filtrate										
a. gross weight (g)										
b. tare weight (g)										
c. net weight (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d. density of filtrate (g/mL)										
4. Total weight wet solids (g)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Weight percent solids (wet) (%)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6. Weight percent solids (dry)										
a. gross dry weight 1 (g)										
b. gross dry weight 2 (g)										
c. percent dry solids (%)										
d. Oven Temp (observed) (°C)										
Thermometer Correction Factor										
Oven Temp Actual (°C)	0	0	0	0	0	0	0	0	0	0
7. Vol. of initial aqueous filtrate (mL)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
8. Vol. of initial organic filtrate (mL)										

Comments:

$$(\text{Weight percent dry solids, B.6.c}) = 100 \times \frac{(\text{Gross dry weight 2 or 1, B.6.b or B.6.a if B.6.a is blank}) - (\text{Weight of filter, B.1})}{(\text{Weight of subsample .B.2.c})}$$

(Net Weight of Subsample, B.2.c) = (gross weight, B.2.a) - (tare weight, B.2.b)

(Net Weight of Filtrate, B.3.c) = (gross weight, B.3.a) - (tare weight, B.3.b)

(Total weight wet solids, B.4) = (Weight subsample, B.2.c) - (Weight filtrate, B.3.c)

(Vol of initail filtrate, B.7) = (Weight of filtrate, B.3.c) / (Denisity of filtrate, B.3.d)

(Weight percent wet solids, B.5.) = 100 X (Total weight wet solids, B.4.) / (Weight of subsample, B.2.c.)

Recorder has been Downloaded 10/26/2022 3:19:23 PM

Note: All Date-Time values are in UTC -07:00 DayLight

Alarm Status

Lower	✓	OK
Upper	✓	OK

Recorder Info

Serial #: 2000144860 Model: TRIX-8 Battery: OK Trip #: 117
Description: TCLP 2 (-0.2)

Recorder Configuration

Start type :	Push button start	Temperature alarms	
Start delay :	1 Minute	Lower : 21.2 °C after 3 Consecutive	
Interval :	10 Minutes	or after 3 Accumulative	
Alert indicator :	Enabled lower & upper	Upper : 25.2 °C after 3 Consecutive	
OK indicator :	Enabled	or after 3 Accumulative	

Recorded Data

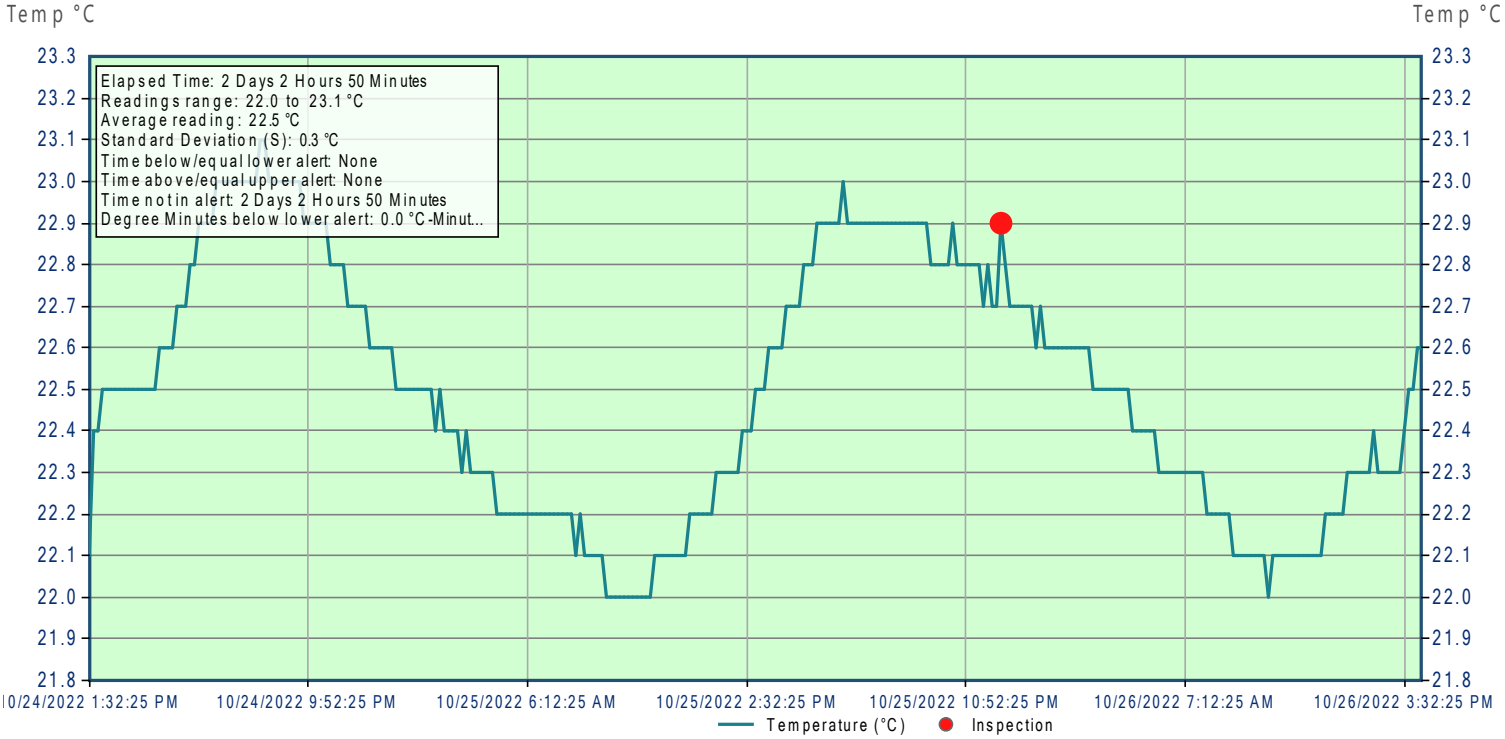
First reading :	10/24/2022 1:32:25 PM	Temperature statistics	
Last reading :	10/26/2022 4:12:25 PM	Lowest :	22.0 °C
Elapsed time :	2 Days 2 Hours 50 Minutes	@	10/25/2022 9:12:25 AM
Total readings :	305	Highest :	23.1 °C
First evaluated :	10/24/2022 1:32:25 PM	@	10/24/2022 8:02:25 PM
Last evaluated :	10/26/2022 4:12:25 PM	Average reading:	22.5 °C
Evaluated Time :	2 Days 2 Hours 50 Minutes	Standard Deviation:	0.3 °C(S)
Evaluated Readings :	305	MKT(ΔH 83.144):	22.5 °C

Lower Alarm

Triggered:	(none)
Time below/equal:	(none)
Occurrences :	0
°C - Minutes below :	0.00

Upper Alarm

Triggered:	(none)
Time above/equal:	(none)
Occurrences :	0
°C - Minutes above :	0.00



Source: TCLP 2 (-0.2)TRIX-8- 2000144860 Started 10_26_2022, Finished 10_26_20222D17121435.ltd
Created : 10/26/2022 4:20:43 PM

Events Info

10/26/2022 12:12:25 AM	Inspection

METALS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Batch Number: 591441 Batch Start Date: 10/27/22 12:30 Batch Analyst: Snowden, Kristen M

Batch Method: 7470A Batch End Date: 10/27/22 15:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Hg Daily Spk 03218		
LB2 280-591261/1-A		7470A, 7470A		<2	30 mL	50 mL			
LCS 280-591261/2-A		7470A, 7470A		<2	30 mL	50 mL	1.5 mL		
280-168095-A-3-A	BS-DISPOSAL-01	7470A, 7470A	P	<2	10 mL	50 mL			
280-168095-A-3-A MS	BS-DISPOSAL-01	7470A, 7470A	P	<2	10 mL	50 mL	1.5 mL		
280-168095-A-3-A MSD	BS-DISPOSAL-01	7470A, 7470A	P	<2	10 mL	50 mL	1.5 mL		

Batch Notes	
Digestion Tube/Cup ID	2204135
Pipette/Syringe/Dispenser ID	MET-107
Analyst ID - Spike Analyst	KS
Sufficient Volume for Batch QC	YES
Nitric Acid ID	22A562002
Sulfuric Acid ID	217904
Potassium Permanganate ID	6825686
Potassium Persulfate ID	6825702
Digestion Unit ID	12
Thermometer ID	761950
Temperature - Uncorrected - Start	94 Degrees C
Temperature - Corrected - Start	95 Degrees C
Digestion Start Time	12:30
Digestion End Time	15:15
Temperature - Uncorrected - End	94 Degrees C
Temperature - Corrected - End	95 Degrees C
Hydroxylamine ID	M014-18
Batch Comment	DV-MT-0017

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Batch Number: 591441 Batch Start Date: 10/27/22 12:30 Batch Analyst: Snowden, Kristen M

Batch Method: 7470A Batch End Date: 10/27/22 15:15

Basis	Basis Description
P	TCLP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Batch Number: 591442 Batch Start Date: 10/27/22 12:30 Batch Analyst: Snowden, Kristen M

Batch Method: 245.1 Batch End Date: 10/27/22 15:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Hg Biwk ICV 00371	Hg Daily Spk 03218	
ICV 280-591442/9		245.1, 7470A		<2	30 mL	50 mL	0.3 mL		
ICB 280-591442/10		245.1, 7470A		<2	30 mL	50 mL			
CRA 280-591442/11		245.1, 7470A		<2	30 mL	50 mL		0.06 mL	
CCV 280-591442/12		245.1, 7470A		<2	30 mL	50 mL		1.5 mL	
CCB 280-591442/13		245.1, 7470A		<2	30 mL	50 mL			

Batch Notes	
Digestion Tube/Cup ID	2204135
Pipette/Syringe/Dispenser ID	MET-107
Pipette Tip Lot ID	N/E
Analyst ID - Spike Analyst	KS
Sufficient Volume for Batch QC	YES
Nitric Acid ID	22A562002
Sulfuric Acid Lot Number	217904
Potassium Permanganate ID	6825686
Potassium Persulfate ID	6825702
Digestion Unit ID	13
Thermometer ID	940256
Temperature - Uncorrected - Start	93 Degrees C
Temperature - Corrected - Start	94 Degrees C
Digestion Start Time	10/27/2022 12:30
Digestion End Time	10/27/2022 15:15
Temperature - Uncorrected - End	93 Degrees C
Temperature - Corrected - End	94 Degrees C
Hydroxylamine ID	M014-18
Batch Comment	DV-MT-0017

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-168095-1

SDG No.:

Batch Number: 591442 Batch Start Date: 10/27/22 12:30 Batch Analyst: Snowden, Kristen M

Batch Method: 245.1 Batch End Date: 10/27/22 15:15

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Path: D:\My Results\51A102722.esws

Date created: 10/27/2022 8:40:52 AM

Instrument used: MY14490005

Software Version : 7.3.1.9507

Firmware Version : 3442

Notes:

Sample Name: icis

Date: 10/27/2022 1:06:08 PM Rack:Tube: S1:5

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000000 !	ppm	N/A	N/A	-1046.626165 !	Y 377.433
Ag (328.068 nm)	0.000000 !	ppm	N/A	N/A	-159.158000 !	Y 377.433
Al (167.019 nm)	0.000000 !	ppm	N/A	N/A	0.665050 !	Y_R 377.433
Al H (396.152 nm)	0.000000 !	ppm	N/A	N/A	16.962245 !	Y_R 377.433
As (188.980 nm)	0.000000 !	ppm	N/A	N/A	-3.553880 !	Y 242.219
B (249.678 nm)	0.000000 !	ppm	N/A	N/A	79.645400 !	Y 242.219
Ba (493.408 nm)	0.000000 !	ppm	N/A	N/A	49.129800 !	Y_R 488.368
Be (234.861 nm)	0.000000 !	ppm	N/A	N/A	-16.626000 !	Y_R 488.368
Bi (223.061 nm)	0.000000 !	ppm	N/A	N/A	17.332700 !	Y 377.433
Ca (315.887 nm)	0.000000 !	ppm	N/A	N/A	-7.779339 !	Y_R 377.433
Cd (214.439 nm)	0.000000 !	ppm	N/A	N/A	-5.495460 !	Y 377.433
Co (228.615 nm)	0.000000 !	ppm	N/A	N/A	-14.046800 !	Y 242.219
Cr (205.560 nm)	0.000000 !	ppm	N/A	N/A	7.151240 !	Y 377.433
Cu (324.754 nm)	0.000000 !	ppm	N/A	N/A	1425.750000 !	Y 377.433
Fe (238.204 nm)	0.000000 !	ppm	N/A	N/A	12.558576 !	Y_R 377.433
Fe H (259.940 nm)	0.000000 !	ppm	N/A	N/A	7.025950 !	Y_R 377.433
K (766.491 nm)	0.000000 !	ppm	N/A	N/A	-789.886000 !	Y_R2 488.368
Li (670.783 nm)	0.000000 !	ppm	N/A	N/A	-1145.290000 !	Y_R2 488.368
Mg (279.078 nm)	0.000000 !	ppm	N/A	N/A	43.407300 !	Y 377.433
Mn (257.610 nm)	0.000000 !	ppm	N/A	N/A	76.490500 !	Y 377.433
Mo (202.032 nm)	0.000000 !	ppm	N/A	N/A	5.061430 !	Y 377.433
Na (589.592 nm)	0.000000 !	ppm	N/A	N/A	218.033000 !	Y_R2 488.368
Na H (589.593 nm)	0.000000 !	ppm	N/A	N/A	622.040574 !	Y_R 488.368
Ni (231.604 nm)	0.000000 !	ppm	N/A	N/A	5.847430 !	Y 377.433
P (213.618 nm)	0.000000 !	ppm	N/A	N/A	10.597600 !	Y 242.219
Pb (220.353 nm)	0.000000 !	ppm	N/A	N/A	-3.649100 !	Y 242.219
S (181.972 nm)	0.000000 !	ppm	N/A	N/A	4.386837 !	Y 377.433
Sb (206.834 nm)	0.000000 !	ppm	N/A	N/A	-6.891690 !	Y 377.433
Se (196.026 nm)	0.000000 !	ppm	N/A	N/A	6.173400 !	Y 242.219
Si (288.158 nm)	0.000000 !	ppm	N/A	N/A	865.288000 !	Y 377.433
Sn (189.925 nm)	0.000000 !	ppm	N/A	N/A	5.351360 !	Y 377.433
Sr (421.552 nm)	0.000000 !	ppm	N/A	N/A	58.465974 !	Y_R 488.368
Th (288.505 nm)	0.000000 !	ppm	N/A	N/A	98.657600 !	Y 377.433
Ti (336.122 nm)	0.000000 !	ppm	N/A	N/A	-216.078000 !	Y 377.433
Tl (190.794 nm)	0.000000 !	ppm	N/A	N/A	-3.294440 !	Y 377.433
U (409.013 nm)	0.000000 !	ppm	N/A	N/A	-59.758600 !	Y 377.433
V (292.401 nm)	0.000000 !	ppm	N/A	N/A	20.866600 !	Y 377.433
Zn (206.200 nm)	0.000000 !	ppm	N/A	N/A	9.361630 !	Y 377.433
Zr (343.823 nm)	0.000000 !	ppm	N/A	N/A	16.383600 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.000000 !	8382.745832 !	0.000000	0.00
Y 377.433	1.000000 !	453369.556770 !	0.000000	0.00
Y_R 377.433	1.000000 !	34499.100000 !	0.000000	0.00
Y_R 488.368	1.000000 !	18842.800000 !	0.000000	0.00
Y_R2 488.368	1.000000 !	33118.768507 !	0.000000	0.00

Sample Name: ic1

Date: 10/27/2022 1:10:12 PM Rack:Tube: 3:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	1.000000 !	ppm	N/A	N/A	2304227.840200 !	Y 377.433
Ag (328.068 nm)	1.000000 !	ppm	N/A	N/A	52996.400000 !	Y 377.433
Al (167.019 nm)	1.000000 !	ppm	N/A	N/A	446.950000 !	Y_R 377.433
Al H (396.152 nm)	1.000000 !	ppm	N/A	N/A	2799.048695 !	Y_R 377.433
As (188.980 nm)	1.000000 !	ppm	N/A	N/A	1296.730000 !	Y 242.219
B (249.678 nm)	1.000000 !	ppm	N/A	N/A	27931.100000 !	Y 242.219
Ba (493.408 nm)	1.000000 !	ppm	N/A	N/A	110686.000000 !	Y_R 488.368
Be (234.861 nm)	1.000000 !	ppm	N/A	N/A	278851.000000 !	Y_R 488.368
Bi (223.061 nm)	2.000000 !	ppm	N/A	N/A	5037.120000 !	Y 377.433
Ca (315.887 nm)	10.000000 !	ppm	N/A	N/A	9249.570205 !	Y_R 377.433
Cd (214.439 nm)	1.000000 !	ppm	N/A	N/A	61153.800000 !	Y 377.433
Co (228.615 nm)	1.000000 !	ppm	N/A	N/A	18946.000000 !	Y 242.219
Cr (205.560 nm)	1.000000 !	ppm	N/A	N/A	14918.300000 !	Y 377.433
Cu (324.754 nm)	1.000000 !	ppm	N/A	N/A	72379.900000 !	Y 377.433
Fe (238.204 nm)	5.000000 !	ppm	N/A	N/A	17683.945447 !	Y_R 377.433
Fe H (259.940 nm)	5.000000 !	ppm	N/A	N/A	10429.500000 !	Y_R 377.433
K (766.491 nm)	100.000000 !	ppm	N/A	N/A	98895.200000 !	Y_R2 488.368
Li (670.783 nm)	1.000000 !	ppm	N/A	N/A	32400.700000 !	Y_R2 488.368
Mg (279.078 nm)	40.000000 !	ppm	N/A	N/A	241610.000000 !	Y 377.433
Mn (257.610 nm)	1.000000 !	ppm	N/A	N/A	242077.000000 !	Y 377.433
Mo (202.032 nm)	1.000000 !	ppm	N/A	N/A	8571.630000 !	Y 377.433
Na (589.592 nm)	50.000000 !	ppm	N/A	N/A	312350.000000 !	Y_R2 488.368
Na H (589.593 nm)	50.000000 !	ppm	N/A	N/A	197826.176764 !	Y_R 488.368
Ni (231.604 nm)	1.000000 !	ppm	N/A	N/A	7026.030000 !	Y 377.433
P (213.618 nm)		ppm	N/A	N/A	36.162700 !	Y 242.219
Pb (220.353 nm)	1.000000 !	ppm	N/A	N/A	2774.720000 !	Y 242.219
S (181.972 nm)		ppm	N/A	N/A	0.184877 !	Y 377.433
Sb (206.834 nm)	1.000000 !	ppm	N/A	N/A	2505.120000 !	Y 377.433
Se (196.026 nm)	1.000000 !	ppm	N/A	N/A	1003.260000 !	Y 242.219
Si (288.158 nm)	10.000000 !	ppm	N/A	N/A	94024.000000 !	Y 377.433
Sn (189.925 nm)	1.000000 !	ppm	N/A	N/A	2130.280000 !	Y 377.433
Sr (421.552 nm)	1.000000 !	ppm	N/A	N/A	224006.288299 !	Y_R 488.368
Th (288.505 nm)		ppm	N/A	N/A	133.282000 !	Y 377.433
Ti (336.122 nm)	1.000000 !	ppm	N/A	N/A	149094.000000 !	Y 377.433
Tl (190.794 nm)	1.000000 !	ppm	N/A	N/A	2198.780000 !	Y 377.433
U (409.013 nm)		ppm	N/A	N/A	-132.372000 !	Y 377.433
V (292.401 nm)	1.000000 !	ppm	N/A	N/A	41048.000000 !	Y 377.433
Zn (206.200 nm)	1.000000 !	ppm	N/A	N/A	5346.500000 !	Y 377.433
Zr (343.823 nm)	1.000000 !	ppm	N/A	N/A	136754.000000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.978862 !	8205.549498 !	0.003048	0.31
Y 377.433	0.973152 !	441197.480134 !	0.003022	0.31
Y_R 377.433	0.999726 !	34489.700000 !	0.004964	0.50
Y_R 488.368	0.997141 !	18789.000000 !	0.005869	0.59
Y_R2 488.368	1.000614 !	33139.113116 !	0.006353	0.63

Sample Name: ic2

Date: 10/27/2022 1:14:15 PM Rack:Tube: 3:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)		ppm	N/A	N/A	-912.904863 !	Y 377.433
Ag (328.068 nm)		ppm	N/A	N/A	-260.853000 !	Y 377.433
Al (167.019 nm)	100.000000 !	ppm	N/A	N/A	39536.400000 !	Y_R 377.433
Al H (396.152 nm)	100.000000 !	ppm	N/A	N/A	277565.523133 !	Y_R 377.433
As (188.980 nm)		ppm	N/A	N/A	-4.097460 !	Y 242.219
B (249.678 nm)		ppm	N/A	N/A	-13.963800 !	Y 242.219
Ba (493.408 nm)		ppm	N/A	N/A	243.250000 !	Y_R 488.368
Be (234.861 nm)		ppm	N/A	N/A	1685.010000 !	Y_R 488.368
Bi (223.061 nm)		ppm	N/A	N/A	16.249300 !	Y 377.433
Ca (315.887 nm)		ppm	N/A	N/A	-43.975734 !	Y_R 377.433
Cd (214.439 nm)		ppm	N/A	N/A	65.375800 !	Y 377.433
Co (228.615 nm)		ppm	N/A	N/A	-30.333100 !	Y 242.219
Cr (205.560 nm)		ppm	N/A	N/A	5.012600 !	Y 377.433
Cu (324.754 nm)		ppm	N/A	N/A	3806.480000 !	Y 377.433
Fe (238.204 nm)	100.000000 !	ppm	N/A	N/A	353093.083233 !	Y_R 377.433
Fe H (259.940 nm)	100.000000 !	ppm	N/A	N/A	208284.000000 !	Y_R 377.433
K (766.491 nm)		ppm	N/A	N/A	-583.829000 !	Y_R2 488.368
Li (670.783 nm)		ppm	N/A	N/A	-1111.580000 !	Y_R2 488.368
Mg (279.078 nm)		ppm	N/A	N/A	-427.895000 !	Y 377.433
Mn (257.610 nm)		ppm	N/A	N/A	264.975000 !	Y 377.433
Mo (202.032 nm)		ppm	N/A	N/A	24.648400 !	Y 377.433
Na (589.592 nm)	500.000000 !	ppm	N/A	N/A	3013170.000000 !	Y_R2 488.368
Na H (589.593 nm)	500.000000 !	ppm	N/A	N/A	2007997.403204 !	Y_R 488.368
Ni (231.604 nm)		ppm	N/A	N/A	9.435790 !	Y 377.433
P (213.618 nm)	10.000000 !	ppm	N/A	N/A	23596.700000 !	Y 242.219
Pb (220.353 nm)		ppm	N/A	N/A	-48.753700 !	Y 242.219
S (181.972 nm)	10.000000 !	ppm	N/A	N/A	4809.416639 !	Y 377.433
Sb (206.834 nm)		ppm	N/A	N/A	-27.322100 !	Y 377.433
Se (196.026 nm)		ppm	N/A	N/A	-0.699985 !	Y 242.219
Si (288.158 nm)		ppm	N/A	N/A	1108.830000 !	Y 377.433
Sn (189.925 nm)		ppm	N/A	N/A	9.152370 !	Y 377.433
Sr (421.552 nm)		ppm	N/A	N/A	302.348720 !	Y_R 488.368
Th (288.505 nm)	10.000000 !	ppm	N/A	N/A	28087.900000 !	Y 377.433
Ti (336.122 nm)		ppm	N/A	N/A	-7.917130 !	Y 377.433
Tl (190.794 nm)		ppm	N/A	N/A	-21.984200 !	Y 377.433
U (409.013 nm)	5.000000 !	ppm	N/A	N/A	25102.300000 !	Y 377.433
V (292.401 nm)		ppm	N/A	N/A	588.396000 !	Y 377.433
Zn (206.200 nm)		ppm	N/A	N/A	14.571700 !	Y 377.433
Zr (343.823 nm)		ppm	N/A	N/A	2387.690000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.967033 !	8106.387711 !	0.005605	0.58
Y 377.433	0.949503 !	430475.776870 !	0.005313	0.56
Y_R 377.433	0.981802 !	33871.300000 !	0.003282	0.33
Y_R 488.368	0.979853 !	18463.200000 !	0.004228	0.43
Y_R2 488.368	0.980923 !	32486.973504 !	0.003283	0.33

Sample Name: S1-7429322

Date: 10/27/2022 1:18:19 PM Rack:Tube: 3:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.995090 !	ppm	0.003539	0.36	2292909.444171 !	Y 377.433
Ag (328.068 nm)	1.000610 !	ppm	0.001950	0.19	53058.400000 !	Y 377.433
Al (167.019 nm)	1.009630 !	ppm	0.009514	0.94	453.934000 !	Y_R 377.433
Al H (396.152 nm)	1.011348 !	ppm	0.002686	0.27	2923.849873 !	Y_R 377.433
As (188.980 nm)	0.998393 !	ppm	0.004247	0.43	1294.640000 !	Y 242.219
B (249.678 nm)	1.001980 !	ppm	0.001272	0.13	28025.500000 !	Y 242.219
Ba (493.408 nm)	0.995362 !	ppm	0.005002	0.50	110172.000000 !	Y_R 488.368
Be (234.861 nm)	1.004640 !	ppm	0.003148	0.31	280168.000000 !	Y_R 488.368
Bi (223.061 nm)	2.004470 !	ppm	0.003002	0.15	5048.340000 !	Y 377.433
Ca (315.887 nm)	10.031376 !	ppm	0.031047	0.31	9279.276678 !	Y_R 377.433
Cd (214.439 nm)	1.003820 !	ppm	0.003462	0.34	61393.300000 !	Y 377.433
Co (228.615 nm)	1.002730 !	ppm	0.000874	0.09	19034.700000 !	Y 242.219
Cr (205.560 nm)	1.003740 !	ppm	0.002559	0.25	14962.200000 !	Y 377.433
Cu (324.754 nm)	1.000980 !	ppm	0.002137	0.21	72469.300000 !	Y 377.433
Fe (238.204 nm)	5.015809 !	ppm	0.009314	0.19	17739.817694 !	Y_R 377.433
Fe H (259.940 nm)	5.018280 !	ppm	0.017951	0.36	10467.600000 !	Y_R 377.433
K (766.491 nm)	100.308000 !	ppm	0.306541	0.31	99202.200000 !	Y_R2 488.368
Li (670.783 nm)	1.002230 !	ppm	0.006387	0.64	32475.500000 !	Y_R2 488.368
Mg (279.078 nm)	40.172600 !	ppm	0.081853	0.20	242644.000000 !	Y 377.433
Mn (257.610 nm)	1.001740 !	ppm	0.001333	0.13	242497.000000 !	Y 377.433
Mo (202.032 nm)	1.003160 !	ppm	0.002281	0.23	8598.660000 !	Y 377.433
Na (589.592 nm)	51.882500 !	ppm	0.278719	0.54	314347.000000 !	Y_R2 488.368
Na H (589.593 nm)	50.238342 !	ppm	0.026635	0.05	199849.499459 !	Y_R 488.368
Ni (231.604 nm)	1.002590 !	ppm	0.002113	0.21	7046.270000 !	Y 377.433
P (213.618 nm)	0.018541 S!	ppm	0.004242	22.88	54.328300 S!	Y 242.219
Pb (220.353 nm)	1.002570 !	ppm	0.000918	0.09	2777.500000 !	Y 242.219
S (181.972 nm)	-0.005424 !u	ppm	0.001130	20.82	4.062831 !	Y 377.433
Sb (206.834 nm)	1.001890 !	ppm	0.001851	0.18	2530.430000 !	Y 377.433
Se (196.026 nm)	1.000450 !	ppm	0.001038	0.10	1003.630000 !	Y 242.219
Si (288.158 nm)	10.021600 !	ppm	0.045501	0.45	94387.400000 !	Y 377.433
Sn (189.925 nm)	1.004780 !	ppm	0.003333	0.33	2140.440000 !	Y 377.433
Sr (421.552 nm)	1.001417 !	ppm	0.002120	0.21	224323.669570 !	Y_R 488.368
Th (288.505 nm)	0.044108 !	ppm	0.014395	32.63	239.186000 !	Y 377.433
Ti (336.122 nm)	1.001800 !	ppm	0.000886	0.09	149395.000000 !	Y 377.433
Tl (190.794 nm)	1.002750 !	ppm	0.002637	0.26	2201.800000 !	Y 377.433
U (409.013 nm)	0.005288 !	ppm	0.003984	75.35	-115.329000 !	Y 377.433
V (292.401 nm)	1.001000 !	ppm	0.001688	0.17	40816.400000 !	Y 377.433
Zn (206.200 nm)	1.003460 !	ppm	0.001960	0.20	5364.950000 !	Y 377.433
Zr (343.823 nm)	0.991384 !	ppm	0.002184	0.22	135591.000000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.977620 !	8195.139138 !	0.002718	0.28
Y 377.433	0.971151 !	440290.379606 !	0.002940	0.30
Y_R 377.433	0.996421 !	34375.700000 !	0.000348	0.03
Y_R 488.368	0.993916 !	18728.200000 !	0.002544	0.26
Y_R2 488.368	0.989217 !	32761.643642 !	0.002618	0.26

Sample Name: S2- 7429325

Date: 10/27/2022 1:22:23 PM Rack:Tube: 3:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000057 !	ppm	0.000015	25.79	-914.925189 !	Y 377.433
Ag (328.068 nm)	0.000834 !	ppm	0.000112	13.49	-270.131000 !	Y 377.433
Al (167.019 nm)	88.308200 !o	ppm	0.501404	0.57	39464.800000 !	Y_R 377.433
Al H (396.152 nm)	100.041736 !	ppm	0.276971	0.28	277681.571988 !	Y_R 377.433
As (188.980 nm)	-0.001969 !u	ppm	0.001494	75.92	-6.113480 !	Y 242.219
B (249.678 nm)	0.003445 !	ppm	0.000276	8.00	-19.291900 !	Y 242.219
Ba (493.408 nm)	0.001209 !	ppm	0.000144	11.87	271.347000 !	Y_R 488.368
Be (234.861 nm)	0.000577 !	ppm	0.000157	27.18	1677.330000 !	Y_R 488.368
Bi (223.061 nm)	-0.000354 S!u	ppm	0.003825	> 100.00	16.444100 S!	Y 377.433
Ca (315.887 nm)	-0.035178 !u	ppm	0.001060	3.01	-40.343596 !	Y_R 377.433
Cd (214.439 nm)	-0.000487 !u	ppm	0.000118	24.21	62.549800 !	Y 377.433
Co (228.615 nm)	-0.000588 !u	ppm	0.000190	32.25	-25.163500 !	Y 242.219
Cr (205.560 nm)	0.001510 !	ppm	0.000233	15.46	2.836400 !	Y 377.433
Cu (324.754 nm)	0.001389 !	ppm	0.000119	8.59	3809.830000 !	Y 377.433
Fe (238.204 nm)	99.909790 !o	ppm	0.061464	0.06	353121.470276 !	Y_R 377.433
Fe H (259.940 nm)	100.058000 !	ppm	0.084547	0.08	208405.000000 !	Y_R 377.433
K (766.491 nm)	0.227393 !	ppm	0.006241	2.74	-563.210000 !	Y_R2 488.368
Li (670.783 nm)	0.001457 !	ppm	0.000675	46.32	-1096.410000 !	Y_R2 488.368
Mg (279.078 nm)	-0.025236 !u	ppm	0.000760	3.01	-425.815000 !	Y 377.433
Mn (257.610 nm)	0.000519 !	ppm	0.000022	4.17	202.099000 !	Y 377.433
Mo (202.032 nm)	0.002214 !	ppm	0.000192	8.69	24.031000 !	Y 377.433
Na (589.592 nm)	503.123000 !	ppm	2.114220	0.42	3033070.000000 !	Y_R2 488.368
Na H (589.593 nm)	498.512576 !	ppm	2.696121	0.54	2002014.275282 !	Y_R 488.368
Ni (231.604 nm)	-0.001514 !u	ppm	0.000327	21.60	12.064900 !	Y 377.433
P (213.618 nm)	9.979340 !	ppm	0.002913	0.03	23548.000000 !	Y 242.219
Pb (220.353 nm)	-0.009968 !u	ppm	0.001729	17.35	-44.738400 !	Y 242.219
S (181.972 nm)	9.978446 !	ppm	0.021040	0.21	4799.062447 !	Y 377.433
Sb (206.834 nm)	0.004004 !	ppm	0.001065	26.61	-28.541900 !	Y 377.433
Se (196.026 nm)	0.009451 !	ppm	0.000716	7.57	-1.047770 !	Y 242.219
Si (288.158 nm)	0.027015 !	ppm	0.000404	1.50	1117.100000 !	Y 377.433
Sn (189.925 nm)	0.001409 !	ppm	0.000591	41.97	8.344600 !	Y 377.433
Sr (421.552 nm)	0.001002 !	ppm	0.000058	5.74	282.972152 !	Y_R 488.368
Th (288.505 nm)	9.977150 !	ppm	0.048976	0.49	28128.200000 !	Y 377.433
Ti (336.122 nm)	0.001452 !	ppm	0.000077	5.28	0.849176 !	Y 377.433
Tl (190.794 nm)	-0.005956 !u	ppm	0.000764	12.83	-19.059900 !	Y 377.433
U (409.013 nm)	4.994300 Q!	ppm	0.010958	0.22	25174.200000 Q!	Y 377.433
V (292.401 nm)	-0.001772 !u	ppm	0.000200	11.28	583.067000 !	Y 377.433
Zn (206.200 nm)	0.000772 !	ppm	0.000044	5.75	13.482300 !	Y 377.433
Zr (343.823 nm)	0.015078 !	ppm	0.000762	5.06	2378.830000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.965283 !	8091.719354 !	0.003606	0.37
Y 377.433	0.947706 !	429660.918394 !	0.003812	0.40
Y_R 377.433	0.975255 !	33645.400000 !	0.002886	0.30
Y_R 488.368	0.977106 !	18411.400000 !	0.008876	0.91
Y_R2 488.368	0.971755 !	32183.325953 !	0.005822	0.60

Sample Name: ICVH-7434562

Date: 10/27/2022 1:26:27 PM Rack:Tube: 3:5

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000028 !	ppm	0.000013	47.61	-982.003923 !	Y 377.433
Ag (328.068 nm)	0.000563 !	ppm	0.000227	40.32	-142.232000 !	Y 377.433
Al (167.019 nm)	38.490300 !o	ppm	0.173540	0.45	17221.700000 !	Y_R 377.433
Al H (396.152 nm)	39.765604 !	ppm	0.092306	0.23	110389.835791 !	Y_R 377.433
As (188.980 nm)	-0.000781 !u	ppm	0.001545	> 100.00	-4.569190 !	Y 242.219
B (249.678 nm)	0.002396 !	ppm	0.000359	14.98	-11.555900 !	Y 242.219
Ba (493.408 nm)	0.000236 !	ppm	0.000135	57.15	146.934000 !	Y_R 488.368
Be (234.861 nm)	0.000442 !	ppm	0.000033	7.51	1349.180000 !	Y_R 488.368
Bi (223.061 nm)	0.000243 !	ppm	0.000171	70.51	17.941900 !	Y 377.433
Ca (315.887 nm)	-0.011665 !u	ppm	0.009521	81.61	-18.577700 !	Y_R 377.433
Cd (214.439 nm)	-0.000284 !u	ppm	0.000053	18.66	56.418300 !	Y 377.433
Co (228.615 nm)	0.000007 !u	ppm	0.000174	> 100.00	-13.911900 !	Y 242.219
Cr (205.560 nm)	0.001082 !	ppm	0.000219	20.25	1.537670 !	Y 377.433
Cu (324.754 nm)	-0.000095 !u	ppm	0.000198	> 100.00	2254.920000 !	Y 377.433
Fe (238.204 nm)	80.950445 !o	ppm	0.264166	0.33	286113.885344 !	Y_R 377.433
Fe H (259.940 nm)	81.024500 !	ppm	0.250886	0.31	168764.000000 !	Y_R 377.433
K (766.491 nm)	0.053769 !u	ppm	0.072238	> 100.00	-736.286000 !	Y_R2 488.368
Li (670.783 nm)	0.001287 !	ppm	0.000712	55.35	-1102.110000 !	Y_R2 488.368
Mg (279.078 nm)	-0.006826 !u	ppm	0.000523	7.66	-151.962000 !	Y 377.433
Mn (257.610 nm)	0.000609 !	ppm	0.000014	2.36	223.879000 !	Y 377.433
Mo (202.032 nm)	-0.000143 !u	ppm	0.000353	> 100.00	3.832170 !	Y 377.433
Na (589.592 nm)	82.582600 !	ppm	0.265422	0.32	498030.000000 !	Y_R2 488.368
Na H (589.593 nm)	81.904631 !	ppm	0.501437	0.61	326166.504662 !	Y_R 488.368
Ni (231.604 nm)	-0.001260 !u	ppm	0.000452	35.84	10.652900 !	Y 377.433
P (213.618 nm)	3.919970 !	ppm	0.005723	0.15	9256.280000 !	Y 242.219
Pb (220.353 nm)	-0.004852 !u	ppm	0.001318	27.16	-23.363600 !	Y 242.219
S (181.972 nm)	3.849088 !	ppm	0.010385	0.27	1853.886811 !	Y 377.433
Sb (206.834 nm)	0.001177 !	ppm	0.000258	21.91	-17.775300 !	Y 377.433
Se (196.026 nm)	0.005062 !	ppm	0.003971	78.45	-2.887230 !	Y 242.219
Si (288.158 nm)	0.011731 !	ppm	0.001041	8.88	974.593000 !	Y 377.433
Sn (189.925 nm)	0.002450 !	ppm	0.000486	19.84	10.557500 !	Y 377.433
Sr (421.552 nm)	0.000065 !	ppm	0.000045	69.09	72.991703 !	Y_R 488.368
Th (288.505 nm)	2.953810 !	ppm	0.016034	0.54	8370.890000 !	Y 377.433
Ti (336.122 nm)	0.000282 !	ppm	0.000099	34.95	-173.953000 !	Y 377.433
Tl (190.794 nm)	-0.001487 !u	ppm	0.000491	33.01	-8.707910 !	Y 377.433
U (409.013 nm)	0.413783 !	ppm	0.004882	1.18	2104.910000 !	Y 377.433
V (292.401 nm)	-0.000857 !u	ppm	0.000104	12.10	242.506000 !	Y 377.433
Zn (206.200 nm)	0.000603 !	ppm	0.000436	72.31	12.582000 !	Y 377.433
Zr (343.823 nm)	0.003054 !	ppm	0.000120	3.92	677.699000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.986043 !	8265.747930 !	0.003241	0.33
Y 377.433	0.975229 !	442139.251589 !	0.003266	0.33
Y_R 377.433	1.003420 !	34617.100000 !	0.002963	0.30
Y_R 488.368	0.998364 !	18812.000000 !	0.005329	0.53
Y_R2 488.368	0.997180 !	33025.357169 !	0.005543	0.56

Sample Name: ICV-7434563

Date: 10/27/2022 4:27:47 PM Rack:Tube: 3:6

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.210359 Q!	ppm	0.000224	0.11	483887.593087 Q!	Y 377.433
Ag (328.068 nm)	0.248340 !	ppm	0.000105	0.04	13051.800000 !	Y 377.433
Al (167.019 nm)	0.263639 Q!	ppm	0.005518	2.09	119.018000 Q!	Y_R 377.433
Al H (396.152 nm)	0.251901 !u	ppm	0.004114	1.63	747.663420 !	Y_R 377.433
As (188.980 nm)	0.237085 Q!	ppm	0.002658	1.12	304.724000 Q!	Y 242.219
B (249.678 nm)	0.244496 !	ppm	0.000087	0.04	6899.070000 !	Y 242.219
Ba (493.408 nm)	0.253254 !	ppm	0.000418	0.17	28068.400000 !	Y_R 488.368
Be (234.861 nm)	0.255207 !	ppm	0.001081	0.42	71157.600000 !	Y_R 488.368
Bi (223.061 nm)	0.510403 !	ppm	0.000467	0.09	1298.390000 !	Y 377.433
Ca (315.887 nm)	2.610701 !	ppm	0.003077	0.12	2409.207590 !	Y_R 377.433
Cd (214.439 nm)	0.254840 !	ppm	0.001766	0.69	15581.900000 !	Y 377.433
Co (228.615 nm)	0.252186 !	ppm	0.000553	0.22	4776.990000 !	Y 242.219
Cr (205.560 nm)	0.257732 !	ppm	0.000116	0.05	3847.230000 !	Y 377.433
Cu (324.754 nm)	0.251218 !	ppm	0.000233	0.09	19254.800000 !	Y 377.433
Fe (238.204 nm)	1.282052 !	ppm	0.000574	0.04	4543.684535 !	Y_R 377.433
Fe H (259.940 nm)	1.293050 !u	ppm	0.003551	0.27	2709.170000 !	Y_R 377.433
K (766.491 nm)	24.803800 !	ppm	0.021460	0.09	23935.800000 !	Y_R2 488.368
Li (670.783 nm)	0.248201 !	ppm	0.001895	0.76	7180.850000 !	Y_R2 488.368
Mg (279.078 nm)	10.271000 !	ppm	0.010839	0.11	62069.700000 !	Y 377.433
Mn (257.610 nm)	0.260391 !	ppm	0.000223	0.09	63091.200000 !	Y 377.433
Mo (202.032 nm)	0.266180 Q!	ppm	0.001213	0.46	2285.310000 Q!	Y 377.433
Na (589.592 nm)	12.913900 !	ppm	0.025601	0.20	78414.800000 !	Y_R2 488.368
Na H (589.593 nm)	13.774706 Q!	ppm	0.015057	0.11	52377.452450 Q!	Y_R 488.368
Ni (231.604 nm)	0.261604 !	ppm	0.000379	0.14	1842.900000 !	Y 377.433
P (213.618 nm)	0.003571 !	ppm	0.002524	70.69	19.019700 !	Y 242.219
Pb (220.353 nm)	0.253865 !	ppm	0.000639	0.25	700.519000 !	Y 242.219
S (181.972 nm)	-0.002234 !u	ppm	0.001626	72.81	3.911061 !	Y 377.433
Sb (206.834 nm)	0.272635 Q!	ppm	0.002409	0.88	683.206000 Q!	Y 377.433
Se (196.026 nm)	0.245338 !	ppm	0.002936	1.20	250.779000 !	Y 242.219
Si (288.158 nm)	2.496360 !	ppm	0.004301	0.17	24163.000000 !	Y 377.433
Sn (189.925 nm)	0.261232 !	ppm	0.001886	0.72	560.452000 !	Y 377.433
Sr (421.552 nm)	0.247202 !	ppm	0.000342	0.14	55418.826762 !	Y_R 488.368
Th (288.505 nm)	0.004128 !	ppm	0.001216	29.45	114.801000 !	Y 377.433
Ti (336.122 nm)	0.257586 !	ppm	0.000148	0.06	38252.300000 !	Y 377.433
Tl (190.794 nm)	0.258545 !	ppm	0.000934	0.36	565.213000 !	Y 377.433
U (409.013 nm)	0.007295 !	ppm	0.002344	32.13	-44.904300 !	Y 377.433
V (292.401 nm)	0.253307 !	ppm	0.000323	0.13	10342.300000 !	Y 377.433
Zn (206.200 nm)	0.261465 !	ppm	0.000674	0.26	1404.840000 !	Y 377.433
Zr (343.823 nm)	0.260126 !	ppm	0.001128	0.43	35589.300000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.980639 !	8220.451260 !	0.003075	0.31
Y 377.433	0.959541 !	435026.635383 !	0.004832	0.50
Y_R 377.433	0.975890 !	33667.400000 !	0.002675	0.27
Y_R 488.368	0.989663 !	18648.100000 !	0.003091	0.31
Y_R2 488.368	0.966341 !	32004.029957 !	0.010755	1.11

Sample Name: ICV-7434564

Date: 10/27/2022 4:31:50 PM Rack:Tube: 3:11

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000026 !u	ppm	0.000016	60.73	-1105.604550 !	Y 377.433
Ag (328.068 nm)	0.000236 n!	ppm	0.000197	83.21	-146.355000 !	Y 377.433
Al (167.019 nm)	-0.003369 !u	ppm	0.000977	29.02	-0.837940 !	Y_R 377.433
Al H (396.152 nm)	-0.009591 !u	ppm	0.003833	39.97	-2.914028 !	Y_R 377.433
As (188.980 nm)	0.248561 !	ppm	0.004838	1.95	319.646000 !	Y 242.219
B (249.678 nm)	0.000462 !	ppm	0.000296	64.11	92.526400 !	Y 242.219
Ba (493.408 nm)	0.000029 !u	ppm	0.000348	> 100.00	51.135200 !	Y_R 488.368
Be (234.861 nm)	-0.000059 !u	ppm	0.000016	27.54	-33.204000 !	Y_R 488.368
Bi (223.061 nm)	0.000044 !u	ppm	0.001043	> 100.00	17.443600 !	Y 377.433
Ca (315.887 nm)	0.001130 !u	ppm	0.007010	> 100.00	-6.733308 !	Y_R 377.433
Cd (214.439 nm)	-0.000034 !u	ppm	0.000008	23.43	-7.561190 !	Y 377.433
Co (228.615 nm)	0.000080 !u	ppm	0.000265	> 100.00	-12.535200 !	Y 242.219
Cr (205.560 nm)	0.000091 !u	ppm	0.000282	> 100.00	8.507020 !	Y 377.433
Cu (324.754 nm)	0.000864 !	ppm	0.000105	12.15	1486.450000 !	Y 377.433
Fe (238.204 nm)	0.000374 !u	ppm	0.000606	> 100.00	13.879280 !	Y_R 377.433
Fe H (259.940 nm)	-0.002531 !u	ppm	0.000391	15.44	10.899800 !	Y_R 377.433
K (766.491 nm)	0.314751 !	ppm	0.028477	9.05	-476.127000 !	Y_R2 488.368
Li (670.783 nm)	0.013316 !	ppm	0.000699	5.25	-698.606000 !	Y_R2 488.368
Mg (279.078 nm)	-0.001983 !u	ppm	0.001236	62.34	31.327700 !	Y 377.433
Mn (257.610 nm)	-0.000073 !u	ppm	0.000028	37.93	58.904800 !	Y 377.433
Mo (202.032 nm)	0.000773 !	ppm	0.000065	8.36	11.681600 !	Y 377.433
Na (589.592 nm)	0.005732 !u	ppm	0.008971	> 100.00	252.506000 !	Y_R2 488.368
Na H (589.593 nm)	1.336375 !u	ppm	0.001735	0.13	2071.684655 !	Y_R 488.368
Ni (231.604 nm)	-0.000181 !u	ppm	0.000503	> 100.00	4.574850 !	Y 377.433
P (213.618 nm)	0.000619 !u	ppm	0.000711	> 100.00	12.057900 !	Y 242.219
Pb (220.353 nm)	-0.000535 !u	ppm	0.000653	> 100.00	-5.127150 !	Y 242.219
S (181.972 nm)	0.004205 !	ppm	0.000421	10.02	6.407117 !	Y 377.433
Sb (206.834 nm)	0.248735 !	ppm	0.001816	0.73	617.921000 !	Y 377.433
Se (196.026 nm)	0.001436 !	ppm	0.001632	> 100.00	7.604430 !	Y 242.219
Si (288.158 nm)	-0.000015 !u	ppm	0.000512	> 100.00	865.137000 !	Y 377.433
Sn (189.925 nm)	-0.000810 !u	ppm	0.000616	75.99	3.629610 !	Y 377.433
Sr (421.552 nm)	-0.000099 !u	ppm	0.000084	84.57	36.275773 !	Y_R 488.368
Th (288.505 nm)	-0.001987 !u	ppm	0.002768	> 100.00	93.180800 !	Y 377.433
Ti (336.122 nm)	-0.000050 !u	ppm	0.000087	> 100.00	-223.554000 !	Y 377.433
Tl (190.794 nm)	0.000516 !	ppm	0.000713	> 100.00	-2.160570 !	Y 377.433
U (409.013 nm)	0.004346 !	ppm	0.002858	65.77	-38.024500 !	Y 377.433
V (292.401 nm)	-0.000103 !u	ppm	0.000353	> 100.00	16.227500 !	Y 377.433
Zn (206.200 nm)	-0.000447 !u	ppm	0.000344	76.90	6.973660 !	Y 377.433
Zr (343.823 nm)	0.001328 !	ppm	0.000152	11.42	198.011000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.977339 !	8192.782799 !	0.003416	0.35
Y 377.433	0.955786 !	433324.391370 !	0.003792	0.40
Y_R 377.433	0.979546 !	33793.500000 !	0.004179	0.43
Y_R 488.368	0.990160 !	18657.400000 !	0.004997	0.50
Y_R2 488.368	1.448401 !	47969.271349 !	0.066423	4.59

Sample Name: CCVH-7429327

Date: 10/27/2022 4:35:53 PM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000006 !u	ppm	0.000013	> 100.00	-1032.869011 !	Y 377.433
Ag (328.068 nm)	0.001087 !	ppm	0.000242	22.29	-178.606000 !	Y 377.433
Al (167.019 nm)	49.605200 !o	ppm	0.042304	0.09	22166.400000 !	Y_R 377.433
Al H (396.152 nm)	51.032720 !	ppm	0.233028	0.46	141660.794111 !	Y_R 377.433
As (188.980 nm)	0.001085 !u	ppm	0.001421	> 100.00	-2.142730 !	Y 242.219
B (249.678 nm)	0.001257 !	ppm	0.000132	10.47	13.887600 !	Y 242.219
Ba (493.408 nm)	0.000534 !	ppm	0.000258	48.24	153.987000 !	Y_R 488.368
Be (234.861 nm)	0.000145 !	ppm	0.000029	20.28	816.652000 !	Y_R 488.368
Bi (223.061 nm)	-0.001254 !u	ppm	0.000842	67.14	14.185200 !	Y 377.433
Ca (315.887 nm)	-0.013548 !u	ppm	0.004514	33.32	-20.320497 !	Y_R 377.433
Cd (214.439 nm)	-0.000265 !u	ppm	0.000057	21.48	28.888900 !	Y 377.433
Co (228.615 nm)	-0.000240 !u	ppm	0.000181	75.40	-18.578200 !	Y 242.219
Cr (205.560 nm)	0.000773 !	ppm	0.000166	21.50	4.802670 !	Y 377.433
Cu (324.754 nm)	0.001807 !	ppm	0.000069	3.83	2726.200000 !	Y 377.433
Fe (238.204 nm)	51.094608 !o	ppm	0.108019	0.21	180595.074034 !	Y_R 377.433
Fe H (259.940 nm)	51.485600 !	ppm	0.219806	0.43	107244.000000 !	Y_R 377.433
K (766.491 nm)	0.090319 !	ppm	0.068678	76.04	-699.852000 !	Y_R2 488.368
Li (670.783 nm)	0.002285 !	ppm	0.001128	49.35	-1068.630000 !	Y_R2 488.368
Mg (279.078 nm)	-0.011185 !u	ppm	0.000352	3.14	-186.691000 !	Y 377.433
Mn (257.610 nm)	0.000215 !	ppm	0.000004	1.70	128.621000 !	Y 377.433
Mo (202.032 nm)	-0.000171 !u	ppm	0.000167	97.78	3.597180 !	Y 377.433
Na (589.592 nm)	251.317000 !	ppm	0.338596	0.13	1515170.000000 !	Y_R2 488.368
Na H (589.593 nm)	245.162789 !	ppm	2.252000	0.92	982888.885460 !	Y_R 488.368
Ni (231.604 nm)	-0.000348 !u	ppm	0.000622	> 100.00	12.113800 !	Y 377.433
P (213.618 nm)	4.977180 !	ppm	0.036701	0.74	11749.800000 !	Y 242.219
Pb (220.353 nm)	-0.005211 !u	ppm	0.000924	17.74	-25.019500 !	Y 242.219
S (181.972 nm)	5.042866 !	ppm	0.011658	0.23	2427.500105 !	Y 377.433
Sb (206.834 nm)	0.003381 !	ppm	0.000262	7.74	-14.666300 !	Y 377.433
Se (196.026 nm)	0.006128 !	ppm	0.004251	69.37	3.670360 !	Y 242.219
Si (288.158 nm)	0.011487 !	ppm	0.001424	12.39	972.342000 !	Y 377.433
Sn (189.925 nm)	0.000293 !u	ppm	0.001340	> 100.00	5.974750 !	Y 377.433
Sr (421.552 nm)	0.000532 !	ppm	0.000059	11.09	177.530013 !	Y_R 488.368
Th (288.505 nm)	5.056390 !	ppm	0.039503	0.78	14304.000000 !	Y 377.433
Ti (336.122 nm)	0.000567 !	ppm	0.000053	9.42	-131.486000 !	Y 377.433
Tl (190.794 nm)	-0.002627 !u	ppm	0.000817	31.09	-10.445900 !	Y 377.433
U (409.013 nm)	2.520520 !	ppm	0.001941	0.08	12676.000000 !	Y 377.433
V (292.401 nm)	-0.001094 !u	ppm	0.000147	13.41	302.233000 !	Y 377.433
Zn (206.200 nm)	0.000935 !	ppm	0.000310	33.21	14.350000 !	Y 377.433
Zr (343.823 nm)	0.014154 !	ppm	0.000256	1.81	2107.310000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.957445 !	8026.019029 !	0.003294	0.34
Y 377.433	0.925266 !	419487.647612 !	0.001690	0.18
Y_R 377.433	0.965744 !	33317.300000 !	0.000418	0.04
Y_R 488.368	0.982272 !	18508.800000 !	0.005432	0.55
Y_R2 488.368	0.953368 !	31574.374163 !	0.003003	0.32

Sample Name: CCV-7429326

Date: 10/27/2022 4:39:55 PM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.466281 !	ppm	0.001017	0.22	1073859.042081 !	Y 377.433
Ag (328.068 nm)	0.503856 !	ppm	0.000983	0.20	26639.500000 !	Y 377.433
Al (167.019 nm)	0.519429 !	ppm	0.010929	2.10	233.870000 !	Y_R 377.433
Al H (396.152 nm)	0.522662 !u	ppm	0.006725	1.29	1523.093793 !	Y_R 377.433
As (188.980 nm)	0.499332 !	ppm	0.002330	0.47	645.719000 !	Y 242.219
B (249.678 nm)	0.496169 !	ppm	0.000596	0.12	13918.700000 !	Y 242.219
Ba (493.408 nm)	0.506196 !	ppm	0.003108	0.61	56052.900000 !	Y_R 488.368
Be (234.861 nm)	0.507954 !	ppm	0.003187	0.63	141646.000000 !	Y_R 488.368
Bi (223.061 nm)	1.030690 !	ppm	0.004074	0.40	2604.250000 !	Y 377.433
Ca (315.887 nm)	5.212361 !	ppm	0.014247	0.27	4817.832044 !	Y_R 377.433
Cd (214.439 nm)	0.521080 !	ppm	0.002097	0.40	31866.400000 !	Y 377.433
Co (228.615 nm)	0.510869 !	ppm	0.002612	0.51	9690.960000 !	Y 242.219
Cr (205.560 nm)	0.521191 !	ppm	0.002261	0.43	7772.750000 !	Y 377.433
Cu (324.754 nm)	0.514778 !	ppm	0.000966	0.19	37965.500000 !	Y 377.433
Fe (238.204 nm)	2.565547 !	ppm	0.003299	0.13	9079.911995 !	Y_R 377.433
Fe H (259.940 nm)	2.604070 !u	ppm	0.005845	0.22	5439.590000 !	Y_R 377.433
K (766.491 nm)	49.627200 !	ppm	0.161129	0.32	48681.000000 !	Y_R2 488.368
Li (670.783 nm)	0.504019 !	ppm	0.000535	0.11	15762.500000 !	Y_R2 488.368
Mg (279.078 nm)	20.387400 !	ppm	0.009493	0.05	123162.000000 !	Y 377.433
Mn (257.610 nm)	0.517796 !	ppm	0.000524	0.10	125383.000000 !	Y 377.433
Mo (202.032 nm)	0.521342 !	ppm	0.000981	0.19	4471.180000 !	Y 377.433
Na (589.592 nm)	25.724000 !	ppm	0.070777	0.28	155986.000000 !	Y_R2 488.368
Na H (589.593 nm)	25.910570 !	ppm	0.133047	0.51	101466.395686 !	Y_R 488.368
Ni (231.604 nm)	0.525305 !	ppm	0.000909	0.17	3694.670000 !	Y 377.433
P (213.618 nm)	0.007498 !	ppm	0.001818	24.25	28.282400 !	Y 242.219
Pb (220.353 nm)	0.506743 !	ppm	0.001896	0.37	1402.000000 !	Y 242.219
S (181.972 nm)	-0.000687 !u	ppm	0.003331	> 100.00	5.246340 !	Y 377.433
Sb (206.834 nm)	0.519834 !	ppm	0.001125	0.22	1309.660000 !	Y 377.433
Se (196.026 nm)	0.500973 !	ppm	0.001013	0.20	505.649000 !	Y 242.219
Si (288.158 nm)	5.065360 !	ppm	0.027568	0.54	48136.500000 !	Y 377.433
Sn (189.925 nm)	0.519410 !	ppm	0.002741	0.53	1109.060000 !	Y 377.433
Sr (421.552 nm)	0.498099 !	ppm	0.001944	0.39	111606.659029 !	Y_R 488.368
Th (288.505 nm)	0.033264 !	ppm	0.010928	32.85	201.220000 !	Y 377.433
Ti (336.122 nm)	0.507654 !	ppm	0.000318	0.06	75598.200000 !	Y 377.433
Tl (190.794 nm)	0.522376 !	ppm	0.002350	0.45	1145.450000 !	Y 377.433
U (409.013 nm)	0.007024 !	ppm	0.005028	71.59	-67.096800 !	Y 377.433
V (292.401 nm)	0.514842 !	ppm	0.000735	0.14	21001.900000 !	Y 377.433
Zn (206.200 nm)	0.522412 !	ppm	0.001161	0.22	2797.550000 !	Y 377.433
Zr (343.823 nm)	0.508776 !	ppm	0.001955	0.38	69592.800000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.962765 !	8070.610602 !	0.000383	0.04
Y 377.433	0.936265 !	424474.037448 !	0.000315	0.03
Y_R 377.433	0.972881 !	33563.500000 !	0.003454	0.36
Y_R 488.368	0.989932 !	18653.100000 !	0.006398	0.65
Y_R2 488.368	0.953693 !	31585.132849 !	0.005180	0.54

Sample Name: ICB-7434561

Date: 10/27/2022 4:43:57 PM Rack:Tube: S1:5

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000013 !u	ppm	0.000020	> 100.00	-1076.279714 !	Y 377.433
Ag (328.068 nm)	0.000362 !	ppm	0.000152	42.09	-140.057000 !	Y 377.433
Al (167.019 nm)	0.000774 !u	ppm	0.000917	> 100.00	1.010990 !	Y_R 377.433
Al H (396.152 nm)	-0.002457 !u	ppm	0.005526	> 100.00	16.942666 !	Y_R 377.433
As (188.980 nm)	0.000238 !u	ppm	0.001632	> 100.00	-3.244690 !	Y 242.219
B (249.678 nm)	0.001037 !	ppm	0.000220	21.17	108.537000 !	Y 242.219
Ba (493.408 nm)	0.000093 !u	ppm	0.000552	> 100.00	59.392600 !	Y_R 488.368
Be (234.861 nm)	-0.000009 !u	ppm	0.000013	> 100.00	-19.175000 !	Y_R 488.368
Bi (223.061 nm)	-0.001428 !u	ppm	0.001583	> 100.00	13.748400 !	Y 377.433
Ca (315.887 nm)	-0.005250 !u	ppm	0.002949	56.17	-12.639259 !	Y_R 377.433
Cd (214.439 nm)	0.000014 !	ppm	0.000008	60.41	-4.635710 !	Y 377.433
Co (228.615 nm)	0.000009 !u	ppm	0.000067	> 100.00	-13.875300 !	Y 242.219
Cr (205.560 nm)	-0.000207 !u	ppm	0.000071	34.53	4.065380 !	Y 377.433
Cu (324.754 nm)	0.001016 !	ppm	0.000010	1.03	1497.650000 !	Y 377.433
Fe (238.204 nm)	0.001089 !	ppm	0.000235	21.58	16.407190 !	Y_R 377.433
Fe H (259.940 nm)	-0.003233 !u	ppm	0.001028	31.80	9.438210 !	Y_R 377.433
K (766.491 nm)	0.036522 !u	ppm	0.089419	> 100.00	-753.479000 !	Y_R2 488.368
Li (670.783 nm)	0.003641 !	ppm	0.000866	23.79	-1023.150000 !	Y_R2 488.368
Mg (279.078 nm)	-0.000278 !u	ppm	0.001903	> 100.00	41.516300 !	Y 377.433
Mn (257.610 nm)	0.000134 !	ppm	0.000008	5.86	108.803000 !	Y 377.433
Mo (202.032 nm)	0.001422 !	ppm	0.000043	3.03	17.244200 !	Y 377.433
Na (589.592 nm)	0.033162 !	ppm	0.014897	44.92	417.636000 !	Y_R2 488.368
Na H (589.593 nm)	1.353742 !u	ppm	0.024361	1.80	2141.376932 !	Y_R 488.368
Ni (231.604 nm)	0.000026 !u	ppm	0.000141	> 100.00	6.029090 !	Y 377.433
P (213.618 nm)	0.001094 !u	ppm	0.002007	> 100.00	13.178200 !	Y 242.219
Pb (220.353 nm)	0.000096 !u	ppm	0.000693	> 100.00	-3.367250 !	Y 242.219
S (181.972 nm)	0.004199 !	ppm	0.003035	72.29	6.404753 !	Y 377.433
Sb (206.834 nm)	0.000367 !u	ppm	0.002176	> 100.00	-5.999260 !	Y 377.433
Se (196.026 nm)	0.001485 !u	ppm	0.002159	> 100.00	7.653950 !	Y 242.219
Si (288.158 nm)	0.001247 !	ppm	0.001096	87.89	876.922000 !	Y 377.433
Sn (189.925 nm)	0.000414 !u	ppm	0.000406	98.14	6.231290 !	Y 377.433
Sr (421.552 nm)	-0.000081 !u	ppm	0.000041	50.34	40.394558 !	Y_R 488.368
Th (288.505 nm)	0.001027 !u	ppm	0.002477	> 100.00	101.694000 !	Y 377.433
Ti (336.122 nm)	0.000090 !	ppm	0.000066	73.35	-202.600000 !	Y 377.433
Tl (190.794 nm)	-0.000321 !u	ppm	0.001314	> 100.00	-4.005070 !	Y 377.433
U (409.013 nm)	0.012083 !	ppm	0.005659	46.84	1.018140 !	Y 377.433
V (292.401 nm)	-0.000121 !u	ppm	0.000243	> 100.00	15.534900 !	Y 377.433
Zn (206.200 nm)	0.000126 !	ppm	0.000094	75.00	10.032700 !	Y 377.433
Zr (343.823 nm)	0.000232 !	ppm	0.000076	32.66	48.111400 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.975747 !	8179.438709 !	0.005648	0.58
Y 377.433	0.953621 !	432342.913126 !	0.006719	0.70
Y_R 377.433	0.974585 !	33622.300000 !	0.003895	0.40
Y_R 488.368	0.984106 !	18543.300000 !	0.002753	0.28
Y_R2 488.368	0.971413 !	32171.992834 !	0.000793	0.08

Sample Name: CRI-7434568

Date: 10/27/2022 4:48:01 PM Rack:Tube: 3:7

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014707 Q!	ppm	0.000006	0.04	32857.465987 Q!	Y 377.433
Ag (328.068 nm)	0.010321 !	ppm	0.000309	2.99	388.958000 !	Y 377.433
Al (167.019 nm)	0.106087 !	ppm	0.003657	3.45	48.067200 !	Y_R 377.433
Al H (396.152 nm)	0.102546 !u	ppm	0.003266	3.18	310.147532 !	Y_R 377.433
As (188.980 nm)	0.013042 !	ppm	0.001191	9.13	13.404500 !	Y 242.219
B (249.678 nm)	0.099235 !	ppm	0.000146	0.15	2843.780000 !	Y 242.219
Ba (493.408 nm)	0.010307 !	ppm	0.000406	3.94	1189.490000 !	Y_R 488.368
Be (234.861 nm)	0.001016 !	ppm	0.000020	1.94	267.011000 !	Y_R 488.368
Bi (223.061 nm)	-0.001192 Q!u	ppm	0.002724	> 100.00	14.340300 Q!	Y 377.433
Ca (315.887 nm)	0.221056 !	ppm	0.001367	0.62	196.862975 !	Y_R 377.433
Cd (214.439 nm)	0.005215 !	ppm	0.000040	0.77	313.554000 !	Y 377.433
Co (228.615 nm)	0.010327 !	ppm	0.000216	2.09	182.077000 !	Y 242.219
Cr (205.560 nm)	0.010516 !	ppm	0.000221	2.10	163.875000 !	Y 377.433
Cu (324.754 nm)	0.016779 !	ppm	0.000132	0.79	2615.690000 !	Y 377.433
Fe (238.204 nm)	0.104910 !	ppm	0.001557	1.48	383.340852 !	Y_R 377.433
Fe H (259.940 nm)	0.104259 !u	ppm	0.001083	1.04	233.309000 !	Y_R 377.433
K (766.491 nm)	3.032550 !	ppm	0.052423	1.73	2233.120000 !	Y_R2 488.368
Li (670.783 nm)	0.023858 !	ppm	0.001762	7.39	-344.946000 !	Y_R2 488.368
Mg (279.078 nm)	0.207004 !	ppm	0.000841	0.41	1291.770000 !	Y 377.433
Mn (257.610 nm)	0.010708 !	ppm	0.000052	0.49	2667.860000 !	Y 377.433
Mo (202.032 nm)	0.020368 !	ppm	0.000030	0.15	179.548000 !	Y 377.433
Na (589.592 nm)	1.107160 !	ppm	0.004184	0.38	6905.970000 !	Y_R2 488.368
Na H (589.593 nm)	2.326210 !u	ppm	0.008627	0.37	6064.207604 !	Y_R 488.368
Ni (231.604 nm)	0.044481 !	ppm	0.000290	0.65	318.152000 !	Y 377.433
P (213.618 nm)	2.899410 !	ppm	0.009990	0.34	6849.160000 !	Y 242.219
Pb (220.353 nm)	0.008110 !	ppm	0.000471	5.80	18.921200 !	Y 242.219
S (181.972 nm)	0.098105 !	ppm	0.005613	5.72	51.550859 !	Y 377.433
Sb (206.834 nm)	0.021850 !	ppm	0.000775	3.55	48.062500 !	Y 377.433
Se (196.026 nm)	0.019262 !	ppm	0.002794	14.50	25.370300 !	Y 242.219
Si (288.158 nm)	0.491620 !	ppm	0.005731	1.17	5446.610000 !	Y 377.433
Sn (189.925 nm)	0.105893 !	ppm	0.001358	1.28	230.367000 !	Y 377.433
Sr (421.552 nm)	0.010021 !	ppm	0.000054	0.54	2302.571624 !	Y_R 488.368
Th (288.505 nm)	0.016243 !	ppm	0.000348	2.14	145.773000 !	Y 377.433
Ti (336.122 nm)	0.009832 !	ppm	0.000077	0.78	1252.540000 !	Y 377.433
Tl (190.794 nm)	0.016681 !	ppm	0.000627	3.76	33.385100 !	Y 377.433
U (409.013 nm)	0.068405 !	ppm	0.001432	2.09	283.375000 !	Y 377.433
V (292.401 nm)	0.010053 !	ppm	0.000209	2.08	427.960000 !	Y 377.433
Zn (206.200 nm)	0.022801 !	ppm	0.000136	0.60	131.055000 !	Y 377.433
Zr (343.823 nm)	0.013239 Q!	ppm	0.000005	0.04	1826.910000 Q!	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.972061 !	8148.541229 !	0.002405	0.25
Y 377.433	0.947966 !	429779.053592 !	0.001727	0.18
Y_R 377.433	0.975724 !	33661.600000 !	0.001168	0.12
Y_R 488.368	0.987347 !	18604.400000 !	0.001797	0.18
Y_R2 488.368	0.971692 !	32181.236496 !	0.004926	0.51

Sample Name: ICSA-7415500

Date: 10/27/2022 4:52:04 PM Rack:Tube: 3:8

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.003027 !	ppm	0.000004	0.13	5931.967203 !	Y 377.433
Ag (328.068 nm)	0.000911 !	ppm	0.000535	58.78	-111.369000 !	Y 377.433
Al (167.019 nm)	247.718000 !o	ppm	1.370300	0.55	110658.000000 !	Y_R 377.433
Al H (396.152 nm)	518.784175 !o	ppm	1.819931	0.35	1440109.381206 !	Y_R 377.433
As (188.980 nm)	-0.004050 !u	ppm	0.004657	> 100.00	-8.820430 !	Y 242.219
B (249.678 nm)	0.003082 !	ppm	0.000370	11.99	-213.462000 !	Y 242.219
Ba (493.408 nm)	-0.000002 !u	ppm	0.000074	> 100.00	220.922000 !	Y_R 488.368
Be (234.861 nm)	0.000129 !u	ppm	0.000149	> 100.00	3000.700000 !	Y_R 488.368
Bi (223.061 nm)	0.008801 !	ppm	0.000462	5.25	39.423100 !	Y 377.433
Ca (315.887 nm)	500.662317 !o	ppm	0.333971	0.07	463472.829861 !	Y_R 377.433
Cd (214.439 nm)	-0.000460 !u	ppm	0.000152	33.03	156.595000 !	Y 377.433
Co (228.615 nm)	-0.001589 !u	ppm	0.000216	13.57	-44.193600 !	Y 242.219
Cr (205.560 nm)	0.002415 !	ppm	0.000227	9.40	-9.001830 !	Y 377.433
Cu (324.754 nm)	-0.002294 !u	ppm	0.000156	6.80	1352.790000 !	Y 377.433
Fe (238.204 nm)	192.032183 !o	ppm	0.800788	0.42	678707.559047 !	Y_R 377.433
Fe H (259.940 nm)	197.616000 !	ppm	0.253042	0.13	411586.000000 !	Y_R 377.433
K (766.491 nm)	0.111392 !	ppm	0.074538	66.92	-678.845000 !	Y_R2 488.368
Li (670.783 nm)	0.005913 !	ppm	0.002073	35.05	-946.944000 !	Y_R2 488.368
Mg (279.078 nm)	526.812000 !o	ppm	0.735935	0.14	3181210.000000 !	Y 377.433
Mn (257.610 nm)	0.000376 !	ppm	0.000039	10.44	167.473000 !	Y 377.433
Mo (202.032 nm)	-0.000079 !u	ppm	0.000326	> 100.00	4.383770 !	Y 377.433
Na (589.592 nm)	0.105867 !	ppm	0.027394	25.88	858.580000 !	Y_R2 488.368
Na H (589.593 nm)	2.403348 !u	ppm	0.031930	1.33	6365.588656 !	Y_R 488.368
Ni (231.604 nm)	-0.005446 K!u	ppm	0.000655	12.03	0.366651 K!	Y 377.433
P (213.618 nm)	0.015073 !	ppm	0.003829	25.41	46.148000 !	Y 242.219
Pb (220.353 nm)	-0.001758 !u	ppm	0.003402	> 100.00	-177.889000 !	Y 242.219
S (181.972 nm)	0.012314 !	ppm	0.002750	22.33	10.305045 !	Y 377.433
Sb (206.834 nm)	0.009868 !	ppm	0.001424	14.43	-30.846300 !	Y 377.433
Se (196.026 nm)	-0.004920 !u	ppm	0.002844	57.81	-26.197100 !	Y 242.219
Si (288.158 nm)	0.024082 !	ppm	0.001234	5.12	1089.530000 !	Y 377.433
Sn (189.925 nm)	0.001622 !	ppm	0.001088	67.04	8.798710 !	Y 377.433
Sr (421.552 nm)	0.004762 K!	ppm	0.000064	1.35	1124.976610 K!	Y_R 488.368
Th (288.505 nm)	0.003587 !u	ppm	0.006362	> 100.00	98.762000 !	Y 377.433
Ti (336.122 nm)	-0.000397 !u	ppm	0.000063	15.81	1307.110000 !	Y 377.433
Tl (190.794 nm)	0.000724 !u	ppm	0.001778	> 100.00	-6.831800 !	Y 377.433
U (409.013 nm)	0.020839 !	ppm	0.004375	21.00	136.614000 !	Y 377.433
V (292.401 nm)	0.001171 !	ppm	0.000238	20.29	68.663800 !	Y 377.433
Zn (206.200 nm)	0.001381 !u	ppm	0.001449	> 100.00	16.730000 !	Y 377.433
Zr (343.823 nm)	0.000035 !u	ppm	0.000124	> 100.00	605.965000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.860348 !	7212.074449 !	0.002710	0.32
Y 377.433	0.833939 !	378082.393203 !	0.004120	0.49
Y_R 377.433	0.924896 !	31908.100000 !	0.002422	0.26
Y_R 488.368	0.941067 !	17732.400000 !	0.010419	1.11
Y_R2 488.368	0.916464 !	30352.166546 !	0.004150	0.45

Sample Name: ICSAB-7429328

Date: 10/27/2022 4:56:08 PM Rack:Tube: 3:9

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	1.206029 G!	ppm	0.006886	0.57	2779181.854568 G!	Y 377.433
Ag (328.068 nm)	1.140600 !o	ppm	0.000658	0.06	60389.000000 !	Y 377.433
Al (167.019 nm)	248.585000 !o	ppm	0.832690	0.33	111045.000000 !	Y_R 377.433
Al H (396.152 nm)	520.605281 !o	ppm	1.195742	0.23	1445254.930921 !	Y_R 377.433
As (188.980 nm)	1.047110 !	ppm	0.004813	0.46	1357.990000 !	Y 242.219
B (249.678 nm)	10.610900 !o	ppm	0.020282	0.19	295276.000000 !	Y 242.219
Ba (493.408 nm)	1.038180 !	ppm	0.012678	1.22	115077.000000 !	Y_R 488.368
Be (234.861 nm)	0.525025 !	ppm	0.005017	0.96	149321.000000 !	Y_R 488.368
Bi (223.061 nm)	1.099200 !	ppm	0.003906	0.36	2776.220000 !	Y 377.433
Ca (315.887 nm)	499.701997 !o	ppm	2.048710	0.41	462584.489801 !	Y_R 377.433
Cd (214.439 nm)	0.996633 !	ppm	0.003102	0.31	61139.300000 !	Y 377.433
Co (228.615 nm)	0.950291 !	ppm	0.002244	0.24	18041.900000 !	Y 242.219
Cr (205.560 nm)	1.039900 !	ppm	0.002908	0.28	15454.900000 !	Y 377.433
Cu (324.754 nm)	1.111070 !o	ppm	0.000690	0.06	80708.500000 !	Y 377.433
Fe (238.204 nm)	192.179174 !o	ppm	0.475104	0.25	679227.066035 !	Y_R 377.433
Fe H (259.940 nm)	198.210000 !	ppm	0.544742	0.27	412822.000000 !	Y_R 377.433
K (766.491 nm)	11.206300 !	ppm	0.121319	1.08	10381.100000 !	Y_R2 488.368
Li (670.783 nm)	1.077430 !	ppm	0.004710	0.44	34998.100000 !	Y_R2 488.368
Mg (279.078 nm)	527.512000 !o	ppm	1.169120	0.22	3185380.000000 !	Y 377.433
Mn (257.610 nm)	1.028670 !	ppm	0.000914	0.09	249015.000000 !	Y 377.433
Mo (202.032 nm)	1.031010 !	ppm	0.003183	0.31	8837.300000 !	Y 377.433
Na (589.592 nm)	11.314900 !	ppm	0.061684	0.55	69868.800000 !	Y_R2 488.368
Na H (589.593 nm)	13.024367 !	ppm	0.023061	0.18	50202.362834 !	Y_R 488.368
Ni (231.604 nm)	0.986615 !	ppm	0.006439	0.65	6966.110000 !	Y 377.433
P (213.618 nm)	10.314900 !	ppm	0.022839	0.22	24339.400000 !	Y 242.219
Pb (220.353 nm)	0.987077 !	ppm	0.005060	0.51	2570.110000 !	Y 242.219
S (181.972 nm)	10.466516 !	ppm	0.007874	0.08	5035.938875 !	Y 377.433
Sb (206.834 nm)	1.150900 !o	ppm	0.001460	0.13	2852.140000 !	Y 377.433
Se (196.026 nm)	1.025910 !	ppm	0.002070	0.20	1002.460000 !	Y 242.219
Si (288.158 nm)	10.483000 !	ppm	0.053349	0.51	98691.600000 !	Y 377.433
Sn (189.925 nm)	1.015720 !	ppm	0.004074	0.40	2163.700000 !	Y 377.433
Sr (421.552 nm)	1.017819 !	ppm	0.000828	0.08	227996.914105 !	Y_R 488.368
Th (288.505 nm)	2.106180 !	ppm	0.000834	0.04	6063.470000 !	Y 377.433
Ti (336.122 nm)	1.044830 !	ppm	0.001169	0.11	157368.000000 !	Y 377.433
Tl (190.794 nm)	0.997141 !	ppm	0.002495	0.25	2184.040000 !	Y 377.433
U (409.013 nm)	2.139410 !	ppm	0.007620	0.36	10725.100000 !	Y 377.433
V (292.401 nm)	1.036460 !	ppm	0.001483	0.14	42319.400000 !	Y 377.433
Zn (206.200 nm)	0.983583 !	ppm	0.002122	0.22	5258.880000 !	Y 377.433
Zr (343.823 nm)	0.848454 !	ppm	0.024750	2.92	116617.000000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.865814 !	7257.901229 !	0.002838	0.33
Y 377.433	0.840512 !	381062.491384 !	0.003861	0.46
Y_R 377.433	0.915436 !	31581.800000 !	0.001297	0.14
Y_R 488.368	0.929593 !	17516.200000 !	0.003099	0.33
Y_R2 488.368	0.907254 !	30047.121589 !	0.007192	0.79

Sample Name: LRA-7382399

Date: 10/27/2022 5:00:10 PM Rack:Tube: 3:10

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000083 !	ppm	0.000005	6.60	-855.295620 !	Y 377.433
Ag (328.068 nm)	-0.009979 !u	ppm	0.000284	2.85	-2840.130000 !	Y 377.433
Al (167.019 nm)	-0.028311 !u	ppm	0.009174	32.40	252.059000 !	Y_R 377.433
Al H (396.152 nm)	0.014093 !u	ppm	0.006856	48.65	510.948874 !	Y_R 377.433
As (188.980 nm)	9.716850 !o	ppm	0.011531	0.12	12631.100000 !	Y 242.219
B (249.678 nm)	9.917530 !o	ppm	0.028049	0.28	275588.000000 !	Y 242.219
Ba (493.408 nm)	11.998700 !o	ppm	0.010117	0.08	1327930.000000 !	Y_R 488.368
Be (234.861 nm)	0.001078 !	ppm	0.000167	15.46	7529.680000 !	Y_R 488.368
Bi (223.061 nm)	-0.003289 !u	ppm	0.002370	72.05	9.077120 !	Y 377.433
Ca (315.887 nm)	0.043537 !	ppm	0.005065	11.63	33.888909 !	Y_R 377.433
Cd (214.439 nm)	2.043700 !o	ppm	0.008295	0.41	125473.000000 !	Y 377.433
Co (228.615 nm)	5.108280 !o	ppm	0.023030	0.45	97205.800000 !	Y 242.219
Cr (205.560 nm)	10.375600 !o	ppm	0.025155	0.24	154577.000000 !	Y 377.433
Cu (324.754 nm)	10.889900 !o	ppm	0.019518	0.18	774631.000000 !	Y 377.433
Fe (238.204 nm)	486.619977 !o	ppm	1.579353	0.32	1719862.533838 !	Y_R 377.433
Fe H (259.940 nm)	492.402000 !	ppm	1.226550	0.25	1025530.000000 !	Y_R 377.433
K (766.491 nm)	-0.013376 !u	ppm	0.048765	> 100.00	-803.220000 !	Y_R2 488.368
Li (670.783 nm)	0.003760 !	ppm	0.001173	31.19	-1019.170000 !	Y_R2 488.368
Mg (279.078 nm)	0.014754 !	ppm	0.003343	22.66	-736.834000 !	Y 377.433
Mn (257.610 nm)	10.105600 !o	ppm	0.010233	0.10	2445650.000000 !	Y 377.433
Mo (202.032 nm)	5.043340 !o	ppm	0.012702	0.25	43209.200000 !	Y 377.433
Na (589.592 nm)	0.163164 !	ppm	0.008149	4.99	17873.200000 !	Y_R2 488.368
Na H (589.593 nm)	1.027800 !u	ppm	0.016880	1.64	13697.062770 !	Y_R 488.368
Ni (231.604 nm)	10.668300 !o	ppm	0.030304	0.28	74988.900000 !	Y 377.433
P (213.618 nm)	24.000900 !o	ppm	0.112509	0.47	56619.300000 !	Y 242.219
Pb (220.353 nm)	10.330000 !o	ppm	0.033244	0.32	28715.800000 !	Y 242.219
S (181.972 nm)	19.650241 !o	ppm	0.077810	0.40	9469.605241 !	Y 377.433
Sb (206.834 nm)	0.029478 !	ppm	0.001910	6.48	277.320000 !	Y 377.433
Se (196.026 nm)	4.941060 !o	ppm	0.023229	0.47	4851.670000 !	Y 242.219
Si (288.158 nm)	48.672600 !o	ppm	0.143628	0.30	455902.000000 !	Y 377.433
Sn (189.925 nm)	-0.000750 !u	ppm	0.000396	52.82	3.758090 !	Y 377.433
Sr (421.552 nm)	9.961550 !o	ppm	0.052575	0.53	2230925.810213 !	Y_R 488.368
Th (288.505 nm)	0.052699 !	ppm	0.003795	7.20	682.655000 !	Y 377.433
Ti (336.122 nm)	9.834040 !o	ppm	0.027779	0.28	1468110.000000 !	Y 377.433
Tl (190.794 nm)	5.175860 !o	ppm	0.014934	0.29	11345.600000 !	Y 377.433
U (409.013 nm)	-0.026993 !u	ppm	0.004402	16.31	300.480000 !	Y 377.433
V (292.401 nm)	10.123100 !o	ppm	0.022459	0.22	412583.000000 !	Y 377.433
Zn (206.200 nm)	10.321500 !o	ppm	0.034040	0.33	55096.700000 !	Y 377.433
Zr (343.823 nm)	0.076606 !	ppm	0.019725	25.75	11974.400000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.954737 !	8003.317759 !	0.002461	0.26
Y 377.433	0.930864 !	422025.353321 !	0.002214	0.24
Y_R 377.433	0.974435 !	33617.200000 !	0.002076	0.21
Y_R 488.368	0.991487 !	18682.400000 !	0.005495	0.55
Y_R2 488.368	0.963847 !	31921.410922 !	0.006823	0.71

Sample Name: CCVH-7429327

Date: 10/27/2022 5:04:14 PM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000009 !u	ppm	0.000009	> 100.00	-1066.558304 !	Y 377.433
Ag (328.068 nm)	0.001197 !	ppm	0.000131	10.97	-176.976000 !	Y 377.433
Al (167.019 nm)	49.451500 !o	ppm	0.216967	0.44	22098.000000 !	Y_R 377.433
Al H (396.152 nm)	51.030675 !	ppm	0.107968	0.21	141656.622418 !	Y_R 377.433
As (188.980 nm)	0.002345 !u	ppm	0.002821	> 100.00	-0.504640 !	Y 242.219
B (249.678 nm)	0.016922 !	ppm	0.002405	14.21	449.760000 !	Y 242.219
Ba (493.408 nm)	0.002118 !	ppm	0.000367	17.31	329.439000 !	Y_R 488.368
Be (234.861 nm)	0.000108 !	ppm	0.000030	27.78	808.623000 !	Y_R 488.368
Bi (223.061 nm)	0.001362 !u	ppm	0.001184	86.94	20.750100 !	Y 377.433
Ca (315.887 nm)	-0.006556 !u	ppm	0.004016	61.25	-13.848132 !	Y_R 377.433
Cd (214.439 nm)	-0.000157 !u	ppm	0.000072	45.85	35.726000 !	Y 377.433
Co (228.615 nm)	-0.000473 !u	ppm	0.000246	51.96	-22.967700 !	Y 242.219
Cr (205.560 nm)	0.000869 !	ppm	0.000046	5.27	6.138130 !	Y 377.433
Cu (324.754 nm)	0.002052 !	ppm	0.000260	12.68	2732.320000 !	Y 377.433
Fe (238.204 nm)	51.264337 !o	ppm	0.107922	0.21	181194.943524 !	Y_R 377.433
Fe H (259.940 nm)	51.753700 !	ppm	0.135502	0.26	107802.000000 !	Y_R 377.433
K (766.491 nm)	0.119038 !	ppm	0.089381	75.09	-671.223000 !	Y_R2 488.368
Li (670.783 nm)	0.002192 !	ppm	0.000185	8.46	-1071.760000 !	Y_R2 488.368
Mg (279.078 nm)	-0.010359 !u	ppm	0.000463	4.47	-182.452000 !	Y 377.433
Mn (257.610 nm)	0.000326 !	ppm	0.000025	7.63	155.386000 !	Y 377.433
Mo (202.032 nm)	0.016669 !	ppm	0.002790	16.74	147.859000 !	Y 377.433
Na (589.592 nm)	250.772000 !	ppm	0.472899	0.19	1511890.000000 !	Y_R2 488.368
Na H (589.593 nm)	242.785755 !	ppm	1.101581	0.45	973328.964999 !	Y_R 488.368
Ni (231.604 nm)	-0.000768 !u	ppm	0.000227	29.52	9.203580 !	Y 377.433
P (213.618 nm)	5.022580 !	ppm	0.009490	0.19	11856.900000 !	Y 242.219
Pb (220.353 nm)	-0.004280 !u	ppm	0.002235	52.23	-22.458500 !	Y 242.219
S (181.972 nm)	5.047802 !	ppm	0.008152	0.16	2429.872139 !	Y 377.433
Sb (206.834 nm)	0.003762 !	ppm	0.002715	72.16	-13.814400 !	Y 377.433
Se (196.026 nm)	0.006492 !	ppm	0.001661	25.59	3.993830 !	Y 242.219
Si (288.158 nm)	0.031172 !	ppm	0.005773	18.52	1155.900000 !	Y 377.433
Sn (189.925 nm)	0.000400 !u	ppm	0.000826	> 100.00	6.202140 !	Y 377.433
Sr (421.552 nm)	0.000619 !	ppm	0.000029	4.72	196.981233 !	Y_R 488.368
Th (288.505 nm)	5.012190 !	ppm	0.080743	1.61	14180.600000 !	Y 377.433
Ti (336.122 nm)	0.001887 !	ppm	0.000045	2.36	65.682000 !	Y 377.433
Tl (190.794 nm)	-0.000934 !u	ppm	0.001688	> 100.00	-6.770840 !	Y 377.433
U (409.013 nm)	2.523460 !	ppm	0.005442	0.22	12692.400000 !	Y 377.433
V (292.401 nm)	-0.000561 !u	ppm	0.000088	15.60	318.837000 !	Y 377.433
Zn (206.200 nm)	0.001369 !	ppm	0.000245	17.91	16.667700 !	Y 377.433
Zr (343.823 nm)	-0.000845 !u	ppm	0.000058	6.83	57.003800 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.960719 !	8053.463262 !	0.003741	0.39
Y 377.433	0.927349 !	420431.996803 !	0.003956	0.43
Y_R 377.433	0.980350 !	33821.200000 !	0.006703	0.68
Y_R 488.368	0.996063 !	18768.700000 !	0.010268	1.03
Y_R2 488.368	0.950887 !	31492.208055 !	0.000115	0.01

Sample Name: CCV-7429326

Date: 10/27/2022 5:08:16 PM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.465729 !	ppm	0.000783	0.17	1072587.593958 !	Y 377.433
Ag (328.068 nm)	0.502780 !	ppm	0.000850	0.17	26568.700000 !	Y 377.433
Al (167.019 nm)	0.528184 !	ppm	0.002338	0.44	237.780000 !	Y_R 377.433
Al H (396.152 nm)	0.520410 !u	ppm	0.004696	0.90	1517.234182 !	Y_R 377.433
As (188.980 nm)	0.501772 !	ppm	0.003381	0.67	648.892000 !	Y 242.219
B (249.678 nm)	0.504486 !	ppm	0.001033	0.20	14150.400000 !	Y 242.219
Ba (493.408 nm)	0.503840 !	ppm	0.002115	0.42	55792.100000 !	Y_R 488.368
Be (234.861 nm)	0.504608 !	ppm	0.002882	0.57	140713.000000 !	Y_R 488.368
Bi (223.061 nm)	1.032240 !	ppm	0.001947	0.19	2608.130000 !	Y 377.433
Ca (315.887 nm)	5.229784 !	ppm	0.010305	0.20	4833.961797 !	Y_R 377.433
Cd (214.439 nm)	0.523134 !	ppm	0.001279	0.24	31992.100000 !	Y 377.433
Co (228.615 nm)	0.512001 !	ppm	0.002616	0.51	9712.440000 !	Y 242.219
Cr (205.560 nm)	0.521565 !	ppm	0.001357	0.26	7778.350000 !	Y 377.433
Cu (324.754 nm)	0.515118 !	ppm	0.000468	0.09	38003.100000 !	Y 377.433
Fe (238.204 nm)	2.570867 !	ppm	0.003453	0.13	9098.717385 !	Y_R 377.433
Fe H (259.940 nm)	2.611270 !u	ppm	0.006530	0.25	5454.600000 !	Y_R 377.433
K (766.491 nm)	49.373100 !	ppm	0.189573	0.38	48427.700000 !	Y_R2 488.368
Li (670.783 nm)	0.500346 !	ppm	0.002494	0.50	15639.300000 !	Y_R2 488.368
Mg (279.078 nm)	20.445400 !	ppm	0.016444	0.08	123512.000000 !	Y 377.433
Mn (257.610 nm)	0.519731 !	ppm	0.001425	0.27	125852.000000 !	Y 377.433
Mo (202.032 nm)	0.525672 !	ppm	0.001965	0.37	4508.270000 !	Y 377.433
Na (589.592 nm)	25.519500 !	ppm	0.068966	0.27	154750.000000 !	Y_R2 488.368
Na H (589.593 nm)	25.444965 !	ppm	0.079903	0.31	99591.073659 !	Y_R 488.368
Ni (231.604 nm)	0.526821 !	ppm	0.002733	0.52	3705.320000 !	Y 377.433
P (213.618 nm)	0.008101 !	ppm	0.000981	12.11	29.705500 !	Y 242.219
Pb (220.353 nm)	0.507873 !	ppm	0.002087	0.41	1405.130000 !	Y 242.219
S (181.972 nm)	-0.001107 !u	ppm	0.002698	> 100.00	5.049036 !	Y 377.433
Sb (206.834 nm)	0.520275 !	ppm	0.003977	0.76	1310.960000 !	Y 377.433
Se (196.026 nm)	0.501183 !	ppm	0.002425	0.48	505.858000 !	Y 242.219
Si (288.158 nm)	5.123290 !	ppm	0.021460	0.42	48676.200000 !	Y 377.433
Sn (189.925 nm)	0.521857 !	ppm	0.003198	0.61	1114.260000 !	Y 377.433
Sr (421.552 nm)	0.496978 !	ppm	0.001799	0.36	111355.660203 !	Y_R 488.368
Th (288.505 nm)	0.088418 !	ppm	0.037106	41.97	355.822000 !	Y 377.433
Ti (336.122 nm)	0.508227 !	ppm	0.000450	0.09	75683.900000 !	Y 377.433
Tl (190.794 nm)	0.523252 !	ppm	0.003033	0.58	1147.370000 !	Y 377.433
U (409.013 nm)	0.011604 !	ppm	0.004813	41.48	-39.410800 !	Y 377.433
V (292.401 nm)	0.515834 !	ppm	0.000717	0.14	21047.100000 !	Y 377.433
Zn (206.200 nm)	0.523885 !	ppm	0.002259	0.43	2805.410000 !	Y 377.433
Zr (343.823 nm)	0.455531 !	ppm	0.019963	4.38	62312.400000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.960939 !	8055.309308 !	0.001291	0.13
Y 377.433	0.934040 !	423465.110354 !	0.001750	0.19
Y_R 377.433	0.978350 !	33752.200000 !	0.003969	0.41
Y_R 488.368	0.997349 !	18792.900000 !	0.006698	0.67
Y_R2 488.368	0.974880 !	32286.839024 !	0.005147	0.53

Sample Name: CCB

Date: 10/27/2022 5:12:19 PM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000034 !u	ppm	0.000007	20.42	-1125.842208 !	Y 377.433
Ag (328.068 nm)	0.000372 !	ppm	0.000142	38.17	-139.493000 !	Y 377.433
Al (167.019 nm)	0.001500 !u	ppm	0.002489	> 100.00	1.334480 !	Y_R 377.433
Al H (396.152 nm)	-0.009735 !u	ppm	0.001030	10.58	-3.195579 !	Y_R 377.433
As (188.980 nm)	0.001916 !	ppm	0.000872	45.50	-1.062860 !	Y 242.219
B (249.678 nm)	0.005272 !	ppm	0.000390	7.40	226.458000 !	Y 242.219
Ba (493.408 nm)	0.000287 !	ppm	0.000100	34.83	80.922000 !	Y_R 488.368
Be (234.861 nm)	-0.000023 !u	ppm	0.000018	80.28	-23.055300 !	Y_R 488.368
Bi (223.061 nm)	-0.000178 !u	ppm	0.002380	> 100.00	16.885800 !	Y 377.433
Ca (315.887 nm)	0.002616 !u	ppm	0.003464	> 100.00	-5.357864 !	Y_R 377.433
Cd (214.439 nm)	-0.000025 !u	ppm	0.000051	> 100.00	-7.012500 !	Y 377.433
Co (228.615 nm)	-0.000168 !u	ppm	0.000206	> 100.00	-17.227400 !	Y 242.219
Cr (205.560 nm)	-0.000040 !u	ppm	0.000040	> 100.00	6.551280 !	Y 377.433
Cu (324.754 nm)	0.001192 !	ppm	0.000163	13.66	1509.630000 !	Y 377.433
Fe (238.204 nm)	-0.000853 !u	ppm	0.000430	50.44	9.543089 !	Y_R 377.433
Fe H (259.940 nm)	-0.001362 !u	ppm	0.000485	35.59	13.333900 !	Y_R 377.433
K (766.491 nm)	-0.000342 !u	ppm	0.017082	> 100.00	-790.227000 !	Y_R2 488.368
Li (670.783 nm)	0.003180 !	ppm	0.000720	22.64	-1038.600000 !	Y_R2 488.368
Mg (279.078 nm)	-0.001804 !u	ppm	0.001087	60.29	32.307900 !	Y 377.433
Mn (257.610 nm)	-0.000133 !u	ppm	0.000018	13.46	44.291700 !	Y 377.433
Mo (202.032 nm)	0.002018 !	ppm	0.000143	7.11	22.349800 !	Y 377.433
Na (589.592 nm)	0.005355 !	ppm	0.003944	73.65	250.331000 !	Y_R2 488.368
Na H (589.593 nm)	1.140764 !u	ppm	0.006264	0.55	1284.892285 !	Y_R 488.368
Ni (231.604 nm)	-0.000182 !u	ppm	0.000195	> 100.00	4.570590 !	Y 377.433
P (213.618 nm)	0.000058 !u	ppm	0.000524	> 100.00	10.735500 !	Y 242.219
Pb (220.353 nm)	-0.000007 !u	ppm	0.002084	> 100.00	-3.657140 !	Y 242.219
S (181.972 nm)	-0.002249 !u	ppm	0.001330	59.15	3.306036 !	Y 377.433
Sb (206.834 nm)	0.001007 !u	ppm	0.001331	> 100.00	-4.391490 !	Y 377.433
Se (196.026 nm)	0.000005 !u	ppm	0.004264	> 100.00	6.177640 !	Y 242.219
Si (288.158 nm)	0.003193 !	ppm	0.000478	14.96	895.041000 !	Y 377.433
Sn (189.925 nm)	-0.000016 !u	ppm	0.000938	> 100.00	5.316530 !	Y 377.433
Sr (421.552 nm)	-0.000022 !u	ppm	0.000127	> 100.00	53.577306 !	Y_R 488.368
Th (288.505 nm)	0.000483 !u	ppm	0.002563	> 100.00	100.166000 !	Y 377.433
Ti (336.122 nm)	0.000107 !	ppm	0.000026	24.04	-200.067000 !	Y 377.433
Tl (190.794 nm)	0.001015 !	ppm	0.000606	59.65	-1.065480 !	Y 377.433
U (409.013 nm)	0.011377 !	ppm	0.002756	24.23	-2.542940 !	Y 377.433
V (292.401 nm)	-0.000159 !u	ppm	0.000314	> 100.00	13.756000 !	Y 377.433
Zn (206.200 nm)	-0.000497 !u	ppm	0.000260	52.24	6.707950 !	Y 377.433
Zr (343.823 nm)	0.000325 !	ppm	0.000088	27.25	60.776900 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.973248 !	8158.486464 !	0.005637	0.58
Y 377.433	0.950333 !	430851.903013 !	0.005414	0.57
Y_R 377.433	0.987138 !	34055.400000 !	0.004720	0.48
Y_R 488.368	1.008710 !	19007.000000 !	0.004009	0.40
Y_R2 488.368	0.973104 !	32228.005587 !	0.003179	0.33

Sample Name: CCVL-7434568

Date: 10/27/2022 5:16:21 PM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014648 !	ppm	0.000022	0.15	32721.443464 !	Y 377.433
Ag (328.068 nm)	0.010317 !	ppm	0.000181	1.76	388.527000 !	Y 377.433
Al (167.019 nm)	0.109497 !	ppm	0.001020	0.93	49.589100 !	Y_R 377.433
Al H (396.152 nm)	0.100323 !u	ppm	0.003376	3.37	304.007709 !	Y_R 377.433
As (188.980 nm)	0.014094 !	ppm	0.001209	8.58	14.772200 !	Y 242.219
B (249.678 nm)	0.102318 !	ppm	0.000577	0.56	2929.630000 !	Y 242.219
Ba (493.408 nm)	0.009781 !	ppm	0.000334	3.42	1131.340000 !	Y_R 488.368
Be (234.861 nm)	0.001003 !	ppm	0.000021	2.14	263.313000 !	Y_R 488.368
Bi (223.061 nm)	-0.002600 Q!u	ppm	0.000478	18.40	10.807700 Q!	Y 377.433
Ca (315.887 nm)	0.212828 !	ppm	0.008801	4.14	189.246219 !	Y_R 377.433
Cd (214.439 nm)	0.005124 !	ppm	0.000103	2.02	308.018000 !	Y 377.433
Co (228.615 nm)	0.010462 !	ppm	0.000177	1.70	184.643000 !	Y 242.219
Cr (205.560 nm)	0.010478 !	ppm	0.000073	0.69	163.307000 !	Y 377.433
Cu (324.754 nm)	0.016952 !	ppm	0.000150	0.88	2628.380000 !	Y 377.433
Fe (238.204 nm)	0.104652 !	ppm	0.001095	1.05	382.427404 !	Y_R 377.433
Fe H (259.940 nm)	0.103564 !u	ppm	0.001287	1.24	231.861000 !	Y_R 377.433
K (766.491 nm)	3.065730 !	ppm	0.055128	1.80	2266.190000 !	Y_R2 488.368
Li (670.783 nm)	0.022803 !	ppm	0.000652	2.86	-380.345000 !	Y_R2 488.368
Mg (279.078 nm)	0.206272 !	ppm	0.002072	1.00	1287.370000 !	Y 377.433
Mn (257.610 nm)	0.010450 !	ppm	0.000049	0.47	2605.340000 !	Y 377.433
Mo (202.032 nm)	0.020691 !	ppm	0.000458	2.21	182.315000 !	Y 377.433
Na (589.592 nm)	1.077830 !	ppm	0.009019	0.84	6728.670000 !	Y_R2 488.368
Na H (589.593 nm)	2.135473 !u	ppm	0.006460	0.30	5296.572711 !	Y_R 488.368
Ni (231.604 nm)	0.043748 !	ppm	0.001464	3.35	313.004000 !	Y 377.433
P (213.618 nm)	2.905690 !	ppm	0.006600	0.23	6863.990000 !	Y 242.219
Pb (220.353 nm)	0.010164 !	ppm	0.000290	2.85	24.624500 !	Y 242.219
S (181.972 nm)	0.102108 !	ppm	0.002845	2.79	53.473759 !	Y 377.433
Sb (206.834 nm)	0.020549 !	ppm	0.000755	3.67	44.794000 !	Y 377.433
Se (196.026 nm)	0.018891 !	ppm	0.003511	18.58	25.000300 !	Y 242.219
Si (288.158 nm)	0.493684 !	ppm	0.001495	0.30	5465.840000 !	Y 377.433
Sn (189.925 nm)	0.105114 !	ppm	0.000357	0.34	228.712000 !	Y 377.433
Sr (421.552 nm)	0.009868 !	ppm	0.000157	1.59	2268.423379 !	Y_R 488.368
Th (288.505 nm)	0.017043 !	ppm	0.002214	12.99	147.996000 !	Y 377.433
Ti (336.122 nm)	0.009906 !	ppm	0.000027	0.27	1263.520000 !	Y 377.433
Tl (190.794 nm)	0.015705 !	ppm	0.001205	7.67	31.234400 !	Y 377.433
U (409.013 nm)	0.070097 !	ppm	0.000284	0.41	291.969000 !	Y 377.433
V (292.401 nm)	0.009934 !	ppm	0.000245	2.46	423.258000 !	Y 377.433
Zn (206.200 nm)	0.022310 !	ppm	0.000556	2.49	128.434000 !	Y 377.433
Zr (343.823 nm)	0.012382 !	ppm	0.000166	1.34	1709.820000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.985880 !	8264.380150 !	0.007657	0.78
Y 377.433	0.961051 !	435711.194454 !	0.008127	0.85
Y_R 377.433	0.986009 !	34016.500000 !	0.006925	0.70
Y_R 488.368	1.008490 !	19002.800000 !	0.003119	0.31
Y_R2 488.368	0.987979 !	32720.644428 !	0.001116	0.11

Sample Name: mb 280-591067/1-a

Date: 10/27/2022 5:20:25 PM Rack:Tube: 4:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000018 !u	ppm	0.000013	73.84	-1087.284891 !	Y 377.433
Ag (328.068 nm)	-0.000022 n!u	ppm	0.000167	> 100.00	-160.375000 !	Y 377.433
Al (167.019 nm)	0.017330 !	ppm	0.002310	13.33	8.418110 !	Y_R 377.433
Al H (396.152 nm)	0.005527 !u	ppm	0.005075	91.83	39.082954 !	Y_R 377.433
As (188.980 nm)	-0.000399 !u	ppm	0.001394	> 100.00	-4.072260 !	Y 242.219
B (249.678 nm)	0.003041 !	ppm	0.000044	1.44	164.271000 !	Y 242.219
Ba (493.408 nm)	0.000579 !	ppm	0.000069	11.94	113.272000 !	Y_R 488.368
Be (234.861 nm)	-0.000026 !u	ppm	0.000026	> 100.00	-23.230000 !	Y_R 488.368
Bi (223.061 nm)	0.000803 !u	ppm	0.003846	> 100.00	19.348400 !	Y 377.433
Ca (315.887 nm)	0.128915 !	ppm	0.002839	2.20	111.561643 !	Y_R 377.433
Cd (214.439 nm)	-0.000003 !u	ppm	0.000066	> 100.00	-5.628860 !	Y 377.433
Co (228.615 nm)	0.000040 !	ppm	0.000029	73.52	-13.275600 !	Y 242.219
Cr (205.560 nm)	0.001382 !	ppm	0.000334	24.21	27.742600 !	Y 377.433
Cu (324.754 nm)	0.003604 !	ppm	0.000350	9.70	1681.260000 !	Y 377.433
Fe (238.204 nm)	0.035237 !	ppm	0.001333	3.78	137.096527 !	Y_R 377.433
Fe H (259.940 nm)	0.034917 !u	ppm	0.001575	4.51	88.891000 !	Y_R 377.433
K (766.491 nm)	0.163650 !	ppm	0.014082	8.60	-626.752000 !	Y_R2 488.368
Li (670.783 nm)	0.004973 !	ppm	0.000595	11.96	-978.454000 !	Y_R2 488.368
Mg (279.078 nm)	0.022156 !	ppm	0.000894	4.03	177.018000 !	Y 377.433
Mn (257.610 nm)	0.000698 !	ppm	0.000011	1.54	245.299000 !	Y 377.433
Mo (202.032 nm)	0.000632 !	ppm	0.000044	6.95	10.475100 !	Y 377.433
Na (589.592 nm)	0.117425 !	ppm	0.002065	1.76	926.421000 !	Y_R2 488.368
Na H (589.593 nm)	1.197603 !u	ppm	0.008102	0.68	1513.939997 !	Y_R 488.368
Ni (231.604 nm)	0.000537 !	ppm	0.000380	70.75	9.621030 !	Y 377.433
P (213.618 nm)	0.010548 !	ppm	0.001952	18.50	35.475300 !	Y 242.219
Pb (220.353 nm)	-0.000717 !u	ppm	0.001063	> 100.00	-5.632470 !	Y 242.219
S (181.972 nm)	0.016469 !	ppm	0.003721	22.60	12.301607 !	Y 377.433
Sb (206.834 nm)	0.001243 !	ppm	0.000772	62.14	-3.740550 !	Y 377.433
Se (196.026 nm)	-0.000113 !u	ppm	0.000289	> 100.00	6.054610 !	Y 242.219
Si (288.158 nm)	0.009251 !	ppm	0.000271	2.93	951.544000 !	Y 377.433
Sn (189.925 nm)	0.007476 !	ppm	0.000251	3.35	21.237900 !	Y 377.433
Sr (421.552 nm)	0.000637 !	ppm	0.000093	14.61	201.153879 !	Y_R 488.368
Th (288.505 nm)	0.001492 !u	ppm	0.002830	> 100.00	102.949000 !	Y 377.433
Ti (336.122 nm)	0.000598 !	ppm	0.000108	18.14	-126.452000 !	Y 377.433
Tl (190.794 nm)	-0.000374 !u	ppm	0.001559	> 100.00	-4.122920 !	Y 377.433
U (409.013 nm)	0.009303 !	ppm	0.004796	51.56	-12.959700 !	Y 377.433
V (292.401 nm)	-0.000169 !u	ppm	0.000241	> 100.00	13.296700 !	Y 377.433
Zn (206.200 nm)	0.012632 !	ppm	0.001112	8.81	76.778100 !	Y 377.433
Zr (343.823 nm)	0.000240 !	ppm	0.000016	6.74	49.277400 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.981222 !	8225.334779 !	0.004568	0.47
Y 377.433	0.957892 !	434279.183601 !	0.005063	0.53
Y_R 377.433	0.997645 !	34417.900000 !	0.002703	0.27
Y_R 488.368	1.017570 !	19173.800000 !	0.006183	0.61
Y_R2 488.368	0.994680 !	32942.592680 !	0.004496	0.45

Sample Name: lcs 280-591067/2-a

Date: 10/27/2022 5:24:28 PM Rack:Tube: 4:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.941841 !	ppm	0.002329	0.25	2170154.807744 !	Y 377.433
Ag (328.068 nm)	0.047021 n!	ppm	0.000407	0.86	2361.290000 !	Y 377.433
Al (167.019 nm)	9.962350 !o	ppm	0.035830	0.36	4452.110000 !	Y_R 377.433
Al H (396.152 nm)	9.952934 !	ppm	0.021843	0.22	27761.402204 !	Y_R 377.433
As (188.980 nm)	0.947162 !	ppm	0.003685	0.39	1228.030000 !	Y 242.219
B (249.678 nm)	1.862140 !o	ppm	0.001022	0.05	51970.200000 !	Y 242.219
Ba (493.408 nm)	0.983552 !	ppm	0.008984	0.91	108870.000000 !	Y_R 488.368
Be (234.861 nm)	0.984642 !	ppm	0.009503	0.97	274659.000000 !	Y_R 488.368
Bi (223.061 nm)	-0.005185 !u	ppm	0.003250	62.67	4.318240 !	Y 377.433
Ca (315.887 nm)	49.801630 !o	ppm	0.020196	0.04	46095.985215 !	Y_R 377.433
Cd (214.439 nm)	0.985289 !	ppm	0.000997	0.10	60264.900000 !	Y 377.433
Co (228.615 nm)	0.950801 !	ppm	0.001637	0.17	18049.900000 !	Y 242.219
Cr (205.560 nm)	0.985717 !	ppm	0.002990	0.30	14692.400000 !	Y 377.433
Cu (324.754 nm)	0.995874 !	ppm	0.000728	0.07	72080.000000 !	Y 377.433
Fe (238.204 nm)	9.939329 !o	ppm	0.011125	0.11	35140.904792 !	Y_R 377.433
Fe H (259.940 nm)	10.070100 !	ppm	0.012245	0.12	20988.900000 !	Y_R 377.433
K (766.491 nm)	47.609000 !	ppm	0.131878	0.28	46669.200000 !	Y_R2 488.368
Li (670.783 nm)	0.952043 !	ppm	0.001385	0.15	30791.900000 !	Y_R2 488.368
Mg (279.078 nm)	49.432900 !o	ppm	0.100377	0.20	298559.000000 !	Y 377.433
Mn (257.610 nm)	1.006350 !	ppm	0.000918	0.09	243615.000000 !	Y 377.433
Mo (202.032 nm)	1.013960 !	ppm	0.002100	0.21	8691.220000 !	Y 377.433
Na (589.592 nm)	49.199000 !	ppm	0.092836	0.19	298158.000000 !	Y_R2 488.368
Na H (589.593 nm)	48.264386 !	ppm	0.169999	0.35	191898.899431 !	Y_R 488.368
Ni (231.604 nm)	0.989139 !	ppm	0.001182	0.12	6952.720000 !	Y 377.433
P (213.618 nm)	19.603300 !o	ppm	0.007046	0.04	46247.100000 !	Y 242.219
Pb (220.353 nm)	0.971307 !	ppm	0.001169	0.12	2687.790000 !	Y 242.219
S (181.972 nm)	18.956312 !o	ppm	0.007226	0.04	9115.265188 !	Y 377.433
Sb (206.834 nm)	1.050390 !	ppm	0.004672	0.44	2650.880000 !	Y 377.433
Se (196.026 nm)	0.944425 !	ppm	0.004617	0.49	946.999000 !	Y 242.219
Si (288.158 nm)	1.279580 !	ppm	0.006471	0.51	12946.900000 !	Y 377.433
Sn (189.925 nm)	1.011070 !	ppm	0.002209	0.22	2153.810000 !	Y 377.433
Sr (421.552 nm)	0.960329 !	ppm	0.002352	0.24	215122.130391 !	Y_R 488.368
Th (288.505 nm)	0.008449 !	ppm	0.002140	25.32	140.505000 !	Y 377.433
Ti (336.122 nm)	0.985943 !	ppm	0.001464	0.15	147152.000000 !	Y 377.433
Tl (190.794 nm)	0.995261 !	ppm	0.002217	0.22	2185.000000 !	Y 377.433
U (409.013 nm)	0.006359 !	ppm	0.004105	64.56	-110.468000 !	Y 377.433
V (292.401 nm)	0.997905 !	ppm	0.000946	0.09	40689.300000 !	Y 377.433
Zn (206.200 nm)	0.990977 !	ppm	0.001739	0.18	5298.350000 !	Y 377.433
Zr (343.823 nm)	0.947763 !	ppm	0.013268	1.40	129641.000000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.948921 !	7954.562892 !	0.001768	0.19
Y 377.433	0.922842 !	418388.470704 !	0.001848	0.20
Y_R 377.433	0.963576 !	33242.500000 !	0.009401	0.98
Y_R 488.368	0.979136 !	18449.700000 !	0.010210	1.04
Y_R2 488.368	0.964189 !	31932.754280 !	0.008207	0.85

Sample Name: 280-167932-a-1-a

Date: 10/27/2022 5:28:32 PM Rack:Tube: 4:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.021112 !	ppm	0.000078	0.37	47623.228931 !	Y 377.433
Ag (328.068 nm)	0.026851 n!	ppm	0.000260	0.97	1249.670000 !	Y 377.433
Al (167.019 nm)	28.648200 !o	ppm	0.086536	0.30	12826.800000 !	Y_R 377.433
Al H (396.152 nm)	29.664056 !	ppm	0.139660	0.47	82455.845986 !	Y_R 377.433
As (188.980 nm)	0.032354 !	ppm	0.001845	5.70	38.515700 !	Y 242.219
B (249.678 nm)	0.597466 !	ppm	0.002884	0.48	16572.700000 !	Y 242.219
Ba (493.408 nm)	2.151760 !o	ppm	0.010661	0.50	238181.000000 !	Y_R 488.368
Be (234.861 nm)	0.000930 !	ppm	0.000050	5.39	1409.860000 !	Y_R 488.368
Bi (223.061 nm)	0.771574 !	ppm	0.004032	0.52	1953.900000 !	Y 377.433
Ca (315.887 nm)	193.046966 !o	ppm	0.597282	0.31	178702.557507 !	Y_R 377.433
Cd (214.439 nm)	0.017845 !	ppm	0.000109	0.61	1160.560000 !	Y 377.433
Co (228.615 nm)	0.027950 !	ppm	0.000229	0.82	534.106000 !	Y 242.219
Cr (205.560 nm)	0.306063 !	ppm	0.001237	0.40	4550.240000 !	Y 377.433
Cu (324.754 nm)	3.141270 !o	ppm	0.007464	0.24	224258.000000 !	Y 377.433
Fe (238.204 nm)	75.231677 !o	ppm	0.113027	0.15	265902.171266 !	Y_R 377.433
Fe H (259.940 nm)	76.130600 !	ppm	0.077754	0.10	158571.000000 !	Y_R 377.433
K (766.491 nm)	33.417600 !	ppm	0.180860	0.54	32522.500000 !	Y_R2 488.368
Li (670.783 nm)	0.027955 !	ppm	0.002168	7.76	-207.527000 !	Y_R2 488.368
Mg (279.078 nm)	40.272600 !	ppm	0.148528	0.37	243122.000000 !	Y 377.433
Mn (257.610 nm)	3.261470 !o	ppm	0.013581	0.42	789355.000000 !	Y 377.433
Mo (202.032 nm)	0.096334 !	ppm	0.001402	1.46	830.311000 !	Y 377.433
Na (589.592 nm)	22.530200 !	ppm	0.143489	0.64	139020.000000 !	Y_R2 488.368
Na H (589.593 nm)	22.607562 !	ppm	0.069295	0.31	89943.795898 !	Y_R 488.368
Ni (231.604 nm)	0.208625 !	ppm	0.000716	0.34	1483.290000 !	Y 377.433
P (213.618 nm)	128.631000 !bo	ppm	0.921033	0.72	303400.000000 !	Y 242.219
Pb (220.353 nm)	0.146565 !	ppm	0.002291	1.56	398.910000 !	Y 242.219
S (181.972 nm)	116.344143 !bo	ppm	0.420171	0.36	55915.598161 !	Y 377.433
Sb (206.834 nm)	0.023715 !	ppm	0.001478	6.23	49.439800 !	Y 377.433
Se (196.026 nm)	0.081202 !	ppm	0.001258	1.55	76.425700 !	Y 242.219
Si (288.158 nm)	3.578300 !	ppm	0.025548	0.71	34280.200000 !	Y 377.433
Sn (189.925 nm)	0.460982 !	ppm	0.001196	0.26	984.907000 !	Y 377.433
Sr (421.552 nm)	0.711481 !	ppm	0.002303	0.32	159393.150929 !	Y_R 488.368
Th (288.505 nm)	0.025952 !	ppm	0.003883	14.96	244.511000 !	Y 377.433
Ti (336.122 nm)	0.492719 !	ppm	0.000290	0.06	73962.300000 !	Y 377.433
Tl (190.794 nm)	-0.003050 !u	ppm	0.002002	65.62	-14.321800 !	Y 377.433
U (409.013 nm)	0.026315 !	ppm	0.008812	33.49	100.271000 !	Y 377.433
V (292.401 nm)	0.202044 !	ppm	0.001148	0.57	8236.990000 !	Y 377.433
Zn (206.200 nm)	11.092500 !o	ppm	0.053117	0.48	59211.400000 !	Y 377.433
Zr (343.823 nm)	0.103580 !	ppm	0.016913	16.33	14409.000000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.972978 !	8156.223124 !	0.003686	0.38
Y 377.433	0.962648 !	436435.242870 !	0.004365	0.45
Y_R 377.433	1.010590 !	34864.500000 !	0.003891	0.39
Y_R 488.368	1.029480 !	19398.300000 !	0.001025	0.10
Y_R2 488.368	1.003762 !	33243.369039 !	0.007230	0.72

Sample Name: LB2 280-591261/1-B

Date: 10/27/2022 5:32:35 PM Rack:Tube: 4:27

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000001 !u	ppm	0.000012	> 100.00	-1043.412189 !	Y 377.433
Ag (328.068 nm)	0.000459 n!	ppm	0.000196	42.60	-134.885000 !	Y 377.433
Al (167.019 nm)	0.006876 !	ppm	0.001906	27.73	3.740850 !	Y_R 377.433
Al H (396.152 nm)	-0.000248 !u	ppm	0.006362	> 100.00	22.984008 !	Y_R 377.433
As (188.980 nm)	0.000948 !u	ppm	0.001017	> 100.00	-2.321310 !	Y 242.219
B (249.678 nm)	0.005593 !	ppm	0.000258	4.61	235.403000 !	Y 242.219
Ba (493.408 nm)	0.000616 !	ppm	0.000341	55.40	117.248000 !	Y_R 488.368
Be (234.861 nm)	-0.000026 !u	ppm	0.000008	32.74	-23.612100 !	Y_R 488.368
Bi (223.061 nm)	0.000845 !u	ppm	0.001211	> 100.00	19.453100 !	Y 377.433
Ca (315.887 nm)	0.058155 !	ppm	0.002324	4.00	46.057053 !	Y_R 377.433
Cd (214.439 nm)	0.000004 !u	ppm	0.000046	> 100.00	-5.214910 !	Y 377.433
Co (228.615 nm)	0.000003 !u	ppm	0.000197	> 100.00	-13.978000 !	Y 242.219
Cr (205.560 nm)	-0.000070 !u	ppm	0.000250	> 100.00	6.100620 !	Y 377.433
Cu (324.754 nm)	0.008092 !	ppm	0.000182	2.25	1999.240000 !	Y 377.433
Fe (238.204 nm)	0.012925 !	ppm	0.000703	5.44	58.238806 !	Y_R 377.433
Fe H (259.940 nm)	0.010547 !u	ppm	0.002194	20.80	38.137700 !	Y_R 377.433
K (766.491 nm)	0.121710 !	ppm	0.060705	49.88	-668.559000 !	Y_R2 488.368
Li (670.783 nm)	0.004282 !	ppm	0.000911	21.27	-1001.660000 !	Y_R2 488.368
Mg (279.078 nm)	0.006558 !	ppm	0.001485	22.65	82.932200 !	Y 377.433
Mn (257.610 nm)	0.000270 !	ppm	0.000077	28.35	141.883000 !	Y 377.433
Mo (202.032 nm)	0.000097 !u	ppm	0.000260	> 100.00	5.892270 !	Y 377.433
Na (589.592 nm)	0.245700 !	ppm	0.005424	2.21	1699.430000 !	Y_R2 488.368
Na H (589.593 nm)	1.357957 !u	ppm	0.003966	0.29	2158.800645 !	Y_R 488.368
Ni (231.604 nm)	-0.000071 !u	ppm	0.000110	> 100.00	5.352290 !	Y 377.433
P (213.618 nm)	0.021207 !	ppm	0.003381	15.94	60.617200 !	Y 242.219
Pb (220.353 nm)	0.005708 !	ppm	0.000408	7.15	12.213600 !	Y 242.219
S (181.972 nm)	0.030133 !	ppm	0.003791	12.58	18.866643 !	Y 377.433
Sb (206.834 nm)	0.001489 !u	ppm	0.001578	> 100.00	-3.153070 !	Y 377.433
Se (196.026 nm)	0.000336 !u	ppm	0.001386	> 100.00	6.505940 !	Y 242.219
Si (288.158 nm)	0.046553 !	ppm	0.003635	7.81	1298.990000 !	Y 377.433
Sn (189.925 nm)	-0.000078 !u	ppm	0.001121	> 100.00	5.185960 !	Y 377.433
Sr (421.552 nm)	0.000240 !	ppm	0.000059	24.43	112.183072 !	Y_R 488.368
Th (288.505 nm)	-0.001883 !u	ppm	0.001259	66.85	93.437900 !	Y 377.433
Ti (336.122 nm)	0.000378 !	ppm	0.000087	23.16	-159.550000 !	Y 377.433
Tl (190.794 nm)	-0.002154 !u	ppm	0.000395	18.35	-8.040090 !	Y 377.433
U (409.013 nm)	0.009223 !	ppm	0.004650	50.41	-13.314400 !	Y 377.433
V (292.401 nm)	-0.000216 !u	ppm	0.000248	> 100.00	11.643200 !	Y 377.433
Zn (206.200 nm)	0.003649 !	ppm	0.000410	11.23	28.838100 !	Y 377.433
Zr (343.823 nm)	-0.000251 !u	ppm	0.000010	4.15	-17.830200 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.998146 !	8367.208265 !	0.003900	0.39
Y 377.433	0.976024 !	442499.676859 !	0.003417	0.35
Y_R 377.433	1.025350 !	35373.600000 !	0.004050	0.39
Y_R 488.368	1.045410 !	19698.500000 !	0.007308	0.70
Y_R2 488.368	1.016879 !	33677.767182 !	0.006054	0.60

Sample Name: LCS 280-591261/2-B

Date: 10/27/2022 5:36:39 PM Rack:Tube: 4:28

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.972360 !	ppm	0.002567	0.26	2240509.491020 !	Y 377.433
Ag (328.068 nm)	0.253016 n!	ppm	0.000577	0.23	13311.200000 !	Y 377.433
Al (167.019 nm)	10.193300 !o	ppm	0.033668	0.33	4555.310000 !	Y_R 377.433
Al H (396.152 nm)	10.157865 !	ppm	0.024396	0.24	28333.901835 !	Y_R 377.433
As (188.980 nm)	1.609230 !o	ppm	0.006740	0.42	2088.900000 !	Y 242.219
B (249.678 nm)	1.961420 !o	ppm	0.001727	0.09	54736.200000 !	Y 242.219
Ba (493.408 nm)	3.100110 !o	ppm	0.008321	0.27	343037.000000 !	Y_R 488.368
Be (234.861 nm)	1.008240 !	ppm	0.006326	0.63	281242.000000 !	Y_R 488.368
Bi (223.061 nm)	-0.002329 !u	ppm	0.001368	58.76	11.488200 !	Y 377.433
Ca (315.887 nm)	51.090018 !o	ppm	0.047342	0.09	47288.850630 !	Y_R 377.433
Cd (214.439 nm)	1.223520 !o	ppm	0.004905	0.40	74835.200000 !	Y 377.433
Co (228.615 nm)	0.975886 !	ppm	0.002394	0.25	18526.700000 !	Y 242.219
Cr (205.560 nm)	2.077590 !o	ppm	0.008612	0.41	30973.100000 !	Y 377.433
Cu (324.754 nm)	1.421800 !o	ppm	0.008960	0.63	102301.000000 !	Y 377.433
Fe (238.204 nm)	10.180512 !o	ppm	0.008310	0.08	35993.310934 !	Y_R 377.433
Fe H (259.940 nm)	10.330700 !	ppm	0.002357	0.02	21531.700000 !	Y_R 377.433
K (766.491 nm)	48.994300 !	ppm	0.197570	0.40	48050.100000 !	Y_R2 488.368
Li (670.783 nm)	0.980533 !	ppm	0.004572	0.47	31747.700000 !	Y_R2 488.368
Mg (279.078 nm)	50.920300 !o	ppm	0.174699	0.34	307542.000000 !	Y 377.433
Mn (257.610 nm)	1.031790 !	ppm	0.004121	0.40	249771.000000 !	Y 377.433
Mo (202.032 nm)	1.048350 !	ppm	0.001355	0.13	8985.860000 !	Y 377.433
Na (589.592 nm)	50.815900 !	ppm	0.204516	0.40	310845.000000 !	Y_R2 488.368
Na H (589.593 nm)	49.394060 !	ppm	0.149765	0.30	198712.286632 !	Y_R 488.368
Ni (231.604 nm)	1.006200 !	ppm	0.005194	0.52	7072.600000 !	Y 377.433
P (213.618 nm)	20.249000 !o	ppm	0.041801	0.21	47770.100000 !	Y 242.219
Pb (220.353 nm)	2.032300 !o	ppm	0.006875	0.34	5635.390000 !	Y 242.219
S (181.972 nm)	19.691995 !o	ppm	0.097836	0.50	9468.825976 !	Y 377.433
Sb (206.834 nm)	1.101050 !o	ppm	0.004364	0.40	2809.910000 !	Y 377.433
Se (196.026 nm)	1.196460 !o	ppm	0.003209	0.27	1198.280000 !	Y 242.219
Si (288.158 nm)	10.013600 !	ppm	0.053285	0.53	94317.300000 !	Y 377.433
Sn (189.925 nm)	1.035180 !	ppm	0.005686	0.55	2205.050000 !	Y 377.433
Sr (421.552 nm)	0.980599 !	ppm	0.001374	0.14	219661.445400 !	Y_R 488.368
Th (288.505 nm)	0.008716 !	ppm	0.001941	22.27	141.800000 !	Y 377.433
Ti (336.122 nm)	1.016450 !	ppm	0.003188	0.31	151712.000000 !	Y 377.433
Tl (190.794 nm)	1.023230 !	ppm	0.003719	0.36	2246.470000 !	Y 377.433
U (409.013 nm)	0.001870 !	ppm	0.000564	30.18	-135.069000 !	Y 377.433
V (292.401 nm)	1.024190 !	ppm	0.003997	0.39	41460.700000 !	Y 377.433
Zn (206.200 nm)	1.015620 !	ppm	0.004613	0.45	5429.870000 !	Y 377.433
Zr (343.823 nm)	0.969535 !	ppm	0.019792	2.04	132619.000000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.954787 !	8003.734346 !	0.004902	0.51
Y 377.433	0.927156 !	420344.293766 !	0.006360	0.69
Y_R 377.433	0.975753 !	33662.600000 !	0.002500	0.26
Y_R 488.368	0.995836 !	18764.400000 !	0.003149	0.32
Y_R2 488.368	0.962641 !	31881.495014 !	0.009860	1.02

Sample Name: 280-168095-A-3-B

Date: 10/27/2022 5:40:43 PM Rack:Tube: 4:29

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	####	ppm	N/A	N/A	####	Y 377.433
Ag (328.068 nm)	0.011996 n!	ppm	0.000279	2.33	483.582000 !	Y 377.433
Al (167.019 nm)	5.042600 !o	ppm	0.002918	0.06	2312.800000 !	Y_R 377.433
Al H (396.152 nm)	5.248583 !	ppm	0.003835	0.07	14917.702789 !	Y_R 377.433
As (188.980 nm)	-0.003728 !u	ppm	0.002067	55.43	-8.401410 !	Y 242.219
B (249.678 nm)	5.069290 !o	ppm	0.003731	0.07	141054.000000 !	Y 242.219
Ba (493.408 nm)	0.147855 !	ppm	0.000706	0.48	16509.300000 !	Y_R 488.368
Be (234.861 nm)	-0.001804 !u	ppm	0.000227	12.60	1076.990000 !	Y_R 488.368
Bi (223.061 nm)	0.012635 !	ppm	0.001072	8.48	49.044000 !	Y 377.433
Ca (315.887 nm)	176.523797 !o	ppm	0.385661	0.22	163406.471134 !	Y_R 377.433
Cd (214.439 nm)	-0.000185 !u	ppm	0.000091	49.23	96.172700 !	Y 377.433
Co (228.615 nm)	0.239410 !	ppm	0.000380	0.16	4525.690000 !	Y 242.219
Cr (205.560 nm)	3.801490 !o	ppm	0.010088	0.27	56655.600000 !	Y 377.433
Cu (324.754 nm)	0.946448 !	ppm	0.001490	0.16	68730.600000 !	Y 377.433
Fe (238.204 nm)	113.464697 !o	ppm	0.234159	0.21	401028.270282 !	Y_R 377.433
Fe H (259.940 nm)	114.942000 !	ppm	0.367887	0.32	239404.000000 !	Y_R 377.433
K (766.491 nm)	261.302000 !o	ppm	1.380670	0.53	259689.000000 !	Y_R2 488.368
Li (670.783 nm)	8.683290 !o	ppm	0.062761	0.72	290144.000000 !	Y_R2 488.368
Mg (279.078 nm)	74.339000 !o	ppm	0.215037	0.29	448787.000000 !	Y 377.433
Mn (257.610 nm)	56.353300 !bo	ppm	0.083422	0.15	13637600.000000 !	Y 377.433
Mo (202.032 nm)	2.715900 !o	ppm	0.006123	0.23	23271.000000 !	Y 377.433
Na (589.592 nm)	682.898000 !o	ppm	1.605770	0.24	4116960.000000 !	Y_R2 488.368
Na H (589.593 nm)	713.431891 !	ppm	4.309451	0.60	2866708.460683 !	Y_R 488.368
Ni (231.604 nm)	26.239400 !o	ppm	0.039954	0.15	184231.000000 !	Y 377.433
P (213.618 nm)	0.496852 !	ppm	0.010486	2.11	1182.480000 !	Y 242.219
Pb (220.353 nm)	0.013615 !	ppm	0.000775	5.70	29.884800 !	Y 242.219
S (181.972 nm)	331.392497 !bo	ppm	0.502757	0.15	159370.281871 !	Y 377.433
Sb (206.834 nm)	8.143270 !o	ppm	0.007945	0.10	20530.800000 !	Y 377.433
Se (196.026 nm)	0.007543 !b	ppm	0.001456	19.30	39.600800 !	Y 242.219
Si (288.158 nm)	2.080400 !	ppm	0.005407	0.26	20248.300000 !	Y 377.433
Sn (189.925 nm)	0.691050 !	ppm	0.000828	0.12	1473.790000 !	Y 377.433
Sr (421.552 nm)	20.167158 !bo	ppm	0.021843	0.11	4516449.559433 !	Y_R 488.368
Th (288.505 nm)	0.570678 !b	ppm	0.004365	0.76	2949.030000 !	Y 377.433
Ti (336.122 nm)	0.017043 !	ppm	0.000170	1.00	2887.300000 !	Y 377.433
Tl (190.794 nm)	0.000998 !	ppm	0.000621	62.28	-9.989740 !	Y 377.433
U (409.013 nm)	-0.050936 !u	ppm	0.002122	4.17	-239.493000 !	Y 377.433
V (292.401 nm)	0.021207 !	ppm	0.000520	2.45	-219.746000 !	Y 377.433
Zn (206.200 nm)	116.831000 !bo	ppm	0.593481	0.51	623551.000000 !	Y 377.433
Zr (343.823 nm)	0.036631 !	ppm	0.006491	17.72	5371.740000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.900157 !	7545.789009 !	0.004741	0.53
Y 377.433	0.882445 !	400073.644884 !	0.005770	0.65
Y_R 377.433	0.959218 !	33092.200000 !	0.010447	1.09
Y_R 488.368	0.977230 !	18413.800000 !	0.008176	0.84
Y_R2 488.368	0.931942 !	30864.780067 !	0.002892	0.31

Sample Name: 280-168095-A-3-B SD@5

Date: 10/27/2022 5:44:47 PM Rack:Tube: 4:30

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	2.037934 !	ppm	0.277859	13.63	4696951.088165 !	Y 377.433
Ag (328.068 nm)	0.003140 n!	ppm	0.000203	6.45	7.426530 !	Y 377.433
Al (167.019 nm)	0.888957 !	ppm	0.036786	4.14	408.030000 !	Y_R 377.433
Al H (396.152 nm)	0.862978 !u	ppm	0.028655	3.32	2490.383651 !	Y_R 377.433
As (188.980 nm)	0.000073 !u	ppm	0.002303	> 100.00	-3.458310 !	Y 242.219
B (249.678 nm)	1.119170 !o	ppm	0.135157	12.08	31214.200000 !	Y 242.219
Ba (493.408 nm)	0.024577 !	ppm	0.000735	2.99	2785.870000 !	Y_R 488.368
Be (234.861 nm)	-0.000102 !u	ppm	0.000115	> 100.00	219.285000 !	Y_R 488.368
Bi (223.061 nm)	-0.000965 !u	ppm	0.000884	91.63	14.909900 !	Y 377.433
Ca (315.887 nm)	30.484473 !o	ppm	1.173072	3.85	28212.763280 !	Y_R 377.433
Cd (214.439 nm)	0.000009 !u	ppm	0.000123	> 100.00	14.571100 !	Y 377.433
Co (228.615 nm)	0.055840 !	ppm	0.006920	12.39	1044.780000 !	Y 242.219
Cr (205.560 nm)	0.870332 !	ppm	0.109205	12.55	12978.200000 !	Y 377.433
Cu (324.754 nm)	0.209816 !	ppm	0.026181	12.48	16356.100000 !	Y 377.433
Fe (238.204 nm)	19.553392 !o	ppm	0.733813	3.75	69119.669813 !	Y_R 377.433
Fe H (259.940 nm)	19.717300 !	ppm	0.720163	3.65	41080.900000 !	Y_R 377.433
K (766.491 nm)	38.509300 !	ppm	0.232569	0.60	37598.100000 !	Y_R2 488.368
Li (670.783 nm)	1.295860 !o	ppm	0.007975	0.62	42325.500000 !	Y_R2 488.368
Mg (279.078 nm)	16.811800 !	ppm	2.104660	12.52	101538.000000 !	Y 377.433
Mn (257.610 nm)	15.451200 !o	ppm	1.823580	11.80	3739270.000000 !	Y 377.433
Mo (202.032 nm)	0.638969 !	ppm	0.076770	12.01	5478.830000 !	Y 377.433
Na (589.592 nm)	107.956000 !	ppm	0.596283	0.55	651015.000000 !	Y_R2 488.368
Na H (589.593 nm)	115.043693 !	ppm	4.247021	3.69	459497.294846 !	Y_R 488.368
Ni (231.604 nm)	6.224280 !o	ppm	0.783417	12.59	43704.800000 !	Y 377.433
P (213.618 nm)	0.107847 !	ppm	0.013697	12.70	264.966000 !	Y 242.219
Pb (220.353 nm)	0.001960 !u	ppm	0.002999	> 100.00	0.308559 !	Y 242.219
S (181.972 nm)	74.590555 !o	ppm	9.289739	12.45	35881.027537 !	Y 377.433
Sb (206.834 nm)	1.819460 !o	ppm	0.231234	12.71	4583.200000 !	Y 377.433
Se (196.026 nm)	-0.000290 !u	ppm	0.001565	> 100.00	15.031600 !	Y 242.219
Si (288.158 nm)	0.464322 !	ppm	0.057859	12.46	5191.290000 !	Y 377.433
Sn (189.925 nm)	0.160172 !	ppm	0.020375	12.72	345.706000 !	Y 377.433
Sr (421.552 nm)	3.406253 !o	ppm	0.106326	3.12	762881.506016 !	Y_R 488.368
Th (288.505 nm)	0.122648 !	ppm	0.033320	27.17	784.053000 !	Y 377.433
Ti (336.122 nm)	0.003853 !	ppm	0.000549	14.24	455.501000 !	Y 377.433
Tl (190.794 nm)	0.001167 !	ppm	0.001000	85.74	-2.631090 !	Y 377.433
U (409.013 nm)	-0.004664 !u	ppm	0.001034	22.17	-69.594700 !	Y 377.433
V (292.401 nm)	0.004512 !	ppm	0.000261	5.78	-46.331900 !	Y 377.433
Zn (206.200 nm)	34.666700 !o	ppm	4.206500	12.13	185030.000000 !	Y 377.433
Zr (343.823 nm)	0.001235 !	ppm	0.000227	18.41	244.943000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.944794 !	7919.964607 !	0.007447	0.79
Y 377.433	0.917747 !	416078.713349 !	0.008592	0.94
Y_R 377.433	0.970934 !	33496.400000 !	0.004076	0.42
Y_R 488.368	0.992022 !	18692.500000 !	0.005005	0.50
Y_R2 488.368	0.991536 !	32838.445128 !	0.000421	0.04

Sample Name: 280-168095-A-3-C MS

Date: 10/27/2022 5:48:51 PM Rack:Tube: 4:31

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	####	ppm	N/A	N/A	####	Y 377.433
Ag (328.068 nm)	0.282304 n!	ppm	0.000711	0.25	14874.400000 !	Y 377.433
Al (167.019 nm)	14.391900 !o	ppm	0.045120	0.31	6486.480000 !	Y_R 377.433
Al H (396.152 nm)	15.204294 !	ppm	0.036440	0.24	42643.835990 !	Y_R 377.433
As (188.980 nm)	1.667490 !o	ppm	0.005341	0.32	2164.650000 !	Y 242.219
B (249.678 nm)	6.752830 !o	ppm	0.026706	0.40	187987.000000 !	Y 242.219
Ba (493.408 nm)	3.249820 !o	ppm	0.013107	0.40	359694.000000 !	Y_R 488.368
Be (234.861 nm)	0.998646 !	ppm	0.003295	0.33	280051.000000 !	Y_R 488.368
Bi (223.061 nm)	0.007281 !	ppm	0.003310	45.46	35.608200 !	Y 377.433
Ca (315.887 nm)	214.340037 !o	ppm	0.578081	0.27	198415.072528 !	Y_R 377.433
Cd (214.439 nm)	1.182160 !o	ppm	0.002397	0.20	72410.600000 !	Y 377.433
Co (228.615 nm)	1.214150 !o	ppm	0.004084	0.34	23044.800000 !	Y 242.219
Cr (205.560 nm)	5.600840 !o	ppm	0.009103	0.16	83475.400000 !	Y 377.433
Cu (324.754 nm)	2.405070 !o	ppm	0.013271	0.55	172220.000000 !	Y 377.433
Fe (238.204 nm)	115.618962 !o	ppm	0.343589	0.30	408642.038358 !	Y_R 377.433
Fe H (259.940 nm)	117.253000 !	ppm	0.210947	0.18	244215.000000 !	Y_R 377.433
K (766.491 nm)	293.162000 !o	ppm	1.608830	0.55	291449.000000 !	Y_R2 488.368
Li (670.783 nm)	9.092800 !o	ppm	0.067362	0.74	303882.000000 !	Y_R2 488.368
Mg (279.078 nm)	119.281000 !o	ppm	0.464584	0.39	720197.000000 !	Y 377.433
Mn (257.610 nm)	54.033200 !bo	ppm	0.220406	0.41	13076100.000000 !	Y 377.433
Mo (202.032 nm)	3.572090 !o	ppm	0.009388	0.26	30605.600000 !	Y 377.433
Na (589.592 nm)	686.385000 !o	ppm	2.487620	0.36	4142290.000000 !	Y_R2 488.368
Na H (589.593 nm)	720.748044 !	ppm	3.879598	0.54	2899466.134739 !	Y_R 488.368
Ni (231.604 nm)	25.414200 !o	ppm	0.050822	0.20	178439.000000 !	Y 377.433
P (213.618 nm)	21.671600 !o	ppm	0.082415	0.38	51125.500000 !	Y 242.219
Pb (220.353 nm)	2.006410 !o	ppm	0.006133	0.31	5559.390000 !	Y 242.219
S (181.972 nm)	329.366460 !bo	ppm	0.922805	0.28	158391.536746 !	Y 377.433
Sb (206.834 nm)	8.748620 !o	ppm	0.013425	0.15	22096.200000 !	Y 377.433
Se (196.026 nm)	1.261350 !bo	ppm	0.007484	0.59	1287.620000 !	Y 242.219
Si (288.158 nm)	11.934300 !o	ppm	0.016364	0.14	112212.000000 !	Y 377.433
Sn (189.925 nm)	1.668870 !o	ppm	0.003462	0.21	3551.600000 !	Y 377.433
Sr (421.552 nm)	19.969753 !bo	ppm	0.150052	0.75	4472241.168701 !	Y_R 488.368
Th (288.505 nm)	0.535189 !b	ppm	0.011031	2.06	2796.270000 !	Y 377.433
Ti (336.122 nm)	1.044980 !	ppm	0.001221	0.12	156489.000000 !	Y 377.433
Tl (190.794 nm)	0.963070 !	ppm	0.006215	0.65	2105.790000 !	Y 377.433
U (409.013 nm)	-0.051670 !u	ppm	0.003717	7.19	-333.948000 !	Y 377.433
V (292.401 nm)	1.047930 !	ppm	0.000323	0.03	41410.400000 !	Y 377.433
Zn (206.200 nm)	110.525000 !bo	ppm	0.190367	0.17	589894.000000 !	Y 377.433
Zr (343.823 nm)	1.016500 !	ppm	0.002306	0.23	139364.000000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.886464 !	7431.001350 !	0.001926	0.22
Y 377.433	0.869813 !	394346.721802 !	0.000781	0.09
Y_R 377.433	0.950994 !	32808.500000 !	0.002812	0.30
Y_R 488.368	0.969150 !	18261.500000 !	0.003821	0.39
Y_R2 488.368	0.950364 !	31474.879040 !	0.007924	0.83

Sample Name: 280-168095-A-3-D MSD

Date: 10/27/2022 5:52:56 PM Rack:Tube: 4:32

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	####	ppm	N/A	N/A	####	Y 377.433
Ag (328.068 nm)	0.282245 n!	ppm	0.000987	0.35	14873.000000 !	Y 377.433
Al (167.019 nm)	14.522300 !o	ppm	0.030036	0.21	6545.650000 !	Y_R 377.433
Al H (396.152 nm)	15.201578 !	ppm	0.013589	0.09	42641.684876 !	Y_R 377.433
As (188.980 nm)	1.667960 !o	ppm	0.006061	0.36	2165.270000 !	Y 242.219
B (249.678 nm)	6.785300 !o	ppm	0.016735	0.25	188888.000000 !	Y 242.219
Ba (493.408 nm)	3.237600 !o	ppm	0.012784	0.39	358343.000000 !	Y_R 488.368
Be (234.861 nm)	0.997157 !	ppm	0.006073	0.61	279661.000000 !	Y_R 488.368
Bi (223.061 nm)	0.008180 !	ppm	0.002138	26.13	37.862800 !	Y 377.433
Ca (315.887 nm)	217.275102 !o	ppm	0.527686	0.24	201132.161749 !	Y_R 377.433
Cd (214.439 nm)	1.177660 !o	ppm	0.004734	0.40	72137.100000 !	Y 377.433
Co (228.615 nm)	1.208890 !o	ppm	0.002947	0.24	22944.700000 !	Y 242.219
Cr (205.560 nm)	5.664940 !o	ppm	0.014990	0.26	84430.600000 !	Y 377.433
Cu (324.754 nm)	2.411000 !o	ppm	0.012830	0.53	172655.000000 !	Y 377.433
Fe (238.204 nm)	117.409983 !o	ppm	0.101049	0.09	414972.003251 !	Y_R 377.433
Fe H (259.940 nm)	119.117000 !	ppm	0.101079	0.08	248099.000000 !	Y_R 377.433
K (766.491 nm)	297.132000 !o	ppm	0.883085	0.30	295407.000000 !	Y_R2 488.368
Li (670.783 nm)	9.211190 !o	ppm	0.014814	0.16	307853.000000 !	Y_R2 488.368
Mg (279.078 nm)	120.832000 !o	ppm	0.725085	0.60	729559.000000 !	Y 377.433
Mn (257.610 nm)	54.951800 !bo	ppm	0.202244	0.37	13298400.000000 !	Y 377.433
Mo (202.032 nm)	3.616650 !o	ppm	0.007029	0.19	30987.400000 !	Y 377.433
Na (589.592 nm)	698.356000 !o	ppm	2.780950	0.40	4214440.000000 !	Y_R2 488.368
Na H (589.593 nm)	729.706501 !	ppm	1.435895	0.20	2935488.622820 !	Y_R 488.368
Ni (231.604 nm)	25.805400 !o	ppm	0.110984	0.43	181186.000000 !	Y 377.433
P (213.618 nm)	21.484900 !o	ppm	0.045181	0.21	50685.100000 !	Y 242.219
Pb (220.353 nm)	2.000870 !o	ppm	0.004412	0.22	5543.930000 !	Y 242.219
S (181.972 nm)	333.257224 !bo	ppm	1.826544	0.55	160263.199430 !	Y 377.433
Sb (206.834 nm)	8.855840 !o	ppm	0.036937	0.42	22367.000000 !	Y 377.433
Se (196.026 nm)	1.247970 !bo	ppm	0.000488	0.04	1274.710000 !	Y 242.219
Si (288.158 nm)	11.944000 !o	ppm	0.044507	0.37	112302.000000 !	Y 377.433
Sn (189.925 nm)	1.672150 !o	ppm	0.009702	0.58	3558.550000 !	Y 377.433
Sr (421.552 nm)	20.092725 !bo	ppm	0.111077	0.55	4499780.427459 !	Y_R 488.368
Th (288.505 nm)	0.552023 !b	ppm	0.002777	0.50	2863.710000 !	Y 377.433
Ti (336.122 nm)	1.037550 !	ppm	0.003505	0.34	155388.000000 !	Y 377.433
Tl (190.794 nm)	0.955307 !	ppm	0.004151	0.43	2088.550000 !	Y 377.433
U (409.013 nm)	-0.056144 !u	ppm	0.002564	4.57	-355.315000 !	Y 377.433
V (292.401 nm)	1.041490 !	ppm	0.003289	0.32	41131.400000 !	Y 377.433
Zn (206.200 nm)	112.553000 !bo	ppm	0.783917	0.70	600721.000000 !	Y 377.433
Zr (343.823 nm)	1.017040 !	ppm	0.004467	0.44	139443.000000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.880680 !	7382.520557 !	0.002719	0.31
Y 377.433	0.861794 !	390711.001140 !	0.006342	0.74
Y_R 377.433	0.932564 !	32172.600000 !	0.002566	0.28
Y_R 488.368	0.953991 !	17975.900000 !	0.003595	0.38
Y_R2 488.368	0.942416 !	31211.664308 !	0.000748	0.08

Sample Name: 280-168095-A-3-B PDS

Date: 10/27/2022 5:57:01 PM Rack:Tube: 4:33

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	####	ppm	N/A	N/A	####	Y 377.433
Ag (328.068 nm)	0.062589 n!	ppm	0.000140	0.22	3157.510000 !	Y 377.433
Al (167.019 nm)	6.020690 !o	ppm	0.030710	0.51	2749.100000 !	Y_R 377.433
Al H (396.152 nm)	6.266319 !	ppm	0.015090	0.24	17754.300143 !	Y_R 377.433
As (188.980 nm)	0.216157 !	ppm	0.000581	0.27	277.512000 !	Y 242.219
B (249.678 nm)	5.086370 !o	ppm	0.012424	0.24	141533.000000 !	Y 242.219
Ba (493.408 nm)	0.252492 !	ppm	0.000786	0.31	28084.500000 !	Y_R 488.368
Be (234.861 nm)	0.049042 !	ppm	0.000652	1.33	15248.400000 !	Y_R 488.368
Bi (223.061 nm)	0.008121 !	ppm	0.000911	11.22	37.714700 !	Y 377.433
Ca (315.887 nm)	195.869809 !o	ppm	0.495144	0.25	181315.785487 !	Y_R 377.433
Cd (214.439 nm)	0.052237 !	ppm	0.000079	0.15	3301.910000 !	Y 377.433
Co (228.615 nm)	0.288359 !	ppm	0.000530	0.18	5455.680000 !	Y 242.219
Cr (205.560 nm)	3.801500 !o	ppm	0.010298	0.27	56655.300000 !	Y 377.433
Cu (324.754 nm)	0.989632 !	ppm	0.004525	0.46	71785.300000 !	Y 377.433
Fe (238.204 nm)	112.927630 !o	ppm	0.118099	0.10	399130.124617 !	Y_R 377.433
Fe H (259.940 nm)	114.421000 !	ppm	0.213637	0.19	238319.000000 !	Y_R 377.433
K (766.491 nm)	275.708000 !o	ppm	2.200870	0.80	274050.000000 !	Y_R2 488.368
Li (670.783 nm)	8.534620 !o	ppm	0.136241	1.60	285157.000000 !	Y_R2 488.368
Mg (279.078 nm)	94.753600 !o	ppm	0.205420	0.22	572060.000000 !	Y 377.433
Mn (257.610 nm)	56.033600 !bo	ppm	0.068660	0.12	13560200.000000 !	Y 377.433
Mo (202.032 nm)	2.740640 !o	ppm	0.002507	0.09	23483.000000 !	Y 377.433
Na (589.592 nm)	687.912000 !o	ppm	4.541840	0.66	4147330.000000 !	Y_R2 488.368
Na H (589.593 nm)	728.160200 !	ppm	3.483433	0.48	2926066.665011 !	Y_R 488.368
Ni (231.604 nm)	25.822500 !o	ppm	0.116440	0.45	181304.000000 !	Y 377.433
P (213.618 nm)	2.711420 !	ppm	0.021007	0.77	6405.780000 !	Y 242.219
Pb (220.353 nm)	0.117027 !	ppm	0.001246	1.06	318.127000 !	Y 242.219
S (181.972 nm)	326.679559 !bo	ppm	1.803611	0.55	157105.184968 !	Y 377.433
Sb (206.834 nm)	8.160340 !o	ppm	0.021058	0.26	20572.000000 !	Y 377.433
Se (196.026 nm)	0.222949 !b	ppm	0.003031	1.36	254.282000 !	Y 242.219
Si (288.158 nm)	7.312420 !	ppm	0.017346	0.24	68997.600000 !	Y 377.433
Sn (189.925 nm)	0.788907 !	ppm	0.004118	0.52	1681.730000 !	Y 377.433
Sr (421.552 nm)	19.936254 !bo	ppm	0.063112	0.32	4464739.145811 !	Y_R 488.368
Th (288.505 nm)	0.781569 !b	ppm	0.003961	0.51	3545.820000 !	Y 377.433
Ti (336.122 nm)	0.070549 !	ppm	0.000295	0.42	10937.700000 !	Y 377.433
Tl (190.794 nm)	0.198301 !	ppm	0.001027	0.52	424.402000 !	Y 377.433
U (409.013 nm)	0.492091 !	ppm	0.005181	1.05	2484.500000 !	Y 377.433
V (292.401 nm)	0.075028 !	ppm	0.000360	0.48	1974.420000 !	Y 377.433
Zn (206.200 nm)	115.011000 !bo	ppm	1.179470	1.03	613840.000000 !	Y 377.433
Zr (343.823 nm)	0.084942 !	ppm	0.010709	12.61	11976.500000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.886194 !	7428.741016 !	0.003157	0.36
Y 377.433	0.866833 !	392995.656927 !	0.003353	0.39
Y_R 377.433	0.936260 !	32300.200000 !	0.004254	0.45
Y_R 488.368	0.955118 !	17997.100000 !	0.006184	0.65
Y_R2 488.368	0.950304 !	31472.903685 !	0.006378	0.67

Sample Name: CCVH-7429327

Date: 10/27/2022 6:01:04 PM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000078 !	ppm	0.000029	37.13	-867.510846 !	Y 377.433
Ag (328.068 nm)	0.001347 !	ppm	0.000076	5.63	-169.855000 !	Y 377.433
Al (167.019 nm)	49.687500 !o	ppm	0.218786	0.44	22203.400000 !	Y_R 377.433
Al H (396.152 nm)	51.027798 !	ppm	0.031895	0.06	141648.100070 !	Y_R 377.433
As (188.980 nm)	0.000861 !u	ppm	0.001513	> 100.00	-2.434670 !	Y 242.219
B (249.678 nm)	0.012284 !	ppm	0.000808	6.58	320.051000 !	Y 242.219
Ba (493.408 nm)	0.000705 !	ppm	0.000393	55.75	173.312000 !	Y_R 488.368
Be (234.861 nm)	0.000097 !	ppm	0.000023	24.21	809.791000 !	Y_R 488.368
Bi (223.061 nm)	-0.000810 !u	ppm	0.001856	> 100.00	15.299200 !	Y 377.433
Ca (315.887 nm)	-0.004449 !u	ppm	0.004623	> 100.00	-11.897140 !	Y_R 377.433
Cd (214.439 nm)	-0.000182 !u	ppm	0.000018	9.75	34.453200 !	Y 377.433
Co (228.615 nm)	-0.000415 !u	ppm	0.000300	72.23	-21.905000 !	Y 242.219
Cr (205.560 nm)	0.001134 !	ppm	0.000058	5.11	10.043300 !	Y 377.433
Cu (324.754 nm)	0.002156 !	ppm	0.000194	9.00	2745.960000 !	Y 377.433
Fe (238.204 nm)	51.302124 !o	ppm	0.021319	0.04	181328.494433 !	Y_R 377.433
Fe H (259.940 nm)	51.872800 !	ppm	0.013408	0.03	108050.000000 !	Y_R 377.433
K (766.491 nm)	0.340344 !	ppm	0.039123	11.50	-450.614000 !	Y_R2 488.368
Li (670.783 nm)	0.003956 !	ppm	0.001260	31.86	-1012.590000 !	Y_R2 488.368
Mg (279.078 nm)	-0.007869 !u	ppm	0.002106	26.76	-168.875000 !	Y 377.433
Mn (257.610 nm)	0.000928 !	ppm	0.000145	15.66	301.043000 !	Y 377.433
Mo (202.032 nm)	0.010578 !	ppm	0.001321	12.48	95.680000 !	Y 377.433
Na (589.592 nm)	249.862000 !	ppm	0.132554	0.05	1506400.000000 !	Y_R2 488.368
Na H (589.593 nm)	244.489340 !	ppm	1.445280	0.59	980179.934625 !	Y_R 488.368
Ni (231.604 nm)	-0.000594 !u	ppm	0.000117	19.73	10.469700 !	Y 377.433
P (213.618 nm)	4.991700 !	ppm	0.019925	0.40	11784.100000 !	Y 242.219
Pb (220.353 nm)	-0.005718 !u	ppm	0.000617	10.79	-26.342600 !	Y 242.219
S (181.972 nm)	5.129784 !	ppm	0.019674	0.38	2469.265791 !	Y 377.433
Sb (206.834 nm)	0.004725 !	ppm	0.001580	33.44	-11.497600 !	Y 377.433
Se (196.026 nm)	0.002548 !u	ppm	0.003603	> 100.00	0.016085 !	Y 242.219
Si (288.158 nm)	0.018223 !	ppm	0.000580	3.19	1035.100000 !	Y 377.433
Sn (189.925 nm)	0.000484 !u	ppm	0.001410	> 100.00	6.380320 !	Y 377.433
Sr (421.552 nm)	0.000693 !	ppm	0.000150	21.70	213.578616 !	Y_R 488.368
Th (288.505 nm)	5.030420 !	ppm	0.067008	1.33	14232.400000 !	Y 377.433
Ti (336.122 nm)	0.000579 !	ppm	0.000038	6.50	-129.625000 !	Y 377.433
Tl (190.794 nm)	-0.002950 !u	ppm	0.001311	44.45	-11.196300 !	Y 377.433
U (409.013 nm)	2.539150 !	ppm	0.004429	0.17	12771.500000 !	Y 377.433
V (292.401 nm)	-0.000993 !u	ppm	0.000144	14.47	302.328000 !	Y 377.433
Zn (206.200 nm)	0.003363 !	ppm	0.000657	19.55	27.312800 !	Y 377.433
Zr (343.823 nm)	0.000040 !u	ppm	0.000141	> 100.00	178.770000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.967247 !	8108.183243 !	0.003130	0.32
Y 377.433	0.930786 !	421990.262824 !	0.002698	0.29
Y_R 377.433	0.982928 !	33910.200000 !	0.001053	0.11
Y_R 488.368	1.005920 !	18954.300000 !	0.004853	0.48
Y_R2 488.368	0.978513 !	32407.159212 !	0.003253	0.33

Sample Name: CCV-7429326

Date: 10/27/2022 6:05:07 PM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.466107 !	ppm	0.001273	0.27	1073457.251470 !	Y 377.433
Ag (328.068 nm)	0.506264 !	ppm	0.000467	0.09	26757.600000 !	Y 377.433
Al (167.019 nm)	0.533712 !	ppm	0.002279	0.43	240.253000 !	Y_R 377.433
Al H (396.152 nm)	0.525148 !u	ppm	0.004328	0.82	1530.866628 !	Y_R 377.433
As (188.980 nm)	0.502557 !	ppm	0.000610	0.12	649.913000 !	Y 242.219
B (249.678 nm)	0.503216 !	ppm	0.001409	0.28	14115.200000 !	Y 242.219
Ba (493.408 nm)	0.509304 !	ppm	0.001513	0.30	56396.700000 !	Y_R 488.368
Be (234.861 nm)	0.505385 !	ppm	0.002080	0.41	140930.000000 !	Y_R 488.368
Bi (223.061 nm)	1.042730 !	ppm	0.003054	0.29	2634.470000 !	Y 377.433
Ca (315.887 nm)	5.256795 !	ppm	0.009958	0.19	4858.970285 !	Y_R 377.433
Cd (214.439 nm)	0.525632 !	ppm	0.001449	0.28	32144.900000 !	Y 377.433
Co (228.615 nm)	0.514355 !	ppm	0.001489	0.29	9757.210000 !	Y 242.219
Cr (205.560 nm)	0.524803 !	ppm	0.002750	0.52	7826.630000 !	Y 377.433
Cu (324.754 nm)	0.520002 !	ppm	0.000697	0.13	38345.000000 !	Y 377.433
Fe (238.204 nm)	2.569881 !	ppm	0.004106	0.16	9095.232118 !	Y_R 377.433
Fe H (259.940 nm)	2.619380 !u	ppm	0.003244	0.12	5471.490000 !	Y_R 377.433
K (766.491 nm)	49.457500 !	ppm	0.196574	0.40	48511.900000 !	Y_R2 488.368
Li (670.783 nm)	0.499407 !	ppm	0.001153	0.23	15607.800000 !	Y_R2 488.368
Mg (279.078 nm)	20.501100 !	ppm	0.016079	0.08	123848.000000 !	Y 377.433
Mn (257.610 nm)	0.523210 !	ppm	0.001223	0.23	126694.000000 !	Y 377.433
Mo (202.032 nm)	0.528668 !	ppm	0.000606	0.11	4533.940000 !	Y 377.433
Na (589.592 nm)	25.555200 !	ppm	0.045823	0.18	154973.000000 !	Y_R2 488.368
Na H (589.593 nm)	26.476104 !	ppm	0.050223	0.19	103744.773308 !	Y_R 488.368
Ni (231.604 nm)	0.531189 !	ppm	0.000762	0.14	3735.990000 !	Y 377.433
P (213.618 nm)	0.006775 !	ppm	0.000254	3.74	26.576500 !	Y 242.219
Pb (220.353 nm)	0.506360 !	ppm	0.003895	0.77	1400.900000 !	Y 242.219
S (181.972 nm)	0.029379 !	ppm	0.007625	25.95	19.710882 !	Y 377.433
Sb (206.834 nm)	0.522697 !	ppm	0.001209	0.23	1317.080000 !	Y 377.433
Se (196.026 nm)	0.502339 !	ppm	0.003698	0.74	507.015000 !	Y 242.219
Si (288.158 nm)	5.101590 !	ppm	0.031640	0.62	48474.600000 !	Y 377.433
Sn (189.925 nm)	0.525788 !	ppm	0.000416	0.08	1122.610000 !	Y 377.433
Sr (421.552 nm)	0.497509 !	ppm	0.000450	0.09	111474.481759 !	Y_R 488.368
Th (288.505 nm)	0.070006 !	ppm	0.030945	44.20	304.571000 !	Y 377.433
Ti (336.122 nm)	0.509899 !	ppm	0.000091	0.02	75933.600000 !	Y 377.433
Tl (190.794 nm)	0.527258 !	ppm	0.001130	0.21	1156.180000 !	Y 377.433
U (409.013 nm)	0.007049 !	ppm	0.003686	52.29	-63.962100 !	Y 377.433
V (292.401 nm)	0.518537 !	ppm	0.000145	0.03	21155.000000 !	Y 377.433
Zn (206.200 nm)	0.528550 !	ppm	0.000658	0.12	2830.310000 !	Y 377.433
Zr (343.823 nm)	0.472061 !	ppm	0.015784	3.34	64572.500000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.956965 !	8021.996274 !	0.000873	0.09
Y 377.433	0.927333 !	420424.368147 !	0.000107	0.01
Y_R 377.433	0.981664 !	33866.600000 !	0.001621	0.17
Y_R 488.368	1.000870 !	18859.200000 !	0.002331	0.23
Y_R2 488.368	0.984268 !	32597.751885 !	0.009094	0.92

Sample Name: CCB

Date: 10/27/2022 6:09:09 PM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000012 !u	ppm	0.000006	49.05	-1073.354726 !	Y 377.433
Ag (328.068 nm)	0.000411 !	ppm	0.000385	93.52	-137.280000 !	Y 377.433
Al (167.019 nm)	0.001239 !	ppm	0.001000	80.70	1.218400 !	Y_R 377.433
Al H (396.152 nm)	-0.003745 !u	ppm	0.005507	> 100.00	13.479001 !	Y_R 377.433
As (188.980 nm)	0.000355 !u	ppm	0.001247	> 100.00	-3.092390 !	Y 242.219
B (249.678 nm)	0.004482 !	ppm	0.000526	11.73	204.472000 !	Y 242.219
Ba (493.408 nm)	0.000071 !u	ppm	0.000120	> 100.00	56.969900 !	Y_R 488.368
Be (234.861 nm)	-0.000012 !u	ppm	0.000028	> 100.00	-20.200900 !	Y_R 488.368
Bi (223.061 nm)	0.000349 !u	ppm	0.001787	> 100.00	18.209600 !	Y 377.433
Ca (315.887 nm)	0.006355 !	ppm	0.004885	76.87	-1.895969 !	Y_R 377.433
Cd (214.439 nm)	-0.000006 !u	ppm	0.000030	> 100.00	-5.848440 !	Y 377.433
Co (228.615 nm)	-0.000201 !u	ppm	0.000086	42.56	-17.869700 !	Y 242.219
Cr (205.560 nm)	-0.000047 !u	ppm	0.000128	> 100.00	6.450140 !	Y 377.433
Cu (324.754 nm)	0.001284 !	ppm	0.000178	13.89	1516.940000 !	Y 377.433
Fe (238.204 nm)	0.000200 !u	ppm	0.000782	> 100.00	13.265751 !	Y_R 377.433
Fe H (259.940 nm)	-0.003707 !u	ppm	0.001544	41.64	8.450680 !	Y_R 377.433
K (766.491 nm)	0.098979 !	ppm	0.023528	23.77	-691.219000 !	Y_R2 488.368
Li (670.783 nm)	0.003673 !	ppm	0.001481	40.34	-1022.090000 !	Y_R2 488.368
Mg (279.078 nm)	-0.000147 !u	ppm	0.000046	31.12	42.431100 !	Y 377.433
Mn (257.610 nm)	0.000222 !	ppm	0.000023	10.60	130.127000 !	Y 377.433
Mo (202.032 nm)	0.002640 !	ppm	0.000366	13.86	27.678300 !	Y 377.433
Na (589.592 nm)	0.054959 !	ppm	0.002891	5.26	549.307000 !	Y_R2 488.368
Na H (589.593 nm)	1.736547 !u	ppm	0.027186	1.57	3681.461420 !	Y_R 488.368
Ni (231.604 nm)	-0.000248 !u	ppm	0.000571	> 100.00	4.107850 !	Y 377.433
P (213.618 nm)	0.001221 !u	ppm	0.001394	> 100.00	13.476800 !	Y 242.219
Pb (220.353 nm)	-0.000004 !u	ppm	0.001351	> 100.00	-3.663260 !	Y 242.219
S (181.972 nm)	0.029722 !	ppm	0.005065	17.04	18.668696 !	Y 377.433
Sb (206.834 nm)	-0.000294 !u	ppm	0.001447	> 100.00	-7.650950 !	Y 377.433
Se (196.026 nm)	0.000318 !u	ppm	0.002133	> 100.00	6.490890 !	Y 242.219
Si (288.158 nm)	0.002545 !	ppm	0.001279	50.23	888.962000 !	Y 377.433
Sn (189.925 nm)	-0.000212 !u	ppm	0.000922	> 100.00	4.901430 !	Y 377.433
Sr (421.552 nm)	-0.000031 !u	ppm	0.000064	> 100.00	51.575704 !	Y_R 488.368
Th (288.505 nm)	-0.000431 !u	ppm	0.000739	> 100.00	97.522700 !	Y 377.433
Ti (336.122 nm)	0.000018 !u	ppm	0.000106	> 100.00	-213.423000 !	Y 377.433
Tl (190.794 nm)	0.000959 !	ppm	0.000589	61.41	-1.190020 !	Y 377.433
U (409.013 nm)	0.008205 !	ppm	0.006428	78.35	-18.509900 !	Y 377.433
V (292.401 nm)	-0.000206 !u	ppm	0.000189	91.68	12.216700 !	Y 377.433
Zn (206.200 nm)	0.000523 !	ppm	0.000181	34.56	12.155600 !	Y 377.433
Zr (343.823 nm)	0.000210 !	ppm	0.000076	36.29	45.102900 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.967678 !	8111.796804 !	0.008795	0.91
Y 377.433	0.940355 !	426328.342003 !	0.010087	1.07
Y_R 377.433	0.996318 !	34372.100000 !	0.004383	0.44
Y_R 488.368	1.020250 !	19224.500000 !	0.004217	0.41
Y_R2 488.368	0.963530 !	31910.942059 !	0.017980	1.87

Sample Name: CCVL-7434568

Date: 10/27/2022 6:13:11 PM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014688 !	ppm	0.000026	0.18	32813.511117 !	Y 377.433
Ag (328.068 nm)	0.010489 !	ppm	0.000177	1.69	397.482000 !	Y 377.433
Al (167.019 nm)	0.105828 !	ppm	0.006438	6.08	47.952100 !	Y_R 377.433
Al H (396.152 nm)	0.105326 !u	ppm	0.001203	1.14	317.901670 !	Y_R 377.433
As (188.980 nm)	0.012170 !	ppm	0.002686	22.07	12.269900 !	Y 242.219
B (249.678 nm)	0.102073 !	ppm	0.000935	0.92	2922.810000 !	Y 242.219
Ba (493.408 nm)	0.010294 !	ppm	0.000122	1.18	1188.000000 !	Y_R 488.368
Be (234.861 nm)	0.000999 !	ppm	0.000034	3.38	262.444000 !	Y_R 488.368
Bi (223.061 nm)	-0.003470 Q!u	ppm	0.000860	24.80	8.623280 Q!	Y 377.433
Ca (315.887 nm)	0.216007 !	ppm	0.009113	4.22	192.189203 !	Y_R 377.433
Cd (214.439 nm)	0.005162 !	ppm	0.000118	2.28	310.348000 !	Y 377.433
Co (228.615 nm)	0.010328 !	ppm	0.000082	0.80	182.100000 !	Y 242.219
Cr (205.560 nm)	0.010346 !	ppm	0.000046	0.45	161.349000 !	Y 377.433
Cu (324.754 nm)	0.016904 !	ppm	0.000129	0.76	2624.090000 !	Y 377.433
Fe (238.204 nm)	0.106049 !	ppm	0.001921	1.81	387.364828 !	Y_R 377.433
Fe H (259.940 nm)	0.103728 !u	ppm	0.002334	2.25	232.203000 !	Y_R 377.433
K (766.491 nm)	3.078750 !	ppm	0.046350	1.51	2279.170000 !	Y_R2 488.368
Li (670.783 nm)	0.023439 !	ppm	0.001560	6.65	-358.995000 !	Y_R2 488.368
Mg (279.078 nm)	0.207797 !	ppm	0.001620	0.78	1296.490000 !	Y 377.433
Mn (257.610 nm)	0.010806 !	ppm	0.000031	0.29	2691.600000 !	Y 377.433
Mo (202.032 nm)	0.020661 !	ppm	0.000216	1.05	182.054000 !	Y 377.433
Na (589.592 nm)	1.124360 !	ppm	0.015045	1.34	7009.910000 !	Y_R2 488.368
Na H (589.593 nm)	2.633101 !u	ppm	0.005721	0.22	7298.891824 !	Y_R 488.368
Ni (231.604 nm)	0.044688 !	ppm	0.000502	1.12	319.602000 !	Y 377.433
P (213.618 nm)	2.897660 !	ppm	0.006077	0.21	6845.050000 !	Y 242.219
Pb (220.353 nm)	0.009618 !	ppm	0.001626	16.90	23.114600 !	Y 242.219
S (181.972 nm)	0.121875 !	ppm	0.000381	0.31	62.972916 !	Y 377.433
Sb (206.834 nm)	0.021781 !	ppm	0.000729	3.34	47.883600 !	Y 377.433
Se (196.026 nm)	0.017121 !	ppm	0.002297	13.42	23.235400 !	Y 242.219
Si (288.158 nm)	0.494448 !	ppm	0.005771	1.17	5472.970000 !	Y 377.433
Sn (189.925 nm)	0.105637 !	ppm	0.001348	1.28	229.822000 !	Y 377.433
Sr (421.552 nm)	0.009908 !	ppm	0.000047	0.47	2277.310595 !	Y_R 488.368
Th (288.505 nm)	0.015540 !	ppm	0.003093	19.91	143.878000 !	Y 377.433
Ti (336.122 nm)	0.009816 !	ppm	0.000058	0.60	1250.110000 !	Y 377.433
Tl (190.794 nm)	0.016806 !	ppm	0.001385	8.24	33.661000 !	Y 377.433
U (409.013 nm)	0.070586 !	ppm	0.000547	0.77	294.426000 !	Y 377.433
V (292.401 nm)	0.010287 !	ppm	0.000127	1.23	437.307000 !	Y 377.433
Zn (206.200 nm)	0.022922 !	ppm	0.000450	1.96	131.702000 !	Y 377.433
Zr (343.823 nm)	0.012400 !	ppm	0.000123	0.99	1712.220000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.968668 !	8120.095766 !	0.005234	0.54
Y 377.433	0.941487 !	426841.710442 !	0.004632	0.49
Y_R 377.433	0.980313 !	33820.000000 !	0.004523	0.46
Y_R 488.368	0.996691 !	18780.500000 !	0.001757	0.18
Y_R2 488.368	0.971409 !	32171.858465 !	0.001445	0.15

Sample Name: MB 280-588991/1-A

Date: 10/27/2022 6:17:16 PM Rack:Tube: 4:34

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000006 !u	ppm	0.000004	60.68	-1060.957674 !	Y 377.433
Ag (328.068 nm)	0.000091 n!u	ppm	0.000158	> 100.00	-154.388000 !	Y 377.433
Al (167.019 nm)	0.001064 !u	ppm	0.003056	> 100.00	1.140550 !	Y_R 377.433
Al H (396.152 nm)	-0.007076 !u	ppm	0.002297	32.46	4.026582 !	Y_R 377.433
As (188.980 nm)	-0.000569 !u	ppm	0.000641	> 100.00	-4.293670 !	Y 242.219
B (249.678 nm)	0.002838 !	ppm	0.000129	4.54	158.685000 !	Y 242.219
Ba (493.408 nm)	-0.000027 !u	ppm	0.000282	> 100.00	46.193200 !	Y_R 488.368
Be (234.861 nm)	-0.000048 !u	ppm	0.000020	40.94	-30.103700 !	Y_R 488.368
Bi (223.061 nm)	0.000603 !	ppm	0.000910	> 100.00	18.845800 !	Y 377.433
Ca (315.887 nm)	-0.005284 !u	ppm	0.006244	> 100.00	-12.670572 !	Y_R 377.433
Cd (214.439 nm)	0.000031 !	ppm	0.000005	16.89	-3.594970 !	Y 377.433
Co (228.615 nm)	-0.000069 !u	ppm	0.000213	> 100.00	-15.368700 !	Y 242.219
Cr (205.560 nm)	-0.000374 !u	ppm	0.000045	12.11	1.566860 !	Y 377.433
Cu (324.754 nm)	0.000901 !	ppm	0.000074	8.18	1489.850000 !	Y 377.433
Fe (238.204 nm)	0.000814 !u	ppm	0.002060	> 100.00	15.434114 !	Y_R 377.433
Fe H (259.940 nm)	-0.006532 !u	ppm	0.000264	4.05	2.567580 !	Y_R 377.433
K (766.491 nm)	0.115200 !	ppm	0.050828	44.12	-675.049000 !	Y_R2 488.368
Li (670.783 nm)	0.004490 !	ppm	0.000953	21.23	-994.671000 !	Y_R2 488.368
Mg (279.078 nm)	-0.001042 !u	ppm	0.001046	> 100.00	37.036400 !	Y 377.433
Mn (257.610 nm)	0.000084 !	ppm	0.000045	54.09	96.762100 !	Y 377.433
Mo (202.032 nm)	0.000404 !	ppm	0.000203	50.18	8.524250 !	Y 377.433
Na (589.592 nm)	0.039217 !	ppm	0.003373	8.60	454.018000 !	Y_R2 488.368
Na H (589.593 nm)	1.476116 !u	ppm	0.015421	1.04	2633.547002 !	Y_R 488.368
Ni (231.604 nm)	0.000362 !u	ppm	0.000549	> 100.00	8.389250 !	Y 377.433
P (213.618 nm)	0.002689 !	ppm	0.001256	46.70	16.939800 !	Y 242.219
Pb (220.353 nm)	-0.001348 !u	ppm	0.001409	> 100.00	-7.387350 !	Y 242.219
S (181.972 nm)	0.026077 !	ppm	0.002890	11.08	16.917178 !	Y 377.433
Sb (206.834 nm)	-0.000563 !u	ppm	0.000892	> 100.00	-8.325280 !	Y 377.433
Se (196.026 nm)	-0.000382 !u	ppm	0.001860	> 100.00	5.792670 !	Y 242.219
Si (288.158 nm)	0.009539 !	ppm	0.000510	5.34	954.102000 !	Y 377.433
Sn (189.925 nm)	-0.000813 !u	ppm	0.001289	> 100.00	3.624050 !	Y 377.433
Sr (421.552 nm)	-0.000030 !u	ppm	0.000123	> 100.00	51.688872 !	Y_R 488.368
Th (288.505 nm)	0.003128 !	ppm	0.001152	36.84	107.471000 !	Y 377.433
Ti (336.122 nm)	-0.000081 !u	ppm	0.000039	48.49	-228.120000 !	Y 377.433
Tl (190.794 nm)	-0.000096 !u	ppm	0.000681	> 100.00	-3.505790 !	Y 377.433
U (409.013 nm)	0.010330 !	ppm	0.002939	28.45	-7.763700 !	Y 377.433
V (292.401 nm)	-0.000284 !u	ppm	0.000241	84.85	9.249660 !	Y 377.433
Zn (206.200 nm)	0.000340 !u	ppm	0.000523	> 100.00	11.176700 !	Y 377.433
Zr (343.823 nm)	-0.000054 !u	ppm	0.000079	> 100.00	9.014660 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.981499 !	8227.655792 !	0.005120	0.52
Y 377.433	0.956368 !	433588.029593 !	0.004962	0.52
Y_R 377.433	0.993839 !	34286.600000 !	0.003623	0.36
Y_R 488.368	1.011130 !	19052.500000 !	0.007978	0.79
Y_R2 488.368	0.989969 !	32786.558646 !	0.004234	0.43

Sample Name: 280-163982-16-B-MDLV

Date: 10/27/2022 6:21:19 PM Rack:Tube: 4:35

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.013415 !	ppm	0.000049	0.36	29878.108357 !	Y 377.433
Ag (328.068 nm)	0.006480 n!	ppm	0.000042	0.65	186.355000 !	Y 377.433
Al (167.019 nm)	0.075602 !	ppm	0.000820	1.08	34.428000 !	Y_R 377.433
Al H (396.152 nm)	0.070438 !u	ppm	0.002383	3.38	219.569577 !	Y_R 377.433
As (188.980 nm)	0.014233 !	ppm	0.001512	10.62	14.952700 !	Y 242.219
B (249.678 nm)	0.006221 !	ppm	0.000108	1.74	252.902000 !	Y 242.219
Ba (493.408 nm)	0.002290 !	ppm	0.000290	12.66	302.411000 !	Y_R 488.368
Be (234.861 nm)	0.000132 !	ppm	0.000021	16.31	20.645100 !	Y_R 488.368
Bi (223.061 nm)	0.040356 !	ppm	0.002635	6.53	118.622000 !	Y 377.433
Ca (315.887 nm)	0.065988 !	ppm	0.002756	4.18	53.308405 !	Y_R 377.433
Cd (214.439 nm)	0.000455 !	ppm	0.000047	10.38	22.362400 !	Y 377.433
Co (228.615 nm)	0.001766 !	ppm	0.000204	11.56	19.458500 !	Y 242.219
Cr (205.560 nm)	0.002739 !	ppm	0.000312	11.41	47.965800 !	Y 377.433
Cu (324.754 nm)	0.012767 !	ppm	0.000333	2.61	2372.420000 !	Y 377.433
Fe (238.204 nm)	0.042513 !	ppm	0.000560	1.32	162.811218 !	Y_R 377.433
Fe H (259.940 nm)	0.040031 !u	ppm	0.000856	2.14	99.542900 !	Y_R 377.433
K (766.491 nm)	1.084050 !	ppm	0.030843	2.85	290.746000 !	Y_R2 488.368
Li (670.783 nm)	0.023158 !	ppm	0.000469	2.03	-368.443000 !	Y_R2 488.368
Mg (279.078 nm)	0.013703 !	ppm	0.001555	11.35	125.896000 !	Y 377.433
Mn (257.610 nm)	0.002011 !	ppm	0.000024	1.20	563.057000 !	Y 377.433
Mo (202.032 nm)	0.004613 !	ppm	0.000212	4.59	44.583000 !	Y 377.433
Na (589.592 nm)	0.375975 !	ppm	0.005376	1.43	2487.060000 !	Y_R2 488.368
Na H (589.593 nm)	1.746344 !u	ppm	0.010428	0.60	3722.926920 !	Y_R 488.368
Ni (231.604 nm)	0.008522 !	ppm	0.000846	9.93	65.696400 !	Y 377.433
P (213.618 nm)	0.048645 !	ppm	0.001761	3.62	125.332000 !	Y 242.219
Pb (220.353 nm)	0.006995 !	ppm	0.002005	28.66	15.761500 !	Y 242.219
S (181.972 nm)	0.101868 !	ppm	0.002899	2.85	53.339314 !	Y 377.433
Sb (206.834 nm)	0.015065 !	ppm	0.002319	15.40	30.955200 !	Y 377.433
Se (196.026 nm)	0.016856 !	ppm	0.001637	9.71	22.974900 !	Y 242.219
Si (288.158 nm)	0.055398 !	ppm	0.000613	1.11	1381.460000 !	Y 377.433
Sn (189.925 nm)	0.004028 !	ppm	0.000218	5.42	13.909600 !	Y 377.433
Sr (421.552 nm)	0.001218 !	ppm	0.000042	3.47	331.273614 !	Y_R 488.368
Th (288.505 nm)	0.159466 !	ppm	0.006315	3.96	545.216000 !	Y 377.433
Ti (336.122 nm)	0.000950 !	ppm	0.000150	15.80	-74.019200 !	Y 377.433
Tl (190.794 nm)	0.015430 !	ppm	0.001425	9.23	30.673600 !	Y 377.433
U (409.013 nm)	0.008730 !	ppm	0.003812	43.66	-16.355200 !	Y 377.433
V (292.401 nm)	0.001391 !	ppm	0.000206	14.83	92.046700 !	Y 377.433
Zn (206.200 nm)	0.004763 !	ppm	0.000505	10.59	34.783500 !	Y 377.433
Zr (343.823 nm)	0.006266 !	ppm	0.000249	3.97	873.341000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.978655 !	8203.812104 !	0.008756	0.89
Y 377.433	0.951866 !	431547.264753 !	0.009481	1.00
Y_R 377.433	0.980749 !	33835.000000 !	0.003190	0.33
Y_R 488.368	1.005060 !	18938.100000 !	0.011353	1.13
Y_R2 488.368	0.986733 !	32679.395403 !	0.004173	0.42

Sample Name: MB 280-588979/1-A

Date: 10/27/2022 6:25:23 PM Rack:Tube: 4:36

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.001047 !	ppm	0.000016	1.55	1366.945016 !	Y 377.433
Ag (328.068 nm)	0.000623 n!	ppm	0.000196	31.45	-125.939000 !	Y 377.433
Al (167.019 nm)	0.010983 !	ppm	0.003368	30.67	5.609520 !	Y_R 377.433
Al H (396.152 nm)	0.007959 !u	ppm	0.007024	88.25	45.827337 !	Y_R 377.433
As (188.980 nm)	0.002428 !	ppm	0.001351	55.65	-0.396921 !	Y 242.219
B (249.678 nm)	0.004728 !	ppm	0.000295	6.24	211.195000 !	Y 242.219
Ba (493.408 nm)	0.001113 !	ppm	0.000253	22.70	172.337000 !	Y_R 488.368
Be (234.861 nm)	0.000065 !	ppm	0.000010	15.58	2.832330 !	Y_R 488.368
Bi (223.061 nm)	0.000742 !	ppm	0.000425	57.21	19.196100 !	Y 377.433
Ca (315.887 nm)	0.134577 !	ppm	0.002301	1.71	116.803159 !	Y_R 377.433
Cd (214.439 nm)	0.000046 !	ppm	0.000016	35.41	-2.613020 !	Y 377.433
Co (228.615 nm)	0.000105 !u	ppm	0.000150	> 100.00	-12.026200 !	Y 242.219
Cr (205.560 nm)	0.000451 !	ppm	0.000141	31.36	13.855600 !	Y 377.433
Cu (324.754 nm)	0.003498 !	ppm	0.000103	2.93	1675.410000 !	Y 377.433
Fe (238.204 nm)	0.079128 !	ppm	0.000933	1.18	292.217637 !	Y_R 377.433
Fe H (259.940 nm)	0.077952 !u	ppm	0.001901	2.44	178.519000 !	Y_R 377.433
K (766.491 nm)	0.195684 !	ppm	0.009086	4.64	-594.819000 !	Y_R2 488.368
Li (670.783 nm)	0.006073 !	ppm	0.001036	17.06	-941.563000 !	Y_R2 488.368
Mg (279.078 nm)	0.033044 !	ppm	0.001316	3.98	242.664000 !	Y 377.433
Mn (257.610 nm)	0.000949 !	ppm	0.000015	1.54	306.120000 !	Y 377.433
Mo (202.032 nm)	0.000518 !	ppm	0.000306	59.06	9.497400 !	Y 377.433
Na (589.592 nm)	0.190289 !	ppm	0.007894	4.15	1366.500000 !	Y_R2 488.368
Na H (589.593 nm)	1.519464 !u	ppm	0.012880	0.85	2809.316652 !	Y_R 488.368
Ni (231.604 nm)	0.001658 !	ppm	0.000269	16.23	17.503700 !	Y 377.433
P (213.618 nm)	0.017756 !	ppm	0.000481	2.71	52.477200 !	Y 242.219
Pb (220.353 nm)	-0.000957 !u	ppm	0.000301	31.49	-6.292100 !	Y 242.219
S (181.972 nm)	0.025590 !	ppm	0.008710	34.04	16.685121 !	Y 377.433
Sb (206.834 nm)	0.001396 !	ppm	0.001207	86.45	-3.384400 !	Y 377.433
Se (196.026 nm)	0.003105 !	ppm	0.001448	46.64	9.255290 !	Y 242.219
Si (288.158 nm)	0.022576 !	ppm	0.000228	1.01	1075.720000 !	Y 377.433
Sn (189.925 nm)	0.021095 !	ppm	0.000400	1.90	50.175800 !	Y 377.433
Sr (421.552 nm)	0.000816 !	ppm	0.000038	4.63	241.153604 !	Y_R 488.368
Th (288.505 nm)	0.008503 !	ppm	0.000837	9.84	122.601000 !	Y 377.433
Ti (336.122 nm)	0.000692 !	ppm	0.000051	7.33	-112.400000 !	Y 377.433
Tl (190.794 nm)	0.000809 !u	ppm	0.000835	> 100.00	-1.517400 !	Y 377.433
U (409.013 nm)	0.009003 !	ppm	0.001083	12.03	-14.504400 !	Y 377.433
V (292.401 nm)	-0.000091 !u	ppm	0.000100	> 100.00	17.316900 !	Y 377.433
Zn (206.200 nm)	0.006894 !	ppm	0.000497	7.20	46.154200 !	Y 377.433
Zr (343.823 nm)	0.001105 !	ppm	0.000070	6.34	167.746000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.979632 !	8212.004196 !	0.004674	0.48
Y 377.433	0.954821 !	432886.632972 !	0.005256	0.55
Y_R 377.433	0.993191 !	34264.200000 !	0.002509	0.25
Y_R 488.368	1.010740 !	19045.300000 !	0.003574	0.35
Y_R2 488.368	0.995378 !	32965.697767 !	0.004040	0.41

Sample Name: 280-163982-A-14-B MDLV

Date: 10/27/2022 6:29:26 PM Rack:Tube: 4:37

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.012188 !	ppm	0.000037	0.30	27049.900556 !	Y 377.433
Ag (328.068 nm)	0.005653 n!	ppm	0.000098	1.73	141.648000 !	Y 377.433
Al (167.019 nm)	0.061995 !	ppm	0.005417	8.74	28.441200 !	Y_R 377.433
Al H (396.152 nm)	0.053559 !u	ppm	0.004933	9.21	172.877820 !	Y_R 377.433
As (188.980 nm)	0.017470 !	ppm	0.000778	4.45	19.161800 !	Y 242.219
B (249.678 nm)	0.031539 !	ppm	0.000141	0.45	957.732000 !	Y 242.219
Ba (493.408 nm)	0.008762 !	ppm	0.000185	2.11	1018.650000 !	Y_R 488.368
Be (234.861 nm)	0.001088 !	ppm	0.000015	1.33	289.748000 !	Y_R 488.368
Bi (223.061 nm)	0.037370 !	ppm	0.002377	6.36	111.128000 !	Y 377.433
Ca (315.887 nm)	0.547398 !	ppm	0.008181	1.49	498.966979 !	Y_R 377.433
Cd (214.439 nm)	0.001369 !	ppm	0.000047	3.41	78.460500 !	Y 377.433
Co (228.615 nm)	0.001811 !	ppm	0.000121	6.66	20.446600 !	Y 242.219
Cr (205.560 nm)	0.003790 !	ppm	0.000129	3.40	63.588900 !	Y 377.433
Cu (324.754 nm)	0.010568 !	ppm	0.000058	0.55	2177.600000 !	Y 377.433
Fe (238.204 nm)	0.200036 !	ppm	0.001831	0.92	719.542599 !	Y_R 377.433
Fe H (259.940 nm)	0.200028 !u	ppm	0.001338	0.67	432.764000 !	Y_R 377.433
K (766.491 nm)	1.503350 !	ppm	0.054312	3.61	708.726000 !	Y_R2 488.368
Li (670.783 nm)	0.020108 !	ppm	0.001003	4.99	-470.766000 !	Y_R2 488.368
Mg (279.078 nm)	0.199724 !	ppm	0.000439	0.22	1249.020000 !	Y 377.433
Mn (257.610 nm)	0.004072 !	ppm	0.000006	0.15	1061.900000 !	Y 377.433
Mo (202.032 nm)	0.003919 !	ppm	0.000545	13.92	38.637200 !	Y 377.433
Na (589.592 nm)	1.051090 !	ppm	0.009314	0.89	6566.130000 !	Y_R2 488.368
Na H (589.593 nm)	2.291988 !u	ppm	0.005796	0.25	5925.128607 !	Y_R 488.368
Ni (231.604 nm)	0.005157 !	ppm	0.000307	5.95	42.099200 !	Y 377.433
P (213.618 nm)	0.062935 !	ppm	0.003926	6.24	159.037000 !	Y 242.219
Pb (220.353 nm)	0.006843 !	ppm	0.000193	2.81	15.361800 !	Y 242.219
S (181.972 nm)	0.103096 !	ppm	0.001765	1.71	53.934171 !	Y 377.433
Sb (206.834 nm)	0.015897 !	ppm	0.002072	13.04	33.153000 !	Y 377.433
Se (196.026 nm)	0.012330 !	ppm	0.003613	29.30	18.434300 !	Y 242.219
Si (288.158 nm)	0.175159 !	ppm	0.000315	0.18	2497.720000 !	Y 377.433
Sn (189.925 nm)	0.104585 !	ppm	0.002616	2.50	227.588000 !	Y 377.433
Sr (421.552 nm)	0.004098 !	ppm	0.000122	2.98	976.292965 !	Y_R 488.368
Th (288.505 nm)	0.010674 !	ppm	0.001543	14.46	128.810000 !	Y 377.433
Ti (336.122 nm)	0.004695 !	ppm	0.000051	1.08	486.473000 !	Y 377.433
Tl (190.794 nm)	0.012251 !	ppm	0.000654	5.33	23.656200 !	Y 377.433
U (409.013 nm)	0.007086 !	ppm	0.002831	39.95	-24.430900 !	Y 377.433
V (292.401 nm)	0.003126 !	ppm	0.000128	4.10	148.633000 !	Y 377.433
Zn (206.200 nm)	0.017958 !	ppm	0.000580	3.23	105.207000 !	Y 377.433
Zr (343.823 nm)	0.004673 !	ppm	0.000024	0.52	655.936000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.974997 !	8173.149826 !	0.003043	0.31
Y 377.433	0.948320 !	429939.391641 !	0.003738	0.39
Y_R 377.433	0.980435 !	33824.200000 !	0.002544	0.26
Y_R 488.368	1.000330 !	18849.100000 !	0.002688	0.27
Y_R2 488.368	0.973231 !	32232.224658 !	0.002133	0.22

Sample Name: 280-167824-a-1-b

Date: 10/27/2022 6:33:30 PM Rack:Tube: 4:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.251400 !	ppm	0.000724	0.29	578500.311175 !	Y 377.433
Ag (328.068 nm)	-0.000077 n!u	ppm	0.000142	> 100.00	-222.660000 !	Y 377.433
Al (167.019 nm)	102.407000 !o	ppm	0.839335	0.82	45775.300000 !	Y_R 377.433
Al H (396.152 nm)	127.488875 !o	ppm	0.587835	0.46	354027.228228 !	Y_R 377.433
As (188.980 nm)	0.058836 !	ppm	0.001271	2.16	72.949600 !	Y 242.219
B (249.678 nm)	0.241255 !	ppm	0.000594	0.25	6540.260000 !	Y 242.219
Ba (493.408 nm)	0.802761 !	ppm	0.006328	0.79	88982.600000 !	Y_R 488.368
Be (234.861 nm)	0.006597 !	ppm	0.000089	1.35	3882.430000 !	Y_R 488.368
Bi (223.061 nm)	-0.003133 !u	ppm	0.002082	66.46	9.468230 !	Y 377.433
Ca (315.887 nm)	346.758320 !o	ppm	1.281668	0.37	320998.520859 !	Y_R 377.433
Cd (214.439 nm)	0.000916 !	ppm	0.000061	6.68	181.981000 !	Y 377.433
Co (228.615 nm)	0.056719 !	ppm	0.000469	0.83	1205.420000 !	Y 242.219
Cr (205.560 nm)	0.148048 !	ppm	0.000891	0.60	2178.620000 !	Y 377.433
Cu (324.754 nm)	0.152963 !	ppm	0.000128	0.08	12153.200000 !	Y 377.433
Fe (238.204 nm)	132.356858 !o	ppm	1.002935	0.76	467798.408575 !	Y_R 377.433
Fe H (259.940 nm)	136.224000 !	ppm	0.671354	0.49	283726.000000 !	Y_R 377.433
K (766.491 nm)	26.446400 !	ppm	0.074452	0.28	25573.200000 !	Y_R2 488.368
Li (670.783 nm)	0.245300 !	ppm	0.001919	0.78	7083.560000 !	Y_R2 488.368
Mg (279.078 nm)	68.864200 !o	ppm	0.094520	0.14	415690.000000 !	Y 377.433
Mn (257.610 nm)	2.624750 !o	ppm	0.000973	0.04	635267.000000 !	Y 377.433
Mo (202.032 nm)	0.006084 !	ppm	0.000154	2.53	57.180800 !	Y 377.433
Na (589.592 nm)	12.901500 !	ppm	0.034582	0.27	79104.800000 !	Y_R2 488.368
Na H (589.593 nm)	14.065373 !	ppm	0.054923	0.39	54136.848861 !	Y_R 488.368
Ni (231.604 nm)	0.113299 !	ppm	0.000737	0.65	823.857000 !	Y 377.433
P (213.618 nm)	4.741800 !	ppm	0.007487	0.16	11194.600000 !	Y 242.219
Pb (220.353 nm)	0.073000 !	ppm	0.001221	1.67	164.704000 !	Y 242.219
S (181.972 nm)	2.309172 !	ppm	0.009821	0.43	1119.997684 !	Y 377.433
Sb (206.834 nm)	0.003386 !	ppm	0.001289	38.06	-18.084200 !	Y 377.433
Se (196.026 nm)	-0.000066 !u	ppm	0.003378	> 100.00	-14.181500 !	Y 242.219
Si (288.158 nm)	2.543020 !	ppm	0.009492	0.37	25187.800000 !	Y 377.433
Sn (189.925 nm)	0.011023 !	ppm	0.000978	8.88	28.774000 !	Y 377.433
Sr (421.552 nm)	1.227542 !o	ppm	0.007269	0.59	274963.888274 !	Y_R 488.368
Th (288.505 nm)	0.088031 !	ppm	0.001273	1.45	404.118000 !	Y 377.433
Ti (336.122 nm)	3.866890 !o	ppm	0.010355	0.27	578247.000000 !	Y 377.433
Tl (190.794 nm)	0.002947 !	ppm	0.001707	57.94	-17.282900 !	Y 377.433
U (409.013 nm)	-0.036683 !u	ppm	0.005721	15.60	-186.349000 !	Y 377.433
V (292.401 nm)	0.333964 !	ppm	0.000463	0.14	13796.400000 !	Y 377.433
Zn (206.200 nm)	0.397490 !	ppm	0.000780	0.20	2130.820000 !	Y 377.433
Zr (343.823 nm)	0.056489 !	ppm	0.000782	1.38	8144.460000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.048860 !	8792.329448 !	0.001350	0.13
Y 377.433	1.009026 !	457461.753930 !	0.003205	0.32
Y_R 377.433	1.091960 !	37671.600000 !	0.004771	0.44
Y_R 488.368	1.111500 !	20943.800000 !	0.003668	0.33
Y_R2 488.368	1.082555 !	35852.878192 !	0.003389	0.31

Sample Name: 280-167824-a-2-b

Date: 10/27/2022 6:37:34 PM Rack:Tube: 4:5

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.263638 !	ppm	0.001047	0.40	606710.797317 !	Y 377.433
Ag (328.068 nm)	0.000246 n!	ppm	0.000169	68.70	-201.092000 !	Y 377.433
Al (167.019 nm)	105.021000 !o	ppm	0.143466	0.14	46946.600000 !	Y_R 377.433
Al H (396.152 nm)	132.197710 !o	ppm	0.529349	0.40	367092.471141 !	Y_R 377.433
As (188.980 nm)	0.059493 !	ppm	0.002525	4.24	73.803700 !	Y 242.219
B (249.678 nm)	0.279861 !	ppm	0.000768	0.27	7598.060000 !	Y 242.219
Ba (493.408 nm)	1.484260 !o	ppm	0.006337	0.43	164390.000000 !	Y_R 488.368
Be (234.861 nm)	0.006800 !	ppm	0.000115	1.69	4077.210000 !	Y_R 488.368
Bi (223.061 nm)	-0.000785 !u	ppm	0.002565	> 100.00	15.363200 !	Y 377.433
Ca (315.887 nm)	338.851783 !o	ppm	1.015224	0.30	313679.162971 !	Y_R 377.433
Cd (214.439 nm)	0.001024 !	ppm	0.000081	7.94	197.448000 !	Y 377.433
Co (228.615 nm)	0.058487 !	ppm	0.000525	0.90	1241.350000 !	Y 242.219
Cr (205.560 nm)	0.158687 !	ppm	0.000292	0.18	2334.860000 !	Y 377.433
Cu (324.754 nm)	0.157721 !	ppm	0.000222	0.14	12509.300000 !	Y 377.433
Fe (238.204 nm)	141.162645 !o	ppm	0.135434	0.10	498920.499304 !	Y_R 377.433
Fe H (259.940 nm)	144.940000 !	ppm	0.176945	0.12	301878.000000 !	Y_R 377.433
K (766.491 nm)	26.949800 !	ppm	0.153678	0.57	26075.000000 !	Y_R2 488.368
Li (670.783 nm)	0.254890 !	ppm	0.000819	0.32	7405.260000 !	Y_R2 488.368
Mg (279.078 nm)	72.170000 !o	ppm	0.082124	0.11	435639.000000 !	Y 377.433
Mn (257.610 nm)	2.749920 !o	ppm	0.006011	0.22	665560.000000 !	Y 377.433
Mo (202.032 nm)	0.007002 !	ppm	0.000367	5.24	65.045700 !	Y 377.433
Na (589.592 nm)	20.040200 !	ppm	0.096107	0.48	123084.000000 !	Y_R2 488.368
Na H (589.593 nm)	20.698330 !	ppm	0.041853	0.20	81549.194522 !	Y_R 488.368
Ni (231.604 nm)	0.120138 !	ppm	0.000943	0.79	873.383000 !	Y 377.433
P (213.618 nm)	5.298580 !	ppm	0.038550	0.73	12507.900000 !	Y 242.219
Pb (220.353 nm)	0.071381 !	ppm	0.002052	2.87	159.245000 !	Y 242.219
S (181.972 nm)	5.448156 !	ppm	0.003949	0.07	2628.578675 !	Y 377.433
Sb (206.834 nm)	0.004668 !	ppm	0.001140	24.42	-16.036600 !	Y 377.433
Se (196.026 nm)	0.002828 !u	ppm	0.004720	> 100.00	-12.755100 !	Y 242.219
Si (288.158 nm)	2.364520 !	ppm	0.002900	0.12	23535.400000 !	Y 377.433
Sn (189.925 nm)	0.011502 !	ppm	0.000550	4.78	29.792800 !	Y 377.433
Sr (421.552 nm)	1.615886 !o	ppm	0.001057	0.07	361932.574275 !	Y_R 488.368
Th (288.505 nm)	0.091584 !	ppm	0.001521	1.66	416.165000 !	Y 377.433
Ti (336.122 nm)	3.930320 !o	ppm	0.002353	0.06	587694.000000 !	Y 377.433
Tl (190.794 nm)	0.001103 !	ppm	0.000636	57.65	-21.863800 !	Y 377.433
U (409.013 nm)	-0.038531 !u	ppm	0.003686	9.57	-185.786000 !	Y 377.433
V (292.401 nm)	0.327071 !	ppm	0.000245	0.07	13513.000000 !	Y 377.433
Zn (206.200 nm)	0.415715 !	ppm	0.001346	0.32	2228.090000 !	Y 377.433
Zr (343.823 nm)	0.067990 !	ppm	0.000726	1.07	9744.180000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.048198 !	8786.779828 !	0.000668	0.06
Y 377.433	1.008324 !	457143.435997 !	0.001847	0.18
Y_R 377.433	1.097020 !	37846.100000 !	0.003423	0.31
Y_R 488.368	1.116560 !	21039.100000 !	0.003333	0.30
Y_R2 488.368	1.086218 !	35974.192287 !	0.004015	0.37

Sample Name: 280-167824-a-3-b

Date: 10/27/2022 6:41:38 PM Rack:Tube: 4:6

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.261293 !	ppm	0.001113	0.43	601304.341778 !	Y 377.433
Ag (328.068 nm)	0.000027 n!u	ppm	0.000079	> 100.00	-211.270000 !	Y 377.433
Al (167.019 nm)	98.970100 !o	ppm	0.493388	0.50	44243.500000 !	Y_R 377.433
Al H (396.152 nm)	123.144580 !o	ppm	0.103740	0.08	341978.240167 !	Y_R 377.433
As (188.980 nm)	0.063471 !	ppm	0.000442	0.70	78.976100 !	Y 242.219
B (249.678 nm)	0.266860 !	ppm	0.001239	0.46	7246.200000 !	Y 242.219
Ba (493.408 nm)	1.902880 !o	ppm	0.009014	0.47	210699.000000 !	Y_R 488.368
Be (234.861 nm)	0.006404 !	ppm	0.000038	0.59	3885.660000 !	Y_R 488.368
Bi (223.061 nm)	-0.001973 !u	ppm	0.002177	> 100.00	12.381000 !	Y 377.433
Ca (315.887 nm)	363.413967 !o	ppm	0.634597	0.17	336417.235865 !	Y_R 377.433
Cd (214.439 nm)	0.001152 !	ppm	0.000065	5.68	200.087000 !	Y 377.433
Co (228.615 nm)	0.057462 !	ppm	0.000566	0.99	1212.140000 !	Y 242.219
Cr (205.560 nm)	0.153317 !	ppm	0.000331	0.22	2256.190000 !	Y 377.433
Cu (324.754 nm)	0.152440 !	ppm	0.000298	0.20	12110.700000 !	Y 377.433
Fe (238.204 nm)	135.893914 !o	ppm	0.191495	0.14	480299.345898 !	Y_R 377.433
Fe H (259.940 nm)	140.000000 !	ppm	0.258573	0.18	291591.000000 !	Y_R 377.433
K (766.491 nm)	26.521400 !	ppm	0.080279	0.30	25648.000000 !	Y_R2 488.368
Li (670.783 nm)	0.252969 !	ppm	0.001054	0.42	7340.810000 !	Y_R2 488.368
Mg (279.078 nm)	69.346500 !o	ppm	0.113528	0.16	418596.000000 !	Y 377.433
Mn (257.610 nm)	2.599890 !o	ppm	0.004374	0.17	629251.000000 !	Y 377.433
Mo (202.032 nm)	0.007439 !	ppm	0.000270	3.63	68.792100 !	Y 377.433
Na (589.592 nm)	19.059900 !	ppm	0.042750	0.22	117757.000000 !	Y_R2 488.368
Na H (589.593 nm)	19.856044 !	ppm	0.039044	0.20	78610.401673 !	Y_R 488.368
Ni (231.604 nm)	0.114438 !	ppm	0.001230	1.07	832.479000 !	Y 377.433
P (213.618 nm)	5.015900 !	ppm	0.018598	0.37	11841.100000 !	Y 242.219
Pb (220.353 nm)	0.069300 !	ppm	0.000662	0.95	156.245000 !	Y 242.219
S (181.972 nm)	5.574407 !	ppm	0.018452	0.33	2688.899911 !	Y 377.433
Sb (206.834 nm)	0.002861 !	ppm	0.002671	93.36	-19.649600 !	Y 377.433
Se (196.026 nm)	0.002290 !u	ppm	0.003600	> 100.00	-12.589600 !	Y 242.219
Si (288.158 nm)	2.477430 !	ppm	0.004824	0.19	24544.300000 !	Y 377.433
Sn (189.925 nm)	0.011685 !	ppm	0.001145	9.79	30.181600 !	Y 377.433
Sr (421.552 nm)	1.813308 !o	ppm	0.001378	0.08	406144.740562 !	Y_R 488.368
Th (288.505 nm)	0.090369 !	ppm	0.003633	4.02	409.794000 !	Y 377.433
Ti (336.122 nm)	3.669040 !o	ppm	0.008598	0.23	548760.000000 !	Y 377.433
Tl (190.794 nm)	0.002728 !	ppm	0.001278	46.86	-16.985900 !	Y 377.433
U (409.013 nm)	-0.033050 !u	ppm	0.002444	7.39	-169.612000 !	Y 377.433
V (292.401 nm)	0.330139 !	ppm	0.000364	0.11	13633.000000 !	Y 377.433
Zn (206.200 nm)	0.390423 !	ppm	0.001333	0.34	2093.100000 !	Y 377.433
Zr (343.823 nm)	0.076813 !	ppm	0.000480	0.62	10934.700000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.054035 !	8835.704959 !	0.004377	0.42
Y 377.433	1.014855 !	460104.536744 !	0.002027	0.20
Y_R 377.433	1.108080 !	38227.900000 !	0.001987	0.18
Y_R 488.368	1.125440 !	21206.500000 !	0.002848	0.25
Y_R2 488.368	1.094377 !	36244.434991 !	0.005998	0.55

Sample Name: 280-167824-a-4-b

Date: 10/27/2022 6:45:42 PM Rack:Tube: 4:7

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.249084 !	ppm	0.000655	0.26	573159.485818 !	Y 377.433
Ag (328.068 nm)	0.000167 n!	ppm	0.000136	81.75	-196.649000 !	Y 377.433
Al (167.019 nm)	89.543800 !o	ppm	0.080695	0.09	40029.500000 !	Y_R 377.433
Al H (396.152 nm)	110.283518 !o	ppm	0.441147	0.40	306419.398348 !	Y_R 377.433
As (188.980 nm)	0.059123 !	ppm	0.003260	5.51	73.322500 !	Y 242.219
B (249.678 nm)	0.263985 !	ppm	0.000284	0.11	7191.730000 !	Y 242.219
Ba (493.408 nm)	1.066080 !	ppm	0.011071	1.04	118107.000000 !	Y_R 488.368
Be (234.861 nm)	0.005814 !	ppm	0.000208	3.58	3516.340000 !	Y_R 488.368
Bi (223.061 nm)	0.000352 !u	ppm	0.000746	> 100.00	18.215100 !	Y 377.433
Ca (315.887 nm)	643.581790 !o	ppm	1.165373	0.18	595778.382503 !	Y_R 377.433
Cd (214.439 nm)	0.002355 !	ppm	0.000068	2.90	260.555000 !	Y 377.433
Co (228.615 nm)	0.049602 !	ppm	0.000140	0.28	1062.780000 !	Y 242.219
Cr (205.560 nm)	0.144242 !	ppm	0.000642	0.44	2124.460000 !	Y 377.433
Cu (324.754 nm)	0.216277 !	ppm	0.000828	0.38	16397.100000 !	Y 377.433
Fe (238.204 nm)	122.616073 !o	ppm	0.389011	0.32	433371.771532 !	Y_R 377.433
Fe H (259.940 nm)	124.662000 !	ppm	0.603696	0.48	259647.000000 !	Y_R 377.433
K (766.491 nm)	24.846500 !	ppm	0.072740	0.29	23978.400000 !	Y_R2 488.368
Li (670.783 nm)	0.231290 !	ppm	0.002074	0.90	6613.560000 !	Y_R2 488.368
Mg (279.078 nm)	65.351400 !o	ppm	0.179799	0.28	394492.000000 !	Y 377.433
Mn (257.610 nm)	2.306010 !o	ppm	0.005213	0.23	558133.000000 !	Y 377.433
Mo (202.032 nm)	0.009704 !	ppm	0.000590	6.08	88.194500 !	Y 377.433
Na (589.592 nm)	25.849000 !	ppm	0.046019	0.18	157520.000000 !	Y_R2 488.368
Na H (589.593 nm)	26.524616 !	ppm	0.098314	0.37	104538.264265 !	Y_R 488.368
Ni (231.604 nm)	0.101808 !	ppm	0.000642	0.63	741.564000 !	Y 377.433
P (213.618 nm)	4.820830 !	ppm	0.014118	0.29	11381.000000 !	Y 242.219
Pb (220.353 nm)	0.065517 !	ppm	0.001249	1.91	149.142000 !	Y 242.219
S (181.972 nm)	5.969929 !	ppm	0.018430	0.31	2878.282870 !	Y 377.433
Sb (206.834 nm)	0.005478 !	ppm	0.001760	32.13	-10.987200 !	Y 377.433
Se (196.026 nm)	0.001161 !u	ppm	0.003191	> 100.00	-11.724000 !	Y 242.219
Si (288.158 nm)	2.533950 !	ppm	0.005389	0.21	25069.400000 !	Y 377.433
Sn (189.925 nm)	0.015479 !	ppm	0.000945	6.11	38.242600 !	Y 377.433
Sr (421.552 nm)	1.710007 !o	ppm	0.006761	0.40	383010.742990 !	Y_R 488.368
Th (288.505 nm)	0.078738 !	ppm	0.003021	3.84	370.800000 !	Y 377.433
Ti (336.122 nm)	3.662550 !o	ppm	0.011734	0.32	548678.000000 !	Y 377.433
Tl (190.794 nm)	0.002312 !u	ppm	0.002435	> 100.00	-17.549200 !	Y 377.433
U (409.013 nm)	-0.027376 !u	ppm	0.003732	13.63	-214.987000 !	Y 377.433
V (292.401 nm)	0.305436 !	ppm	0.000859	0.28	12621.600000 !	Y 377.433
Zn (206.200 nm)	0.398511 !	ppm	0.000564	0.14	2136.270000 !	Y 377.433
Zr (343.823 nm)	0.083300 !	ppm	0.000145	0.17	11781.600000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.013566 !	8496.470132 !	0.005936	0.59
Y 377.433	0.983192 !	445749.475741 !	0.006144	0.62
Y_R 377.433	1.053630 !	36349.300000 !	0.005043	0.48
Y_R 488.368	1.077360 !	20300.600000 !	0.000838	0.08
Y_R2 488.368	1.061947 !	35170.392759 !	0.003474	0.33

Sample Name: 280-167824-a-5-b

Date: 10/27/2022 6:49:46 PM Rack:Tube: 4:8

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.284877 !	ppm	0.000414	0.15	655672.061743 !	Y 377.433
Ag (328.068 nm)	0.000061 n!u	ppm	0.000177	> 100.00	-210.770000 !	Y 377.433
Al (167.019 nm)	107.440000 !o	ppm	0.464571	0.43	48027.500000 !	Y_R 377.433
Al H (396.152 nm)	135.035746 !o	ppm	0.358561	0.27	374962.046612 !	Y_R 377.433
As (188.980 nm)	0.066462 !	ppm	0.000602	0.91	82.865300 !	Y 242.219
B (249.678 nm)	0.349613 !	ppm	0.000917	0.26	9536.090000 !	Y 242.219
Ba (493.408 nm)	1.355830 !o	ppm	0.013184	0.97	150183.000000 !	Y_R 488.368
Be (234.861 nm)	0.006968 !	ppm	0.000117	1.68	4161.120000 !	Y_R 488.368
Bi (223.061 nm)	-0.004681 !u	ppm	0.001845	39.42	5.582780 !	Y 377.433
Ca (315.887 nm)	322.672899 !o	ppm	0.785757	0.24	298701.804942 !	Y_R 377.433
Cd (214.439 nm)	0.001049 !	ppm	0.000047	4.50	201.376000 !	Y 377.433
Co (228.615 nm)	0.058886 !	ppm	0.000302	0.51	1281.300000 !	Y 242.219
Cr (205.560 nm)	0.170575 !	ppm	0.000969	0.57	2511.440000 !	Y 377.433
Cu (324.754 nm)	0.193815 !	ppm	0.000696	0.36	15068.300000 !	Y 377.433
Fe (238.204 nm)	143.270864 !o	ppm	0.440989	0.31	506371.529842 !	Y_R 377.433
Fe H (259.940 nm)	146.855000 !	ppm	0.523658	0.36	305868.000000 !	Y_R 377.433
K (766.491 nm)	31.019800 !	ppm	0.092944	0.30	30132.300000 !	Y_R2 488.368
Li (670.783 nm)	0.271495 !	ppm	0.002949	1.09	7962.270000 !	Y_R2 488.368
Mg (279.078 nm)	72.746600 !o	ppm	0.272886	0.38	439116.000000 !	Y 377.433
Mn (257.610 nm)	2.762320 !o	ppm	0.010429	0.38	668560.000000 !	Y 377.433
Mo (202.032 nm)	0.012761 !	ppm	0.000718	5.63	114.376000 !	Y 377.433
Na (589.592 nm)	27.683400 !	ppm	0.100163	0.36	168980.000000 !	Y_R2 488.368
Na H (589.593 nm)	28.193970 !	ppm	0.097384	0.35	111564.049842 !	Y_R 488.368
Ni (231.604 nm)	0.123613 !	ppm	0.002151	1.74	898.192000 !	Y 377.433
P (213.618 nm)	5.258410 !	ppm	0.016614	0.32	12413.100000 !	Y 242.219
Pb (220.353 nm)	0.071682 !	ppm	0.001365	1.90	159.205000 !	Y 242.219
S (181.972 nm)	7.429389 !	ppm	0.032920	0.44	3580.609432 !	Y 377.433
Sb (206.834 nm)	0.004260 !	ppm	0.001855	43.54	-17.278200 !	Y 377.433
Se (196.026 nm)	0.002260 !	ppm	0.001193	52.78	-13.706700 !	Y 242.219
Si (288.158 nm)	2.573860 !	ppm	0.011337	0.44	25627.600000 !	Y 377.433
Sn (189.925 nm)	0.017367 !	ppm	0.001509	8.69	42.255000 !	Y 377.433
Sr (421.552 nm)	1.923576 !o	ppm	0.017319	0.90	430839.102799 !	Y_R 488.368
Th (288.505 nm)	0.100669 !	ppm	0.002727	2.71	442.572000 !	Y 377.433
Ti (336.122 nm)	4.791200 !o	ppm	0.012693	0.26	716182.000000 !	Y 377.433
Tl (190.794 nm)	0.003797 !	ppm	0.000624	16.43	-19.858900 !	Y 377.433
U (409.013 nm)	-0.038389 !u	ppm	0.002561	6.67	-181.319000 !	Y 377.433
V (292.401 nm)	0.352424 !	ppm	0.001208	0.34	14574.200000 !	Y 377.433
Zn (206.200 nm)	0.474866 !	ppm	0.001059	0.22	2543.790000 !	Y 377.433
Zr (343.823 nm)	0.092572 !	ppm	0.000344	0.37	13112.800000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.052686 !	8824.401607 !	0.001518	0.14
Y 377.433	1.008905 !	457406.691769 !	0.001831	0.18
Y_R 377.433	1.082290 !	37338.200000 !	0.000997	0.09
Y_R 488.368	1.104060 !	20803.700000 !	0.001268	0.11
Y_R2 488.368	1.077599 !	35688.747089 !	0.001484	0.14

Sample Name: 280-167824-a-6-b

Date: 10/27/2022 6:53:50 PM Rack:Tube: 4:9

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.257811 !	ppm	0.000601	0.23	593278.620292 !	Y 377.433
Ag (328.068 nm)	0.000001 n!u	ppm	0.000162	> 100.00	-227.080000 !	Y 377.433
Al (167.019 nm)	91.729600 !o	ppm	0.656057	0.72	41009.100000 !	Y_R 377.433
Al H (396.152 nm)	111.902356 !o	ppm	0.179308	0.16	310821.585511 !	Y_R 377.433
As (188.980 nm)	0.074707 !	ppm	0.001338	1.79	93.585800 !	Y 242.219
B (249.678 nm)	0.220579 !	ppm	0.000116	0.05	5968.010000 !	Y 242.219
Ba (493.408 nm)	0.533511 !	ppm	0.004102	0.77	59191.800000 !	Y_R 488.368
Be (234.861 nm)	0.005945 !	ppm	0.000106	1.79	3671.250000 !	Y_R 488.368
Bi (223.061 nm)	-0.005765 !u	ppm	0.000351	6.10	2.862420 !	Y 377.433
Ca (315.887 nm)	456.519301 !o	ppm	1.506835	0.33	422608.097713 !	Y_R 377.433
Cd (214.439 nm)	0.001359 !	ppm	0.000102	7.50	207.224000 !	Y 377.433
Co (228.615 nm)	0.053613 !	ppm	0.000465	0.87	1142.970000 !	Y 242.219
Cr (205.560 nm)	0.145009 !	ppm	0.000645	0.44	2133.830000 !	Y 377.433
Cu (324.754 nm)	0.134485 !	ppm	0.000328	0.24	10745.400000 !	Y 377.433
Fe (238.204 nm)	129.932881 !o	ppm	0.062708	0.05	459231.401014 !	Y_R 377.433
Fe H (259.940 nm)	133.685000 !	ppm	0.382043	0.29	278438.000000 !	Y_R 377.433
K (766.491 nm)	23.197400 !	ppm	0.021576	0.09	22334.400000 !	Y_R2 488.368
Li (670.783 nm)	0.248224 !	ppm	0.000243	0.10	7181.620000 !	Y_R2 488.368
Mg (279.078 nm)	67.505800 !o	ppm	0.198586	0.29	407490.000000 !	Y 377.433
Mn (257.610 nm)	2.215020 !o	ppm	0.007514	0.34	536112.000000 !	Y 377.433
Mo (202.032 nm)	0.005813 !	ppm	0.000128	2.20	54.854800 !	Y 377.433
Na (589.592 nm)	13.402500 !	ppm	0.026432	0.20	81751.600000 !	Y_R2 488.368
Na H (589.593 nm)	14.383766 !	ppm	0.006724	0.05	55129.290449 !	Y_R 488.368
Ni (231.604 nm)	0.106615 !	ppm	0.000288	0.27	776.611000 !	Y 377.433
P (213.618 nm)	5.606450 !	ppm	0.012114	0.22	13234.000000 !	Y 242.219
Pb (220.353 nm)	0.064824 !	ppm	0.002125	3.28	147.308000 !	Y 242.219
S (181.972 nm)	2.383728 !	ppm	0.014284	0.60	1154.898892 !	Y 377.433
Sb (206.834 nm)	0.002694 !	ppm	0.000959	35.59	-19.040900 !	Y 377.433
Se (196.026 nm)	0.002799 !	ppm	0.001523	54.42	-11.537600 !	Y 242.219
Si (288.158 nm)	2.412430 !	ppm	0.005529	0.23	23955.600000 !	Y 377.433
Sn (189.925 nm)	0.009680 !	ppm	0.000670	6.92	25.921600 !	Y 377.433
Sr (421.552 nm)	1.568076 !o	ppm	0.001319	0.08	351225.701651 !	Y_R 488.368
Th (288.505 nm)	0.086620 !	ppm	0.004368	5.04	392.671000 !	Y 377.433
Ti (336.122 nm)	3.763820 !o	ppm	0.015626	0.42	563207.000000 !	Y 377.433
Tl (190.794 nm)	0.001801 !	ppm	0.001294	71.87	-19.344700 !	Y 377.433
U (409.013 nm)	-0.027098 !u	ppm	0.004672	17.24	-164.806000 !	Y 377.433
V (292.401 nm)	0.388607 !	ppm	0.001364	0.35	16035.800000 !	Y 377.433
Zn (206.200 nm)	0.335663 !	ppm	0.000684	0.20	1800.840000 !	Y 377.433
Zr (343.823 nm)	0.070095 !	ppm	0.000966	1.38	9999.200000 !	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.031164 !	8643.985715 !	0.001719	0.17
Y 377.433	0.994788 !	451006.695548 !	0.002575	0.26
Y_R 377.433	1.079820 !	37253.000000 !	0.003393	0.31
Y_R 488.368	1.098380 !	20696.600000 !	0.003904	0.36
Y_R2 488.368	1.062691 !	35195.015908 !	0.000185	0.02

Sample Name: CCVH-7429327

Date: 10/27/2022 6:57:54 PM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000017	ppm	0.000010	62.13	-1008.576540	Y 377.433
Ag (328.068 nm)	0.001545	ppm	0.000255	16.51	-147.683000	Y 377.433
Al (167.019 nm)	49.846100 o	ppm	0.078236	0.16	22274.200000	Y_R 377.433
Al H (396.152 nm)	51.049048	ppm	0.027753	0.05	141706.081247	Y_R 377.433
As (188.980 nm)	-0.000463 u	ppm	0.002090	> 100.00	-4.155530	Y 242.219
B (249.678 nm)	0.002317	ppm	0.000244	10.52	42.604300	Y 242.219
Ba (493.408 nm)	0.000210 u	ppm	0.000273	> 100.00	118.446000	Y_R 488.368
Be (234.861 nm)	0.000020 u	ppm	0.000031	> 100.00	788.035000	Y_R 488.368
Bi (223.061 nm)	-0.001666 u	ppm	0.000868	52.10	13.150100	Y 377.433
Ca (315.887 nm)	0.001240 u	ppm	0.001906	> 100.00	-6.631331	Y_R 377.433
Cd (214.439 nm)	-0.000193 u	ppm	0.000029	15.04	33.672700	Y 377.433
Co (228.615 nm)	-0.000405 u	ppm	0.000206	50.94	-21.689600	Y 242.219
Cr (205.560 nm)	0.000901	ppm	0.000315	34.97	6.609870	Y 377.433
Cu (324.754 nm)	0.002287	ppm	0.000229	10.02	2773.330000	Y 377.433
Fe (238.204 nm)	51.091301 o	ppm	0.082089	0.16	180583.388509	Y_R 377.433
Fe H (259.940 nm)	51.758900	ppm	0.022743	0.04	107813.000000	Y_R 377.433
K (766.491 nm)	0.087996	ppm	0.038405	43.64	-702.167000	Y_R2 488.368
Li (670.783 nm)	0.003490	ppm	0.000842	24.14	-1028.220000	Y_R2 488.368
Mg (279.078 nm)	-0.008250 u	ppm	0.000094	1.14	-170.973000	Y 377.433
Mn (257.610 nm)	0.000351	ppm	0.000039	10.99	161.523000	Y 377.433
Mo (202.032 nm)	-0.000632 u	ppm	0.000135	21.32	-0.352955	Y 377.433
Na (589.592 nm)	250.206000	ppm	1.208020	0.48	1508470.000000	Y_R2 488.368
Na H (589.593 nm)	242.913050	ppm	0.342410	0.14	973838.376713	Y_R 488.368
Ni (231.604 nm)	-0.000527 u	ppm	0.000637	> 100.00	10.927800	Y 377.433
P (213.618 nm)	5.008810	ppm	0.013172	0.26	11824.400000	Y 242.219
Pb (220.353 nm)	-0.004861 u	ppm	0.000899	18.49	-23.955800	Y 242.219
S (181.972 nm)	5.071698	ppm	0.013163	0.26	2441.354220	Y 377.433
Sb (206.834 nm)	0.002103	ppm	0.001367	64.98	-18.184300	Y 377.433
Se (196.026 nm)	0.006132	ppm	0.001623	26.47	3.604050	Y 242.219
Si (288.158 nm)	0.012849	ppm	0.000499	3.88	985.128000	Y 377.433
Sn (189.925 nm)	0.000724 u	ppm	0.001104	> 100.00	6.889990	Y 377.433
Sr (421.552 nm)	0.000703	ppm	0.000084	11.97	215.809624	Y_R 488.368
Th (288.505 nm)	5.082550	ppm	0.025407	0.50	14378.200000	Y 377.433
Ti (336.122 nm)	0.001211	ppm	0.000126	10.44	-35.180500	Y 377.433
Tl (190.794 nm)	-0.002055 u	ppm	0.001355	65.95	-9.197830	Y 377.433
U (409.013 nm)	2.530310	ppm	0.003423	0.14	12722.800000	Y 377.433
V (292.401 nm)	-0.001071 u	ppm	0.000225	20.98	306.497000	Y 377.433
Zn (206.200 nm)	0.000997	ppm	0.000177	17.80	14.683300	Y 377.433
Zr (343.823 nm)	0.046391	ppm	0.004575	9.86	6516.420000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.954184	7998.682440	0.001960	0.21
Y 377.433	0.915394	415011.965753	0.000576	0.06
Y_R 377.433	0.974697	33626.200000	0.001286	0.13
Y_R 488.368	1.001430	18869.800000	0.002748	0.27
Y_R2 488.368	0.961169	31832.717586	0.013956	1.45

Sample Name: CCV-7429326

Date: 10/27/2022 7:01:56 PM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.466581	ppm	0.001568	0.34	1074550.919705	Y 377.433
Ag (328.068 nm)	0.506987	ppm	0.000846	0.17	26810.300000	Y 377.433
Al (167.019 nm)	0.531789	ppm	0.000710	0.13	239.399000	Y_R 377.433
Al H (396.152 nm)	0.517149 u	ppm	0.010716	2.07	1508.489031	Y_R 377.433
As (188.980 nm)	0.502620	ppm	0.002414	0.48	649.994000	Y 242.219
B (249.678 nm)	0.498722	ppm	0.001345	0.27	13990.000000	Y 242.219
Ba (493.408 nm)	0.504854	ppm	0.002623	0.52	55904.300000	Y_R 488.368
Be (234.861 nm)	0.510978	ppm	0.003085	0.60	142490.000000	Y_R 488.368
Bi (223.061 nm)	1.046260	ppm	0.002594	0.25	2643.320000	Y 377.433
Ca (315.887 nm)	5.253947	ppm	0.001943	0.04	4856.331746	Y_R 377.433
Cd (214.439 nm)	0.521543	ppm	0.002818	0.54	31894.800000	Y 377.433
Co (228.615 nm)	0.512263	ppm	0.001418	0.28	9717.590000	Y 242.219
Cr (205.560 nm)	0.525847	ppm	0.001962	0.37	7842.160000	Y 377.433
Cu (324.754 nm)	0.520759	ppm	0.000813	0.16	38388.700000	Y 377.433
Fe (238.204 nm)	2.569978	ppm	0.002976	0.12	9095.575294	Y_R 377.433
Fe H (259.940 nm)	2.612380 u	ppm	0.006350	0.24	5456.910000	Y_R 377.433
K (766.491 nm)	49.398200	ppm	0.145633	0.29	48452.800000	Y_R2 488.368
Li (670.783 nm)	0.495978	ppm	0.003335	0.67	15492.800000	Y_R2 488.368
Mg (279.078 nm)	20.489100	ppm	0.064417	0.31	123776.000000	Y 377.433
Mn (257.610 nm)	0.522321	ppm	0.000941	0.18	126479.000000	Y 377.433
Mo (202.032 nm)	0.525729	ppm	0.001104	0.21	4508.760000	Y 377.433
Na (589.592 nm)	25.564400	ppm	0.046380	0.18	155024.000000	Y_R2 488.368
Na H (589.593 nm)	25.933482	ppm	0.092641	0.36	101558.096028	Y_R 488.368
Ni (231.604 nm)	0.528524	ppm	0.000962	0.18	3717.280000	Y 377.433
P (213.618 nm)	0.009318	ppm	0.001180	12.67	32.574200	Y 242.219
Pb (220.353 nm)	0.505099	ppm	0.002703	0.54	1397.390000	Y 242.219
S (181.972 nm)	0.000303 u	ppm	0.004071	> 100.00	5.740704	Y 377.433
Sb (206.834 nm)	0.524467	ppm	0.000262	0.05	1321.380000	Y 377.433
Se (196.026 nm)	0.500982	ppm	0.001406	0.28	505.660000	Y 242.219
Si (288.158 nm)	5.097860	ppm	0.016680	0.33	48440.200000	Y 377.433
Sn (189.925 nm)	0.522847	ppm	0.002400	0.46	1116.370000	Y 377.433
Sr (421.552 nm)	0.495589	ppm	0.001997	0.40	111044.507211	Y_R 488.368
Th (288.505 nm)	0.027851	ppm	0.007973	28.63	186.391000	Y 377.433
Ti (336.122 nm)	0.510629	ppm	0.000804	0.16	76042.600000	Y 377.433
Tl (190.794 nm)	0.526346	ppm	0.003586	0.68	1154.160000	Y 377.433
U (409.013 nm)	0.007598	ppm	0.004226	55.62	-66.230900	Y 377.433
V (292.401 nm)	0.518817	ppm	0.001103	0.21	21162.600000	Y 377.433
Zn (206.200 nm)	0.525625	ppm	0.002684	0.51	2814.700000	Y 377.433
Zr (343.823 nm)	0.528714	ppm	0.004447	0.84	72319.100000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.963557	8077.250236	0.005911	0.61
Y 377.433	0.934241	423556.484541	0.005178	0.55
Y_R 377.433	0.979210	33781.900000	0.002461	0.25
Y_R 488.368	1.001840	18877.500000	0.002618	0.26
Y_R2 488.368	0.955680	31650.954272	0.007566	0.79

Sample Name: CCB

Date: 10/27/2022 7:05:58 PM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000015 u	ppm	0.000014	90.45	-1081.584661	Y 377.433
Ag (328.068 nm)	0.000378	ppm	0.000166	43.87	-139.226000	Y 377.433
Al (167.019 nm)	-0.000072 u	ppm	0.003379	> 100.00	0.633310	Y_R 377.433
Al H (396.152 nm)	-0.003249 u	ppm	0.001831	56.37	14.751626	Y_R 377.433
As (188.980 nm)	0.001093 u	ppm	0.002033	> 100.00	-2.133280	Y 242.219
B (249.678 nm)	0.001034	ppm	0.000190	18.37	108.439000	Y 242.219
Ba (493.408 nm)	-0.000140 u	ppm	0.000145	> 100.00	33.599700	Y_R 488.368
Be (234.861 nm)	-0.000030 u	ppm	0.000015	50.00	-25.203200	Y_R 488.368
Bi (223.061 nm)	0.000000 u	ppm	0.002163	> 100.00	17.333900	Y 377.433
Ca (315.887 nm)	0.000993 u	ppm	0.004940	> 100.00	-6.860238	Y_R 377.433
Cd (214.439 nm)	-0.000056 u	ppm	0.000080	> 100.00	-8.901150	Y 377.433
Co (228.615 nm)	0.000032 u	ppm	0.000131	> 100.00	-13.437700	Y 242.219
Cr (205.560 nm)	0.000069 u	ppm	0.000310	> 100.00	8.177970	Y 377.433
Cu (324.754 nm)	0.001478	ppm	0.000192	12.96	1529.500000	Y 377.433
Fe (238.204 nm)	0.000249 u	ppm	0.000801	> 100.00	13.437433	Y_R 377.433
Fe H (259.940 nm)	-0.001029 u	ppm	0.000192	18.70	14.028400	Y_R 377.433
K (766.491 nm)	0.021743 u	ppm	0.048079	> 100.00	-768.212000	Y_R2 488.368
Li (670.783 nm)	0.004022	ppm	0.000963	23.95	-1010.370000	Y_R2 488.368
Mg (279.078 nm)	-0.000345 u	ppm	0.000450	> 100.00	41.038300	Y 377.433
Mn (257.610 nm)	-0.000074 u	ppm	0.000024	32.74	58.643100	Y 377.433
Mo (202.032 nm)	0.001495	ppm	0.000358	23.92	17.865900	Y 377.433
Na (589.592 nm)	0.015240 u	ppm	0.015799	> 100.00	309.437000	Y_R2 488.368
Na H (589.593 nm)	1.419994 u	ppm	0.009418	0.66	2407.756105	Y_R 488.368
Ni (231.604 nm)	-0.000025 u	ppm	0.000675	> 100.00	5.674870	Y 377.433
P (213.618 nm)	0.000525 u	ppm	0.001327	> 100.00	11.835500	Y 242.219
Pb (220.353 nm)	-0.001203 u	ppm	0.000953	79.27	-6.969630	Y 242.219
S (181.972 nm)	0.002161	ppm	0.000903	41.80	5.424869	Y 377.433
Sb (206.834 nm)	0.001013	ppm	0.000814	80.37	-4.382790	Y 377.433
Se (196.026 nm)	0.000219 u	ppm	0.002684	> 100.00	6.392010	Y 242.219
Si (288.158 nm)	0.001509	ppm	0.000416	27.57	879.319000	Y 377.433
Sn (189.925 nm)	-0.000168 u	ppm	0.000186	> 100.00	4.994510	Y 377.433
Sr (421.552 nm)	-0.000030 u	ppm	0.000036	> 100.00	51.759235	Y_R 488.368
Th (288.505 nm)	-0.001430 u	ppm	0.002243	> 100.00	94.872100	Y 377.433
Ti (336.122 nm)	0.000053 u	ppm	0.000073	> 100.00	-208.207000	Y 377.433
Tl (190.794 nm)	0.000480 u	ppm	0.000849	> 100.00	-2.241730	Y 377.433
U (409.013 nm)	0.007178	ppm	0.003429	47.77	-23.673100	Y 377.433
V (292.401 nm)	-0.000277 u	ppm	0.000142	51.42	8.682830	Y 377.433
Zn (206.200 nm)	-0.000105 u	ppm	0.000334	> 100.00	8.800870	Y 377.433
Zr (343.823 nm)	0.000277	ppm	0.000230	83.16	54.281100	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.959745	8045.295065	0.000801	0.08
Y 377.433	0.931659	422385.807506	0.001997	0.21
Y_R 377.433	0.970123	33468.400000	0.002282	0.24
Y_R 488.368	0.996254	18772.300000	0.004093	0.41
Y_R2 488.368	0.970289	32134.783093	0.005307	0.55

Sample Name: CCVL-7434568

Date: 10/27/2022 7:10:00 PM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014700	ppm	0.000021	0.14	32840.327411	Y 377.433
Ag (328.068 nm)	0.010439	ppm	0.000170	1.63	395.287000	Y 377.433
Al (167.019 nm)	0.113406	ppm	0.003781	3.33	51.333500	Y_R 377.433
Al H (396.152 nm)	0.100483 u	ppm	0.006548	6.52	304.457039	Y_R 377.433
As (188.980 nm)	0.013417	ppm	0.001953	14.56	13.891800	Y 242.219
B (249.678 nm)	0.100016	ppm	0.000120	0.12	2865.550000	Y 242.219
Ba (493.408 nm)	0.010169	ppm	0.000520	5.11	1174.170000	Y_R 488.368
Be (234.861 nm)	0.001024	ppm	0.000016	1.56	269.123000	Y_R 488.368
Bi (223.061 nm)	-0.003312 Qu	ppm	0.003289	99.28	9.018950 Q	Y 377.433
Ca (315.887 nm)	0.221988	ppm	0.004607	2.08	197.726223	Y_R 377.433
Cd (214.439 nm)	0.005183	ppm	0.000093	1.79	311.604000	Y 377.433
Co (228.615 nm)	0.010637	ppm	0.000141	1.32	187.972000	Y 242.219
Cr (205.560 nm)	0.010636	ppm	0.000176	1.65	165.666000	Y 377.433
Cu (324.754 nm)	0.017232	ppm	0.000214	1.24	2647.610000	Y 377.433
Fe (238.204 nm)	0.104416	ppm	0.000257	0.25	381.592067	Y_R 377.433
Fe H (259.940 nm)	0.102974 u	ppm	0.001393	1.35	230.632000	Y_R 377.433
K (766.491 nm)	3.077080	ppm	0.006686	0.22	2277.500000	Y_R2 488.368
Li (670.783 nm)	0.025164	ppm	0.000651	2.59	-301.140000	Y_R2 488.368
Mg (279.078 nm)	0.206865	ppm	0.000817	0.40	1290.950000	Y 377.433
Mn (257.610 nm)	0.010554	ppm	0.000005	0.05	2630.560000	Y 377.433
Mo (202.032 nm)	0.020550	ppm	0.000227	1.10	181.100000	Y 377.433
Na (589.592 nm)	1.098900	ppm	0.005503	0.50	6856.050000	Y_R2 488.368
Na H (589.593 nm)	2.410666 u	ppm	0.001054	0.04	6403.822773	Y_R 488.368
Ni (231.604 nm)	0.044518	ppm	0.000293	0.66	318.409000	Y 377.433
P (213.618 nm)	2.899220	ppm	0.010234	0.35	6848.730000	Y 242.219
Pb (220.353 nm)	0.008483	ppm	0.001099	12.96	19.955600	Y 242.219
S (181.972 nm)	0.104886	ppm	0.003281	3.13	54.809229	Y 377.433
Sb (206.834 nm)	0.022720	ppm	0.000466	2.05	50.260000	Y 377.433
Se (196.026 nm)	0.019969	ppm	0.002632	13.18	26.074800	Y 242.219
Si (288.158 nm)	0.495662	ppm	0.002105	0.42	5484.270000	Y 377.433
Sn (189.925 nm)	0.105644	ppm	0.001716	1.62	229.837000	Y 377.433
Sr (421.552 nm)	0.009880	ppm	0.000340	3.44	2271.168768	Y_R 488.368
Th (288.505 nm)	0.015666	ppm	0.001067	6.81	144.155000	Y 377.433
Ti (336.122 nm)	0.009792	ppm	0.000030	0.30	1246.650000	Y 377.433
Tl (190.794 nm)	0.015418	ppm	0.000847	5.49	30.604500	Y 377.433
U (409.013 nm)	0.066558	ppm	0.002025	3.04	274.063000	Y 377.433
V (292.401 nm)	0.010011	ppm	0.000210	2.10	426.038000	Y 377.433
Zn (206.200 nm)	0.022635	ppm	0.000141	0.62	130.166000	Y 377.433
Zr (343.823 nm)	0.013430 Q	ppm	0.000144	1.07	1853.070000 Q	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.974262	8166.994301	0.002329	0.24
Y 377.433	0.946853	429274.512288	0.002103	0.22
Y_R 377.433	0.984814	33975.200000	0.003051	0.31
Y_R 488.368	1.001800	18876.700000	0.009912	0.99
Y_R2 488.368	0.975337	32301.975112	0.003449	0.35

Sample Name: 280-167824-a-7-b

Date: 10/27/2022 7:14:03 PM Rack:Tube: 4:10

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.249831	ppm	0.000920	0.37	574882.437251	Y 377.433
Ag (328.068 nm)	0.000116 n	ppm	0.000059	50.50	-210.582000	Y 377.433
Al (167.019 nm)	89.449200 o	ppm	0.499154	0.56	39993.300000	Y_R 377.433
Al H (396.152 nm)	106.097239	ppm	0.198092	0.19	294592.255075	Y_R 377.433
As (188.980 nm)	0.052926	ppm	0.000273	0.52	65.264600	Y 242.219
B (249.678 nm)	0.209243	ppm	0.000567	0.27	5645.330000	Y 242.219
Ba (493.408 nm)	0.506688	ppm	0.003652	0.72	56227.500000	Y_R 488.368
Be (234.861 nm)	0.006123	ppm	0.000127	2.07	3775.300000	Y_R 488.368
Bi (223.061 nm)	-0.003089 u	ppm	0.001039	33.64	9.579140	Y 377.433
Ca (315.887 nm)	213.711484 o	ppm	0.194435	0.09	197832.413738	Y_R 377.433
Cd (214.439 nm)	0.000628	ppm	0.000056	8.85	165.994000	Y 377.433
Co (228.615 nm)	0.052106	ppm	0.000077	0.15	1130.910000	Y 242.219
Cr (205.560 nm)	0.146984	ppm	0.000619	0.42	2162.330000	Y 377.433
Cu (324.754 nm)	0.132595	ppm	0.000114	0.09	10796.400000	Y 377.433
Fe (238.204 nm)	133.017207 o	ppm	0.920731	0.69	470132.262019	Y_R 377.433
Fe H (259.940 nm)	137.233000	ppm	0.281401	0.21	285827.000000	Y_R 377.433
K (766.491 nm)	21.330500	ppm	0.057061	0.27	20473.400000	Y_R2 488.368
Li (670.783 nm)	0.251753	ppm	0.000543	0.22	7300.000000	Y_R2 488.368
Mg (279.078 nm)	60.178900 o	ppm	0.084396	0.14	363235.000000	Y 377.433
Mn (257.610 nm)	2.212490 o	ppm	0.002254	0.10	535500.000000	Y 377.433
Mo (202.032 nm)	0.006379	ppm	0.000204	3.20	59.703500	Y 377.433
Na (589.592 nm)	12.269700	ppm	0.034221	0.28	74886.000000	Y_R2 488.368
Na H (589.593 nm)	13.082001	ppm	0.044314	0.34	49864.471489	Y_R 488.368
Ni (231.604 nm)	0.102040	ppm	0.000533	0.52	745.094000	Y 377.433
P (213.618 nm)	4.539180	ppm	0.014580	0.32	10716.700000	Y 242.219
Pb (220.353 nm)	0.059903	ppm	0.003286	5.49	136.013000	Y 242.219
S (181.972 nm)	1.981800	ppm	0.004583	0.23	961.780643	Y 377.433
Sb (206.834 nm)	0.004612	ppm	0.002462	53.39	-14.327400	Y 377.433
Se (196.026 nm)	0.001462	ppm	0.000747	51.08	-13.598700	Y 242.219
Si (288.158 nm)	2.384820	ppm	0.001646	0.07	23770.800000	Y 377.433
Sn (189.925 nm)	0.010424	ppm	0.000830	7.96	27.501700	Y 377.433
Sr (421.552 nm)	1.583548 o	ppm	0.004442	0.28	354690.589817	Y_R 488.368
Th (288.505 nm)	0.096989	ppm	0.002063	2.13	419.986000	Y 377.433
Ti (336.122 nm)	4.191230 o	ppm	0.003727	0.09	626255.000000	Y 377.433
Tl (190.794 nm)	0.002379	ppm	0.000906	38.09	-20.137000	Y 377.433
U (409.013 nm)	-0.031721 u	ppm	0.004277	13.48	-130.573000	Y 377.433
V (292.401 nm)	0.311749	ppm	0.000444	0.14	12895.000000	Y 377.433
Zn (206.200 nm)	0.339958	ppm	0.001034	0.30	1823.770000	Y 377.433
Zr (343.823 nm)	0.046463	ppm	0.000787	1.69	6778.460000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.068424	8956.329282	0.005069	0.47
Y 377.433	1.026414	465344.672510	0.005331	0.52
Y_R 377.433	1.092030	37674.000000	0.003147	0.29
Y_R 488.368	1.114070	20992.200000	0.004183	0.38
Y_R2 488.368	1.087162	36005.475544	0.000693	0.06

Sample Name: 280-167824-a-8-b

Date: 10/27/2022 7:18:06 PM Rack:Tube: 4:11

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.250348	ppm	0.001083	0.43	576074.941968	Y 377.433
Ag (328.068 nm)	0.000238 n	ppm	0.000061	25.62	-189.269000	Y 377.433
Al (167.019 nm)	92.800000 o	ppm	0.357503	0.39	41488.800000	Y_R 377.433
Al H (396.152 nm)	111.477307 o	ppm	0.131543	0.12	309551.243886	Y_R 377.433
As (188.980 nm)	0.039291	ppm	0.002002	5.10	47.535700	Y 242.219
B (249.678 nm)	0.234280	ppm	0.000917	0.39	6342.840000	Y 242.219
Ba (493.408 nm)	0.825233	ppm	0.002738	0.33	91470.300000	Y_R 488.368
Be (234.861 nm)	0.006170	ppm	0.000335	5.42	3788.210000	Y_R 488.368
Bi (223.061 nm)	-0.001196 u	ppm	0.000153	12.83	14.330400	Y 377.433
Ca (315.887 nm)	268.458763 o	ppm	0.473674	0.18	248513.883795	Y_R 377.433
Cd (214.439 nm)	0.000862	ppm	0.000069	7.98	180.311000	Y 377.433
Co (228.615 nm)	0.056471	ppm	0.000055	0.10	1209.370000	Y 242.219
Cr (205.560 nm)	0.146939	ppm	0.000528	0.36	2161.650000	Y 377.433
Cu (324.754 nm)	0.138531	ppm	0.000465	0.34	11180.900000	Y 377.433
Fe (238.204 nm)	133.008683 o	ppm	0.226951	0.17	470102.139134	Y_R 377.433
Fe H (259.940 nm)	136.718000	ppm	0.225557	0.16	284755.000000	Y_R 377.433
K (766.491 nm)	21.949500	ppm	0.071634	0.33	21090.500000	Y_R2 488.368
Li (670.783 nm)	0.245532	ppm	0.001641	0.67	7091.310000	Y_R2 488.368
Mg (279.078 nm)	61.528000 o	ppm	0.096498	0.16	371383.000000	Y 377.433
Mn (257.610 nm)	2.585980 o	ppm	0.006341	0.25	625886.000000	Y 377.433
Mo (202.032 nm)	0.010435	ppm	0.000209	2.00	94.450500	Y 377.433
Na (589.592 nm)	14.793200	ppm	0.024015	0.16	90541.000000	Y_R2 488.368
Na H (589.593 nm)	15.517729	ppm	0.030468	0.20	60004.444368	Y_R 488.368
Ni (231.604 nm)	0.108434	ppm	0.000330	0.30	789.977000	Y 377.433
P (213.618 nm)	4.265290	ppm	0.017173	0.40	10070.700000	Y 242.219
Pb (220.353 nm)	0.064488	ppm	0.001956	3.03	146.776000	Y 242.219
S (181.972 nm)	3.058615	ppm	0.010754	0.35	1480.060718	Y 377.433
Sb (206.834 nm)	0.003428	ppm	0.000947	27.64	-17.614300	Y 377.433
Se (196.026 nm)	0.004851	ppm	0.002097	43.23	-9.827290	Y 242.219
Si (288.158 nm)	2.623320	ppm	0.002125	0.08	25973.700000	Y 377.433
Sn (189.925 nm)	0.012151	ppm	0.001041	8.57	31.170300	Y 377.433
Sr (421.552 nm)	1.808313 o	ppm	0.004620	0.26	405026.315119	Y_R 488.368
Th (288.505 nm)	0.093585	ppm	0.006448	6.89	417.589000	Y 377.433
Ti (336.122 nm)	4.077090 o	ppm	0.010976	0.27	609388.000000	Y 377.433
Tl (190.794 nm)	0.002608	ppm	0.001749	67.08	-19.112600	Y 377.433
U (409.013 nm)	-0.027677 u	ppm	0.002289	8.27	-123.648000	Y 377.433
V (292.401 nm)	0.266109	ppm	0.000624	0.23	11019.800000	Y 377.433
Zn (206.200 nm)	0.361658	ppm	0.001227	0.34	1939.580000	Y 377.433
Zr (343.823 nm)	0.065639	ppm	0.000678	1.03	9400.510000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.058462	8872.814985	0.007382	0.70
Y 377.433	1.014387	459892.121494	0.008292	0.82
Y_R 377.433	1.083080	37365.400000	0.002720	0.25
Y_R 488.368	1.106930	20857.700000	0.005423	0.49
Y_R2 488.368	1.077632	35689.846238	0.003038	0.28

Sample Name: 280-167824-a-9-b

Date: 10/27/2022 7:28:07 PM Rack:Tube: 4:12

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.335718	ppm	0.001489	0.44	772876.611257	Y 377.433
Ag (328.068 nm)	-0.000130 nu	ppm	0.000106	82.07	-273.160000	Y 377.433
Al (167.019 nm)	109.082000 o	ppm	0.340192	0.31	48763.500000	Y_R 377.433
Al H (396.152 nm)	139.138750 o	ppm	0.085449	0.06	386387.858633	Y_R 377.433
As (188.980 nm)	0.137693	ppm	0.000823	0.60	175.487000	Y 242.219
B (249.678 nm)	0.213384	ppm	0.000243	0.11	5730.180000	Y 242.219
Ba (493.408 nm)	0.729723	ppm	0.005030	0.69	80917.000000	Y_R 488.368
Be (234.861 nm)	0.007372	ppm	0.000382	5.19	4367.610000	Y_R 488.368
Bi (223.061 nm)	-0.000202 u	ppm	0.000749	> 100.00	16.825400	Y 377.433
Ca (315.887 nm)	401.945943 o	ppm	0.390026	0.10	372087.632455	Y_R 377.433
Cd (214.439 nm)	0.001069	ppm	0.000123	11.50	208.543000	Y 377.433
Co (228.615 nm)	0.061176	ppm	0.000399	0.65	1329.650000	Y 242.219
Cr (205.560 nm)	0.201066	ppm	0.001087	0.54	2964.470000	Y 377.433
Cu (324.754 nm)	0.159352	ppm	0.000299	0.19	12565.100000	Y 377.433
Fe (238.204 nm)	148.672977 o	ppm	0.502686	0.34	525464.096304	Y_R 377.433
Fe H (259.940 nm)	153.476000	ppm	0.158226	0.10	319656.000000	Y_R 377.433
K (766.491 nm)	29.591300	ppm	0.095290	0.32	28708.200000	Y_R2 488.368
Li (670.783 nm)	0.314949	ppm	0.001679	0.53	9419.980000	Y_R2 488.368
Mg (279.078 nm)	78.396400 o	ppm	0.066376	0.08	473226.000000	Y 377.433
Mn (257.610 nm)	2.552650 o	ppm	0.000963	0.04	617820.000000	Y 377.433
Mo (202.032 nm)	0.009160	ppm	0.000167	1.82	83.534200	Y 377.433
Na (589.592 nm)	14.479300	ppm	0.051463	0.36	88516.100000	Y_R2 488.368
Na H (589.593 nm)	15.394821	ppm	0.097329	0.63	59407.628138	Y_R 488.368
Ni (231.604 nm)	0.130236	ppm	0.000322	0.25	945.711000	Y 377.433
P (213.618 nm)	5.864630	ppm	0.008477	0.14	13843.000000	Y 242.219
Pb (220.353 nm)	0.074985	ppm	0.000514	0.69	167.321000	Y 242.219
S (181.972 nm)	2.457081	ppm	0.020590	0.84	1190.947315	Y 377.433
Sb (206.834 nm)	0.005967	ppm	0.003250	54.47	-13.037600	Y 377.433
Se (196.026 nm)	0.004476	ppm	0.002157	48.19	-12.697700	Y 242.219
Si (288.158 nm)	2.310410	ppm	0.002154	0.09	23195.000000	Y 377.433
Sn (189.925 nm)	0.012682	ppm	0.001463	11.53	32.300400	Y 377.433
Sr (421.552 nm)	2.916456 o	ppm	0.019149	0.66	653192.473335	Y_R 488.368
Th (288.505 nm)	0.095454	ppm	0.001548	1.62	428.590000	Y 377.433
Ti (336.122 nm)	4.911000 o	ppm	0.004647	0.09	734322.000000	Y 377.433
Tl (190.794 nm)	0.001629	ppm	0.001530	93.92	-25.362400	Y 377.433
U (409.013 nm)	-0.032292 u	ppm	0.000876	2.71	-160.208000	Y 377.433
V (292.401 nm)	0.576249	ppm	0.000255	0.04	23752.000000	Y 377.433
Zn (206.200 nm)	0.395557	ppm	0.001125	0.28	2120.500000	Y 377.433
Zr (343.823 nm)	0.078473	ppm	0.001038	1.32	11203.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.057114	8861.517989	0.007420	0.70
Y 377.433	1.015097	460214.134284	0.006080	0.60
Y_R 377.433	1.083990	37396.900000	0.004568	0.42
Y_R 488.368	1.106470	20849.100000	0.009385	0.85
Y_R2 488.368	1.089461	36081.620284	0.005550	0.51

Sample Name: 280-167828-a-1-b@2

Date: 10/27/2022 7:32:10 PM Rack:Tube: 4:13

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.069945	ppm	0.000134	0.19	160196.521924	Y 377.433
Ag (328.068 nm)	0.000272 n	ppm	0.000165	60.81	-186.047000	Y 377.433
Al (167.019 nm)	50.176000 o	ppm	0.065715	0.13	22446.900000	Y_R 377.433
Al H (396.152 nm)	53.139318	ppm	0.014535	0.03	147561.820292	Y_R 377.433
As (188.980 nm)	0.027766	ppm	0.002047	7.37	32.550200	Y 242.219
B (249.678 nm)	0.025257	ppm	0.000155	0.62	591.120000	Y 242.219
Ba (493.408 nm)	1.737940 o	ppm	0.014557	0.84	192417.000000	Y_R 488.368
Be (234.861 nm)	0.003205	ppm	0.000229	7.14	2406.710000	Y_R 488.368
Bi (223.061 nm)	-0.004562 u	ppm	0.001401	30.70	5.882790	Y 377.433
Ca (315.887 nm)	111.489043 o	ppm	0.058605	0.05	103201.526555	Y_R 377.433
Cd (214.439 nm)	0.000316	ppm	0.000009	2.69	111.493000	Y 377.433
Co (228.615 nm)	0.044528	ppm	0.000205	0.46	944.355000	Y 242.219
Cr (205.560 nm)	0.102175	ppm	0.000455	0.45	1503.910000	Y 377.433
Cu (324.754 nm)	0.093998	ppm	0.000201	0.21	8093.850000	Y 377.433
Fe (238.204 nm)	97.669965 o	ppm	0.208240	0.21	345205.304463	Y_R 377.433
Fe H (259.940 nm)	99.129800	ppm	0.138344	0.14	206471.000000	Y_R 377.433
K (766.491 nm)	12.189900	ppm	0.038463	0.32	11361.600000	Y_R2 488.368
Li (670.783 nm)	0.079737	ppm	0.000105	0.13	1529.560000	Y_R2 488.368
Mg (279.078 nm)	50.072800 o	ppm	0.136442	0.27	302266.000000	Y 377.433
Mn (257.610 nm)	3.084590 o	ppm	0.008499	0.28	746548.000000	Y 377.433
Mo (202.032 nm)	0.002565	ppm	0.000299	11.67	27.037800	Y 377.433
Na (589.592 nm)	1.999230	ppm	0.007073	0.35	14687.700000	Y_R2 488.368
Na H (589.593 nm)	3.210616 u	ppm	0.011740	0.37	11477.362359	Y_R 488.368
Ni (231.604 nm)	0.084797	ppm	0.000733	0.86	617.945000	Y 377.433
P (213.618 nm)	5.833810	ppm	0.026215	0.45	13770.300000	Y 242.219
Pb (220.353 nm)	0.068284	ppm	0.000216	0.32	175.298000	Y 242.219
S (181.972 nm)	1.486373	ppm	0.000879	0.06	725.743915	Y 377.433
Sb (206.834 nm)	0.001280 u	ppm	0.003104	> 100.00	-16.816900	Y 377.433
Se (196.026 nm)	-0.000839 u	ppm	0.001983	> 100.00	-9.404000	Y 242.219
Si (288.158 nm)	0.930093	ppm	0.006213	0.67	10030.600000	Y 377.433
Sn (189.925 nm)	0.004758	ppm	0.000473	9.95	15.462800	Y 377.433
Sr (421.552 nm)	0.962032	ppm	0.001986	0.21	215503.412034	Y_R 488.368
Th (288.505 nm)	0.076600	ppm	0.001494	1.95	382.845000	Y 377.433
Ti (336.122 nm)	3.045440 o	ppm	0.007747	0.25	454853.000000	Y 377.433
Tl (190.794 nm)	0.000806 u	ppm	0.001692	> 100.00	-17.563400	Y 377.433
U (409.013 nm)	-0.054336 u	ppm	0.001792	3.30	-261.170000	Y 377.433
V (292.401 nm)	0.263188	ppm	0.000689	0.26	10882.200000	Y 377.433
Zn (206.200 nm)	0.219251	ppm	0.000967	0.44	1179.540000	Y 377.433
Zr (343.823 nm)	0.066438	ppm	0.001021	1.54	9400.960000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.027086	8609.801374	0.006962	0.68
Y 377.433	0.988958	448363.514708	0.009034	0.91
Y_R 377.433	1.039470	35860.800000	0.000961	0.09
Y_R 488.368	1.058500	19945.100000	0.002013	0.19
Y_R2 488.368	1.029701	34102.423783	0.010069	0.98

Sample Name: 280-167828-a-2-b@2

Date: 10/27/2022 7:36:13 PM Rack:Tube: 4:14

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.079195	ppm	0.000147	0.19	181519.381637	Y 377.433
Ag (328.068 nm)	0.000417 n	ppm	0.000105	25.21	-181.827000	Y 377.433
Al (167.019 nm)	55.114400 o	ppm	0.418936	0.76	24657.800000	Y_R 377.433
Al H (396.152 nm)	59.017990	ppm	0.042538	0.07	163880.151576	Y_R 377.433
As (188.980 nm)	0.032929	ppm	0.002976	9.04	39.263700	Y 242.219
B (249.678 nm)	0.034987	ppm	0.000204	0.58	836.952000	Y 242.219
Ba (493.408 nm)	2.135190 o	ppm	0.005706	0.27	236379.000000	Y_R 488.368
Be (234.861 nm)	0.003603	ppm	0.000160	4.44	2717.110000	Y_R 488.368
Bi (223.061 nm)	-0.002166 u	ppm	0.002192	> 100.00	11.895900	Y 377.433
Ca (315.887 nm)	116.666393 o	ppm	0.211694	0.18	107994.380510	Y_R 377.433
Cd (214.439 nm)	0.000400	ppm	0.000045	11.31	129.336000	Y 377.433
Co (228.615 nm)	0.047872	ppm	0.000190	0.40	1020.460000	Y 242.219
Cr (205.560 nm)	0.107232	ppm	0.000359	0.33	1575.820000	Y 377.433
Cu (324.754 nm)	0.100498	ppm	0.000086	0.09	8558.230000	Y 377.433
Fe (238.204 nm)	110.462247 o	ppm	0.203697	0.18	390416.777545	Y_R 377.433
Fe H (259.940 nm)	112.069000	ppm	0.299360	0.27	233419.000000	Y_R 377.433
K (766.491 nm)	13.792600	ppm	0.125852	0.91	12959.300000	Y_R2 488.368
Li (670.783 nm)	0.089288	ppm	0.001583	1.77	1849.950000	Y_R2 488.368
Mg (279.078 nm)	53.243500 o	ppm	0.079255	0.15	321392.000000	Y 377.433
Mn (257.610 nm)	3.002070 o	ppm	0.005908	0.20	726580.000000	Y 377.433
Mo (202.032 nm)	0.002678	ppm	0.000070	2.61	28.000900	Y 377.433
Na (589.592 nm)	3.232400	ppm	0.032007	0.99	22673.300000	Y_R2 488.368
Na H (589.593 nm)	4.332025 u	ppm	0.018093	0.42	16414.342453	Y_R 488.368
Ni (231.604 nm)	0.091604	ppm	0.000902	0.98	667.927000	Y 377.433
P (213.618 nm)	6.516930	ppm	0.066700	1.02	15381.500000	Y 242.219
Pb (220.353 nm)	0.084388	ppm	0.002310	2.74	219.030000	Y 242.219
S (181.972 nm)	2.264815	ppm	0.018462	0.82	1099.595176	Y 377.433
Sb (206.834 nm)	0.001351 u	ppm	0.002275	> 100.00	-18.550800	Y 377.433
Se (196.026 nm)	-0.001699 u	ppm	0.004268	> 100.00	-12.603700	Y 242.219
Si (288.158 nm)	0.913241	ppm	0.002328	0.25	9929.380000	Y 377.433
Sn (189.925 nm)	0.005114	ppm	0.001003	19.61	16.217800	Y 377.433
Sr (421.552 nm)	1.149424 o	ppm	0.002518	0.22	257469.428481	Y_R 488.368
Th (288.505 nm)	0.078809	ppm	0.001059	1.34	387.114000	Y 377.433
Ti (336.122 nm)	3.385180 o	ppm	0.003952	0.12	505596.000000	Y 377.433
Tl (190.794 nm)	0.002485	ppm	0.001342	54.02	-15.708200	Y 377.433
U (409.013 nm)	-0.054271 u	ppm	0.003087	5.69	-249.345000	Y 377.433
V (292.401 nm)	0.287079	ppm	0.000518	0.18	11869.500000	Y 377.433
Zn (206.200 nm)	0.244848	ppm	0.000627	0.26	1316.150000	Y 377.433
Zr (343.823 nm)	0.073919	ppm	0.000802	1.08	10463.100000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.028680	8623.164197	0.003888	0.38
Y 377.433	0.988119	447982.867982	0.002464	0.25
Y_R 377.433	1.049320	36200.800000	0.004329	0.41
Y_R 488.368	1.066340	20092.900000	0.002614	0.25
Y_R2 488.368	1.040028	34444.456663	0.012885	1.24

Sample Name: 280-167828-a-3-b@2

Date: 10/27/2022 7:40:17 PM Rack:Tube: 4:15

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.075852	ppm	0.000421	0.56	173812.686910	Y 377.433
Ag (328.068 nm)	0.000363 n	ppm	0.000278	76.74	-174.405000	Y 377.433
Al (167.019 nm)	51.838200 o	ppm	0.096334	0.19	23188.000000	Y_R 377.433
Al H (396.152 nm)	55.035744	ppm	0.133898	0.24	152826.884120	Y_R 377.433
As (188.980 nm)	0.033330	ppm	0.001156	3.47	39.784400	Y 242.219
B (249.678 nm)	0.027701	ppm	0.000197	0.71	661.806000	Y 242.219
Ba (493.408 nm)	1.775770 o	ppm	0.015353	0.86	196602.000000	Y_R 488.368
Be (234.861 nm)	0.003328	ppm	0.000143	4.29	2419.750000	Y_R 488.368
Bi (223.061 nm)	-0.002925 u	ppm	0.001392	47.59	9.990740	Y 377.433
Ca (315.887 nm)	114.906055 o	ppm	0.173261	0.15	106364.773403	Y_R 377.433
Cd (214.439 nm)	0.000264	ppm	0.000022	8.14	106.973000	Y 377.433
Co (228.615 nm)	0.042465	ppm	0.000218	0.51	914.921000	Y 242.219
Cr (205.560 nm)	0.088272	ppm	0.000294	0.33	1296.970000	Y 377.433
Cu (324.754 nm)	0.088111	ppm	0.000408	0.46	7665.790000	Y 377.433
Fe (238.204 nm)	96.409843 o	ppm	0.109199	0.11	340751.686993	Y_R 377.433
Fe H (259.940 nm)	97.686200	ppm	0.154826	0.16	203465.000000	Y_R 377.433
K (766.491 nm)	10.529600	ppm	0.043255	0.41	9706.570000	Y_R2 488.368
Li (670.783 nm)	0.086464	ppm	0.001267	1.47	1755.210000	Y_R2 488.368
Mg (279.078 nm)	50.922700 o	ppm	0.257181	0.51	307401.000000	Y 377.433
Mn (257.610 nm)	2.972490 o	ppm	0.013447	0.45	719421.000000	Y 377.433
Mo (202.032 nm)	0.002719	ppm	0.000256	9.40	28.356100	Y 377.433
Na (589.592 nm)	3.332040	ppm	0.004839	0.15	22773.800000	Y_R2 488.368
Na H (589.593 nm)	4.411413 u	ppm	0.009026	0.20	16347.735577	Y_R 488.368
Ni (231.604 nm)	0.077346	ppm	0.000748	0.97	565.403000	Y 377.433
P (213.618 nm)	6.436940	ppm	0.033440	0.52	15192.800000	Y 242.219
Pb (220.353 nm)	0.088195	ppm	0.001736	1.97	229.838000	Y 242.219
S (181.972 nm)	1.870333	ppm	0.004014	0.21	909.973298	Y 377.433
Sb (206.834 nm)	0.002776	ppm	0.000445	16.02	-13.449700	Y 377.433
Se (196.026 nm)	0.002552	ppm	0.002626	> 100.00	-5.839680	Y 242.219
Si (288.158 nm)	0.978582	ppm	0.014029	1.43	10524.800000	Y 377.433
Sn (189.925 nm)	0.005145	ppm	0.001929	37.49	16.283200	Y 377.433
Sr (421.552 nm)	1.291431 o	ppm	0.001993	0.15	289271.666203	Y_R 488.368
Th (288.505 nm)	0.076923	ppm	0.003418	4.44	381.148000	Y 377.433
Ti (336.122 nm)	3.305150 o	ppm	0.007512	0.23	493641.000000	Y 377.433
Tl (190.794 nm)	0.000332 u	ppm	0.001409	> 100.00	-19.732900	Y 377.433
U (409.013 nm)	-0.053963 u	ppm	0.002791	5.17	-263.197000	Y 377.433
V (292.401 nm)	0.254167	ppm	0.000941	0.37	10522.900000	Y 377.433
Zn (206.200 nm)	0.211556	ppm	0.000552	0.26	1138.460000	Y 377.433
Zr (343.823 nm)	0.086650	ppm	0.001674	1.93	12160.500000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.023999	8583.922650	0.003701	0.36
Y 377.433	0.987450	447679.870900	0.008545	0.87
Y_R 377.433	1.039770	35871.000000	0.001909	0.18
Y_R 488.368	1.055850	19895.200000	0.001276	0.12
Y_R2 488.368	1.028909	34076.199792	0.001603	0.16

Sample Name: 280-167828-a-4-b@2

Date: 10/27/2022 7:44:20 PM Rack:Tube: 4:16

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.076643	ppm	0.000429	0.56	175635.531534	Y 377.433
Ag (328.068 nm)	0.000076 nu	ppm	0.000185	> 100.00	-196.466000	Y 377.433
Al (167.019 nm)	58.236500 o	ppm	0.052738	0.09	26050.900000	Y_R 377.433
Al H (396.152 nm)	63.115349	ppm	0.281834	0.45	175250.404574	Y_R 377.433
As (188.980 nm)	0.028049	ppm	0.001886	6.72	32.917700	Y 242.219
B (249.678 nm)	0.031476	ppm	0.000586	1.86	739.839000	Y 242.219
Ba (493.408 nm)	1.912810 o	ppm	0.007926	0.41	211775.000000	Y_R 488.368
Be (234.861 nm)	0.003545	ppm	0.000137	3.87	2695.470000	Y_R 488.368
Bi (223.061 nm)	-0.003115 u	ppm	0.002597	83.37	9.514680	Y 377.433
Ca (315.887 nm)	113.347368 o	ppm	0.287248	0.25	104921.843327	Y_R 377.433
Cd (214.439 nm)	0.000353	ppm	0.000093	26.40	126.127000	Y 377.433
Co (228.615 nm)	0.046130	ppm	0.000591	1.28	1004.460000	Y 242.219
Cr (205.560 nm)	0.107038	ppm	0.000329	0.31	1573.030000	Y 377.433
Cu (324.754 nm)	0.097893	ppm	0.000454	0.46	8369.150000	Y 377.433
Fe (238.204 nm)	110.233711 o	ppm	0.314967	0.29	389609.068964	Y_R 377.433
Fe H (259.940 nm)	111.769000	ppm	0.382571	0.34	232795.000000	Y_R 377.433
K (766.491 nm)	13.010600	ppm	0.075875	0.58	12179.700000	Y_R2 488.368
Li (670.783 nm)	0.086997	ppm	0.000717	0.82	1773.120000	Y_R2 488.368
Mg (279.078 nm)	53.744300 o	ppm	0.268327	0.50	324417.000000	Y 377.433
Mn (257.610 nm)	2.743020 o	ppm	0.009979	0.36	663890.000000	Y 377.433
Mo (202.032 nm)	0.002576	ppm	0.000078	3.04	27.133100	Y 377.433
Na (589.592 nm)	4.089090	ppm	0.006249	0.15	27528.100000	Y_R2 488.368
Na H (589.593 nm)	5.186155 u	ppm	0.014781	0.29	19611.382312	Y_R 488.368
Ni (231.604 nm)	0.091329	ppm	0.000839	0.92	665.930000	Y 377.433
P (213.618 nm)	7.432900	ppm	0.063926	0.86	17541.900000	Y 242.219
Pb (220.353 nm)	0.077167	ppm	0.001698	2.20	197.472000	Y 242.219
S (181.972 nm)	3.239446	ppm	0.029783	0.92	1567.297643	Y 377.433
Sb (206.834 nm)	0.003684	ppm	0.001739	47.22	-12.904200	Y 377.433
Se (196.026 nm)	0.001717 u	ppm	0.001946	> 100.00	-9.288060	Y 242.219
Si (288.158 nm)	1.006720	ppm	0.007955	0.79	10874.900000	Y 377.433
Sn (189.925 nm)	0.006165	ppm	0.001257	20.39	18.451300	Y 377.433
Sr (421.552 nm)	1.280157 o	ppm	0.005157	0.40	286746.868469	Y_R 488.368
Th (288.505 nm)	0.076842	ppm	0.000765	0.99	375.985000	Y 377.433
Ti (336.122 nm)	3.842120 o	ppm	0.019105	0.50	573811.000000	Y 377.433
Tl (190.794 nm)	-0.000194 u	ppm	0.000905	> 100.00	-23.632300	Y 377.433
U (409.013 nm)	-0.064880 u	ppm	0.003777	5.82	-304.452000	Y 377.433
V (292.401 nm)	0.298192	ppm	0.001457	0.49	12339.100000	Y 377.433
Zn (206.200 nm)	0.248632	ppm	0.001518	0.61	1336.350000	Y 377.433
Zr (343.823 nm)	0.097488	ppm	0.000719	0.74	13684.700000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.027085	8609.795593	0.001761	0.17
Y 377.433	0.989590	448650.008664	0.001740	0.18
Y_R 377.433	1.047660	36143.200000	0.003291	0.31
Y_R 488.368	1.060790	19988.400000	0.003259	0.31
Y_R2 488.368	1.039496	34426.827424	0.008442	0.81

Sample Name: 280-167828-a-5-b@2

Date: 10/27/2022 7:48:25 PM Rack:Tube: 4:17

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.088905	ppm	0.000152	0.17	203903.437215	Y 377.433
Ag (328.068 nm)	0.000020 nu	ppm	0.000278	> 100.00	-226.097000	Y 377.433
Al (167.019 nm)	60.961600 o	ppm	0.225503	0.37	27271.500000	Y_R 377.433
Al H (396.152 nm)	67.414244	ppm	0.014147	0.02	187202.753202	Y_R 377.433
As (188.980 nm)	0.043210	ppm	0.003342	7.74	52.631000	Y 242.219
B (249.678 nm)	0.032240	ppm	0.000258	0.80	745.860000	Y 242.219
Ba (493.408 nm)	1.919860 o	ppm	0.012279	0.64	212563.000000	Y_R 488.368
Be (234.861 nm)	0.003968	ppm	0.000161	4.05	2937.710000	Y_R 488.368
Bi (223.061 nm)	-0.004494 u	ppm	0.002929	65.17	6.053420	Y 377.433
Ca (315.887 nm)	156.373779 o	ppm	0.153629	0.10	144752.895641	Y_R 377.433
Cd (214.439 nm)	0.000558	ppm	0.000035	6.28	146.601000	Y 377.433
Co (228.615 nm)	0.057192	ppm	0.000362	0.63	1223.460000	Y 242.219
Cr (205.560 nm)	0.169911	ppm	0.000356	0.21	2508.350000	Y 377.433
Cu (324.754 nm)	0.123530	ppm	0.000107	0.09	10151.400000	Y 377.433
Fe (238.204 nm)	118.066277 o	ppm	0.241175	0.20	417291.528383	Y_R 377.433
Fe H (259.940 nm)	119.917000	ppm	0.072470	0.06	249764.000000	Y_R 377.433
K (766.491 nm)	11.926200	ppm	0.054637	0.46	11098.700000	Y_R2 488.368
Li (670.783 nm)	0.098687	ppm	0.001074	1.09	2165.260000	Y_R2 488.368
Mg (279.078 nm)	65.779200 o	ppm	0.124884	0.19	397084.000000	Y 377.433
Mn (257.610 nm)	4.115430 o	ppm	0.002064	0.05	996014.000000	Y 377.433
Mo (202.032 nm)	0.004474	ppm	0.000165	3.69	43.387100	Y 377.433
Na (589.592 nm)	3.369560	ppm	0.010431	0.31	23200.600000	Y_R2 488.368
Na H (589.593 nm)	4.409728 u	ppm	0.005809	0.13	16495.767727	Y_R 488.368
Ni (231.604 nm)	0.118883	ppm	0.000524	0.44	860.735000	Y 377.433
P (213.618 nm)	9.224040	ppm	0.016738	0.18	21766.500000	Y 242.219
Pb (220.353 nm)	0.132612	ppm	0.000508	0.38	350.611000	Y 242.219
S (181.972 nm)	1.756672	ppm	0.008571	0.49	858.012292	Y 377.433
Sb (206.834 nm)	0.002115 u	ppm	0.003834	> 100.00	-16.389000	Y 377.433
Se (196.026 nm)	-0.000006 u	ppm	0.003481	> 100.00	-11.273400	Y 242.219
Si (288.158 nm)	1.048400	ppm	0.004902	0.47	11303.900000	Y 377.433
Sn (189.925 nm)	0.006126	ppm	0.000897	14.64	18.369300	Y 377.433
Sr (421.552 nm)	1.176835 o	ppm	0.001339	0.11	263608.196647	Y_R 488.368
Th (288.505 nm)	0.094010	ppm	0.004821	5.13	457.869000	Y 377.433
Ti (336.122 nm)	4.088400 o	ppm	0.006747	0.17	610719.000000	Y 377.433
Tl (190.794 nm)	0.000565 u	ppm	0.000968	> 100.00	-23.236800	Y 377.433
U (409.013 nm)	-0.078433 u	ppm	0.008603	10.97	-375.946000	Y 377.433
V (292.401 nm)	0.452421	ppm	0.000866	0.19	18653.000000	Y 377.433
Zn (206.200 nm)	0.291182	ppm	0.001694	0.58	1563.440000	Y 377.433
Zr (343.823 nm)	0.124324	ppm	0.001842	1.48	17378.600000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.048675	8790.774802	0.004355	0.42
Y 377.433	1.008192	457083.405088	0.002509	0.25
Y_R 377.433	1.081730	37318.900000	0.004922	0.46
Y_R 488.368	1.100330	20733.300000	0.003600	0.33
Y_R2 488.368	1.066282	35313.945240	0.003254	0.31

Sample Name: 280-167828-a-6-b@2

Date: 10/27/2022 7:52:29 PM Rack:Tube: 4:18

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.067095	ppm	0.000190	0.28	153626.380784	Y 377.433
Ag (328.068 nm)	0.000054 nu	ppm	0.000149	> 100.00	-218.752000	Y 377.433
Al (167.019 nm)	60.762400 o	ppm	0.395368	0.65	27181.300000	Y_R 377.433
Al H (396.152 nm)	65.703517	ppm	0.049920	0.08	182432.147444	Y_R 377.433
As (188.980 nm)	0.038221	ppm	0.001030	2.69	46.143600	Y 242.219
B (249.678 nm)	0.032452	ppm	0.000434	1.34	756.190000	Y 242.219
Ba (493.408 nm)	1.703740 o	ppm	0.005184	0.30	188650.000000	Y_R 488.368
Be (234.861 nm)	0.003830	ppm	0.000147	3.84	2863.390000	Y_R 488.368
Bi (223.061 nm)	-0.001394 u	ppm	0.001959	> 100.00	13.834000	Y 377.433
Ca (315.887 nm)	109.874561 o	ppm	0.176193	0.16	101706.944446	Y_R 377.433
Cd (214.439 nm)	0.000343	ppm	0.000064	18.49	131.195000	Y 377.433
Co (228.615 nm)	0.053784	ppm	0.000076	0.14	1173.390000	Y 242.219
Cr (205.560 nm)	0.154427	ppm	0.000339	0.22	2278.090000	Y 377.433
Cu (324.754 nm)	0.110172	ppm	0.000602	0.55	9236.500000	Y 377.433
Fe (238.204 nm)	115.644934 o	ppm	0.036807	0.03	408733.832235	Y_R 377.433
Fe H (259.940 nm)	117.315000	ppm	0.096602	0.08	244344.000000	Y_R 377.433
K (766.491 nm)	11.708800	ppm	0.071421	0.61	10882.100000	Y_R2 488.368
Li (670.783 nm)	0.077146	ppm	0.000735	0.95	1442.640000	Y_R2 488.368
Mg (279.078 nm)	61.849900 o	ppm	0.191012	0.31	373358.000000	Y 377.433
Mn (257.610 nm)	3.238290 o	ppm	0.012001	0.37	783745.000000	Y 377.433
Mo (202.032 nm)	0.004038	ppm	0.000587	14.53	39.657200	Y 377.433
Na (589.592 nm)	4.625860	ppm	0.014072	0.30	30473.800000	Y_R2 488.368
Na H (589.593 nm)	5.654881 u	ppm	0.017705	0.31	21273.134601	Y_R 488.368
Ni (231.604 nm)	0.111319	ppm	0.000454	0.41	807.235000	Y 377.433
P (213.618 nm)	8.602490	ppm	0.077632	0.90	20300.500000	Y 242.219
Pb (220.353 nm)	0.105108	ppm	0.001165	1.11	274.624000	Y 242.219
S (181.972 nm)	2.624630	ppm	0.012149	0.46	1273.039727	Y 377.433
Sb (206.834 nm)	0.002742	ppm	0.000403	14.71	-14.953100	Y 377.433
Se (196.026 nm)	-0.000734 u	ppm	0.000976	> 100.00	-12.324700	Y 242.219
Si (288.158 nm)	1.004900	ppm	0.007818	0.78	10962.400000	Y 377.433
Sn (189.925 nm)	0.006359	ppm	0.000314	4.94	18.863300	Y 377.433
Sr (421.552 nm)	1.110275 o	ppm	0.001520	0.14	248702.053892	Y_R 488.368
Th (288.505 nm)	0.082718	ppm	0.004481	5.42	406.897000	Y 377.433
Ti (336.122 nm)	4.470620 o	ppm	0.014677	0.33	667642.000000	Y 377.433
Tl (190.794 nm)	0.001946	ppm	0.000339	17.41	-21.876500	Y 377.433
U (409.013 nm)	-0.068217 u	ppm	0.001717	2.52	-318.778000	Y 377.433
V (292.401 nm)	0.449255	ppm	0.001253	0.28	18541.400000	Y 377.433
Zn (206.200 nm)	0.275106	ppm	0.000523	0.19	1477.640000	Y 377.433
Zr (343.823 nm)	0.144664	ppm	0.001691	1.17	20152.700000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.040353	8721.012733	0.003240	0.31
Y 377.433	0.999627	453200.630691	0.004884	0.49
Y_R 377.433	1.054400	36375.800000	0.002888	0.27
Y_R 488.368	1.070210	20165.800000	0.003585	0.34
Y_R2 488.368	1.038579	34396.472063	0.006587	0.63

Sample Name: 280-167828-a-7-b@2

Date: 10/27/2022 7:56:33 PM Rack:Tube: 4:19

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.082561	ppm	0.000562	0.68	189279.293408	Y 377.433
Ag (328.068 nm)	0.000410 n	ppm	0.000255	62.13	-173.409000	Y 377.433
Al (167.019 nm)	56.819600 o	ppm	0.241541	0.43	25415.300000	Y_R 377.433
Al H (396.152 nm)	61.243266	ppm	0.072472	0.12	170051.233202	Y_R 377.433
As (188.980 nm)	0.030401	ppm	0.002285	7.52	35.975600	Y 242.219
B (249.678 nm)	0.039580	ppm	0.000538	1.36	977.585000	Y 242.219
Ba (493.408 nm)	2.066920 o	ppm	0.028368	1.37	228820.000000	Y_R 488.368
Be (234.861 nm)	0.003872	ppm	0.000267	6.90	2690.990000	Y_R 488.368
Bi (223.061 nm)	-0.000824 u	ppm	0.001794	> 100.00	15.265300	Y 377.433
Ca (315.887 nm)	106.325234 o	ppm	0.224586	0.21	98421.207861	Y_R 377.433
Cd (214.439 nm)	0.000323	ppm	0.000036	11.28	118.186000	Y 377.433
Co (228.615 nm)	0.044855	ppm	0.000225	0.50	962.395000	Y 242.219
Cr (205.560 nm)	0.102536	ppm	0.000503	0.49	1507.580000	Y 377.433
Cu (324.754 nm)	0.095553	ppm	0.000535	0.56	8211.890000	Y 377.433
Fe (238.204 nm)	103.771675 o	ppm	0.201184	0.19	366770.441183	Y_R 377.433
Fe H (259.940 nm)	105.449000	ppm	0.272425	0.26	219632.000000	Y_R 377.433
K (766.491 nm)	13.506600	ppm	0.049808	0.37	12674.200000	Y_R2 488.368
Li (670.783 nm)	0.092928	ppm	0.001508	1.62	1972.070000	Y_R2 488.368
Mg (279.078 nm)	56.113500 o	ppm	0.287435	0.51	338736.000000	Y 377.433
Mn (257.610 nm)	2.777280 o	ppm	0.015850	0.57	672180.000000	Y 377.433
Mo (202.032 nm)	0.002700	ppm	0.000553	20.47	28.189400	Y 377.433
Na (589.592 nm)	3.662590	ppm	0.015844	0.43	25172.300000	Y_R2 488.368
Na H (589.593 nm)	4.655455 u	ppm	0.002185	0.05	17642.672141	Y_R 488.368
Ni (231.604 nm)	0.090990	ppm	0.000765	0.84	662.499000	Y 377.433
P (213.618 nm)	6.161340	ppm	0.065238	1.06	14542.800000	Y 242.219
Pb (220.353 nm)	0.067700	ppm	0.000897	1.33	171.278000	Y 242.219
S (181.972 nm)	3.039689	ppm	0.013981	0.46	1471.414132	Y 377.433
Sb (206.834 nm)	0.000902 u	ppm	0.002336	> 100.00	-19.077800	Y 377.433
Se (196.026 nm)	0.002700	ppm	0.001046	38.73	-7.168210	Y 242.219
Si (288.158 nm)	1.000740	ppm	0.009088	0.91	10740.700000	Y 377.433
Sn (189.925 nm)	0.006176	ppm	0.000446	7.23	18.475400	Y 377.433
Sr (421.552 nm)	1.293808 o	ppm	0.004585	0.35	289803.986387	Y_R 488.368
Th (288.505 nm)	0.083317	ppm	0.002090	2.51	394.685000	Y 377.433
Ti (336.122 nm)	3.357380 o	ppm	0.018189	0.54	501413.000000	Y 377.433
Tl (190.794 nm)	0.000952	ppm	0.001012	> 100.00	-18.818600	Y 377.433
U (409.013 nm)	-0.059290 u	ppm	0.003217	5.43	-280.959000	Y 377.433
V (292.401 nm)	0.271265	ppm	0.001592	0.59	11222.300000	Y 377.433
Zn (206.200 nm)	0.237914	ppm	0.001036	0.44	1279.140000	Y 377.433
Zr (343.823 nm)	0.094638	ppm	0.000307	0.32	13276.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.025817	8599.162864	0.002709	0.26
Y 377.433	0.985950	446999.563273	0.003436	0.35
Y_R 377.433	1.052280	36302.700000	0.005607	0.53
Y_R 488.368	1.067010	20105.600000	0.005888	0.55
Y_R2 488.368	1.033683	34234.303625	0.003400	0.33

Sample Name: CCVH-7429327

Date: 10/27/2022 8:00:37 PM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000031	ppm	0.000010	31.75	-976.212354	Y 377.433
Ag (328.068 nm)	0.001674	ppm	0.000284	16.94	-136.457000	Y 377.433
Al (167.019 nm)	49.577900 o	ppm	0.330888	0.67	22154.500000	Y_R 377.433
Al H (396.152 nm)	51.205766	ppm	0.189565	0.37	142141.074406	Y_R 377.433
As (188.980 nm)	0.000229 u	ppm	0.001460	> 100.00	-3.255890	Y 242.219
B (249.678 nm)	0.001571	ppm	0.000164	10.47	21.669100	Y 242.219
Ba (493.408 nm)	0.000635	ppm	0.000290	45.60	165.563000	Y_R 488.368
Be (234.861 nm)	0.000085	ppm	0.000031	35.93	807.526000	Y_R 488.368
Bi (223.061 nm)	-0.000960 u	ppm	0.001967	> 100.00	14.922100	Y 377.433
Ca (315.887 nm)	-0.008676 u	ppm	0.003451	39.78	-15.810701	Y_R 377.433
Cd (214.439 nm)	-0.000148 u	ppm	0.000087	58.94	36.540900	Y 377.433
Co (228.615 nm)	-0.000357 u	ppm	0.000071	19.89	-20.778400	Y 242.219
Cr (205.560 nm)	0.000744	ppm	0.000129	17.40	4.236870	Y 377.433
Cu (324.754 nm)	0.002466	ppm	0.000229	9.27	2793.530000	Y 377.433
Fe (238.204 nm)	51.024760 o	ppm	0.146225	0.29	180348.211771	Y_R 377.433
Fe H (259.940 nm)	51.741600	ppm	0.195202	0.38	107777.000000	Y_R 377.433
K (766.491 nm)	0.037704	ppm	0.014733	39.08	-752.301000	Y_R2 488.368
Li (670.783 nm)	0.004550	ppm	0.001337	29.37	-992.651000	Y_R2 488.368
Mg (279.078 nm)	-0.008620 u	ppm	0.000544	6.32	-173.663000	Y 377.433
Mn (257.610 nm)	0.000304	ppm	0.000019	6.16	150.097000	Y 377.433
Mo (202.032 nm)	-0.000161 u	ppm	0.000454	> 100.00	3.683760	Y 377.433
Na (589.592 nm)	251.132000	ppm	1.690260	0.67	1514050.000000	Y_R2 488.368
Na H (589.593 nm)	246.628489	ppm	0.299261	0.12	988785.170034	Y_R 488.368
Ni (231.604 nm)	-0.000955 u	ppm	0.000078	8.17	7.937730	Y 377.433
P (213.618 nm)	4.986760	ppm	0.010774	0.22	11772.400000	Y 242.219
Pb (220.353 nm)	-0.005834 u	ppm	0.000837	14.34	-26.706800	Y 242.219
S (181.972 nm)	5.052147	ppm	0.011004	0.22	2431.959951	Y 377.433
Sb (206.834 nm)	0.001893	ppm	0.001037	54.79	-18.838000	Y 377.433
Se (196.026 nm)	0.005459	ppm	0.002221	40.68	2.922010	Y 242.219
Si (288.158 nm)	0.013990	ppm	0.000341	2.44	995.751000	Y 377.433
Sn (189.925 nm)	0.000364 u	ppm	0.000641	> 100.00	6.125670	Y 377.433
Sr (421.552 nm)	0.000569	ppm	0.000038	6.70	185.902224	Y_R 488.368
Th (288.505 nm)	5.105140	ppm	0.023528	0.46	14441.700000	Y 377.433
Ti (336.122 nm)	0.001242	ppm	0.000051	4.08	-30.684200	Y 377.433
Tl (190.794 nm)	-0.004427 u	ppm	0.000686	15.51	-14.425300	Y 377.433
U (409.013 nm)	2.529590	ppm	0.003112	0.12	12717.600000	Y 377.433
V (292.401 nm)	-0.000736 u	ppm	0.000197	26.72	322.600000	Y 377.433
Zn (206.200 nm)	0.001231	ppm	0.000520	42.28	15.932400	Y 377.433
Zr (343.823 nm)	0.065454	ppm	0.007839	11.98	9123.390000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.953185	7990.310591	0.002356	0.25
Y 377.433	0.915027	414845.259792	0.001680	0.18
Y_R 377.433	0.956552	33000.200000	0.005926	0.62
Y_R 488.368	0.977241	18414.000000	0.006316	0.65
Y_R2 488.368	0.949702	31452.950145	0.005202	0.55

Sample Name: CCV-7429326

Date: 10/27/2022 8:04:39 PM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.467553	ppm	0.001334	0.29	1076790.232720	Y 377.433
Ag (328.068 nm)	0.507748	ppm	0.000961	0.19	26853.900000	Y 377.433
Al (167.019 nm)	0.529524	ppm	0.003923	0.74	238.388000	Y_R 377.433
Al H (396.152 nm)	0.512331 u	ppm	0.004381	0.86	1495.155374	Y_R 377.433
As (188.980 nm)	0.500315	ppm	0.001662	0.33	646.997000	Y 242.219
B (249.678 nm)	0.497184	ppm	0.000538	0.11	13947.300000	Y 242.219
Ba (493.408 nm)	0.507588	ppm	0.000784	0.15	56206.800000	Y_R 488.368
Be (234.861 nm)	0.514436	ppm	0.001464	0.28	143454.000000	Y_R 488.368
Bi (223.061 nm)	1.044020	ppm	0.004505	0.43	2637.720000	Y 377.433
Ca (315.887 nm)	5.259473	ppm	0.014208	0.27	4861.449651	Y_R 377.433
Cd (214.439 nm)	0.524454	ppm	0.002237	0.43	32072.800000	Y 377.433
Co (228.615 nm)	0.514125	ppm	0.001802	0.35	9752.930000	Y 242.219
Cr (205.560 nm)	0.523852	ppm	0.000835	0.16	7812.390000	Y 377.433
Cu (324.754 nm)	0.520188	ppm	0.000790	0.15	38346.600000	Y 377.433
Fe (238.204 nm)	2.563633	ppm	0.006805	0.27	9073.148928	Y_R 377.433
Fe H (259.940 nm)	2.611990 u	ppm	0.005178	0.20	5456.100000	Y_R 377.433
K (766.491 nm)	49.939400	ppm	0.089164	0.18	48992.300000	Y_R2 488.368
Li (670.783 nm)	0.501013	ppm	0.001193	0.24	15661.700000	Y_R2 488.368
Mg (279.078 nm)	20.556700	ppm	0.055044	0.27	124184.000000	Y 377.433
Mn (257.610 nm)	0.521902	ppm	0.001200	0.23	126377.000000	Y 377.433
Mo (202.032 nm)	0.525544	ppm	0.000955	0.18	4507.170000	Y 377.433
Na (589.592 nm)	25.854900	ppm	0.031999	0.12	156778.000000	Y_R2 488.368
Na H (589.593 nm)	25.931113	ppm	0.043043	0.17	101551.425927	Y_R 488.368
Ni (231.604 nm)	0.528720	ppm	0.000330	0.06	3718.650000	Y 377.433
P (213.618 nm)	0.007092	ppm	0.000906	12.77	27.324200	Y 242.219
Pb (220.353 nm)	0.503937	ppm	0.001630	0.32	1394.180000	Y 242.219
S (181.972 nm)	0.001322 u	ppm	0.007488	> 100.00	6.232913	Y 377.433
Sb (206.834 nm)	0.523582	ppm	0.001136	0.22	1319.050000	Y 377.433
Se (196.026 nm)	0.502161	ppm	0.003618	0.72	506.837000	Y 242.219
Si (288.158 nm)	5.128240	ppm	0.034845	0.68	48723.200000	Y 377.433
Sn (189.925 nm)	0.525523	ppm	0.000365	0.07	1122.050000	Y 377.433
Sr (421.552 nm)	0.497525	ppm	0.000910	0.18	111478.024697	Y_R 488.368
Th (288.505 nm)	0.024509	ppm	0.007712	31.47	177.148000	Y 377.433
Ti (336.122 nm)	0.510661	ppm	0.001127	0.22	76047.400000	Y 377.433
Tl (190.794 nm)	0.522891	ppm	0.000742	0.14	1146.560000	Y 377.433
U (409.013 nm)	0.006272	ppm	0.003906	62.27	-74.157100	Y 377.433
V (292.401 nm)	0.519217	ppm	0.001620	0.31	21178.700000	Y 377.433
Zn (206.200 nm)	0.525110	ppm	0.003005	0.57	2811.950000	Y 377.433
Zr (343.823 nm)	0.541802	ppm	0.009232	1.70	74108.800000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.958241	8032.693387	0.001666	0.17
Y 377.433	0.928013	420732.963485	0.003655	0.39
Y_R 377.433	0.971082	33501.500000	0.003666	0.38
Y_R 488.368	0.990535	18664.500000	0.002869	0.29
Y_R2 488.368	0.952534	31546.752957	0.005319	0.56

Sample Name: CCB

Date: 10/27/2022 8:08:41 PM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000010 u	ppm	0.000004	45.59	-1069.133293	Y 377.433
Ag (328.068 nm)	0.000582	ppm	0.000342	58.70	-128.392000	Y 377.433
Al (167.019 nm)	-0.000867 u	ppm	0.002444	> 100.00	0.279228	Y_R 377.433
Al H (396.152 nm)	-0.004083 u	ppm	0.003375	82.66	12.391197	Y_R 377.433
As (188.980 nm)	0.000691 u	ppm	0.001006	> 100.00	-2.655790	Y 242.219
B (249.678 nm)	0.000444	ppm	0.000247	55.57	92.004700	Y 242.219
Ba (493.408 nm)	-0.000006 u	ppm	0.000016	> 100.00	48.507300	Y_R 488.368
Be (234.861 nm)	-0.000042 u	ppm	0.000014	33.32	-28.291600	Y_R 488.368
Bi (223.061 nm)	-0.000586 u	ppm	0.001954	> 100.00	15.861400	Y 377.433
Ca (315.887 nm)	0.002521 u	ppm	0.008089	> 100.00	-5.445341	Y_R 377.433
Cd (214.439 nm)	-0.000015 u	ppm	0.000044	> 100.00	-6.398930	Y 377.433
Co (228.615 nm)	-0.000058 u	ppm	0.000177	> 100.00	-15.136900	Y 242.219
Cr (205.560 nm)	0.000145	ppm	0.000064	43.85	9.316840	Y 377.433
Cu (324.754 nm)	0.001490	ppm	0.000174	11.67	1531.090000	Y 377.433
Fe (238.204 nm)	0.001281 u	ppm	0.002165	> 100.00	17.085081	Y_R 377.433
Fe H (259.940 nm)	-0.003110 u	ppm	0.001239	39.83	9.693490	Y_R 377.433
K (766.491 nm)	0.005631 u	ppm	0.110786	> 100.00	-784.273000	Y_R2 488.368
Li (670.783 nm)	0.005047	ppm	0.001042	20.64	-976.000000	Y_R2 488.368
Mg (279.078 nm)	-0.000097 u	ppm	0.000628	> 100.00	42.586300	Y 377.433
Mn (257.610 nm)	-0.000094 u	ppm	0.000010	10.83	53.832100	Y 377.433
Mo (202.032 nm)	0.000848	ppm	0.000207	24.36	12.329000	Y 377.433
Na (589.592 nm)	0.009009	ppm	0.008505	94.40	271.953000	Y_R2 488.368
Na H (589.593 nm)	1.284495 u	ppm	0.006954	0.54	1862.754587	Y_R 488.368
Ni (231.604 nm)	0.000277 u	ppm	0.000522	> 100.00	7.793490	Y 377.433
P (213.618 nm)	0.002289	ppm	0.000062	2.71	15.996800	Y 242.219
Pb (220.353 nm)	0.000023 u	ppm	0.000236	> 100.00	-3.566490	Y 242.219
S (181.972 nm)	0.005519	ppm	0.000570	10.33	7.038502	Y 377.433
Sb (206.834 nm)	0.000448 u	ppm	0.001282	> 100.00	-5.791770	Y 377.433
Se (196.026 nm)	-0.001205 u	ppm	0.001737	> 100.00	4.971730	Y 242.219
Si (288.158 nm)	0.002351	ppm	0.000979	41.64	887.200000	Y 377.433
Sn (189.925 nm)	-0.001213 u	ppm	0.000699	57.66	2.774020	Y 377.433
Sr (421.552 nm)	-0.000030 u	ppm	0.000067	> 100.00	51.654737	Y_R 488.368
Th (288.505 nm)	0.001416	ppm	0.000544	38.41	102.804000	Y 377.433
Ti (336.122 nm)	0.000053 u	ppm	0.000143	> 100.00	-208.185000	Y 377.433
Tl (190.794 nm)	0.000133 u	ppm	0.000681	> 100.00	-3.003230	Y 377.433
U (409.013 nm)	0.005840	ppm	0.004691	80.32	-30.406400	Y 377.433
V (292.401 nm)	-0.000146 u	ppm	0.000133	90.94	14.400500	Y 377.433
Zn (206.200 nm)	-0.000536 u	ppm	0.000588	> 100.00	6.502130	Y 377.433
Zr (343.823 nm)	0.000250	ppm	0.000134	53.65	50.549700	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.960779	8053.963496	0.002443	0.25
Y 377.433	0.933636	423281.971789	0.001830	0.20
Y_R 377.433	0.972601	33553.900000	0.004084	0.42
Y_R 488.368	0.989661	18648.000000	0.002061	0.21
Y_R2 488.368	0.959346	31772.365483	0.003113	0.32

Sample Name: CCVL-7434568

Date: 10/27/2022 8:12:44 PM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014714	ppm	0.000027	0.19	32872.953028	Y 377.433
Ag (328.068 nm)	0.010469	ppm	0.000185	1.76	396.966000	Y 377.433
Al (167.019 nm)	0.104243	ppm	0.002757	2.65	47.244100	Y_R 377.433
Al H (396.152 nm)	0.103350 u	ppm	0.000545	0.53	312.401754	Y_R 377.433
As (188.980 nm)	0.013416	ppm	0.001025	7.64	13.891100	Y 242.219
B (249.678 nm)	0.099830	ppm	0.000138	0.14	2860.360000	Y 242.219
Ba (493.408 nm)	0.009997	ppm	0.000237	2.37	1155.150000	Y_R 488.368
Be (234.861 nm)	0.001026	ppm	0.000029	2.87	269.836000	Y_R 488.368
Bi (223.061 nm)	-0.000749 Qu	ppm	0.000452	60.30	15.453100 Q	Y 377.433
Ca (315.887 nm)	0.217712	ppm	0.004450	2.04	193.767330	Y_R 377.433
Cd (214.439 nm)	0.005136	ppm	0.000084	1.64	308.730000	Y 377.433
Co (228.615 nm)	0.010619	ppm	0.000167	1.57	187.618000	Y 242.219
Cr (205.560 nm)	0.010499	ppm	0.000409	3.90	163.622000	Y 377.433
Cu (324.754 nm)	0.017438	ppm	0.000060	0.34	2662.180000	Y 377.433
Fe (238.204 nm)	0.104286	ppm	0.000433	0.42	381.133605	Y_R 377.433
Fe H (259.940 nm)	0.103946 u	ppm	0.001643	1.58	232.657000	Y_R 377.433
K (766.491 nm)	3.078470	ppm	0.046123	1.50	2278.890000	Y_R2 488.368
Li (670.783 nm)	0.026149 Q	ppm	0.000341	1.30	-268.088000 Q	Y_R2 488.368
Mg (279.078 nm)	0.207873	ppm	0.000400	0.19	1297.060000	Y 377.433
Mn (257.610 nm)	0.010524	ppm	0.000030	0.29	2623.370000	Y 377.433
Mo (202.032 nm)	0.020385	ppm	0.000219	1.07	179.691000	Y 377.433
Na (589.592 nm)	1.086460	ppm	0.012030	1.11	6780.970000	Y_R2 488.368
Na H (589.593 nm)	2.268116 u	ppm	0.005738	0.25	5830.350579	Y_R 488.368
Ni (231.604 nm)	0.044117	ppm	0.000484	1.10	315.595000	Y 377.433
P (213.618 nm)	2.902320	ppm	0.014920	0.51	6856.030000	Y 242.219
Pb (220.353 nm)	0.008848	ppm	0.000312	3.52	20.964700	Y 242.219
S (181.972 nm)	0.098542	ppm	0.004302	4.37	51.760837	Y 377.433
Sb (206.834 nm)	0.021742	ppm	0.001066	4.91	47.796200	Y 377.433
Se (196.026 nm)	0.020936	ppm	0.001129	5.39	27.039300	Y 242.219
Si (288.158 nm)	0.497729	ppm	0.003640	0.73	5503.550000	Y 377.433
Sn (189.925 nm)	0.106233	ppm	0.001962	1.85	231.090000	Y 377.433
Sr (421.552 nm)	0.009821	ppm	0.000022	0.22	2257.861306	Y_R 488.368
Th (288.505 nm)	0.015121	ppm	0.004267	28.22	142.614000	Y 377.433
Ti (336.122 nm)	0.009884	ppm	0.000058	0.59	1260.380000	Y 377.433
Tl (190.794 nm)	0.015574	ppm	0.000297	1.91	30.949200	Y 377.433
U (409.013 nm)	0.069210	ppm	0.003850	5.56	287.375000	Y 377.433
V (292.401 nm)	0.010110	ppm	0.000065	0.64	430.196000	Y 377.433
Zn (206.200 nm)	0.021818	ppm	0.000117	0.54	125.807000	Y 377.433
Zr (343.823 nm)	0.013741 Q	ppm	0.000181	1.32	1895.570000 Q	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.972063	8148.560558	0.002845	0.29
Y 377.433	0.944415	428168.857806	0.002465	0.26
Y_R 377.433	0.978449	33755.600000	0.002768	0.28
Y_R 488.368	0.998083	18806.700000	0.002664	0.27
Y_R2 488.368	0.980070	32458.717188	0.001627	0.17

Sample Name: 280-167828-a-8-b@2

Date: 10/27/2022 8:16:47 PM Rack:Tube: 4:20

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.077153	ppm	0.000248	0.32	176811.101798	Y 377.433
Ag (328.068 nm)	0.000590 n	ppm	0.000228	38.67	-174.895000	Y 377.433
Al (167.019 nm)	51.248400 o	ppm	0.071708	0.14	22925.700000	Y_R 377.433
Al H (396.152 nm)	54.808019	ppm	0.135083	0.25	152195.612410	Y_R 377.433
As (188.980 nm)	0.033447	ppm	0.000899	2.69	39.937200	Y 242.219
B (249.678 nm)	0.030330	ppm	0.000362	1.19	731.502000	Y 242.219
Ba (493.408 nm)	2.506450 o	ppm	0.010183	0.41	277443.000000	Y_R 488.368
Be (234.861 nm)	0.003261	ppm	0.000149	4.57	2428.920000	Y_R 488.368
Bi (223.061 nm)	-0.002831 u	ppm	0.001962	69.31	10.227600	Y 377.433
Ca (315.887 nm)	116.233943 o	ppm	0.288430	0.25	107594.046499	Y_R 377.433
Cd (214.439 nm)	0.000358	ppm	0.000058	16.11	114.494000	Y 377.433
Co (228.615 nm)	0.042796	ppm	0.000054	0.13	921.343000	Y 242.219
Cr (205.560 nm)	0.093326	ppm	0.000299	0.32	1371.830000	Y 377.433
Cu (324.754 nm)	0.095625	ppm	0.000215	0.22	8206.330000	Y 377.433
Fe (238.204 nm)	97.958987 o	ppm	0.096262	0.10	346226.791665	Y_R 377.433
Fe H (259.940 nm)	99.391800	ppm	0.086365	0.09	207017.000000	Y_R 377.433
K (766.491 nm)	11.473700	ppm	0.042215	0.37	10647.700000	Y_R2 488.368
Li (670.783 nm)	0.089327	ppm	0.001144	1.28	1851.270000	Y_R2 488.368
Mg (279.078 nm)	50.796100 o	ppm	0.129421	0.25	306634.000000	Y 377.433
Mn (257.610 nm)	6.053250 o	ppm	0.019006	0.31	1464970.000000	Y 377.433
Mo (202.032 nm)	0.003644	ppm	0.000222	6.08	36.277900	Y 377.433
Na (589.592 nm)	3.023950	ppm	0.011146	0.37	21934.700000	Y_R2 488.368
Na H (589.593 nm)	4.023286 u	ppm	0.006890	0.17	15572.185220	Y_R 488.368
Ni (231.604 nm)	0.082564	ppm	0.000597	0.72	602.347000	Y 377.433
P (213.618 nm)	6.626890	ppm	0.033711	0.51	15640.800000	Y 242.219
Pb (220.353 nm)	0.088925	ppm	0.001435	1.61	232.053000	Y 242.219
S (181.972 nm)	2.529337	ppm	0.007573	0.30	1233.797399	Y 377.433
Sb (206.834 nm)	0.003761	ppm	0.002718	72.26	-10.908400	Y 377.433
Se (196.026 nm)	-0.000540 u	ppm	0.001185	> 100.00	-6.693530	Y 242.219
Si (288.158 nm)	1.052070	ppm	0.004031	0.38	11210.000000	Y 377.433
Sn (189.925 nm)	0.007345	ppm	0.001400	19.06	20.958100	Y 377.433
Sr (421.552 nm)	0.990209	ppm	0.001170	0.12	221813.572865	Y_R 488.368
Th (288.505 nm)	0.102285	ppm	0.002420	2.37	521.245000	Y 377.433
Ti (336.122 nm)	3.304390 o	ppm	0.013036	0.39	493532.000000	Y 377.433
Tl (190.794 nm)	-0.000267 u	ppm	0.002013	> 100.00	-21.114500	Y 377.433
U (409.013 nm)	-0.059508 u	ppm	0.002280	3.83	-286.382000	Y 377.433
V (292.401 nm)	0.271493	ppm	0.000529	0.19	11235.100000	Y 377.433
Zn (206.200 nm)	0.259447	ppm	0.000226	0.09	1394.070000	Y 377.433
Zr (343.823 nm)	0.050332	ppm	0.001043	2.07	7199.950000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.020088	8551.139130	0.001252	0.12
Y 377.433	0.980614	444580.478698	0.002874	0.29
Y_R 377.433	1.040970	35912.400000	0.005630	0.54
Y_R 488.368	1.060990	19992.100000	0.006610	0.62
Y_R2 488.368	1.040661	34465.396327	0.008332	0.80

Sample Name: 280-167828-a-9-b@2

Date: 10/27/2022 8:20:50 PM Rack:Tube: 4:21

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.069504	ppm	0.000211	0.30	159179.195155	Y 377.433
Ag (328.068 nm)	0.000337 n	ppm	0.000089	26.40	-188.133000	Y 377.433
Al (167.019 nm)	55.150100 o	ppm	0.279547	0.51	24666.700000	Y_R 377.433
Al H (396.152 nm)	59.242777	ppm	0.100231	0.17	164499.349277	Y_R 377.433
As (188.980 nm)	0.032348	ppm	0.002365	7.31	38.507600	Y 242.219
B (249.678 nm)	0.030480	ppm	0.000069	0.23	736.656000	Y 242.219
Ba (493.408 nm)	2.033860 o	ppm	0.003496	0.17	225157.000000	Y_R 488.368
Be (234.861 nm)	0.003315	ppm	0.000066	1.98	2435.890000	Y_R 488.368
Bi (223.061 nm)	-0.001822 u	ppm	0.001975	> 100.00	12.759500	Y 377.433
Ca (315.887 nm)	106.980825 o	ppm	0.383142	0.36	99028.111056	Y_R 377.433
Cd (214.439 nm)	0.000313	ppm	0.000013	4.12	111.202000	Y 377.433
Co (228.615 nm)	0.040934	ppm	0.000240	0.59	893.946000	Y 242.219
Cr (205.560 nm)	0.120940	ppm	0.000357	0.30	1783.740000	Y 377.433
Cu (324.754 nm)	0.089221	ppm	0.000275	0.31	7749.650000	Y 377.433
Fe (238.204 nm)	97.433483 o	ppm	0.135722	0.14	344369.512574	Y_R 377.433
Fe H (259.940 nm)	98.974700	ppm	0.233387	0.24	206148.000000	Y_R 377.433
K (766.491 nm)	12.963700	ppm	0.024854	0.19	12133.000000	Y_R2 488.368
Li (670.783 nm)	0.081068	ppm	0.001036	1.28	1574.220000	Y_R2 488.368
Mg (279.078 nm)	49.637500 o	ppm	0.130079	0.26	299638.000000	Y 377.433
Mn (257.610 nm)	2.545400 o	ppm	0.003603	0.14	616065.000000	Y 377.433
Mo (202.032 nm)	0.002669	ppm	0.000078	2.92	27.922700	Y 377.433
Na (589.592 nm)	3.885560	ppm	0.010364	0.27	26471.000000	Y_R2 488.368
Na H (589.593 nm)	4.834030 u	ppm	0.009996	0.21	18325.985582	Y_R 488.368
Ni (231.604 nm)	0.086771	ppm	0.000287	0.33	631.781000	Y 377.433
P (213.618 nm)	6.260180	ppm	0.039611	0.63	14775.900000	Y 242.219
Pb (220.353 nm)	0.082913	ppm	0.001482	1.79	213.719000	Y 242.219
S (181.972 nm)	2.136653	ppm	0.005330	0.25	1036.964584	Y 377.433
Sb (206.834 nm)	0.002911	ppm	0.000760	26.10	-12.432000	Y 377.433
Se (196.026 nm)	0.001936 u	ppm	0.005717	> 100.00	-6.970570	Y 242.219
Si (288.158 nm)	1.058380	ppm	0.002096	0.20	11303.500000	Y 377.433
Sn (189.925 nm)	0.006192	ppm	0.000065	1.05	18.508900	Y 377.433
Sr (421.552 nm)	1.207449 o	ppm	0.002517	0.21	270464.008874	Y_R 488.368
Th (288.505 nm)	0.074639	ppm	0.001644	2.20	366.159000	Y 377.433
Ti (336.122 nm)	3.514010 o	ppm	0.006891	0.20	524801.000000	Y 377.433
Tl (190.794 nm)	-0.000588 u	ppm	0.001042	> 100.00	-22.755800	Y 377.433
U (409.013 nm)	-0.053846 u	ppm	0.001751	3.25	-258.506000	Y 377.433
V (292.401 nm)	0.297191	ppm	0.000301	0.10	12285.100000	Y 377.433
Zn (206.200 nm)	0.218491	ppm	0.000436	0.20	1175.480000	Y 377.433
Zr (343.823 nm)	0.073744	ppm	0.000990	1.34	10399.700000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.019736	8548.189601	0.002979	0.29
Y 377.433	0.982239	445317.091953	0.004054	0.41
Y_R 377.433	1.040590	35899.400000	0.010428	1.00
Y_R 488.368	1.062800	20026.200000	0.012606	1.19
Y_R2 488.368	1.043313	34553.243144	0.003697	0.35

Sample Name: 280-167828-a-10-b@2

Date: 10/27/2022 8:24:54 PM Rack:Tube: 4:22

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.083401	ppm	0.000376	0.45	191216.570289	Y 377.433
Ag (328.068 nm)	0.000185 n	ppm	0.000173	93.42	-199.161000	Y 377.433
Al (167.019 nm)	59.899600 o	ppm	0.316782	0.53	26793.700000	Y_R 377.433
Al H (396.152 nm)	65.308707	ppm	0.042961	0.07	181335.733443	Y_R 377.433
As (188.980 nm)	0.036345	ppm	0.002407	6.62	43.704600	Y 242.219
B (249.678 nm)	0.031262	ppm	0.000171	0.55	731.933000	Y 242.219
Ba (493.408 nm)	2.102250 o	ppm	0.004099	0.19	232736.000000	Y_R 488.368
Be (234.861 nm)	0.003496	ppm	0.000185	5.28	2697.800000	Y_R 488.368
Bi (223.061 nm)	-0.001858 u	ppm	0.001235	66.49	12.669100	Y 377.433
Ca (315.887 nm)	108.386793 o	ppm	0.107723	0.10	100329.665552	Y_R 377.433
Cd (214.439 nm)	0.000466	ppm	0.000060	12.99	134.034000	Y 377.433
Co (228.615 nm)	0.048472	ppm	0.000142	0.29	1038.210000	Y 242.219
Cr (205.560 nm)	0.124135	ppm	0.000315	0.25	1827.680000	Y 377.433
Cu (324.754 nm)	0.099993	ppm	0.000422	0.42	8532.880000	Y 377.433
Fe (238.204 nm)	110.845664 o	ppm	0.166331	0.15	391771.882527	Y_R 377.433
Fe H (259.940 nm)	112.612000	ppm	0.047364	0.04	234550.000000	Y_R 377.433
K (766.491 nm)	13.956800	ppm	0.069856	0.50	13123.000000	Y_R2 488.368
Li (670.783 nm)	0.095543	ppm	0.001101	1.15	2059.800000	Y_R2 488.368
Mg (279.078 nm)	57.817500 o	ppm	0.259587	0.45	349014.000000	Y 377.433
Mn (257.610 nm)	3.346930 o	ppm	0.016732	0.50	810035.000000	Y 377.433
Mo (202.032 nm)	0.004832	ppm	0.000736	15.23	46.458700	Y 377.433
Na (589.592 nm)	3.730620	ppm	0.006872	0.18	25632.600000	Y_R2 488.368
Na H (589.593 nm)	4.702252 u	ppm	0.013749	0.29	17869.659468	Y_R 488.368
Ni (231.604 nm)	0.100756	ppm	0.000805	0.80	732.291000	Y 377.433
P (213.618 nm)	7.697940	ppm	0.024679	0.32	18167.000000	Y 242.219
Pb (220.353 nm)	0.089944	ppm	0.000903	1.00	232.218000	Y 242.219
S (181.972 nm)	2.054389	ppm	0.008481	0.41	999.303739	Y 377.433
Sb (206.834 nm)	0.001201	ppm	0.000585	48.71	-18.885200	Y 377.433
Se (196.026 nm)	-0.000023 u	ppm	0.000726	> 100.00	-10.667800	Y 242.219
Si (288.158 nm)	1.061070	ppm	0.008018	0.76	11334.500000	Y 377.433
Sn (189.925 nm)	0.005405	ppm	0.000659	12.20	16.836400	Y 377.433
Sr (421.552 nm)	1.342972 o	ppm	0.002353	0.18	300814.067205	Y_R 488.368
Th (288.505 nm)	0.086941	ppm	0.003444	3.96	418.838000	Y 377.433
Ti (336.122 nm)	3.549290 o	ppm	0.011866	0.33	530073.000000	Y 377.433
Tl (190.794 nm)	0.001242	ppm	0.000596	48.03	-19.223600	Y 377.433
U (409.013 nm)	-0.064484 u	ppm	0.001623	2.52	-300.309000	Y 377.433
V (292.401 nm)	0.336523	ppm	0.001680	0.50	13899.600000	Y 377.433
Zn (206.200 nm)	0.253483	ppm	0.001304	0.51	1362.230000	Y 377.433
Zr (343.823 nm)	0.096787	ppm	0.001284	1.33	13592.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.042519	8739.174944	0.003708	0.36
Y 377.433	1.001469	454035.405997	0.007297	0.73
Y_R 377.433	1.081150	37298.700000	0.001131	0.10
Y_R 488.368	1.101150	20748.900000	0.003078	0.28
Y_R2 488.368	1.066506	35321.369079	0.002268	0.21

Sample Name: 280-167828-a-10-b SD@10

Date: 10/27/2022 8:28:57 PM Rack:Tube: 4:23

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014724	ppm	0.000050	0.34	32896.816028	Y 377.433
Ag (328.068 nm)	0.000604 n	ppm	0.000387	64.02	-137.245000	Y 377.433
Al (167.019 nm)	14.500900 o	ppm	0.065837	0.45	6485.560000	Y_R 377.433
Al H (396.152 nm)	14.302320	ppm	0.012278	0.09	39730.270598	Y_R 377.433
As (188.980 nm)	0.008531	ppm	0.001189	13.93	7.539190	Y 242.219
B (249.678 nm)	0.006378	ppm	0.000067	1.05	209.271000	Y 242.219
Ba (493.408 nm)	0.455727	ppm	0.004596	1.01	50491.300000	Y_R 488.368
Be (234.861 nm)	0.000811	ppm	0.000012	1.47	591.748000	Y_R 488.368
Bi (223.061 nm)	-0.004701 u	ppm	0.001099	23.38	5.533850	Y 377.433
Ca (315.887 nm)	24.061492 o	ppm	0.026860	0.11	22266.785148	Y_R 377.433
Cd (214.439 nm)	0.000069 u	ppm	0.000080	> 100.00	23.151600	Y 377.433
Co (228.615 nm)	0.010329	ppm	0.000127	1.23	210.480000	Y 242.219
Cr (205.560 nm)	0.026770	ppm	0.000415	1.55	399.621000	Y 377.433
Cu (324.754 nm)	0.022462	ppm	0.000081	0.36	3022.320000	Y 377.433
Fe (238.204 nm)	24.361942 o	ppm	0.008945	0.04	86114.420067	Y_R 377.433
Fe H (259.940 nm)	24.923000	ppm	0.002911	0.01	51922.800000	Y_R 377.433
K (766.491 nm)	2.987180	ppm	0.058532	1.96	2187.880000	Y_R2 488.368
Li (670.783 nm)	0.024562	ppm	0.000477	1.94	-321.324000	Y_R2 488.368
Mg (279.078 nm)	12.471100	ppm	0.050729	0.41	75314.600000	Y 377.433
Mn (257.610 nm)	0.743185	ppm	0.002310	0.31	179928.000000	Y 377.433
Mo (202.032 nm)	0.000470	ppm	0.000340	72.47	9.085370	Y 377.433
Na (589.592 nm)	0.834288	ppm	0.012006	1.44	5880.940000	Y_R2 488.368
Na H (589.593 nm)	1.921824 u	ppm	0.004455	0.23	4915.902783	Y_R 488.368
Ni (231.604 nm)	0.021408	ppm	0.000697	3.26	160.339000	Y 377.433
P (213.618 nm)	1.666570	ppm	0.007777	0.47	3941.380000	Y 242.219
Pb (220.353 nm)	0.019739	ppm	0.001459	7.39	48.148000	Y 242.219
S (181.972 nm)	0.430869	ppm	0.001875	0.44	213.143976	Y 377.433
Sb (206.834 nm)	-0.000023 u	ppm	0.002284	> 100.00	-10.278800	Y 377.433
Se (196.026 nm)	-0.001347 u	ppm	0.000773	57.35	1.138490	Y 242.219
Si (288.158 nm)	0.235421	ppm	0.002542	1.08	3184.280000	Y 377.433
Sn (189.925 nm)	0.000575 u	ppm	0.000704	> 100.00	6.574040	Y 377.433
Sr (421.552 nm)	0.293059	ppm	0.001164	0.40	65688.363651	Y_R 488.368
Th (288.505 nm)	0.022221	ppm	0.002181	9.81	177.940000	Y 377.433
Ti (336.122 nm)	0.764605	ppm	0.001758	0.23	114023.000000	Y 377.433
Tl (190.794 nm)	0.001338	ppm	0.000688	51.43	-4.380530	Y 377.433
U (409.013 nm)	-0.006214 u	ppm	0.003062	49.28	-72.827000	Y 377.433
V (292.401 nm)	0.072770	ppm	0.000409	0.56	3021.830000	Y 377.433
Zn (206.200 nm)	0.057206	ppm	0.000400	0.70	314.680000	Y 377.433
Zr (343.823 nm)	0.023337	ppm	0.000377	1.62	3282.390000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.994744	8338.682550	0.003356	0.34
Y 377.433	0.962578	436403.535132	0.004220	0.44
Y_R 377.433	1.014120	34986.100000	0.002495	0.25
Y_R 488.368	1.031170	19430.200000	0.001045	0.10
Y_R2 488.368	1.000529	33136.281155	0.001963	0.20

Sample Name: 280-167828-a-10-c ms@2

Date: 10/27/2022 8:33:01 PM Rack:Tube: 4:24

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.571780	ppm	0.002531	0.44	1317063.713505	Y 377.433
Ag (328.068 nm)	0.023960 n	ppm	0.000040	0.17	1085.890000	Y 377.433
Al (167.019 nm)	72.232400 o	ppm	0.231368	0.32	32298.200000	Y_R 377.433
Al H (396.152 nm)	81.503535	ppm	0.063398	0.08	226341.460080	Y_R 377.433
As (188.980 nm)	0.496970	ppm	0.001823	0.37	642.648000	Y 242.219
B (249.678 nm)	0.935962	ppm	0.002760	0.29	25950.100000	Y 242.219
Ba (493.408 nm)	2.669220 o	ppm	0.020708	0.78	295462.000000	Y_R 488.368
Be (234.861 nm)	0.492744	ppm	0.004313	0.88	139119.000000	Y_R 488.368
Bi (223.061 nm)	-0.006582 u	ppm	0.001539	23.38	0.811755	Y 377.433
Ca (315.887 nm)	142.254592 o	ppm	0.055251	0.04	131682.588997	Y_R 377.433
Cd (214.439 nm)	0.475408	ppm	0.002595	0.55	29182.600000	Y 377.433
Co (228.615 nm)	0.505760	ppm	0.002769	0.55	9742.010000	Y 242.219
Cr (205.560 nm)	0.602352	ppm	0.002114	0.35	8953.310000	Y 377.433
Cu (324.754 nm)	0.593921	ppm	0.003506	0.59	43553.400000	Y 377.433
Fe (238.204 nm)	111.785136 o	ppm	0.184601	0.17	395092.234940	Y_R 377.433
Fe H (259.940 nm)	113.611000	ppm	0.198909	0.18	236632.000000	Y_R 377.433
K (766.491 nm)	38.750600	ppm	0.081854	0.21	37838.700000	Y_R2 488.368
Li (670.783 nm)	0.554934	ppm	0.002126	0.38	17470.500000	Y_R2 488.368
Mg (279.078 nm)	85.831600 o	ppm	0.436796	0.51	518194.000000	Y 377.433
Mn (257.610 nm)	3.622330 o	ppm	0.021015	0.58	876683.000000	Y 377.433
Mo (202.032 nm)	0.471189	ppm	0.002851	0.61	4041.540000	Y 377.433
Na (589.592 nm)	28.449100	ppm	0.038984	0.14	175426.000000	Y_R2 488.368
Na H (589.593 nm)	28.398409	ppm	0.075777	0.27	113799.014391	Y_R 488.368
Ni (231.604 nm)	0.581219	ppm	0.002449	0.42	4105.980000	Y 377.433
P (213.618 nm)	17.038500 o	ppm	0.076713	0.45	40197.800000	Y 242.219
Pb (220.353 nm)	0.556402	ppm	0.000593	0.11	1520.370000	Y 242.219
S (181.972 nm)	11.828898 o	ppm	0.096686	0.82	5696.630647	Y 377.433
Sb (206.834 nm)	0.291729	ppm	0.002858	0.98	720.335000	Y 377.433
Se (196.026 nm)	0.450971	ppm	0.003322	0.74	439.309000	Y 242.219
Si (288.158 nm)	2.085140	ppm	0.011882	0.57	21021.900000	Y 377.433
Sn (189.925 nm)	0.479605	ppm	0.005251	1.09	1024.480000	Y 377.433
Sr (421.552 nm)	1.895617 o	ppm	0.007126	0.38	424577.695030	Y_R 488.368
Th (288.505 nm)	0.093670	ppm	0.005699	6.08	441.675000	Y 377.433
Ti (336.122 nm)	4.445710 o	ppm	0.024514	0.55	664026.000000	Y 377.433
Tl (190.794 nm)	0.475011	ppm	0.003515	0.74	1020.720000	Y 377.433
U (409.013 nm)	-0.069954 u	ppm	0.003962	5.66	-376.419000	Y 377.433
V (292.401 nm)	0.795994	ppm	0.003951	0.50	32628.100000	Y 377.433
Zn (206.200 nm)	0.729949	ppm	0.003833	0.53	3905.200000	Y 377.433
Zr (343.823 nm)	0.579738	ppm	0.003626	0.63	79632.400000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.019284	8544.401071	0.000899	0.09
Y 377.433	0.981029	444768.512634	0.005924	0.60
Y_R 377.433	1.041110	35917.600000	0.004032	0.39
Y_R 488.368	1.059840	19970.300000	0.005599	0.53
Y_R2 488.368	1.026556	33998.284064	0.005291	0.52

Sample Name: 280-167828-a-10-d msd@2

Date: 10/27/2022 8:37:05 PM Rack:Tube: 4:25

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.577315	ppm	0.003197	0.55	1329823.711470	Y 377.433
Ag (328.068 nm)	0.023610 n	ppm	0.000247	1.04	1064.250000	Y 377.433
Al (167.019 nm)	70.124700 o	ppm	0.097976	0.14	31359.200000	Y_R 377.433
Al H (396.152 nm)	78.994655	ppm	0.087499	0.11	219391.933085	Y_R 377.433
As (188.980 nm)	0.491709	ppm	0.001194	0.24	635.807000	Y 242.219
B (249.678 nm)	0.942123	ppm	0.000539	0.06	26115.500000	Y 242.219
Ba (493.408 nm)	2.543950 o	ppm	0.011637	0.46	281605.000000	Y_R 488.368
Be (234.861 nm)	0.488466	ppm	0.003088	0.63	137973.000000	Y_R 488.368
Bi (223.061 nm)	-0.006336 u	ppm	0.002543	40.14	1.429260	Y 377.433
Ca (315.887 nm)	169.815620 o	ppm	0.086840	0.05	157196.791941	Y_R 377.433
Cd (214.439 nm)	0.470544	ppm	0.001040	0.22	28888.200000	Y 377.433
Co (228.615 nm)	0.501733	ppm	0.002690	0.54	9680.150000	Y 242.219
Cr (205.560 nm)	0.605412	ppm	0.002332	0.39	8998.140000	Y 377.433
Cu (324.754 nm)	0.597060	ppm	0.004941	0.83	43751.000000	Y 377.433
Fe (238.204 nm)	114.796135 o	ppm	0.451673	0.39	405733.942134	Y_R 377.433
Fe H (259.940 nm)	116.927000	ppm	0.259372	0.22	243537.000000	Y_R 377.433
K (766.491 nm)	38.121200	ppm	0.067477	0.18	37211.200000	Y_R2 488.368
Li (670.783 nm)	0.555338	ppm	0.003495	0.63	17484.100000	Y_R2 488.368
Mg (279.078 nm)	84.070700 o	ppm	0.316300	0.38	507554.000000	Y 377.433
Mn (257.610 nm)	3.380940 o	ppm	0.017748	0.52	818267.000000	Y 377.433
Mo (202.032 nm)	0.473741	ppm	0.003330	0.70	4063.400000	Y 377.433
Na (589.592 nm)	28.195900	ppm	0.070868	0.25	173725.000000	Y_R2 488.368
Na H (589.593 nm)	28.327639	ppm	0.074415	0.26	113379.440168	Y_R 488.368
Ni (231.604 nm)	0.574950	ppm	0.002953	0.51	4062.490000	Y 377.433
P (213.618 nm)	16.378900 o	ppm	0.016288	0.10	38641.900000	Y 242.219
Pb (220.353 nm)	0.557531	ppm	0.003510	0.63	1524.660000	Y 242.219
S (181.972 nm)	12.096323 o	ppm	0.056848	0.47	5824.569255	Y 377.433
Sb (206.834 nm)	0.285124	ppm	0.003134	1.10	703.510000	Y 377.433
Se (196.026 nm)	0.452903	ppm	0.001751	0.39	440.433000	Y 242.219
Si (288.158 nm)	2.083320	ppm	0.011023	0.53	21068.600000	Y 377.433
Sn (189.925 nm)	0.479341	ppm	0.003751	0.78	1023.920000	Y 377.433
Sr (421.552 nm)	1.634634 o	ppm	0.003446	0.21	366131.296560	Y_R 488.368
Th (288.505 nm)	0.086682	ppm	0.003983	4.59	416.949000	Y 377.433
Ti (336.122 nm)	4.831240 o	ppm	0.025711	0.53	721677.000000	Y 377.433
Tl (190.794 nm)	0.471696	ppm	0.003243	0.69	1011.590000	Y 377.433
U (409.013 nm)	-0.061711 u	ppm	0.001940	3.14	-337.127000	Y 377.433
V (292.401 nm)	0.802350	ppm	0.003390	0.42	32899.900000	Y 377.433
Zn (206.200 nm)	0.729806	ppm	0.002391	0.33	3904.440000	Y 377.433
Zr (343.823 nm)	0.573341	ppm	0.002883	0.50	78767.100000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.006768	8439.482713	0.005612	0.56
Y 377.433	0.971366	440387.595074	0.000897	0.09
Y_R 377.433	1.039570	35864.400000	0.003348	0.32
Y_R 488.368	1.056640	19910.200000	0.005203	0.49
Y_R2 488.368	1.029834	34106.844286	0.003383	0.33

Sample Name: 280-167828-a-10-b PDS@2

Date: 10/27/2022 8:41:09 PM Rack:Tube: 4:26

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.184203	ppm	0.000970	0.53	423592.577515	Y 377.433
Ag (328.068 nm)	0.028150 n	ppm	0.000190	0.68	1293.500000	Y 377.433
Al (167.019 nm)	59.344600 o	ppm	0.308545	0.52	26545.100000	Y_R 377.433
Al H (396.152 nm)	64.710339	ppm	0.194924	0.30	179688.255270	Y_R 377.433
As (188.980 nm)	0.233409	ppm	0.003963	1.70	299.944000	Y 242.219
B (249.678 nm)	0.119688	ppm	0.000611	0.51	3200.600000	Y 242.219
Ba (493.408 nm)	2.147930 o	ppm	0.007607	0.35	237787.000000	Y_R 488.368
Be (234.861 nm)	0.052428	ppm	0.000459	0.88	16312.600000	Y_R 488.368
Bi (223.061 nm)	-0.004426 u	ppm	0.000940	21.23	6.223690	Y 377.433
Ca (315.887 nm)	126.457412 o	ppm	0.251163	0.20	117058.302486	Y_R 377.433
Cd (214.439 nm)	0.050857	ppm	0.000146	0.29	3214.240000	Y 377.433
Co (228.615 nm)	0.095518	ppm	0.000508	0.53	1929.000000	Y 242.219
Cr (205.560 nm)	0.172209	ppm	0.000757	0.44	2544.540000	Y 377.433
Cu (324.754 nm)	0.150435	ppm	0.000556	0.37	12102.900000	Y 377.433
Fe (238.204 nm)	109.058441 o	ppm	0.191854	0.18	385455.339572	Y_R 377.433
Fe H (259.940 nm)	110.786000	ppm	0.157598	0.14	230747.000000	Y_R 377.433
K (766.491 nm)	33.032100	ppm	0.206274	0.62	32138.200000	Y_R2 488.368
Li (670.783 nm)	0.187984	ppm	0.000653	0.35	5160.830000	Y_R2 488.368
Mg (279.078 nm)	76.703100 o	ppm	0.153974	0.20	463056.000000	Y 377.433
Mn (257.610 nm)	3.304400 o	ppm	0.004674	0.14	799743.000000	Y 377.433
Mo (202.032 nm)	0.054337	ppm	0.000939	1.73	470.542000	Y 377.433
Na (589.592 nm)	23.712300	ppm	0.045790	0.19	146147.000000	Y_R2 488.368
Na H (589.593 nm)	23.900509	ppm	0.009179	0.04	95145.664695	Y_R 488.368
Ni (231.604 nm)	0.148196	ppm	0.000125	0.08	1065.250000	Y 377.433
P (213.618 nm)	9.563560	ppm	0.025131	0.26	22567.300000	Y 242.219
Pb (220.353 nm)	0.187638	ppm	0.001714	0.91	504.850000	Y 242.219
S (181.972 nm)	2.119631	ppm	0.019431	0.92	1030.558902	Y 377.433
Sb (206.834 nm)	0.104041	ppm	0.000157	0.15	239.138000	Y 377.433
Se (196.026 nm)	0.197342	ppm	0.004571	2.32	186.407000	Y 242.219
Si (288.158 nm)	5.781080	ppm	0.027595	0.48	55300.200000	Y 377.433
Sn (189.925 nm)	0.100991	ppm	0.001011	1.00	219.950000	Y 377.433
Sr (421.552 nm)	1.356853 o	ppm	0.000705	0.05	303922.750674	Y_R 488.368
Th (288.505 nm)	0.286338	ppm	0.003430	1.20	986.688000	Y 377.433
Ti (336.122 nm)	3.517770 o	ppm	0.003638	0.10	525424.000000	Y 377.433
Tl (190.794 nm)	0.197467	ppm	0.000498	0.25	413.137000	Y 377.433
U (409.013 nm)	0.436374	ppm	0.002488	0.57	2203.600000	Y 377.433
V (292.401 nm)	0.380307	ppm	0.000958	0.25	15666.900000	Y 377.433
Zn (206.200 nm)	0.445486	ppm	0.002302	0.52	2386.980000	Y 377.433
Zr (343.823 nm)	0.221063	ppm	0.017644	7.98	30579.700000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.028956	8625.474935	0.004851	0.47
Y 377.433	0.989734	448715.042802	0.005861	0.59
Y_R 377.433	1.054530	36380.300000	0.000472	0.04
Y_R 488.368	1.072450	20208.000000	0.003753	0.35
Y_R2 488.368	1.025353	33958.412364	0.011861	1.16

Sample Name: MB 280-591243/1-B

Date: 10/27/2022 8:45:12 PM Rack:Tube: 1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000302	ppm	0.000007	2.24	-351.459881	Y 377.433
Ag (328.068 nm)	0.000394 n	ppm	0.000059	15.08	-138.008000	Y 377.433
Al (167.019 nm)	-0.001117 u	ppm	0.000125	11.15	0.165902	Y_R 377.433
Al H (396.152 nm)	-0.006728 u	ppm	0.000528	7.85	4.954687	Y_R 377.433
As (188.980 nm)	0.001858	ppm	0.000651	35.04	-1.138510	Y 242.219
B (249.678 nm)	-0.001889 u	ppm	0.000142	7.50	27.029300	Y 242.219
Ba (493.408 nm)	-0.000351 u	ppm	0.000082	23.24	10.276300	Y_R 488.368
Be (234.861 nm)	0.000018	ppm	0.000009	50.45	-11.762200	Y_R 488.368
Bi (223.061 nm)	-0.004827 u	ppm	0.000195	4.05	5.217530	Y 377.433
Ca (315.887 nm)	0.013916	ppm	0.001519	10.92	5.102999	Y_R 377.433
Cd (214.439 nm)	0.000041	ppm	0.000021	51.24	-3.010010	Y 377.433
Co (228.615 nm)	0.000436	ppm	0.000041	9.41	-5.799340	Y 242.219
Cr (205.560 nm)	-0.000435 u	ppm	0.000076	17.49	0.661295	Y 377.433
Cu (324.754 nm)	-0.016398 u	ppm	0.000202	1.23	258.959000	Y 377.433
Fe (238.204 nm)	-0.001352 u	ppm	0.000670	49.60	7.781330	Y_R 377.433
Fe H (259.940 nm)	-0.005576 u	ppm	0.000361	6.47	4.558710	Y_R 377.433
K (766.491 nm)	0.580282	ppm	0.016830	2.90	-211.431000	Y_R2 488.368
Li (670.783 nm)	0.025768	ppm	0.000348	1.35	-280.886000	Y_R2 488.368
Mg (279.078 nm)	-0.005299 u	ppm	0.000300	5.66	11.667700	Y 377.433
Mn (257.610 nm)	-0.000246 u	ppm	0.000011	4.52	17.052600	Y 377.433
Mo (202.032 nm)	-0.000040 u	ppm	0.000028	69.22	4.717170	Y 377.433
Na (589.592 nm)	-0.030467 u	ppm	0.002891	9.49	33.377900	Y_R2 488.368
Na H (589.593 nm)	0.910895 u	ppm	0.001876	0.21	359.441352	Y_R 488.368
Ni (231.604 nm)	-0.000573 u	ppm	0.000085	14.88	1.825870	Y 377.433
P (213.618 nm)	-0.001589 u	ppm	0.000878	55.26	6.848720	Y 242.219
Pb (220.353 nm)	0.000673	ppm	0.000578	85.91	-1.799780	Y 242.219
S (181.972 nm)	-0.005274 u	ppm	0.000513	9.73	1.852059	Y 377.433
Sb (206.834 nm)	0.002067	ppm	0.000317	15.33	-1.693680	Y 377.433
Se (196.026 nm)	-0.004344 u	ppm	0.000840	19.34	1.841650	Y 242.219
Si (288.158 nm)	-0.073595 u	ppm	0.002607	3.54	179.619000	Y 377.433
Sn (189.925 nm)	-0.002027 u	ppm	0.000172	8.47	1.043200	Y 377.433
Sr (421.552 nm)	-0.000234 u	ppm	0.000022	9.41	5.993487	Y_R 488.368
Th (288.505 nm)	-0.027218 u	ppm	0.000820	3.01	22.261600	Y 377.433
Ti (336.122 nm)	0.001226	ppm	0.000075	6.13	-33.094700	Y 377.433
Tl (190.794 nm)	0.001266	ppm	0.000469	37.05	-0.504166	Y 377.433
U (409.013 nm)	0.010597	ppm	0.000243	2.30	-6.368170	Y 377.433
V (292.401 nm)	-0.000397 u	ppm	0.000042	10.47	3.803070	Y 377.433
Zn (206.200 nm)	-0.001273 u	ppm	0.000074	5.78	2.567240	Y 377.433
Zr (343.823 nm)	-0.000284 u	ppm	0.000023	8.02	-22.486400	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	3.800412	31857.891135	0.193094	5.08
Y 377.433	3.596457	1630524.075308	0.178386	4.96
Y_R 377.433	3.373650	116388.000000	0.181271	5.37
Y_R 488.368	3.461720	65228.600000	0.171606	4.96
Y_R2 488.368	3.424225	113406.118740	0.070166	2.05

Sample Name: LCS 280-591243/2-B

Date: 10/27/2022 8:49:15 PM Rack:Tube: 1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000297	ppm	0.000007	2.48	-362.703135	Y 377.433
Ag (328.068 nm)	0.000368 n	ppm	0.000045	12.28	-139.476000	Y 377.433
Al (167.019 nm)	-0.000984 u	ppm	0.000434	44.11	0.224269	Y_R 377.433
Al H (396.152 nm)	-0.007347 u	ppm	0.001162	15.82	3.215262	Y_R 377.433
As (188.980 nm)	0.001900	ppm	0.000149	7.83	-1.083940	Y 242.219
B (249.678 nm)	-0.001969 u	ppm	0.000122	6.21	24.809000	Y 242.219
Ba (493.408 nm)	-0.000375 u	ppm	0.000024	6.28	7.697770	Y_R 488.368
Be (234.861 nm)	0.000012	ppm	0.000007	63.68	-13.412000	Y_R 488.368
Bi (223.061 nm)	-0.005057 u	ppm	0.000534	10.55	4.639720	Y 377.433
Ca (315.887 nm)	0.011816	ppm	0.000475	4.02	3.159335	Y_R 377.433
Cd (214.439 nm)	0.000047	ppm	0.000016	33.97	-2.654330	Y 377.433
Co (228.615 nm)	0.000448	ppm	0.000031	6.85	-5.571720	Y 242.219
Cr (205.560 nm)	-0.000438 u	ppm	0.000026	6.00	0.619779	Y 377.433
Cu (324.754 nm)	-0.016460 u	ppm	0.000259	1.57	253.844000	Y 377.433
Fe (238.204 nm)	-0.002745 u	ppm	0.000295	10.75	2.856528	Y_R 377.433
Fe H (259.940 nm)	-0.006576 u	ppm	0.000266	4.04	2.474590	Y_R 377.433
K (766.491 nm)	0.571064	ppm	0.033873	5.93	-220.620000	Y_R2 488.368
Li (670.783 nm)	0.026217	ppm	0.000400	1.52	-265.806000	Y_R2 488.368
Mg (279.078 nm)	-0.005946 u	ppm	0.000273	4.59	7.728400	Y 377.433
Mn (257.610 nm)	-0.000259 u	ppm	0.000005	2.00	13.884600	Y 377.433
Mo (202.032 nm)	-0.000263 u	ppm	0.000161	61.35	2.809480	Y 377.433
Na (589.592 nm)	-0.031674 u	ppm	0.002896	9.14	26.028500	Y_R2 488.368
Na H (589.593 nm)	0.906318 u	ppm	0.003962	0.44	340.968026	Y_R 488.368
Ni (231.604 nm)	-0.000615 u	ppm	0.000150	24.44	1.530400	Y 377.433
P (213.618 nm)	-0.002867 u	ppm	0.000781	27.23	3.834930	Y 242.219
Pb (220.353 nm)	0.000550	ppm	0.000255	46.32	-2.138050	Y 242.219
S (181.972 nm)	-0.006770 u	ppm	0.001315	19.43	1.133358	Y 377.433
Sb (206.834 nm)	0.002204	ppm	0.000329	14.93	-1.349840	Y 377.433
Se (196.026 nm)	-0.003787 u	ppm	0.000633	16.72	2.397070	Y 242.219
Si (288.158 nm)	-0.075508 u	ppm	0.002316	3.07	161.765000	Y 377.433
Sn (189.925 nm)	-0.002107 u	ppm	0.000059	2.82	0.874470	Y 377.433
Sr (421.552 nm)	-0.000190 u	ppm	0.000036	18.81	16.007337	Y_R 488.368
Th (288.505 nm)	-0.029049 u	ppm	0.000776	2.67	17.164000	Y 377.433
Ti (336.122 nm)	0.000997	ppm	0.000010	1.05	-67.281900	Y 377.433
Tl (190.794 nm)	0.000829	ppm	0.000190	22.92	-1.465950	Y 377.433
U (409.013 nm)	0.011207	ppm	0.000522	4.65	-3.284260	Y 377.433
V (292.401 nm)	-0.000382 u	ppm	0.000099	25.84	4.155070	Y 377.433
Zn (206.200 nm)	-0.001442 u	ppm	0.000076	5.29	1.665310	Y 377.433
Zr (343.823 nm)	-0.000375 u	ppm	0.000023	6.11	-34.892000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	3.834149	32140.693761	0.221676	5.78
Y 377.433	3.627453	1644576.597029	0.203419	5.61
Y_R 377.433	3.461770	119428.000000	0.202151	5.84
Y_R 488.368	3.517710	66283.700000	0.229706	6.53
Y_R2 488.368	3.500561	115934.262011	0.034819	0.99

Sample Name: 280-167882-B-2-B

Date: 10/27/2022 8:53:17 PM Rack:Tube: 1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000302	ppm	0.000006	1.93	-350.172181	Y 377.433
Ag (328.068 nm)	0.000353 n	ppm	0.000033	9.27	-140.282000	Y 377.433
Al (167.019 nm)	-0.001236 u	ppm	0.000949	76.77	0.112176	Y_R 377.433
Al H (396.152 nm)	-0.006683 u	ppm	0.001296	19.40	5.054024	Y_R 377.433
As (188.980 nm)	0.001921	ppm	0.000302	15.70	-1.056480	Y 242.219
B (249.678 nm)	-0.001999 u	ppm	0.000050	2.51	23.963400	Y 242.219
Ba (493.408 nm)	-0.000396 u	ppm	0.000016	4.01	5.291850	Y_R 488.368
Be (234.861 nm)	0.000015	ppm	0.000004	27.83	-12.366900	Y_R 488.368
Bi (223.061 nm)	-0.004812 u	ppm	0.000420	8.73	5.255800	Y 377.433
Ca (315.887 nm)	0.011686	ppm	0.002262	19.36	3.038396	Y_R 377.433
Cd (214.439 nm)	0.000042	ppm	0.000016	38.81	-2.939130	Y 377.433
Co (228.615 nm)	0.000492	ppm	0.000053	10.71	-4.742510	Y 242.219
Cr (205.560 nm)	-0.000441 u	ppm	0.000035	7.89	0.574051	Y 377.433
Cu (324.754 nm)	-0.016414 u	ppm	0.000205	1.25	257.316000	Y 377.433
Fe (238.204 nm)	-0.002867 u	ppm	0.000175	6.11	2.426355	Y_R 377.433
Fe H (259.940 nm)	-0.006998 u	ppm	0.000560	8.00	1.597410	Y_R 377.433
K (766.491 nm)	0.571794	ppm	0.012898	2.26	-219.893000	Y_R2 488.368
Li (670.783 nm)	0.025635	ppm	0.000478	1.86	-285.329000	Y_R2 488.368
Mg (279.078 nm)	-0.005922 u	ppm	0.000259	4.37	7.890940	Y 377.433
Mn (257.610 nm)	-0.000270 u	ppm	0.000006	2.39	11.062900	Y 377.433
Mo (202.032 nm)	-0.000304 u	ppm	0.000059	19.52	2.456540	Y 377.433
Na (589.592 nm)	-0.032575 u	ppm	0.002589	7.95	20.591700	Y_R2 488.368
Na H (589.593 nm)	0.905478 u	ppm	0.003436	0.38	337.586969	Y_R 488.368
Ni (231.604 nm)	-0.000766 u	ppm	0.000047	6.13	0.471309	Y 377.433
P (213.618 nm)	-0.002933 u	ppm	0.000423	14.42	3.679110	Y 242.219
Pb (220.353 nm)	0.000715	ppm	0.000512	71.67	-1.682320	Y 242.219
S (181.972 nm)	-0.005055 u	ppm	0.000818	16.18	1.957146	Y 377.433
Sb (206.834 nm)	0.002024	ppm	0.000371	18.36	-1.800510	Y 377.433
Se (196.026 nm)	-0.005226 u	ppm	0.000248	4.75	0.963107	Y 242.219
Si (288.158 nm)	-0.075511 u	ppm	0.001873	2.48	161.728000	Y 377.433
Sn (189.925 nm)	-0.002134 u	ppm	0.000178	8.36	0.817754	Y 377.433
Sr (421.552 nm)	-0.000231 u	ppm	0.000002	1.02	6.694344	Y_R 488.368
Th (288.505 nm)	-0.029354 u	ppm	0.000471	1.60	16.295000	Y 377.433
Ti (336.122 nm)	0.000942	ppm	0.000019	2.01	-75.534200	Y 377.433
Tl (190.794 nm)	0.000750	ppm	0.000208	27.67	-1.639070	Y 377.433
U (409.013 nm)	0.010713	ppm	0.001212	11.31	-5.769100	Y 377.433
V (292.401 nm)	-0.000386 u	ppm	0.000023	5.97	4.045850	Y 377.433
Zn (206.200 nm)	-0.001398 u	ppm	0.000060	4.31	1.898350	Y 377.433
Zr (343.823 nm)	-0.000401 u	ppm	0.000005	1.23	-38.389900	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	3.857588	32337.177680	0.162674	4.22
Y 377.433	3.649542	1654591.090414	0.149248	4.09
Y_R 377.433	3.410350	117654.000000	0.217745	6.38
Y_R 488.368	3.370580	63511.200000	0.214049	6.35
Y_R2 488.368	3.410185	112941.112082	0.035774	1.05

Sample Name: CCVH-7429327

Date: 10/27/2022 8:57:20 PM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000032	ppm	0.000009	26.67	-972.243599	Y 377.433
Ag (328.068 nm)	0.001945	ppm	0.000166	8.52	-136.624000	Y 377.433
Al (167.019 nm)	49.847400 o	ppm	0.223321	0.45	22274.900000	Y_R 377.433
Al H (396.152 nm)	51.413936	ppm	0.069044	0.13	142718.824804	Y_R 377.433
As (188.980 nm)	-0.000521 u	ppm	0.002198	> 100.00	-4.230910	Y 242.219
B (249.678 nm)	0.001493	ppm	0.000153	10.27	19.150300	Y 242.219
Ba (493.408 nm)	0.000481	ppm	0.000349	72.54	148.741000	Y_R 488.368
Be (234.861 nm)	0.000118	ppm	0.000043	36.13	819.494000	Y_R 488.368
Bi (223.061 nm)	-0.000439 u	ppm	0.001878	> 100.00	16.231500	Y 377.433
Ca (315.887 nm)	-0.015863 u	ppm	0.007321	46.15	-22.463869	Y_R 377.433
Cd (214.439 nm)	-0.000176 u	ppm	0.000025	14.09	35.007400	Y 377.433
Co (228.615 nm)	-0.000109 u	ppm	0.000101	92.51	-16.097400	Y 242.219
Cr (205.560 nm)	0.000754	ppm	0.000160	21.16	4.343320	Y 377.433
Cu (324.754 nm)	0.002567	ppm	0.000177	6.91	2804.060000	Y 377.433
Fe (238.204 nm)	51.128292 o	ppm	0.195096	0.38	180714.124323	Y_R 377.433
Fe H (259.940 nm)	51.994300	ppm	0.135167	0.26	108303.000000	Y_R 377.433
K (766.491 nm)	0.001176 u	ppm	0.061950	> 100.00	-788.714000	Y_R2 488.368
Li (670.783 nm)	0.004781	ppm	0.002845	59.51	-984.912000	Y_R2 488.368
Mg (279.078 nm)	-0.009474 u	ppm	0.001084	11.44	-179.740000	Y 377.433
Mn (257.610 nm)	0.000262	ppm	0.000022	8.22	139.845000	Y 377.433
Mo (202.032 nm)	-0.000114 u	ppm	0.000489	> 100.00	4.082640	Y 377.433
Na (589.592 nm)	252.676000	ppm	2.051230	0.81	1523360.000000	Y_R2 488.368
Na H (589.593 nm)	247.328169	ppm	0.534840	0.22	991598.810618	Y_R 488.368
Ni (231.604 nm)	-0.000801 u	ppm	0.000269	33.51	9.047320	Y 377.433
P (213.618 nm)	5.003630	ppm	0.013284	0.27	11812.200000	Y 242.219
Pb (220.353 nm)	-0.005468 u	ppm	0.000551	10.08	-25.704700	Y 242.219
S (181.972 nm)	5.059811	ppm	0.006225	0.12	2435.642275	Y 377.433
Sb (206.834 nm)	0.002400	ppm	0.001060	44.16	-17.451700	Y 377.433
Se (196.026 nm)	0.000340 u	ppm	0.003576	> 100.00	-2.213300	Y 242.219
Si (288.158 nm)	0.012742	ppm	0.001475	11.58	984.047000	Y 377.433
Sn (189.925 nm)	0.000025 u	ppm	0.001166	> 100.00	5.405380	Y 377.433
Sr (421.552 nm)	0.000651	ppm	0.000027	4.17	204.299291	Y_R 488.368
Th (288.505 nm)	5.108980	ppm	0.049568	0.97	14452.900000	Y 377.433
Ti (336.122 nm)	0.000634	ppm	0.000107	16.97	-121.525000	Y 377.433
Tl (190.794 nm)	-0.001236 u	ppm	0.000756	61.12	-7.400580	Y 377.433
U (409.013 nm)	2.531490	ppm	0.005613	0.22	12732.300000	Y 377.433
V (292.401 nm)	-0.000990 u	ppm	0.000256	25.83	312.580000	Y 377.433
Zn (206.200 nm)	0.001014	ppm	0.000041	4.01	14.770800	Y 377.433
Zr (343.823 nm)	0.009593	ppm	0.000213	2.22	1485.720000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.959910	8046.681981	0.009249	0.96
Y 377.433	0.921929	417974.694550	0.009119	0.99
Y_R 377.433	0.959940	33117.100000	0.003894	0.41
Y_R 488.368	0.978227	18432.600000	0.003639	0.37
Y_R2 488.368	0.953518	31579.325530	0.004147	0.43

Sample Name: CCV-7429326

Date: 10/27/2022 9:01:23 PM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.467720	ppm	0.000813	0.17	1077176.465494	Y 377.433
Ag (328.068 nm)	0.508489	ppm	0.000647	0.13	26884.000000	Y 377.433
Al (167.019 nm)	0.538615	ppm	0.003019	0.56	242.449000	Y_R 377.433
Al H (396.152 nm)	0.514116 u	ppm	0.003707	0.72	1500.225295	Y_R 377.433
As (188.980 nm)	0.500158	ppm	0.003244	0.65	646.793000	Y 242.219
B (249.678 nm)	0.498839	ppm	0.001459	0.29	13993.500000	Y 242.219
Ba (493.408 nm)	0.503919	ppm	0.000344	0.07	55800.900000	Y_R 488.368
Be (234.861 nm)	0.517933	ppm	0.002404	0.46	144429.000000	Y_R 488.368
Bi (223.061 nm)	1.045670	ppm	0.001395	0.13	2641.850000	Y 377.433
Ca (315.887 nm)	5.276208	ppm	0.010634	0.20	4876.942628	Y_R 377.433
Cd (214.439 nm)	0.524774	ppm	0.001044	0.20	32092.400000	Y 377.433
Co (228.615 nm)	0.513369	ppm	0.001379	0.27	9738.610000	Y 242.219
Cr (205.560 nm)	0.525823	ppm	0.000883	0.17	7841.760000	Y 377.433
Cu (324.754 nm)	0.521383	ppm	0.000448	0.09	38435.200000	Y 377.433
Fe (238.204 nm)	2.565505	ppm	0.005215	0.20	9079.763665	Y_R 377.433
Fe H (259.940 nm)	2.618510 u	ppm	0.010196	0.39	5469.680000	Y_R 377.433
K (766.491 nm)	49.969700	ppm	0.235701	0.47	49022.400000	Y_R2 488.368
Li (670.783 nm)	0.498043	ppm	0.000378	0.08	15562.100000	Y_R2 488.368
Mg (279.078 nm)	20.608600	ppm	0.035209	0.17	124498.000000	Y 377.433
Mn (257.610 nm)	0.522920	ppm	0.000488	0.09	126624.000000	Y 377.433
Mo (202.032 nm)	0.525867	ppm	0.001711	0.33	4509.940000	Y 377.433
Na (589.592 nm)	25.841000	ppm	0.077840	0.30	156690.000000	Y_R2 488.368
Na H (589.593 nm)	25.979315	ppm	0.087032	0.34	101741.465194	Y_R 488.368
Ni (231.604 nm)	0.531255	ppm	0.000643	0.12	3736.460000	Y 377.433
P (213.618 nm)	0.006239	ppm	0.002905	46.56	25.313900	Y 242.219
Pb (220.353 nm)	0.503647	ppm	0.002325	0.46	1393.370000	Y 242.219
S (181.972 nm)	-0.006187 u	ppm	0.004782	77.30	2.629861	Y 377.433
Sb (206.834 nm)	0.524011	ppm	0.000645	0.12	1320.320000	Y 377.433
Se (196.026 nm)	0.497869	ppm	0.004373	0.88	502.558000	Y 242.219
Si (288.158 nm)	5.113920	ppm	0.009060	0.18	48590.000000	Y 377.433
Sn (189.925 nm)	0.526177	ppm	0.002146	0.41	1123.440000	Y 377.433
Sr (421.552 nm)	0.499169	ppm	0.001487	0.30	111846.312413	Y_R 488.368
Th (288.505 nm)	0.036933	ppm	0.012102	32.77	211.986000	Y 377.433
Ti (336.122 nm)	0.510751	ppm	0.000269	0.05	76060.900000	Y 377.433
Tl (190.794 nm)	0.524784	ppm	0.002023	0.39	1150.730000	Y 377.433
U (409.013 nm)	0.006468	ppm	0.002685	41.51	-70.144300	Y 377.433
V (292.401 nm)	0.520903	ppm	0.000455	0.09	21248.500000	Y 377.433
Zn (206.200 nm)	0.527101	ppm	0.001548	0.29	2822.570000	Y 377.433
Zr (343.823 nm)	0.506356	ppm	0.003960	0.78	69262.100000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.956762	8020.294424	0.001026	0.11
Y 377.433	0.925444	419568.190985	0.001545	0.17
Y_R 377.433	0.966197	33333.000000	0.005659	0.59
Y_R 488.368	0.987131	18600.300000	0.006180	0.63
Y_R2 488.368	0.951203	31502.672024	0.007032	0.74

Sample Name: CCB

Date: 10/27/2022 9:05:35 PM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	-0.000005 u	ppm	0.000007	> 100.00	-1057.386654	Y 377.433
Ag (328.068 nm)	0.000669	ppm	0.000173	25.80	-123.767000	Y 377.433
Al (167.019 nm)	0.001646	ppm	0.000620	37.65	1.400120	Y_R 377.433
Al H (396.152 nm)	-0.006860 u	ppm	0.003941	57.45	4.719503	Y_R 377.433
As (188.980 nm)	-0.000133 u	ppm	0.001723	> 100.00	-3.726970	Y 242.219
B (249.678 nm)	0.000721	ppm	0.000124	17.23	99.708100	Y 242.219
Ba (493.408 nm)	-0.000165 u	ppm	0.000406	> 100.00	30.896300	Y_R 488.368
Be (234.861 nm)	-0.000027 u	ppm	0.000011	41.91	-24.225600	Y_R 488.368
Bi (223.061 nm)	-0.001588 u	ppm	0.001095	68.99	13.347200	Y 377.433
Ca (315.887 nm)	0.009666	ppm	0.004058	41.98	1.169031	Y_R 377.433
Cd (214.439 nm)	-0.000025 u	ppm	0.000058	> 100.00	-7.019810	Y 377.433
Co (228.615 nm)	-0.000244 u	ppm	0.000205	83.87	-18.672100	Y 242.219
Cr (205.560 nm)	-0.000069 u	ppm	0.000129	> 100.00	6.123220	Y 377.433
Cu (324.754 nm)	0.001295	ppm	0.000089	6.85	1517.450000	Y 377.433
Fe (238.204 nm)	0.000519 u	ppm	0.001556	> 100.00	14.392411	Y_R 377.433
Fe H (259.940 nm)	-0.003253 u	ppm	0.001384	42.54	9.396680	Y_R 377.433
K (766.491 nm)	0.004498 u	ppm	0.063680	> 100.00	-785.403000	Y_R2 488.368
Li (670.783 nm)	0.004989	ppm	0.001973	39.54	-977.930000	Y_R2 488.368
Mg (279.078 nm)	-0.002019 u	ppm	0.000605	29.97	31.001500	Y 377.433
Mn (257.610 nm)	-0.000108 u	ppm	0.000012	10.78	50.286700	Y 377.433
Mo (202.032 nm)	0.001303	ppm	0.000642	49.29	16.219600	Y 377.433
Na (589.592 nm)	-0.004872 u	ppm	0.010379	> 100.00	188.064000	Y_R2 488.368
Na H (589.593 nm)	1.248214 u	ppm	0.001574	0.13	1716.649118	Y_R 488.368
Ni (231.604 nm)	-0.000145 u	ppm	0.000569	> 100.00	4.833230	Y 377.433
P (213.618 nm)	0.002154	ppm	0.001878	87.15	15.678700	Y 242.219
Pb (220.353 nm)	-0.000660 u	ppm	0.000756	> 100.00	-5.467170	Y 242.219
S (181.972 nm)	0.006253 u	ppm	0.009487	> 100.00	7.391054	Y 377.433
Sb (206.834 nm)	-0.000370 u	ppm	0.000887	> 100.00	-7.849100	Y 377.433
Se (196.026 nm)	0.001429	ppm	0.001693	> 100.00	7.597840	Y 242.219
Si (288.158 nm)	0.002758	ppm	0.000202	7.32	890.976000	Y 377.433
Sn (189.925 nm)	0.000570 u	ppm	0.000761	> 100.00	6.563450	Y 377.433
Sr (421.552 nm)	-0.000030 u	ppm	0.000063	> 100.00	51.660608	Y_R 488.368
Th (288.505 nm)	0.002291	ppm	0.002795	> 100.00	105.231000	Y 377.433
Ti (336.122 nm)	-0.000050 u	ppm	0.000045	90.11	-223.559000	Y 377.433
Tl (190.794 nm)	0.000438 u	ppm	0.000625	> 100.00	-2.333230	Y 377.433
U (409.013 nm)	0.006325	ppm	0.004286	67.77	-27.956300	Y 377.433
V (292.401 nm)	-0.000094 u	ppm	0.000267	> 100.00	16.637600	Y 377.433
Zn (206.200 nm)	-0.000309 u	ppm	0.000080	25.84	7.711820	Y 377.433
Zr (343.823 nm)	0.000136	ppm	0.000071	52.07	34.951700	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.961549	8060.418447	0.003115	0.32
Y 377.433	0.932796	422901.178593	0.002492	0.27
Y_R 377.433	0.976543	33689.900000	0.002301	0.24
Y_R 488.368	0.992570	18702.800000	0.000220	0.02
Y_R2 488.368	0.960785	31820.001584	0.003639	0.38

Sample Name: CCVL-7434568

Date: 10/27/2022 9:09:37 PM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014724	ppm	0.000052	0.35	32896.956239	Y 377.433
Ag (328.068 nm)	0.010604	ppm	0.000047	0.44	403.852000	Y 377.433
Al (167.019 nm)	0.108668	ppm	0.002936	2.70	49.219300	Y_R 377.433
Al H (396.152 nm)	0.100910 u	ppm	0.001565	1.55	305.631428	Y_R 377.433
As (188.980 nm)	0.012307	ppm	0.002434	19.78	12.448800	Y 242.219
B (249.678 nm)	0.099978	ppm	0.000230	0.23	2864.490000	Y 242.219
Ba (493.408 nm)	0.010258	ppm	0.000260	2.53	1184.090000	Y_R 488.368
Be (234.861 nm)	0.001024	ppm	0.000016	1.53	269.162000	Y_R 488.368
Bi (223.061 nm)	-0.000095 Qu	ppm	0.001272	> 100.00	17.094800 Q	Y 377.433
Ca (315.887 nm)	0.223068	ppm	0.002466	1.11	198.725998	Y_R 377.433
Cd (214.439 nm)	0.005170	ppm	0.000059	1.13	310.843000	Y 377.433
Co (228.615 nm)	0.010353	ppm	0.000081	0.78	182.591000	Y 242.219
Cr (205.560 nm)	0.010444	ppm	0.000172	1.65	162.808000	Y 377.433
Cu (324.754 nm)	0.017764	ppm	0.000124	0.70	2685.180000	Y 377.433
Fe (238.204 nm)	0.104038	ppm	0.000954	0.92	380.258806	Y_R 377.433
Fe H (259.940 nm)	0.105182 u	ppm	0.002631	2.50	235.230000	Y_R 377.433
K (766.491 nm)	3.091680	ppm	0.026379	0.85	2292.050000	Y_R2 488.368
Li (670.783 nm)	0.024941	ppm	0.001385	5.55	-308.621000	Y_R2 488.368
Mg (279.078 nm)	0.207675	ppm	0.001340	0.65	1295.780000	Y 377.433
Mn (257.610 nm)	0.010528	ppm	0.000026	0.25	2624.290000	Y 377.433
Mo (202.032 nm)	0.020399	ppm	0.000243	1.19	179.808000	Y 377.433
Na (589.592 nm)	1.080190	ppm	0.006156	0.57	6743.580000	Y_R2 488.368
Na H (589.593 nm)	2.247546 u	ppm	0.014466	0.64	5747.900600	Y_R 488.368
Ni (231.604 nm)	0.044396	ppm	0.000361	0.81	317.554000	Y 377.433
P (213.618 nm)	2.900780	ppm	0.015820	0.55	6852.400000	Y 242.219
Pb (220.353 nm)	0.008865	ppm	0.000821	9.26	21.022200	Y 242.219
S (181.972 nm)	0.101068	ppm	0.002510	2.48	52.974425	Y 377.433
Sb (206.834 nm)	0.021569	ppm	0.000792	3.67	47.356300	Y 377.433
Se (196.026 nm)	0.019594	ppm	0.003230	16.49	25.701500	Y 242.219
Si (288.158 nm)	0.495530	ppm	0.003603	0.73	5483.060000	Y 377.433
Sn (189.925 nm)	0.106210	ppm	0.001336	1.26	231.041000	Y 377.433
Sr (421.552 nm)	0.009989	ppm	0.000038	0.38	2295.470958	Y_R 488.368
Th (288.505 nm)	0.015479	ppm	0.000461	2.97	143.684000	Y 377.433
Ti (336.122 nm)	0.009869	ppm	0.000036	0.36	1258.050000	Y 377.433
Tl (190.794 nm)	0.015954	ppm	0.001849	11.59	31.784000	Y 377.433
U (409.013 nm)	0.068396	ppm	0.002673	3.91	283.331000	Y 377.433
V (292.401 nm)	0.009976	ppm	0.000032	0.32	424.527000	Y 377.433
Zn (206.200 nm)	0.022211	ppm	0.000954	4.29	127.905000	Y 377.433
Zr (343.823 nm)	0.013097 Q	ppm	0.000142	1.09	1807.520000 Q	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.975153	8174.458164	0.009541	0.98
Y 377.433	0.945631	428720.263048	0.010077	1.07
Y_R 377.433	0.987013	34051.100000	0.008406	0.85
Y_R 488.368	1.003040	18900.200000	0.010744	1.07
Y_R2 488.368	0.966175	31998.529892	0.006655	0.69

Sample Name: MB 280-591243/1-B

Date: 10/27/2022 9:13:40 PM Rack:Tube: 1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000011	ppm	0.000007	60.03	-1021.300982	Y 377.433
Ag (328.068 nm)	0.000498 n	ppm	0.000254	50.89	-132.963000	Y 377.433
Al (167.019 nm)	0.001605	ppm	0.001611	> 100.00	1.384020	Y_R 377.433
Al H (396.152 nm)	0.000303 u	ppm	0.004797	> 100.00	24.494650	Y_R 377.433
As (188.980 nm)	0.000781 u	ppm	0.001611	> 100.00	-2.538420	Y 242.219
B (249.678 nm)	0.000706	ppm	0.000109	15.44	99.302200	Y 242.219
Ba (493.408 nm)	-0.000104 u	ppm	0.000212	> 100.00	37.590700	Y_R 488.368
Be (234.861 nm)	-0.000037 u	ppm	0.000016	44.14	-26.971700	Y_R 488.368
Bi (223.061 nm)	-0.004089 u	ppm	0.000444	10.85	7.069610	Y 377.433
Ca (315.887 nm)	0.027353	ppm	0.007891	28.85	17.542577	Y_R 377.433
Cd (214.439 nm)	-0.000065 u	ppm	0.000026	40.06	-9.466230	Y 377.433
Co (228.615 nm)	-0.000227 u	ppm	0.000242	> 100.00	-18.353300	Y 242.219
Cr (205.560 nm)	0.000319	ppm	0.000098	30.61	11.913900	Y 377.433
Cu (324.754 nm)	0.001488	ppm	0.000200	13.46	1530.650000	Y 377.433
Fe (238.204 nm)	0.004885	ppm	0.001093	22.37	29.823094	Y_R 377.433
Fe H (259.940 nm)	0.003453 u	ppm	0.001548	44.82	23.363300	Y_R 377.433
K (766.491 nm)	0.025082 u	ppm	0.035238	> 100.00	-764.883000	Y_R2 488.368
Li (670.783 nm)	0.006347	ppm	0.001587	25.01	-932.393000	Y_R2 488.368
Mg (279.078 nm)	0.000476	ppm	0.000153	32.10	46.058600	Y 377.433
Mn (257.610 nm)	0.000000 u	ppm	0.000003	> 100.00	76.438400	Y 377.433
Mo (202.032 nm)	0.000086 u	ppm	0.000458	> 100.00	5.801970	Y 377.433
Na (589.592 nm)	0.006639 u	ppm	0.007685	> 100.00	258.175000	Y_R2 488.368
Na H (589.593 nm)	1.173433 u	ppm	0.004465	0.38	1416.390415	Y_R 488.368
Ni (231.604 nm)	-0.000115 u	ppm	0.000085	73.40	5.038540	Y 377.433
P (213.618 nm)	0.003061	ppm	0.002336	76.30	17.817800	Y 242.219
Pb (220.353 nm)	-0.001754 u	ppm	0.000670	38.20	-8.503980	Y 242.219
S (181.972 nm)	0.010358	ppm	0.002560	24.72	9.363669	Y 377.433
Sb (206.834 nm)	0.001314	ppm	0.000139	10.60	-3.600500	Y 377.433
Se (196.026 nm)	-0.002873 u	ppm	0.002891	> 100.00	3.308380	Y 242.219
Si (288.158 nm)	0.002282	ppm	0.001208	52.95	886.526000	Y 377.433
Sn (189.925 nm)	0.000141 u	ppm	0.000606	> 100.00	5.650760	Y 377.433
Sr (421.552 nm)	0.000039 u	ppm	0.000162	> 100.00	67.190513	Y_R 488.368
Th (288.505 nm)	0.000932	ppm	0.000542	58.12	101.439000	Y 377.433
Ti (336.122 nm)	-0.000139 u	ppm	0.000037	26.57	-236.703000	Y 377.433
Tl (190.794 nm)	0.000469 u	ppm	0.001128	> 100.00	-2.263120	Y 377.433
U (409.013 nm)	0.009049	ppm	0.003783	41.81	-14.213100	Y 377.433
V (292.401 nm)	-0.000063 u	ppm	0.000104	> 100.00	17.651000	Y 377.433
Zn (206.200 nm)	0.002061	ppm	0.000576	27.93	20.361000	Y 377.433
Zr (343.823 nm)	-0.000222 u	ppm	0.000094	42.20	-13.996400	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.969677	8128.554979	0.003978	0.41
Y 377.433	0.942704	427393.326217	0.004099	0.43
Y_R 377.433	0.986416	34030.500000	0.003844	0.39
Y_R 488.368	1.005400	18944.500000	0.006706	0.67
Y_R2 488.368	0.977598	32376.840268	0.002692	0.28

Sample Name: LCS 280-591243/2-B

Date: 10/27/2022 9:17:43 PM Rack:Tube: 1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.986929	ppm	0.002283	0.23	2274095.680601	Y 377.433
Ag (328.068 nm)	0.049921 n	ppm	0.000275	0.55	2523.300000	Y 377.433
Al (167.019 nm)	10.222100 o	ppm	0.033264	0.33	4568.220000	Y_R 377.433
Al H (396.152 nm)	10.227113	ppm	0.030224	0.30	28528.121664	Y_R 377.433
As (188.980 nm)	0.990490	ppm	0.005614	0.57	1284.360000	Y 242.219
B (249.678 nm)	1.987520 o	ppm	0.001618	0.08	55463.900000	Y 242.219
Ba (493.408 nm)	1.009330	ppm	0.004903	0.49	111723.000000	Y_R 488.368
Be (234.861 nm)	1.040030	ppm	0.005269	0.51	290106.000000	Y_R 488.368
Bi (223.061 nm)	-0.003135 u	ppm	0.001894	60.39	9.463190	Y 377.433
Ca (315.887 nm)	51.623686 o	ppm	0.114132	0.22	47782.755728	Y_R 377.433
Cd (214.439 nm)	1.020790	ppm	0.003342	0.33	62436.600000	Y 377.433
Co (228.615 nm)	0.984396	ppm	0.001643	0.17	18688.700000	Y 242.219
Cr (205.560 nm)	1.017130	ppm	0.004525	0.44	15160.300000	Y 377.433
Cu (324.754 nm)	1.019970	ppm	0.000453	0.04	73789.500000	Y 377.433
Fe (238.204 nm)	10.161412 o	ppm	0.012449	0.12	35925.805432	Y_R 377.433
Fe H (259.940 nm)	10.343500	ppm	0.026600	0.26	21558.300000	Y_R 377.433
K (766.491 nm)	49.527800	ppm	0.029716	0.06	48581.900000	Y_R2 488.368
Li (670.783 nm)	0.974753	ppm	0.001765	0.18	31553.800000	Y_R2 488.368
Mg (279.078 nm)	51.764400 o	ppm	0.172946	0.33	312639.000000	Y 377.433
Mn (257.610 nm)	1.043930	ppm	0.001861	0.18	252709.000000	Y 377.433
Mo (202.032 nm)	1.056920	ppm	0.000934	0.09	9059.230000	Y 377.433
Na (589.592 nm)	51.318400	ppm	0.068114	0.13	310972.000000	Y_R2 488.368
Na H (589.593 nm)	50.241455	ppm	0.171590	0.34	199881.243649	Y_R 488.368
Ni (231.604 nm)	1.015750	ppm	0.004037	0.40	7139.660000	Y 377.433
P (213.618 nm)	20.459700 o	ppm	0.037435	0.18	48267.000000	Y 242.219
Pb (220.353 nm)	0.995664	ppm	0.000835	0.08	2755.140000	Y 242.219
S (181.972 nm)	19.903343 o	ppm	0.036219	0.18	9570.434965	Y 377.433
Sb (206.834 nm)	1.110030 o	ppm	0.003086	0.28	2801.210000	Y 377.433
Se (196.026 nm)	0.999481	ppm	0.004921	0.49	1001.880000	Y 242.219
Si (288.158 nm)	9.990480	ppm	0.024537	0.25	94104.200000	Y 377.433
Sn (189.925 nm)	1.044530	ppm	0.003866	0.37	2224.900000	Y 377.433
Sr (421.552 nm)	0.992391	ppm	0.004403	0.44	222302.299474	Y_R 488.368
Th (288.505 nm)	0.013192	ppm	0.003001	22.75	155.010000	Y 377.433
Ti (336.122 nm)	1.025140	ppm	0.001224	0.12	153012.000000	Y 377.433
Tl (190.794 nm)	1.032980	ppm	0.003869	0.37	2267.900000	Y 377.433
U (409.013 nm)	0.003671	ppm	0.000463	12.61	-130.850000	Y 377.433
V (292.401 nm)	1.040280	ppm	0.001300	0.12	42417.500000	Y 377.433
Zn (206.200 nm)	1.029960	ppm	0.003261	0.32	5506.390000	Y 377.433
Zr (343.823 nm)	1.014250	ppm	0.001287	0.13	138733.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.946424	7933.631223	0.004561	0.48
Y 377.433	0.918229	416296.929845	0.005664	0.62
Y_R 377.433	0.964637	33279.100000	0.003769	0.39
Y_R 488.368	0.984033	18542.000000	0.004208	0.43
Y_R2 488.368	0.954541	31613.217628	0.001503	0.16

Sample Name: 280-167882-B-2-B

Date: 10/27/2022 9:21:46 PM Rack:Tube: 1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014465	ppm	0.000019	0.13	32299.939859	Y 377.433
Ag (328.068 nm)	0.000624 n	ppm	0.000176	28.29	-126.326000	Y 377.433
Al (167.019 nm)	0.004892	ppm	0.001621	33.15	2.855210	Y_R 377.433
Al H (396.152 nm)	0.013653 u	ppm	0.003008	22.03	83.580517	Y_R 377.433
As (188.980 nm)	0.002153	ppm	0.001230	57.12	-0.754052	Y 242.219
B (249.678 nm)	0.023930	ppm	0.000335	1.40	746.091000	Y 242.219
Ba (493.408 nm)	0.148965	ppm	0.000209	0.14	16530.100000	Y_R 488.368
Be (234.861 nm)	-0.000040 u	ppm	0.000015	38.59	-27.772700	Y_R 488.368
Bi (223.061 nm)	-0.000355 u	ppm	0.001029	> 100.00	16.441300	Y 377.433
Ca (315.887 nm)	44.682857 o	ppm	0.067957	0.15	41356.703152	Y_R 377.433
Cd (214.439 nm)	-0.000059 u	ppm	0.000040	66.64	-9.115020	Y 377.433
Co (228.615 nm)	-0.000369 u	ppm	0.000080	21.69	-21.046900	Y 242.219
Cr (205.560 nm)	0.001245	ppm	0.000113	9.11	25.708600	Y 377.433
Cu (324.754 nm)	0.001684	ppm	0.000166	9.85	1511.210000	Y 377.433
Fe (238.204 nm)	0.012491	ppm	0.001079	8.64	56.706345	Y_R 377.433
Fe H (259.940 nm)	0.009836 u	ppm	0.001525	15.51	36.656300	Y_R 377.433
K (766.491 nm)	2.020490	ppm	0.069612	3.45	1224.240000	Y_R2 488.368
Li (670.783 nm)	0.023013	ppm	0.002151	9.35	-373.315000	Y_R2 488.368
Mg (279.078 nm)	11.081100	ppm	0.026359	0.24	66963.700000	Y 377.433
Mn (257.610 nm)	0.000399	ppm	0.000026	6.45	173.133000	Y 377.433
Mo (202.032 nm)	0.003837	ppm	0.000252	6.57	37.928000	Y 377.433
Na (589.592 nm)	18.544200	ppm	0.058119	0.31	112210.000000	Y_R2 488.368
Na H (589.593 nm)	19.082389	ppm	0.053175	0.28	73616.636688	Y_R 488.368
Ni (231.604 nm)	-0.001179 u	ppm	0.000291	24.70	-2.426120	Y 377.433
P (213.618 nm)	0.014802	ppm	0.001107	7.48	45.508400	Y 242.219
Pb (220.353 nm)	-0.000935 u	ppm	0.000859	91.83	-6.257150	Y 242.219
S (181.972 nm)	17.571409 o	ppm	0.055158	0.31	8447.502381	Y 377.433
Sb (206.834 nm)	0.000824	ppm	0.000339	41.11	-4.822240	Y 377.433
Se (196.026 nm)	-0.000289 u	ppm	0.002013	> 100.00	5.883750	Y 242.219
Si (288.158 nm)	10.509100	ppm	0.044258	0.42	98766.700000	Y 377.433
Sn (189.925 nm)	0.000484 u	ppm	0.001216	> 100.00	6.378870	Y 377.433
Sr (421.552 nm)	0.376636	ppm	0.000750	0.20	84405.329941	Y_R 488.368
Th (288.505 nm)	0.003146 u	ppm	0.004349	> 100.00	107.649000	Y 377.433
Ti (336.122 nm)	0.000067 u	ppm	0.000097	> 100.00	-64.281300	Y 377.433
Tl (190.794 nm)	0.000302 u	ppm	0.001539	> 100.00	-2.639980	Y 377.433
U (409.013 nm)	0.007356	ppm	0.005298	72.02	-32.462000	Y 377.433
V (292.401 nm)	0.002698	ppm	0.000169	6.26	131.296000	Y 377.433
Zn (206.200 nm)	0.003718	ppm	0.000109	2.92	29.207100	Y 377.433
Zr (343.823 nm)	0.001754	ppm	0.000231	13.14	256.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.968122	8115.523927	0.005984	0.62
Y 377.433	0.943336	427679.752175	0.005655	0.60
Y_R 377.433	0.993593	34278.100000	0.003958	0.40
Y_R 488.368	1.009650	19024.700000	0.003988	0.39
Y_R2 488.368	0.975807	32317.509586	0.005338	0.55

Sample Name: 280-167882-B-3-B

Date: 10/27/2022 9:25:48 PM Rack:Tube: 1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.013553	ppm	0.000010	0.08	30196.997153	Y 377.433
Ag (328.068 nm)	0.000672 n	ppm	0.000148	22.07	-124.322000	Y 377.433
Al (167.019 nm)	0.011791	ppm	0.002393	20.30	5.934280	Y_R 377.433
Al H (396.152 nm)	0.018379 u	ppm	0.005348	29.10	94.271461	Y_R 377.433
As (188.980 nm)	0.001232	ppm	0.000939	76.21	-1.951700	Y 242.219
B (249.678 nm)	0.031484	ppm	0.000277	0.88	956.480000	Y 242.219
Ba (493.408 nm)	0.157710	ppm	0.000285	0.18	17497.700000	Y_R 488.368
Be (234.861 nm)	-0.000062 u	ppm	0.000025	40.03	-33.757300	Y_R 488.368
Bi (223.061 nm)	0.000194 u	ppm	0.001969	> 100.00	17.819400	Y 377.433
Ca (315.887 nm)	40.080919 o	ppm	0.028316	0.07	37096.527977	Y_R 377.433
Cd (214.439 nm)	-0.000065 u	ppm	0.000038	58.56	-9.431400	Y 377.433
Co (228.615 nm)	-0.000398 u	ppm	0.000320	80.26	-21.599300	Y 242.219
Cr (205.560 nm)	0.001238	ppm	0.000176	14.23	25.598800	Y 377.433
Cu (324.754 nm)	0.001627	ppm	0.000216	13.30	1510.740000	Y 377.433
Fe (238.204 nm)	0.012722	ppm	0.001816	14.27	57.521003	Y_R 377.433
Fe H (259.940 nm)	0.011134 u	ppm	0.002241	20.13	39.359900	Y_R 377.433
K (766.491 nm)	2.212420	ppm	0.054303	2.45	1415.570000	Y_R2 488.368
Li (670.783 nm)	0.023356	ppm	0.001446	6.19	-361.788000	Y_R2 488.368
Mg (279.078 nm)	9.766170	ppm	0.011835	0.12	59022.900000	Y 377.433
Mn (257.610 nm)	0.000819	ppm	0.000015	1.80	274.685000	Y 377.433
Mo (202.032 nm)	0.001771	ppm	0.000282	15.94	20.232500	Y 377.433
Na (589.592 nm)	20.495900	ppm	0.041394	0.20	123987.000000	Y_R2 488.368
Na H (589.593 nm)	20.786460	ppm	0.032023	0.15	80480.796783	Y_R 488.368
Ni (231.604 nm)	-0.000922 u	ppm	0.000472	51.15	-0.624041	Y 377.433
P (213.618 nm)	0.014491	ppm	0.002625	18.11	44.776900	Y 242.219
Pb (220.353 nm)	-0.001831 u	ppm	0.000602	32.88	-8.745580	Y 242.219
S (181.972 nm)	15.484213 o	ppm	0.054482	0.35	7444.599076	Y 377.433
Sb (206.834 nm)	0.000825	ppm	0.001253	> 100.00	-4.799750	Y 377.433
Se (196.026 nm)	0.001330 u	ppm	0.004214	> 100.00	7.497850	Y 242.219
Si (288.158 nm)	10.753900	ppm	0.097035	0.90	101047.000000	Y 377.433
Sn (189.925 nm)	0.000831	ppm	0.000414	49.78	7.117100	Y 377.433
Sr (421.552 nm)	0.352085	ppm	0.000255	0.07	78907.125337	Y_R 488.368
Th (288.505 nm)	0.003060 u	ppm	0.003974	> 100.00	107.418000	Y 377.433
Ti (336.122 nm)	-0.000103 u	ppm	0.000013	12.37	-104.307000	Y 377.433
Tl (190.794 nm)	0.001310	ppm	0.000216	16.49	-0.414995	Y 377.433
U (409.013 nm)	0.005610	ppm	0.005707	> 100.00	-40.187700	Y 377.433
V (292.401 nm)	0.004693	ppm	0.000113	2.40	213.272000	Y 377.433
Zn (206.200 nm)	0.005838	ppm	0.000511	8.75	40.519800	Y 377.433
Zr (343.823 nm)	0.000921	ppm	0.000115	12.44	142.401000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.959216	8040.863234	0.005295	0.55
Y 377.433	0.934181	423529.073229	0.004554	0.49
Y_R 377.433	0.970820	33492.400000	0.000452	0.05
Y_R 488.368	0.989246	18640.200000	0.000642	0.06
Y_R2 488.368	0.965527	31977.070376	0.004690	0.49

Sample Name: 280-167882-B-3-Bsd@5

Date: 10/27/2022 9:29:50 PM Rack:Tube: 1:5

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.002377	ppm	0.000399	16.79	4431.991881	Y 377.433
Ag (328.068 nm)	0.000730 n	ppm	0.000252	34.57	-120.845000	Y 377.433
Al (167.019 nm)	-0.002188 u	ppm	0.006819	> 100.00	-0.310098	Y_R 377.433
Al H (396.152 nm)	-0.003204 u	ppm	0.003109	97.02	17.698392	Y_R 377.433
As (188.980 nm)	0.001361 u	ppm	0.001485	> 100.00	-1.784400	Y 242.219
B (249.678 nm)	0.006654	ppm	0.000796	11.97	264.964000	Y 242.219
Ba (493.408 nm)	0.023706	ppm	0.000799	3.37	2671.910000	Y_R 488.368
Be (234.861 nm)	-0.000040 u	ppm	0.000006	13.86	-27.779100	Y_R 488.368
Bi (223.061 nm)	-0.000284 u	ppm	0.001322	> 100.00	16.618600	Y 377.433
Ca (315.887 nm)	5.993754	ppm	0.135636	2.26	5540.847997	Y_R 377.433
Cd (214.439 nm)	-0.000018 u	ppm	0.000063	> 100.00	-6.602490	Y 377.433
Co (228.615 nm)	-0.000284 u	ppm	0.000014	4.80	-19.427000	Y 242.219
Cr (205.560 nm)	0.000157	ppm	0.000127	80.58	9.493200	Y 377.433
Cu (324.754 nm)	0.001299	ppm	0.000169	13.04	1512.810000	Y 377.433
Fe (238.204 nm)	0.001887	ppm	0.001042	55.25	19.226047	Y_R 377.433
Fe H (259.940 nm)	-0.003833 u	ppm	0.001899	49.56	8.188750	Y_R 377.433
K (766.491 nm)	0.411393	ppm	0.061303	14.90	-379.788000	Y_R2 488.368
Li (670.783 nm)	0.008580	ppm	0.000727	8.47	-857.470000	Y_R2 488.368
Mg (279.078 nm)	1.983000	ppm	0.315039	15.89	12018.900000	Y 377.433
Mn (257.610 nm)	0.000153	ppm	0.000026	16.92	113.440000	Y 377.433
Mo (202.032 nm)	0.000688	ppm	0.000196	28.51	10.954700	Y 377.433
Na (589.592 nm)	2.973860	ppm	0.017439	0.59	18177.300000	Y_R2 488.368
Na H (589.593 nm)	4.168412 u	ppm	0.083835	2.01	13489.147902	Y_R 488.368
Ni (231.604 nm)	-0.000859 u	ppm	0.000491	57.09	-0.184262	Y 377.433
P (213.618 nm)	0.003665	ppm	0.001847	50.41	19.241200	Y 242.219
Pb (220.353 nm)	-0.000933 u	ppm	0.001013	> 100.00	-6.224300	Y 242.219
S (181.972 nm)	3.095076	ppm	0.502801	16.25	1491.580525	Y 377.433
Sb (206.834 nm)	0.001171 u	ppm	0.002615	> 100.00	-3.965880	Y 377.433
Se (196.026 nm)	0.001708 u	ppm	0.005131	> 100.00	7.875930	Y 242.219
Si (288.158 nm)	2.191760	ppm	0.355669	16.23	21283.400000	Y 377.433
Sn (189.925 nm)	0.001220 u	ppm	0.001265	> 100.00	7.943770	Y 377.433
Sr (421.552 nm)	0.053193	ppm	0.001505	2.83	11970.940899	Y_R 488.368
Th (288.505 nm)	0.000412 u	ppm	0.002279	> 100.00	99.999500	Y 377.433
Ti (336.122 nm)	0.000006 u	ppm	0.000074	> 100.00	-196.265000	Y 377.433
Tl (190.794 nm)	0.001157 u	ppm	0.001291	> 100.00	-0.747828	Y 377.433
U (409.013 nm)	0.011427	ppm	0.005832	51.04	-3.511920	Y 377.433
V (292.401 nm)	0.000815	ppm	0.000143	17.51	53.812800	Y 377.433
Zn (206.200 nm)	0.000721	ppm	0.000178	24.67	13.212400	Y 377.433
Zr (343.823 nm)	-0.000101 u	ppm	0.000076	75.06	2.572960	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.974262	8166.987102	0.002015	0.21
Y 377.433	0.947507	429570.773530	0.002495	0.26
Y_R 377.433	0.989797	34147.200000	0.002161	0.22
Y_R 488.368	1.004950	18936.100000	0.002404	0.24
Y_R2 488.368	0.985732	32646.219067	0.003421	0.35

Sample Name: 780-167882-B-3-C MS

Date: 10/27/2022 9:33:52 PM Rack:Tube: 1:6

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	1.024441	ppm	0.002685	0.26	2360571.886303	Y 377.433
Ag (328.068 nm)	0.049671 n	ppm	0.000124	0.25	2511.800000	Y 377.433
Al (167.019 nm)	10.096100 o	ppm	0.019912	0.20	4511.890000	Y_R 377.433
Al H (396.152 nm)	10.105380	ppm	0.016135	0.16	28209.453950	Y_R 377.433
As (188.980 nm)	0.982008	ppm	0.002377	0.24	1273.330000	Y 242.219
B (249.678 nm)	2.010610 o	ppm	0.003742	0.19	56106.400000	Y 242.219
Ba (493.408 nm)	1.166110 o	ppm	0.006567	0.56	129068.000000	Y_R 488.368
Be (234.861 nm)	1.027740	ppm	0.001838	0.18	286677.000000	Y_R 488.368
Bi (223.061 nm)	-0.005141 u	ppm	0.000538	10.46	4.428310	Y 377.433
Ca (315.887 nm)	90.808845 o	ppm	0.114469	0.13	84057.813895	Y_R 377.433
Cd (214.439 nm)	0.999820	ppm	0.001957	0.20	61153.800000	Y 377.433
Co (228.615 nm)	0.961744	ppm	0.000536	0.06	18259.200000	Y 242.219
Cr (205.560 nm)	1.005170	ppm	0.001781	0.18	14982.200000	Y 377.433
Cu (324.754 nm)	1.015220	ppm	0.000889	0.09	73421.800000	Y 377.433
Fe (238.204 nm)	9.995699 o	ppm	0.019512	0.20	35340.130232	Y_R 377.433
Fe H (259.940 nm)	10.188000	ppm	0.016657	0.16	21234.400000	Y_R 377.433
K (766.491 nm)	51.069700	ppm	0.449889	0.88	50118.900000	Y_R2 488.368
Li (670.783 nm)	0.974125	ppm	0.003540	0.36	31532.700000	Y_R2 488.368
Mg (279.078 nm)	60.962100 o	ppm	0.140933	0.23	368186.000000	Y 377.433
Mn (257.610 nm)	1.028810	ppm	0.001800	0.17	249049.000000	Y 377.433
Mo (202.032 nm)	1.056410	ppm	0.001077	0.10	9054.880000	Y 377.433
Na (589.592 nm)	70.415700	ppm	0.507841	0.72	426309.000000	Y_R2 488.368
Na H (589.593 nm)	70.161673	ppm	0.126738	0.18	280180.903919	Y_R 488.368
Ni (231.604 nm)	1.002110	ppm	0.002365	0.24	7043.890000	Y 377.433
P (213.618 nm)	20.191000 o	ppm	0.033759	0.17	47633.400000	Y 242.219
Pb (220.353 nm)	0.976144	ppm	0.002149	0.22	2700.930000	Y 242.219
S (181.972 nm)	35.773386 o	ppm	0.122404	0.34	17196.007714	Y 377.433
Sb (206.834 nm)	1.113900 o	ppm	0.001312	0.12	2810.570000	Y 377.433
Se (196.026 nm)	0.976744	ppm	0.001561	0.16	979.221000	Y 242.219
Si (288.158 nm)	20.981100 o	ppm	0.103407	0.49	196492.000000	Y 377.433
Sn (189.925 nm)	1.049860	ppm	0.002942	0.28	2236.230000	Y 377.433
Sr (421.552 nm)	1.347160 o	ppm	0.003829	0.28	301751.997152	Y_R 488.368
Th (288.505 nm)	0.014582	ppm	0.005373	36.85	158.988000	Y 377.433
Ti (336.122 nm)	1.026820	ppm	0.000364	0.04	153387.000000	Y 377.433
Tl (190.794 nm)	1.012260	ppm	0.001622	0.16	2222.190000	Y 377.433
U (409.013 nm)	0.000000 u	ppm	0.002310	> 100.00	-158.223000	Y 377.433
V (292.401 nm)	1.033740	ppm	0.002649	0.26	42152.500000	Y 377.433
Zn (206.200 nm)	1.009570	ppm	0.003038	0.30	5397.580000	Y 377.433
Zr (343.823 nm)	1.016880	ppm	0.000402	0.04	139093.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.941022	7888.351675	0.002749	0.29
Y 377.433	0.912581	413736.395083	0.003184	0.35
Y_R 377.433	0.963654	33245.200000	0.001909	0.20
Y_R 488.368	0.980546	18476.300000	0.001772	0.18
Y_R2 488.368	0.953754	31587.167272	0.003093	0.32

Sample Name: 280-167882-B-3-D MSD

Date: 10/27/2022 9:37:54 PM Rack:Tube: 1:7

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	1.035627	ppm	0.002215	0.21	2386358.058346	Y 377.433
Ag (328.068 nm)	0.050369 n	ppm	0.000278	0.55	2548.310000	Y 377.433
Al (167.019 nm)	10.103200 o	ppm	0.025365	0.25	4515.110000	Y_R 377.433
Al H (396.152 nm)	10.182699	ppm	0.031481	0.31	28424.624318	Y_R 377.433
As (188.980 nm)	0.999282	ppm	0.003535	0.35	1295.800000	Y 242.219
B (249.678 nm)	2.042450 o	ppm	0.003606	0.18	56993.700000	Y 242.219
Ba (493.408 nm)	1.166130 o	ppm	0.005517	0.47	129070.000000	Y_R 488.368
Be (234.861 nm)	1.033890	ppm	0.006538	0.63	288394.000000	Y_R 488.368
Bi (223.061 nm)	-0.003370 u	ppm	0.002313	68.65	8.875030	Y 377.433
Ca (315.887 nm)	90.662984 o	ppm	0.203071	0.22	83922.792927	Y_R 377.433
Cd (214.439 nm)	1.011350	ppm	0.002122	0.21	61859.300000	Y 377.433
Co (228.615 nm)	0.974939	ppm	0.001373	0.14	18509.600000	Y 242.219
Cr (205.560 nm)	1.014820	ppm	0.003862	0.38	15126.000000	Y 377.433
Cu (324.754 nm)	1.023750	ppm	0.002548	0.25	74027.700000	Y 377.433
Fe (238.204 nm)	10.067772 o	ppm	0.027213	0.27	35594.856745	Y_R 377.433
Fe H (259.940 nm)	10.285700	ppm	0.034138	0.33	21438.000000	Y_R 377.433
K (766.491 nm)	51.897800	ppm	0.360282	0.69	50944.500000	Y_R2 488.368
Li (670.783 nm)	0.989175	ppm	0.003955	0.40	32037.600000	Y_R2 488.368
Mg (279.078 nm)	61.422300 o	ppm	0.053545	0.09	370965.000000	Y 377.433
Mn (257.610 nm)	1.033250	ppm	0.000906	0.09	250123.000000	Y 377.433
Mo (202.032 nm)	1.063780	ppm	0.001515	0.14	9117.980000	Y 377.433
Na (589.592 nm)	70.732100	ppm	0.322584	0.46	428217.000000	Y_R2 488.368
Na H (589.593 nm)	70.438734	ppm	0.137198	0.19	281295.814851	Y_R 488.368
Ni (231.604 nm)	1.006390	ppm	0.004727	0.47	7073.890000	Y 377.433
P (213.618 nm)	20.464800 o	ppm	0.029526	0.14	48279.000000	Y 242.219
Pb (220.353 nm)	0.987503	ppm	0.002358	0.24	2732.410000	Y 242.219
S (181.972 nm)	35.820726 o	ppm	0.100425	0.28	17218.765506	Y 377.433
Sb (206.834 nm)	1.112300 o	ppm	0.002377	0.21	2806.790000	Y 377.433
Se (196.026 nm)	0.993863	ppm	0.005677	0.57	996.283000	Y 242.219
Si (288.158 nm)	21.008600 o	ppm	0.019334	0.09	196749.000000	Y 377.433
Sn (189.925 nm)	1.053740	ppm	0.002819	0.27	2244.480000	Y 377.433
Sr (421.552 nm)	1.349247 o	ppm	0.004830	0.36	302219.294879	Y_R 488.368
Th (288.505 nm)	0.012801	ppm	0.002944	22.99	153.997000	Y 377.433
Ti (336.122 nm)	1.031320	ppm	0.000675	0.07	154059.000000	Y 377.433
Tl (190.794 nm)	1.016740	ppm	0.003744	0.37	2232.070000	Y 377.433
U (409.013 nm)	0.003880	ppm	0.003899	> 100.00	-139.184000	Y 377.433
V (292.401 nm)	1.045840	ppm	0.001762	0.17	42646.600000	Y 377.433
Zn (206.200 nm)	1.017520	ppm	0.000849	0.08	5440.000000	Y 377.433
Zr (343.823 nm)	1.023330	ppm	0.001756	0.17	139975.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.943087	7905.657793	0.002756	0.29
Y 377.433	0.917357	415901.868259	0.002245	0.24
Y_R 377.433	0.975426	33651.300000	0.006259	0.64
Y_R 488.368	0.991902	18690.200000	0.006800	0.69
Y_R2 488.368	0.942946	31229.207967	0.008011	0.85

Sample Name: 280-167882-B-3-Bpds

Date: 10/27/2022 9:41:56 PM Rack:Tube: 1:8

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.112762	ppm	0.000223	0.20	258901.479612	Y 377.433
Ag (328.068 nm)	0.048672 n	ppm	0.000072	0.15	2421.860000	Y 377.433
Al (167.019 nm)	1.074150	ppm	0.009053	0.84	480.625000	Y_R 377.433
Al H (396.152 nm)	1.076569	ppm	0.004205	0.39	3046.707347	Y_R 377.433
As (188.980 nm)	0.213709	ppm	0.001849	0.87	274.329000	Y 242.219
B (249.678 nm)	0.133344	ppm	0.000735	0.55	3793.930000	Y 242.219
Ba (493.408 nm)	0.260083	ppm	0.000924	0.36	28823.800000	Y_R 488.368
Be (234.861 nm)	0.052638	ppm	0.000249	0.47	14675.400000	Y_R 488.368
Bi (223.061 nm)	-0.005341 u	ppm	0.000889	16.65	3.927840	Y 377.433
Ca (315.887 nm)	61.372352 o	ppm	0.118244	0.19	56806.788318	Y_R 377.433
Cd (214.439 nm)	0.053831	ppm	0.000097	0.18	3287.890000	Y 377.433
Co (228.615 nm)	0.051940	ppm	0.000051	0.10	972.659000	Y 242.219
Cr (205.560 nm)	0.056032	ppm	0.000342	0.61	841.814000	Y 377.433
Cu (324.754 nm)	0.056389	ppm	0.000079	0.14	5386.400000	Y 377.433
Fe (238.204 nm)	1.059678	ppm	0.002163	0.20	3757.753235	Y_R 377.433
Fe H (259.940 nm)	1.075640 u	ppm	0.007639	0.71	2256.370000	Y_R 377.433
K (766.491 nm)	22.584600	ppm	0.113400	0.50	21723.600000	Y_R2 488.368
Li (670.783 nm)	0.123671	ppm	0.001244	1.01	3003.380000	Y_R2 488.368
Mg (279.078 nm)	30.252000	ppm	0.108650	0.36	182723.000000	Y 377.433
Mn (257.610 nm)	0.055595	ppm	0.000108	0.19	13530.400000	Y 377.433
Mo (202.032 nm)	0.058804	ppm	0.001285	2.18	508.809000	Y 377.433
Na (589.592 nm)	41.113000	ppm	0.150940	0.37	248410.000000	Y_R2 488.368
Na H (589.593 nm)	40.717236	ppm	0.154969	0.38	160764.527822	Y_R 488.368
Ni (231.604 nm)	0.052228	ppm	0.001083	2.07	372.950000	Y 377.433
P (213.618 nm)	2.162280	ppm	0.008660	0.40	5110.560000	Y 242.219
Pb (220.353 nm)	0.105077	ppm	0.000489	0.47	289.219000	Y 242.219
S (181.972 nm)	15.365191 o	ppm	0.052616	0.34	7387.536449	Y 377.433
Sb (206.834 nm)	0.113535	ppm	0.002125	1.87	277.712000	Y 377.433
Se (196.026 nm)	0.207038	ppm	0.001009	0.49	212.474000	Y 242.219
Si (288.158 nm)	15.602500 o	ppm	0.049570	0.32	146225.000000	Y 377.433
Sn (189.925 nm)	0.109045	ppm	0.003033	2.78	237.065000	Y 377.433
Sr (421.552 nm)	0.396168	ppm	0.001436	0.36	88779.347998	Y_R 488.368
Th (288.505 nm)	0.210183	ppm	0.001676	0.80	699.910000	Y 377.433
Ti (336.122 nm)	0.053196	ppm	0.000069	0.13	7921.550000	Y 377.433
Tl (190.794 nm)	0.211573	ppm	0.000481	0.23	462.411000	Y 377.433
U (409.013 nm)	0.536506	ppm	0.003993	0.74	2619.840000	Y 377.433
V (292.401 nm)	0.059703	ppm	0.000132	0.22	2439.750000	Y 377.433
Zn (206.200 nm)	0.217892	ppm	0.000902	0.41	1172.280000	Y 377.433
Zr (343.823 nm)	0.093747	ppm	0.012492	13.33	12838.400000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.951266	7974.222950	0.000936	0.10
Y 377.433	0.926949	420250.300173	0.003438	0.37
Y_R 377.433	0.967806	33388.500000	0.001366	0.14
Y_R 488.368	0.985277	18565.400000	0.001941	0.20
Y_R2 488.368	0.956406	31674.997425	0.003997	0.42

Sample Name: 280-168147-C-1-B

Date: 10/27/2022 9:45:58 PM Rack:Tube: 1:9

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.145993	ppm	0.000137	0.09	335507.325211	Y 377.433
Ag (328.068 nm)	0.001116 n	ppm	0.000066	5.88	-101.021000	Y 377.433
Al (167.019 nm)	-0.001841 u	ppm	0.003646	> 100.00	-0.139495	Y_R 377.433
Al H (396.152 nm)	0.051904 u	ppm	0.002124	4.09	341.051552	Y_R 377.433
As (188.980 nm)	-0.002547 u	ppm	0.001988	78.04	-6.865690	Y 242.219
B (249.678 nm)	0.509958	ppm	0.000791	0.16	14282.700000	Y 242.219
Ba (493.408 nm)	0.015809	ppm	0.000338	2.14	1798.190000	Y_R 488.368
Be (234.861 nm)	-0.000011 u	ppm	0.000016	> 100.00	-19.248800	Y_R 488.368
Bi (223.061 nm)	-0.002172 u	ppm	0.001380	63.51	11.880800	Y 377.433
Ca (315.887 nm)	355.840497 o	ppm	1.386270	0.39	329406.206884	Y_R 377.433
Cd (214.439 nm)	-0.000049 u	ppm	0.000058	> 100.00	-8.449460	Y 377.433
Co (228.615 nm)	-0.000534 u	ppm	0.000073	13.69	-24.186700	Y 242.219
Cr (205.560 nm)	0.000921	ppm	0.000305	33.10	20.871300	Y 377.433
Cu (324.754 nm)	0.002015	ppm	0.000262	13.03	1292.260000	Y 377.433
Fe (238.204 nm)	0.030781	ppm	0.001212	3.94	121.346310	Y_R 377.433
Fe H (259.940 nm)	0.025574 u	ppm	0.003419	13.37	69.434200	Y_R 377.433
K (766.491 nm)	6.203700	ppm	0.035573	0.57	5394.270000	Y_R2 488.368
Li (670.783 nm)	0.132141	ppm	0.000693	0.52	3287.520000	Y_R2 488.368
Mg (279.078 nm)	154.771000 o	ppm	0.190750	0.12	934731.000000	Y 377.433
Mn (257.610 nm)	0.015871	ppm	0.000052	0.33	3917.160000	Y 377.433
Mo (202.032 nm)	0.001130	ppm	0.000554	49.03	14.740700	Y 377.433
Na (589.592 nm)	264.907000	ppm	1.386110	0.52	1597110.000000	Y_R2 488.368
Na H (589.593 nm)	262.745068	ppm	1.134879	0.43	1053631.781194	Y_R 488.368
Ni (231.604 nm)	-0.001431 u	ppm	0.000931	65.01	-4.193790	Y 377.433
P (213.618 nm)	0.010066	ppm	0.000976	9.70	34.340200	Y 242.219
Pb (220.353 nm)	0.001525 u	ppm	0.001855	> 100.00	0.609943	Y 242.219
S (181.972 nm)	539.341046 bo	ppm	0.398512	0.07	259159.403913	Y 377.433
Sb (206.834 nm)	0.000399 u	ppm	0.001991	> 100.00	-5.942840	Y 377.433
Se (196.026 nm)	-0.000050 u	ppm	0.002279	> 100.00	6.133070	Y 242.219
Si (288.158 nm)	7.891640	ppm	0.034142	0.43	74382.800000	Y 377.433
Sn (189.925 nm)	0.000992	ppm	0.000673	67.83	7.460280	Y 377.433
Sr (421.552 nm)	5.066702 o	ppm	0.031344	0.62	1134735.433507	Y_R 488.368
Th (288.505 nm)	0.011912	ppm	0.004883	40.99	132.990000	Y 377.433
Ti (336.122 nm)	-0.000513 u	ppm	0.000065	12.67	838.760000	Y 377.433
Tl (190.794 nm)	0.001199	ppm	0.000427	35.57	-0.655209	Y 377.433
U (409.013 nm)	0.029341	ppm	0.002432	8.29	11.670500	Y 377.433
V (292.401 nm)	0.000591	ppm	0.000404	68.37	45.748000	Y 377.433
Zn (206.200 nm)	0.010695	ppm	0.000485	4.54	66.441300	Y 377.433
Zr (343.823 nm)	-0.000241 u	ppm	0.000192	79.89	-16.419700	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.897019	7519.478106	0.005614	0.63
Y 377.433	0.879741	398847.841289	0.005310	0.60
Y_R 377.433	0.933898	32218.700000	0.003723	0.40
Y_R 488.368	0.955225	17999.100000	0.007938	0.83
Y_R2 488.368	0.943548	31249.139192	0.002950	0.31

Sample Name: 280-168147-C-2-B

Date: 10/27/2022 9:50:01 PM Rack:Tube: 1:10

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.093673	ppm	0.000065	0.07	214895.378224	Y 377.433
Ag (328.068 nm)	0.000882 n	ppm	0.000152	17.23	-114.250000	Y 377.433
Al (167.019 nm)	-0.002948 u	ppm	0.004949	> 100.00	-0.642526	Y_R 377.433
Al H (396.152 nm)	0.061009 u	ppm	0.009946	16.30	393.263119	Y_R 377.433
As (188.980 nm)	0.002810 u	ppm	0.003075	> 100.00	0.100205	Y 242.219
B (249.678 nm)	0.551954	ppm	0.000241	0.04	15452.400000	Y 242.219
Ba (493.408 nm)	0.041964	ppm	0.000254	0.60	4691.810000	Y_R 488.368
Be (234.861 nm)	-0.000008 u	ppm	0.000034	> 100.00	-19.071400	Y_R 488.368
Bi (223.061 nm)	0.000114 u	ppm	0.002748	> 100.00	17.619100	Y 377.433
Ca (315.887 nm)	410.288361 o	ppm	0.497841	0.12	379810.497828	Y_R 377.433
Cd (214.439 nm)	0.000018 u	ppm	0.000066	> 100.00	-4.383770	Y 377.433
Co (228.615 nm)	0.001248	ppm	0.000250	20.04	9.596930	Y 242.219
Cr (205.560 nm)	0.000661	ppm	0.000050	7.55	16.998300	Y 377.433
Cu (324.754 nm)	0.001475	ppm	0.000142	9.63	1210.040000	Y 377.433
Fe (238.204 nm)	0.014262	ppm	0.001168	8.19	62.963973	Y_R 377.433
Fe H (259.940 nm)	0.005316 u	ppm	0.002619	49.28	27.242000	Y_R 377.433
K (766.491 nm)	8.203130	ppm	0.055459	0.68	7387.410000	Y_R2 488.368
Li (670.783 nm)	0.083917	ppm	0.001359	1.62	1669.790000	Y_R2 488.368
Mg (279.078 nm)	158.759000 o	ppm	0.228848	0.14	958817.000000	Y 377.433
Mn (257.610 nm)	0.036491	ppm	0.000050	0.14	8907.390000	Y 377.433
Mo (202.032 nm)	0.005939	ppm	0.000266	4.48	55.935200	Y 377.433
Na (589.592 nm)	305.646000	ppm	1.697550	0.56	1842720.000000	Y_R2 488.368
Na H (589.593 nm)	305.095336	ppm	0.376725	0.12	1224018.165827	Y_R 488.368
Ni (231.604 nm)	0.003549	ppm	0.000812	22.87	30.770800	Y 377.433
P (213.618 nm)	0.006711	ppm	0.001128	16.81	26.426800	Y 242.219
Pb (220.353 nm)	0.001065	ppm	0.000574	53.89	-0.652951	Y 242.219
S (181.972 nm)	611.793184 bo	ppm	0.575640	0.09	293972.920571	Y 377.433
Sb (206.834 nm)	0.002241	ppm	0.002048	91.37	-1.393510	Y 377.433
Se (196.026 nm)	0.222210	ppm	0.000860	0.39	227.766000	Y 242.219
Si (288.158 nm)	8.646950	ppm	0.055335	0.64	81419.100000	Y 377.433
Sn (189.925 nm)	-0.000395 u	ppm	0.001486	> 100.00	4.511150	Y 377.433
Sr (421.552 nm)	5.335731 o	ppm	0.009866	0.18	1194983.750799	Y_R 488.368
Th (288.505 nm)	0.015056	ppm	0.001737	11.54	142.611000	Y 377.433
Ti (336.122 nm)	-0.000640 u	ppm	0.000034	5.36	992.857000	Y 377.433
Tl (190.794 nm)	0.002120	ppm	0.000092	4.33	1.366700	Y 377.433
U (409.013 nm)	0.042815	ppm	0.001254	2.93	67.819000	Y 377.433
V (292.401 nm)	0.001566	ppm	0.000331	21.14	84.887000	Y 377.433
Zn (206.200 nm)	0.009341	ppm	0.000459	4.91	59.217200	Y 377.433
Zr (343.823 nm)	-0.000440 u	ppm	0.000099	22.42	-43.732900	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.893035	7486.087136	0.001821	0.20
Y 377.433	0.875228	396801.880317	0.001961	0.22
Y_R 377.433	0.939250	32403.300000	0.003030	0.32
Y_R 488.368	0.955283	18000.200000	0.003594	0.38
Y_R2 488.368	0.928688	30756.995767	0.002334	0.25

Sample Name: CCVH-7429327

Date: 10/27/2022 9:54:04 PM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000052	ppm	0.000017	31.94	-926.457982	Y 377.433
Ag (328.068 nm)	0.002183	ppm	0.000117	5.37	-126.827000	Y 377.433
Al (167.019 nm)	49.685300 o	ppm	0.106457	0.21	22202.600000	Y_R 377.433
Al H (396.152 nm)	51.440554	ppm	0.099530	0.19	142792.696962	Y_R 377.433
As (188.980 nm)	-0.000474 u	ppm	0.001935	> 100.00	-4.170060	Y 242.219
B (249.678 nm)	0.002636	ppm	0.000358	13.56	50.803800	Y 242.219
Ba (493.408 nm)	0.000245	ppm	0.000165	67.11	122.698000	Y_R 488.368
Be (234.861 nm)	0.000068	ppm	0.000021	31.01	806.858000	Y_R 488.368
Bi (223.061 nm)	-0.001702 u	ppm	0.001769	> 100.00	13.060300	Y 377.433
Ca (315.887 nm)	-0.005722 u	ppm	0.012198	> 100.00	-13.075752	Y_R 377.433
Cd (214.439 nm)	-0.000141 u	ppm	0.000050	35.29	37.219700	Y 377.433
Co (228.615 nm)	-0.000473 u	ppm	0.000303	64.14	-23.000800	Y 242.219
Cr (205.560 nm)	0.000921	ppm	0.000286	31.09	6.809450	Y 377.433
Cu (324.754 nm)	0.002720	ppm	0.000252	9.27	2817.360000	Y 377.433
Fe (238.204 nm)	51.054775 o	ppm	0.091999	0.18	180454.292985	Y_R 377.433
Fe H (259.940 nm)	51.925600	ppm	0.093884	0.18	108160.000000	Y_R 377.433
K (766.491 nm)	0.087091	ppm	0.075313	86.48	-703.070000	Y_R2 488.368
Li (670.783 nm)	0.005829	ppm	0.002008	34.44	-949.746000	Y_R2 488.368
Mg (279.078 nm)	-0.005652 u	ppm	0.000849	15.01	-157.330000	Y 377.433
Mn (257.610 nm)	0.000275	ppm	0.000018	6.60	143.058000	Y 377.433
Mo (202.032 nm)	-0.000344 u	ppm	0.000338	98.36	2.115400	Y 377.433
Na (589.592 nm)	253.713000	ppm	0.593252	0.23	1529610.000000	Y_R2 488.368
Na H (589.593 nm)	249.566425	ppm	0.429508	0.17	1000602.217335	Y_R 488.368
Ni (231.604 nm)	-0.000408 u	ppm	0.000564	> 100.00	11.822400	Y 377.433
P (213.618 nm)	5.022530	ppm	0.026960	0.54	11856.800000	Y 242.219
Pb (220.353 nm)	-0.007224 u	ppm	0.000141	1.96	-30.567100	Y 242.219
S (181.972 nm)	5.127765	ppm	0.012332	0.24	2468.294408	Y 377.433
Sb (206.834 nm)	0.001346	ppm	0.001155	85.83	-20.136700	Y 377.433
Se (196.026 nm)	0.004915	ppm	0.000387	7.87	2.334260	Y 242.219
Si (288.158 nm)	0.017210	ppm	0.001040	6.04	1025.670000	Y 377.433
Sn (189.925 nm)	0.000852 u	ppm	0.000932	> 100.00	7.161650	Y 377.433
Sr (421.552 nm)	0.000609	ppm	0.000105	17.27	194.904106	Y_R 488.368
Th (288.505 nm)	5.112880	ppm	0.064575	1.26	14464.200000	Y 377.433
Ti (336.122 nm)	0.000481	ppm	0.000037	7.64	-144.280000	Y 377.433
Tl (190.794 nm)	-0.001791 u	ppm	0.000403	22.49	-8.624320	Y 377.433
U (409.013 nm)	2.543760	ppm	0.006528	0.26	12794.900000	Y 377.433
V (292.401 nm)	-0.000689 u	ppm	0.000337	48.91	325.277000	Y 377.433
Zn (206.200 nm)	0.001106	ppm	0.000144	12.99	15.266800	Y 377.433
Zr (343.823 nm)	0.000730	ppm	0.000186	25.47	274.053000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.952708	7986.311455	0.003842	0.40
Y 377.433	0.914839	414760.306544	0.004404	0.48
Y_R 377.433	0.960260	33128.200000	0.002182	0.23
Y_R 488.368	0.979774	18461.700000	0.003539	0.36
Y_R2 488.368	0.951601	31515.857956	0.001243	0.13

Sample Name: CCV-7429326

Date: 10/27/2022 9:58:07 PM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.467315	ppm	0.000254	0.05	1076241.941780	Y 377.433
Ag (328.068 nm)	0.509164	ppm	0.000131	0.03	26913.100000	Y 377.433
Al (167.019 nm)	0.532265	ppm	0.007301	1.37	239.608000	Y_R 377.433
Al H (396.152 nm)	0.521795 u	ppm	0.008192	1.57	1521.453209	Y_R 377.433
As (188.980 nm)	0.501179	ppm	0.004809	0.96	648.120000	Y 242.219
B (249.678 nm)	0.499293	ppm	0.000789	0.16	14006.300000	Y 242.219
Ba (493.408 nm)	0.502957	ppm	0.001555	0.31	55694.400000	Y_R 488.368
Be (234.861 nm)	0.514942	ppm	0.003708	0.72	143595.000000	Y_R 488.368
Bi (223.061 nm)	1.048070	ppm	0.002244	0.21	2647.890000	Y 377.433
Ca (315.887 nm)	5.276180	ppm	0.020424	0.39	4876.915051	Y_R 377.433
Cd (214.439 nm)	0.521353	ppm	0.004200	0.81	31883.200000	Y 377.433
Co (228.615 nm)	0.512494	ppm	0.001340	0.26	9722.030000	Y 242.219
Cr (205.560 nm)	0.522718	ppm	0.000898	0.17	7795.510000	Y 377.433
Cu (324.754 nm)	0.521783	ppm	0.000584	0.11	38470.800000	Y 377.433
Fe (238.204 nm)	2.543288	ppm	0.003528	0.14	9001.244625	Y_R 377.433
Fe H (259.940 nm)	2.602560 u	ppm	0.007065	0.27	5436.450000	Y_R 377.433
K (766.491 nm)	49.958700	ppm	0.162993	0.33	49011.500000	Y_R2 488.368
Li (670.783 nm)	0.497874	ppm	0.000288	0.06	15556.400000	Y_R2 488.368
Mg (279.078 nm)	20.576400	ppm	0.013879	0.07	124303.000000	Y 377.433
Mn (257.610 nm)	0.521044	ppm	0.000380	0.07	126170.000000	Y 377.433
Mo (202.032 nm)	0.523426	ppm	0.001124	0.21	4489.030000	Y 377.433
Na (589.592 nm)	25.866300	ppm	0.047336	0.18	156841.000000	Y_R2 488.368
Na H (589.593 nm)	26.130757	ppm	0.068611	0.26	102350.183914	Y_R 488.368
Ni (231.604 nm)	0.528007	ppm	0.000902	0.17	3713.650000	Y 377.433
P (213.618 nm)	0.007539	ppm	0.001070	14.19	28.379200	Y 242.219
Pb (220.353 nm)	0.500843	ppm	0.000812	0.16	1385.560000	Y 242.219
S (181.972 nm)	0.023091	ppm	0.004710	20.40	16.698442	Y 377.433
Sb (206.834 nm)	0.524297	ppm	0.000536	0.10	1321.100000	Y 377.433
Se (196.026 nm)	0.497785	ppm	0.003775	0.76	502.477000	Y 242.219
Si (288.158 nm)	5.122210	ppm	0.005426	0.11	48667.200000	Y 377.433
Sn (189.925 nm)	0.521746	ppm	0.002825	0.54	1114.030000	Y 377.433
Sr (421.552 nm)	0.498490	ppm	0.001651	0.33	111694.246795	Y_R 488.368
Th (288.505 nm)	0.064147	ppm	0.024224	37.76	288.217000	Y 377.433
Ti (336.122 nm)	0.509479	ppm	0.000436	0.09	75871.000000	Y 377.433
Tl (190.794 nm)	0.521697	ppm	0.000223	0.04	1143.940000	Y 377.433
U (409.013 nm)	0.005555	ppm	0.002865	51.58	-72.390400	Y 377.433
V (292.401 nm)	0.520636	ppm	0.000821	0.16	21241.000000	Y 377.433
Zn (206.200 nm)	0.527363	ppm	0.001148	0.22	2823.970000	Y 377.433
Zr (343.823 nm)	0.477876	ppm	0.013598	2.85	65367.800000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.964413	8084.426483	0.003048	0.32
Y 377.433	0.934354	423607.432347	0.003789	0.41
Y_R 377.433	0.984242	33955.500000	0.004279	0.43
Y_R 488.368	1.004860	18934.500000	0.003194	0.32
Y_R2 488.368	0.970810	32152.036502	0.002543	0.26

Sample Name: CCB

Date: 10/27/2022 10:02:10 PM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000015	ppm	0.000009	60.40	-1011.927938	Y 377.433
Ag (328.068 nm)	0.000560	ppm	0.000254	45.30	-129.559000	Y 377.433
Al (167.019 nm)	-0.003344 u	ppm	0.002078	62.13	-0.826947	Y_R 377.433
Al H (396.152 nm)	-0.000769 u	ppm	0.002436	> 100.00	21.620363	Y_R 377.433
As (188.980 nm)	0.000450 u	ppm	0.001487	> 100.00	-2.968210	Y 242.219
B (249.678 nm)	0.000872	ppm	0.000052	5.92	103.932000	Y 242.219
Ba (493.408 nm)	0.000013 u	ppm	0.000136	> 100.00	50.621000	Y_R 488.368
Be (234.861 nm)	-0.000021 u	ppm	0.000006	27.52	-22.471800	Y_R 488.368
Bi (223.061 nm)	0.002093 u	ppm	0.004981	> 100.00	22.585800	Y 377.433
Ca (315.887 nm)	0.003769 u	ppm	0.010697	> 100.00	-4.290163	Y_R 377.433
Cd (214.439 nm)	-0.000042 u	ppm	0.000008	20.17	-8.070350	Y 377.433
Co (228.615 nm)	-0.000213 u	ppm	0.000284	> 100.00	-18.087100	Y 242.219
Cr (205.560 nm)	-0.000009 u	ppm	0.000201	> 100.00	7.016160	Y 377.433
Cu (324.754 nm)	0.001457	ppm	0.000076	5.20	1528.700000	Y 377.433
Fe (238.204 nm)	0.000706	ppm	0.000456	64.59	15.054600	Y_R 377.433
Fe H (259.940 nm)	-0.004682 u	ppm	0.000579	12.37	6.419140	Y_R 377.433
K (766.491 nm)	0.052629	ppm	0.019049	36.19	-737.423000	Y_R2 488.368
Li (670.783 nm)	0.004476	ppm	0.000369	8.24	-995.142000	Y_R2 488.368
Mg (279.078 nm)	-0.001630 u	ppm	0.000512	31.44	33.294100	Y 377.433
Mn (257.610 nm)	-0.000088 u	ppm	0.000020	22.45	55.307800	Y 377.433
Mo (202.032 nm)	0.001244	ppm	0.000101	8.12	15.720000	Y 377.433
Na (589.592 nm)	0.007758 u	ppm	0.018598	> 100.00	264.865000	Y_R2 488.368
Na H (589.593 nm)	1.344196 u	ppm	0.011991	0.89	2103.257141	Y_R 488.368
Ni (231.604 nm)	0.000293 u	ppm	0.000286	97.60	7.902090	Y 377.433
P (213.618 nm)	0.000251 u	ppm	0.000934	> 100.00	11.190400	Y 242.219
Pb (220.353 nm)	0.000220 u	ppm	0.001836	> 100.00	-3.016230	Y 242.219
S (181.972 nm)	0.018423	ppm	0.004660	25.30	13.238778	Y 377.433
Sb (206.834 nm)	0.002196	ppm	0.000480	21.86	-1.408820	Y 377.433
Se (196.026 nm)	-0.000219 u	ppm	0.001180	> 100.00	5.954660	Y 242.219
Si (288.158 nm)	0.002516	ppm	0.000513	20.38	888.719000	Y 377.433
Sn (189.925 nm)	-0.000380 u	ppm	0.000369	97.07	4.543530	Y 377.433
Sr (421.552 nm)	-0.000024 u	ppm	0.000074	> 100.00	52.993689	Y_R 488.368
Th (288.505 nm)	0.002248 u	ppm	0.002810	> 100.00	105.155000	Y 377.433
Ti (336.122 nm)	-0.000074 u	ppm	0.000083	> 100.00	-227.099000	Y 377.433
Tl (190.794 nm)	0.001253	ppm	0.000958	76.46	-0.539450	Y 377.433
U (409.013 nm)	0.008625	ppm	0.002023	23.45	-16.391400	Y 377.433
V (292.401 nm)	-0.000164 u	ppm	0.000059	35.73	13.598300	Y 377.433
Zn (206.200 nm)	-0.000544 u	ppm	0.000108	19.92	6.456300	Y 377.433
Zr (343.823 nm)	0.000257	ppm	0.000071	27.56	51.533300	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.966156	8099.038968	0.005529	0.57
Y 377.433	0.938113	425311.727660	0.007297	0.78
Y_R 377.433	0.959455	33100.400000	0.002067	0.22
Y_R 488.368	0.973532	18344.100000	0.005259	0.54
Y_R2 488.368	0.951482	31511.897083	0.003712	0.39

Sample Name: CCVL-7434568

Date: 10/27/2022 10:06:12 PM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014779	ppm	0.000019	0.13	33024.073950	Y 377.433
Ag (328.068 nm)	0.010406	ppm	0.000194	1.86	393.116000	Y 377.433
Al (167.019 nm)	0.103264	ppm	0.001413	1.37	46.808400	Y_R 377.433
Al H (396.152 nm)	0.096960 u	ppm	0.003274	3.38	294.710042	Y_R 377.433
As (188.980 nm)	0.017471	ppm	0.001446	8.27	19.163100	Y 242.219
B (249.678 nm)	0.100396	ppm	0.000112	0.11	2876.130000	Y 242.219
Ba (493.408 nm)	0.010140	ppm	0.000441	4.35	1171.000000	Y_R 488.368
Be (234.861 nm)	0.001034	ppm	0.000034	3.24	272.116000	Y_R 488.368
Bi (223.061 nm)	-0.003699 Qu	ppm	0.001268	34.27	8.049070 Q	Y 377.433
Ca (315.887 nm)	0.215445	ppm	0.006865	3.19	191.669357	Y_R 377.433
Cd (214.439 nm)	0.005196	ppm	0.000073	1.41	312.375000	Y 377.433
Co (228.615 nm)	0.010766	ppm	0.000236	2.19	190.407000	Y 242.219
Cr (205.560 nm)	0.010517	ppm	0.000167	1.59	163.887000	Y 377.433
Cu (324.754 nm)	0.017646	ppm	0.000170	0.96	2677.530000	Y 377.433
Fe (238.204 nm)	0.105292	ppm	0.001823	1.73	384.689511	Y_R 377.433
Fe H (259.940 nm)	0.103802 u	ppm	0.003592	3.46	232.357000	Y_R 377.433
K (766.491 nm)	3.080490	ppm	0.022660	0.74	2280.900000	Y_R2 488.368
Li (670.783 nm)	0.026005 Q	ppm	0.002978	11.45	-272.924000 Q	Y_R2 488.368
Mg (279.078 nm)	0.210163	ppm	0.000858	0.41	1310.740000	Y 377.433
Mn (257.610 nm)	0.010570	ppm	0.000018	0.17	2634.380000	Y 377.433
Mo (202.032 nm)	0.020831	ppm	0.000157	0.76	183.507000	Y 377.433
Na (589.592 nm)	1.099500	ppm	0.005385	0.49	6859.770000	Y_R2 488.368
Na H (589.593 nm)	2.312139 u	ppm	0.005331	0.23	6007.597562	Y_R 488.368
Ni (231.604 nm)	0.044731	ppm	0.000439	0.98	319.903000	Y 377.433
P (213.618 nm)	2.903370	ppm	0.007327	0.25	6858.510000	Y 242.219
Pb (220.353 nm)	0.008102	ppm	0.002179	26.90	18.907400	Y 242.219
S (181.972 nm)	0.115846	ppm	0.002920	2.52	60.075480	Y 377.433
Sb (206.834 nm)	0.021498	ppm	0.001439	6.69	47.167400	Y 377.433
Se (196.026 nm)	0.019320	ppm	0.000284	1.47	25.428100	Y 242.219
Si (288.158 nm)	0.503084	ppm	0.002501	0.50	5553.430000	Y 377.433
Sn (189.925 nm)	0.105311	ppm	0.000268	0.25	229.131000	Y 377.433
Sr (421.552 nm)	0.010088	ppm	0.000106	1.05	2317.746898	Y_R 488.368
Th (288.505 nm)	0.017824	ppm	0.003503	19.65	150.300000	Y 377.433
Ti (336.122 nm)	0.009693	ppm	0.000075	0.77	1231.730000	Y 377.433
Tl (190.794 nm)	0.016055	ppm	0.000629	3.92	32.007400	Y 377.433
U (409.013 nm)	0.070627	ppm	0.002831	4.01	294.615000	Y 377.433
V (292.401 nm)	0.010167	ppm	0.000201	1.98	432.577000	Y 377.433
Zn (206.200 nm)	0.022229	ppm	0.000412	1.86	127.999000	Y 377.433
Zr (343.823 nm)	0.012451	ppm	0.000032	0.26	1719.230000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.966364	8100.785861	0.003447	0.36
Y 377.433	0.937008	424810.914677	0.003718	0.40
Y_R 377.433	0.976155	33676.500000	0.007245	0.74
Y_R 488.368	0.994771	18744.300000	0.011727	1.18
Y_R2 488.368	0.975638	32311.940012	0.005999	0.61

Sample Name: 280-168150-C-1-B

Date: 10/27/2022 10:10:14 PM Rack:Tube: 1:11

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.095965	ppm	0.000070	0.07	220178.468568	Y 377.433
Ag (328.068 nm)	0.001122 n	ppm	0.000186	16.61	-101.247000	Y 377.433
Al (167.019 nm)	0.007499	ppm	0.002443	32.58	4.022420	Y_R 377.433
Al H (396.152 nm)	0.070900 u	ppm	0.004524	6.38	482.966051	Y_R 377.433
As (188.980 nm)	-0.001991 u	ppm	0.002306	> 100.00	-6.142650	Y 242.219
B (249.678 nm)	0.634944	ppm	0.000694	0.11	17763.700000	Y 242.219
Ba (493.408 nm)	0.014414	ppm	0.000180	1.25	1643.890000	Y_R 488.368
Be (234.861 nm)	-0.000042 u	ppm	0.000012	28.23	-28.038100	Y_R 488.368
Bi (223.061 nm)	0.000596	ppm	0.000186	31.27	18.827300	Y 377.433
Ca (315.887 nm)	539.165981 o	ppm	1.806167	0.33	499117.015496	Y_R 377.433
Cd (214.439 nm)	0.000004 u	ppm	0.000026	> 100.00	-5.230080	Y 377.433
Co (228.615 nm)	-0.000732 u	ppm	0.000106	14.53	-27.957700	Y 242.219
Cr (205.560 nm)	0.000683	ppm	0.000312	45.62	17.329800	Y 377.433
Cu (324.754 nm)	0.001134	ppm	0.000156	13.77	1083.220000	Y 377.433
Fe (238.204 nm)	0.019017	ppm	0.001207	6.35	79.768974	Y_R 377.433
Fe H (259.940 nm)	0.012593 u	ppm	0.000128	1.01	42.398300	Y_R 377.433
K (766.491 nm)	10.327500	ppm	0.047603	0.46	9505.100000	Y_R2 488.368
Li (670.783 nm)	0.090298	ppm	0.000506	0.56	1883.860000	Y_R2 488.368
Mg (279.078 nm)	204.726000 o	ppm	0.292298	0.14	1236420.000000	Y 377.433
Mn (257.610 nm)	0.005194	ppm	0.000010	0.19	1333.410000	Y 377.433
Mo (202.032 nm)	0.000511	ppm	0.000134	26.20	9.437890	Y 377.433
Na (589.592 nm)	208.056000	ppm	1.024170	0.49	1254410.000000	Y_R2 488.368
Na H (589.593 nm)	206.653950	ppm	0.883123	0.43	827998.194130	Y_R 488.368
Ni (231.604 nm)	-0.001205 u	ppm	0.000730	60.59	-2.606850	Y 377.433
P (213.618 nm)	0.008919	ppm	0.000246	2.76	31.633300	Y 242.219
Pb (220.353 nm)	0.000790 u	ppm	0.002541	> 100.00	-1.394510	Y 242.219
S (181.972 nm)	635.026158 bo	ppm	0.621978	0.10	305136.360814	Y 377.433
Sb (206.834 nm)	-0.001865 u	ppm	0.001133	60.76	-11.700500	Y 377.433
Se (196.026 nm)	0.000574 u	ppm	0.001552	> 100.00	6.749660	Y 242.219
Si (288.158 nm)	4.989680	ppm	0.037384	0.75	47348.400000	Y 377.433
Sn (189.925 nm)	0.000093 u	ppm	0.000961	> 100.00	5.548270	Y 377.433
Sr (421.552 nm)	5.270620 o	ppm	0.009829	0.19	1180402.328509	Y_R 488.368
Th (288.505 nm)	0.011758	ppm	0.003149	26.78	132.778000	Y 377.433
Ti (336.122 nm)	-0.000718 u	ppm	0.000077	10.70	1390.950000	Y 377.433
Tl (190.794 nm)	0.001561 u	ppm	0.001515	97.02	0.143940	Y 377.433
U (409.013 nm)	0.047156	ppm	0.003594	7.62	61.962900	Y 377.433
V (292.401 nm)	0.001032	ppm	0.000123	11.92	62.748600	Y 377.433
Zn (206.200 nm)	0.003367	ppm	0.000961	28.54	27.332900	Y 377.433
Zr (343.823 nm)	0.000266	ppm	0.000133	50.05	52.880900	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.891391	7472.302866	0.003465	0.39
Y 377.433	0.878110	398108.134661	0.004198	0.48
Y_R 377.433	0.937645	32347.900000	0.002024	0.22
Y_R 488.368	0.956809	18029.000000	0.002212	0.23
Y_R2 488.368	0.928794	30760.523265	0.003580	0.39

Sample Name: 280-168150-D-2-B

Date: 10/27/2022 10:14:17 PM Rack:Tube: 1:12

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.026509	ppm	0.000051	0.19	60063.402896	Y 377.433
Ag (328.068 nm)	0.001012 n	ppm	0.000103	10.20	-105.785000	Y 377.433
Al (167.019 nm)	-0.000382 u	ppm	0.004011	> 100.00	0.499778	Y_R 377.433
Al H (396.152 nm)	0.009347 u	ppm	0.003952	42.28	76.692563	Y_R 377.433
As (188.980 nm)	-0.000120 u	ppm	0.001416	> 100.00	-3.709860	Y 242.219
B (249.678 nm)	0.070764	ppm	0.000254	0.36	2050.510000	Y 242.219
Ba (493.408 nm)	0.091502	ppm	0.000529	0.58	10172.600000	Y_R 488.368
Be (234.861 nm)	-0.000053 u	ppm	0.000033	63.36	-31.379100	Y_R 488.368
Bi (223.061 nm)	-0.000622 u	ppm	0.002095	> 100.00	15.770700	Y 377.433
Ca (315.887 nm)	55.027241 o	ppm	0.124300	0.23	50932.860895	Y_R 377.433
Cd (214.439 nm)	-0.000063 u	ppm	0.000025	40.12	-9.326940	Y 377.433
Co (228.615 nm)	-0.000133 u	ppm	0.000392	> 100.00	-16.577900	Y 242.219
Cr (205.560 nm)	0.002068	ppm	0.000138	6.69	37.983300	Y 377.433
Cu (324.754 nm)	0.002230	ppm	0.000088	3.94	1542.130000	Y 377.433
Fe (238.204 nm)	0.009006	ppm	0.002076	23.06	44.388432	Y_R 377.433
Fe H (259.940 nm)	0.002074 u	ppm	0.001724	83.13	20.490100	Y_R 377.433
K (766.491 nm)	2.215560	ppm	0.039521	1.78	1418.690000	Y_R2 488.368
Li (670.783 nm)	0.033426	ppm	0.001000	2.99	-23.977700	Y_R2 488.368
Mg (279.078 nm)	23.841100	ppm	0.037644	0.16	144023.000000	Y 377.433
Mn (257.610 nm)	0.000683	ppm	0.000037	5.40	241.680000	Y 377.433
Mo (202.032 nm)	0.003931	ppm	0.000257	6.54	38.734900	Y 377.433
Na (589.592 nm)	56.240800	ppm	0.009992	0.02	339367.000000	Y_R2 488.368
Na H (589.593 nm)	55.543242	ppm	0.224790	0.40	220222.514272	Y_R 488.368
Ni (231.604 nm)	-0.001310 u	ppm	0.000312	23.83	-3.346950	Y 377.433
P (213.618 nm)	0.004467	ppm	0.002077	46.50	21.132900	Y 242.219
Pb (220.353 nm)	0.000142 u	ppm	0.001056	> 100.00	-3.233180	Y 242.219
S (181.972 nm)	15.431393 o	ppm	0.045281	0.29	7419.218923	Y 377.433
Sb (206.834 nm)	0.000247 u	ppm	0.000960	> 100.00	-6.276920	Y 377.433
Se (196.026 nm)	0.005449	ppm	0.003877	71.15	11.605300	Y 242.219
Si (288.158 nm)	7.802740	ppm	0.029353	0.38	73554.600000	Y 377.433
Sn (189.925 nm)	0.001068	ppm	0.000532	49.79	7.619930	Y 377.433
Sr (421.552 nm)	0.829292	ppm	0.003404	0.41	185776.500682	Y_R 488.368
Th (288.505 nm)	0.005223	ppm	0.003454	66.12	113.658000	Y 377.433
Ti (336.122 nm)	-0.000210 u	ppm	0.000117	55.90	-72.661100	Y 377.433
Tl (190.794 nm)	-0.000024 u	ppm	0.002073	> 100.00	-3.356460	Y 377.433
U (409.013 nm)	0.015032	ppm	0.004335	28.84	4.050610	Y 377.433
V (292.401 nm)	-0.000010 u	ppm	0.000035	> 100.00	19.820500	Y 377.433
Zn (206.200 nm)	0.002699	ppm	0.000470	17.42	23.767700	Y 377.433
Zr (343.823 nm)	0.000443	ppm	0.000073	16.41	76.937600	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.948330	7949.608737	0.001155	0.12
Y 377.433	0.921276	417678.267216	0.002948	0.32
Y_R 377.433	0.957923	33047.500000	0.003803	0.40
Y_R 488.368	0.975476	18380.700000	0.004221	0.43
Y_R2 488.368	0.964537	31944.289177	0.005924	0.61

Sample Name: 280-167970-C-5-B

Date: 10/27/2022 10:18:20 PM Rack:Tube: 1:13

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.023558	ppm	0.000039	0.17	53260.776953	Y 377.433
Ag (328.068 nm)	0.000872 n	ppm	0.000125	14.31	-113.265000	Y 377.433
Al (167.019 nm)	0.002048 u	ppm	0.005215	> 100.00	1.584760	Y_R 377.433
Al H (396.152 nm)	0.033667 u	ppm	0.001619	4.81	188.175132	Y_R 377.433
As (188.980 nm)	0.002479	ppm	0.000642	25.88	-0.330147	Y 242.219
B (249.678 nm)	0.090679	ppm	0.000250	0.28	2605.220000	Y 242.219
Ba (493.408 nm)	0.168238	ppm	0.000538	0.32	18662.500000	Y_R 488.368
Be (234.861 nm)	-0.000074 u	ppm	0.000004	5.95	-37.422200	Y_R 488.368
Bi (223.061 nm)	-0.001284 u	ppm	0.002114	> 100.00	14.109300	Y 377.433
Ca (315.887 nm)	145.317455 o	ppm	0.232956	0.16	134517.668015	Y_R 377.433
Cd (214.439 nm)	-0.000055 u	ppm	0.000042	77.24	-8.828580	Y 377.433
Co (228.615 nm)	0.001099	ppm	0.000128	11.65	6.787960	Y 242.219
Cr (205.560 nm)	0.000526	ppm	0.000253	48.20	14.984100	Y 377.433
Cu (324.754 nm)	0.001383	ppm	0.000213	15.38	1410.040000	Y 377.433
Fe (238.204 nm)	0.010063	ppm	0.001549	15.40	48.122485	Y_R 377.433
Fe H (259.940 nm)	0.004711 u	ppm	0.001138	24.16	25.981600	Y_R 377.433
K (766.491 nm)	16.425000	ppm	0.072046	0.44	15583.400000	Y_R2 488.368
Li (670.783 nm)	0.028507	ppm	0.001207	4.23	-189.010000	Y_R2 488.368
Mg (279.078 nm)	13.975700	ppm	0.075923	0.54	84444.800000	Y 377.433
Mn (257.610 nm)	0.329679	ppm	0.000420	0.13	79858.900000	Y 377.433
Mo (202.032 nm)	0.003441	ppm	0.000249	7.24	34.535600	Y 377.433
Na (589.592 nm)	28.717600	ppm	0.127303	0.44	173563.000000	Y_R2 488.368
Na H (589.593 nm)	28.819028	ppm	0.071802	0.25	112804.101685	Y_R 488.368
Ni (231.604 nm)	0.003911	ppm	0.001428	36.53	33.302500	Y 377.433
P (213.618 nm)	0.004338	ppm	0.000896	20.65	20.828300	Y 242.219
Pb (220.353 nm)	0.000345 u	ppm	0.001010	> 100.00	-2.679170	Y 242.219
S (181.972 nm)	33.412198 o	ppm	0.053598	0.16	16059.818753	Y 377.433
Sb (206.834 nm)	-0.001213 u	ppm	0.000796	65.57	-9.997390	Y 377.433
Se (196.026 nm)	0.015219	ppm	0.000682	4.48	21.623100	Y 242.219
Si (288.158 nm)	12.415700 o	ppm	0.116511	0.94	116528.000000	Y 377.433
Sn (189.925 nm)	0.000374 u	ppm	0.001574	> 100.00	6.146480	Y 377.433
Sr (421.552 nm)	0.531500	ppm	0.001788	0.34	119086.687796	Y_R 488.368
Th (288.505 nm)	0.005780	ppm	0.003544	61.31	122.658000	Y 377.433
Ti (336.122 nm)	-0.000322 u	ppm	0.000082	25.37	198.094000	Y 377.433
Tl (190.794 nm)	-0.000879 u	ppm	0.000436	49.66	-5.233680	Y 377.433
U (409.013 nm)	0.022572	ppm	0.004108	18.20	22.634200	Y 377.433
V (292.401 nm)	-0.000152 u	ppm	0.000107	70.32	14.198700	Y 377.433
Zn (206.200 nm)	0.007941	ppm	0.000321	4.04	51.745300	Y 377.433
Zr (343.823 nm)	0.000153	ppm	0.000057	37.23	37.393100	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.939110	7872.316833	0.002643	0.28
Y 377.433	0.916327	415434.752920	0.002714	0.30
Y_R 377.433	0.959585	33104.900000	0.004888	0.51
Y_R 488.368	0.978738	18442.200000	0.002972	0.30
Y_R2 488.368	0.952561	31547.642838	0.003950	0.41

Sample Name: MB 280-591310/1-A

Date: 10/27/2022 10:22:22 PM Rack:Tube: 1:14

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000038	ppm	0.000006	14.93	-959.839111	Y 377.433
Ag (328.068 nm)	0.000612 n	ppm	0.000095	15.48	-127.066000	Y 377.433
Al (167.019 nm)	0.010880	ppm	0.001743	16.02	5.526020	Y_R 377.433
Al H (396.152 nm)	0.002233 u	ppm	0.004815	> 100.00	29.828539	Y_R 377.433
As (188.980 nm)	-0.000569 u	ppm	0.001466	> 100.00	-4.294020	Y 242.219
B (249.678 nm)	0.000652	ppm	0.000359	55.00	97.784800	Y 242.219
Ba (493.408 nm)	0.000443	ppm	0.000117	26.37	98.202800	Y_R 488.368
Be (234.861 nm)	-0.000031 u	ppm	0.000026	84.59	-25.113400	Y_R 488.368
Bi (223.061 nm)	-0.001109 u	ppm	0.001968	> 100.00	14.548800	Y 377.433
Ca (315.887 nm)	0.024393	ppm	0.003501	14.35	14.801684	Y_R 377.433
Cd (214.439 nm)	-0.000065 u	ppm	0.000036	55.66	-9.457200	Y 377.433
Co (228.615 nm)	-0.000343 u	ppm	0.000233	67.84	-20.489900	Y 242.219
Cr (205.560 nm)	-0.000288 u	ppm	0.000058	20.12	2.860340	Y 377.433
Cu (324.754 nm)	0.001654	ppm	0.000173	10.46	1542.750000	Y 377.433
Fe (238.204 nm)	0.009338	ppm	0.001341	14.36	45.560414	Y_R 377.433
Fe H (259.940 nm)	0.008128 u	ppm	0.002017	24.81	33.099300	Y_R 377.433
K (766.491 nm)	0.058930	ppm	0.049105	83.33	-731.142000	Y_R2 488.368
Li (670.783 nm)	0.006078	ppm	0.000526	8.65	-941.408000	Y_R2 488.368
Mg (279.078 nm)	0.009357	ppm	0.000834	8.91	99.591000	Y 377.433
Mn (257.610 nm)	0.000179	ppm	0.000005	2.87	119.851000	Y 377.433
Mo (202.032 nm)	-0.000183 u	ppm	0.000177	96.68	3.490000	Y 377.433
Na (589.592 nm)	0.045367	ppm	0.003128	6.90	491.728000	Y_R2 488.368
Na H (589.593 nm)	1.307120 u	ppm	0.006770	0.52	1954.236701	Y_R 488.368
Ni (231.604 nm)	-0.000011 u	ppm	0.000284	> 100.00	5.773920	Y 377.433
P (213.618 nm)	0.000379 u	ppm	0.000979	> 100.00	11.491900	Y 242.219
Pb (220.353 nm)	-0.001212 u	ppm	0.001008	83.13	-6.986550	Y 242.219
S (181.972 nm)	0.027208	ppm	0.004087	15.02	17.460750	Y 377.433
Sb (206.834 nm)	0.001094	ppm	0.000563	51.41	-4.176190	Y 377.433
Se (196.026 nm)	0.000352 u	ppm	0.004246	> 100.00	6.522390	Y 242.219
Si (288.158 nm)	0.018251	ppm	0.000295	1.62	1035.580000	Y 377.433
Sn (189.925 nm)	0.000311	ppm	0.000309	99.41	6.011970	Y 377.433
Sr (421.552 nm)	0.000180	ppm	0.000098	54.63	98.799971	Y_R 488.368
Th (288.505 nm)	0.004879	ppm	0.001660	34.03	112.558000	Y 377.433
Ti (336.122 nm)	0.002058	ppm	0.000079	3.84	91.254400	Y 377.433
Tl (190.794 nm)	-0.000903 u	ppm	0.001315	> 100.00	-5.290690	Y 377.433
U (409.013 nm)	0.009261	ppm	0.001285	13.87	-13.119600	Y 377.433
V (292.401 nm)	0.000008 u	ppm	0.000051	> 100.00	20.811100	Y 377.433
Zn (206.200 nm)	0.000269	ppm	0.000219	81.41	10.799700	Y 377.433
Zr (343.823 nm)	-0.000312 u	ppm	0.000036	11.46	-26.272400	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.979064	8207.245088	0.001581	0.16
Y 377.433	0.952701	431925.744342	0.002597	0.27
Y_R 377.433	0.993981	34291.500000	0.010039	1.01
Y_R 488.368	1.020080	19221.300000	0.010793	1.06
Y_R2 488.368	0.966429	32006.923065	0.001950	0.20

Sample Name: LCS 280-591310/2-A

Date: 10/27/2022 10:26:26 PM Rack:Tube: 1:15

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.990708	ppm	0.002702	0.27	2282806.384966	Y 377.433
Ag (328.068 nm)	0.050589 n	ppm	0.000193	0.38	2557.630000	Y 377.433
Al (167.019 nm)	10.218000 o	ppm	0.021349	0.21	4566.410000	Y_R 377.433
Al H (396.152 nm)	10.256335	ppm	0.018559	0.18	28610.174967	Y_R 377.433
As (188.980 nm)	0.996896	ppm	0.001831	0.18	1292.690000	Y 242.219
B (249.678 nm)	1.998670 o	ppm	0.000904	0.05	55774.700000	Y 242.219
Ba (493.408 nm)	1.019240	ppm	0.001099	0.11	112819.000000	Y_R 488.368
Be (234.861 nm)	1.055240	ppm	0.012592	1.19	294348.000000	Y_R 488.368
Bi (223.061 nm)	-0.002981 u	ppm	0.002039	68.41	9.851040	Y 377.433
Ca (315.887 nm)	52.008853 o	ppm	0.071711	0.14	48139.323830	Y_R 377.433
Cd (214.439 nm)	1.025470	ppm	0.001624	0.16	62722.500000	Y 377.433
Co (228.615 nm)	0.986966	ppm	0.001461	0.15	18737.800000	Y 242.219
Cr (205.560 nm)	1.016680	ppm	0.002832	0.28	15153.500000	Y 377.433
Cu (324.754 nm)	1.024080	ppm	0.002222	0.22	74081.600000	Y 377.433
Fe (238.204 nm)	10.166835 o	ppm	0.009102	0.09	35944.973343	Y_R 377.433
Fe H (259.940 nm)	10.387500	ppm	0.015437	0.15	21649.900000	Y_R 377.433
K (766.491 nm)	49.946800	ppm	0.108759	0.22	48999.600000	Y_R2 488.368
Li (670.783 nm)	0.971898	ppm	0.002749	0.28	31458.000000	Y_R2 488.368
Mg (279.078 nm)	52.103400 o	ppm	0.142527	0.27	314686.000000	Y 377.433
Mn (257.610 nm)	1.046010	ppm	0.001674	0.16	253211.000000	Y 377.433
Mo (202.032 nm)	1.062760	ppm	0.002175	0.20	9109.290000	Y 377.433
Na (589.592 nm)	51.621900	ppm	0.116592	0.23	312817.000000	Y_R2 488.368
Na H (589.593 nm)	50.917205	ppm	0.102114	0.20	202611.311241	Y_R 488.368
Ni (231.604 nm)	1.018440	ppm	0.001302	0.13	7158.580000	Y 377.433
P (213.618 nm)	20.523500 o	ppm	0.012692	0.06	48417.400000	Y 242.219
Pb (220.353 nm)	0.997390	ppm	0.001790	0.18	2759.890000	Y 242.219
S (181.972 nm)	20.069688 o	ppm	0.056167	0.28	9650.378483	Y 377.433
Sb (206.834 nm)	1.117500 o	ppm	0.002975	0.27	2819.930000	Y 377.433
Se (196.026 nm)	0.998348	ppm	0.003183	0.32	1000.740000	Y 242.219
Si (288.158 nm)	10.098100	ppm	0.084651	0.84	95108.300000	Y 377.433
Sn (189.925 nm)	1.053170	ppm	0.001432	0.14	2243.260000	Y 377.433
Sr (421.552 nm)	0.998422	ppm	0.002263	0.23	223652.788604	Y_R 488.368
Th (288.505 nm)	0.013046	ppm	0.002641	20.25	154.739000	Y 377.433
Ti (336.122 nm)	1.032970	ppm	0.001084	0.10	154182.000000	Y 377.433
Tl (190.794 nm)	1.037160	ppm	0.002808	0.27	2277.080000	Y 377.433
U (409.013 nm)	-0.001729 u	ppm	0.003474	> 100.00	-158.452000	Y 377.433
V (292.401 nm)	1.047610	ppm	0.001023	0.10	42717.600000	Y 377.433
Zn (206.200 nm)	1.030980	ppm	0.004115	0.40	5511.820000	Y 377.433
Zr (343.823 nm)	1.015460	ppm	0.002761	0.27	138899.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.949500	7959.415764	0.003567	0.38
Y 377.433	0.919414	416834.488295	0.004462	0.49
Y_R 377.433	0.962668	33211.200000	0.009510	0.99
Y_R 488.368	0.980944	18483.800000	0.008414	0.86
Y_R2 488.368	0.962150	31865.220317	0.005180	0.54

Sample Name: LCSD 280-591310/3-A

Date: 10/27/2022 10:30:28 PM Rack:Tube: 1:16

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.991939	ppm	0.001816	0.18	2285645.265674	Y 377.433
Ag (328.068 nm)	0.050162 n	ppm	0.000268	0.53	2537.840000	Y 377.433
Al (167.019 nm)	10.331500 o	ppm	0.011443	0.11	4617.100000	Y_R 377.433
Al H (396.152 nm)	10.299662	ppm	0.013543	0.13	28731.297027	Y_R 377.433
As (188.980 nm)	1.001040	ppm	0.000559	0.06	1298.080000	Y 242.219
B (249.678 nm)	2.004360 o	ppm	0.002747	0.14	55933.300000	Y 242.219
Ba (493.408 nm)	1.022620	ppm	0.007485	0.73	113192.000000	Y_R 488.368
Be (234.861 nm)	1.062900	ppm	0.000845	0.08	296484.000000	Y_R 488.368
Bi (223.061 nm)	-0.002847 u	ppm	0.000704	24.73	10.186800	Y 377.433
Ca (315.887 nm)	52.105281 o	ppm	0.022869	0.04	48228.591274	Y_R 377.433
Cd (214.439 nm)	1.027740	ppm	0.002189	0.21	62861.900000	Y 377.433
Co (228.615 nm)	0.988997	ppm	0.001476	0.15	18776.400000	Y 242.219
Cr (205.560 nm)	1.021930	ppm	0.006165	0.60	15231.600000	Y 377.433
Cu (324.754 nm)	1.026800	ppm	0.003124	0.30	74274.900000	Y 377.433
Fe (238.204 nm)	10.191097 o	ppm	0.011186	0.11	36030.721584	Y_R 377.433
Fe H (259.940 nm)	10.419500	ppm	0.008122	0.08	21716.600000	Y_R 377.433
K (766.491 nm)	50.152300	ppm	0.077353	0.15	49204.500000	Y_R2 488.368
Li (670.783 nm)	0.976413	ppm	0.001803	0.18	31609.500000	Y_R2 488.368
Mg (279.078 nm)	52.293900 o	ppm	0.181004	0.35	315837.000000	Y 377.433
Mn (257.610 nm)	1.050060	ppm	0.002443	0.23	254192.000000	Y 377.433
Mo (202.032 nm)	1.071610	ppm	0.001383	0.13	9185.110000	Y 377.433
Na (589.592 nm)	51.833700	ppm	0.049996	0.10	314098.000000	Y_R2 488.368
Na H (589.593 nm)	51.021109	ppm	0.204281	0.40	203032.991385	Y_R 488.368
Ni (231.604 nm)	1.021470	ppm	0.003738	0.37	7179.830000	Y 377.433
P (213.618 nm)	20.569500 o	ppm	0.045734	0.22	48526.100000	Y 242.219
Pb (220.353 nm)	0.998558	ppm	0.000617	0.06	2763.080000	Y 242.219
S (181.972 nm)	20.091025 o	ppm	0.062108	0.31	9660.640643	Y 377.433
Sb (206.834 nm)	1.122650 o	ppm	0.006163	0.55	2832.920000	Y 377.433
Se (196.026 nm)	1.002500	ppm	0.001255	0.13	1004.890000	Y 242.219
Si (288.158 nm)	10.142700	ppm	0.027190	0.27	95524.800000	Y 377.433
Sn (189.925 nm)	1.059290	ppm	0.002639	0.25	2256.270000	Y 377.433
Sr (421.552 nm)	1.002180	ppm	0.003432	0.34	224494.497735	Y_R 488.368
Th (288.505 nm)	0.011571	ppm	0.001444	12.48	150.542000	Y 377.433
Ti (336.122 nm)	1.036790	ppm	0.002622	0.25	154753.000000	Y 377.433
Tl (190.794 nm)	1.037310	ppm	0.001106	0.11	2277.380000	Y 377.433
U (409.013 nm)	0.002595 u	ppm	0.004487	> 100.00	-137.881000	Y 377.433
V (292.401 nm)	1.049360	ppm	0.002796	0.27	42788.200000	Y 377.433
Zn (206.200 nm)	1.032220	ppm	0.002141	0.21	5518.450000	Y 377.433
Zr (343.823 nm)	1.028760	ppm	0.002527	0.25	140718.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.950265	7965.827679	0.002374	0.25
Y 377.433	0.920091	417141.184842	0.003258	0.35
Y_R 377.433	0.960551	33138.200000	0.000963	0.10
Y_R 488.368	0.978140	18430.900000	0.001577	0.16
Y_R2 488.368	0.946474	31346.042002	0.002696	0.28

Sample Name: 280-168102-A-10-C

Date: 10/27/2022 10:34:30 PM Rack:Tube: 1:17

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.899313	ppm	0.001268	0.14	2072117.247503	Y 377.433
Ag (328.068 nm)	0.000136 nu	ppm	0.000334	> 100.00	-151.678000	Y 377.433
Al (167.019 nm)	-0.001476 u	ppm	0.002925	> 100.00	0.013616	Y_R 377.433
Al H (396.152 nm)	0.037748 u	ppm	0.012202	32.33	786.875272	Y_R 377.433
As (188.980 nm)	-0.002120 u	ppm	0.001546	72.91	-6.310460	Y 242.219
B (249.678 nm)	0.490804	ppm	0.001180	0.24	13749.200000	Y 242.219
Ba (493.408 nm)	0.060802	ppm	0.000664	1.09	6776.060000	Y_R 488.368
Be (234.861 nm)	-0.000005 u	ppm	0.000020	> 100.00	-18.115200	Y_R 488.368
Bi (223.061 nm)	0.000414 u	ppm	0.003289	> 100.00	18.372800	Y 377.433
Ca (315.887 nm)	1350.700169 o	ppm	5.701705	0.42	1250382.579574	Y_R 377.433
Cd (214.439 nm)	-0.000126 u	ppm	0.000089	70.77	-13.174600	Y 377.433
Co (228.615 nm)	-0.000002 u	ppm	0.000164	> 100.00	-14.126600	Y 242.219
Cr (205.560 nm)	0.036822	ppm	0.000281	0.76	556.193000	Y 377.433
Cu (324.754 nm)	0.002976	ppm	0.000281	9.43	570.234000	Y 377.433
Fe (238.204 nm)	0.013158	ppm	0.001005	7.64	59.061190	Y_R 377.433
Fe H (259.940 nm)	0.002552 u	ppm	0.000594	23.27	21.485700	Y_R 377.433
K (766.491 nm)	54.467600	ppm	0.131291	0.24	53506.200000	Y_R2 488.368
Li (670.783 nm)	0.725891	ppm	0.000975	0.13	23205.400000	Y_R2 488.368
Mg (279.078 nm)	0.263919	ppm	0.000749	0.28	1637.090000	Y 377.433
Mn (257.610 nm)	0.001735	ppm	0.000014	0.81	496.325000	Y 377.433
Mo (202.032 nm)	0.005954	ppm	0.000486	8.16	56.067400	Y 377.433
Na (589.592 nm)	284.026000	ppm	0.907336	0.32	1712430.000000	Y_R2 488.368
Na H (589.593 nm)	284.974865	ppm	2.222338	0.78	1143102.054610	Y_R 488.368
Ni (231.604 nm)	-0.000089 u	ppm	0.000338	> 100.00	5.226640	Y 377.433
P (213.618 nm)	0.017226	ppm	0.000304	1.77	51.228000	Y 242.219
Pb (220.353 nm)	-0.000047 u	ppm	0.001490	> 100.00	-3.914570	Y 242.219
S (181.972 nm)	617.850969 bo	ppm	0.483879	0.08	296883.622683	Y 377.433
Sb (206.834 nm)	0.000958	ppm	0.000529	55.30	-3.458120	Y 377.433
Se (196.026 nm)	-0.000125 u	ppm	0.001214	> 100.00	6.052990	Y 242.219
Si (288.158 nm)	0.652781	ppm	0.002442	0.37	6946.320000	Y 377.433
Sn (189.925 nm)	0.010385	ppm	0.001407	13.55	27.419000	Y 377.433
Sr (421.552 nm)	19.361433 bo	ppm	0.115877	0.60	4336009.141719	Y_R 488.368
Th (288.505 nm)	0.001108 u	ppm	0.001562	> 100.00	101.935000	Y 377.433
Ti (336.122 nm)	-0.000662 u	ppm	0.000078	11.77	3981.660000	Y 377.433
Tl (190.794 nm)	0.002246	ppm	0.001596	71.05	1.642900	Y 377.433
U (409.013 nm)	-0.009491 u	ppm	0.001523	16.05	-397.350000	Y 377.433
V (292.401 nm)	0.001962	ppm	0.000434	22.13	91.448500	Y 377.433
Zn (206.200 nm)	0.002119	ppm	0.000479	22.62	20.670600	Y 377.433
Zr (343.823 nm)	0.002351	ppm	0.000332	14.13	337.837000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.867404	7271.224533	0.007169	0.83
Y 377.433	0.859422	389635.886819	0.008110	0.94
Y_R 377.433	0.906483	31272.900000	0.002260	0.25
Y_R 488.368	0.924834	17426.500000	0.002636	0.29
Y_R2 488.368	0.906218	30012.826488	0.003367	0.37

Sample Name: 280-168102-A-10-Csd@5

Date: 10/27/2022 10:38:33 PM Rack:Tube: 1:18

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.148304	ppm	0.000089	0.06	340835.358658	Y 377.433
Ag (328.068 nm)	0.000736 n	ppm	0.000087	11.88	-120.176000	Y 377.433
Al (167.019 nm)	-0.004833 u	ppm	0.002909	60.19	-1.490230	Y_R 377.433
Al H (396.152 nm)	0.042250 u	ppm	0.002662	6.30	277.683341	Y_R 377.433
As (188.980 nm)	-0.000313 u	ppm	0.002536	> 100.00	-3.961420	Y 242.219
B (249.678 nm)	0.096579	ppm	0.000515	0.53	2769.510000	Y 242.219
Ba (493.408 nm)	0.012262	ppm	0.000329	2.69	1405.740000	Y_R 488.368
Be (234.861 nm)	-0.000040 u	ppm	0.000013	31.44	-27.770800	Y_R 488.368
Bi (223.061 nm)	-0.004131 u	ppm	0.001024	24.79	6.964780	Y 377.433
Ca (315.887 nm)	280.658837 o	ppm	0.207277	0.07	259807.916642	Y_R 377.433
Cd (214.439 nm)	-0.000070 u	ppm	0.000040	58.11	-9.747210	Y 377.433
Co (228.615 nm)	-0.000292 u	ppm	0.000284	97.42	-19.594100	Y 242.219
Cr (205.560 nm)	0.007705	ppm	0.000301	3.90	122.043000	Y 377.433
Cu (324.754 nm)	0.001300	ppm	0.000268	20.63	1296.640000	Y 377.433
Fe (238.204 nm)	0.002387	ppm	0.000822	34.45	20.994564	Y_R 377.433
Fe H (259.940 nm)	-0.004070 u	ppm	0.002490	61.19	7.695450	Y_R 377.433
K (766.491 nm)	10.572000	ppm	0.026163	0.25	9748.820000	Y_R2 488.368
Li (670.783 nm)	0.150271	ppm	0.002127	1.42	3895.710000	Y_R2 488.368
Mg (279.078 nm)	0.056242	ppm	0.000631	1.12	382.968000	Y 377.433
Mn (257.610 nm)	0.000370	ppm	0.000008	2.27	166.035000	Y 377.433
Mo (202.032 nm)	0.000752	ppm	0.000109	14.53	11.502500	Y 377.433
Na (589.592 nm)	57.522000	ppm	0.275669	0.48	346980.000000	Y_R2 488.368
Na H (589.593 nm)	56.829480	ppm	0.107814	0.19	225311.427194	Y_R 488.368
Ni (231.604 nm)	-0.002106 u	ppm	0.000442	21.01	-8.931330	Y 377.433
P (213.618 nm)	0.002906	ppm	0.001506	51.82	17.451700	Y 242.219
Pb (220.353 nm)	0.000169 u	ppm	0.000344	> 100.00	-3.212600	Y 242.219
S (181.972 nm)	126.327054 bo	ppm	0.229894	0.18	60704.913558	Y 377.433
Sb (206.834 nm)	-0.000368 u	ppm	0.000124	33.78	-7.603720	Y 377.433
Se (196.026 nm)	-0.000476 u	ppm	0.003799	> 100.00	5.700230	Y 242.219
Si (288.158 nm)	0.131143	ppm	0.001234	0.94	2086.920000	Y 377.433
Sn (189.925 nm)	0.002412	ppm	0.000764	31.67	10.477400	Y 377.433
Sr (421.552 nm)	3.868057 o	ppm	0.017807	0.46	866301.403960	Y_R 488.368
Th (288.505 nm)	0.001852	ppm	0.002322	> 100.00	103.925000	Y 377.433
Ti (336.122 nm)	-0.000528 u	ppm	0.000113	21.46	597.889000	Y 377.433
Tl (190.794 nm)	0.000949 u	ppm	0.001597	> 100.00	-1.205160	Y 377.433
U (409.013 nm)	0.007977	ppm	0.003147	39.45	-79.802800	Y 377.433
V (292.401 nm)	0.000202	ppm	0.000174	86.08	27.135500	Y 377.433
Zn (206.200 nm)	0.000455 u	ppm	0.000629	> 100.00	11.788600	Y 377.433
Zr (343.823 nm)	-0.000035 u	ppm	0.000024	68.84	11.600300	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.935660	7843.404091	0.002136	0.23
Y 377.433	0.916615	415565.533606	0.002074	0.23
Y_R 377.433	0.968891	33425.900000	0.007900	0.82
Y_R 488.368	0.985329	18566.400000	0.007587	0.77
Y_R2 488.368	0.959363	31772.917359	0.009721	1.01

Sample Name: 280-168102-A-10-D MS

Date: 10/27/2022 10:42:35 PM Rack:Tube: 1:19

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	2.131993	ppm	0.003559	0.17	4913781.768869	Y 377.433
Ag (328.068 nm)	0.053866 n	ppm	0.000241	0.45	2734.030000	Y 377.433
Al (167.019 nm)	9.638620 o	ppm	0.013581	0.14	4307.740000	Y_R 377.433
Al H (396.152 nm)	10.700472	ppm	0.008916	0.08	30485.687501	Y_R 377.433
As (188.980 nm)	1.058530	ppm	0.004208	0.40	1372.840000	Y 242.219
B (249.678 nm)	2.584700 o	ppm	0.004826	0.19	72095.900000	Y 242.219
Ba (493.408 nm)	1.093780 o	ppm	0.013328	1.22	121065.000000	Y_R 488.368
Be (234.861 nm)	1.072490	ppm	0.016108	1.50	299157.000000	Y_R 488.368
Bi (223.061 nm)	-0.002264 u	ppm	0.002677	> 100.00	11.649800	Y 377.433
Ca (315.887 nm)	1373.452845 o	ppm	5.180567	0.38	1271446.179214	Y_R 377.433
Cd (214.439 nm)	0.970415	ppm	0.001728	0.18	59355.400000	Y 377.433
Co (228.615 nm)	0.959106	ppm	0.002088	0.22	18209.000000	Y 242.219
Cr (205.560 nm)	1.036730	ppm	0.000771	0.07	15452.400000	Y 377.433
Cu (324.754 nm)	1.058490	ppm	0.003605	0.34	75479.600000	Y 377.433
Fe (238.204 nm)	9.971636 o	ppm	0.019211	0.19	35255.086894	Y_R 377.433
Fe H (259.940 nm)	10.273700	ppm	0.021519	0.21	21412.900000	Y_R 377.433
K (766.491 nm)	107.207000	ppm	0.182460	0.17	106080.000000	Y_R2 488.368
Li (670.783 nm)	1.731100 o	ppm	0.004905	0.28	56926.100000	Y_R2 488.368
Mg (279.078 nm)	49.961800 o	ppm	0.084111	0.17	301753.000000	Y 377.433
Mn (257.610 nm)	1.023700	ppm	0.000824	0.08	247812.000000	Y 377.433
Mo (202.032 nm)	1.049940	ppm	0.002856	0.27	8999.480000	Y 377.433
Na (589.592 nm)	329.438000	ppm	0.679943	0.21	1987610.000000	Y_R2 488.368
Na H (589.593 nm)	334.971660	ppm	0.583753	0.17	1345329.171856	Y_R 488.368
Ni (231.604 nm)	0.992321	ppm	0.001765	0.18	6975.080000	Y 377.433
P (213.618 nm)	21.575600 o	ppm	0.018778	0.09	50899.000000	Y 242.219
Pb (220.353 nm)	0.971173	ppm	0.001701	0.18	2686.750000	Y 242.219
S (181.972 nm)	629.871644 bo	ppm	0.621042	0.10	302661.991964	Y 377.433
Sb (206.834 nm)	1.151920 o	ppm	0.002406	0.21	2907.000000	Y 377.433
Se (196.026 nm)	1.065750	ppm	0.010043	0.94	1067.990000	Y 242.219
Si (288.158 nm)	10.793600	ppm	0.060470	0.56	101585.000000	Y 377.433
Sn (189.925 nm)	1.039750	ppm	0.000279	0.03	2214.760000	Y 377.433
Sr (421.552 nm)	19.989699 bo	ppm	0.200153	1.00	4476708.023283	Y_R 488.368
Th (288.505 nm)	0.006320	ppm	0.002009	31.79	134.676000	Y 377.433
Ti (336.122 nm)	1.040550	ppm	0.000757	0.07	159520.000000	Y 377.433
Tl (190.794 nm)	0.962829	ppm	0.002769	0.29	2113.410000	Y 377.433
U (409.013 nm)	-0.013602 u	ppm	0.001776	13.05	-502.715000	Y 377.433
V (292.401 nm)	1.044890	ppm	0.000466	0.04	42602.800000	Y 377.433
Zn (206.200 nm)	0.971956	ppm	0.001154	0.12	5196.830000	Y 377.433
Zr (343.823 nm)	1.028680	ppm	0.001020	0.10	140706.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.862054	7226.379640	0.002599	0.30
Y 377.433	0.851082	385854.851710	0.003910	0.46
Y_R 377.433	0.907379	31303.800000	0.005834	0.64
Y_R 488.368	0.927979	17485.800000	0.008840	0.95
Y_R2 488.368	0.898253	29749.035723	0.003644	0.41

Sample Name: 280-168102-A-10-E MSD

Date: 10/27/2022 10:46:37 PM Rack:Tube: 1:20

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	2.157140	ppm	0.005405	0.25	4971754.202065	Y 377.433
Ag (328.068 nm)	0.054106 n	ppm	0.000149	0.28	2747.740000	Y 377.433
Al (167.019 nm)	9.800450 o	ppm	0.077044	0.79	4380.020000	Y_R 377.433
Al H (396.152 nm)	10.777287	ppm	0.029687	0.28	30705.273706	Y_R 377.433
As (188.980 nm)	1.070910	ppm	0.001384	0.13	1388.940000	Y 242.219
B (249.678 nm)	2.616530 o	ppm	0.001138	0.04	72982.900000	Y 242.219
Ba (493.408 nm)	1.098390 o	ppm	0.008224	0.75	121575.000000	Y_R 488.368
Be (234.861 nm)	1.090740	ppm	0.007201	0.66	304247.000000	Y_R 488.368
Bi (223.061 nm)	-0.002114 u	ppm	0.001657	78.36	12.025800	Y 377.433
Ca (315.887 nm)	1383.417885 o	ppm	4.004528	0.29	1280671.169842	Y_R 377.433
Cd (214.439 nm)	0.978170	ppm	0.003252	0.33	59829.800000	Y 377.433
Co (228.615 nm)	0.967260	ppm	0.004634	0.48	18364.200000	Y 242.219
Cr (205.560 nm)	1.050590	ppm	0.002206	0.21	15658.800000	Y 377.433
Cu (324.754 nm)	1.071440	ppm	0.007366	0.69	76389.000000	Y 377.433
Fe (238.204 nm)	10.061518 o	ppm	0.011862	0.12	35572.753431	Y_R 377.433
Fe H (259.940 nm)	10.356800	ppm	0.027625	0.27	21586.100000	Y_R 377.433
K (766.491 nm)	108.986000	ppm	0.285286	0.26	107853.000000	Y_R2 488.368
Li (670.783 nm)	1.758610 o	ppm	0.004646	0.26	57849.200000	Y_R2 488.368
Mg (279.078 nm)	50.331600 o	ppm	0.115658	0.23	303986.000000	Y 377.433
Mn (257.610 nm)	1.033070	ppm	0.002377	0.23	250080.000000	Y 377.433
Mo (202.032 nm)	1.066700	ppm	0.002795	0.26	9143.010000	Y 377.433
Na (589.592 nm)	334.553000	ppm	1.612620	0.48	2018450.000000	Y_R2 488.368
Na H (589.593 nm)	336.108957	ppm	0.570854	0.17	1349909.146097	Y_R 488.368
Ni (231.604 nm)	0.996403	ppm	0.008797	0.88	7003.770000	Y 377.433
P (213.618 nm)	21.826400 o	ppm	0.024096	0.11	51490.500000	Y 242.219
Pb (220.353 nm)	0.981273	ppm	0.001851	0.19	2714.730000	Y 242.219
S (181.972 nm)	635.756803 bo	ppm	1.728734	0.27	305489.853157	Y 377.433
Sb (206.834 nm)	1.168500 o	ppm	0.002698	0.23	2948.900000	Y 377.433
Se (196.026 nm)	1.074460	ppm	0.002436	0.23	1076.660000	Y 242.219
Si (288.158 nm)	10.819300	ppm	0.053598	0.50	101827.000000	Y 377.433
Sn (189.925 nm)	1.051990	ppm	0.003832	0.36	2240.760000	Y 377.433
Sr (421.552 nm)	20.106084 bo	ppm	0.129043	0.64	4502772.092335	Y_R 488.368
Th (288.505 nm)	0.004770	ppm	0.002935	61.53	130.534000	Y 377.433
Ti (336.122 nm)	1.056030	ppm	0.002539	0.24	161862.000000	Y 377.433
Tl (190.794 nm)	0.972457	ppm	0.003330	0.34	2134.540000	Y 377.433
U (409.013 nm)	-0.010949 u	ppm	0.002935	26.80	-492.646000	Y 377.433
V (292.401 nm)	1.055030	ppm	0.002540	0.24	43013.800000	Y 377.433
Zn (206.200 nm)	0.977882	ppm	0.004126	0.42	5228.460000	Y 377.433
Zr (343.823 nm)	1.042060	ppm	0.001273	0.12	142537.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.867312	7270.459220	0.003805	0.44
Y 377.433	0.858058	389017.460540	0.004619	0.54
Y_R 377.433	0.908681	31348.700000	0.006036	0.66
Y_R 488.368	0.931187	17546.200000	0.005228	0.56
Y_R2 488.368	0.895223	29648.693345	0.010286	1.15

Sample Name: CCVH-7429327

Date: 10/27/2022 10:50:39 PM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000067	ppm	0.000021	32.06	-892.388491	Y 377.433
Ag (328.068 nm)	0.002274	ppm	0.000171	7.54	-117.938000	Y 377.433
Al (167.019 nm)	50.198100 o	ppm	0.134741	0.27	22431.500000	Y_R 377.433
Al H (396.152 nm)	51.482728	ppm	0.057351	0.11	142909.997604	Y_R 377.433
As (188.980 nm)	0.000586 u	ppm	0.002328	> 100.00	-2.791910	Y 242.219
B (249.678 nm)	0.005638	ppm	0.000678	12.02	134.160000	Y 242.219
Ba (493.408 nm)	0.000665	ppm	0.000095	14.35	169.228000	Y_R 488.368
Be (234.861 nm)	0.000127	ppm	0.000029	22.56	824.968000	Y_R 488.368
Bi (223.061 nm)	-0.001190 u	ppm	0.000823	69.15	14.347100	Y 377.433
Ca (315.887 nm)	0.002000 u	ppm	0.005087	> 100.00	-5.927309	Y_R 377.433
Cd (214.439 nm)	-0.000120 u	ppm	0.000080	67.00	38.617400	Y 377.433
Co (228.615 nm)	-0.000267 u	ppm	0.000201	75.19	-19.097200	Y 242.219
Cr (205.560 nm)	0.000929	ppm	0.000244	26.30	6.886320	Y 377.433
Cu (324.754 nm)	0.002960	ppm	0.000172	5.81	2846.280000	Y 377.433
Fe (238.204 nm)	51.044674 o	ppm	0.031429	0.06	180418.595172	Y_R 377.433
Fe H (259.940 nm)	52.010800	ppm	0.019354	0.04	108338.000000	Y_R 377.433
K (766.491 nm)	0.105142	ppm	0.063862	60.74	-685.075000	Y_R2 488.368
Li (670.783 nm)	0.004895	ppm	0.001270	25.94	-981.102000	Y_R2 488.368
Mg (279.078 nm)	-0.005262 u	ppm	0.000753	14.31	-155.674000	Y 377.433
Mn (257.610 nm)	0.000294	ppm	0.000013	4.54	147.557000	Y 377.433
Mo (202.032 nm)	0.002418	ppm	0.000631	26.09	25.773700	Y 377.433
Na (589.592 nm)	254.194000	ppm	1.142110	0.45	1532510.000000	Y_R2 488.368
Na H (589.593 nm)	252.386521	ppm	1.550987	0.61	1011947.065162	Y_R 488.368
Ni (231.604 nm)	-0.000765 u	ppm	0.000488	63.77	9.339630	Y 377.433
P (213.618 nm)	5.035910	ppm	0.009904	0.20	11888.300000	Y 242.219
Pb (220.353 nm)	-0.005135 u	ppm	0.000180	3.51	-24.750500	Y 242.219
S (181.972 nm)	5.171646	ppm	0.032575	0.63	2489.379517	Y 377.433
Sb (206.834 nm)	0.001310 u	ppm	0.002369	> 100.00	-20.375800	Y 377.433
Se (196.026 nm)	0.004401	ppm	0.001630	37.04	1.800570	Y 242.219
Si (288.158 nm)	0.021292	ppm	0.001913	8.99	1063.700000	Y 377.433
Sn (189.925 nm)	0.001056 u	ppm	0.000985	93.28	7.594550	Y 377.433
Sr (421.552 nm)	0.000747	ppm	0.000025	3.39	225.653254	Y_R 488.368
Th (288.505 nm)	5.149230	ppm	0.042687	0.83	14566.300000	Y 377.433
Ti (336.122 nm)	0.000670	ppm	0.000101	15.07	-115.949000	Y 377.433
Tl (190.794 nm)	-0.002787 u	ppm	0.001816	65.18	-10.828300	Y 377.433
U (409.013 nm)	2.542350	ppm	0.000092	0.00	12786.300000	Y 377.433
V (292.401 nm)	-0.000631 u	ppm	0.000123	19.48	331.363000	Y 377.433
Zn (206.200 nm)	0.000858	ppm	0.000641	74.69	13.939900	Y 377.433
Zr (343.823 nm)	0.018607	ppm	0.000736	3.96	2718.870000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.948043	7947.205564	0.002818	0.30
Y 377.433	0.909686	412423.851973	0.001980	0.22
Y_R 377.433	0.950916	32805.800000	0.002045	0.22
Y_R 488.368	0.966408	18209.900000	0.002776	0.29
Y_R2 488.368	0.939480	31114.407310	0.003481	0.37

Sample Name: CCV-7429326

Date: 10/27/2022 10:54:42 PM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.469914	ppm	0.000508	0.11	1082234.604022	Y 377.433
Ag (328.068 nm)	0.512348	ppm	0.000389	0.08	27089.900000	Y 377.433
Al (167.019 nm)	0.535077	ppm	0.004939	0.92	240.873000	Y_R 377.433
Al H (396.152 nm)	0.522708 u	ppm	0.006485	1.24	1524.465445	Y_R 377.433
As (188.980 nm)	0.504634	ppm	0.000698	0.14	652.613000	Y 242.219
B (249.678 nm)	0.503435	ppm	0.001029	0.20	14121.700000	Y 242.219
Ba (493.408 nm)	0.507009	ppm	0.003679	0.73	56142.700000	Y_R 488.368
Be (234.861 nm)	0.520871	ppm	0.005461	1.05	145249.000000	Y_R 488.368
Bi (223.061 nm)	1.050970	ppm	0.000682	0.06	2655.150000	Y 377.433
Ca (315.887 nm)	5.323135	ppm	0.012978	0.24	4920.386705	Y_R 377.433
Cd (214.439 nm)	0.525271	ppm	0.002045	0.39	32122.800000	Y 377.433
Co (228.615 nm)	0.514067	ppm	0.000456	0.09	9752.000000	Y 242.219
Cr (205.560 nm)	0.524526	ppm	0.002313	0.44	7822.410000	Y 377.433
Cu (324.754 nm)	0.525258	ppm	0.000779	0.15	38710.300000	Y 377.433
Fe (238.204 nm)	2.560393	ppm	0.010112	0.39	9061.699050	Y_R 377.433
Fe H (259.940 nm)	2.627900 u	ppm	0.009065	0.34	5489.240000	Y_R 377.433
K (766.491 nm)	50.182500	ppm	0.107745	0.21	49234.600000	Y_R2 488.368
Li (670.783 nm)	0.495296	ppm	0.002180	0.44	15469.900000	Y_R2 488.368
Mg (279.078 nm)	20.741300	ppm	0.036586	0.18	125299.000000	Y 377.433
Mn (257.610 nm)	0.523610	ppm	0.000390	0.07	126790.000000	Y 377.433
Mo (202.032 nm)	0.527564	ppm	0.001696	0.32	4524.480000	Y 377.433
Na (589.592 nm)	25.892900	ppm	0.032047	0.12	157007.000000	Y_R2 488.368
Na H (589.593 nm)	26.268610	ppm	0.026649	0.10	102908.915151	Y_R 488.368
Ni (231.604 nm)	0.532181	ppm	0.000441	0.08	3742.960000	Y 377.433
P (213.618 nm)	-0.029936 u	ppm	0.002523	8.43	-60.008600	Y 242.219
Pb (220.353 nm)	0.502666	ppm	0.000804	0.16	1390.620000	Y 242.219
S (181.972 nm)	0.031955	ppm	0.007719	24.16	20.966107	Y 377.433
Sb (206.834 nm)	0.524880	ppm	0.001754	0.33	1322.460000	Y 377.433
Se (196.026 nm)	0.502459	ppm	0.002166	0.43	507.137000	Y 242.219
Si (288.158 nm)	5.175860	ppm	0.022340	0.43	49167.600000	Y 377.433
Sn (189.925 nm)	0.529293	ppm	0.002842	0.54	1130.060000	Y 377.433
Sr (421.552 nm)	0.500949	ppm	0.000589	0.12	112244.957565	Y_R 488.368
Th (288.505 nm)	0.040768	ppm	0.014332	35.15	222.923000	Y 377.433
Ti (336.122 nm)	0.512585	ppm	0.000554	0.11	76334.900000	Y 377.433
Tl (190.794 nm)	0.525878	ppm	0.000583	0.11	1153.140000	Y 377.433
U (409.013 nm)	0.008593	ppm	0.004354	50.67	-60.090200	Y 377.433
V (292.401 nm)	0.523629	ppm	0.000195	0.04	21360.300000	Y 377.433
Zn (206.200 nm)	0.528801	ppm	0.001041	0.20	2831.650000	Y 377.433
Zr (343.823 nm)	0.511209	ppm	0.001509	0.30	69925.600000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.956863	8021.138125	0.001945	0.20
Y 377.433	0.925322	419512.881639	0.003125	0.34
Y_R 377.433	0.970220	33471.700000	0.010478	1.08
Y_R 488.368	0.993502	18720.400000	0.008062	0.81
Y_R2 488.368	0.955734	31652.747143	0.001506	0.16

Sample Name: CCB

Date: 10/27/2022 10:58:44 PM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000035	ppm	0.000012	33.91	-965.043376	Y 377.433
Ag (328.068 nm)	0.000613	ppm	0.000224	36.46	-126.616000	Y 377.433
Al (167.019 nm)	-0.001283 u	ppm	0.003150	> 100.00	0.092759	Y_R 377.433
Al H (396.152 nm)	-0.007514 u	ppm	0.006191	82.40	2.922505	Y_R 377.433
As (188.980 nm)	0.001473	ppm	0.000779	52.90	-1.639210	Y 242.219
B (249.678 nm)	0.001426	ppm	0.000274	19.24	119.365000	Y 242.219
Ba (493.408 nm)	0.000008 u	ppm	0.000341	> 100.00	50.024100	Y_R 488.368
Be (234.861 nm)	-0.000038 u	ppm	0.000024	64.12	-27.192700	Y_R 488.368
Bi (223.061 nm)	0.001262 u	ppm	0.003960	> 100.00	20.499400	Y 377.433
Ca (315.887 nm)	0.004125	ppm	0.002970	72.00	-3.960853	Y_R 377.433
Cd (214.439 nm)	-0.000011 u	ppm	0.000050	> 100.00	-6.181550	Y 377.433
Co (228.615 nm)	-0.000125 u	ppm	0.000229	> 100.00	-16.423200	Y 242.219
Cr (205.560 nm)	0.000052 u	ppm	0.000106	> 100.00	7.918610	Y 377.433
Cu (324.754 nm)	0.001580	ppm	0.000159	10.08	1537.760000	Y 377.433
Fe (238.204 nm)	0.000600 u	ppm	0.000669	> 100.00	14.680654	Y_R 377.433
Fe H (259.940 nm)	-0.004543 u	ppm	0.001773	39.04	6.709420	Y_R 377.433
K (766.491 nm)	0.078651	ppm	0.055362	70.39	-711.483000	Y_R2 488.368
Li (670.783 nm)	0.006400	ppm	0.001129	17.64	-930.599000	Y_R2 488.368
Mg (279.078 nm)	-0.001060 u	ppm	0.001235	> 100.00	36.869500	Y 377.433
Mn (257.610 nm)	-0.000096 u	ppm	0.000032	33.82	53.254400	Y 377.433
Mo (202.032 nm)	0.001581	ppm	0.000078	4.91	18.608700	Y 377.433
Na (589.592 nm)	0.016264	ppm	0.007086	43.57	315.813000	Y_R2 488.368
Na H (589.593 nm)	1.346099 u	ppm	0.003052	0.23	2110.665560	Y_R 488.368
Ni (231.604 nm)	-0.000172 u	ppm	0.000361	> 100.00	4.639390	Y 377.433
P (213.618 nm)	0.002163	ppm	0.001884	87.11	15.698500	Y 242.219
Pb (220.353 nm)	-0.001347 u	ppm	0.000878	65.16	-7.385210	Y 242.219
S (181.972 nm)	0.028470	ppm	0.000474	1.67	18.066591	Y 377.433
Sb (206.834 nm)	0.000208 u	ppm	0.001490	> 100.00	-6.386870	Y 377.433
Se (196.026 nm)	-0.001753 u	ppm	0.001424	81.24	4.425160	Y 242.219
Si (288.158 nm)	0.002877	ppm	0.000516	17.94	892.081000	Y 377.433
Sn (189.925 nm)	0.000409 u	ppm	0.000812	> 100.00	6.219410	Y 377.433
Sr (421.552 nm)	0.000041 u	ppm	0.000073	> 100.00	67.753384	Y_R 488.368
Th (288.505 nm)	0.002908	ppm	0.000140	4.81	106.904000	Y 377.433
Ti (336.122 nm)	-0.000036 u	ppm	0.000050	> 100.00	-221.516000	Y 377.433
Tl (190.794 nm)	0.000165 u	ppm	0.001165	> 100.00	-2.934740	Y 377.433
U (409.013 nm)	0.004775	ppm	0.001320	27.64	-35.771500	Y 377.433
V (292.401 nm)	-0.000051 u	ppm	0.000222	> 100.00	18.489400	Y 377.433
Zn (206.200 nm)	-0.000210 u	ppm	0.000290	> 100.00	8.238400	Y 377.433
Zr (343.823 nm)	0.000363	ppm	0.000072	19.70	66.038600	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.969541	8127.414744	0.005886	0.61
Y 377.433	0.944298	428116.131237	0.004173	0.44
Y_R 377.433	0.975592	33657.100000	0.014147	1.45
Y_R 488.368	0.997037	18787.000000	0.014338	1.44
Y_R2 488.368	0.952623	31549.687780	0.004102	0.43

Sample Name: CCVL-7434568

Date: 10/27/2022 11:02:49 PM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014826	ppm	0.000002	0.01	33130.953752	Y 377.433
Ag (328.068 nm)	0.010693	ppm	0.000156	1.46	408.532000	Y 377.433
Al (167.019 nm)	0.110163	ppm	0.000628	0.57	49.886900	Y_R 377.433
Al H (396.152 nm)	0.102382 u	ppm	0.005469	5.34	309.762408	Y_R 377.433
As (188.980 nm)	0.014167	ppm	0.000605	4.27	14.867200	Y 242.219
B (249.678 nm)	0.100939	ppm	0.000262	0.26	2891.240000	Y 242.219
Ba (493.408 nm)	0.010070	ppm	0.000322	3.20	1163.280000	Y_R 488.368
Be (234.861 nm)	0.001019	ppm	0.000008	0.79	267.825000	Y_R 488.368
Bi (223.061 nm)	-0.003143 Qu	ppm	0.001354	43.08	9.443690 Q	Y 377.433
Ca (315.887 nm)	0.218055	ppm	0.005270	2.42	194.085145	Y_R 377.433
Cd (214.439 nm)	0.005213	ppm	0.000026	0.49	313.473000	Y 377.433
Co (228.615 nm)	0.010628	ppm	0.000558	5.25	187.788000	Y 242.219
Cr (205.560 nm)	0.010497	ppm	0.000261	2.48	163.599000	Y 377.433
Cu (324.754 nm)	0.017670	ppm	0.000256	1.45	2678.670000	Y 377.433
Fe (238.204 nm)	0.104683	ppm	0.002488	2.38	382.537183	Y_R 377.433
Fe H (259.940 nm)	0.103655 u	ppm	0.000913	0.88	232.051000	Y_R 377.433
K (766.491 nm)	3.160320	ppm	0.117836	3.73	2360.480000	Y_R2 488.368
Li (670.783 nm)	0.027817 Q	ppm	0.000603	2.17	-212.138000 Q	Y_R2 488.368
Mg (279.078 nm)	0.209583	ppm	0.000545	0.26	1307.230000	Y 377.433
Mn (257.610 nm)	0.010573	ppm	0.000041	0.39	2635.140000	Y 377.433
Mo (202.032 nm)	0.020855	ppm	0.000688	3.30	183.714000	Y 377.433
Na (589.592 nm)	1.109090	ppm	0.002620	0.24	6917.620000	Y_R2 488.368
Na H (589.593 nm)	2.345874 u	ppm	0.003434	0.15	6143.324624	Y_R 488.368
Ni (231.604 nm)	0.043943	ppm	0.000278	0.63	314.374000	Y 377.433
P (213.618 nm)	2.897760	ppm	0.006253	0.22	6845.270000	Y 242.219
Pb (220.353 nm)	0.008523	ppm	0.001210	14.20	20.074700	Y 242.219
S (181.972 nm)	0.122434	ppm	0.002424	1.98	63.241347	Y 377.433
Sb (206.834 nm)	0.020723	ppm	0.001355	6.54	45.220400	Y 377.433
Se (196.026 nm)	0.018913	ppm	0.000655	3.46	25.021800	Y 242.219
Si (288.158 nm)	0.504836	ppm	0.000879	0.17	5569.750000	Y 377.433
Sn (189.925 nm)	0.106068	ppm	0.000404	0.38	230.740000	Y 377.433
Sr (421.552 nm)	0.009932	ppm	0.000095	0.96	2282.611291	Y_R 488.368
Th (288.505 nm)	0.015271	ppm	0.000696	4.56	143.158000	Y 377.433
Ti (336.122 nm)	0.009784	ppm	0.000043	0.44	1245.410000	Y 377.433
Tl (190.794 nm)	0.015336	ppm	0.000634	4.13	30.422200	Y 377.433
U (409.013 nm)	0.068204	ppm	0.003303	4.84	282.363000	Y 377.433
V (292.401 nm)	0.010184	ppm	0.000220	2.16	433.053000	Y 377.433
Zn (206.200 nm)	0.022276	ppm	0.000294	1.32	128.253000	Y 377.433
Zr (343.823 nm)	0.013099 Q	ppm	0.000166	1.26	1807.810000 Q	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.969056	8123.353752	0.002149	0.22
Y 377.433	0.940691	426480.710878	0.003321	0.35
Y_R 377.433	0.991801	34216.300000	0.002879	0.29
Y_R 488.368	1.012640	19081.100000	0.004234	0.42
Y_R2 488.368	0.965017	31960.174665	0.008198	0.85

Sample Name: 280-168102-A-10-Cpds

Date: 10/27/2022 11:13:07 PM Rack:Tube: 1:21

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	1.010429	ppm	0.000947	0.09	2328268.441033	Y 377.433
Ag (328.068 nm)	0.053631 n	ppm	0.000258	0.48	2685.690000	Y 377.433
Al (167.019 nm)	0.978971	ppm	0.005525	0.56	438.118000	Y_R 377.433
Al H (396.152 nm)	1.090991	ppm	0.006706	0.61	3709.723275	Y_R 377.433
As (188.980 nm)	0.216964	ppm	0.002792	1.29	278.561000	Y 242.219
B (249.678 nm)	0.580231	ppm	0.001376	0.24	16240.400000	Y 242.219
Ba (493.408 nm)	0.163577	ppm	0.000118	0.07	18146.600000	Y_R 488.368
Be (234.861 nm)	0.050957	ppm	0.000234	0.46	14205.800000	Y_R 488.368
Bi (223.061 nm)	-0.003030 u	ppm	0.002838	93.65	9.727770	Y 377.433
Ca (315.887 nm)	1340.684627 o	ppm	3.677553	0.27	1241110.876845	Y_R 377.433
Cd (214.439 nm)	0.050168	ppm	0.000042	0.08	3063.790000	Y 377.433
Co (228.615 nm)	0.049721	ppm	0.000242	0.49	930.392000	Y 242.219
Cr (205.560 nm)	0.087181	ppm	0.000525	0.60	1306.320000	Y 377.433
Cu (324.754 nm)	0.058568	ppm	0.000317	0.54	4530.430000	Y 377.433
Fe (238.204 nm)	1.001799	ppm	0.001151	0.11	3553.194518	Y_R 377.433
Fe H (259.940 nm)	1.031410 u	ppm	0.007693	0.75	2164.260000	Y_R 377.433
K (766.491 nm)	74.925600	ppm	0.036030	0.05	73899.800000	Y_R2 488.368
Li (670.783 nm)	0.814508	ppm	0.000699	0.09	26178.200000	Y_R2 488.368
Mg (279.078 nm)	19.793200	ppm	0.048389	0.24	119561.000000	Y 377.433
Mn (257.610 nm)	0.054286	ppm	0.000061	0.11	13213.700000	Y 377.433
Mo (202.032 nm)	0.054347	ppm	0.000508	0.93	470.632000	Y 377.433
Na (589.592 nm)	296.115000	ppm	1.496650	0.51	1785440.000000	Y_R2 488.368
Na H (589.593 nm)	298.294862	ppm	1.341982	0.45	1196793.349156	Y_R 488.368
Ni (231.604 nm)	0.050868	ppm	0.000753	1.48	363.368000	Y 377.433
P (213.618 nm)	2.176550	ppm	0.002722	0.13	5144.230000	Y 242.219
Pb (220.353 nm)	0.100041	ppm	0.000728	0.73	275.080000	Y 242.219
S (181.972 nm)	604.112546 bo	ppm	1.223525	0.20	290282.392947	Y 377.433
Sb (206.834 nm)	0.115225	ppm	0.000273	0.24	282.947000	Y 377.433
Se (196.026 nm)	0.211072	ppm	0.004542	2.15	216.511000	Y 242.219
Si (288.158 nm)	7.707070	ppm	0.021458	0.28	72671.000000	Y 377.433
Sn (189.925 nm)	0.112531	ppm	0.002159	1.92	244.472000	Y 377.433
Sr (421.552 nm)	18.901916 bo	ppm	0.071969	0.38	4233101.436845	Y_R 488.368
Th (288.505 nm)	0.206721	ppm	0.001776	0.86	689.855000	Y 377.433
Ti (336.122 nm)	0.051877	ppm	0.000207	0.40	11795.500000	Y 377.433
Tl (190.794 nm)	0.192388	ppm	0.001456	0.76	420.193000	Y 377.433
U (409.013 nm)	0.521490	ppm	0.003294	0.63	2270.310000	Y 377.433
V (292.401 nm)	0.054353	ppm	0.000373	0.69	2212.770000	Y 377.433
Zn (206.200 nm)	0.199840	ppm	0.000550	0.28	1075.940000	Y 377.433
Zr (343.823 nm)	0.088408	ppm	0.010790	12.20	12108.100000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.869417	7288.101998	0.003938	0.45
Y 377.433	0.859556	389696.688112	0.005388	0.63
Y_R 377.433	0.909087	31362.700000	0.002932	0.32
Y_R 488.368	0.931862	17558.900000	0.004401	0.47
Y_R2 488.368	0.911258	30179.744275	0.003853	0.42

Sample Name: 280-168102-A-11-C

Date: 10/27/2022 11:17:09 PM Rack:Tube: 1:22

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.886554	ppm	0.001440	0.16	2042703.960974	Y 377.433
Ag (328.068 nm)	0.000243 nu	ppm	0.000457	> 100.00	-146.824000	Y 377.433
Al (167.019 nm)	0.002926	ppm	0.002398	81.96	1.974420	Y_R 377.433
Al H (396.152 nm)	0.009268 u	ppm	0.006440	69.48	774.754201	Y_R 377.433
As (188.980 nm)	-0.003256 u	ppm	0.002354	72.30	-7.788170	Y 242.219
B (249.678 nm)	0.485731	ppm	0.001030	0.21	13608.000000	Y 242.219
Ba (493.408 nm)	0.064703	ppm	0.000686	1.06	7207.680000	Y_R 488.368
Be (234.861 nm)	-0.000025 u	ppm	0.000030	> 100.00	-23.511200	Y_R 488.368
Bi (223.061 nm)	-0.002285 u	ppm	0.000660	28.90	11.597100	Y 377.433
Ca (315.887 nm)	1488.911948 o	ppm	5.195371	0.35	1378330.054702	Y_R 377.433
Cd (214.439 nm)	-0.000069 u	ppm	0.000040	58.25	-9.698980	Y 377.433
Co (228.615 nm)	-0.000026 u	ppm	0.000302	> 100.00	-14.577400	Y 242.219
Cr (205.560 nm)	0.040895	ppm	0.000294	0.72	616.930000	Y 377.433
Cu (324.754 nm)	0.002980	ppm	0.000238	8.00	461.347000	Y 377.433
Fe (238.204 nm)	0.006700	ppm	0.000851	12.70	36.238741	Y_R 377.433
Fe H (259.940 nm)	0.000071 u	ppm	0.002675	> 100.00	16.319800	Y_R 377.433
K (766.491 nm)	54.195300	ppm	0.199071	0.37	53234.800000	Y_R2 488.368
Li (670.783 nm)	0.716155	ppm	0.006491	0.91	22878.900000	Y_R2 488.368
Mg (279.078 nm)	0.394329	ppm	0.001344	0.34	2424.650000	Y 377.433
Mn (257.610 nm)	0.001667	ppm	0.000017	1.02	479.849000	Y 377.433
Mo (202.032 nm)	0.001716	ppm	0.000168	9.79	19.762500	Y 377.433
Na (589.592 nm)	279.503000	ppm	1.718730	0.61	1685160.000000	Y_R2 488.368
Na H (589.593 nm)	280.190146	ppm	2.465914	0.88	1123858.915952	Y_R 488.368
Ni (231.604 nm)	-0.000007 u	ppm	0.000307	> 100.00	5.804460	Y 377.433
P (213.618 nm)	0.012759	ppm	0.002513	19.69	40.690900	Y 242.219
Pb (220.353 nm)	-0.000160 u	ppm	0.001731	> 100.00	-4.199130	Y 242.219
S (181.972 nm)	681.303003 bo	ppm	0.749367	0.11	327372.514106	Y 377.433
Sb (206.834 nm)	-0.001691 u	ppm	0.002445	> 100.00	-9.958980	Y 377.433
Se (196.026 nm)	0.001676 u	ppm	0.002217	> 100.00	7.849880	Y 242.219
Si (288.158 nm)	0.594501	ppm	0.005269	0.89	6403.390000	Y 377.433
Sn (189.925 nm)	0.010124	ppm	0.001748	17.26	26.864300	Y 377.433
Sr (421.552 nm)	19.879628 bo	ppm	0.203009	1.02	4452057.872123	Y_R 488.368
Th (288.505 nm)	0.003383	ppm	0.000543	16.05	108.314000	Y 377.433
Ti (336.122 nm)	-0.000884 u	ppm	0.000082	9.33	4388.010000	Y 377.433
Tl (190.794 nm)	0.002611	ppm	0.000699	26.75	2.457750	Y 377.433
U (409.013 nm)	-0.010326 u	ppm	0.004591	44.46	-430.901000	Y 377.433
V (292.401 nm)	0.001752	ppm	0.000207	11.83	81.959000	Y 377.433
Zn (206.200 nm)	0.002317	ppm	0.000068	2.95	21.729000	Y 377.433
Zr (343.823 nm)	-0.000873 u	ppm	0.000079	9.04	-102.921000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.865175	7252.543338	0.003059	0.35
Y 377.433	0.859333	389595.304288	0.003241	0.38
Y_R 377.433	0.921047	31775.300000	0.008474	0.92
Y_R 488.368	0.946863	17841.600000	0.017636	1.86
Y_R2 488.368	0.922982	30568.036026	0.006349	0.69

Sample Name: 280-168102-A-12-C

Date: 10/27/2022 11:21:11 PM Rack:Tube: 1:23

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.888100	ppm	0.000494	0.06	2046267.047316	Y 377.433
Ag (328.068 nm)	-0.000096 nu	ppm	0.000395	> 100.00	-164.475000	Y 377.433
Al (167.019 nm)	-0.002530 u	ppm	0.002237	88.43	-0.459752	Y_R 377.433
Al H (396.152 nm)	0.003233 u	ppm	0.003864	> 100.00	793.380468	Y_R 377.433
As (188.980 nm)	0.000737 u	ppm	0.000905	> 100.00	-2.595120	Y 242.219
B (249.678 nm)	0.486667	ppm	0.001122	0.23	13634.000000	Y 242.219
Ba (493.408 nm)	0.071253	ppm	0.000361	0.51	7932.290000	Y_R 488.368
Be (234.861 nm)	-0.000021 u	ppm	0.000012	58.28	-22.778000	Y_R 488.368
Bi (223.061 nm)	-0.003052 u	ppm	0.001407	46.09	9.672860	Y 377.433
Ca (315.887 nm)	1560.591302 o	ppm	2.426377	0.16	1444686.138615	Y_R 377.433
Cd (214.439 nm)	-0.000077 u	ppm	0.000027	34.67	-10.203500	Y 377.433
Co (228.615 nm)	0.000009 u	ppm	0.000212	> 100.00	-13.912700	Y 242.219
Cr (205.560 nm)	0.045090	ppm	0.000363	0.80	679.486000	Y 377.433
Cu (324.754 nm)	0.002863	ppm	0.000161	5.61	396.715000	Y 377.433
Fe (238.204 nm)	0.007149	ppm	0.000616	8.62	37.824953	Y_R 377.433
Fe H (259.940 nm)	0.000832 u	ppm	0.003056	> 100.00	17.903500	Y_R 377.433
K (766.491 nm)	54.383400	ppm	0.073836	0.14	53422.200000	Y_R2 488.368
Li (670.783 nm)	0.717846	ppm	0.001258	0.18	22935.600000	Y_R2 488.368
Mg (279.078 nm)	0.490797	ppm	0.001269	0.26	3007.600000	Y 377.433
Mn (257.610 nm)	0.002316	ppm	0.000008	0.33	636.894000	Y 377.433
Mo (202.032 nm)	0.004728	ppm	0.000090	1.90	45.564600	Y 377.433
Na (589.592 nm)	279.073000	ppm	0.154325	0.06	1682580.000000	Y_R2 488.368
Na H (589.593 nm)	282.163316	ppm	1.937616	0.69	1131803.433094	Y_R 488.368
Ni (231.604 nm)	-0.000133 u	ppm	0.000825	> 100.00	4.920940	Y 377.433
P (213.618 nm)	0.014009	ppm	0.000336	2.40	43.639900	Y 242.219
Pb (220.353 nm)	-0.002454 u	ppm	0.000669	27.27	-10.631200	Y 242.219
S (181.972 nm)	720.565635 bo	ppm	0.410062	0.06	346238.327424	Y 377.433
Sb (206.834 nm)	-0.001770 u	ppm	0.000502	28.34	-10.012300	Y 377.433
Se (196.026 nm)	-0.006789 u	ppm	0.002900	42.71	-0.590494	Y 242.219
Si (288.158 nm)	0.880844	ppm	0.003167	0.36	9070.920000	Y 377.433
Sn (189.925 nm)	0.010171	ppm	0.000429	4.22	26.964300	Y 377.433
Sr (421.552 nm)	20.589852 bo	ppm	0.198997	0.97	4611110.888449	Y_R 488.368
Th (288.505 nm)	-0.001314 u	ppm	0.001472	> 100.00	94.893000	Y 377.433
Ti (336.122 nm)	-0.000726 u	ppm	0.000052	7.15	4640.890000	Y 377.433
Tl (190.794 nm)	0.001899	ppm	0.000718	37.79	0.880721	Y 377.433
U (409.013 nm)	-0.002762 u	ppm	0.005557	> 100.00	-408.252000	Y 377.433
V (292.401 nm)	0.001744	ppm	0.000243	13.92	81.005700	Y 377.433
Zn (206.200 nm)	0.001674	ppm	0.000549	32.79	18.295300	Y 377.433
Zr (343.823 nm)	-0.000894 u	ppm	0.000042	4.64	-105.903000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.867906	7275.432042	0.004581	0.53
Y 377.433	0.862574	391064.839421	0.003522	0.41
Y_R 377.433	0.927960	32013.800000	0.001743	0.19
Y_R 488.368	0.945769	17821.000000	0.002290	0.24
Y_R2 488.368	0.910388	30150.939017	0.004989	0.55

Sample Name: 280-168087-A-13-B

Date: 10/27/2022 11:25:13 PM Rack:Tube: 1:24

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.236681	ppm	0.000162	0.07	544566.966014	Y 377.433
Ag (328.068 nm)	0.001099 n	ppm	0.000276	25.08	-102.414000	Y 377.433
Al (167.019 nm)	0.096178	ppm	0.001921	2.00	43.864600	Y_R 377.433
Al H (396.152 nm)	0.111408 u	ppm	0.002546	2.28	363.152083	Y_R 377.433
As (188.980 nm)	0.038349	ppm	0.000452	1.18	46.310600	Y 242.219
B (249.678 nm)	2.180950 o	ppm	0.001663	0.08	60821.300000	Y 242.219
Ba (493.408 nm)	0.073942	ppm	0.000257	0.35	8230.100000	Y_R 488.368
Be (234.861 nm)	0.000011 u	ppm	0.000016	> 100.00	-5.654120	Y_R 488.368
Bi (223.061 nm)	-0.000673 u	ppm	0.002385	> 100.00	15.642800	Y 377.433
Ca (315.887 nm)	62.147286 o	ppm	0.032450	0.05	57524.135477	Y_R 377.433
Cd (214.439 nm)	0.000003 u	ppm	0.000032	> 100.00	-4.816720	Y 377.433
Co (228.615 nm)	0.000710	ppm	0.000332	46.77	-0.430150	Y 242.219
Cr (205.560 nm)	0.011396	ppm	0.000225	1.97	176.943000	Y 377.433
Cu (324.754 nm)	0.003511	ppm	0.000069	1.95	1633.980000	Y 377.433
Fe (238.204 nm)	0.501970	ppm	0.002001	0.40	1786.658362	Y_R 377.433
Fe H (259.940 nm)	0.510750 u	ppm	0.002269	0.44	1079.900000	Y_R 377.433
K (766.491 nm)	6.883210	ppm	0.113460	1.65	6071.650000	Y_R2 488.368
Li (670.783 nm)	0.191544	ppm	0.001708	0.89	5280.240000	Y_R2 488.368
Mg (279.078 nm)	274.591000 o	ppm	0.127701	0.05	1658350.000000	Y 377.433
Mn (257.610 nm)	0.132712	ppm	0.000328	0.25	32193.000000	Y 377.433
Mo (202.032 nm)	0.000872	ppm	0.000193	22.12	12.535500	Y 377.433
Na (589.592 nm)	726.649000 o	ppm	2.109820	0.29	4380590.000000	Y_R2 488.368
Na H (589.593 nm)	779.300844	ppm	1.572603	0.20	3131593.109283	Y_R 488.368
Ni (231.604 nm)	0.042799	ppm	0.000346	0.81	306.391000	Y 377.433
P (213.618 nm)	0.233307	ppm	0.003439	1.47	560.878000	Y 242.219
Pb (220.353 nm)	-0.000435 u	ppm	0.000967	> 100.00	-4.863220	Y 242.219
S (181.972 nm)	21.821426 o	ppm	0.062599	0.29	10489.958112	Y 377.433
Sb (206.834 nm)	0.003319	ppm	0.001451	43.73	1.660020	Y 377.433
Se (196.026 nm)	-0.002110 u	ppm	0.001364	64.66	4.089110	Y 242.219
Si (288.158 nm)	21.596000 o	ppm	0.118550	0.55	202051.000000	Y 377.433
Sn (189.925 nm)	0.003214	ppm	0.000674	20.96	12.181700	Y 377.433
Sr (421.552 nm)	3.788693 o	ppm	0.014514	0.38	848527.978897	Y_R 488.368
Th (288.505 nm)	0.016306	ppm	0.002309	14.16	147.791000	Y 377.433
Ti (336.122 nm)	0.004844	ppm	0.000044	0.91	704.652000	Y 377.433
Tl (190.794 nm)	0.001343 u	ppm	0.001227	91.35	-0.368442	Y 377.433
U (409.013 nm)	-0.002510 u	ppm	0.000754	30.03	-86.238600	Y 377.433
V (292.401 nm)	0.019841	ppm	0.000124	0.63	834.584000	Y 377.433
Zn (206.200 nm)	2.041620 o	ppm	0.015184	0.74	10905.800000	Y 377.433
Zr (343.823 nm)	0.011736	ppm	0.000093	0.79	1622.740000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.913675	7659.101946	0.007421	0.81
Y 377.433	0.895387	405941.199329	0.008403	0.94
Y_R 377.433	0.975779	33663.500000	0.001552	0.16
Y_R 488.368	0.994304	18735.500000	0.002061	0.21
Y_R2 488.368	0.961882	31856.343591	0.011840	1.23

Sample Name: 280-168087-A-14-B

Date: 10/27/2022 11:29:15 PM Rack:Tube: 1:25

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.149799	ppm	0.000457	0.30	344280.128304	Y 377.433
Ag (328.068 nm)	0.002318 n	ppm	0.000301	12.99	-17.176300	Y 377.433
Al (167.019 nm)	0.313397	ppm	0.006432	2.05	150.356000	Y_R 377.433
Al H (396.152 nm)	0.458874 u	ppm	0.002053	0.45	1520.866010	Y_R 377.433
As (188.980 nm)	0.505791	ppm	0.003421	0.68	654.118000	Y 242.219
B (249.678 nm)	2.833280 o	ppm	0.002387	0.08	78955.100000	Y 242.219
Ba (493.408 nm)	0.080478	ppm	0.000509	0.63	8966.600000	Y_R 488.368
Be (234.861 nm)	-0.000172 u	ppm	0.000014	8.15	216.484000	Y_R 488.368
Bi (223.061 nm)	-0.000600 u	ppm	0.001298	> 100.00	15.826700	Y 377.433
Ca (315.887 nm)	458.364688 o	ppm	0.665987	0.15	424316.434755	Y_R 377.433
Cd (214.439 nm)	0.000008 u	ppm	0.000079	> 100.00	12.956600	Y 377.433
Co (228.615 nm)	0.003392	ppm	0.000587	17.31	51.194800	Y 242.219
Cr (205.560 nm)	0.005280	ppm	0.000190	3.61	80.943600	Y 377.433
Cu (324.754 nm)	0.003411	ppm	0.000057	1.69	1331.080000	Y 377.433
Fe (238.204 nm)	17.832762 o	ppm	0.017359	0.10	63038.486881	Y_R 377.433
Fe H (259.940 nm)	18.387600	ppm	0.019340	0.11	38311.500000	Y_R 377.433
K (766.491 nm)	26.873500	ppm	0.231926	0.86	25999.000000	Y_R2 488.368
Li (670.783 nm)	0.122351	ppm	0.001394	1.14	2959.100000	Y_R2 488.368
Mg (279.078 nm)	1147.070000 bo	ppm	7.568540	0.66	6927380.000000	Y 377.433
Mn (257.610 nm)	6.587740 o	ppm	0.017307	0.26	1594310.000000	Y 377.433
Mo (202.032 nm)	0.004999	ppm	0.001008	20.16	47.889000	Y 377.433
Na (589.592 nm)	2983.650000 bo	ppm	12.115100	0.41	17985900.000000	Y_R2 488.368
Na H (589.593 nm)	4587.755387 bo	ppm	27.212649	0.59	18451499.747945	Y_R 488.368
Ni (231.604 nm)	0.031331	ppm	0.000126	0.40	228.901000	Y 377.433
P (213.618 nm)	0.518881	ppm	0.002293	0.44	1234.430000	Y 242.219
Pb (220.353 nm)	0.002174	ppm	0.000960	44.17	3.978910	Y 242.219
S (181.972 nm)	2184.025666 bo	ppm	7.516304	0.34	1049450.753413	Y 377.433
Sb (206.834 nm)	0.004012	ppm	0.000640	15.96	-0.072476	Y 377.433
Se (196.026 nm)	-0.004728 u	ppm	0.007837	> 100.00	3.684120	Y 242.219
Si (288.158 nm)	12.712400 o	ppm	0.061488	0.48	119296.000000	Y 377.433
Sn (189.925 nm)	-0.000180 u	ppm	0.000489	> 100.00	4.969560	Y 377.433
Sr (421.552 nm)	7.122338 o	ppm	0.017863	0.25	1595090.635593	Y_R 488.368
Th (288.505 nm)	0.054190	ppm	0.005013	9.25	402.945000	Y 377.433
Ti (336.122 nm)	0.028793	ppm	0.000262	0.91	5540.630000	Y 377.433
Tl (190.794 nm)	0.001084 u	ppm	0.001597	> 100.00	-1.501560	Y 377.433
U (409.013 nm)	0.102698	ppm	0.001821	1.77	363.607000	Y 377.433
V (292.401 nm)	0.078086	ppm	0.000366	0.47	3222.340000	Y 377.433
Zn (206.200 nm)	0.005051	ppm	0.000157	3.11	36.319200	Y 377.433
Zr (343.823 nm)	0.159010	ppm	0.000419	0.26	21814.200000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.775901	6504.182675	0.002604	0.34
Y 377.433	0.785823	356268.158873	0.003651	0.46
Y_R 377.433	0.925293	31921.800000	0.005798	0.63
Y_R 488.368	0.936721	17650.500000	0.007584	0.81
Y_R2 488.368	0.911151	30176.196117	0.005097	0.56

Sample Name: 280-168087-A-14-B@5

Date: 10/27/2022 11:33:18 PM Rack:Tube: 1:26

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.026737	ppm	0.003419	12.79	60589.363586	Y 377.433
Ag (328.068 nm)	0.001374 n	ppm	0.000255	18.53	-83.022300	Y 377.433
Al (167.019 nm)	0.053155	ppm	0.004618	8.69	26.032800	Y_R 377.433
Al H (396.152 nm)	0.073668 u	ppm	0.000973	1.32	265.862795	Y_R 377.433
As (188.980 nm)	0.098242	ppm	0.012574	12.80	124.189000	Y 242.219
B (249.678 nm)	0.549782	ppm	0.065374	11.89	15385.900000	Y 242.219
Ba (493.408 nm)	0.012498	ppm	0.000371	2.96	1434.100000	Y_R 488.368
Be (234.861 nm)	0.000003 u	ppm	0.000023	> 100.00	31.203400	Y_R 488.368
Bi (223.061 nm)	-0.001430 u	ppm	0.000735	51.43	13.744100	Y 377.433
Ca (315.887 nm)	77.486896 o	ppm	1.234161	1.59	71724.548314	Y_R 377.433
Cd (214.439 nm)	-0.000057 u	ppm	0.000094	> 100.00	-5.974390	Y 377.433
Co (228.615 nm)	0.000207 u	ppm	0.000293	> 100.00	-9.959500	Y 242.219
Cr (205.560 nm)	0.001057	ppm	0.000452	42.81	22.079000	Y 377.433
Cu (324.754 nm)	0.002963	ppm	0.000038	1.29	1584.980000	Y 377.433
Fe (238.204 nm)	2.986608	ppm	0.060137	2.01	10568.061417	Y_R 377.433
Fe H (259.940 nm)	3.063710 u	ppm	0.058185	1.90	6396.890000	Y_R 377.433
K (766.491 nm)	3.435220	ppm	0.119410	3.48	2634.520000	Y_R2 488.368
Li (670.783 nm)	0.023034	ppm	0.001395	6.06	-372.613000	Y_R2 488.368
Mg (279.078 nm)	248.505000 o	ppm	29.195500	11.75	1500800.000000	Y 377.433
Mn (257.610 nm)	1.412140 o	ppm	0.164521	11.65	341816.000000	Y 377.433
Mo (202.032 nm)	0.000912	ppm	0.000613	67.25	12.872200	Y 377.433
Na (589.592 nm)	691.903000 o	ppm	3.791280	0.55	4171060.000000	Y_R2 488.368
Na H (589.593 nm)	755.363693	ppm	14.889440	1.97	3035237.295581	Y_R 488.368
Ni (231.604 nm)	0.005202	ppm	0.000808	15.53	42.891100	Y 377.433
P (213.618 nm)	0.104749	ppm	0.012408	11.85	257.660000	Y 242.219
Pb (220.353 nm)	0.002711	ppm	0.000278	10.25	4.172320	Y 242.219
S (181.972 nm)	590.513204 bo	ppm	64.898512	10.99	283751.053298	Y 377.433
Sb (206.834 nm)	0.000566 u	ppm	0.002015	> 100.00	-6.043570	Y 377.433
Se (196.026 nm)	-0.003314 u	ppm	0.001332	40.20	3.496580	Y 242.219
Si (288.158 nm)	2.501470	ppm	0.293515	11.73	24169.400000	Y 377.433
Sn (189.925 nm)	0.000010 u	ppm	0.001148	> 100.00	5.372830	Y 377.433
Sr (421.552 nm)	1.107791 o	ppm	0.022194	2.00	248145.758121	Y_R 488.368
Th (288.505 nm)	0.027710	ppm	0.006714	24.23	208.889000	Y 377.433
Ti (336.122 nm)	0.005622	ppm	0.000884	15.73	869.406000	Y 377.433
Tl (190.794 nm)	0.002956	ppm	0.000326	11.04	3.111230	Y 377.433
U (409.013 nm)	0.024604	ppm	0.002169	8.82	47.906700	Y 377.433
V (292.401 nm)	0.015831	ppm	0.001750	11.06	671.881000	Y 377.433
Zn (206.200 nm)	0.000155	ppm	0.000187	> 100.00	10.189500	Y 377.433
Zr (343.823 nm)	0.030326	ppm	0.003721	12.27	4172.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.910309	7630.893104	0.012524	1.38
Y 377.433	0.891037	403968.917659	0.011948	1.34
Y_R 377.433	0.954924	32944.100000	0.008676	0.91
Y_R 488.368	0.979611	18458.700000	0.014287	1.46
Y_R2 488.368	0.927385	30713.844259	0.002115	0.23

Sample Name: 280-168089-A-9-D

Date: 10/27/2022 11:37:20 PM Rack:Tube: 1:27

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.866386	ppm	0.000928	0.11	1996210.785485	Y 377.433
Ag (328.068 nm)	0.000905 n	ppm	0.000085	9.43	-112.028000	Y 377.433
Al (167.019 nm)	0.342009	ppm	0.006721	1.97	153.622000	Y_R 377.433
Al H (396.152 nm)	0.432314 u	ppm	0.008058	1.86	1486.502651	Y_R 377.433
As (188.980 nm)	-0.003504 u	ppm	0.003062	87.39	-8.110070	Y 242.219
B (249.678 nm)	5.355870 o	ppm	0.009803	0.18	149247.000000	Y 242.219
Ba (493.408 nm)	0.011984	ppm	0.000160	1.33	1375.500000	Y_R 488.368
Be (234.861 nm)	0.000015 u	ppm	0.000028	> 100.00	-3.389000	Y_R 488.368
Bi (223.061 nm)	-0.001158 u	ppm	0.002817	> 100.00	14.426100	Y 377.433
Ca (315.887 nm)	539.646422 o	ppm	0.859203	0.16	499561.776097	Y_R 377.433
Cd (214.439 nm)	-0.000065 u	ppm	0.000079	> 100.00	-8.893800	Y 377.433
Co (228.615 nm)	-0.000250 u	ppm	0.000189	75.70	-18.535500	Y 242.219
Cr (205.560 nm)	0.013920	ppm	0.000201	1.44	214.546000	Y 377.433
Cu (324.754 nm)	0.002605	ppm	0.000270	10.38	1191.500000	Y 377.433
Fe (238.204 nm)	0.587150	ppm	0.003894	0.66	2087.709733	Y_R 377.433
Fe H (259.940 nm)	0.592008 u	ppm	0.004136	0.70	1249.130000	Y_R 377.433
K (766.491 nm)	13.947300	ppm	0.086952	0.62	13113.500000	Y_R2 488.368
Li (670.783 nm)	0.658705	ppm	0.002689	0.41	20951.600000	Y_R2 488.368
Mg (279.078 nm)	206.919000 o	ppm	0.606211	0.29	1249660.000000	Y 377.433
Mn (257.610 nm)	0.137308	ppm	0.000226	0.16	33305.000000	Y 377.433
Mo (202.032 nm)	0.001270	ppm	0.000374	29.48	15.937300	Y 377.433
Na (589.592 nm)	981.149000 bo	ppm	3.206700	0.33	5914640.000000	Y_R2 488.368
Na H (589.593 nm)	1086.040895 b	ppm	9.599858	0.88	4365419.962122	Y_R 488.368
Ni (231.604 nm)	0.005985	ppm	0.000343	5.72	47.966500	Y 377.433
P (213.618 nm)	0.022979	ppm	0.000814	3.54	64.796400	Y 242.219
Pb (220.353 nm)	0.001658	ppm	0.000763	45.98	0.862119	Y 242.219
S (181.972 nm)	813.106865 bo	ppm	1.320933	0.16	390704.981178	Y 377.433
Sb (206.834 nm)	-0.000187 u	ppm	0.001049	> 100.00	-7.112040	Y 377.433
Se (196.026 nm)	0.000516 u	ppm	0.002555	> 100.00	6.701800	Y 242.219
Si (288.158 nm)	10.236200	ppm	0.046278	0.45	96225.100000	Y 377.433
Sn (189.925 nm)	0.000105 u	ppm	0.000889	> 100.00	5.574570	Y 377.433
Sr (421.552 nm)	15.644258 bo	ppm	0.125808	0.80	3503556.026644	Y_R 488.368
Th (288.505 nm)	0.018264	ppm	0.001564	8.56	153.335000	Y 377.433
Ti (336.122 nm)	0.008468	ppm	0.000499	5.89	2765.210000	Y 377.433
Tl (190.794 nm)	0.002553	ppm	0.000648	25.36	2.280580	Y 377.433
U (409.013 nm)	0.009165	ppm	0.004207	45.91	-128.822000	Y 377.433
V (292.401 nm)	0.001666	ppm	0.000168	10.07	87.528900	Y 377.433
Zn (206.200 nm)	0.005819	ppm	0.000376	6.47	40.416600	Y 377.433
Zr (343.823 nm)	0.000501	ppm	0.000024	4.86	86.649500	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.867508	7272.095318	0.007290	0.84
Y 377.433	0.857940	388964.063063	0.008288	0.97
Y_R 377.433	0.942138	32503.000000	0.006300	0.67
Y_R 488.368	0.959041	18071.000000	0.009823	1.02
Y_R2 488.368	0.931394	30846.631905	0.004836	0.52

Sample Name: 280-168125-A-1-C@5

Date: 10/27/2022 11:41:22 PM Rack:Tube: 1:28

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.055533	ppm	0.004196	7.56	126973.059861	Y 377.433
Ag (328.068 nm)	0.000831 n	ppm	0.000040	4.84	-121.727000	Y 377.433
Al (167.019 nm)	0.647085	ppm	0.005107	0.79	292.364000	Y_R 377.433
Al H (396.152 nm)	0.641833 u	ppm	0.007872	1.23	1815.907729	Y_R 377.433
As (188.980 nm)	0.063465	ppm	0.004755	7.49	78.968100	Y 242.219
B (249.678 nm)	2.734420 o	ppm	0.183784	6.72	76227.500000	Y 242.219
Ba (493.408 nm)	0.408770	ppm	0.002174	0.53	45278.600000	Y_R 488.368
Be (234.861 nm)	0.000108	ppm	0.000039	36.47	96.492800	Y_R 488.368
Bi (223.061 nm)	-0.002772 u	ppm	0.000599	21.61	10.374300	Y 377.433
Ca (315.887 nm)	21.513383 o	ppm	0.131947	0.61	19907.911824	Y_R 377.433
Cd (214.439 nm)	0.000279	ppm	0.000038	13.79	16.894600	Y 377.433
Co (228.615 nm)	0.017210	ppm	0.001172	6.81	317.965000	Y 242.219
Cr (205.560 nm)	0.176800	ppm	0.011845	6.70	2641.960000	Y 377.433
Cu (324.754 nm)	0.010762	ppm	0.000650	6.04	2178.470000	Y 377.433
Fe (238.204 nm)	5.289407	ppm	0.038331	0.72	18706.789663	Y_R 377.433
Fe H (259.940 nm)	5.393920	ppm	0.035905	0.67	11250.000000	Y_R 377.433
K (766.491 nm)	190.144000 o	ppm	0.451653	0.24	188755.000000	Y_R2 488.368
Li (670.783 nm)	0.045395	ppm	0.000394	0.87	377.524000	Y_R2 488.368
Mg (279.078 nm)	23.564800	ppm	1.606340	6.82	142346.000000	Y 377.433
Mn (257.610 nm)	0.194268	ppm	0.013027	6.71	47089.400000	Y 377.433
Mo (202.032 nm)	0.005198	ppm	0.000324	6.24	49.586400	Y 377.433
Na (589.592 nm)	658.270000 o	ppm	4.683350	0.71	3968860.000000	Y_R2 488.368
Na H (589.593 nm)	709.047931	ppm	3.655872	0.52	2849353.217377	Y_R 488.368
Ni (231.604 nm)	0.089783	ppm	0.006377	7.10	637.060000	Y 377.433
P (213.618 nm)	5.470580	ppm	0.390579	7.14	12913.500000	Y 242.219
Pb (220.353 nm)	0.003191	ppm	0.000614	19.25	5.425170	Y 242.219
S (181.972 nm)	18.062987 o	ppm	1.250981	6.93	8684.160671	Y 377.433
Sb (206.834 nm)	0.013938	ppm	0.002214	15.88	32.451900	Y 377.433
Se (196.026 nm)	-0.001154 u	ppm	0.001488	> 100.00	4.207480	Y 242.219
Si (288.158 nm)	5.932540	ppm	0.384810	6.49	56157.100000	Y 377.433
Sn (189.925 nm)	0.068660	ppm	0.006118	8.91	151.248000	Y 377.433
Sr (421.552 nm)	0.199545	ppm	0.000960	0.48	44746.200860	Y_R 488.368
Th (288.505 nm)	0.011012	ppm	0.002222	20.18	135.400000	Y 377.433
Ti (336.122 nm)	0.153331	ppm	0.010466	6.83	22746.000000	Y 377.433
Tl (190.794 nm)	0.000287 u	ppm	0.001245	> 100.00	-3.426780	Y 377.433
U (409.013 nm)	-0.000879 u	ppm	0.006603	> 100.00	-66.513100	Y 377.433
V (292.401 nm)	0.072126	ppm	0.004587	6.36	2935.190000	Y 377.433
Zn (206.200 nm)	0.230666	ppm	0.016172	7.01	1240.460000	Y 377.433
Zr (343.823 nm)	0.037025	ppm	0.002326	6.28	5095.510000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.915933	7678.033162	0.004857	0.53
Y 377.433	0.889452	403250.671171	0.004230	0.48
Y_R 377.433	0.959819	33112.900000	0.007292	0.76
Y_R 488.368	0.974735	18366.800000	0.007016	0.72
Y_R2 488.368	0.950400	31476.088147	0.002980	0.31

Sample Name: 280-168147-E-1-D

Date: 10/27/2022 11:45:25 PM Rack:Tube: 1:29

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.145502	ppm	0.000343	0.24	334375.790645	Y 377.433
Ag (328.068 nm)	0.000981 n	ppm	0.000120	12.21	-108.281000	Y 377.433
Al (167.019 nm)	0.071540	ppm	0.007214	10.08	32.634200	Y_R 377.433
Al H (396.152 nm)	0.126434 u	ppm	0.009282	7.34	545.016911	Y_R 377.433
As (188.980 nm)	-0.001387 u	ppm	0.001003	72.34	-5.357050	Y 242.219
B (249.678 nm)	0.507189	ppm	0.001826	0.36	14205.500000	Y 242.219
Ba (493.408 nm)	0.017378	ppm	0.000237	1.36	1971.810000	Y_R 488.368
Be (234.861 nm)	-0.000028 u	ppm	0.000018	65.45	-23.216800	Y_R 488.368
Bi (223.061 nm)	-0.000386 u	ppm	0.001401	> 100.00	16.363800	Y 377.433
Ca (315.887 nm)	349.775862 o	ppm	1.085231	0.31	323791.962620	Y_R 377.433
Cd (214.439 nm)	-0.000027 u	ppm	0.000079	> 100.00	-7.054930	Y 377.433
Co (228.615 nm)	-0.000230 u	ppm	0.000340	> 100.00	-18.359800	Y 242.219
Cr (205.560 nm)	0.000839	ppm	0.000060	7.14	19.636800	Y 377.433
Cu (324.754 nm)	0.001973	ppm	0.000196	9.92	1292.740000	Y 377.433
Fe (238.204 nm)	0.076034	ppm	0.001670	2.20	281.284948	Y_R 377.433
Fe H (259.940 nm)	0.070089 u	ppm	0.002408	3.44	162.144000	Y_R 377.433
K (766.491 nm)	6.345640	ppm	0.032397	0.51	5535.770000	Y_R2 488.368
Li (670.783 nm)	0.132003	ppm	0.002175	1.65	3282.890000	Y_R2 488.368
Mg (279.078 nm)	152.831000 o	ppm	0.045071	0.03	923014.000000	Y 377.433
Mn (257.610 nm)	0.020945	ppm	0.000009	0.04	5145.130000	Y 377.433
Mo (202.032 nm)	0.001057	ppm	0.000199	18.78	14.119500	Y 377.433
Na (589.592 nm)	266.897000	ppm	1.345460	0.50	1609110.000000	Y_R2 488.368
Na H (589.593 nm)	268.406304	ppm	1.714002	0.64	1076406.585306	Y_R 488.368
Ni (231.604 nm)	-0.001158 u	ppm	0.000666	57.48	-2.269760	Y 377.433
P (213.618 nm)	0.019156	ppm	0.001278	6.67	55.779900	Y 242.219
Pb (220.353 nm)	0.001133 u	ppm	0.002268	> 100.00	-0.505639	Y 242.219
S (181.972 nm)	536.329060 bo	ppm	0.635836	0.12	257712.147598	Y 377.433
Sb (206.834 nm)	0.000129 u	ppm	0.001885	> 100.00	-6.638730	Y 377.433
Se (196.026 nm)	-0.002353 u	ppm	0.001993	84.72	3.834430	Y 242.219
Si (288.158 nm)	8.250190	ppm	0.066961	0.81	77723.200000	Y 377.433
Sn (189.925 nm)	0.000044 u	ppm	0.000088	> 100.00	5.444780	Y 377.433
Sr (421.552 nm)	4.990261 o	ppm	0.018436	0.37	1117616.556208	Y_R 488.368
Th (288.505 nm)	0.008790	ppm	0.003819	43.45	124.368000	Y 377.433
Ti (336.122 nm)	0.001477	ppm	0.000070	4.77	1117.070000	Y 377.433
Tl (190.794 nm)	0.002133 u	ppm	0.002243	> 100.00	1.393620	Y 377.433
U (409.013 nm)	0.028527	ppm	0.004070	14.27	8.894090	Y 377.433
V (292.401 nm)	0.000916	ppm	0.000012	1.33	58.684800	Y 377.433
Zn (206.200 nm)	0.009796	ppm	0.000495	5.05	61.644200	Y 377.433
Zr (343.823 nm)	-0.000192 u	ppm	0.000028	14.68	-9.645080	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.908192	7613.145333	0.004610	0.51
Y 377.433	0.892604	404679.272397	0.003905	0.44
Y_R 377.433	0.961915	33185.200000	0.004642	0.48
Y_R 488.368	0.981928	18502.300000	0.004071	0.41
Y_R2 488.368	0.957820	31721.807982	0.004333	0.45

Sample Name: 280-168147-E-2-F

Date: 10/27/2022 11:50:30 PM Rack:Tube: 1:30

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.098590	ppm	0.000263	0.27	226231.379626	Y 377.433
Ag (328.068 nm)	0.001058 n	ppm	0.000117	11.10	-105.279000	Y 377.433
Al (167.019 nm)	0.996721	ppm	0.011810	1.18	445.887000	Y_R 377.433
Al H (396.152 nm)	1.093932	ppm	0.002761	0.25	3264.246022	Y_R 377.433
As (188.980 nm)	-0.000423 u	ppm	0.001162	> 100.00	-4.104200	Y 242.219
B (249.678 nm)	0.572612	ppm	0.001112	0.19	16026.300000	Y 242.219
Ba (493.408 nm)	0.052573	ppm	0.000179	0.34	5866.320000	Y_R 488.368
Be (234.861 nm)	0.000018 u	ppm	0.000033	> 100.00	-0.579297	Y_R 488.368
Bi (223.061 nm)	0.000065 u	ppm	0.000674	> 100.00	17.494800	Y 377.433
Ca (315.887 nm)	418.635074 o	ppm	0.352108	0.08	387537.341747	Y_R 377.433
Cd (214.439 nm)	-0.000037 u	ppm	0.000055	> 100.00	-7.039220	Y 377.433
Co (228.615 nm)	0.001256	ppm	0.000137	10.92	10.373200	Y 242.219
Cr (205.560 nm)	0.002032	ppm	0.000297	14.62	37.230700	Y 377.433
Cu (324.754 nm)	0.002131	ppm	0.000388	18.23	1250.660000	Y 377.433
Fe (238.204 nm)	0.726540	ppm	0.001570	0.22	2580.352078	Y_R 377.433
Fe H (259.940 nm)	0.741673 u	ppm	0.001829	0.25	1560.830000	Y_R 377.433
K (766.491 nm)	8.803240	ppm	0.061236	0.70	7985.630000	Y_R2 488.368
Li (670.783 nm)	0.088803	ppm	0.001547	1.74	1833.680000	Y_R2 488.368
Mg (279.078 nm)	167.081000 o	ppm	0.668656	0.40	1009070.000000	Y 377.433
Mn (257.610 nm)	0.047230	ppm	0.000162	0.34	11506.200000	Y 377.433
Mo (202.032 nm)	0.007050	ppm	0.000222	3.15	65.455700	Y 377.433
Na (589.592 nm)	314.880000	ppm	1.212830	0.39	1898400.000000	Y_R2 488.368
Na H (589.593 nm)	315.639507	ppm	0.875315	0.28	1266444.769343	Y_R 488.368
Ni (231.604 nm)	0.004889	ppm	0.000365	7.46	40.296000	Y 377.433
P (213.618 nm)	0.026503	ppm	0.002513	9.48	73.107300	Y 242.219
Pb (220.353 nm)	0.000283 u	ppm	0.002050	> 100.00	-3.151420	Y 242.219
S (181.972 nm)	635.638387 bo	ppm	2.304064	0.36	305430.636781	Y 377.433
Sb (206.834 nm)	0.002075 u	ppm	0.002081	> 100.00	-1.925490	Y 377.433
Se (196.026 nm)	0.227155	ppm	0.004999	2.20	232.589000	Y 242.219
Si (288.158 nm)	10.814900	ppm	0.018711	0.17	101618.000000	Y 377.433
Sn (189.925 nm)	0.001072 u	ppm	0.001484	> 100.00	7.629310	Y 377.433
Sr (421.552 nm)	5.567080 o	ppm	0.006685	0.12	1246793.833229	Y_R 488.368
Th (288.505 nm)	0.012663	ppm	0.000964	7.61	136.208000	Y 377.433
Ti (336.122 nm)	0.017993	ppm	0.000390	2.17	3801.700000	Y 377.433
Tl (190.794 nm)	0.001905	ppm	0.000690	36.24	0.795368	Y 377.433
U (409.013 nm)	0.041480	ppm	0.002225	5.36	59.980000	Y 377.433
V (292.401 nm)	0.003913	ppm	0.000167	4.27	181.047000	Y 377.433
Zn (206.200 nm)	0.007738	ppm	0.000263	3.40	50.660500	Y 377.433
Zr (343.823 nm)	0.000159	ppm	0.000055	34.43	40.399900	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.897012	7519.424198	0.005484	0.61
Y 377.433	0.882244	399982.418877	0.006427	0.73
Y_R 377.433	0.950385	32787.500000	0.003913	0.41
Y_R 488.368	0.966047	18203.100000	0.001300	0.13
Y_R2 488.368	0.937294	31042.024460	0.001855	0.20

Sample Name: CCVH-7429327

Date: 10/27/2022 11:54:33 PM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000062	ppm	0.000012	18.83	-904.093372	Y 377.433
Ag (328.068 nm)	0.002199	ppm	0.000180	8.18	-126.841000	Y 377.433
Al (167.019 nm)	50.152000 o	ppm	0.116477	0.23	22411.000000	Y_R 377.433
Al H (396.152 nm)	51.317051	ppm	0.100459	0.20	142449.887619	Y_R 377.433
As (188.980 nm)	-0.000911 u	ppm	0.002733	> 100.00	-4.738830	Y 242.219
B (249.678 nm)	0.004061	ppm	0.000260	6.39	89.895400	Y 242.219
Ba (493.408 nm)	0.000510	ppm	0.000225	44.06	152.307000	Y_R 488.368
Be (234.861 nm)	0.000030	ppm	0.000029	96.63	800.918000	Y_R 488.368
Bi (223.061 nm)	-0.000459 u	ppm	0.001542	> 100.00	16.181200	Y 377.433
Ca (315.887 nm)	-0.000083 u	ppm	0.002905	> 100.00	-7.856136	Y_R 377.433
Cd (214.439 nm)	-0.000163 u	ppm	0.000008	4.89	36.161100	Y 377.433
Co (228.615 nm)	-0.000438 u	ppm	0.000324	74.10	-22.339000	Y 242.219
Cr (205.560 nm)	0.000690	ppm	0.000133	19.35	3.280950	Y 377.433
Cu (324.754 nm)	0.002981	ppm	0.000287	9.63	2831.690000	Y 377.433
Fe (238.204 nm)	51.228155 o	ppm	0.115424	0.23	181067.066245	Y_R 377.433
Fe H (259.940 nm)	52.107400	ppm	0.086683	0.17	108539.000000	Y_R 377.433
K (766.491 nm)	0.074733	ppm	0.059789	80.00	-715.388000	Y_R2 488.368
Li (670.783 nm)	0.006579	ppm	0.001781	27.08	-924.586000	Y_R2 488.368
Mg (279.078 nm)	-0.005918 u	ppm	0.000980	16.56	-160.287000	Y 377.433
Mn (257.610 nm)	0.000256	ppm	0.000031	12.15	138.537000	Y 377.433
Mo (202.032 nm)	-0.000695 u	ppm	0.000065	9.37	-0.889565	Y 377.433
Na (589.592 nm)	252.562000	ppm	1.445600	0.57	1522670.000000	Y_R2 488.368
Na H (589.593 nm)	251.988881	ppm	1.579876	0.63	1010347.637077	Y_R 488.368
Ni (231.604 nm)	-0.000469 u	ppm	0.000384	81.93	11.443300	Y 377.433
P (213.618 nm)	5.001240	ppm	0.025068	0.50	11806.600000	Y 242.219
Pb (220.353 nm)	-0.005127 u	ppm	0.001239	24.18	-24.601200	Y 242.219
S (181.972 nm)	5.236553	ppm	0.015089	0.29	2520.567264	Y 377.433
Sb (206.834 nm)	0.002624	ppm	0.001588	60.53	-17.041900	Y 377.433
Se (196.026 nm)	0.004378	ppm	0.003081	70.39	1.742410	Y 242.219
Si (288.158 nm)	0.031720	ppm	0.001201	3.79	1160.800000	Y 377.433
Sn (189.925 nm)	0.000780 u	ppm	0.001064	> 100.00	7.009120	Y 377.433
Sr (421.552 nm)	0.000604	ppm	0.000075	12.48	193.680884	Y_R 488.368
Th (288.505 nm)	5.104550	ppm	0.066002	1.29	14441.500000	Y 377.433
Ti (336.122 nm)	0.000480	ppm	0.000030	6.20	-144.424000	Y 377.433
Tl (190.794 nm)	-0.002607 u	ppm	0.000714	27.39	-10.427700	Y 377.433
U (409.013 nm)	2.548550	ppm	0.003086	0.12	12819.300000	Y 377.433
V (292.401 nm)	-0.000583 u	ppm	0.000172	29.51	327.014000	Y 377.433
Zn (206.200 nm)	0.000937	ppm	0.000520	55.49	14.364300	Y 377.433
Zr (343.823 nm)	0.000873	ppm	0.000047	5.33	294.463000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.961123	8056.849993	0.007177	0.75
Y 377.433	0.923281	418587.519537	0.007002	0.76
Y_R 377.433	0.987952	34083.500000	0.002229	0.23
Y_R 488.368	1.007650	18987.000000	0.003946	0.39
Y_R2 488.368	0.976347	32335.399295	0.006620	0.68

Sample Name: CCV-7429326

Date: 10/27/2022 11:58:35 PM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.468675	ppm	0.000278	0.06	1079377.120771	Y 377.433
Ag (328.068 nm)	0.511408	ppm	0.000252	0.05	27031.900000	Y 377.433
Al (167.019 nm)	0.537558	ppm	0.002493	0.46	241.983000	Y_R 377.433
Al H (396.152 nm)	0.522082 u	ppm	0.004724	0.90	1522.386726	Y_R 377.433
As (188.980 nm)	0.502941	ppm	0.003344	0.66	650.412000	Y 242.219
B (249.678 nm)	0.503910	ppm	0.000148	0.03	14134.900000	Y 242.219
Ba (493.408 nm)	0.511513	ppm	0.003471	0.68	56641.100000	Y_R 488.368
Be (234.861 nm)	0.518466	ppm	0.003018	0.58	144578.000000	Y_R 488.368
Bi (223.061 nm)	1.050780	ppm	0.002107	0.20	2654.670000	Y 377.433
Ca (315.887 nm)	5.296076	ppm	0.004873	0.09	4895.333996	Y_R 377.433
Cd (214.439 nm)	0.520756	ppm	0.000873	0.17	31846.600000	Y 377.433
Co (228.615 nm)	0.513215	ppm	0.003039	0.59	9735.770000	Y 242.219
Cr (205.560 nm)	0.519331	ppm	0.001215	0.23	7744.970000	Y 377.433
Cu (324.754 nm)	0.524432	ppm	0.000366	0.07	38657.800000	Y 377.433
Fe (238.204 nm)	2.564826	ppm	0.001212	0.05	9077.363790	Y_R 377.433
Fe H (259.940 nm)	2.621360 u	ppm	0.002952	0.11	5475.600000	Y_R 377.433
K (766.491 nm)	50.232700	ppm	0.170912	0.34	49284.700000	Y_R2 488.368
Li (670.783 nm)	0.495038	ppm	0.003796	0.77	15461.300000	Y_R2 488.368
Mg (279.078 nm)	20.620700	ppm	0.007579	0.04	124570.000000	Y 377.433
Mn (257.610 nm)	0.521470	ppm	0.000346	0.07	126272.000000	Y 377.433
Mo (202.032 nm)	0.523876	ppm	0.001086	0.21	4492.880000	Y 377.433
Na (589.592 nm)	25.902600	ppm	0.062226	0.24	157073.000000	Y_R2 488.368
Na H (589.593 nm)	26.710063	ppm	0.082494	0.31	104690.008340	Y_R 488.368
Ni (231.604 nm)	0.529428	ppm	0.002045	0.39	3723.640000	Y 377.433
P (213.618 nm)	-0.028357 u	ppm	0.002704	9.53	-56.285200	Y 242.219
Pb (220.353 nm)	0.505848	ppm	0.001168	0.23	1399.490000	Y 242.219
S (181.972 nm)	0.083455	ppm	0.001740	2.09	45.706680	Y 377.433
Sb (206.834 nm)	0.524808	ppm	0.003197	0.61	1322.260000	Y 377.433
Se (196.026 nm)	0.506145	ppm	0.002441	0.48	510.810000	Y 242.219
Si (288.158 nm)	5.190810	ppm	0.030341	0.58	49306.600000	Y 377.433
Sn (189.925 nm)	0.524470	ppm	0.002354	0.45	1119.820000	Y 377.433
Sr (421.552 nm)	0.503949	ppm	0.001281	0.25	112916.677423	Y_R 488.368
Th (288.505 nm)	0.063357	ppm	0.026881	42.43	286.157000	Y 377.433
Ti (336.122 nm)	0.511387	ppm	0.000026	0.01	76156.000000	Y 377.433
Tl (190.794 nm)	0.521232	ppm	0.000448	0.09	1142.920000	Y 377.433
U (409.013 nm)	0.002952 u	ppm	0.005880	> 100.00	-85.531500	Y 377.433
V (292.401 nm)	0.521598	ppm	0.000467	0.09	21280.800000	Y 377.433
Zn (206.200 nm)	0.524544	ppm	0.001091	0.21	2808.920000	Y 377.433
Zr (343.823 nm)	0.478105	ppm	0.014309	2.99	65399.200000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.972128	8149.098859	0.003571	0.37
Y 377.433	0.945416	428623.026738	0.003668	0.39
Y_R 377.433	0.995625	34348.200000	0.004301	0.43
Y_R 488.368	1.013690	19100.800000	0.006400	0.63
Y_R2 488.368	0.988182	32727.357496	0.000356	0.04

Sample Name: CCB

Date: 10/28/2022 12:02:38 AM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000035	ppm	0.000004	12.35	-966.351886	Y 377.433
Ag (328.068 nm)	0.000629	ppm	0.000093	14.71	-125.847000	Y 377.433
Al (167.019 nm)	-0.002194 u	ppm	0.000720	32.82	-0.314138	Y_R 377.433
Al H (396.152 nm)	-0.003929 u	ppm	0.005369	> 100.00	12.837467	Y_R 377.433
As (188.980 nm)	-0.000117 u	ppm	0.000916	> 100.00	-3.706460	Y 242.219
B (249.678 nm)	0.001839	ppm	0.000450	24.46	130.857000	Y 242.219
Ba (493.408 nm)	0.000240 u	ppm	0.000382	> 100.00	75.647700	Y_R 488.368
Be (234.861 nm)	-0.000028 u	ppm	0.000012	42.65	-24.633700	Y_R 488.368
Bi (223.061 nm)	-0.003409 u	ppm	0.001109	32.54	8.776030	Y 377.433
Ca (315.887 nm)	0.009405	ppm	0.004341	46.16	0.926976	Y_R 377.433
Cd (214.439 nm)	-0.000043 u	ppm	0.000084	> 100.00	-8.132320	Y 377.433
Co (228.615 nm)	-0.000204 u	ppm	0.000046	22.68	-17.923400	Y 242.219
Cr (205.560 nm)	-0.000127 u	ppm	0.000303	> 100.00	5.260750	Y 377.433
Cu (324.754 nm)	0.001341	ppm	0.000108	8.02	1521.000000	Y 377.433
Fe (238.204 nm)	-0.000309 u	ppm	0.000238	77.08	11.465017	Y_R 377.433
Fe H (259.940 nm)	-0.004767 u	ppm	0.002122	44.52	6.241900	Y_R 377.433
K (766.491 nm)	0.079333	ppm	0.053806	67.82	-710.803000	Y_R2 488.368
Li (670.783 nm)	0.007322	ppm	0.000667	9.11	-899.657000	Y_R2 488.368
Mg (279.078 nm)	-0.000627 u	ppm	0.001162	> 100.00	39.409600	Y 377.433
Mn (257.610 nm)	-0.000131 u	ppm	0.000018	14.13	44.875200	Y 377.433
Mo (202.032 nm)	0.001180	ppm	0.000464	39.28	15.170500	Y 377.433
Na (589.592 nm)	0.062662	ppm	0.007374	11.77	595.541000	Y_R2 488.368
Na H (589.593 nm)	1.602531 u	ppm	0.017048	1.06	3142.211437	Y_R 488.368
Ni (231.604 nm)	-0.000625 u	ppm	0.000290	46.34	1.457910	Y 377.433
P (213.618 nm)	0.001771	ppm	0.001501	84.72	14.775800	Y 242.219
Pb (220.353 nm)	-0.001020 u	ppm	0.000572	56.04	-6.469230	Y 242.219
S (181.972 nm)	0.074786 Z	ppm	0.006871	9.19	40.321613 Z	Y 377.433
Sb (206.834 nm)	0.000926 u	ppm	0.001384	> 100.00	-4.593870	Y 377.433
Se (196.026 nm)	-0.002645 u	ppm	0.002182	82.48	3.535770	Y 242.219
Si (288.158 nm)	0.018687	ppm	0.000934	5.00	1039.370000	Y 377.433
Sn (189.925 nm)	-0.000185 u	ppm	0.000428	> 100.00	4.958020	Y 377.433
Sr (421.552 nm)	-0.000034 u	ppm	0.000014	40.49	50.795458	Y_R 488.368
Th (288.505 nm)	0.003103 u	ppm	0.003062	98.69	107.504000	Y 377.433
Ti (336.122 nm)	-0.000038 u	ppm	0.000075	> 100.00	-221.697000	Y 377.433
Tl (190.794 nm)	0.000121 u	ppm	0.001698	> 100.00	-3.031910	Y 377.433
U (409.013 nm)	0.007482	ppm	0.002921	39.04	-22.135800	Y 377.433
V (292.401 nm)	-0.000227 u	ppm	0.000033	14.59	11.345100	Y 377.433
Zn (206.200 nm)	-0.000532 u	ppm	0.000383	71.99	6.520550	Y 377.433
Zr (343.823 nm)	0.000180	ppm	0.000050	27.66	41.010400	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.976180	8183.070671	0.003955	0.41
Y 377.433	0.950831	431077.713914	0.003975	0.42
Y_R 377.433	1.001780	34560.500000	0.001258	0.13
Y_R 488.368	1.014550	19116.900000	0.005468	0.54
Y_R2 488.368	0.980412	32470.040461	0.005146	0.52

Sample Name: CCVL-7434568

Date: 10/28/2022 12:06:41 AM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014774	ppm	0.000021	0.14	33011.302700	Y 377.433
Ag (328.068 nm)	0.010624	ppm	0.000196	1.85	404.710000	Y 377.433
Al (167.019 nm)	0.107838	ppm	0.001323	1.23	48.848700	Y_R 377.433
Al H (396.152 nm)	0.101673 u	ppm	0.005577	5.49	307.754560	Y_R 377.433
As (188.980 nm)	0.014192	ppm	0.000696	4.91	14.899900	Y 242.219
B (249.678 nm)	0.100957	ppm	0.000775	0.77	2891.760000	Y 242.219
Ba (493.408 nm)	0.010342	ppm	0.000126	1.22	1193.340000	Y_R 488.368
Be (234.861 nm)	0.001000	ppm	0.000006	0.57	262.522000	Y_R 488.368
Bi (223.061 nm)	-0.000345 Qu	ppm	0.000563	> 100.00	16.467900 Q	Y 377.433
Ca (315.887 nm)	0.218483	ppm	0.001509	0.69	194.481805	Y_R 377.433
Cd (214.439 nm)	0.005190	ppm	0.000096	1.86	312.014000	Y 377.433
Co (228.615 nm)	0.010789	ppm	0.000235	2.18	190.839000	Y 242.219
Cr (205.560 nm)	0.010314	ppm	0.000137	1.33	160.867000	Y 377.433
Cu (324.754 nm)	0.017492	ppm	0.000204	1.17	2667.170000	Y 377.433
Fe (238.204 nm)	0.103330	ppm	0.000641	0.62	377.754024	Y_R 377.433
Fe H (259.940 nm)	0.102370 u	ppm	0.003636	3.55	229.375000	Y_R 377.433
K (766.491 nm)	3.173080	ppm	0.037075	1.17	2373.200000	Y_R2 488.368
Li (670.783 nm)	0.027984 Q	ppm	0.001401	5.01	-206.531000 Q	Y_R2 488.368
Mg (279.078 nm)	0.210430	ppm	0.001376	0.65	1312.360000	Y 377.433
Mn (257.610 nm)	0.010520	ppm	0.000009	0.08	2622.380000	Y 377.433
Mo (202.032 nm)	0.020398	ppm	0.000523	2.56	179.803000	Y 377.433
Na (589.592 nm)	1.154980	ppm	0.008386	0.73	7194.450000	Y_R2 488.368
Na H (589.593 nm)	2.559696 u	ppm	0.015634	0.61	7003.621430	Y_R 488.368
Ni (231.604 nm)	0.044954	ppm	0.000761	1.69	321.473000	Y 377.433
P (213.618 nm)	2.899380	ppm	0.012906	0.45	6849.100000	Y 242.219
Pb (220.353 nm)	0.009204	ppm	0.001162	12.63	21.970300	Y 242.219
S (181.972 nm)	0.168250 Q	ppm	0.003048	1.81	85.255974 Q	Y 377.433
Sb (206.834 nm)	0.020272	ppm	0.003356	16.55	44.091600	Y 377.433
Se (196.026 nm)	0.019674	ppm	0.001752	8.91	25.780600	Y 242.219
Si (288.158 nm)	0.505554	ppm	0.003212	0.64	5576.440000	Y 377.433
Sn (189.925 nm)	0.106031	ppm	0.002249	2.12	230.661000	Y 377.433
Sr (421.552 nm)	0.010026	ppm	0.000104	1.04	2303.771275	Y_R 488.368
Th (288.505 nm)	0.020697 Q	ppm	0.002300	11.11	158.333000 Q	Y 377.433
Ti (336.122 nm)	0.009770	ppm	0.000053	0.55	1243.250000	Y 377.433
Tl (190.794 nm)	0.016971	ppm	0.001501	8.85	34.023700	Y 377.433
U (409.013 nm)	0.069467	ppm	0.004431	6.38	288.776000	Y 377.433
V (292.401 nm)	0.010216	ppm	0.000150	1.47	434.832000	Y 377.433
Zn (206.200 nm)	0.021592	ppm	0.000418	1.93	124.603000	Y 377.433
Zr (343.823 nm)	0.012491	ppm	0.000043	0.35	1724.690000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.989159	8291.868067	0.004795	0.48
Y 377.433	0.960810	435602.210392	0.003953	0.41
Y_R 377.433	1.012350	34925.100000	0.001466	0.14
Y_R 488.368	1.032170	19449.000000	0.001712	0.17
Y_R2 488.368	1.000414	33132.490551	0.006786	0.68

Sample Name: 280-168148-E-1-D

Date: 10/28/2022 12:10:44 AM Rack:Tube: 1:31

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.007558	ppm	0.000005	0.07	16376.273319	Y 377.433
Ag (328.068 nm)	0.000866 n	ppm	0.000156	17.97	-113.658000	Y 377.433
Al (167.019 nm)	0.032779	ppm	0.003657	11.16	15.321200	Y_R 377.433
Al H (396.152 nm)	0.046043 u	ppm	0.008929	19.39	185.554101	Y_R 377.433
As (188.980 nm)	-0.000792 u	ppm	0.001765	> 100.00	-4.584230	Y 242.219
B (249.678 nm)	0.091210	ppm	0.000070	0.08	2619.880000	Y 242.219
Ba (493.408 nm)	0.102155	ppm	0.000625	0.61	11351.300000	Y_R 488.368
Be (234.861 nm)	-0.000042 u	ppm	0.000025	59.23	-27.661100	Y_R 488.368
Bi (223.061 nm)	-0.001655 u	ppm	0.000634	38.28	13.177900	Y 377.433
Ca (315.887 nm)	69.872370 o	ppm	0.023116	0.03	64675.515646	Y_R 377.433
Cd (214.439 nm)	-0.000036 u	ppm	0.000044	> 100.00	-7.646400	Y 377.433
Co (228.615 nm)	-0.000294 u	ppm	0.000153	52.09	-19.620000	Y 242.219
Cr (205.560 nm)	0.000415	ppm	0.000254	61.19	13.325300	Y 377.433
Cu (324.754 nm)	0.022786	ppm	0.000225	0.99	2989.240000	Y 377.433
Fe (238.204 nm)	0.049667	ppm	0.000722	1.45	188.095914	Y_R 377.433
Fe H (259.940 nm)	0.047045 u	ppm	0.002197	4.67	114.150000	Y_R 377.433
K (766.491 nm)	1.267120	ppm	0.060198	4.75	473.244000	Y_R2 488.368
Li (670.783 nm)	0.016213	ppm	0.000525	3.24	-601.417000	Y_R2 488.368
Mg (279.078 nm)	17.208600	ppm	0.027619	0.16	103969.000000	Y 377.433
Mn (257.610 nm)	0.001378	ppm	0.000022	1.61	409.849000	Y 377.433
Mo (202.032 nm)	0.001499	ppm	0.000153	10.20	17.906600	Y 377.433
Na (589.592 nm)	31.426900	ppm	0.041531	0.13	189803.000000	Y_R2 488.368
Na H (589.593 nm)	31.565012	ppm	0.031805	0.10	123779.248040	Y_R 488.368
Ni (231.604 nm)	-0.000819 u	ppm	0.000906	> 100.00	0.107673	Y 377.433
P (213.618 nm)	0.020404	ppm	0.002562	12.55	58.723200	Y 242.219
Pb (220.353 nm)	0.000139 u	ppm	0.001407	> 100.00	-3.260470	Y 242.219
S (181.972 nm)	8.170178	ppm	0.012471	0.15	3930.184924	Y 377.433
Sb (206.834 nm)	0.000395 u	ppm	0.002474	> 100.00	-5.925530	Y 377.433
Se (196.026 nm)	0.000834 u	ppm	0.002286	> 100.00	6.998100	Y 242.219
Si (288.158 nm)	5.168460	ppm	0.029923	0.58	49014.000000	Y 377.433
Sn (189.925 nm)	0.001465	ppm	0.001052	71.83	8.464790	Y 377.433
Sr (421.552 nm)	0.817616	ppm	0.001582	0.19	183161.878155	Y_R 488.368
Th (288.505 nm)	0.004063	ppm	0.003442	84.73	110.287000	Y 377.433
Ti (336.122 nm)	0.000508	ppm	0.000117	23.12	81.718000	Y 377.433
Tl (190.794 nm)	0.001680	ppm	0.001474	87.72	0.398225	Y 377.433
U (409.013 nm)	0.012840	ppm	0.003099	24.14	-10.095100	Y 377.433
V (292.401 nm)	0.001220	ppm	0.000079	6.49	71.166300	Y 377.433
Zn (206.200 nm)	0.029279	ppm	0.000213	0.73	165.625000	Y 377.433
Zr (343.823 nm)	0.000152	ppm	0.000068	44.73	37.268100	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.976527	8185.975951	0.002677	0.27
Y 377.433	0.953806	432426.557744	0.001748	0.18
Y_R 377.433	1.013480	34964.200000	0.003049	0.30
Y_R 488.368	1.033020	19464.900000	0.001801	0.17
Y_R2 488.368	0.997818	33046.491143	0.004097	0.41

Sample Name: 280-168149-E-1-F

Date: 10/28/2022 12:14:46 AM Rack:Tube: 1:32

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.013429	ppm	0.000006	0.05	29911.176087	Y 377.433
Ag (328.068 nm)	0.000891 n	ppm	0.000173	19.45	-112.843000	Y 377.433
Al (167.019 nm)	0.010330	ppm	0.002082	20.15	5.968990	Y_R 377.433
Al H (396.152 nm)	0.043175 u	ppm	0.003153	7.30	224.302140	Y_R 377.433
As (188.980 nm)	0.004000	ppm	0.002026	50.67	1.646670	Y 242.219
B (249.678 nm)	1.605470 o	ppm	0.004184	0.26	44791.800000	Y 242.219
Ba (493.408 nm)	0.135466	ppm	0.000639	0.47	15037.800000	Y_R 488.368
Be (234.861 nm)	-0.000057 u	ppm	0.000020	34.47	-13.515700	Y_R 488.368
Bi (223.061 nm)	-0.002757 u	ppm	0.000912	33.07	10.413700	Y 377.433
Ca (315.887 nm)	163.651377 o	ppm	0.483838	0.30	151490.020862	Y_R 377.433
Cd (214.439 nm)	-0.000034 u	ppm	0.000092	> 100.00	-6.304590	Y 377.433
Co (228.615 nm)	0.000924	ppm	0.000282	30.53	3.470890	Y 242.219
Cr (205.560 nm)	0.000020 u	ppm	0.000254	> 100.00	7.080280	Y 377.433
Cu (324.754 nm)	0.001901	ppm	0.000103	5.44	1438.680000	Y 377.433
Fe (238.204 nm)	1.258777	ppm	0.005624	0.45	4461.425629	Y_R 377.433
Fe H (259.940 nm)	1.278730 u	ppm	0.007031	0.55	2679.350000	Y_R 377.433
K (766.491 nm)	4.883400	ppm	0.044643	0.91	4078.130000	Y_R2 488.368
Li (670.783 nm)	0.020572	ppm	0.000841	4.09	-455.194000	Y_R2 488.368
Mg (279.078 nm)	36.467900	ppm	0.093236	0.26	220277.000000	Y 377.433
Mn (257.610 nm)	1.294620 o	ppm	0.002311	0.18	313374.000000	Y 377.433
Mo (202.032 nm)	0.012627	ppm	0.000287	2.28	113.235000	Y 377.433
Na (589.592 nm)	74.290100	ppm	0.677878	0.91	448230.000000	Y_R2 488.368
Na H (589.593 nm)	74.363596	ppm	0.330510	0.44	295976.497739	Y_R 488.368
Ni (231.604 nm)	-0.000528 u	ppm	0.000623	> 100.00	2.359340	Y 377.433
P (213.618 nm)	0.095952	ppm	0.001213	1.26	236.910000	Y 242.219
Pb (220.353 nm)	-0.000222 u	ppm	0.001815	> 100.00	-4.227750	Y 242.219
S (181.972 nm)	65.362312 o	ppm	0.155891	0.24	31414.201785	Y 377.433
Sb (206.834 nm)	0.000757 u	ppm	0.001903	> 100.00	-5.256310	Y 377.433
Se (196.026 nm)	0.000382 u	ppm	0.001960	> 100.00	7.402790	Y 242.219
Si (288.158 nm)	8.012700	ppm	0.014238	0.18	75510.600000	Y 377.433
Sn (189.925 nm)	-0.000488 u	ppm	0.000208	42.64	4.313910	Y 377.433
Sr (421.552 nm)	1.826137 o	ppm	0.010468	0.57	409017.970966	Y_R 488.368
Th (288.505 nm)	0.015932	ppm	0.000835	5.24	172.582000	Y 377.433
Ti (336.122 nm)	-0.000074 u	ppm	0.000042	56.85	293.347000	Y 377.433
Tl (190.794 nm)	0.000527 u	ppm	0.000830	> 100.00	-2.195950	Y 377.433
U (409.013 nm)	0.012080	ppm	0.005170	42.80	-32.806300	Y 377.433
V (292.401 nm)	0.003705	ppm	0.000152	4.10	174.429000	Y 377.433
Zn (206.200 nm)	-0.000017 u	ppm	0.000366	> 100.00	9.273370	Y 377.433
Zr (343.823 nm)	0.000544	ppm	0.000088	16.09	94.688500	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.943318	7907.596772	0.001814	0.19
Y 377.433	0.922134	418067.345463	0.002741	0.30
Y_R 377.433	0.982942	33910.700000	0.003145	0.32
Y_R 488.368	1.000350	18849.500000	0.004499	0.45
Y_R2 488.368	0.971921	32188.814714	0.010675	1.10

Sample Name: 280-168149-E-2-D

Date: 10/28/2022 12:18:48 AM Rack:Tube: 1:33

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.039556	ppm	0.000059	0.15	90140.068999	Y 377.433
Ag (328.068 nm)	0.000991 n	ppm	0.000130	13.15	-106.536000	Y 377.433
Al (167.019 nm)	0.011933	ppm	0.003212	26.92	7.422880	Y_R 377.433
Al H (396.152 nm)	0.037283 u	ppm	0.007805	20.94	198.476108	Y_R 377.433
As (188.980 nm)	0.003738	ppm	0.001913	51.19	1.306550	Y 242.219
B (249.678 nm)	11.662000 o	ppm	0.029285	0.25	324878.000000	Y 242.219
Ba (493.408 nm)	0.043477	ppm	0.000290	0.67	4861.660000	Y_R 488.368
Be (234.861 nm)	-0.000032 u	ppm	0.000037	> 100.00	10.254300	Y_R 488.368
Bi (223.061 nm)	-0.001413 u	ppm	0.002637	> 100.00	13.786900	Y 377.433
Ca (315.887 nm)	131.622480 o	ppm	0.382476	0.29	121839.751500	Y_R 377.433
Cd (214.439 nm)	-0.000065 u	ppm	0.000055	84.98	-6.834350	Y 377.433
Co (228.615 nm)	0.003972	ppm	0.000042	1.06	61.256300	Y 242.219
Cr (205.560 nm)	0.000078 u	ppm	0.000279	> 100.00	7.450120	Y 377.433
Cu (324.754 nm)	0.002427	ppm	0.000311	12.82	1505.330000	Y 377.433
Fe (238.204 nm)	2.599124	ppm	0.004835	0.19	9198.584551	Y_R 377.433
Fe H (259.940 nm)	2.666030 u	ppm	0.009648	0.36	5568.640000	Y_R 377.433
K (766.491 nm)	1.404490	ppm	0.010103	0.72	610.179000	Y_R2 488.368
Li (670.783 nm)	0.042784	ppm	0.000842	1.97	289.948000	Y_R2 488.368
Mg (279.078 nm)	100.975000 o	ppm	0.103874	0.10	609842.000000	Y 377.433
Mn (257.610 nm)	0.613021	ppm	0.001164	0.19	148428.000000	Y 377.433
Mo (202.032 nm)	0.081036	ppm	0.000370	0.46	699.265000	Y 377.433
Na (589.592 nm)	159.331000	ppm	0.227816	0.14	960735.000000	Y_R2 488.368
Na H (589.593 nm)	157.135757	ppm	0.739402	0.47	628837.392466	Y_R 488.368
Ni (231.604 nm)	0.081996	ppm	0.000880	1.07	581.926000	Y 377.433
P (213.618 nm)	0.023364	ppm	0.000715	3.06	65.704900	Y 242.219
Pb (220.353 nm)	0.000908	ppm	0.000641	70.64	-1.242230	Y 242.219
S (181.972 nm)	163.807305 bo	ppm	0.869443	0.53	78715.720123	Y 377.433
Sb (206.834 nm)	0.000254 u	ppm	0.002573	> 100.00	-7.106080	Y 377.433
Se (196.026 nm)	-0.001540 u	ppm	0.000737	47.85	4.666530	Y 242.219
Si (288.158 nm)	7.115440	ppm	0.046123	0.65	67151.800000	Y 377.433
Sn (189.925 nm)	-0.000279 u	ppm	0.000762	> 100.00	4.757880	Y 377.433
Sr (421.552 nm)	2.522488 o	ppm	0.015472	0.61	564964.105619	Y_R 488.368
Th (288.505 nm)	0.016664	ppm	0.002004	12.03	159.362000	Y 377.433
Ti (336.122 nm)	0.000181	ppm	0.000066	36.54	229.388000	Y 377.433
Tl (190.794 nm)	0.002078	ppm	0.000279	13.45	1.022490	Y 377.433
U (409.013 nm)	0.021162	ppm	0.006932	32.76	21.038300	Y 377.433
V (292.401 nm)	0.000048 u	ppm	0.000336	> 100.00	22.299500	Y 377.433
Zn (206.200 nm)	0.000413	ppm	0.000406	98.44	11.564500	Y 377.433
Zr (343.823 nm)	0.002100	ppm	0.000160	7.61	311.596000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.946127	7931.139489	0.005912	0.62
Y 377.433	0.926572	420079.569438	0.004647	0.50
Y_R 377.433	0.990613	34175.300000	0.001797	0.18
Y_R 488.368	1.009590	19023.600000	0.007795	0.77
Y_R2 488.368	0.942551	31216.122498	0.005030	0.53

Sample Name: 280-168149-E-3-D

Date: 10/28/2022 12:22:50 AM Rack:Tube: 1:34

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.020383	ppm	0.000042	0.21	45942.725600	Y 377.433
Ag (328.068 nm)	0.001489 n	ppm	0.000191	12.81	-79.973400	Y 377.433
Al (167.019 nm)	0.019759	ppm	0.003556	18.00	13.385500	Y_R 377.433
Al H (396.152 nm)	0.059301 u	ppm	0.001143	1.93	278.915723	Y_R 377.433
As (188.980 nm)	0.004245	ppm	0.001279	30.14	1.965660	Y 242.219
B (249.678 nm)	2.118450 o	ppm	0.008002	0.38	59068.000000	Y 242.219
Ba (493.408 nm)	0.114369	ppm	0.000129	0.11	12708.900000	Y_R 488.368
Be (234.861 nm)	-0.000081 u	ppm	0.000025	31.07	71.482600	Y_R 488.368
Bi (223.061 nm)	-0.000540 u	ppm	0.002820	> 100.00	15.976800	Y 377.433
Ca (315.887 nm)	183.438284 o	ppm	0.304687	0.17	169807.452397	Y_R 377.433
Cd (214.439 nm)	-0.000089 u	ppm	0.000012	13.47	-3.806220	Y 377.433
Co (228.615 nm)	0.012440	ppm	0.000420	3.38	221.817000	Y 242.219
Cr (205.560 nm)	0.000119 u	ppm	0.000268	> 100.00	6.936040	Y 377.433
Cu (324.754 nm)	0.001931	ppm	0.000170	8.80	1436.140000	Y 377.433
Fe (238.204 nm)	7.079892 o	ppm	0.013170	0.19	25034.861327	Y_R 377.433
Fe H (259.940 nm)	7.206760	ppm	0.011418	0.16	15025.500000	Y_R 377.433
K (766.491 nm)	1.743830	ppm	0.024011	1.38	948.450000	Y_R2 488.368
Li (670.783 nm)	0.023851	ppm	0.000848	3.55	-345.188000	Y_R2 488.368
Mg (279.078 nm)	117.618000 o	ppm	0.268724	0.23	710345.000000	Y 377.433
Mn (257.610 nm)	2.504060 o	ppm	0.001436	0.06	606060.000000	Y 377.433
Mo (202.032 nm)	0.015452	ppm	0.000265	1.72	137.434000	Y 377.433
Na (589.592 nm)	163.418000	ppm	0.388996	0.24	985468.000000	Y_R2 488.368
Na H (589.593 nm)	163.312249	ppm	0.914711	0.56	653759.132318	Y_R 488.368
Ni (231.604 nm)	0.201919	ppm	0.000517	0.26	1424.590000	Y 377.433
P (213.618 nm)	0.143217	ppm	0.002492	1.74	348.390000	Y 242.219
Pb (220.353 nm)	0.000678 u	ppm	0.001895	> 100.00	-1.247880	Y 242.219
S (181.972 nm)	137.918227 bo	ppm	0.275616	0.20	66280.368511	Y 377.433
Sb (206.834 nm)	-0.000425 u	ppm	0.002197	> 100.00	-9.058270	Y 377.433
Se (196.026 nm)	-0.003299 u	ppm	0.000466	14.12	3.657280	Y 242.219
Si (288.158 nm)	9.436990	ppm	0.048183	0.51	88779.100000	Y 377.433
Sn (189.925 nm)	0.000342 u	ppm	0.000876	> 100.00	6.078100	Y 377.433
Sr (421.552 nm)	2.513264 o	ppm	0.020344	0.81	562898.425537	Y_R 488.368
Th (288.505 nm)	0.032122	ppm	0.002461	7.66	244.753000	Y 377.433
Ti (336.122 nm)	0.000173	ppm	0.000053	30.79	392.965000	Y 377.433
Tl (190.794 nm)	0.001609 u	ppm	0.001851	> 100.00	0.067534	Y 377.433
U (409.013 nm)	0.011693	ppm	0.001158	9.90	-32.991700	Y 377.433
V (292.401 nm)	0.000298	ppm	0.000382	> 100.00	36.073100	Y 377.433
Zn (206.200 nm)	0.000967	ppm	0.000180	18.59	14.524000	Y 377.433
Zr (343.823 nm)	0.001854	ppm	0.000051	2.73	291.778000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.931611	7809.457503	0.001061	0.11
Y 377.433	0.912558	413725.917061	0.002467	0.27
Y_R 377.433	0.960320	33130.200000	0.002263	0.24
Y_R 488.368	0.977698	18422.600000	0.004141	0.42
Y_R2 488.368	0.941530	31182.310458	0.003542	0.38

Sample Name: 280-168149-E-4-D

Date: 10/28/2022 12:26:53 AM Rack:Tube: 1:35

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.006277	ppm	0.000033	0.53	13424.188859	Y 377.433
Ag (328.068 nm)	0.001215 n	ppm	0.000239	19.64	-94.898100	Y 377.433
Al (167.019 nm)	0.092109	ppm	0.004210	4.57	43.557400	Y_R 377.433
Al H (396.152 nm)	0.106173 u	ppm	0.005325	5.02	364.640413	Y_R 377.433
As (188.980 nm)	0.007767	ppm	0.000082	1.05	6.544930	Y 242.219
B (249.678 nm)	7.258950 o	ppm	0.008505	0.12	202246.000000	Y 242.219
Ba (493.408 nm)	0.218422	ppm	0.000402	0.18	24217.600000	Y_R 488.368
Be (234.861 nm)	-0.000094 u	ppm	0.000013	14.18	7.504760	Y_R 488.368
Bi (223.061 nm)	0.000021 u	ppm	0.001122	> 100.00	17.386100	Y 377.433
Ca (315.887 nm)	93.226490 o	ppm	0.080452	0.09	86295.240729	Y_R 377.433
Cd (214.439 nm)	-0.000081 u	ppm	0.000020	24.82	-7.179770	Y 377.433
Co (228.615 nm)	0.005983	ppm	0.000109	1.83	99.462300	Y 242.219
Cr (205.560 nm)	0.000242 u	ppm	0.000376	> 100.00	9.840130	Y 377.433
Cu (324.754 nm)	0.002040	ppm	0.000283	13.88	1507.020000	Y 377.433
Fe (238.204 nm)	3.239849	ppm	0.003438	0.11	11463.083216	Y_R 377.433
Fe H (259.940 nm)	3.318570 u	ppm	0.001839	0.06	6927.680000	Y_R 377.433
K (766.491 nm)	1.234010	ppm	0.041690	3.38	440.239000	Y_R2 488.368
Li (670.783 nm)	0.013006	ppm	0.000183	1.41	-708.989000	Y_R2 488.368
Mg (279.078 nm)	44.004900 o	ppm	0.179597	0.41	265790.000000	Y 377.433
Mn (257.610 nm)	1.905770 o	ppm	0.006836	0.36	461275.000000	Y 377.433
Mo (202.032 nm)	0.010635	ppm	0.000331	3.12	96.167000	Y 377.433
Na (589.592 nm)	79.594300	ppm	0.629622	0.79	480320.000000	Y_R2 488.368
Na H (589.593 nm)	79.836969	ppm	0.205412	0.26	318082.954727	Y_R 488.368
Ni (231.604 nm)	0.256579	ppm	0.001432	0.56	1807.640000	Y 377.433
P (213.618 nm)	0.058058	ppm	0.000798	1.37	147.534000	Y 242.219
Pb (220.353 nm)	0.000040 u	ppm	0.000605	> 100.00	-3.331150	Y 242.219
S (181.972 nm)	29.902784 o	ppm	0.134250	0.45	14377.220193	Y 377.433
Sb (206.834 nm)	-0.001618 u	ppm	0.002811	> 100.00	-11.482600	Y 377.433
Se (196.026 nm)	-0.003031 u	ppm	0.002558	84.37	4.140010	Y 242.219
Si (288.158 nm)	11.788100 o	ppm	0.148177	1.26	110682.000000	Y 377.433
Sn (189.925 nm)	0.000266 u	ppm	0.000381	> 100.00	5.915710	Y 377.433
Sr (421.552 nm)	1.170373 o	ppm	0.002189	0.19	262160.961184	Y_R 488.368
Th (288.505 nm)	0.022329	ppm	0.001327	5.94	204.065000	Y 377.433
Ti (336.122 nm)	0.002340	ppm	0.000101	4.33	429.653000	Y 377.433
Tl (190.794 nm)	-0.000096 u	ppm	0.001058	> 100.00	-3.606150	Y 377.433
U (409.013 nm)	0.014801	ppm	0.007831	52.91	-1.925390	Y 377.433
V (292.401 nm)	0.000292	ppm	0.000292	> 100.00	34.516600	Y 377.433
Zn (206.200 nm)	0.001330	ppm	0.000339	25.53	16.460000	Y 377.433
Zr (343.823 nm)	0.000593	ppm	0.000118	19.82	107.507000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.952435	7984.017954	0.006510	0.68
Y 377.433	0.927786	420629.808677	0.008077	0.87
Y_R 377.433	0.990895	34185.000000	0.000204	0.02
Y_R 488.368	1.011160	19053.200000	0.002457	0.24
Y_R2 488.368	0.977813	32383.972553	0.008773	0.90

Sample Name: 280-168149-E-5-D

Date: 10/28/2022 12:30:54 AM Rack:Tube: 1:36

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000022	ppm	0.000009	41.64	-995.867372	Y 377.433
Ag (328.068 nm)	0.000568 n	ppm	0.000185	32.63	-129.358000	Y 377.433
Al (167.019 nm)	0.012322	ppm	0.005537	44.93	6.206310	Y_R 377.433
Al H (396.152 nm)	0.007540 u	ppm	0.000991	13.14	44.583133	Y_R 377.433
As (188.980 nm)	-0.000178 u	ppm	0.001930	> 100.00	-3.785470	Y 242.219
B (249.678 nm)	0.011377	ppm	0.001634	14.36	396.351000	Y 242.219
Ba (493.408 nm)	0.000272 u	ppm	0.000451	> 100.00	79.313300	Y_R 488.368
Be (234.861 nm)	-0.000018 u	ppm	0.000011	60.47	-20.559900	Y_R 488.368
Bi (223.061 nm)	-0.003278 u	ppm	0.001409	42.99	9.106080	Y 377.433
Ca (315.887 nm)	0.066992	ppm	0.007254	10.83	54.237925	Y_R 377.433
Cd (214.439 nm)	-0.000021 u	ppm	0.000052	> 100.00	-6.691810	Y 377.433
Co (228.615 nm)	-0.000198 u	ppm	0.000097	48.96	-17.815000	Y 242.219
Cr (205.560 nm)	0.000131	ppm	0.000120	91.63	9.081910	Y 377.433
Cu (324.754 nm)	0.001438	ppm	0.000190	13.22	1527.320000	Y 377.433
Fe (238.204 nm)	0.076408	ppm	0.001536	2.01	282.606451	Y_R 377.433
Fe H (259.940 nm)	0.073384 u	ppm	0.000354	0.48	169.006000	Y_R 377.433
K (766.491 nm)	0.076922 u	ppm	0.078618	> 100.00	-713.207000	Y_R2 488.368
Li (670.783 nm)	0.007243	ppm	0.001886	26.03	-902.320000	Y_R2 488.368
Mg (279.078 nm)	0.005557	ppm	0.000767	13.80	76.557400	Y 377.433
Mn (257.610 nm)	0.000260	ppm	0.000024	9.29	139.430000	Y 377.433
Mo (202.032 nm)	-0.000125 u	ppm	0.000096	76.96	3.992600	Y 377.433
Na (589.592 nm)	0.098134	ppm	0.012791	13.03	809.956000	Y_R2 488.368
Na H (589.593 nm)	1.456910 u	ppm	0.005522	0.38	2556.891773	Y_R 488.368
Ni (231.604 nm)	0.000066 u	ppm	0.000499	> 100.00	6.326620	Y 377.433
P (213.618 nm)	0.001479 u	ppm	0.002341	> 100.00	14.086100	Y 242.219
Pb (220.353 nm)	-0.000335 u	ppm	0.000723	> 100.00	-4.548480	Y 242.219
S (181.972 nm)	0.044942	ppm	0.000590	1.31	25.982324	Y 377.433
Sb (206.834 nm)	-0.000091 u	ppm	0.000596	> 100.00	-7.150100	Y 377.433
Se (196.026 nm)	-0.000166 u	ppm	0.000946	> 100.00	5.993990	Y 242.219
Si (288.158 nm)	0.021469	ppm	0.000636	2.96	1065.270000	Y 377.433
Sn (189.925 nm)	0.000075 u	ppm	0.000361	> 100.00	5.511610	Y 377.433
Sr (421.552 nm)	0.000379	ppm	0.000021	5.63	143.447731	Y_R 488.368
Th (288.505 nm)	0.001312	ppm	0.001401	> 100.00	102.543000	Y 377.433
Ti (336.122 nm)	0.000113	ppm	0.000038	33.61	-198.959000	Y 377.433
Tl (190.794 nm)	-0.000146 u	ppm	0.001403	> 100.00	-3.616820	Y 377.433
U (409.013 nm)	0.010530	ppm	0.006913	65.65	-6.661840	Y 377.433
V (292.401 nm)	-0.000123 u	ppm	0.000099	80.19	15.273300	Y 377.433
Zn (206.200 nm)	0.018659	ppm	0.000353	1.89	108.945000	Y 377.433
Zr (343.823 nm)	-0.000317 u	ppm	0.000100	31.64	-26.693800	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.974396	8168.116508	0.005437	0.56
Y 377.433	0.946584	429152.260030	0.005317	0.56
Y_R 377.433	0.993110	34261.400000	0.001574	0.16
Y_R 488.368	1.012550	19079.300000	0.009359	0.92
Y_R2 488.368	0.982514	32539.664263	0.001922	0.20

Sample Name: 280-168149-E-6-D

Date: 10/28/2022 12:34:57 AM Rack:Tube: 1:37

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.039508	ppm	0.000092	0.23	90029.119567	Y 377.433
Ag (328.068 nm)	0.001287 n	ppm	0.000426	33.09	-90.907500	Y 377.433
Al (167.019 nm)	0.014624	ppm	0.001729	11.82	8.444440	Y_R 377.433
Al H (396.152 nm)	0.036823 u	ppm	0.004104	11.14	197.156819	Y_R 377.433
As (188.980 nm)	0.001311	ppm	0.001153	87.92	-1.849140	Y 242.219
B (249.678 nm)	11.621600 o	ppm	0.032107	0.28	323754.000000	Y 242.219
Ba (493.408 nm)	0.042923	ppm	0.000825	1.92	4800.040000	Y_R 488.368
Be (234.861 nm)	-0.000044 u	ppm	0.000004	9.75	1.696900	Y_R 488.368
Bi (223.061 nm)	-0.002405 u	ppm	0.001246	51.82	11.296400	Y 377.433
Ca (315.887 nm)	131.164886 o	ppm	0.173311	0.13	121416.140415	Y_R 377.433
Cd (214.439 nm)	-0.000065 u	ppm	0.000043	65.31	-7.198470	Y 377.433
Co (228.615 nm)	0.004166	ppm	0.000223	5.35	64.952800	Y 242.219
Cr (205.560 nm)	0.000094 u	ppm	0.000090	95.75	7.775740	Y 377.433
Cu (324.754 nm)	0.002388	ppm	0.000182	7.62	1502.270000	Y 377.433
Fe (238.204 nm)	2.270698	ppm	0.002379	0.10	8037.835021	Y_R 377.433
Fe H (259.940 nm)	2.328260 u	ppm	0.002167	0.09	4865.190000	Y_R 377.433
K (766.491 nm)	1.226630	ppm	0.023603	1.92	432.880000	Y_R2 488.368
Li (670.783 nm)	0.042059	ppm	0.000690	1.64	265.622000	Y_R2 488.368
Mg (279.078 nm)	100.219000 o	ppm	0.081384	0.08	605277.000000	Y 377.433
Mn (257.610 nm)	0.581581	ppm	0.001405	0.24	140820.000000	Y 377.433
Mo (202.032 nm)	0.082819	ppm	0.000229	0.28	714.536000	Y 377.433
Na (589.592 nm)	157.579000	ppm	1.000270	0.63	950168.000000	Y_R2 488.368
Na H (589.593 nm)	154.995036	ppm	1.155828	0.75	620225.560196	Y_R 488.368
Ni (231.604 nm)	0.081790	ppm	0.001009	1.23	580.427000	Y 377.433
P (213.618 nm)	0.020676	ppm	0.001846	8.93	59.363700	Y 242.219
Pb (220.353 nm)	0.000549 u	ppm	0.001102	> 100.00	-2.282700	Y 242.219
S (181.972 nm)	162.616458 bo	ppm	0.173297	0.11	78143.442840	Y 377.433
Sb (206.834 nm)	0.001227 u	ppm	0.002874	> 100.00	-4.614850	Y 377.433
Se (196.026 nm)	-0.002172 u	ppm	0.002000	92.05	4.070970	Y 242.219
Si (288.158 nm)	7.018990	ppm	0.033319	0.47	66253.300000	Y 377.433
Sn (189.925 nm)	-0.000120 u	ppm	0.000525	> 100.00	5.096230	Y 377.433
Sr (421.552 nm)	2.502898 o	ppm	0.017891	0.71	560576.994169	Y_R 488.368
Th (288.505 nm)	0.013007	ppm	0.001164	8.95	148.398000	Y 377.433
Ti (336.122 nm)	0.000260	ppm	0.000160	61.46	239.822000	Y 377.433
Tl (190.794 nm)	0.001249	ppm	0.000832	66.60	-0.796925	Y 377.433
U (409.013 nm)	0.018332	ppm	0.005375	29.32	6.620480	Y 377.433
V (292.401 nm)	0.000155	ppm	0.000085	55.28	26.609200	Y 377.433
Zn (206.200 nm)	0.000590	ppm	0.000372	63.09	12.508300	Y 377.433
Zr (343.823 nm)	0.001366	ppm	0.000032	2.32	210.227000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.948279	7949.185998	0.001646	0.17
Y 377.433	0.927884	420674.392303	0.000904	0.10
Y_R 377.433	0.968223	33402.900000	0.012369	1.28
Y_R 488.368	0.988532	18626.700000	0.007705	0.78
Y_R2 488.368	0.938416	31079.172898	0.003442	0.37

Sample Name: 280-168150-E-1-D

Date: 10/28/2022 12:38:58 AM Rack:Tube: 1:38

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.099472	ppm	0.000074	0.07	228264.716892	Y 377.433
Ag (328.068 nm)	0.000920 n	ppm	0.000118	12.85	-112.149000	Y 377.433
Al (167.019 nm)	0.225142	ppm	0.005158	2.29	101.245000	Y_R 377.433
Al H (396.152 nm)	0.301391 u	ppm	0.004807	1.59	1122.310607	Y_R 377.433
As (188.980 nm)	-0.001207 u	ppm	0.001419	> 100.00	-5.122680	Y 242.219
B (249.678 nm)	0.664216	ppm	0.002406	0.36	18578.700000	Y 242.219
Ba (493.408 nm)	0.018525	ppm	0.000286	1.54	2098.830000	Y_R 488.368
Be (234.861 nm)	-0.000012 u	ppm	0.000001	10.58	-17.025200	Y_R 488.368
Bi (223.061 nm)	-0.001282 u	ppm	0.000838	65.36	14.116100	Y 377.433
Ca (315.887 nm)	538.178706 o	ppm	2.373484	0.44	498203.060664	Y_R 377.433
Cd (214.439 nm)	-0.000070 u	ppm	0.000024	34.48	-9.594630	Y 377.433
Co (228.615 nm)	-0.000789 u	ppm	0.000213	26.94	-28.891200	Y 242.219
Cr (205.560 nm)	0.000731	ppm	0.000256	34.98	18.002200	Y 377.433
Cu (324.754 nm)	0.001447	ppm	0.000090	6.22	1105.980000	Y 377.433
Fe (238.204 nm)	0.186022	ppm	0.000696	0.37	670.010156	Y_R 377.433
Fe H (259.940 nm)	0.184595 u	ppm	0.001929	1.05	400.622000	Y_R 377.433
K (766.491 nm)	10.545200	ppm	0.020525	0.19	9722.080000	Y_R2 488.368
Li (670.783 nm)	0.089104	ppm	0.000975	1.09	1843.780000	Y_R2 488.368
Mg (279.078 nm)	205.365000 o	ppm	0.364171	0.18	1240280.000000	Y 377.433
Mn (257.610 nm)	0.016842	ppm	0.000049	0.29	4152.200000	Y 377.433
Mo (202.032 nm)	0.000026 u	ppm	0.000352	> 100.00	5.285880	Y 377.433
Na (589.592 nm)	217.029000	ppm	0.376676	0.17	1308500.000000	Y_R2 488.368
Na H (589.593 nm)	216.030172	ppm	1.110607	0.51	865719.159202	Y_R 488.368
Ni (231.604 nm)	-0.001563 u	ppm	0.000456	29.14	-5.092370	Y 377.433
P (213.618 nm)	0.014506	ppm	0.001369	9.44	44.812200	Y 242.219
Pb (220.353 nm)	0.000759 u	ppm	0.001245	> 100.00	-1.562680	Y 242.219
S (181.972 nm)	648.752822 bo	ppm	0.497785	0.08	311732.090886	Y 377.433
Sb (206.834 nm)	-0.000677 u	ppm	0.001132	> 100.00	-8.734070	Y 377.433
Se (196.026 nm)	0.001624 u	ppm	0.003952	> 100.00	7.779000	Y 242.219
Si (288.158 nm)	5.637890	ppm	0.014282	0.25	53387.700000	Y 377.433
Sn (189.925 nm)	-0.000903 u	ppm	0.000220	24.32	3.432380	Y 377.433
Sr (421.552 nm)	5.375369 o	ppm	0.016722	0.31	1203860.582332	Y_R 488.368
Th (288.505 nm)	0.010376	ppm	0.003698	35.64	129.100000	Y 377.433
Ti (336.122 nm)	0.004352	ppm	0.000374	8.58	2145.860000	Y 377.433
Tl (190.794 nm)	0.002475	ppm	0.002212	89.38	2.134080	Y 377.433
U (409.013 nm)	0.046877	ppm	0.005467	11.66	60.944600	Y 377.433
V (292.401 nm)	0.001085	ppm	0.000210	19.33	65.037800	Y 377.433
Zn (206.200 nm)	0.001870	ppm	0.000939	50.22	19.344500	Y 377.433
Zr (343.823 nm)	-0.000205 u	ppm	0.000041	20.00	-11.050700	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.907379	7606.329443	0.004906	0.54
Y 377.433	0.897826	407046.948934	0.004842	0.54
Y_R 377.433	0.938476	32376.600000	0.021600	2.30
Y_R 488.368	0.956460	18022.400000	0.020515	2.14
Y_R2 488.368	0.901730	29864.191866	0.003569	0.40

Sample Name: 280-168150-E-2-D

Date: 10/28/2022 12:43:01 AM Rack:Tube: 1:39

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.026724	ppm	0.000065	0.24	60560.620669	Y 377.433
Ag (328.068 nm)	0.000791 n	ppm	0.000081	10.28	-117.691000	Y 377.433
Al (167.019 nm)	0.250421	ppm	0.007532	3.01	112.539000	Y_R 377.433
Al H (396.152 nm)	0.250561 u	ppm	0.007876	3.14	745.385885	Y_R 377.433
As (188.980 nm)	0.001675	ppm	0.000805	48.04	-1.375860	Y 242.219
B (249.678 nm)	0.081579	ppm	0.000834	1.02	2351.320000	Y 242.219
Ba (493.408 nm)	0.089156	ppm	0.000360	0.40	9913.210000	Y_R 488.368
Be (234.861 nm)	-0.000028 u	ppm	0.000028	99.61	-21.329300	Y_R 488.368
Bi (223.061 nm)	-0.001500 u	ppm	0.001041	69.41	13.568800	Y 377.433
Ca (315.887 nm)	53.507859 o	ppm	0.059897	0.11	49526.316026	Y_R 377.433
Cd (214.439 nm)	-0.000055 u	ppm	0.000023	41.74	-8.657890	Y 377.433
Co (228.615 nm)	-0.000368 u	ppm	0.000065	17.62	-20.859300	Y 242.219
Cr (205.560 nm)	0.001916	ppm	0.000103	5.39	35.651200	Y 377.433
Cu (324.754 nm)	0.002752	ppm	0.000124	4.52	1580.630000	Y 377.433
Fe (238.204 nm)	0.207944	ppm	0.000551	0.27	747.490441	Y_R 377.433
Fe H (259.940 nm)	0.208792 u	ppm	0.001948	0.93	451.017000	Y_R 377.433
K (766.491 nm)	2.273100	ppm	0.041192	1.81	1476.060000	Y_R2 488.368
Li (670.783 nm)	0.032978	ppm	0.001195	3.62	-39.023700	Y_R2 488.368
Mg (279.078 nm)	23.858200	ppm	0.029631	0.12	144127.000000	Y 377.433
Mn (257.610 nm)	0.002567	ppm	0.000031	1.22	697.682000	Y 377.433
Mo (202.032 nm)	0.003308	ppm	0.000594	17.95	33.402300	Y 377.433
Na (589.592 nm)	57.045000	ppm	0.158389	0.28	344211.000000	Y_R2 488.368
Na H (589.593 nm)	56.576881	ppm	0.242471	0.43	224377.813645	Y_R 488.368
Ni (231.604 nm)	-0.000986 u	ppm	0.000233	23.64	-1.039550	Y 377.433
P (213.618 nm)	0.011612	ppm	0.002279	19.63	37.985900	Y 242.219
Pb (220.353 nm)	-0.000792 u	ppm	0.001475	> 100.00	-5.904100	Y 242.219
S (181.972 nm)	14.826938 o	ppm	0.028023	0.19	7128.780524	Y 377.433
Sb (206.834 nm)	-0.002055 u	ppm	0.001417	68.95	-12.094500	Y 377.433
Se (196.026 nm)	0.004471	ppm	0.001617	36.17	10.598300	Y 242.219
Si (288.158 nm)	8.069840	ppm	0.016426	0.20	76043.600000	Y 377.433
Sn (189.925 nm)	0.000146 u	ppm	0.000601	> 100.00	5.661170	Y 377.433
Sr (421.552 nm)	0.824685	ppm	0.002386	0.29	184744.769481	Y_R 488.368
Th (288.505 nm)	0.003856	ppm	0.002302	59.72	109.817000	Y 377.433
Ti (336.122 nm)	0.005009	ppm	0.000080	1.59	701.836000	Y 377.433
Tl (190.794 nm)	0.001306	ppm	0.001068	81.78	-0.451294	Y 377.433
U (409.013 nm)	0.017183	ppm	0.002421	14.09	15.448600	Y 377.433
V (292.401 nm)	0.000480	ppm	0.000121	25.14	40.197800	Y 377.433
Zn (206.200 nm)	0.002086	ppm	0.000047	2.24	20.494900	Y 377.433
Zr (343.823 nm)	0.000045	ppm	0.000040	89.17	23.170000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.952087	7981.099353	0.002720	0.29
Y 377.433	0.927058	420299.722497	0.002097	0.23
Y_R 377.433	0.968783	33422.200000	0.002566	0.26
Y_R 488.368	0.983373	18529.500000	0.003772	0.38
Y_R2 488.368	0.957553	31712.982505	0.007679	0.80

Sample Name: 280-168121-M-1-A

Date: 10/28/2022 12:47:03 AM Rack:Tube: 1:40

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.091081	ppm	0.000023	0.03	208919.009768	Y 377.433
Ag (328.068 nm)	0.000892 n	ppm	0.000284	31.84	-112.422000	Y 377.433
Al (167.019 nm)	-0.003692 u	ppm	0.000863	23.38	-0.733238	Y_R 377.433
Al H (396.152 nm)	0.035539 u	ppm	0.007619	21.44	726.808046	Y_R 377.433
As (188.980 nm)	0.001596 u	ppm	0.003016	> 100.00	-1.478470	Y 242.219
B (249.678 nm)	0.337207	ppm	0.001338	0.40	9471.640000	Y 242.219
Ba (493.408 nm)	3.111790 o	ppm	0.017849	0.57	344328.000000	Y_R 488.368
Be (234.861 nm)	-0.000030 u	ppm	0.000015	48.60	-17.974700	Y_R 488.368
Bi (223.061 nm)	-0.001155 u	ppm	0.003225	> 100.00	14.434100	Y 377.433
Ca (315.887 nm)	1239.892454 o	ppm	1.055820	0.09	1147804.005229	Y_R 377.433
Cd (214.439 nm)	-0.000006 u	ppm	0.000114	> 100.00	-5.392070	Y 377.433
Co (228.615 nm)	0.022962	ppm	0.000215	0.94	421.271000	Y 242.219
Cr (205.560 nm)	0.000251	ppm	0.000127	50.49	10.774200	Y 377.433
Cu (324.754 nm)	0.001036	ppm	0.000047	4.49	530.972000	Y 377.433
Fe (238.204 nm)	0.451518	ppm	0.001374	0.30	1608.348170	Y_R 377.433
Fe H (259.940 nm)	0.455378 u	ppm	0.003702	0.81	964.574000	Y_R 377.433
K (766.491 nm)	12.029400	ppm	0.124974	1.04	11201.700000	Y_R2 488.368
Li (670.783 nm)	0.077147	ppm	0.001040	1.35	1442.670000	Y_R2 488.368
Mg (279.078 nm)	241.462000 o	ppm	0.598755	0.25	1458270.000000	Y 377.433
Mn (257.610 nm)	3.441230 o	ppm	0.005297	0.15	832857.000000	Y 377.433
Mo (202.032 nm)	0.000054 u	ppm	0.000250	> 100.00	5.526560	Y 377.433
Na (589.592 nm)	991.292000 bo	ppm	5.596540	0.56	5980100.000000	Y_R2 488.368
Na H (589.593 nm)	1112.711660 bo	ppm	5.877224	0.53	4476039.653810	Y_R 488.368
Ni (231.604 nm)	-0.000043 u	ppm	0.000220	> 100.00	5.630120	Y 377.433
P (213.618 nm)	0.103021	ppm	0.002029	1.97	253.585000	Y 242.219
Pb (220.353 nm)	-0.000127 u	ppm	0.001162	> 100.00	-4.073010	Y 242.219
S (181.972 nm)	1.541688	ppm	0.007686	0.50	753.272104	Y 377.433
Sb (206.834 nm)	-0.001452 u	ppm	0.000999	68.80	-10.601500	Y 377.433
Se (196.026 nm)	-0.001180 u	ppm	0.004951	> 100.00	7.810740	Y 242.219
Si (288.158 nm)	12.091500 o	ppm	0.060178	0.50	113508.000000	Y 377.433
Sn (189.925 nm)	0.001461 u	ppm	0.001731	> 100.00	8.456930	Y 377.433
Sr (421.552 nm)	12.680788 bo	ppm	0.032943	0.26	2839893.321686	Y_R 488.368
Th (288.505 nm)	0.041506	ppm	0.001591	3.83	292.813000	Y 377.433
Ti (336.122 nm)	0.000146	ppm	0.000076	52.57	3753.420000	Y 377.433
Tl (190.794 nm)	0.001685	ppm	0.001380	81.90	0.504680	Y 377.433
U (409.013 nm)	-0.010078 u	ppm	0.009009	89.40	-376.052000	Y 377.433
V (292.401 nm)	0.001427	ppm	0.000155	10.89	84.322000	Y 377.433
Zn (206.200 nm)	0.002060	ppm	0.000306	14.85	20.356300	Y 377.433
Zr (343.823 nm)	-0.000578 u	ppm	0.000080	13.83	-61.255200	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.841647	7055.312584	0.005268	0.63
Y 377.433	0.836361	379180.391216	0.005115	0.61
Y_R 377.433	0.927553	31999.800000	0.001530	0.16
Y_R 488.368	0.944132	17790.100000	0.001875	0.20
Y_R2 488.368	0.916469	30352.329921	0.004510	0.49

Sample Name: CCVH-7429327

Date: 10/28/2022 12:51:06 AM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000065	ppm	0.000006	8.87	-897.122525	Y 377.433
Ag (328.068 nm)	0.002218	ppm	0.000282	12.72	-124.829000	Y 377.433
Al (167.019 nm)	50.029100 o	ppm	0.258159	0.52	22356.100000	Y_R 377.433
Al H (396.152 nm)	51.337873	ppm	0.098094	0.19	142507.721950	Y_R 377.433
As (188.980 nm)	0.000913	ppm	0.000674	73.84	-2.366540	Y 242.219
B (249.678 nm)	0.004320	ppm	0.000484	11.20	97.502400	Y 242.219
Ba (493.408 nm)	0.000150	ppm	0.000145	96.73	112.192000	Y_R 488.368
Be (234.861 nm)	0.000059	ppm	0.000046	77.86	805.992000	Y_R 488.368
Bi (223.061 nm)	-0.002829 u	ppm	0.001718	60.73	10.230900	Y 377.433
Ca (315.887 nm)	0.002345 u	ppm	0.002996	> 100.00	-5.608129	Y_R 377.433
Cd (214.439 nm)	-0.000145 u	ppm	0.000088	60.93	37.094600	Y 377.433
Co (228.615 nm)	-0.000337 u	ppm	0.000350	> 100.00	-20.440600	Y 242.219
Cr (205.560 nm)	0.000979	ppm	0.000071	7.24	7.646590	Y 377.433
Cu (324.754 nm)	0.002950	ppm	0.000312	10.58	2839.930000	Y 377.433
Fe (238.204 nm)	50.998608 o	ppm	0.115869	0.23	180255.785749	Y_R 377.433
Fe H (259.940 nm)	52.038100	ppm	0.115972	0.22	108394.000000	Y_R 377.433
K (766.491 nm)	0.059950	ppm	0.070189	> 100.00	-730.125000	Y_R2 488.368
Li (670.783 nm)	0.006336	ppm	0.001340	21.14	-932.744000	Y_R2 488.368
Mg (279.078 nm)	-0.005738 u	ppm	0.001757	30.62	-158.833000	Y 377.433
Mn (257.610 nm)	0.000266	ppm	0.000014	5.38	140.859000	Y 377.433
Mo (202.032 nm)	-0.000204 u	ppm	0.000086	42.02	3.311790	Y 377.433
Na (589.592 nm)	252.163000	ppm	1.933090	0.77	1520270.000000	Y_R2 488.368
Na H (589.593 nm)	251.673332	ppm	3.549064	1.41	1009077.342392	Y_R 488.368
Ni (231.604 nm)	-0.000416 u	ppm	0.000219	52.49	11.780000	Y 377.433
P (213.618 nm)	5.025310	ppm	0.020251	0.40	11863.300000	Y 242.219
Pb (220.353 nm)	-0.006168 u	ppm	0.000801	12.99	-27.535700	Y 242.219
S (181.972 nm)	5.156628	ppm	0.016930	0.33	2482.163317	Y 377.433
Sb (206.834 nm)	0.000918	ppm	0.000772	84.11	-21.322100	Y 377.433
Se (196.026 nm)	0.004442 u	ppm	0.004027	90.66	1.844130	Y 242.219
Si (288.158 nm)	0.016391	ppm	0.000938	5.72	1017.980000	Y 377.433
Sn (189.925 nm)	0.000732	ppm	0.000629	85.93	6.907750	Y 377.433
Sr (421.552 nm)	0.000680	ppm	0.000125	18.34	210.699015	Y_R 488.368
Th (288.505 nm)	5.131900	ppm	0.045549	0.89	14518.000000	Y 377.433
Ti (336.122 nm)	0.000463	ppm	0.000086	18.49	-146.924000	Y 377.433
Tl (190.794 nm)	-0.003618 u	ppm	0.000551	15.23	-12.650000	Y 377.433
U (409.013 nm)	2.551110	ppm	0.007304	0.29	12831.600000	Y 377.433
V (292.401 nm)	-0.000794 u	ppm	0.000214	26.92	322.379000	Y 377.433
Zn (206.200 nm)	0.000899	ppm	0.000350	38.92	14.161100	Y 377.433
Zr (343.823 nm)	0.004696	ppm	0.000197	4.19	816.638000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.965565	8094.084721	0.002717	0.28
Y 377.433	0.929060	421207.713266	0.002663	0.29
Y_R 377.433	0.983630	33934.400000	0.002351	0.24
Y_R 488.368	1.004820	18933.600000	0.009182	0.91
Y_R2 488.368	0.940257	31140.141768	0.007704	0.82

Sample Name: CCV-7429326

Date: 10/28/2022 12:55:09 AM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.468809	ppm	0.000520	0.11	1079686.100561	Y 377.433
Ag (328.068 nm)	0.511599	ppm	0.001149	0.22	27046.700000	Y 377.433
Al (167.019 nm)	0.537932	ppm	0.004079	0.76	242.146000	Y_R 377.433
Al H (396.152 nm)	0.520765 u	ppm	0.005891	1.13	1518.699296	Y_R 377.433
As (188.980 nm)	0.503794	ppm	0.003787	0.75	651.521000	Y 242.219
B (249.678 nm)	0.502905	ppm	0.001019	0.20	14107.000000	Y 242.219
Ba (493.408 nm)	0.508944	ppm	0.006159	1.21	56356.800000	Y_R 488.368
Be (234.861 nm)	0.536086	ppm	0.003175	0.59	149492.000000	Y_R 488.368
Bi (223.061 nm)	1.051300	ppm	0.001839	0.17	2655.980000	Y 377.433
Ca (315.887 nm)	5.304279	ppm	0.011799	0.22	4902.927340	Y_R 377.433
Cd (214.439 nm)	0.520149	ppm	0.001519	0.29	31809.500000	Y 377.433
Co (228.615 nm)	0.513474	ppm	0.002310	0.45	9740.700000	Y 242.219
Cr (205.560 nm)	0.517944	ppm	0.001416	0.27	7724.150000	Y 377.433
Cu (324.754 nm)	0.525064	ppm	0.001091	0.21	38699.800000	Y 377.433
Fe (238.204 nm)	2.553018	ppm	0.006734	0.26	9035.631182	Y_R 377.433
Fe H (259.940 nm)	2.616120 u	ppm	0.011844	0.45	5464.690000	Y_R 377.433
K (766.491 nm)	50.177500	ppm	0.041640	0.08	49229.600000	Y_R2 488.368
Li (670.783 nm)	0.491249	ppm	0.001466	0.30	15334.100000	Y_R2 488.368
Mg (279.078 nm)	20.639800	ppm	0.054886	0.27	124686.000000	Y 377.433
Mn (257.610 nm)	0.522213	ppm	0.000858	0.16	126452.000000	Y 377.433
Mo (202.032 nm)	0.523559	ppm	0.000444	0.08	4490.170000	Y 377.433
Na (589.592 nm)	25.892400	ppm	0.034821	0.13	157007.000000	Y_R2 488.368
Na H (589.593 nm)	26.567340	ppm	0.194868	0.73	104113.042695	Y_R 488.368
Ni (231.604 nm)	0.529415	ppm	0.000314	0.06	3723.550000	Y 377.433
P (213.618 nm)	0.004863	ppm	0.002085	42.87	22.067700	Y 242.219
Pb (220.353 nm)	0.501299	ppm	0.001566	0.31	1386.830000	Y 242.219
S (181.972 nm)	0.024965	ppm	0.006103	24.45	17.605105	Y 377.433
Sb (206.834 nm)	0.523046	ppm	0.000990	0.19	1317.750000	Y 377.433
Se (196.026 nm)	0.503263	ppm	0.000994	0.20	507.938000	Y 242.219
Si (288.158 nm)	5.148220	ppm	0.008978	0.17	48909.900000	Y 377.433
Sn (189.925 nm)	0.523244	ppm	0.003726	0.71	1117.210000	Y 377.433
Sr (421.552 nm)	0.501995	ppm	0.003047	0.61	112479.257302	Y_R 488.368
Th (288.505 nm)	0.048689	ppm	0.018574	38.15	244.551000	Y 377.433
Ti (336.122 nm)	0.511194	ppm	0.000889	0.17	76127.200000	Y 377.433
Tl (190.794 nm)	0.521746	ppm	0.001009	0.19	1144.050000	Y 377.433
U (409.013 nm)	0.009070	ppm	0.003725	41.07	-56.398600	Y 377.433
V (292.401 nm)	0.522104	ppm	0.000879	0.17	21301.000000	Y 377.433
Zn (206.200 nm)	0.525077	ppm	0.001784	0.34	2811.770000	Y 377.433
Zr (343.823 nm)	0.496307	ppm	0.006716	1.35	67888.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.973151	8157.673741	0.005718	0.59
Y 377.433	0.943403	427710.391335	0.004181	0.44
Y_R 377.433	0.960961	33152.300000	0.001949	0.20
Y_R 488.368	0.979507	18456.700000	0.004530	0.46
Y_R2 488.368	0.946537	31348.126606	0.005148	0.54

Sample Name: CCB

Date: 10/28/2022 12:59:11 AM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000034	ppm	0.000021	63.51	-968.822144	Y 377.433
Ag (328.068 nm)	0.000457	ppm	0.000278	60.75	-134.937000	Y 377.433
Al (167.019 nm)	-0.002017 u	ppm	0.000952	47.18	-0.235248	Y_R 377.433
Al H (396.152 nm)	-0.004036 u	ppm	0.000515	12.77	12.547545	Y_R 377.433
As (188.980 nm)	0.000541 u	ppm	0.001166	> 100.00	-2.849960	Y 242.219
B (249.678 nm)	0.001881	ppm	0.000315	16.72	132.037000	Y 242.219
Ba (493.408 nm)	-0.000042 u	ppm	0.000200	> 100.00	44.472700	Y_R 488.368
Be (234.861 nm)	-0.000014 u	ppm	0.000011	80.71	-20.561800	Y_R 488.368
Bi (223.061 nm)	0.001434 u	ppm	0.003240	> 100.00	20.930700	Y 377.433
Ca (315.887 nm)	0.004328	ppm	0.003824	88.37	-3.773112	Y_R 377.433
Cd (214.439 nm)	-0.000063 u	ppm	0.000062	99.28	-9.322880	Y 377.433
Co (228.615 nm)	-0.000026 u	ppm	0.000097	> 100.00	-14.541900	Y 242.219
Cr (205.560 nm)	-0.000053 u	ppm	0.000040	75.75	6.356360	Y 377.433
Cu (324.754 nm)	0.001409	ppm	0.000295	20.94	1525.600000	Y 377.433
Fe (238.204 nm)	-0.000105 u	ppm	0.000614	> 100.00	12.186898	Y_R 377.433
Fe H (259.940 nm)	-0.004976 u	ppm	0.000793	15.93	5.806590	Y_R 377.433
K (766.491 nm)	0.096820	ppm	0.081556	84.24	-693.372000	Y_R2 488.368
Li (670.783 nm)	0.007792	ppm	0.001449	18.60	-883.898000	Y_R2 488.368
Mg (279.078 nm)	0.000143 u	ppm	0.000663	> 100.00	44.100500	Y 377.433
Mn (257.610 nm)	-0.000130 u	ppm	0.000007	5.52	45.078500	Y 377.433
Mo (202.032 nm)	0.001262	ppm	0.000350	27.74	15.872400	Y 377.433
Na (589.592 nm)	0.036890	ppm	0.011246	30.48	440.114000	Y_R2 488.368
Na H (589.593 nm)	1.457031 u	ppm	0.012228	0.84	2556.869607	Y_R 488.368
Ni (231.604 nm)	-0.000212 u	ppm	0.000354	> 100.00	4.356620	Y 377.433
P (213.618 nm)	0.002220	ppm	0.001138	51.27	15.834200	Y 242.219
Pb (220.353 nm)	-0.000990 u	ppm	0.000455	45.91	-6.389510	Y 242.219
S (181.972 nm)	0.030130	ppm	0.001169	3.88	18.864260	Y 377.433
Sb (206.834 nm)	0.000657	ppm	0.000539	82.02	-5.262470	Y 377.433
Se (196.026 nm)	-0.000418 u	ppm	0.002083	> 100.00	5.756510	Y 242.219
Si (288.158 nm)	0.002694	ppm	0.000805	29.89	890.366000	Y 377.433
Sn (189.925 nm)	0.000717 u	ppm	0.000961	> 100.00	6.875630	Y 377.433
Sr (421.552 nm)	0.000008 u	ppm	0.000036	> 100.00	60.205176	Y_R 488.368
Th (288.505 nm)	0.001039	ppm	0.000926	89.09	101.695000	Y 377.433
Ti (336.122 nm)	-0.000168 u	ppm	0.000064	38.01	-241.242000	Y 377.433
Tl (190.794 nm)	0.000258 u	ppm	0.001457	> 100.00	-2.728980	Y 377.433
U (409.013 nm)	0.005158	ppm	0.002526	48.97	-33.827700	Y 377.433
V (292.401 nm)	-0.000004 u	ppm	0.000064	> 100.00	20.385300	Y 377.433
Zn (206.200 nm)	-0.000460 u	ppm	0.000319	69.31	6.905770	Y 377.433
Zr (343.823 nm)	0.000234	ppm	0.000095	40.48	48.322300	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.977941	8197.831093	0.002580	0.26
Y 377.433	0.952932	432030.236251	0.001991	0.21
Y_R 377.433	0.992327	34234.400000	0.002730	0.28
Y_R 488.368	1.009290	19017.900000	0.007022	0.70
Y_R2 488.368	0.987507	32705.029649	0.003313	0.34

Sample Name: CCVL-7434568

Date: 10/28/2022 1:03:13 AM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014783	ppm	0.000007	0.05	33032.405202	Y 377.433
Ag (328.068 nm)	0.010652	ppm	0.000069	0.65	406.252000	Y 377.433
Al (167.019 nm)	0.106534	ppm	0.001951	1.83	48.267000	Y_R 377.433
Al H (396.152 nm)	0.105835 u	ppm	0.002334	2.21	319.298950	Y_R 377.433
As (188.980 nm)	0.012937	ppm	0.001877	14.51	13.267300	Y 242.219
B (249.678 nm)	0.101569	ppm	0.000185	0.18	2908.810000	Y 242.219
Ba (493.408 nm)	0.009947	ppm	0.000210	2.11	1149.630000	Y_R 488.368
Be (234.861 nm)	0.001033	ppm	0.000018	1.69	271.886000	Y_R 488.368
Bi (223.061 nm)	0.000662 Qu	ppm	0.001817	> 100.00	18.993300 Q	Y 377.433
Ca (315.887 nm)	0.225297	ppm	0.004514	2.00	200.789408	Y_R 377.433
Cd (214.439 nm)	0.005180	ppm	0.000057	1.10	311.446000	Y 377.433
Co (228.615 nm)	0.010681	ppm	0.000237	2.22	188.805000	Y 242.219
Cr (205.560 nm)	0.010643	ppm	0.000084	0.79	165.773000	Y 377.433
Cu (324.754 nm)	0.017654	ppm	0.000136	0.77	2677.720000	Y 377.433
Fe (238.204 nm)	0.103654	ppm	0.001137	1.10	378.900638	Y_R 377.433
Fe H (259.940 nm)	0.104014 u	ppm	0.002105	2.02	232.798000	Y_R 377.433
K (766.491 nm)	3.173830	ppm	0.031141	0.98	2373.950000	Y_R2 488.368
Li (670.783 nm)	0.025735	ppm	0.001657	6.44	-281.991000	Y_R2 488.368
Mg (279.078 nm)	0.210827	ppm	0.001656	0.79	1314.830000	Y 377.433
Mn (257.610 nm)	0.010543	ppm	0.000029	0.27	2627.800000	Y 377.433
Mo (202.032 nm)	0.020301	ppm	0.000340	1.68	178.969000	Y 377.433
Na (589.592 nm)	1.142650	ppm	0.004966	0.43	7119.510000	Y_R2 488.368
Na H (589.593 nm)	2.463128 u	ppm	0.004245	0.17	6614.659468	Y_R 488.368
Ni (231.604 nm)	0.044409	ppm	0.000304	0.68	317.648000	Y 377.433
P (213.618 nm)	2.893140	ppm	0.011911	0.41	6834.380000	Y 242.219
Pb (220.353 nm)	0.008142	ppm	0.000661	8.12	19.011100	Y 242.219
S (181.972 nm)	0.125947	ppm	0.001949	1.55	64.929083	Y 377.433
Sb (206.834 nm)	0.020598	ppm	0.002078	10.09	44.926400	Y 377.433
Se (196.026 nm)	0.016733	ppm	0.000343	2.05	22.848900	Y 242.219
Si (288.158 nm)	0.504176	ppm	0.002497	0.50	5563.590000	Y 377.433
Sn (189.925 nm)	0.106205	ppm	0.000779	0.73	231.030000	Y 377.433
Sr (421.552 nm)	0.010040	ppm	0.000020	0.20	2306.846988	Y_R 488.368
Th (288.505 nm)	0.016036	ppm	0.001095	6.83	145.238000	Y 377.433
Ti (336.122 nm)	0.009691	ppm	0.000046	0.47	1231.490000	Y 377.433
Tl (190.794 nm)	0.016668	ppm	0.001612	9.67	33.357400	Y 377.433
U (409.013 nm)	0.066329	ppm	0.002053	3.09	272.965000	Y 377.433
V (292.401 nm)	0.010328	ppm	0.000104	1.00	439.096000	Y 377.433
Zn (206.200 nm)	0.022289	ppm	0.000398	1.79	128.320000	Y 377.433
Zr (343.823 nm)	0.012718	ppm	0.000102	0.80	1755.730000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.970303	8133.804804	0.001142	0.12
Y 377.433	0.943519	427762.853483	0.001636	0.17
Y_R 377.433	0.988210	34092.400000	0.000696	0.07
Y_R 488.368	1.004690	18931.200000	0.001738	0.17
Y_R2 488.368	0.977099	32360.311276	0.008304	0.85

Sample Name: 280-167959-E-1-B

Date: 10/28/2022 1:07:16 AM Rack:Tube: 1:41

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000018	ppm	0.000016	88.65	-1006.131910	Y 377.433
Ag (328.068 nm)	0.000518 n	ppm	0.000129	24.81	-131.884000	Y 377.433
Al (167.019 nm)	0.003461 u	ppm	0.004079	> 100.00	2.213200	Y_R 377.433
Al H (396.152 nm)	-0.002059 u	ppm	0.000286	13.86	17.940544	Y_R 377.433
As (188.980 nm)	-0.001123 u	ppm	0.001113	99.10	-5.014210	Y 242.219
B (249.678 nm)	0.001438	ppm	0.000234	16.25	119.682000	Y 242.219
Ba (493.408 nm)	0.000135 u	ppm	0.000389	> 100.00	64.101100	Y_R 488.368
Be (234.861 nm)	-0.000034 u	ppm	0.000017	49.97	-26.019300	Y_R 488.368
Bi (223.061 nm)	0.000560 u	ppm	0.001292	> 100.00	18.737100	Y 377.433
Ca (315.887 nm)	0.086623	ppm	0.008254	9.53	72.410904	Y_R 377.433
Cd (214.439 nm)	-0.000036 u	ppm	0.000046	> 100.00	-7.683290	Y 377.433
Co (228.615 nm)	0.000047 u	ppm	0.000096	> 100.00	-13.161600	Y 242.219
Cr (205.560 nm)	-0.000021 u	ppm	0.000281	> 100.00	6.831220	Y 377.433
Cu (324.754 nm)	0.001516	ppm	0.000256	16.87	1533.410000	Y 377.433
Fe (238.204 nm)	0.006525	ppm	0.001971	30.20	35.619239	Y_R 377.433
Fe H (259.940 nm)	0.005316 u	ppm	0.000287	5.41	27.242900	Y_R 377.433
K (766.491 nm)	0.046721 u	ppm	0.060987	> 100.00	-743.313000	Y_R2 488.368
Li (670.783 nm)	0.005735	ppm	0.002289	39.91	-952.913000	Y_R2 488.368
Mg (279.078 nm)	0.004690	ppm	0.001662	35.43	71.547400	Y 377.433
Mn (257.610 nm)	0.000209	ppm	0.000013	6.03	126.969000	Y 377.433
Mo (202.032 nm)	-0.000185 u	ppm	0.000273	> 100.00	3.477870	Y 377.433
Na (589.592 nm)	0.075467	ppm	0.011159	14.79	673.273000	Y_R2 488.368
Na H (589.593 nm)	1.390415 u	ppm	0.011587	0.83	2289.376477	Y_R 488.368
Ni (231.604 nm)	0.000218 u	ppm	0.000713	> 100.00	7.382150	Y 377.433
P (213.618 nm)	0.005280	ppm	0.000716	13.56	23.050200	Y 242.219
Pb (220.353 nm)	-0.001436 u	ppm	0.001460	> 100.00	-7.618940	Y 242.219
S (181.972 nm)	0.029842	ppm	0.002076	6.96	18.726410	Y 377.433
Sb (206.834 nm)	-0.000023 u	ppm	0.001007	> 100.00	-6.962290	Y 377.433
Se (196.026 nm)	0.001368	ppm	0.001180	86.27	7.536440	Y 242.219
Si (288.158 nm)	0.013360	ppm	0.000416	3.12	989.728000	Y 377.433
Sn (189.925 nm)	0.000137 u	ppm	0.000632	> 100.00	5.641500	Y 377.433
Sr (421.552 nm)	0.000148	ppm	0.000096	64.99	91.501361	Y_R 488.368
Th (288.505 nm)	0.003016	ppm	0.002174	72.08	107.233000	Y 377.433
Ti (336.122 nm)	-0.000099 u	ppm	0.000064	64.25	-230.630000	Y 377.433
Tl (190.794 nm)	0.000582 u	ppm	0.001489	> 100.00	-2.012850	Y 377.433
U (409.013 nm)	0.006831	ppm	0.003235	47.36	-25.356500	Y 377.433
V (292.401 nm)	-0.000227 u	ppm	0.000232	> 100.00	11.384000	Y 377.433
Zn (206.200 nm)	0.001069	ppm	0.000348	32.51	15.066600	Y 377.433
Zr (343.823 nm)	-0.000322 u	ppm	0.000081	25.15	-27.569600	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.975626	8178.426503	0.009274	0.95
Y 377.433	0.947267	429462.235228	0.006641	0.70
Y_R 377.433	0.995073	34329.200000	0.001914	0.19
Y_R 488.368	1.018590	19193.100000	0.002399	0.24
Y_R2 488.368	0.981690	32512.379453	0.001571	0.16

Sample Name: 280-168125-A-1-C

Date: 10/28/2022 1:11:18 AM Rack:Tube: 1:42

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.322049	ppm	0.001799	0.56	741364.646728	Y 377.433
Ag (328.068 nm)	0.001604 n	ppm	0.000181	11.26	-103.962000	Y 377.433
Al (167.019 nm)	3.508900 o	ppm	0.004412	0.13	1582.840000	Y_R 377.433
Al H (396.152 nm)	3.821603	ppm	0.002801	0.07	10689.927111	Y_R 377.433
As (188.980 nm)	0.338728	ppm	0.002756	0.81	436.889000	Y 242.219
B (249.678 nm)	14.710500 o	ppm	0.018877	0.13	409735.000000	Y 242.219
Ba (493.408 nm)	2.373830 o	ppm	0.012628	0.53	262707.000000	Y_R 488.368
Be (234.861 nm)	0.000370	ppm	0.000052	13.92	549.113000	Y_R 488.368
Bi (223.061 nm)	-0.001764 u	ppm	0.001851	> 100.00	12.906100	Y 377.433
Ca (315.887 nm)	117.710880 o	ppm	0.242015	0.21	108961.298274	Y_R 377.433
Cd (214.439 nm)	0.001282	ppm	0.000047	3.69	102.587000	Y 377.433
Co (228.615 nm)	0.083637	ppm	0.000104	0.12	1601.240000	Y 242.219
Cr (205.560 nm)	0.884827	ppm	0.001036	0.12	13192.700000	Y 377.433
Cu (324.754 nm)	0.045466	ppm	0.000124	0.27	4585.640000	Y 377.433
Fe (238.204 nm)	29.376410 o	ppm	0.087767	0.30	103836.938089	Y_R 377.433
Fe H (259.940 nm)	30.368900	ppm	0.017688	0.06	63264.700000	Y_R 377.433
K (766.491 nm)	1005.810000 bo	ppm	2.857730	0.28	1001860.000000	Y_R2 488.368
Li (670.783 nm)	0.245749	ppm	0.000617	0.25	7098.620000	Y_R2 488.368
Mg (279.078 nm)	116.961000 o	ppm	0.234813	0.20	706341.000000	Y 377.433
Mn (257.610 nm)	0.967402	ppm	0.002190	0.23	234188.000000	Y 377.433
Mo (202.032 nm)	0.027256	ppm	0.000448	1.64	238.548000	Y 377.433
Na (589.592 nm)	2642.310000 bo	ppm	16.063900	0.61	15931500.000000	Y_R2 488.368
Na H (589.593 nm)	3902.634171 bo	ppm	6.806492	0.17	15697995.797328	Y_R 488.368
Ni (231.604 nm)	0.444897	ppm	0.003190	0.72	3134.200000	Y 377.433
P (213.618 nm)	29.086200 o	ppm	0.153784	0.53	68613.500000	Y 242.219
Pb (220.353 nm)	0.023294	ppm	0.000887	3.81	62.091400	Y 242.219
S (181.972 nm)	94.614644 o	ppm	0.259061	0.27	45469.285212	Y 377.433
Sb (206.834 nm)	0.068066	ppm	0.000805	1.18	185.284000	Y 377.433
Se (196.026 nm)	0.004434	ppm	0.003946	89.00	5.975450	Y 242.219
Si (288.158 nm)	31.235800 o	ppm	0.201365	0.64	291984.000000	Y 377.433
Sn (189.925 nm)	0.344046	ppm	0.003729	1.08	736.427000	Y 377.433
Sr (421.552 nm)	1.149727 o	ppm	0.000487	0.04	257537.248848	Y_R 488.368
Th (288.505 nm)	0.024722	ppm	0.001267	5.12	197.040000	Y 377.433
Ti (336.122 nm)	0.792983	ppm	0.001290	0.16	118559.000000	Y 377.433
Tl (190.794 nm)	-0.002401 u	ppm	0.000956	39.81	-12.614100	Y 377.433
U (409.013 nm)	-0.014149 u	ppm	0.007362	52.03	-143.039000	Y 377.433
V (292.401 nm)	0.362308	ppm	0.000442	0.12	14660.100000	Y 377.433
Zn (206.200 nm)	1.128010 o	ppm	0.005314	0.47	6029.710000	Y 377.433
Zr (343.823 nm)	0.202238	ppm	0.007258	3.59	27760.800000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.798756	6695.772249	0.003209	0.40
Y 377.433	0.796706	361202.307077	0.004393	0.55
Y_R 377.433	0.932911	32184.600000	0.001616	0.17
Y_R 488.368	0.946897	17842.200000	0.001264	0.13
Y_R2 488.368	0.916443	30351.454740	0.004319	0.47

Sample Name: MB 280-591310/1-A

Date: 10/28/2022 1:15:21 AM Rack:Tube: 1:43

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000077	ppm	0.000004	5.14	-868.595202	Y 377.433
Ag (328.068 nm)	0.000627 n	ppm	0.000182	29.02	-126.024000	Y 377.433
Al (167.019 nm)	0.011746	ppm	0.003303	28.12	5.915850	Y_R 377.433
Al H (396.152 nm)	0.007350 u	ppm	0.002719	36.99	44.036236	Y_R 377.433
As (188.980 nm)	0.000847	ppm	0.001225	> 100.00	-2.453050	Y 242.219
B (249.678 nm)	0.014845	ppm	0.002749	18.52	493.046000	Y 242.219
Ba (493.408 nm)	0.000901	ppm	0.000259	28.78	148.782000	Y_R 488.368
Be (234.861 nm)	-0.000028 u	ppm	0.000012	42.79	-24.274100	Y_R 488.368
Bi (223.061 nm)	0.000027 u	ppm	0.001644	> 100.00	17.399800	Y 377.433
Ca (315.887 nm)	0.037092	ppm	0.003751	10.11	26.557638	Y_R 377.433
Cd (214.439 nm)	-0.000028 u	ppm	0.000036	> 100.00	-7.188500	Y 377.433
Co (228.615 nm)	-0.000082 u	ppm	0.000025	30.33	-15.531600	Y 242.219
Cr (205.560 nm)	-0.000115 u	ppm	0.000134	> 100.00	5.434510	Y 377.433
Cu (324.754 nm)	0.001390	ppm	0.000146	10.48	1524.700000	Y 377.433
Fe (238.204 nm)	0.015730	ppm	0.001730	11.00	68.153588	Y_R 377.433
Fe H (259.940 nm)	0.013247 u	ppm	0.001003	7.57	43.759100	Y_R 377.433
K (766.491 nm)	0.197051	ppm	0.046261	23.48	-593.456000	Y_R2 488.368
Li (670.783 nm)	0.007125	ppm	0.001139	15.99	-906.290000	Y_R2 488.368
Mg (279.078 nm)	0.012294	ppm	0.001140	9.27	117.496000	Y 377.433
Mn (257.610 nm)	0.002966	ppm	0.000033	1.12	794.293000	Y 377.433
Mo (202.032 nm)	-0.000123 u	ppm	0.000214	> 100.00	4.008030	Y 377.433
Na (589.592 nm)	0.699070	ppm	0.016025	2.29	4432.970000	Y_R2 488.368
Na H (589.593 nm)	2.925680 u	ppm	0.055044	1.88	8465.593117	Y_R 488.368
Ni (231.604 nm)	0.000026 u	ppm	0.000698	> 100.00	6.030070	Y 377.433
P (213.618 nm)	0.008663	ppm	0.003002	34.66	31.029200	Y 242.219
Pb (220.353 nm)	-0.000292 u	ppm	0.001131	> 100.00	-4.450690	Y 242.219
S (181.972 nm)	0.115901	ppm	0.001547	1.34	60.084359	Y 377.433
Sb (206.834 nm)	0.000100 u	ppm	0.003009	> 100.00	-6.652930	Y 377.433
Se (196.026 nm)	-0.000840 u	ppm	0.002554	> 100.00	5.335540	Y 242.219
Si (288.158 nm)	0.223589	ppm	0.050795	22.72	2948.510000	Y 377.433
Sn (189.925 nm)	0.000354 u	ppm	0.000399	> 100.00	6.104310	Y 377.433
Sr (421.552 nm)	0.000153	ppm	0.000051	33.30	92.739188	Y_R 488.368
Th (288.505 nm)	0.004678	ppm	0.000576	12.32	111.916000	Y 377.433
Ti (336.122 nm)	0.002356	ppm	0.000011	0.45	135.801000	Y 377.433
Tl (190.794 nm)	0.000425 u	ppm	0.000675	> 100.00	-2.366850	Y 377.433
U (409.013 nm)	0.010549	ppm	0.002063	19.56	-6.634840	Y 377.433
V (292.401 nm)	-0.000224 u	ppm	0.000141	63.23	11.723900	Y 377.433
Zn (206.200 nm)	0.005200	ppm	0.000351	6.75	37.116500	Y 377.433
Zr (343.823 nm)	-0.000191 u	ppm	0.000048	25.25	-9.633090	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.990074	8299.535776	0.006635	0.67
Y 377.433	0.963330	436744.302006	0.008839	0.92
Y_R 377.433	0.993636	34279.600000	0.003539	0.36
Y_R 488.368	1.015390	19132.800000	0.006727	0.66
Y_R2 488.368	0.984113	32592.597544	0.001219	0.12

Sample Name: LCS 280-591310/2-A

Date: 10/28/2022 1:19:24 AM Rack:Tube: 1:44

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.994402	ppm	0.004722	0.47	2291323.835385	Y 377.433
Ag (328.068 nm)	0.050636 n	ppm	0.000526	1.04	2556.910000	Y 377.433
Al (167.019 nm)	10.399300 o	ppm	0.031254	0.30	4647.370000	Y_R 377.433
Al H (396.152 nm)	10.286552	ppm	0.010237	0.10	28694.128587	Y_R 377.433
As (188.980 nm)	1.001010	ppm	0.004033	0.40	1298.040000	Y 242.219
B (249.678 nm)	2.014740 o	ppm	0.000993	0.05	56222.500000	Y 242.219
Ba (493.408 nm)	1.032010	ppm	0.007965	0.77	114232.000000	Y_R 488.368
Be (234.861 nm)	1.040370	ppm	0.004592	0.44	290201.000000	Y_R 488.368
Bi (223.061 nm)	-0.003240 u	ppm	0.002030	62.65	9.201400	Y 377.433
Ca (315.887 nm)	52.267543 o	ppm	0.075039	0.14	48378.799169	Y_R 377.433
Cd (214.439 nm)	1.021490	ppm	0.001302	0.13	62479.600000	Y 377.433
Co (228.615 nm)	0.989444	ppm	0.001757	0.18	18784.800000	Y 242.219
Cr (205.560 nm)	1.020260	ppm	0.001442	0.14	15206.900000	Y 377.433
Cu (324.754 nm)	1.029010	ppm	0.003187	0.31	74432.700000	Y 377.433
Fe (238.204 nm)	10.235671 o	ppm	0.002935	0.03	36188.258177	Y_R 377.433
Fe H (259.940 nm)	10.467000	ppm	0.018246	0.17	21815.600000	Y_R 377.433
K (766.491 nm)	50.294700	ppm	0.170105	0.34	49346.400000	Y_R2 488.368
Li (670.783 nm)	0.973333	ppm	0.005765	0.59	31506.200000	Y_R2 488.368
Mg (279.078 nm)	52.042900 o	ppm	0.093631	0.18	314321.000000	Y 377.433
Mn (257.610 nm)	1.045900	ppm	0.002000	0.19	253186.000000	Y 377.433
Mo (202.032 nm)	1.061710	ppm	0.002844	0.27	9100.270000	Y 377.433
Na (589.592 nm)	52.383600	ppm	0.198113	0.38	317427.000000	Y_R2 488.368
Na H (589.593 nm)	52.597955	ppm	0.115135	0.22	209386.520034	Y_R 488.368
Ni (231.604 nm)	1.019660	ppm	0.001078	0.11	7167.080000	Y 377.433
P (213.618 nm)	20.572000 o	ppm	0.018334	0.09	48532.000000	Y 242.219
Pb (220.353 nm)	0.999097	ppm	0.003173	0.32	2764.600000	Y 242.219
S (181.972 nm)	20.212322 o	ppm	0.015475	0.08	9718.918032	Y 377.433
Sb (206.834 nm)	1.117810 o	ppm	0.001249	0.11	2820.850000	Y 377.433
Se (196.026 nm)	1.009080	ppm	0.005482	0.54	1011.430000	Y 242.219
Si (288.158 nm)	11.213200 o	ppm	0.044155	0.39	105497.000000	Y 377.433
Sn (189.925 nm)	1.047130	ppm	0.003259	0.31	2230.440000	Y 377.433
Sr (421.552 nm)	1.010498	ppm	0.002333	0.23	226357.275359	Y_R 488.368
Th (288.505 nm)	0.014993	ppm	0.002149	14.33	160.491000	Y 377.433
Ti (336.122 nm)	1.034850	ppm	0.001902	0.18	154463.000000	Y 377.433
Tl (190.794 nm)	1.011550	ppm	0.003639	0.36	2220.700000	Y 377.433
U (409.013 nm)	-0.003074 u	ppm	0.002334	75.94	-164.138000	Y 377.433
V (292.401 nm)	1.048240	ppm	0.000794	0.08	42743.800000	Y 377.433
Zn (206.200 nm)	1.033850	ppm	0.003817	0.37	5527.150000	Y 377.433
Zr (343.823 nm)	1.002610	ppm	0.014212	1.42	137142.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.963645	8077.988792	0.005673	0.59
Y 377.433	0.938106	425308.892481	0.005961	0.64
Y_R 377.433	0.998201	34437.100000	0.000836	0.08
Y_R 488.368	1.014940	19124.400000	0.001618	0.16
Y_R2 488.368	0.982569	32541.479817	0.005594	0.57

Sample Name: LCSD 280-591310/3-A

Date: 10/28/2022 1:23:27 AM Rack:Tube: 1:45

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.998252	ppm	0.003628	0.36	2300199.304355	Y 377.433
Ag (328.068 nm)	0.050955 n	ppm	0.000256	0.50	2579.800000	Y 377.433
Al (167.019 nm)	10.464600 o	ppm	0.024615	0.24	4676.500000	Y_R 377.433
Al H (396.152 nm)	10.302374	ppm	0.009543	0.09	28738.713522	Y_R 377.433
As (188.980 nm)	1.006200	ppm	0.002122	0.21	1304.790000	Y 242.219
B (249.678 nm)	2.016820 o	ppm	0.003777	0.19	56280.600000	Y 242.219
Ba (493.408 nm)	1.033350	ppm	0.009244	0.89	114380.000000	Y_R 488.368
Be (234.861 nm)	1.041250	ppm	0.005653	0.54	290449.000000	Y_R 488.368
Bi (223.061 nm)	-0.005111 u	ppm	0.002228	43.58	4.505030	Y 377.433
Ca (315.887 nm)	52.260321 o	ppm	0.032734	0.06	48372.116390	Y_R 377.433
Cd (214.439 nm)	1.026340	ppm	0.002723	0.27	62776.200000	Y 377.433
Co (228.615 nm)	0.991964	ppm	0.002103	0.21	18832.700000	Y 242.219
Cr (205.560 nm)	1.021580	ppm	0.003000	0.29	15226.700000	Y 377.433
Cu (324.754 nm)	1.034080	ppm	0.002681	0.26	74792.400000	Y 377.433
Fe (238.204 nm)	10.246998 o	ppm	0.013560	0.13	36228.293048	Y_R 377.433
Fe H (259.940 nm)	10.454800	ppm	0.005754	0.06	21790.200000	Y_R 377.433
K (766.491 nm)	50.169300	ppm	0.205665	0.41	49221.400000	Y_R2 488.368
Li (670.783 nm)	0.970491	ppm	0.005027	0.52	31410.800000	Y_R2 488.368
Mg (279.078 nm)	52.330900 o	ppm	0.064110	0.12	316060.000000	Y 377.433
Mn (257.610 nm)	1.050300	ppm	0.001933	0.18	254249.000000	Y 377.433
Mo (202.032 nm)	1.069250	ppm	0.000943	0.09	9164.870000	Y 377.433
Na (589.592 nm)	52.238300	ppm	0.166198	0.32	316552.000000	Y_R2 488.368
Na H (589.593 nm)	52.379434	ppm	0.280951	0.54	208508.594814	Y_R 488.368
Ni (231.604 nm)	1.021770	ppm	0.002488	0.24	7181.940000	Y 377.433
P (213.618 nm)	20.677100 o	ppm	0.026120	0.13	48779.800000	Y 242.219
Pb (220.353 nm)	1.001040	ppm	0.002618	0.26	2769.970000	Y 242.219
S (181.972 nm)	20.273006 o	ppm	0.032286	0.16	9748.085710	Y 377.433
Sb (206.834 nm)	1.119720 o	ppm	0.000905	0.08	2825.570000	Y 377.433
Se (196.026 nm)	1.012130	ppm	0.003115	0.31	1014.470000	Y 242.219
Si (288.158 nm)	10.868000	ppm	0.080955	0.74	102282.000000	Y 377.433
Sn (189.925 nm)	1.054320	ppm	0.004437	0.42	2245.710000	Y 377.433
Sr (421.552 nm)	1.012413	ppm	0.004792	0.47	226786.098102	Y_R 488.368
Th (288.505 nm)	0.014155	ppm	0.006207	43.85	158.336000	Y 377.433
Ti (336.122 nm)	1.038740	ppm	0.001674	0.16	155044.000000	Y 377.433
Tl (190.794 nm)	1.016540	ppm	0.003396	0.33	2231.640000	Y 377.433
U (409.013 nm)	-0.002427 u	ppm	0.001631	67.21	-163.224000	Y 377.433
V (292.401 nm)	1.051620	ppm	0.001521	0.14	42881.500000	Y 377.433
Zn (206.200 nm)	1.034750	ppm	0.004668	0.45	5531.960000	Y 377.433
Zr (343.823 nm)	1.029720	ppm	0.001109	0.11	140850.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.958435	8034.313588	0.002938	0.31
Y 377.433	0.931596	422357.053275	0.004509	0.48
Y_R 377.433	0.994009	34292.500000	0.002573	0.26
Y_R 488.368	1.010130	19033.700000	0.004999	0.49
Y_R2 488.368	0.979314	32433.687284	0.004312	0.44

Sample Name: MB 280-591154/1-A

Date: 10/28/2022 1:27:29 AM Rack:Tube: 1:46

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000068	ppm	0.000004	5.71	-890.865285	Y 377.433
Ag (328.068 nm)	0.000589 n	ppm	0.000363	61.55	-127.690000	Y 377.433
Al (167.019 nm)	0.020232	ppm	0.001871	9.25	9.714000	Y_R 377.433
Al H (396.152 nm)	0.012431 u	ppm	0.001331	10.71	58.545064	Y_R 377.433
As (188.980 nm)	-0.000333 u	ppm	0.001198	> 100.00	-3.986690	Y 242.219
B (249.678 nm)	0.006601	ppm	0.000570	8.64	263.422000	Y 242.219
Ba (493.408 nm)	0.000821	ppm	0.000344	41.85	139.994000	Y_R 488.368
Be (234.861 nm)	-0.000005 u	ppm	0.000017	> 100.00	-17.724900	Y_R 488.368
Bi (223.061 nm)	0.001164	ppm	0.000370	31.81	20.253900	Y 377.433
Ca (315.887 nm)	0.155383	ppm	0.005032	3.24	136.064034	Y_R 377.433
Cd (214.439 nm)	0.000041	ppm	0.000047	> 100.00	-2.943770	Y 377.433
Co (228.615 nm)	-0.000037 u	ppm	0.000217	> 100.00	-14.728200	Y 242.219
Cr (205.560 nm)	0.001654	ppm	0.000174	10.51	31.794900	Y 377.433
Cu (324.754 nm)	0.003587	ppm	0.000168	4.67	1680.300000	Y 377.433
Fe (238.204 nm)	0.036217	ppm	0.000073	0.20	140.560705	Y_R 377.433
Fe H (259.940 nm)	0.035587 u	ppm	0.002074	5.83	90.287700	Y_R 377.433
K (766.491 nm)	0.128037	ppm	0.021119	16.49	-662.252000	Y_R2 488.368
Li (670.783 nm)	0.005736	ppm	0.000918	16.01	-952.887000	Y_R2 488.368
Mg (279.078 nm)	0.021156	ppm	0.000454	2.15	170.876000	Y 377.433
Mn (257.610 nm)	0.002548	ppm	0.000018	0.69	693.084000	Y 377.433
Mo (202.032 nm)	0.003792	ppm	0.000451	11.90	37.546100	Y 377.433
Na (589.592 nm)	0.134468	ppm	0.016620	12.36	1029.500000	Y_R2 488.368
Na H (589.593 nm)	1.682473 u	ppm	0.005802	0.34	3464.650749	Y_R 488.368
Ni (231.604 nm)	0.000118 u	ppm	0.000658	> 100.00	6.680850	Y 377.433
P (213.618 nm)	0.015113	ppm	0.001368	9.05	46.242200	Y 242.219
Pb (220.353 nm)	0.000333 u	ppm	0.000978	> 100.00	-2.720810	Y 242.219
S (181.972 nm)	0.038344	ppm	0.007985	20.82	22.817266	Y 377.433
Sb (206.834 nm)	0.000420 u	ppm	0.001155	> 100.00	-5.829540	Y 377.433
Se (196.026 nm)	-0.000026 u	ppm	0.001929	> 100.00	6.142660	Y 242.219
Si (288.158 nm)	0.136666	ppm	0.017517	12.82	2138.520000	Y 377.433
Sn (189.925 nm)	0.012696	ppm	0.001361	10.72	32.329600	Y 377.433
Sr (421.552 nm)	0.000751	ppm	0.000105	13.95	226.715445	Y_R 488.368
Th (288.505 nm)	0.004514	ppm	0.000987	21.88	111.527000	Y 377.433
Ti (336.122 nm)	0.000643	ppm	0.000089	13.85	-119.589000	Y 377.433
Tl (190.794 nm)	0.001263	ppm	0.000888	70.30	-0.525408	Y 377.433
U (409.013 nm)	0.010417	ppm	0.002863	27.48	-7.477850	Y 377.433
V (292.401 nm)	0.000012 u	ppm	0.000228	> 100.00	20.508400	Y 377.433
Zn (206.200 nm)	0.006605	ppm	0.000329	4.99	44.615000	Y 377.433
Zr (343.823 nm)	0.001500	ppm	0.000096	6.38	221.534000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.987626	8279.016165	0.005697	0.58
Y 377.433	0.960360	435397.804649	0.009940	1.04
Y_R 377.433	0.990660	34176.900000	0.001855	0.19
Y_R 488.368	1.005560	18947.700000	0.002721	0.27
Y_R2 488.368	0.965535	31977.339802	0.001809	0.19

Sample Name: LCS 280-591154/2-A

Date: 10/28/2022 1:31:31 AM Rack:Tube: 1:47

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.968909	ppm	0.002310	0.24	2232555.514114	Y 377.433
Ag (328.068 nm)	0.049438 n	ppm	0.000118	0.24	2491.080000	Y 377.433
Al (167.019 nm)	10.272400 o	ppm	0.068968	0.67	4590.620000	Y_R 377.433
Al H (396.152 nm)	10.192716	ppm	0.006390	0.06	28430.901979	Y_R 377.433
As (188.980 nm)	0.974536	ppm	0.003222	0.33	1263.620000	Y 242.219
B (249.678 nm)	1.913810 o	ppm	0.003036	0.16	53410.800000	Y 242.219
Ba (493.408 nm)	0.999982	ppm	0.003658	0.37	110688.000000	Y_R 488.368
Be (234.861 nm)	1.046270	ppm	0.010692	1.02	291846.000000	Y_R 488.368
Bi (223.061 nm)	-0.004318 u	ppm	0.001418	32.83	6.496120	Y 377.433
Ca (315.887 nm)	51.345101 o	ppm	0.036301	0.07	47524.847526	Y_R 377.433
Cd (214.439 nm)	1.000050	ppm	0.001494	0.15	61168.100000	Y 377.433
Co (228.615 nm)	0.969326	ppm	0.002058	0.21	18402.600000	Y 242.219
Cr (205.560 nm)	0.998363	ppm	0.001841	0.18	14880.500000	Y 377.433
Cu (324.754 nm)	1.011850	ppm	0.003269	0.32	73213.800000	Y 377.433
Fe (238.204 nm)	10.064088 o	ppm	0.016092	0.16	35581.836505	Y_R 377.433
Fe H (259.940 nm)	10.266500	ppm	0.013692	0.13	21398.000000	Y_R 377.433
K (766.491 nm)	49.024300	ppm	0.241319	0.49	48080.100000	Y_R2 488.368
Li (670.783 nm)	0.949887	ppm	0.007356	0.77	30719.600000	Y_R2 488.368
Mg (279.078 nm)	50.757100 o	ppm	0.061896	0.12	306556.000000	Y 377.433
Mn (257.610 nm)	1.027960	ppm	0.001264	0.12	248844.000000	Y 377.433
Mo (202.032 nm)	1.035390	ppm	0.001135	0.11	8874.820000	Y 377.433
Na (589.592 nm)	50.874300	ppm	0.304454	0.60	308284.000000	Y_R2 488.368
Na H (589.593 nm)	50.923234	ppm	0.162430	0.32	202615.301412	Y_R 488.368
Ni (231.604 nm)	1.001130	ppm	0.001979	0.20	7037.000000	Y 377.433
P (213.618 nm)	20.079100 o	ppm	0.043127	0.21	47369.400000	Y 242.219
Pb (220.353 nm)	0.978443	ppm	0.002611	0.27	2707.380000	Y 242.219
S (181.972 nm)	19.576461 o	ppm	0.024571	0.13	9413.341496	Y 377.433
Sb (206.834 nm)	1.074770	ppm	0.003452	0.32	2712.360000	Y 377.433
Se (196.026 nm)	0.975840	ppm	0.003855	0.40	978.306000	Y 242.219
Si (288.158 nm)	1.643960	ppm	0.002160	0.13	16347.700000	Y 377.433
Sn (189.925 nm)	1.041530	ppm	0.005015	0.48	2218.540000	Y 377.433
Sr (421.552 nm)	0.986922	ppm	0.002670	0.27	221077.414284	Y_R 488.368
Th (288.505 nm)	0.010043	ppm	0.002533	25.22	145.676000	Y 377.433
Ti (336.122 nm)	1.014100	ppm	0.001586	0.16	151363.000000	Y 377.433
Tl (190.794 nm)	1.009030	ppm	0.000347	0.03	2215.220000	Y 377.433
U (409.013 nm)	-0.001349 u	ppm	0.002458	> 100.00	-153.049000	Y 377.433
V (292.401 nm)	1.025770	ppm	0.000460	0.04	41827.300000	Y 377.433
Zn (206.200 nm)	1.008250	ppm	0.000786	0.08	5390.510000	Y 377.433
Zr (343.823 nm)	0.975599	ppm	0.011732	1.20	133448.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.959607	8044.142512	0.003884	0.40
Y 377.433	0.934814	423816.363688	0.005682	0.61
Y_R 377.433	0.960433	33134.100000	0.003441	0.36
Y_R 488.368	0.979667	18459.700000	0.003768	0.38
Y_R2 488.368	0.942499	31214.416974	0.003333	0.35

Sample Name: LCSD 280-591154/3-A

Date: 10/28/2022 1:35:33 AM Rack:Tube: 1:48

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.963326	ppm	0.001931	0.20	2219684.365422	Y 377.433
Ag (328.068 nm)	0.049190 n	ppm	0.000359	0.73	2484.680000	Y 377.433
Al (167.019 nm)	10.234000 o	ppm	0.030098	0.29	4573.470000	Y_R 377.433
Al H (396.152 nm)	10.075592	ppm	0.011419	0.11	28105.753016	Y_R 377.433
As (188.980 nm)	0.969823	ppm	0.001710	0.18	1257.490000	Y 242.219
B (249.678 nm)	1.905090 o	ppm	0.002077	0.11	53167.800000	Y 242.219
Ba (493.408 nm)	0.999951	ppm	0.004989	0.50	110685.000000	Y_R 488.368
Be (234.861 nm)	1.025510	ppm	0.006573	0.64	286057.000000	Y_R 488.368
Bi (223.061 nm)	-0.005137 u	ppm	0.001452	28.27	4.440040	Y 377.433
Ca (315.887 nm)	51.019974 o	ppm	0.102252	0.20	47223.865624	Y_R 377.433
Cd (214.439 nm)	0.998400	ppm	0.001176	0.12	61067.000000	Y 377.433
Co (228.615 nm)	0.967680	ppm	0.004744	0.49	18371.200000	Y 242.219
Cr (205.560 nm)	0.997412	ppm	0.001434	0.14	14866.500000	Y 377.433
Cu (324.754 nm)	1.007650	ppm	0.002078	0.21	72914.800000	Y 377.433
Fe (238.204 nm)	10.007724 o	ppm	0.022090	0.22	35382.630544	Y_R 377.433
Fe H (259.940 nm)	10.215900	ppm	0.009379	0.09	21292.600000	Y_R 377.433
K (766.491 nm)	48.821200	ppm	0.254723	0.52	47877.500000	Y_R2 488.368
Li (670.783 nm)	0.948347	ppm	0.004696	0.50	30668.000000	Y_R2 488.368
Mg (279.078 nm)	50.761700 o	ppm	0.065434	0.13	306584.000000	Y 377.433
Mn (257.610 nm)	1.025930	ppm	0.001189	0.12	248353.000000	Y 377.433
Mo (202.032 nm)	1.037000	ppm	0.001318	0.13	8888.630000	Y 377.433
Na (589.592 nm)	50.687700	ppm	0.210525	0.42	307159.000000	Y_R2 488.368
Na H (589.593 nm)	50.543600	ppm	0.122994	0.24	201087.885692	Y_R 488.368
Ni (231.604 nm)	1.003960	ppm	0.002132	0.21	7056.840000	Y 377.433
P (213.618 nm)	19.964500 o	ppm	0.007278	0.04	47099.100000	Y 242.219
Pb (220.353 nm)	0.972683	ppm	0.001124	0.12	2691.410000	Y 242.219
S (181.972 nm)	19.438934 o	ppm	0.087764	0.45	9347.254095	Y 377.433
Sb (206.834 nm)	1.070360	ppm	0.003398	0.32	2701.170000	Y 377.433
Se (196.026 nm)	0.965443	ppm	0.002349	0.24	967.947000	Y 242.219
Si (288.158 nm)	1.792030	ppm	0.003601	0.20	17726.200000	Y 377.433
Sn (189.925 nm)	1.035600	ppm	0.001782	0.17	2205.920000	Y 377.433
Sr (421.552 nm)	0.981506	ppm	0.002451	0.25	219864.566259	Y_R 488.368
Th (288.505 nm)	0.009974	ppm	0.004086	40.96	145.928000	Y 377.433
Ti (336.122 nm)	1.008210	ppm	0.001883	0.19	150482.000000	Y 377.433
Tl (190.794 nm)	1.008810	ppm	0.002107	0.21	2214.760000	Y 377.433
U (409.013 nm)	0.005673	ppm	0.001179	20.78	-119.859000	Y 377.433
V (292.401 nm)	1.023840	ppm	0.001407	0.14	41747.800000	Y 377.433
Zn (206.200 nm)	1.007910	ppm	0.001518	0.15	5388.700000	Y 377.433
Zr (343.823 nm)	0.999930	ppm	0.002671	0.27	136775.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.944184	7914.851248	0.006507	0.69
Y 377.433	0.916753	415628.091099	0.006780	0.74
Y_R 377.433	0.958562	33069.600000	0.000849	0.09
Y_R 488.368	0.977331	18415.700000	0.001723	0.18
Y_R2 488.368	0.944847	31292.170385	0.005453	0.58

Sample Name: 280-168023-C-3-a

Date: 10/28/2022 1:39:35 AM Rack:Tube: 1:49

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.196404	ppm	0.000613	0.31	451718.283892	Y 377.433
Ag (328.068 nm)	0.003223 n	ppm	0.000148	4.59	-57.540700	Y 377.433
Al (167.019 nm)	151.718000 o	ppm	1.065050	0.70	67803.200000	Y_R 377.433
Al H (396.152 nm)	209.278082 o	ppm	0.229994	0.11	581045.785944	Y_R 377.433
As (188.980 nm)	0.030294	ppm	0.002179	7.19	35.837100	Y 242.219
B (249.678 nm)	0.144894	ppm	0.000484	0.33	3779.720000	Y 242.219
Ba (493.408 nm)	1.153620 o	ppm	0.009364	0.81	127835.000000	Y_R 488.368
Be (234.861 nm)	0.010930	ppm	0.000259	2.37	5695.640000	Y_R 488.368
Bi (223.061 nm)	0.382007	ppm	0.001853	0.49	976.130000	Y 377.433
Ca (315.887 nm)	380.817403 o	ppm	0.395268	0.10	352528.206056	Y_R 377.433
Cd (214.439 nm)	0.002934	ppm	0.000080	2.73	343.968000	Y 377.433
Co (228.615 nm)	0.062717	ppm	0.000282	0.45	1196.240000	Y 242.219
Cr (205.560 nm)	0.701553	ppm	0.002634	0.38	10421.400000	Y 377.433
Cu (324.754 nm)	5.664530 o	ppm	0.043396	0.77	403354.000000	Y 377.433
Fe (238.204 nm)	168.751421 o	ppm	0.809059	0.48	596426.886014	Y_R 377.433
Fe H (259.940 nm)	174.358000	ppm	0.185093	0.11	363147.000000	Y_R 377.433
K (766.491 nm)	37.182500	ppm	0.066827	0.18	36275.500000	Y_R2 488.368
Li (670.783 nm)	0.180381	ppm	0.000912	0.51	4905.750000	Y_R2 488.368
Mg (279.078 nm)	59.709300 o	ppm	0.246239	0.41	360332.000000	Y 377.433
Mn (257.610 nm)	2.854450 o	ppm	0.014035	0.49	690856.000000	Y 377.433
Mo (202.032 nm)	0.025307	ppm	0.000493	1.95	221.859000	Y 377.433
Na (589.592 nm)	36.738800	ppm	0.039247	0.11	223290.000000	Y_R2 488.368
Na H (589.593 nm)	37.473137	ppm	0.087986	0.23	148677.738478	Y_R 488.368
Ni (231.604 nm)	0.709941	ppm	0.002707	0.38	5019.040000	Y 377.433
P (213.618 nm)	27.471100 o	ppm	0.065675	0.24	64804.200000	Y 242.219
Pb (220.353 nm)	0.121306	ppm	0.001994	1.64	272.274000	Y 242.219
S (181.972 nm)	21.862565 o	ppm	0.100996	0.46	10516.099579	Y 377.433
Sb (206.834 nm)	0.011222	ppm	0.002080	18.53	8.686600	Y 377.433
Se (196.026 nm)	0.001933	ppm	0.002008	> 100.00	-17.858000	Y 242.219
Si (288.158 nm)	2.936230	ppm	0.002752	0.09	28311.800000	Y 377.433
Sn (189.925 nm)	0.027390	ppm	0.001142	4.17	63.553600	Y 377.433
Sr (421.552 nm)	0.765417	ppm	0.002770	0.36	171471.930010	Y_R 488.368
Th (288.505 nm)	0.068679	ppm	0.004159	6.06	356.819000	Y 377.433
Ti (336.122 nm)	0.571809	ppm	0.003351	0.59	86372.500000	Y 377.433
Tl (190.794 nm)	0.003060	ppm	0.001149	37.56	-3.470980	Y 377.433
U (409.013 nm)	-0.034973 u	ppm	0.002363	6.76	-151.118000	Y 377.433
V (292.401 nm)	0.456961	ppm	0.001838	0.40	18592.200000	Y 377.433
Zn (206.200 nm)	2.302960 o	ppm	0.005483	0.24	12300.600000	Y 377.433
Zr (343.823 nm)	0.122314	ppm	0.002130	1.74	17263.800000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.998304	8368.529093	0.002521	0.25
Y 377.433	0.963939	437020.458055	0.001762	0.18
Y_R 377.433	1.021680	35246.900000	0.004079	0.40
Y_R 488.368	1.036990	19539.900000	0.007005	0.68
Y_R2 488.368	1.004984	33283.821666	0.010971	1.09

Sample Name: 280-168023-C-3-Asd@5

Date: 10/28/2022 1:43:37 AM Rack:Tube: 1:50

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.033611	ppm	0.000026	0.08	76436.434415	Y 377.433
Ag (328.068 nm)	0.001368 n	ppm	0.000079	5.75	-102.264000	Y 377.433
Al (167.019 nm)	43.823600 o	ppm	0.171111	0.39	19579.100000	Y_R 377.433
Al H (396.152 nm)	45.044913	ppm	0.007469	0.02	125082.948029	Y_R 377.433
As (188.980 nm)	0.008378	ppm	0.000231	2.76	7.339340	Y 242.219
B (249.678 nm)	0.031686	ppm	0.000403	1.27	887.948000	Y 242.219
Ba (493.408 nm)	0.247331	ppm	0.000138	0.06	27447.000000	Y_R 488.368
Be (234.861 nm)	0.002329	ppm	0.000052	2.22	1221.940000	Y_R 488.368
Bi (223.061 nm)	0.077329	ppm	0.000520	0.67	211.421000	Y 377.433
Ca (315.887 nm)	82.817221 o	ppm	0.059454	0.07	76659.017476	Y_R 377.433
Cd (214.439 nm)	0.000533	ppm	0.000050	9.46	64.727200	Y 377.433
Co (228.615 nm)	0.013353	ppm	0.000052	0.39	243.593000	Y 242.219
Cr (205.560 nm)	0.150965	ppm	0.000605	0.40	2247.880000	Y 377.433
Cu (324.754 nm)	1.159830 o	ppm	0.004052	0.35	83722.000000	Y 377.433
Fe (238.204 nm)	37.317988 o	ppm	0.027835	0.07	131904.678909	Y_R 377.433
Fe H (259.940 nm)	38.371900	ppm	0.031904	0.08	79932.300000	Y_R 377.433
K (766.491 nm)	7.922680	ppm	0.043862	0.55	7107.840000	Y_R2 488.368
Li (670.783 nm)	0.043809	ppm	0.000390	0.89	324.306000	Y_R2 488.368
Mg (279.078 nm)	12.758800	ppm	0.023698	0.19	77028.000000	Y 377.433
Mn (257.610 nm)	0.623843	ppm	0.001049	0.17	151047.000000	Y 377.433
Mo (202.032 nm)	0.005390	ppm	0.000420	7.80	51.238400	Y 377.433
Na (589.592 nm)	7.799900	ppm	0.037610	0.48	47580.900000	Y_R2 488.368
Na H (589.593 nm)	9.019372 u	ppm	0.029627	0.33	33243.421587	Y_R 488.368
Ni (231.604 nm)	0.152798	ppm	0.000246	0.16	1084.990000	Y 377.433
P (213.618 nm)	5.793120	ppm	0.024977	0.43	13674.300000	Y 242.219
Pb (220.353 nm)	0.026025	ppm	0.000991	3.81	55.613600	Y 242.219
S (181.972 nm)	4.523193	ppm	0.015854	0.35	2179.251733	Y 377.433
Sb (206.834 nm)	0.000296 u	ppm	0.002184	> 100.00	-9.000530	Y 377.433
Se (196.026 nm)	0.000198 u	ppm	0.002480	> 100.00	0.603239	Y 242.219
Si (288.158 nm)	0.602468	ppm	0.003841	0.64	6497.370000	Y 377.433
Sn (189.925 nm)	0.006419	ppm	0.000486	7.57	18.991100	Y 377.433
Sr (421.552 nm)	0.164268	ppm	0.000392	0.24	36845.929677	Y_R 488.368
Th (288.505 nm)	0.016225	ppm	0.001158	7.14	158.466000	Y 377.433
Ti (336.122 nm)	0.120881	ppm	0.000308	0.25	18095.900000	Y 377.433
Tl (190.794 nm)	0.000846 u	ppm	0.001971	> 100.00	-2.937450	Y 377.433
U (409.013 nm)	-0.000254 u	ppm	0.003408	> 100.00	-41.559300	Y 377.433
V (292.401 nm)	0.096713	ppm	0.000057	0.06	3950.410000	Y 377.433
Zn (206.200 nm)	0.509012	ppm	0.001542	0.30	2726.030000	Y 377.433
Zr (343.823 nm)	0.021678	ppm	0.000110	0.51	3096.070000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.985162	8258.362751	0.007121	0.72
Y 377.433	0.957578	434136.832834	0.006475	0.68
Y_R 377.433	0.990408	34168.200000	0.010202	1.03
Y_R 488.368	1.007390	18982.100000	0.011903	1.18
Y_R2 488.368	0.974893	32287.264999	0.006297	0.65

Sample Name: CCVH-7429327

Date: 10/28/2022 1:47:39 AM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000052	ppm	0.000007	13.60	-926.801241	Y 377.433
Ag (328.068 nm)	0.002138	ppm	0.000146	6.81	-124.923000	Y 377.433
Al (167.019 nm)	50.163900 o	ppm	0.142524	0.28	22416.300000	Y_R 377.433
Al H (396.152 nm)	51.459074	ppm	0.147653	0.29	142844.107876	Y_R 377.433
As (188.980 nm)	-0.002827 u	ppm	0.002139	75.67	-7.230230	Y 242.219
B (249.678 nm)	0.003386	ppm	0.000276	8.15	71.372900	Y 242.219
Ba (493.408 nm)	0.000260	ppm	0.000310	> 100.00	124.510000	Y_R 488.368
Be (234.861 nm)	0.000043	ppm	0.000022	51.25	802.322000	Y_R 488.368
Bi (223.061 nm)	-0.002215 u	ppm	0.002586	> 100.00	11.773100	Y 377.433
Ca (315.887 nm)	-0.004424 u	ppm	0.006612	> 100.00	-11.874266	Y_R 377.433
Cd (214.439 nm)	-0.000150 u	ppm	0.000018	12.22	36.808200	Y 377.433
Co (228.615 nm)	-0.000678 u	ppm	0.000264	38.93	-26.887500	Y 242.219
Cr (205.560 nm)	0.000837	ppm	0.000237	28.34	5.511220	Y 377.433
Cu (324.754 nm)	0.003201	ppm	0.000138	4.30	2860.730000	Y 377.433
Fe (238.204 nm)	51.083043 o	ppm	0.036368	0.07	180554.200353	Y_R 377.433
Fe H (259.940 nm)	52.028900	ppm	0.116364	0.22	108375.000000	Y_R 377.433
K (766.491 nm)	0.049851	ppm	0.036633	73.49	-740.193000	Y_R2 488.368
Li (670.783 nm)	0.005590	ppm	0.001491	26.68	-957.778000	Y_R2 488.368
Mg (279.078 nm)	-0.007681 u	ppm	0.001631	21.24	-170.382000	Y 377.433
Mn (257.610 nm)	0.000276	ppm	0.000039	14.25	143.238000	Y 377.433
Mo (202.032 nm)	-0.000167 u	ppm	0.000182	> 100.00	3.635070	Y 377.433
Na (589.592 nm)	253.403000	ppm	0.802075	0.32	1527740.000000	Y_R2 488.368
Na H (589.593 nm)	249.285419	ppm	0.707422	0.28	999472.111037	Y_R 488.368
Ni (231.604 nm)	-0.000832 u	ppm	0.000372	44.72	8.872240	Y 377.433
P (213.618 nm)	5.011560	ppm	0.009652	0.19	11830.900000	Y 242.219
Pb (220.353 nm)	-0.007034 u	ppm	0.000906	12.88	-30.002000	Y 242.219
S (181.972 nm)	5.119610	ppm	0.016587	0.32	2464.376190	Y 377.433
Sb (206.834 nm)	0.000086 u	ppm	0.002591	> 100.00	-23.448200	Y 377.433
Se (196.026 nm)	0.002023	ppm	0.002676	> 100.00	-0.576585	Y 242.219
Si (288.158 nm)	0.017883	ppm	0.000825	4.61	1031.930000	Y 377.433
Sn (189.925 nm)	0.000453 u	ppm	0.000705	> 100.00	6.312990	Y 377.433
Sr (421.552 nm)	0.000616	ppm	0.000040	6.48	196.507820	Y_R 488.368
Th (288.505 nm)	5.144700	ppm	0.040277	0.78	14553.700000	Y 377.433
Ti (336.122 nm)	0.000581	ppm	0.000077	13.27	-129.390000	Y 377.433
Tl (190.794 nm)	-0.003821 u	ppm	0.000837	21.90	-13.100900	Y 377.433
U (409.013 nm)	2.547950	ppm	0.002980	0.12	12814.500000	Y 377.433
V (292.401 nm)	-0.000736 u	ppm	0.000074	10.10	326.085000	Y 377.433
Zn (206.200 nm)	0.000920	ppm	0.000163	17.77	14.272000	Y 377.433
Zr (343.823 nm)	0.020052	ppm	0.000568	2.83	2916.500000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.948198	7948.503799	0.002757	0.29
Y 377.433	0.911958	413454.060347	0.002905	0.32
Y_R 377.433	0.966518	33344.100000	0.001778	0.18
Y_R 488.368	0.993934	18728.500000	0.005784	0.58
Y_R2 488.368	0.944848	31292.188789	0.004632	0.49

Sample Name: CCV-7429326

Date: 10/28/2022 1:51:42 AM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.469182	ppm	0.000502	0.11	1080547.402583	Y 377.433
Ag (328.068 nm)	0.512495	ppm	0.000677	0.13	27100.100000	Y 377.433
Al (167.019 nm)	0.537616	ppm	0.000928	0.17	242.005000	Y_R 377.433
Al H (396.152 nm)	0.522004 u	ppm	0.004141	0.79	1522.370647	Y_R 377.433
As (188.980 nm)	0.506410	ppm	0.004672	0.92	654.922000	Y 242.219
B (249.678 nm)	0.503808	ppm	0.001334	0.26	14132.200000	Y 242.219
Ba (493.408 nm)	0.513071	ppm	0.006317	1.23	56813.500000	Y_R 488.368
Be (234.861 nm)	0.515236	ppm	0.003804	0.74	143677.000000	Y_R 488.368
Bi (223.061 nm)	1.051720	ppm	0.002497	0.24	2657.030000	Y 377.433
Ca (315.887 nm)	5.281645	ppm	0.010613	0.20	4881.975784	Y_R 377.433
Cd (214.439 nm)	0.522183	ppm	0.000811	0.16	31933.900000	Y 377.433
Co (228.615 nm)	0.514172	ppm	0.001696	0.33	9753.980000	Y 242.219
Cr (205.560 nm)	0.525084	ppm	0.002566	0.49	7830.790000	Y 377.433
Cu (324.754 nm)	0.525216	ppm	0.000727	0.14	38706.100000	Y 377.433
Fe (238.204 nm)	2.556844	ppm	0.003977	0.16	9049.154728	Y_R 377.433
Fe H (259.940 nm)	2.623790 u	ppm	0.007793	0.30	5480.670000	Y_R 377.433
K (766.491 nm)	50.075000	ppm	0.034506	0.07	49127.500000	Y_R2 488.368
Li (670.783 nm)	0.494471	ppm	0.002802	0.57	15442.200000	Y_R2 488.368
Mg (279.078 nm)	20.691800	ppm	0.035876	0.17	125000.000000	Y 377.433
Mn (257.610 nm)	0.523208	ppm	0.001098	0.21	126693.000000	Y 377.433
Mo (202.032 nm)	0.525927	ppm	0.000806	0.15	4510.450000	Y 377.433
Na (589.592 nm)	25.960400	ppm	0.010570	0.04	157423.000000	Y_R2 488.368
Na H (589.593 nm)	26.560861	ppm	0.130719	0.49	104091.450225	Y_R 488.368
Ni (231.604 nm)	0.529428	ppm	0.000831	0.16	3723.640000	Y 377.433
P (213.618 nm)	-0.012824 u	ppm	0.002359	18.39	-19.649500	Y 242.219
Pb (220.353 nm)	0.505460	ppm	0.001837	0.36	1398.390000	Y 242.219
S (181.972 nm)	0.019392	ppm	0.002351	12.12	14.929014	Y 377.433
Sb (206.834 nm)	0.524383	ppm	0.000949	0.18	1321.220000	Y 377.433
Se (196.026 nm)	0.503996	ppm	0.007328	1.45	508.669000	Y 242.219
Si (288.158 nm)	5.164620	ppm	0.015607	0.30	49062.900000	Y 377.433
Sn (189.925 nm)	0.523068	ppm	0.000674	0.13	1116.830000	Y 377.433
Sr (421.552 nm)	0.505320	ppm	0.002289	0.45	113223.883260	Y_R 488.368
Th (288.505 nm)	0.034897	ppm	0.012449	35.67	206.620000	Y 377.433
Ti (336.122 nm)	0.512501	ppm	0.000592	0.12	76322.200000	Y 377.433
Tl (190.794 nm)	0.523667	ppm	0.001254	0.24	1148.270000	Y 377.433
U (409.013 nm)	0.000169 u	ppm	0.001548	> 100.00	-103.328000	Y 377.433
V (292.401 nm)	0.523388	ppm	0.000798	0.15	21349.800000	Y 377.433
Zn (206.200 nm)	0.524523	ppm	0.002538	0.48	2808.810000	Y 377.433
Zr (343.823 nm)	0.520623	ppm	0.001485	0.29	71212.900000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.954201	7998.821569	0.005961	0.62
Y 377.433	0.928591	420994.984525	0.005251	0.57
Y_R 377.433	0.990442	34169.400000	0.005395	0.54
Y_R 488.368	1.005760	18951.400000	0.009470	0.94
Y_R2 488.368	0.973265	32233.350375	0.003884	0.40

Sample Name: CCB

Date: 10/28/2022 1:55:44 AM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000030	ppm	0.000012	41.01	-977.775455	Y 377.433
Ag (328.068 nm)	0.000520	ppm	0.000057	10.99	-131.690000	Y 377.433
Al (167.019 nm)	-0.001657 u	ppm	0.003070	> 100.00	-0.074285	Y_R 377.433
Al H (396.152 nm)	-0.004135 u	ppm	0.001965	47.52	12.276337	Y_R 377.433
As (188.980 nm)	0.000862 u	ppm	0.001997	> 100.00	-2.433020	Y 242.219
B (249.678 nm)	0.001672	ppm	0.000382	22.82	126.225000	Y 242.219
Ba (493.408 nm)	0.000040 u	ppm	0.000154	> 100.00	53.536400	Y_R 488.368
Be (234.861 nm)	-0.000021 u	ppm	0.000004	19.78	-22.482100	Y_R 488.368
Bi (223.061 nm)	-0.002279 u	ppm	0.000946	41.49	11.611800	Y 377.433
Ca (315.887 nm)	0.003938	ppm	0.002975	75.56	-4.134063	Y_R 377.433
Cd (214.439 nm)	-0.000026 u	ppm	0.000095	> 100.00	-7.078950	Y 377.433
Co (228.615 nm)	0.000185 u	ppm	0.000224	> 100.00	-10.541700	Y 242.219
Cr (205.560 nm)	0.000011 u	ppm	0.000366	> 100.00	7.307260	Y 377.433
Cu (324.754 nm)	0.001630	ppm	0.000075	4.62	1540.710000	Y 377.433
Fe (238.204 nm)	-0.000200 u	ppm	0.000782	> 100.00	11.852899	Y_R 377.433
Fe H (259.940 nm)	-0.003407 u	ppm	0.001708	50.13	9.074610	Y_R 377.433
K (766.491 nm)	0.066536	ppm	0.029752	44.71	-723.560000	Y_R2 488.368
Li (670.783 nm)	0.006929	ppm	0.000928	13.39	-912.858000	Y_R2 488.368
Mg (279.078 nm)	-0.000863 u	ppm	0.000463	53.73	37.968500	Y 377.433
Mn (257.610 nm)	-0.000135 u	ppm	0.000030	22.49	43.732100	Y 377.433
Mo (202.032 nm)	0.001221	ppm	0.000246	20.17	15.520600	Y 377.433
Na (589.592 nm)	0.012378	ppm	0.004334	35.01	292.490000	Y_R2 488.368
Na H (589.593 nm)	1.401540 u	ppm	0.012105	0.86	2333.759561	Y_R 488.368
Ni (231.604 nm)	-0.000306 u	ppm	0.000335	> 100.00	3.699900	Y 377.433
P (213.618 nm)	0.001631	ppm	0.001080	66.26	14.443600	Y 242.219
Pb (220.353 nm)	0.000354 u	ppm	0.001722	> 100.00	-2.648910	Y 242.219
S (181.972 nm)	0.020281	ppm	0.005345	26.36	14.131596	Y 377.433
Sb (206.834 nm)	0.001367	ppm	0.000873	63.82	-3.485670	Y 377.433
Se (196.026 nm)	0.001306	ppm	0.000685	52.43	7.475830	Y 242.219
Si (288.158 nm)	0.005434	ppm	0.000888	16.35	915.908000	Y 377.433
Sn (189.925 nm)	-0.000492 u	ppm	0.000941	> 100.00	4.306330	Y 377.433
Sr (421.552 nm)	-0.000032 u	ppm	0.000098	> 100.00	51.306970	Y_R 488.368
Th (288.505 nm)	-0.000302 u	ppm	0.001417	> 100.00	97.989200	Y 377.433
Ti (336.122 nm)	-0.000192 u	ppm	0.000054	28.10	-244.746000	Y 377.433
Tl (190.794 nm)	0.000514	ppm	0.000471	91.56	-2.165610	Y 377.433
U (409.013 nm)	0.005905	ppm	0.002193	37.14	-30.079800	Y 377.433
V (292.401 nm)	-0.000015 u	ppm	0.000196	> 100.00	19.661100	Y 377.433
Zn (206.200 nm)	-0.000510 u	ppm	0.000390	76.49	6.642120	Y 377.433
Zr (343.823 nm)	0.000302	ppm	0.000079	26.23	57.646200	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.962202	8065.893952	0.001556	0.16
Y 377.433	0.936808	424720.183250	0.002008	0.21
Y_R 377.433	0.979380	33787.800000	0.002221	0.23
Y_R 488.368	1.003350	18906.000000	0.007624	0.76
Y_R2 488.368	0.966278	32001.932303	0.004564	0.47

Sample Name: CCVL-7434568

Date: 10/28/2022 1:59:47 AM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014780	ppm	0.000019	0.13	33025.067083	Y 377.433
Ag (328.068 nm)	0.010524	ppm	0.000267	2.54	399.658000	Y 377.433
Al (167.019 nm)	0.110868	ppm	0.003845	3.47	50.201500	Y_R 377.433
Al H (396.152 nm)	0.102623 u	ppm	0.004747	4.63	310.375197	Y_R 377.433
As (188.980 nm)	0.014313	ppm	0.001709	11.94	15.057400	Y 242.219
B (249.678 nm)	0.101332	ppm	0.000508	0.50	2902.190000	Y 242.219
Ba (493.408 nm)	0.010078	ppm	0.000258	2.56	1164.170000	Y_R 488.368
Be (234.861 nm)	0.001013	ppm	0.000014	1.40	266.325000	Y_R 488.368
Bi (223.061 nm)	-0.000809 Qu	ppm	0.001355	> 100.00	15.302900 Q	Y 377.433
Ca (315.887 nm)	0.224878	ppm	0.003809	1.69	200.401815	Y_R 377.433
Cd (214.439 nm)	0.005146	ppm	0.000079	1.54	309.375000	Y 377.433
Co (228.615 nm)	0.010526	ppm	0.000182	1.73	185.865000	Y 242.219
Cr (205.560 nm)	0.010520	ppm	0.000207	1.97	163.939000	Y 377.433
Cu (324.754 nm)	0.017723	ppm	0.000169	0.95	2682.510000	Y 377.433
Fe (238.204 nm)	0.104023	ppm	0.000826	0.79	380.204585	Y_R 377.433
Fe H (259.940 nm)	0.105623 u	ppm	0.001476	1.40	236.150000	Y_R 377.433
K (766.491 nm)	3.115160	ppm	0.104605	3.36	2315.470000	Y_R2 488.368
Li (670.783 nm)	0.027317 Q	ppm	0.001226	4.49	-228.903000 Q	Y_R2 488.368
Mg (279.078 nm)	0.209145	ppm	0.000393	0.19	1304.640000	Y 377.433
Mn (257.610 nm)	0.010563	ppm	0.000047	0.45	2632.720000	Y 377.433
Mo (202.032 nm)	0.020248	ppm	0.000161	0.79	178.515000	Y 377.433
Na (589.592 nm)	1.122680	ppm	0.005502	0.49	6999.380000	Y_R2 488.368
Na H (589.593 nm)	2.404710 u	ppm	0.023266	0.97	6379.855223	Y_R 488.368
Ni (231.604 nm)	0.044258	ppm	0.000412	0.93	316.587000	Y 377.433
P (213.618 nm)	2.904920	ppm	0.012694	0.44	6862.170000	Y 242.219
Pb (220.353 nm)	0.009053	ppm	0.001090	12.04	21.545600	Y 242.219
S (181.972 nm)	0.120861	ppm	0.004590	3.80	62.485215	Y 377.433
Sb (206.834 nm)	0.020053	ppm	0.002699	13.46	43.544400	Y 377.433
Se (196.026 nm)	0.016400	ppm	0.001079	6.58	22.516600	Y 242.219
Si (288.158 nm)	0.499465	ppm	0.001627	0.33	5519.700000	Y 377.433
Sn (189.925 nm)	0.105577	ppm	0.001541	1.46	229.695000	Y 377.433
Sr (421.552 nm)	0.010004	ppm	0.000104	1.04	2298.877154	Y_R 488.368
Th (288.505 nm)	0.017115	ppm	0.001073	6.27	148.277000	Y 377.433
Ti (336.122 nm)	0.009705	ppm	0.000099	1.02	1233.660000	Y 377.433
Tl (190.794 nm)	0.014671	ppm	0.000610	4.16	28.961000	Y 377.433
U (409.013 nm)	0.066826	ppm	0.002969	4.44	275.408000	Y 377.433
V (292.401 nm)	0.009918	ppm	0.000174	1.75	422.250000	Y 377.433
Zn (206.200 nm)	0.022032	ppm	0.000223	1.01	126.948000	Y 377.433
Zr (343.823 nm)	0.013322 Q	ppm	0.000151	1.13	1838.360000 Q	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.968088	8115.233689	0.004661	0.48
Y 377.433	0.942560	427327.815288	0.006476	0.69
Y_R 377.433	0.994361	34304.600000	0.001460	0.15
Y_R 488.368	1.017380	19170.200000	0.011564	1.14
Y_R2 488.368	0.971693	32181.282690	0.004675	0.48

Sample Name: 280-168023-C-3-B MS

Date: 10/28/2022 2:03:49 AM Rack:Tube: 1:51

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	1.355857	ppm	0.002409	0.18	3124576.096030	Y 377.433
Ag (328.068 nm)	0.050882 n	ppm	0.000364	0.72	2426.710000	Y 377.433
Al (167.019 nm)	197.690000 o	ppm	0.540518	0.27	88337.500000	Y_R 377.433
Al H (396.152 nm)	332.135643 o	ppm	1.702069	0.51	922132.344697	Y_R 377.433
As (188.980 nm)	0.953108	ppm	0.001724	0.18	1235.760000	Y 242.219
B (249.678 nm)	2.019290 o	ppm	0.003814	0.19	55964.900000	Y 242.219
Ba (493.408 nm)	2.323770 o	ppm	0.020173	0.87	257322.000000	Y_R 488.368
Be (234.861 nm)	0.969892	ppm	0.004433	0.46	273569.000000	Y_R 488.368
Bi (223.061 nm)	0.355687	ppm	0.001793	0.50	910.069000	Y 377.433
Ca (315.887 nm)	427.402017 o	ppm	0.595966	0.14	395653.818173	Y_R 377.433
Cd (214.439 nm)	0.906134	ppm	0.000699	0.08	55616.500000	Y 377.433
Co (228.615 nm)	0.952218	ppm	0.001435	0.15	18119.900000	Y 242.219
Cr (205.560 nm)	1.697840 o	ppm	0.001075	0.06	25258.800000	Y 377.433
Cu (324.754 nm)	6.297560 o	ppm	0.025205	0.40	448331.000000	Y 377.433
Fe (238.204 nm)	201.031615 o	ppm	0.714290	0.36	710514.047748	Y_R 377.433
Fe H (259.940 nm)	208.776000	ppm	0.046388	0.02	434829.000000	Y_R 377.433
K (766.491 nm)	105.274000	ppm	0.357745	0.34	104153.000000	Y_R2 488.368
Li (670.783 nm)	1.143940 o	ppm	0.004242	0.37	37229.500000	Y_R2 488.368
Mg (279.078 nm)	117.244000 o	ppm	0.538172	0.46	707734.000000	Y 377.433
Mn (257.610 nm)	4.525900 o	ppm	0.003606	0.08	1095350.000000	Y 377.433
Mo (202.032 nm)	0.944007	ppm	0.002692	0.29	8091.960000	Y 377.433
Na (589.592 nm)	83.658700	ppm	0.602685	0.72	507756.000000	Y_R2 488.368
Na H (589.593 nm)	85.049306	ppm	0.462028	0.54	341315.706864	Y_R 488.368
Ni (231.604 nm)	1.609490 o	ppm	0.000940	0.06	11340.700000	Y 377.433
P (213.618 nm)	46.236100 o	ppm	0.196998	0.43	109063.000000	Y 242.219
Pb (220.353 nm)	1.018270	ppm	0.001691	0.17	2718.730000	Y 242.219
S (181.972 nm)	37.998988 o	ppm	0.019663	0.05	18273.621225	Y 377.433
Sb (206.834 nm)	0.413268	ppm	0.000921	0.22	1031.190000	Y 377.433
Se (196.026 nm)	0.922180	ppm	0.002085	0.23	896.949000	Y 242.219
Si (288.158 nm)	3.971290	ppm	0.019809	0.50	38211.800000	Y 377.433
Sn (189.925 nm)	0.947014	ppm	0.001518	0.16	2017.690000	Y 377.433
Sr (421.552 nm)	1.743856 o	ppm	0.005491	0.31	390591.226762	Y_R 488.368
Th (288.505 nm)	0.091410	ppm	0.001408	1.54	457.724000	Y 377.433
Ti (336.122 nm)	2.132890 o	ppm	0.001308	0.06	319607.000000	Y 377.433
Tl (190.794 nm)	0.899259	ppm	0.003190	0.35	1963.520000	Y 377.433
U (409.013 nm)	-0.049671 u	ppm	0.001699	3.42	-269.484000	Y 377.433
V (292.401 nm)	1.574300 o	ppm	0.000458	0.03	64174.600000	Y 377.433
Zn (206.200 nm)	3.270040 o	ppm	0.001457	0.04	17462.100000	Y 377.433
Zr (343.823 nm)	0.898726	ppm	0.023981	2.67	123528.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.959583	8043.939497	0.000806	0.08
Y 377.433	0.930102	421680.034020	0.000485	0.05
Y_R 377.433	1.017920	35117.500000	0.003020	0.30
Y_R 488.368	1.033040	19465.300000	0.003316	0.32
Y_R2 488.368	1.005277	33293.550859	0.001939	0.19

Sample Name: 280-168023-C-3-C MSD

Date: 10/28/2022 2:07:53 AM Rack:Tube: 1:52

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	1.433104	ppm	0.003072	0.21	3302651.951961	Y 377.433
Ag (328.068 nm)	0.053317 n	ppm	0.000444	0.83	2493.320000	Y 377.433
Al (167.019 nm)	208.553000 o	ppm	0.718513	0.34	93207.100000	Y_R 377.433
Al H (396.152 nm)	387.101919 o	ppm	2.381998	0.62	1074706.988458	Y_R 377.433
As (188.980 nm)	0.973233	ppm	0.004203	0.43	1261.930000	Y 242.219
B (249.678 nm)	2.074250 o	ppm	0.003599	0.17	57418.400000	Y 242.219
Ba (493.408 nm)	3.025320 o	ppm	0.043649	1.44	334975.000000	Y_R 488.368
Be (234.861 nm)	0.977315	ppm	0.009332	0.95	276257.000000	Y_R 488.368
Bi (223.061 nm)	0.572295	ppm	0.002245	0.39	1453.730000	Y 377.433
Ca (315.887 nm)	471.725638 o	ppm	4.699771	1.00	436685.747903	Y_R 377.433
Cd (214.439 nm)	0.911044	ppm	0.002401	0.26	55956.100000	Y 377.433
Co (228.615 nm)	0.972005	ppm	0.002016	0.21	18498.600000	Y 242.219
Cr (205.560 nm)	1.988800 o	ppm	0.003826	0.19	29586.500000	Y 377.433
Cu (324.754 nm)	8.398200 o	ppm	0.044187	0.53	597416.000000	Y 377.433
Fe (238.204 nm)	239.967453 o	ppm	1.242062	0.52	848124.097396	Y_R 377.433
Fe H (259.940 nm)	247.498000	ppm	0.604859	0.24	515473.000000	Y_R 377.433
K (766.491 nm)	116.832000 o	ppm	0.528779	0.45	115674.000000	Y_R2 488.368
Li (670.783 nm)	1.194790 o	ppm	0.004834	0.40	38935.300000	Y_R2 488.368
Mg (279.078 nm)	133.711000 o	ppm	0.653513	0.49	807115.000000	Y 377.433
Mn (257.610 nm)	4.706490 o	ppm	0.010578	0.22	1139050.000000	Y 377.433
Mo (202.032 nm)	0.929224	ppm	0.000958	0.10	7965.330000	Y 377.433
Na (589.592 nm)	86.733700	ppm	0.077020	0.09	527270.000000	Y_R2 488.368
Na H (589.593 nm)	87.233475	ppm	0.775908	0.89	350856.354875	Y_R 488.368
Ni (231.604 nm)	1.758150 o	ppm	0.003450	0.20	12391.200000	Y 377.433
P (213.618 nm)	60.647100 bo	ppm	0.237381	0.39	143053.000000	Y 242.219
Pb (220.353 nm)	1.058560	ppm	0.000613	0.06	2814.240000	Y 242.219
S (181.972 nm)	39.148511 o	ppm	0.093905	0.24	18826.396055	Y 377.433
Sb (206.834 nm)	0.399236	ppm	0.009094	2.28	996.737000	Y 377.433
Se (196.026 nm)	0.928165	ppm	0.004825	0.52	896.619000	Y 242.219
Si (288.158 nm)	4.229790	ppm	0.035958	0.85	40635.200000	Y 377.433
Sn (189.925 nm)	0.932856	ppm	0.004024	0.43	1987.610000	Y 377.433
Sr (421.552 nm)	2.011986 o	ppm	0.013824	0.69	450638.310103	Y_R 488.368
Th (288.505 nm)	0.096145	ppm	0.001855	1.93	479.743000	Y 377.433
Ti (336.122 nm)	2.227310 o	ppm	0.001865	0.08	333845.000000	Y 377.433
Tl (190.794 nm)	0.898502	ppm	0.002074	0.23	1960.500000	Y 377.433
U (409.013 nm)	-0.057385 u	ppm	0.005597	9.75	-276.453000	Y 377.433
V (292.401 nm)	1.853750 o	ppm	0.001180	0.06	75560.200000	Y 377.433
Zn (206.200 nm)	4.340980 o	ppm	0.009233	0.21	23177.800000	Y 377.433
Zr (343.823 nm)	0.894262	ppm	0.005229	0.58	123039.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.962811	8071.002914	0.005327	0.55
Y 377.433	0.937110	424857.260069	0.005615	0.60
Y_R 377.433	1.034720	35696.800000	0.002869	0.28
Y_R 488.368	1.048530	19757.300000	0.004856	0.46
Y_R2 488.368	1.010344	33461.361002	0.007363	0.73

Sample Name: 280-168023-C-3-Apds

Date: 10/28/2022 2:11:55 AM Rack:Tube: 1:53

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.303246	ppm	0.000778	0.26	698017.785054	Y 377.433
Ag (328.068 nm)	0.052490 n	ppm	0.000201	0.38	2555.570000	Y 377.433
Al (167.019 nm)	148.497000 o	ppm	1.039620	0.70	66364.000000	Y_R 377.433
Al H (396.152 nm)	206.268168 o	ppm	1.037457	0.50	572702.064043	Y_R 377.433
As (188.980 nm)	0.226933	ppm	0.008522	3.76	291.524000	Y 242.219
B (249.678 nm)	0.235434	ppm	0.000666	0.28	6309.090000	Y 242.219
Ba (493.408 nm)	1.225460 o	ppm	0.014747	1.20	135780.000000	Y_R 488.368
Be (234.861 nm)	0.056887	ppm	0.000360	0.63	18465.800000	Y_R 488.368
Bi (223.061 nm)	0.370592	ppm	0.002133	0.58	947.480000	Y 377.433
Ca (315.887 nm)	392.668765 o	ppm	1.370114	0.35	363499.457729	Y_R 377.433
Cd (214.439 nm)	0.050423	ppm	0.000232	0.46	3245.720000	Y 377.433
Co (228.615 nm)	0.107827	ppm	0.000486	0.45	2052.890000	Y 242.219
Cr (205.560 nm)	0.733475	ppm	0.003917	0.53	10897.700000	Y 377.433
Cu (324.754 nm)	5.574690 o	ppm	0.039547	0.71	396969.000000	Y 377.433
Fe (238.204 nm)	165.994904 o	ppm	0.953141	0.57	586684.590444	Y_R 377.433
Fe H (259.940 nm)	171.397000	ppm	0.647113	0.38	356981.000000	Y_R 377.433
K (766.491 nm)	55.848600	ppm	0.297112	0.53	54882.800000	Y_R2 488.368
Li (670.783 nm)	0.274159	ppm	0.002231	0.81	8051.650000	Y_R2 488.368
Mg (279.078 nm)	77.691900 o	ppm	0.398151	0.51	468924.000000	Y 377.433
Mn (257.610 nm)	2.833750 o	ppm	0.011504	0.41	685844.000000	Y 377.433
Mo (202.032 nm)	0.074278	ppm	0.000336	0.45	641.371000	Y 377.433
Na (589.592 nm)	54.882000	ppm	0.556452	1.01	332757.000000	Y_R2 488.368
Na H (589.593 nm)	55.816713	ppm	0.169847	0.30	222542.382558	Y_R 488.368
Ni (231.604 nm)	0.737357	ppm	0.003218	0.44	5211.260000	Y 377.433
P (213.618 nm)	29.046800 o	ppm	0.117841	0.41	68520.700000	Y 242.219
Pb (220.353 nm)	0.211825	ppm	0.000396	0.19	525.769000	Y 242.219
S (181.972 nm)	21.332632 o	ppm	0.105654	0.50	10261.415634	Y 377.433
Sb (206.834 nm)	0.114785	ppm	0.002430	2.12	268.471000	Y 377.433
Se (196.026 nm)	0.189012	ppm	0.002473	1.31	169.118000	Y 242.219
Si (288.158 nm)	7.814420	ppm	0.055202	0.71	73762.200000	Y 377.433
Sn (189.925 nm)	0.125319	ppm	0.001933	1.54	271.645000	Y 377.433
Sr (421.552 nm)	0.797379	ppm	0.003644	0.46	178629.782945	Y_R 488.368
Th (288.505 nm)	0.261802	ppm	0.004885	1.87	907.577000	Y 377.433
Ti (336.122 nm)	0.608096	ppm	0.002145	0.35	91827.300000	Y 377.433
Tl (190.794 nm)	0.186037	ppm	0.000634	0.34	399.434000	Y 377.433
U (409.013 nm)	0.458790	ppm	0.003509	0.76	2322.010000	Y 377.433
V (292.401 nm)	0.496517	ppm	0.002453	0.49	20191.600000	Y 377.433
Zn (206.200 nm)	2.422330 o	ppm	0.014240	0.59	12937.700000	Y 377.433
Zr (343.823 nm)	0.194854	ppm	0.013456	6.91	27174.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.983224	8242.114897	0.006763	0.69
Y 377.433	0.953763	432407.324074	0.008095	0.85
Y_R 377.433	1.043120	35986.600000	0.001820	0.17
Y_R 488.368	1.059160	19957.500000	0.003562	0.34
Y_R2 488.368	1.036292	34320.702961	0.002782	0.27

Sample Name: 280-167828-A-11-B@2

Date: 10/28/2022 2:15:58 AM Rack:Tube: 1:54

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.073924	ppm	0.001546	2.09	169368.607937	Y 377.433
Ag (328.068 nm)	0.000182 n	ppm	0.000170	93.54	-194.928000	Y 377.433
Al (167.019 nm)	53.975900 o	ppm	0.180613	0.33	24141.200000	Y_R 377.433
Al H (396.152 nm)	56.706041	ppm	0.112998	0.20	157455.162056	Y_R 377.433
As (188.980 nm)	0.027038	ppm	0.001294	4.79	31.603500	Y 242.219
B (249.678 nm)	0.035488	ppm	0.000913	2.57	881.382000	Y 242.219
Ba (493.408 nm)	1.893760 o	ppm	0.014409	0.76	209655.000000	Y_R 488.368
Be (234.861 nm)	0.003379	ppm	0.000111	3.28	2411.320000	Y_R 488.368
Bi (223.061 nm)	-0.001084 u	ppm	0.003365	> 100.00	14.612000	Y 377.433
Ca (315.887 nm)	99.093594 o	ppm	0.185685	0.19	91726.626434	Y_R 377.433
Cd (214.439 nm)	0.000381	ppm	0.000019	5.06	112.653000	Y 377.433
Co (228.615 nm)	0.037171	ppm	0.000850	2.29	838.609000	Y 242.219
Cr (205.560 nm)	0.103828	ppm	0.002209	2.13	1529.320000	Y 377.433
Cu (324.754 nm)	0.088756	ppm	0.002075	2.34	7708.320000	Y 377.433
Fe (238.204 nm)	93.957861 o	ppm	0.133227	0.14	332085.701922	Y_R 377.433
Fe H (259.940 nm)	95.884400	ppm	0.263537	0.27	199712.000000	Y_R 377.433
K (766.491 nm)	12.368800	ppm	0.023693	0.19	11540.000000	Y_R2 488.368
Li (670.783 nm)	0.083997	ppm	0.001502	1.79	1672.480000	Y_R2 488.368
Mg (279.078 nm)	48.372600 o	ppm	1.032270	2.13	292003.000000	Y 377.433
Mn (257.610 nm)	2.334350 o	ppm	0.047382	2.03	564992.000000	Y 377.433
Mo (202.032 nm)	0.002870	ppm	0.000369	12.85	29.643400	Y 377.433
Na (589.592 nm)	2.995690	ppm	0.009072	0.30	20915.800000	Y_R2 488.368
Na H (589.593 nm)	4.207249 u	ppm	0.019487	0.46	15657.304345	Y_R 488.368
Ni (231.604 nm)	0.079263	ppm	0.001678	2.12	578.616000	Y 377.433
P (213.618 nm)	5.200490	ppm	0.118093	2.27	12276.500000	Y 242.219
Pb (220.353 nm)	0.068192	ppm	0.002132	3.13	173.431000	Y 242.219
S (181.972 nm)	1.877885	ppm	0.042426	2.26	912.184313	Y 377.433
Sb (206.834 nm)	0.002814	ppm	0.002168	77.05	-12.629500	Y 377.433
Se (196.026 nm)	0.001736 u	ppm	0.004527	> 100.00	-6.863290	Y 242.219
Si (288.158 nm)	0.910092	ppm	0.037335	4.10	9992.290000	Y 377.433
Sn (189.925 nm)	0.007191	ppm	0.000421	5.85	20.631300	Y 377.433
Sr (421.552 nm)	1.052358	ppm	0.003838	0.36	235731.658866	Y_R 488.368
Th (288.505 nm)	0.075919	ppm	0.001796	2.37	364.996000	Y 377.433
Ti (336.122 nm)	3.919810 o	ppm	0.084882	2.17	585368.000000	Y 377.433
Tl (190.794 nm)	0.001518	ppm	0.000920	60.62	-19.963100	Y 377.433
U (409.013 nm)	-0.051040 u	ppm	0.000960	1.88	-243.706000	Y 377.433
V (292.401 nm)	0.262835	ppm	0.005515	2.10	10892.100000	Y 377.433
Zn (206.200 nm)	0.210441	ppm	0.004700	2.23	1132.520000	Y 377.433
Zr (343.823 nm)	0.052119	ppm	0.001384	2.66	7434.430000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.014214	8501.900347	0.010703	1.06
Y 377.433	0.976575	442749.324593	0.010365	1.06
Y_R 377.433	1.055090	36399.800000	0.001673	0.16
Y_R 488.368	1.073910	20235.500000	0.005100	0.47
Y_R2 488.368	1.016930	33679.480349	0.020066	1.97

Sample Name: 280-167828-A-12-B@2

Date: 10/28/2022 2:20:01 AM Rack:Tube: 1:55

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.080550	ppm	0.002526	3.14	184643.376325	Y 377.433
Ag (328.068 nm)	0.000314 n	ppm	0.000311	99.01	-206.089000	Y 377.433
Al (167.019 nm)	62.486500 o	ppm	0.506317	0.81	27947.100000	Y_R 377.433
Al H (396.152 nm)	67.043344	ppm	0.570278	0.85	186153.117037	Y_R 377.433
As (188.980 nm)	0.037738	ppm	0.002597	6.88	45.515900	Y 242.219
B (249.678 nm)	0.042195	ppm	0.000969	2.30	1040.820000	Y 242.219
Ba (493.408 nm)	1.926550 o	ppm	0.005921	0.31	213294.000000	Y_R 488.368
Be (234.861 nm)	0.004389	ppm	0.000218	4.97	2914.670000	Y_R 488.368
Bi (223.061 nm)	-0.001615 u	ppm	0.000909	56.29	13.278800	Y 377.433
Ca (315.887 nm)	114.380943 o	ppm	1.164615	1.02	105878.659706	Y_R 377.433
Cd (214.439 nm)	0.000547	ppm	0.000127	23.23	136.983000	Y 377.433
Co (228.615 nm)	0.051644	ppm	0.001595	3.09	1145.700000	Y 242.219
Cr (205.560 nm)	0.166943	ppm	0.004135	2.48	2466.550000	Y 377.433
Cu (324.754 nm)	0.112783	ppm	0.003152	2.79	9403.220000	Y 377.433
Fe (238.204 nm)	107.979466 o	ppm	1.102443	1.02	381641.942072	Y_R 377.433
Fe H (259.940 nm)	110.265000	ppm	1.008150	0.91	229662.000000	Y_R 377.433
K (766.491 nm)	13.262300	ppm	0.066619	0.50	12430.700000	Y_R2 488.368
Li (670.783 nm)	0.082744	ppm	0.001539	1.86	1630.430000	Y_R2 488.368
Mg (279.078 nm)	59.799000 o	ppm	1.774170	2.97	360984.000000	Y 377.433
Mn (257.610 nm)	3.127040 o	ppm	0.086397	2.76	756822.000000	Y 377.433
Mo (202.032 nm)	0.004721	ppm	0.000085	1.80	45.504600	Y 377.433
Na (589.592 nm)	4.369480	ppm	0.023039	0.53	29241.600000	Y_R2 488.368
Na H (589.593 nm)	5.659428 u	ppm	0.027069	0.48	21533.236774	Y_R 488.368
Ni (231.604 nm)	0.106168	ppm	0.003344	3.15	769.928000	Y 377.433
P (213.618 nm)	6.205060	ppm	0.182835	2.95	14645.900000	Y 242.219
Pb (220.353 nm)	0.107899	ppm	0.005116	4.74	281.231000	Y 242.219
S (181.972 nm)	2.946045	ppm	0.093273	3.17	1427.298097	Y 377.433
Sb (206.834 nm)	0.002128	ppm	0.001163	54.66	-15.096500	Y 377.433
Se (196.026 nm)	0.001094 u	ppm	0.001790	> 100.00	-9.304590	Y 242.219
Si (288.158 nm)	0.971525	ppm	0.042076	4.33	10707.900000	Y 377.433
Sn (189.925 nm)	0.008782	ppm	0.000167	1.90	24.012200	Y 377.433
Sr (421.552 nm)	1.216517 o	ppm	0.007295	0.60	272494.866366	Y_R 488.368
Th (288.505 nm)	0.088500	ppm	0.005655	6.39	420.631000	Y 377.433
Ti (336.122 nm)	4.785180 o	ppm	0.131926	2.76	714624.000000	Y 377.433
Tl (190.794 nm)	0.001532 u	ppm	0.001869	> 100.00	-24.147100	Y 377.433
U (409.013 nm)	-0.058285 u	ppm	0.003012	5.17	-272.789000	Y 377.433
V (292.401 nm)	0.398049	ppm	0.011753	2.95	16446.500000	Y 377.433
Zn (206.200 nm)	0.260437	ppm	0.007088	2.72	1399.350000	Y 377.433
Zr (343.823 nm)	0.098318	ppm	0.001337	1.36	13795.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.007849	8448.538461	0.002907	0.29
Y 377.433	0.970735	440101.820362	0.004916	0.51
Y_R 377.433	1.030410	35548.200000	0.003581	0.35
Y_R 488.368	1.049120	19768.300000	0.004559	0.43
Y_R2 488.368	1.009799	33443.292692	0.001672	0.17

Sample Name: 280-167828-A-13-B@2

Date: 10/28/2022 2:24:03 AM Rack:Tube: 1:56

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.082110	ppm	0.000967	1.18	188239.213709	Y 377.433
Ag (328.068 nm)	0.000119 n	ppm	0.000068	57.41	-194.604000	Y 377.433
Al (167.019 nm)	61.014300 o	ppm	0.123801	0.20	27288.700000	Y_R 377.433
Al H (396.152 nm)	65.391299	ppm	0.058236	0.09	181565.170822	Y_R 377.433
As (188.980 nm)	0.032500	ppm	0.001734	5.33	38.704700	Y 242.219
B (249.678 nm)	0.038675	ppm	0.000567	1.47	947.318000	Y 242.219
Ba (493.408 nm)	2.004930 o	ppm	0.006103	0.30	221964.000000	Y_R 488.368
Be (234.861 nm)	0.003838	ppm	0.000363	9.45	2722.500000	Y_R 488.368
Bi (223.061 nm)	-0.005202 u	ppm	0.001514	29.10	4.275880	Y 377.433
Ca (315.887 nm)	108.874051 o	ppm	0.230696	0.21	100780.737361	Y_R 377.433
Cd (214.439 nm)	0.000485	ppm	0.000051	10.61	130.693000	Y 377.433
Co (228.615 nm)	0.044892	ppm	0.000406	0.91	1005.710000	Y 242.219
Cr (205.560 nm)	0.114443	ppm	0.001123	0.98	1684.400000	Y 377.433
Cu (324.754 nm)	0.101217	ppm	0.001002	0.99	8584.300000	Y 377.433
Fe (238.204 nm)	105.624529 o	ppm	0.256605	0.24	373318.942949	Y_R 377.433
Fe H (259.940 nm)	107.978000	ppm	0.343162	0.32	224900.000000	Y_R 377.433
K (766.491 nm)	14.597000	ppm	0.097738	0.67	13761.100000	Y_R2 488.368
Li (670.783 nm)	0.092385	ppm	0.001765	1.91	1953.850000	Y_R2 488.368
Mg (279.078 nm)	54.174900 o	ppm	0.373607	0.69	327024.000000	Y 377.433
Mn (257.610 nm)	2.963880 o	ppm	0.023065	0.78	717338.000000	Y 377.433
Mo (202.032 nm)	0.002769	ppm	0.000296	10.67	28.785000	Y 377.433
Na (589.592 nm)	3.940610	ppm	0.036116	0.92	26766.900000	Y_R2 488.368
Na H (589.593 nm)	5.084575 u	ppm	0.018523	0.36	19306.095275	Y_R 488.368
Ni (231.604 nm)	0.091617	ppm	0.000874	0.95	667.350000	Y 377.433
P (213.618 nm)	6.193310	ppm	0.005473	0.09	14618.200000	Y 242.219
Pb (220.353 nm)	0.081059	ppm	0.001509	1.86	207.055000	Y 242.219
S (181.972 nm)	2.436921	ppm	0.027946	1.15	1182.275707	Y 377.433
Sb (206.834 nm)	0.001504	ppm	0.001256	83.49	-17.787900	Y 377.433
Se (196.026 nm)	0.001106 u	ppm	0.001498	> 100.00	-9.000700	Y 242.219
Si (288.158 nm)	0.967983	ppm	0.018413	1.90	10622.400000	Y 377.433
Sn (189.925 nm)	0.007779	ppm	0.001434	18.44	21.881900	Y 377.433
Sr (421.552 nm)	1.077076	ppm	0.000287	0.03	241267.371617	Y_R 488.368
Th (288.505 nm)	0.087568	ppm	0.004681	5.35	412.029000	Y 377.433
Ti (336.122 nm)	4.470470 o	ppm	0.040630	0.91	667617.000000	Y 377.433
Tl (190.794 nm)	0.001176	ppm	0.001185	> 100.00	-23.462500	Y 377.433
U (409.013 nm)	-0.069113 u	ppm	0.004139	5.99	-328.703000	Y 377.433
V (292.401 nm)	0.299231	ppm	0.002181	0.73	12395.900000	Y 377.433
Zn (206.200 nm)	0.245524	ppm	0.001888	0.77	1319.760000	Y 377.433
Zr (343.823 nm)	0.098799	ppm	0.000252	0.25	13853.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.032075	8651.625429	0.012975	1.26
Y 377.433	0.989966	448820.393941	0.013312	1.34
Y_R 377.433	1.041680	35937.100000	0.004390	0.42
Y_R 488.368	1.059660	19967.100000	0.003485	0.33
Y_R2 488.368	1.029042	34080.611939	0.002553	0.25

Sample Name: 280-167828-A-14-B@2

Date: 10/28/2022 2:28:06 AM Rack:Tube: 1:57

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.076194	ppm	0.000665	0.87	174600.801961	Y 377.433
Ag (328.068 nm)	0.000444 n	ppm	0.000268	60.39	-174.399000	Y 377.433
Al (167.019 nm)	59.784500 o	ppm	0.168321	0.28	26738.100000	Y_R 377.433
Al H (396.152 nm)	64.023191	ppm	0.175882	0.27	177774.245368	Y_R 377.433
As (188.980 nm)	0.031260	ppm	0.000913	2.92	37.092700	Y 242.219
B (249.678 nm)	0.035848	ppm	0.000482	1.34	875.074000	Y 242.219
Ba (493.408 nm)	2.044400 o	ppm	0.007310	0.36	226328.000000	Y_R 488.368
Be (234.861 nm)	0.003476	ppm	0.000278	8.00	2570.680000	Y_R 488.368
Bi (223.061 nm)	-0.005092 u	ppm	0.000981	19.26	4.552560	Y 377.433
Ca (315.887 nm)	121.460428 o	ppm	0.332635	0.27	112432.385685	Y_R 377.433
Cd (214.439 nm)	0.000443	ppm	0.000146	32.97	124.924000	Y 377.433
Co (228.615 nm)	0.045245	ppm	0.000463	1.02	1011.190000	Y 242.219
Cr (205.560 nm)	0.114706	ppm	0.001453	1.27	1689.210000	Y 377.433
Cu (324.754 nm)	0.095751	ppm	0.000785	0.82	8187.740000	Y 377.433
Fe (238.204 nm)	102.420319 o	ppm	0.438735	0.43	361994.375418	Y_R 377.433
Fe H (259.940 nm)	104.518000	ppm	0.197578	0.19	217693.000000	Y_R 377.433
K (766.491 nm)	14.991400	ppm	0.084995	0.57	14154.300000	Y_R2 488.368
Li (670.783 nm)	0.085222	ppm	0.001508	1.77	1713.560000	Y_R2 488.368
Mg (279.078 nm)	53.664500 o	ppm	0.488680	0.91	323947.000000	Y 377.433
Mn (257.610 nm)	2.539380 o	ppm	0.020137	0.79	614609.000000	Y 377.433
Mo (202.032 nm)	0.002920	ppm	0.000504	17.25	30.077900	Y 377.433
Na (589.592 nm)	2.892310	ppm	0.005327	0.18	20502.200000	Y_R2 488.368
Na H (589.593 nm)	4.052381 u	ppm	0.005918	0.15	15196.052844	Y_R 488.368
Ni (231.604 nm)	0.091072	ppm	0.001140	1.25	662.965000	Y 377.433
P (213.618 nm)	5.359590	ppm	0.066015	1.23	12651.800000	Y 242.219
Pb (220.353 nm)	0.084282	ppm	0.002091	2.48	216.236000	Y 242.219
S (181.972 nm)	2.120687	ppm	0.023076	1.09	1029.328595	Y 377.433
Sb (206.834 nm)	0.002785 u	ppm	0.002526	90.70	-14.057100	Y 377.433
Se (196.026 nm)	0.002973	ppm	0.000873	29.37	-6.912610	Y 242.219
Si (288.158 nm)	1.005290	ppm	0.027414	2.73	10964.600000	Y 377.433
Sn (189.925 nm)	0.007843	ppm	0.001222	15.58	22.016300	Y 377.433
Sr (421.552 nm)	1.149729 o	ppm	0.001639	0.14	257537.871940	Y_R 488.368
Th (288.505 nm)	0.080982	ppm	0.001916	2.37	383.893000	Y 377.433
Ti (336.122 nm)	4.437630 o	ppm	0.036296	0.82	662755.000000	Y 377.433
Tl (190.794 nm)	0.001061	ppm	0.000504	47.45	-23.481600	Y 377.433
U (409.013 nm)	-0.053561 u	ppm	0.005010	9.35	-256.392000	Y 377.433
V (292.401 nm)	0.283556	ppm	0.002707	0.95	11753.600000	Y 377.433
Zn (206.200 nm)	0.231296	ppm	0.001338	0.58	1243.820000	Y 377.433
Zr (343.823 nm)	0.097303	ppm	0.000059	0.06	13638.700000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.009310	8460.786830	0.001468	0.15
Y 377.433	0.973881	441527.834480	0.002628	0.27
Y_R 377.433	1.036790	35768.400000	0.004688	0.45
Y_R 488.368	1.052910	19839.900000	0.004007	0.38
Y_R2 488.368	1.028162	34051.461554	0.012589	1.22

Sample Name: 280-167828-A-15-B@2

Date: 10/28/2022 2:32:08 AM Rack:Tube: 1:58

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.067786	ppm	0.001040	1.53	155219.577089	Y 377.433
Ag (328.068 nm)	0.000371 n	ppm	0.000243	65.59	-180.945000	Y 377.433
Al (167.019 nm)	55.635400 o	ppm	0.152962	0.27	24884.900000	Y_R 377.433
Al H (396.152 nm)	59.059670	ppm	0.146164	0.25	163986.297069	Y_R 377.433
As (188.980 nm)	0.025003	ppm	0.000417	1.67	28.956600	Y 242.219
B (249.678 nm)	0.031314	ppm	0.000225	0.72	753.886000	Y 242.219
Ba (493.408 nm)	1.978100 o	ppm	0.019847	1.00	218990.000000	Y_R 488.368
Be (234.861 nm)	0.003093	ppm	0.000407	13.17	2421.920000	Y_R 488.368
Bi (223.061 nm)	-0.004298 u	ppm	0.000951	22.13	6.545660	Y 377.433
Ca (315.887 nm)	96.752323 o	ppm	0.101854	0.11	89559.230065	Y_R 377.433
Cd (214.439 nm)	0.000407	ppm	0.000080	19.63	120.026000	Y 377.433
Co (228.615 nm)	0.040785	ppm	0.000993	2.43	913.697000	Y 242.219
Cr (205.560 nm)	0.105008	ppm	0.001451	1.38	1545.340000	Y 377.433
Cu (324.754 nm)	0.100286	ppm	0.001113	1.11	8532.110000	Y 377.433
Fe (238.204 nm)	99.759618 o	ppm	0.060491	0.06	352590.719708	Y_R 377.433
Fe H (259.940 nm)	101.880000	ppm	0.129329	0.13	212200.000000	Y_R 377.433
K (766.491 nm)	13.487300	ppm	0.019337	0.14	12654.900000	Y_R2 488.368
Li (670.783 nm)	0.079654	ppm	0.000248	0.31	1526.790000	Y_R2 488.368
Mg (279.078 nm)	46.041200 o	ppm	0.712493	1.55	277913.000000	Y 377.433
Mn (257.610 nm)	2.641490 o	ppm	0.036049	1.36	639318.000000	Y 377.433
Mo (202.032 nm)	0.002489	ppm	0.000535	21.50	26.381300	Y 377.433
Na (589.592 nm)	2.664380	ppm	0.010276	0.39	19035.300000	Y_R2 488.368
Na H (589.593 nm)	3.789992 u	ppm	0.011314	0.30	14068.894539	Y_R 488.368
Ni (231.604 nm)	0.079758	ppm	0.001700	2.13	583.077000	Y 377.433
P (213.618 nm)	4.776650	ppm	0.066490	1.39	11276.800000	Y 242.219
Pb (220.353 nm)	0.069837	ppm	0.002125	3.04	177.672000	Y 242.219
S (181.972 nm)	1.678993	ppm	0.026294	1.57	817.331349	Y 377.433
Sb (206.834 nm)	0.004960	ppm	0.001118	22.54	-8.223920	Y 377.433
Se (196.026 nm)	0.002663	ppm	0.001420	53.32	-6.714860	Y 242.219
Si (288.158 nm)	1.031450	ppm	0.033909	3.29	11151.600000	Y 377.433
Sn (189.925 nm)	0.008171	ppm	0.001399	17.12	22.713300	Y 377.433
Sr (421.552 nm)	1.070405	ppm	0.003670	0.34	239773.381773	Y_R 488.368
Th (288.505 nm)	0.078319	ppm	0.002578	3.29	378.728000	Y 377.433
Ti (336.122 nm)	4.095580 o	ppm	0.051909	1.27	611604.000000	Y 377.433
Tl (190.794 nm)	0.001549	ppm	0.000276	17.80	-20.814900	Y 377.433
U (409.013 nm)	-0.049238 u	ppm	0.002716	5.52	-230.640000	Y 377.433
V (292.401 nm)	0.276718	ppm	0.003839	1.39	11466.200000	Y 377.433
Zn (206.200 nm)	0.205590	ppm	0.002545	1.24	1106.620000	Y 377.433
Zr (343.823 nm)	0.080446	ppm	0.000243	0.30	11325.500000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.011556	8479.620906	0.004582	0.45
Y 377.433	0.972399	440856.019207	0.004248	0.44
Y_R 377.433	1.057190	36472.200000	0.001677	0.16
Y_R 488.368	1.076750	20289.100000	0.004026	0.37
Y_R2 488.368	1.038427	34391.427730	0.007999	0.77

Sample Name: 280-167828-A-16-B@2

Date: 10/28/2022 2:36:11 AM Rack:Tube: 1:59

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.063502	ppm	0.000363	0.57	145343.713219	Y 377.433
Ag (328.068 nm)	0.000187 n	ppm	0.000075	40.09	-189.277000	Y 377.433
Al (167.019 nm)	55.630000 o	ppm	0.164476	0.30	24883.200000	Y_R 377.433
Al H (396.152 nm)	59.182203	ppm	0.130237	0.22	164331.723379	Y_R 377.433
As (188.980 nm)	0.027434	ppm	0.000720	2.63	32.117500	Y 242.219
B (249.678 nm)	0.034326	ppm	0.000206	0.60	835.565000	Y 242.219
Ba (493.408 nm)	1.480910 o	ppm	0.008018	0.54	163984.000000	Y_R 488.368
Be (234.861 nm)	0.003237	ppm	0.000026	0.79	2480.420000	Y_R 488.368
Bi (223.061 nm)	-0.002289 u	ppm	0.000900	39.34	11.588500	Y 377.433
Ca (315.887 nm)	107.460030 o	ppm	0.193959	0.18	99471.728019	Y_R 377.433
Cd (214.439 nm)	0.000402	ppm	0.000059	14.58	120.892000	Y 377.433
Co (228.615 nm)	0.042642	ppm	0.000391	0.92	970.741000	Y 242.219
Cr (205.560 nm)	0.110034	ppm	0.000444	0.40	1619.950000	Y 377.433
Cu (324.754 nm)	0.093703	ppm	0.000731	0.78	8039.960000	Y 377.433
Fe (238.204 nm)	100.901429 o	ppm	0.097491	0.10	356626.197186	Y_R 377.433
Fe H (259.940 nm)	103.016000	ppm	0.089071	0.09	214564.000000	Y_R 377.433
K (766.491 nm)	11.596200	ppm	0.044454	0.38	10769.800000	Y_R2 488.368
Li (670.783 nm)	0.075166	ppm	0.000329	0.44	1376.230000	Y_R2 488.368
Mg (279.078 nm)	50.538000 o	ppm	0.386272	0.76	305068.000000	Y 377.433
Mn (257.610 nm)	2.788950 o	ppm	0.021633	0.78	675003.000000	Y 377.433
Mo (202.032 nm)	0.003736	ppm	0.000245	6.57	37.067100	Y 377.433
Na (589.592 nm)	4.744840	ppm	0.012655	0.27	30884.500000	Y_R2 488.368
Na H (589.593 nm)	5.832815 u	ppm	0.008937	0.15	21752.348249	Y_R 488.368
Ni (231.604 nm)	0.080721	ppm	0.000610	0.76	590.042000	Y 377.433
P (213.618 nm)	6.915410	ppm	0.088711	1.28	16321.300000	Y 242.219
Pb (220.353 nm)	0.072436	ppm	0.000603	0.83	184.925000	Y 242.219
S (181.972 nm)	3.212265	ppm	0.022428	0.70	1554.421825	Y 377.433
Sb (206.834 nm)	0.003153	ppm	0.001574	49.92	-12.915800	Y 377.433
Se (196.026 nm)	0.001106 u	ppm	0.003171	> 100.00	-8.358610	Y 242.219
Si (288.158 nm)	0.929735	ppm	0.010242	1.10	10299.900000	Y 377.433
Sn (189.925 nm)	0.008254	ppm	0.001304	15.79	22.889600	Y 377.433
Sr (421.552 nm)	1.001826	ppm	0.000578	0.06	224415.172441	Y_R 488.368
Th (288.505 nm)	0.081792	ppm	0.003095	3.78	392.499000	Y 377.433
Ti (336.122 nm)	4.672940 o	ppm	0.028171	0.60	697844.000000	Y 377.433
Tl (190.794 nm)	0.002383	ppm	0.000631	26.49	-21.603700	Y 377.433
U (409.013 nm)	-0.062084 u	ppm	0.003357	5.41	-299.614000	Y 377.433
V (292.401 nm)	0.312492	ppm	0.001920	0.61	12947.400000	Y 377.433
Zn (206.200 nm)	0.224731	ppm	0.001310	0.58	1208.780000	Y 377.433
Zr (343.823 nm)	0.117232	ppm	0.000983	0.84	16359.100000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.047932	8784.545091	0.010499	1.00
Y 377.433	1.007756	456885.720731	0.010360	1.03
Y_R 377.433	1.086050	37467.700000	0.004387	0.40
Y_R 488.368	1.106850	20856.200000	0.002822	0.25
Y_R2 488.368	1.066259	35313.198334	0.004962	0.47

Sample Name: 280-167828-A-17-B@2

Date: 10/28/2022 2:40:13 AM Rack:Tube: 1:60

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.076948	ppm	0.001320	1.72	176338.992948	Y 377.433
Ag (328.068 nm)	0.000292 n	ppm	0.000182	62.39	-188.507000	Y 377.433
Al (167.019 nm)	61.360100 o	ppm	0.310537	0.51	27447.200000	Y_R 377.433
Al H (396.152 nm)	65.622012	ppm	0.113488	0.17	182205.491666	Y_R 377.433
As (188.980 nm)	0.042292	ppm	0.001984	4.69	51.438300	Y 242.219
B (249.678 nm)	0.035990	ppm	0.000291	0.81	857.498000	Y 242.219
Ba (493.408 nm)	1.977460 o	ppm	0.019417	0.98	218932.000000	Y_R 488.368
Be (234.861 nm)	0.004001	ppm	0.000157	3.91	2887.660000	Y_R 488.368
Bi (223.061 nm)	-0.004777 u	ppm	0.001999	41.85	5.342670	Y 377.433
Ca (315.887 nm)	108.600980 o	ppm	0.165993	0.15	100527.946179	Y_R 377.433
Cd (214.439 nm)	0.000507	ppm	0.000070	13.89	139.706000	Y 377.433
Co (228.615 nm)	0.048647	ppm	0.000992	2.04	1067.170000	Y 242.219
Cr (205.560 nm)	0.114751	ppm	0.001857	1.62	1686.900000	Y 377.433
Cu (324.754 nm)	0.098216	ppm	0.001308	1.33	8396.040000	Y 377.433
Fe (238.204 nm)	113.141820 o	ppm	0.169460	0.15	399887.134745	Y_R 377.433
Fe H (259.940 nm)	115.455000	ppm	0.144525	0.13	240470.000000	Y_R 377.433
K (766.491 nm)	13.638300	ppm	0.026285	0.19	12805.400000	Y_R2 488.368
Li (670.783 nm)	0.086417	ppm	0.000253	0.29	1753.660000	Y_R2 488.368
Mg (279.078 nm)	54.016600 o	ppm	0.896200	1.66	326054.000000	Y 377.433
Mn (257.610 nm)	3.306670 o	ppm	0.052848	1.60	800294.000000	Y 377.433
Mo (202.032 nm)	0.003963	ppm	0.000278	7.02	39.006700	Y 377.433
Na (589.592 nm)	4.215970	ppm	0.010932	0.26	28389.000000	Y_R2 488.368
Na H (589.593 nm)	5.333754 u	ppm	0.014910	0.28	20279.340751	Y_R 488.368
Ni (231.604 nm)	0.090995	ppm	0.001396	1.53	664.300000	Y 377.433
P (213.618 nm)	6.720550	ppm	0.098405	1.46	15861.800000	Y 242.219
Pb (220.353 nm)	0.078764	ppm	0.002797	3.55	201.227000	Y 242.219
S (181.972 nm)	3.289587	ppm	0.051364	1.56	1592.789032	Y 377.433
Sb (206.834 nm)	0.001544	ppm	0.001745	> 100.00	-18.746200	Y 377.433
Se (196.026 nm)	0.000674 u	ppm	0.002906	> 100.00	-10.555200	Y 242.219
Si (288.158 nm)	0.963768	ppm	0.024364	2.53	10540.600000	Y 377.433
Sn (189.925 nm)	0.006883	ppm	0.002190	31.82	19.977900	Y 377.433
Sr (421.552 nm)	1.182865 o	ppm	0.004805	0.41	264958.589510	Y_R 488.368
Th (288.505 nm)	0.093627	ppm	0.002478	2.65	436.592000	Y 377.433
Ti (336.122 nm)	4.212590 o	ppm	0.057842	1.37	629113.000000	Y 377.433
Tl (190.794 nm)	0.001459	ppm	0.000414	28.38	-21.876100	Y 377.433
U (409.013 nm)	-0.069168 u	ppm	0.005755	8.32	-321.036000	Y 377.433
V (292.401 nm)	0.314974	ppm	0.004521	1.44	13038.000000	Y 377.433
Zn (206.200 nm)	0.237803	ppm	0.003468	1.46	1278.550000	Y 377.433
Zr (343.823 nm)	0.099381	ppm	0.000733	0.74	13956.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.032154	8652.283031	0.001563	0.15
Y 377.433	0.994362	450813.455582	0.002355	0.24
Y_R 377.433	1.046150	36091.400000	0.002256	0.22
Y_R 488.368	1.062830	20026.700000	0.001894	0.18
Y_R2 488.368	1.023526	33897.920477	0.001254	0.12

Sample Name: CCVH-7429327

Date: 10/28/2022 2:44:17 AM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000050	ppm	0.000004	7.51	-931.368332	Y 377.433
Ag (328.068 nm)	0.002249	ppm	0.000091	4.03	-108.774000	Y 377.433
Al (167.019 nm)	50.459000 o	ppm	0.223167	0.44	22548.000000	Y_R 377.433
Al H (396.152 nm)	51.395148	ppm	0.071151	0.14	142666.675223	Y_R 377.433
As (188.980 nm)	0.001870	ppm	0.000578	30.89	-1.122240	Y 242.219
B (249.678 nm)	0.001954	ppm	0.000126	6.47	31.514500	Y 242.219
Ba (493.408 nm)	0.000600	ppm	0.000239	39.79	162.047000	Y_R 488.368
Be (234.861 nm)	0.000061	ppm	0.000052	85.96	807.080000	Y_R 488.368
Bi (223.061 nm)	-0.000207 u	ppm	0.001092	> 100.00	16.812600	Y 377.433
Ca (315.887 nm)	-0.012496 u	ppm	0.004203	33.63	-19.346755	Y_R 377.433
Cd (214.439 nm)	-0.000147 u	ppm	0.000050	33.98	36.980400	Y 377.433
Co (228.615 nm)	-0.000638 u	ppm	0.000175	27.36	-26.119600	Y 242.219
Cr (205.560 nm)	0.000856	ppm	0.000296	34.62	5.799950	Y 377.433
Cu (324.754 nm)	0.003059	ppm	0.000192	6.27	2853.220000	Y 377.433
Fe (238.204 nm)	51.051281 o	ppm	0.025506	0.05	180441.945941	Y_R 377.433
Fe H (259.940 nm)	52.049500	ppm	0.034759	0.07	108418.000000	Y_R 377.433
K (766.491 nm)	0.058452 u	ppm	0.095623	> 100.00	-731.619000	Y_R2 488.368
Li (670.783 nm)	0.005550	ppm	0.002030	36.57	-959.102000	Y_R2 488.368
Mg (279.078 nm)	-0.005785 u	ppm	0.000477	8.24	-158.777000	Y 377.433
Mn (257.610 nm)	0.000284	ppm	0.000052	18.15	145.211000	Y 377.433
Mo (202.032 nm)	-0.000283 u	ppm	0.000112	39.58	2.639430	Y 377.433
Na (589.592 nm)	251.447000	ppm	1.371880	0.55	1515950.000000	Y_R2 488.368
Na H (589.593 nm)	250.037461	ppm	1.399612	0.56	1002498.019540	Y_R 488.368
Ni (231.604 nm)	-0.000794 u	ppm	0.000835	> 100.00	9.138940	Y 377.433
P (213.618 nm)	5.040420	ppm	0.006796	0.13	11899.000000	Y 242.219
Pb (220.353 nm)	-0.006408 u	ppm	0.002069	32.29	-28.250900	Y 242.219
S (181.972 nm)	5.116851	ppm	0.007673	0.15	2463.050387	Y 377.433
Sb (206.834 nm)	0.002558	ppm	0.000077	2.99	-17.365100	Y 377.433
Se (196.026 nm)	0.005470	ppm	0.001862	34.04	2.862090	Y 242.219
Si (288.158 nm)	0.015887	ppm	0.000430	2.71	1013.420000	Y 377.433
Sn (189.925 nm)	0.001168 u	ppm	0.001873	> 100.00	7.832780	Y 377.433
Sr (421.552 nm)	0.000622	ppm	0.000050	8.05	197.860646	Y_R 488.368
Th (288.505 nm)	5.145260	ppm	0.025063	0.49	14555.100000	Y 377.433
Ti (336.122 nm)	0.001176	ppm	0.000042	3.58	-40.468900	Y 377.433
Tl (190.794 nm)	-0.001454 u	ppm	0.000236	16.20	-7.889990	Y 377.433
U (409.013 nm)	2.544060	ppm	0.008172	0.32	12791.300000	Y 377.433
V (292.401 nm)	-0.000687 u	ppm	0.000120	17.41	329.231000	Y 377.433
Zn (206.200 nm)	0.000663	ppm	0.000126	18.93	12.902300	Y 377.433
Zr (343.823 nm)	0.060316	ppm	0.007132	11.82	8422.050000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.951485	7976.053259	0.002999	0.32
Y 377.433	0.916371	415454.549491	0.003345	0.37
Y_R 377.433	0.966418	33340.600000	0.003285	0.34
Y_R 488.368	0.988339	18623.100000	0.010691	1.08
Y_R2 488.368	0.946683	31352.990146	0.009288	0.98

Sample Name: CCV-7429326

Date: 10/28/2022 2:48:21 AM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.470541	ppm	0.000546	0.12	1083680.192562	Y 377.433
Ag (328.068 nm)	0.513104	ppm	0.000389	0.08	27137.100000	Y 377.433
Al (167.019 nm)	0.542440	ppm	0.004485	0.83	244.159000	Y_R 377.433
Al H (396.152 nm)	0.522234 u	ppm	0.003919	0.75	1522.904764	Y_R 377.433
As (188.980 nm)	0.507606	ppm	0.002645	0.52	656.478000	Y 242.219
B (249.678 nm)	0.502791	ppm	0.001049	0.21	14103.800000	Y 242.219
Ba (493.408 nm)	0.509600	ppm	0.003269	0.64	56429.400000	Y_R 488.368
Be (234.861 nm)	0.522083	ppm	0.001031	0.20	145587.000000	Y_R 488.368
Bi (223.061 nm)	1.053130	ppm	0.002890	0.27	2660.580000	Y 377.433
Ca (315.887 nm)	5.305939	ppm	0.024139	0.45	4904.463324	Y_R 377.433
Cd (214.439 nm)	0.519998	ppm	0.000255	0.05	31800.300000	Y 377.433
Co (228.615 nm)	0.514210	ppm	0.001700	0.33	9754.720000	Y 242.219
Cr (205.560 nm)	0.523701	ppm	0.002752	0.53	7810.110000	Y 377.433
Cu (324.754 nm)	0.526538	ppm	0.000450	0.09	38798.300000	Y 377.433
Fe (238.204 nm)	2.558549	ppm	0.003448	0.13	9055.181902	Y_R 377.433
Fe H (259.940 nm)	2.621990 u	ppm	0.006333	0.24	5476.910000	Y_R 377.433
K (766.491 nm)	49.828300	ppm	0.226618	0.45	48881.500000	Y_R2 488.368
Li (670.783 nm)	0.493316	ppm	0.004372	0.89	15403.500000	Y_R2 488.368
Mg (279.078 nm)	20.687900	ppm	0.014831	0.07	124976.000000	Y 377.433
Mn (257.610 nm)	0.524180	ppm	0.000318	0.06	126928.000000	Y 377.433
Mo (202.032 nm)	0.525042	ppm	0.001962	0.37	4502.870000	Y 377.433
Na (589.592 nm)	25.862400	ppm	0.108180	0.42	156828.000000	Y_R2 488.368
Na H (589.593 nm)	26.348360	ppm	0.061385	0.23	103232.981412	Y_R 488.368
Ni (231.604 nm)	0.531469	ppm	0.001739	0.33	3737.960000	Y 377.433
P (213.618 nm)	0.008302	ppm	0.000849	10.22	30.179900	Y 242.219
Pb (220.353 nm)	0.503469	ppm	0.000544	0.11	1392.860000	Y 242.219
S (181.972 nm)	0.008975	ppm	0.001758	19.58	9.925812	Y 377.433
Sb (206.834 nm)	0.523213	ppm	0.001757	0.34	1318.160000	Y 377.433
Se (196.026 nm)	0.506356	ppm	0.003025	0.60	511.022000	Y 242.219
Si (288.158 nm)	5.153240	ppm	0.005314	0.10	48957.000000	Y 377.433
Sn (189.925 nm)	0.523205	ppm	0.002818	0.54	1117.130000	Y 377.433
Sr (421.552 nm)	0.504364	ppm	0.000780	0.15	113009.763449	Y_R 488.368
Th (288.505 nm)	0.027069	ppm	0.005437	20.08	184.559000	Y 377.433
Ti (336.122 nm)	0.512949	ppm	0.000509	0.10	76389.200000	Y 377.433
Tl (190.794 nm)	0.523542	ppm	0.002615	0.50	1148.000000	Y 377.433
U (409.013 nm)	0.003077	ppm	0.002074	67.40	-90.346900	Y 377.433
V (292.401 nm)	0.523597	ppm	0.000321	0.06	21358.300000	Y 377.433
Zn (206.200 nm)	0.525190	ppm	0.000488	0.09	2812.370000	Y 377.433
Zr (343.823 nm)	0.539494	ppm	0.006903	1.28	73793.200000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.964927	8088.735406	0.001777	0.18
Y 377.433	0.937320	424952.307552	0.000395	0.04
Y_R 377.433	0.985278	33991.300000	0.001868	0.19
Y_R 488.368	1.003050	18900.200000	0.003092	0.31
Y_R2 488.368	0.956006	31661.738569	0.003635	0.38

Sample Name: CCB

Date: 10/28/2022 2:52:23 AM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000031	ppm	0.000013	42.73	-975.995013	Y 377.433
Ag (328.068 nm)	0.000487	ppm	0.000114	23.38	-133.357000	Y 377.433
Al (167.019 nm)	-0.001811 u	ppm	0.001483	81.88	-0.142708	Y_R 377.433
Al H (396.152 nm)	-0.002169 u	ppm	0.003000	> 100.00	17.710991	Y_R 377.433
As (188.980 nm)	-0.000837 u	ppm	0.002436	> 100.00	-4.641580	Y 242.219
B (249.678 nm)	0.000860	ppm	0.000037	4.32	103.591000	Y 242.219
Ba (493.408 nm)	0.000056 u	ppm	0.000182	> 100.00	55.277000	Y_R 488.368
Be (234.861 nm)	-0.000019 u	ppm	0.000012	63.85	-22.031600	Y_R 488.368
Bi (223.061 nm)	-0.000891 u	ppm	0.002559	> 100.00	15.096000	Y 377.433
Ca (315.887 nm)	0.001345 u	ppm	0.009270	> 100.00	-6.533875	Y_R 377.433
Cd (214.439 nm)	-0.000045 u	ppm	0.000073	> 100.00	-8.265470	Y 377.433
Co (228.615 nm)	-0.000092 u	ppm	0.000084	91.03	-15.795800	Y 242.219
Cr (205.560 nm)	-0.000237 u	ppm	0.000121	51.17	3.610140	Y 377.433
Cu (324.754 nm)	0.001638	ppm	0.000302	18.45	1541.970000	Y 377.433
Fe (238.204 nm)	0.000415 u	ppm	0.000833	> 100.00	14.025879	Y_R 377.433
Fe H (259.940 nm)	-0.000510 u	ppm	0.001586	> 100.00	15.108600	Y_R 377.433
K (766.491 nm)	0.083125 u	ppm	0.087915	> 100.00	-707.023000	Y_R2 488.368
Li (670.783 nm)	0.006076	ppm	0.000549	9.04	-941.468000	Y_R2 488.368
Mg (279.078 nm)	0.000233 u	ppm	0.001015	> 100.00	44.650200	Y 377.433
Mn (257.610 nm)	-0.000135 u	ppm	0.000016	11.52	43.738000	Y 377.433
Mo (202.032 nm)	0.001040	ppm	0.000197	18.98	13.970800	Y 377.433
Na (589.592 nm)	-0.005748 u	ppm	0.005008	87.12	182.925000	Y_R2 488.368
Na H (589.593 nm)	1.281023 u	ppm	0.005009	0.39	1848.732204	Y_R 488.368
Ni (231.604 nm)	-0.000255 u	ppm	0.000625	> 100.00	4.061420	Y 377.433
P (213.618 nm)	0.003220	ppm	0.001150	35.73	18.191900	Y 242.219
Pb (220.353 nm)	-0.000001 u	ppm	0.000214	> 100.00	-3.640170	Y 242.219
S (181.972 nm)	0.017389	ppm	0.003373	19.40	12.742206	Y 377.433
Sb (206.834 nm)	0.001916	ppm	0.000624	32.59	-2.101640	Y 377.433
Se (196.026 nm)	-0.000626 u	ppm	0.002507	> 100.00	5.548480	Y 242.219
Si (288.158 nm)	0.004140	ppm	0.000041	0.99	903.857000	Y 377.433
Sn (189.925 nm)	0.000524	ppm	0.000147	28.11	6.464010	Y 377.433
Sr (421.552 nm)	-0.000010 u	ppm	0.000041	> 100.00	56.244732	Y_R 488.368
Th (288.505 nm)	0.003001 u	ppm	0.003032	> 100.00	107.179000	Y 377.433
Ti (336.122 nm)	-0.000061 u	ppm	0.000068	> 100.00	-225.203000	Y 377.433
Tl (190.794 nm)	0.000165 u	ppm	0.000740	> 100.00	-2.933990	Y 377.433
U (409.013 nm)	0.005907	ppm	0.002089	35.37	-30.070300	Y 377.433
V (292.401 nm)	-0.000277 u	ppm	0.000120	43.17	9.285560	Y 377.433
Zn (206.200 nm)	-0.000629 u	ppm	0.000046	7.31	6.003030	Y 377.433
Zr (343.823 nm)	0.000303	ppm	0.000016	5.32	57.786200	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.962894	8071.693099	0.003096	0.32
Y 377.433	0.937231	424911.926823	0.002860	0.31
Y_R 377.433	0.979064	33776.900000	0.000685	0.07
Y_R 488.368	0.998078	18806.600000	0.005351	0.54
Y_R2 488.368	0.982963	32554.531142	0.002531	0.26

Sample Name: CCVL-7434568

Date: 10/28/2022 2:56:25 AM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014748	ppm	0.000019	0.13	32951.097414	Y 377.433
Ag (328.068 nm)	0.010807	ppm	0.000123	1.14	414.727000	Y 377.433
Al (167.019 nm)	0.109787	ppm	0.003970	3.62	49.719700	Y_R 377.433
Al H (396.152 nm)	0.098977 u	ppm	0.004188	4.23	300.279890	Y_R 377.433
As (188.980 nm)	0.014389	ppm	0.001639	11.39	15.155700	Y 242.219
B (249.678 nm)	0.100680	ppm	0.000499	0.50	2884.040000	Y 242.219
Ba (493.408 nm)	0.010440	ppm	0.000302	2.90	1204.240000	Y_R 488.368
Be (234.861 nm)	0.001042	ppm	0.000020	1.96	274.439000	Y_R 488.368
Bi (223.061 nm)	-0.000158 Qu	ppm	0.000852	> 100.00	16.935500 Q	Y 377.433
Ca (315.887 nm)	0.224442	ppm	0.003642	1.62	199.998356	Y_R 377.433
Cd (214.439 nm)	0.005184	ppm	0.000051	0.98	311.694000	Y 377.433
Co (228.615 nm)	0.010644	ppm	0.000170	1.60	188.102000	Y 242.219
Cr (205.560 nm)	0.010377	ppm	0.000147	1.42	161.803000	Y 377.433
Cu (324.754 nm)	0.017525	ppm	0.000102	0.58	2668.390000	Y 377.433
Fe (238.204 nm)	0.105074	ppm	0.001938	1.84	383.920708	Y_R 377.433
Fe H (259.940 nm)	0.106603 u	ppm	0.000258	0.24	238.190000	Y_R 377.433
K (766.491 nm)	3.108490	ppm	0.070145	2.26	2308.810000	Y_R2 488.368
Li (670.783 nm)	0.026729 Q	ppm	0.000379	1.42	-248.641000 Q	Y_R2 488.368
Mg (279.078 nm)	0.208754	ppm	0.000658	0.32	1302.210000	Y 377.433
Mn (257.610 nm)	0.010514	ppm	0.000036	0.34	2620.800000	Y 377.433
Mo (202.032 nm)	0.020373	ppm	0.000417	2.05	179.590000	Y 377.433
Na (589.592 nm)	1.103700	ppm	0.009743	0.88	6885.570000	Y_R2 488.368
Na H (589.593 nm)	2.309506 u	ppm	0.011283	0.49	5997.372972	Y_R 488.368
Ni (231.604 nm)	0.044052	ppm	0.000719	1.63	315.139000	Y 377.433
P (213.618 nm)	2.886780	ppm	0.016368	0.57	6819.390000	Y 242.219
Pb (220.353 nm)	0.008538	ppm	0.001368	16.02	20.122300	Y 242.219
S (181.972 nm)	0.110686	ppm	0.003034	2.74	57.596138	Y 377.433
Sb (206.834 nm)	0.022252	ppm	0.003024	13.59	49.055300	Y 377.433
Se (196.026 nm)	0.019033	ppm	0.000478	2.51	25.141500	Y 242.219
Si (288.158 nm)	0.497888	ppm	0.000345	0.07	5505.040000	Y 377.433
Sn (189.925 nm)	0.105756	ppm	0.001460	1.38	230.075000	Y 377.433
Sr (421.552 nm)	0.010032	ppm	0.000032	0.32	2305.003065	Y_R 488.368
Th (288.505 nm)	0.017884	ppm	0.001718	9.61	150.480000	Y 377.433
Ti (336.122 nm)	0.009871	ppm	0.000031	0.31	1258.450000	Y 377.433
Tl (190.794 nm)	0.015291	ppm	0.000772	5.05	30.324000	Y 377.433
U (409.013 nm)	0.068127	ppm	0.002123	3.12	281.919000	Y 377.433
V (292.401 nm)	0.010110	ppm	0.000066	0.66	430.054000	Y 377.433
Zn (206.200 nm)	0.022194	ppm	0.000461	2.08	127.815000	Y 377.433
Zr (343.823 nm)	0.013766 Q	ppm	0.000034	0.25	1898.980000 Q	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.979777	8213.222903	0.001607	0.16
Y 377.433	0.954416	432703.305667	0.001565	0.16
Y_R 377.433	0.978686	33763.800000	0.002211	0.23
Y_R 488.368	0.995020	18749.000000	0.003769	0.38
Y_R2 488.368	0.963834	31921.009807	0.008499	0.88

Sample Name: 280-167828-A-18-B@2

Date: 10/28/2022 3:00:27 AM Rack:Tube: 1:61

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.069896	ppm	0.000302	0.43	160083.777368	Y 377.433
Ag (328.068 nm)	0.000178 n	ppm	0.000098	54.84	-205.114000	Y 377.433
Al (167.019 nm)	63.510400 o	ppm	0.167180	0.26	28406.500000	Y_R 377.433
Al H (396.152 nm)	68.659465	ppm	0.100481	0.15	190633.719161	Y_R 377.433
As (188.980 nm)	0.028736	ppm	0.000988	3.44	33.811300	Y 242.219
B (249.678 nm)	0.034994	ppm	0.000451	1.29	831.103000	Y 242.219
Ba (493.408 nm)	1.653680 o	ppm	0.016028	0.97	183110.000000	Y_R 488.368
Be (234.861 nm)	0.003410	ppm	0.000276	8.08	2712.720000	Y_R 488.368
Bi (223.061 nm)	-0.002496 u	ppm	0.000514	20.60	11.068700	Y 377.433
Ca (315.887 nm)	104.768848 o	ppm	0.190260	0.18	96980.407681	Y_R 377.433
Cd (214.439 nm)	0.000430	ppm	0.000033	7.63	134.349000	Y 377.433
Co (228.615 nm)	0.049070	ppm	0.000124	0.25	1098.630000	Y 242.219
Cr (205.560 nm)	0.107277	ppm	0.000285	0.27	1575.630000	Y 377.433
Cu (324.754 nm)	0.099093	ppm	0.000359	0.36	8439.760000	Y 377.433
Fe (238.204 nm)	112.487223 o	ppm	0.225490	0.20	397573.604206	Y_R 377.433
Fe H (259.940 nm)	114.915000	ppm	0.083050	0.07	239346.000000	Y_R 377.433
K (766.491 nm)	12.603800	ppm	0.043872	0.35	11774.200000	Y_R2 488.368
Li (670.783 nm)	0.080388	ppm	0.001228	1.53	1551.380000	Y_R2 488.368
Mg (279.078 nm)	59.325800 o	ppm	0.249615	0.42	358118.000000	Y 377.433
Mn (257.610 nm)	3.111650 o	ppm	0.007433	0.24	753099.000000	Y 377.433
Mo (202.032 nm)	0.002730	ppm	0.000262	9.59	28.450600	Y 377.433
Na (589.592 nm)	4.938950	ppm	0.016351	0.33	32295.200000	Y_R2 488.368
Na H (589.593 nm)	6.071256 u	ppm	0.012084	0.20	22897.153162	Y_R 488.368
Ni (231.604 nm)	0.090920	ppm	0.000061	0.07	663.664000	Y 377.433
P (213.618 nm)	7.396100	ppm	0.053622	0.73	17455.100000	Y 242.219
Pb (220.353 nm)	0.072408	ppm	0.001208	1.67	182.436000	Y 242.219
S (181.972 nm)	2.456152	ppm	0.021621	0.88	1191.867686	Y 377.433
Sb (206.834 nm)	0.003837	ppm	0.002188	57.02	-13.176400	Y 377.433
Se (196.026 nm)	0.000611 u	ppm	0.002749	> 100.00	-10.615600	Y 242.219
Si (288.158 nm)	0.992131	ppm	0.010020	1.01	10907.600000	Y 377.433
Sn (189.925 nm)	0.007735	ppm	0.000897	11.59	21.788100	Y 377.433
Sr (421.552 nm)	1.197829 o	ppm	0.005239	0.44	268309.605193	Y_R 488.368
Th (288.505 nm)	0.084112	ppm	0.001056	1.26	406.308000	Y 377.433
Ti (336.122 nm)	4.831490 o	ppm	0.020871	0.43	721509.000000	Y 377.433
Tl (190.794 nm)	0.002783	ppm	0.001717	61.71	-21.728100	Y 377.433
U (409.013 nm)	-0.069542 u	ppm	0.002472	3.55	-320.891000	Y 377.433
V (292.401 nm)	0.337181	ppm	0.001098	0.33	13965.700000	Y 377.433
Zn (206.200 nm)	0.250348	ppm	0.000824	0.33	1345.500000	Y 377.433
Zr (343.823 nm)	0.078160	ppm	0.001599	2.05	11052.600000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.026958	8608.727680	0.006965	0.68
Y 377.433	0.986023	447033.036764	0.010271	1.04
Y_R 377.433	1.057030	36466.500000	0.004511	0.43
Y_R 488.368	1.074180	20240.600000	0.007748	0.72
Y_R2 488.368	1.051515	34824.883323	0.001101	0.10

Sample Name: 280-167828-A-19-B@2

Date: 10/28/2022 3:04:30 AM Rack:Tube: 1:62

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.066092	ppm	0.000590	0.89	151313.697305	Y 377.433
Ag (328.068 nm)	0.000408 n	ppm	0.000114	27.86	-185.303000	Y 377.433
Al (167.019 nm)	66.768500 o	ppm	0.296646	0.44	29864.800000	Y_R 377.433
Al H (396.152 nm)	72.837077	ppm	0.167668	0.23	202231.618217	Y_R 377.433
As (188.980 nm)	0.026090	ppm	0.002662	10.20	30.370200	Y 242.219
B (249.678 nm)	0.034466	ppm	0.000111	0.32	801.239000	Y 242.219
Ba (493.408 nm)	1.698920 o	ppm	0.009591	0.56	188122.000000	Y_R 488.368
Be (234.861 nm)	0.004097	ppm	0.000241	5.88	3025.340000	Y_R 488.368
Bi (223.061 nm)	-0.003056 u	ppm	0.000773	25.30	9.663500	Y 377.433
Ca (315.887 nm)	111.631377 o	ppm	0.343661	0.31	103333.290611	Y_R 377.433
Cd (214.439 nm)	0.000350	ppm	0.000017	4.86	137.168000	Y 377.433
Co (228.615 nm)	0.051890	ppm	0.000595	1.15	1188.730000	Y 242.219
Cr (205.560 nm)	0.101253	ppm	0.000945	0.93	1483.690000	Y 377.433
Cu (324.754 nm)	0.101402	ppm	0.001086	1.07	8591.330000	Y 377.433
Fe (238.204 nm)	120.183133 o	ppm	0.452774	0.38	424773.085907	Y_R 377.433
Fe H (259.940 nm)	122.615000	ppm	0.308371	0.25	255383.000000	Y_R 377.433
K (766.491 nm)	13.315100	ppm	0.085874	0.64	12483.300000	Y_R2 488.368
Li (670.783 nm)	0.076618	ppm	0.000422	0.55	1424.940000	Y_R2 488.368
Mg (279.078 nm)	57.309500 o	ppm	0.514645	0.90	345928.000000	Y 377.433
Mn (257.610 nm)	3.262830 o	ppm	0.026404	0.81	789684.000000	Y 377.433
Mo (202.032 nm)	0.002181	ppm	0.000371	17.00	23.748000	Y 377.433
Na (589.592 nm)	4.658780	ppm	0.013969	0.30	30669.100000	Y_R2 488.368
Na H (589.593 nm)	5.773154 u	ppm	0.004319	0.07	21746.478547	Y_R 488.368
Ni (231.604 nm)	0.088487	ppm	0.000533	0.60	647.910000	Y 377.433
P (213.618 nm)	7.736210	ppm	0.043551	0.56	18257.300000	Y 242.219
Pb (220.353 nm)	0.067075	ppm	0.001159	1.73	166.774000	Y 242.219
S (181.972 nm)	2.709385	ppm	0.029389	1.08	1313.897100	Y 377.433
Sb (206.834 nm)	0.002890	ppm	0.001415	48.97	-17.155400	Y 377.433
Se (196.026 nm)	0.002142	ppm	0.001896	88.54	-10.331900	Y 242.219
Si (288.158 nm)	0.984454	ppm	0.011770	1.20	10996.700000	Y 377.433
Sn (189.925 nm)	0.007982	ppm	0.000956	11.98	22.311900	Y 377.433
Sr (421.552 nm)	1.601460 o	ppm	0.000743	0.05	358701.996531	Y_R 488.368
Th (288.505 nm)	0.088376	ppm	0.001074	1.22	421.615000	Y 377.433
Ti (336.122 nm)	5.804990 o	ppm	0.052927	0.91	866884.000000	Y 377.433
Tl (190.794 nm)	-0.000075 u	ppm	0.001758	> 100.00	-32.575200	Y 377.433
U (409.013 nm)	-0.068191 u	ppm	0.004850	7.11	-311.612000	Y 377.433
V (292.401 nm)	0.354967	ppm	0.002931	0.83	14726.600000	Y 377.433
Zn (206.200 nm)	0.249540	ppm	0.002394	0.96	1341.190000	Y 377.433
Zr (343.823 nm)	0.124572	ppm	0.001550	1.24	17422.600000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.045868	8767.249425	0.005713	0.55
Y 377.433	1.007031	456556.983725	0.007004	0.70
Y_R 377.433	1.054220	36369.800000	0.001376	0.13
Y_R 488.368	1.073010	20218.600000	0.001795	0.17
Y_R2 488.368	1.037142	34348.853665	0.007154	0.69

Sample Name: 280-167828-A-20-D@2

Date: 10/28/2022 3:08:32 AM Rack:Tube: 1:63

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.071925	ppm	0.000704	0.98	164759.363602	Y 377.433
Ag (328.068 nm)	0.000297 n	ppm	0.000216	72.80	-183.520000	Y 377.433
Al (167.019 nm)	59.794100 o	ppm	0.101717	0.17	26745.400000	Y_R 377.433
Al H (396.152 nm)	64.084513	ppm	0.081264	0.13	177933.040367	Y_R 377.433
As (188.980 nm)	0.031474	ppm	0.000568	1.80	37.371800	Y 242.219
B (249.678 nm)	0.034908	ppm	0.000448	1.28	838.138000	Y 242.219
Ba (493.408 nm)	1.553690 o	ppm	0.010147	0.65	172043.000000	Y_R 488.368
Be (234.861 nm)	0.003552	ppm	0.000224	6.31	2676.590000	Y_R 488.368
Bi (223.061 nm)	-0.005541 u	ppm	0.002314	41.76	3.426580	Y 377.433
Ca (315.887 nm)	98.022899 o	ppm	0.026090	0.03	90735.446716	Y_R 377.433
Cd (214.439 nm)	0.000396	ppm	0.000104	26.22	127.428000	Y 377.433
Co (228.615 nm)	0.045251	ppm	0.000560	1.24	1016.940000	Y 242.219
Cr (205.560 nm)	0.106864	ppm	0.000627	0.59	1570.790000	Y 377.433
Cu (324.754 nm)	0.102129	ppm	0.001151	1.13	8667.150000	Y 377.433
Fe (238.204 nm)	107.759333 o	ppm	0.156915	0.15	380863.931818	Y_R 377.433
Fe H (259.940 nm)	110.025000	ppm	0.047050	0.04	229163.000000	Y_R 377.433
K (766.491 nm)	12.028300	ppm	0.089260	0.74	11200.600000	Y_R2 488.368
Li (670.783 nm)	0.082827	ppm	0.001709	2.06	1633.230000	Y_R2 488.368
Mg (279.078 nm)	56.394000 o	ppm	0.498105	0.88	340421.000000	Y 377.433
Mn (257.610 nm)	2.904870 o	ppm	0.024795	0.85	703056.000000	Y 377.433
Mo (202.032 nm)	0.003035	ppm	0.000285	9.38	31.057900	Y 377.433
Na (589.592 nm)	4.660190	ppm	0.019920	0.43	30475.800000	Y_R2 488.368
Na H (589.593 nm)	5.752131 u	ppm	0.004401	0.08	21506.172248	Y_R 488.368
Ni (231.604 nm)	0.084070	ppm	0.000391	0.47	614.742000	Y 377.433
P (213.618 nm)	7.217110	ppm	0.044063	0.61	17032.900000	Y 242.219
Pb (220.353 nm)	0.084742	ppm	0.001559	1.84	217.936000	Y 242.219
S (181.972 nm)	3.033569	ppm	0.032924	1.09	1468.825153	Y 377.433
Sb (206.834 nm)	0.003180	ppm	0.001674	52.64	-14.095000	Y 377.433
Se (196.026 nm)	-0.001041 u	ppm	0.002596	> 100.00	-11.611200	Y 242.219
Si (288.158 nm)	0.856540	ppm	0.014097	1.65	9603.670000	Y 377.433
Sn (189.925 nm)	0.008391	ppm	0.000090	1.08	23.180600	Y 377.433
Sr (421.552 nm)	1.091880	ppm	0.002370	0.22	244582.605632	Y_R 488.368
Th (288.505 nm)	0.097840	ppm	0.001203	1.23	439.535000	Y 377.433
Ti (336.122 nm)	4.588250 o	ppm	0.040938	0.89	685169.000000	Y 377.433
Tl (190.794 nm)	-0.000136 u	ppm	0.000618	> 100.00	-26.936500	Y 377.433
U (409.013 nm)	-0.071462 u	ppm	0.004837	6.77	-337.502000	Y 377.433
V (292.401 nm)	0.311901	ppm	0.002793	0.90	12925.100000	Y 377.433
Zn (206.200 nm)	0.250455	ppm	0.002360	0.94	1346.080000	Y 377.433
Zr (343.823 nm)	0.116201	ppm	0.000166	0.14	16239.400000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.036068	8685.091763	0.002295	0.22
Y 377.433	0.995068	451133.595874	0.002163	0.22
Y_R 377.433	1.064600	36727.900000	0.002233	0.21
Y_R 488.368	1.081070	20370.400000	0.002402	0.22
Y_R2 488.368	1.046731	34666.453478	0.006348	0.61

Sample Name: 280-167828-A-21-B@2

Date: 10/28/2022 3:12:34 AM Rack:Tube: 1:64

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.069437	ppm	0.001783	2.57	159025.481863	Y 377.433
Ag (328.068 nm)	0.000601 n	ppm	0.000100	16.57	-169.886000	Y 377.433
Al (167.019 nm)	62.374400 o	ppm	0.278629	0.45	27896.800000	Y_R 377.433
Al H (396.152 nm)	66.974106	ppm	0.072849	0.11	185960.888281	Y_R 377.433
As (188.980 nm)	0.029682	ppm	0.001727	5.82	35.040500	Y 242.219
B (249.678 nm)	0.034082	ppm	0.000616	1.81	815.515000	Y 242.219
Ba (493.408 nm)	2.043250 o	ppm	0.017358	0.85	226205.000000	Y_R 488.368
Be (234.861 nm)	0.003646	ppm	0.000092	2.52	2700.480000	Y_R 488.368
Bi (223.061 nm)	-0.001935 u	ppm	0.002311	> 100.00	12.476800	Y 377.433
Ca (315.887 nm)	114.479923 o	ppm	0.125720	0.11	105970.289205	Y_R 377.433
Cd (214.439 nm)	0.000384	ppm	0.000054	14.10	126.543000	Y 377.433
Co (228.615 nm)	0.046477	ppm	0.001044	2.25	1048.320000	Y 242.219
Cr (205.560 nm)	0.102111	ppm	0.002205	2.16	1499.970000	Y 377.433
Cu (324.754 nm)	0.101588	ppm	0.002281	2.25	8612.440000	Y 377.433
Fe (238.204 nm)	107.668844 o	ppm	0.293957	0.27	380544.119254	Y_R 377.433
Fe H (259.940 nm)	109.857000	ppm	0.156877	0.14	228813.000000	Y_R 377.433
K (766.491 nm)	12.388200	ppm	0.048032	0.39	11559.300000	Y_R2 488.368
Li (670.783 nm)	0.077404	ppm	0.001383	1.79	1451.310000	Y_R2 488.368
Mg (279.078 nm)	56.130300 o	ppm	1.270480	2.26	338829.000000	Y 377.433
Mn (257.610 nm)	5.094840 o	ppm	0.102148	2.00	1233030.000000	Y 377.433
Mo (202.032 nm)	0.003304	ppm	0.000210	6.36	33.369100	Y 377.433
Na (589.592 nm)	4.233820	ppm	0.017404	0.41	28587.000000	Y_R2 488.368
Na H (589.593 nm)	5.313736 u	ppm	0.025766	0.48	20268.509879	Y_R 488.368
Ni (231.604 nm)	0.085179	ppm	0.002929	3.44	622.505000	Y 377.433
P (213.618 nm)	6.961910	ppm	0.161872	2.33	16431.000000	Y 242.219
Pb (220.353 nm)	0.067387	ppm	0.000539	0.80	168.652000	Y 242.219
S (181.972 nm)	2.720956	ppm	0.059652	2.19	1323.745214	Y 377.433
Sb (206.834 nm)	0.000205 u	ppm	0.000982	> 100.00	-21.802600	Y 377.433
Se (196.026 nm)	0.002085	ppm	0.002226	> 100.00	-6.589050	Y 242.219
Si (288.158 nm)	0.979435	ppm	0.036055	3.68	10784.300000	Y 377.433
Sn (189.925 nm)	0.008447	ppm	0.000431	5.10	23.299900	Y 377.433
Sr (421.552 nm)	1.450223 o	ppm	0.005842	0.40	324832.835016	Y_R 488.368
Th (288.505 nm)	0.100902	ppm	0.002733	2.71	497.669000	Y 377.433
Ti (336.122 nm)	4.806640 o	ppm	0.109930	2.29	717829.000000	Y 377.433
Tl (190.794 nm)	0.001247	ppm	0.001843	> 100.00	-24.850100	Y 377.433
U (409.013 nm)	-0.067197 u	ppm	0.001641	2.44	-319.673000	Y 377.433
V (292.401 nm)	0.323168	ppm	0.007155	2.21	13395.200000	Y 377.433
Zn (206.200 nm)	0.263232	ppm	0.005351	2.03	1414.270000	Y 377.433
Zr (343.823 nm)	0.115884	ppm	0.001174	1.01	16195.500000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.033828	8666.314454	0.006507	0.63
Y 377.433	0.996951	451987.113581	0.006765	0.68
Y_R 377.433	1.058670	36523.200000	0.004780	0.45
Y_R 488.368	1.077610	20305.200000	0.002441	0.23
Y_R2 488.368	1.039086	34413.257967	0.005650	0.54

Sample Name: 280-167828-A-22-B@2

Date: 10/28/2022 3:16:37 AM Rack:Tube: 1:65

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.063070	ppm	0.001611	2.55	144347.563530	Y 377.433
Ag (328.068 nm)	0.000354 n	ppm	0.000186	52.66	-171.952000	Y 377.433
Al (167.019 nm)	49.101800 o	ppm	0.231742	0.47	21962.100000	Y_R 377.433
Al H (396.152 nm)	51.182349	ppm	0.142045	0.28	142115.279533	Y_R 377.433
As (188.980 nm)	0.021977	ppm	0.000369	1.68	25.022800	Y 242.219
B (249.678 nm)	0.022312	ppm	0.000577	2.59	528.533000	Y 242.219
Ba (493.408 nm)	1.277080 o	ppm	0.007722	0.60	141420.000000	Y_R 488.368
Be (234.861 nm)	0.003053	ppm	0.000111	3.65	2210.510000	Y_R 488.368
Bi (223.061 nm)	-0.005216 u	ppm	0.002411	46.24	4.242140	Y 377.433
Ca (315.887 nm)	80.153768 o	ppm	0.225578	0.28	74193.367034	Y_R 377.433
Cd (214.439 nm)	0.000392	ppm	0.000061	15.55	106.284000	Y 377.433
Co (228.615 nm)	0.040282	ppm	0.001133	2.81	890.034000	Y 242.219
Cr (205.560 nm)	0.078232	ppm	0.001663	2.13	1149.580000	Y 377.433
Cu (324.754 nm)	0.093647	ppm	0.002110	2.25	8054.090000	Y 377.433
Fe (238.204 nm)	87.105068 o	ppm	0.194727	0.22	307866.027906	Y_R 377.433
Fe H (259.940 nm)	88.937300	ppm	0.346971	0.39	185244.000000	Y_R 377.433
K (766.491 nm)	9.582330	ppm	0.048048	0.50	8762.270000	Y_R2 488.368
Li (670.783 nm)	0.072925	ppm	0.001978	2.71	1301.030000	Y_R2 488.368
Mg (279.078 nm)	45.879500 o	ppm	1.076990	2.35	276960.000000	Y 377.433
Mn (257.610 nm)	2.572450 o	ppm	0.053744	2.09	622611.000000	Y 377.433
Mo (202.032 nm)	0.001744	ppm	0.000245	14.06	20.000600	Y 377.433
Na (589.592 nm)	2.634700	ppm	0.013545	0.51	17880.100000	Y_R2 488.368
Na H (589.593 nm)	3.710337 u	ppm	0.021508	0.58	12994.956428	Y_R 488.368
Ni (231.604 nm)	0.072669	ppm	0.000881	1.21	531.110000	Y 377.433
P (213.618 nm)	6.326480	ppm	0.160879	2.54	14932.300000	Y 242.219
Pb (220.353 nm)	0.068897	ppm	0.001530	2.22	176.793000	Y 242.219
S (181.972 nm)	1.034159	ppm	0.020816	2.01	507.320399	Y 377.433
Sb (206.834 nm)	0.002002 u	ppm	0.003206	> 100.00	-14.347800	Y 377.433
Se (196.026 nm)	0.002453	ppm	0.000805	32.80	-4.734660	Y 242.219
Si (288.158 nm)	0.769909	ppm	0.032830	4.26	8653.270000	Y 377.433
Sn (189.925 nm)	0.007412	ppm	0.001473	19.87	21.100300	Y 377.433
Sr (421.552 nm)	0.891767	ppm	0.004013	0.45	199767.830044	Y_R 488.368
Th (288.505 nm)	0.074903	ppm	0.001872	2.50	367.420000	Y 377.433
Ti (336.122 nm)	3.721210 o	ppm	0.079915	2.15	555654.000000	Y 377.433
Tl (190.794 nm)	0.001587 u	ppm	0.002031	> 100.00	-18.707600	Y 377.433
U (409.013 nm)	-0.063047 u	ppm	0.004163	6.60	-311.098000	Y 377.433
V (292.401 nm)	0.249296	ppm	0.005339	2.14	10334.600000	Y 377.433
Zn (206.200 nm)	0.200752	ppm	0.006030	3.00	1080.800000	Y 377.433
Zr (343.823 nm)	0.094235	ppm	0.001084	1.15	13171.700000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.022603	8572.223537	0.004418	0.43
Y 377.433	0.981673	445060.795327	0.004198	0.43
Y_R 377.433	1.058440	36515.200000	0.002093	0.20
Y_R 488.368	1.077080	20295.300000	0.006060	0.56
Y_R2 488.368	1.023711	33904.046862	0.004249	0.42

Sample Name: 280-167828-A-23-B@2

Date: 10/28/2022 3:20:39 AM Rack:Tube: 1:66

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.064350	ppm	0.000815	1.27	147297.333037	Y 377.433
Ag (328.068 nm)	0.000348 n	ppm	0.000143	40.96	-179.791000	Y 377.433
Al (167.019 nm)	56.404500 o	ppm	0.199640	0.35	25225.700000	Y_R 377.433
Al H (396.152 nm)	59.568325	ppm	0.086077	0.14	165411.724727	Y_R 377.433
As (188.980 nm)	0.037735	ppm	0.000183	0.49	45.511800	Y 242.219
B (249.678 nm)	0.030218	ppm	0.000478	1.58	732.287000	Y 242.219
Ba (493.408 nm)	1.516270 o	ppm	0.009051	0.60	167891.000000	Y_R 488.368
Be (234.861 nm)	0.003328	ppm	0.000059	1.76	2415.910000	Y_R 488.368
Bi (223.061 nm)	-0.003087 u	ppm	0.000869	28.16	9.584980	Y 377.433
Ca (315.887 nm)	124.264572 o	ppm	0.191063	0.15	115028.279652	Y_R 377.433
Cd (214.439 nm)	0.000377	ppm	0.000036	9.48	113.643000	Y 377.433
Co (228.615 nm)	0.038897	ppm	0.000896	2.30	876.067000	Y 242.219
Cr (205.560 nm)	0.122538	ppm	0.001190	0.97	1807.980000	Y 377.433
Cu (324.754 nm)	0.100127	ppm	0.001288	1.29	8493.750000	Y 377.433
Fe (238.204 nm)	95.250319 o	ppm	0.127367	0.13	336653.604617	Y_R 377.433
Fe H (259.940 nm)	97.306000	ppm	0.153379	0.16	202673.000000	Y_R 377.433
K (766.491 nm)	10.561400	ppm	0.043859	0.42	9738.240000	Y_R2 488.368
Li (670.783 nm)	0.075840	ppm	0.002642	3.48	1398.830000	Y_R2 488.368
Mg (279.078 nm)	50.517400 o	ppm	0.528549	1.05	304954.000000	Y 377.433
Mn (257.610 nm)	2.468840 o	ppm	0.028061	1.14	597537.000000	Y 377.433
Mo (202.032 nm)	0.005710	ppm	0.000436	7.63	53.975900	Y 377.433
Na (589.592 nm)	4.109270	ppm	0.030693	0.75	27101.600000	Y_R2 488.368
Na H (589.593 nm)	5.152247 u	ppm	0.007557	0.15	19052.021805	Y_R 488.368
Ni (231.604 nm)	0.079662	ppm	0.001047	1.31	581.621000	Y 377.433
P (213.618 nm)	6.311030	ppm	0.038707	0.61	14895.800000	Y 242.219
Pb (220.353 nm)	0.091160	ppm	0.002062	2.26	236.309000	Y 242.219
S (181.972 nm)	1.666385	ppm	0.025624	1.54	810.868742	Y 377.433
Sb (206.834 nm)	0.002725	ppm	0.000812	29.80	-12.775000	Y 377.433
Se (196.026 nm)	0.001714 u	ppm	0.003517	> 100.00	-6.954880	Y 242.219
Si (288.158 nm)	0.863614	ppm	0.018568	2.15	9580.150000	Y 377.433
Sn (189.925 nm)	0.008363	ppm	0.000669	8.00	23.121400	Y 377.433
Sr (421.552 nm)	1.130366 o	ppm	0.000534	0.05	253201.545130	Y_R 488.368
Th (288.505 nm)	0.073102	ppm	0.000902	1.23	360.607000	Y 377.433
Ti (336.122 nm)	4.048070 o	ppm	0.049840	1.23	604598.000000	Y 377.433
Tl (190.794 nm)	-0.000475 u	ppm	0.002409	> 100.00	-24.950100	Y 377.433
U (409.013 nm)	-0.056839 u	ppm	0.001981	3.48	-281.128000	Y 377.433
V (292.401 nm)	0.288032	ppm	0.003200	1.11	11923.600000	Y 377.433
Zn (206.200 nm)	0.216354	ppm	0.003097	1.43	1164.070000	Y 377.433
Zr (343.823 nm)	0.098713	ppm	0.000035	0.04	13809.200000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.021012	8558.880124	0.006925	0.68
Y 377.433	0.984636	446403.812991	0.006678	0.68
Y_R 377.433	1.037080	35778.300000	0.002892	0.28
Y_R 488.368	1.052850	19838.600000	0.001126	0.11
Y_R2 488.368	1.028038	34047.343941	0.000664	0.06

Sample Name: 280-167828-A-24-B@2

Date: 10/28/2022 3:24:40 AM Rack:Tube: 1:67

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.075733	ppm	0.000947	1.25	173538.569699	Y 377.433
Ag (328.068 nm)	0.000151 n	ppm	0.000105	69.50	-194.993000	Y 377.433
Al (167.019 nm)	59.044000 o	ppm	0.124347	0.21	26411.600000	Y_R 377.433
Al H (396.152 nm)	62.546786	ppm	0.156772	0.25	173668.641967	Y_R 377.433
As (188.980 nm)	0.033094	ppm	0.002046	6.18	39.478000	Y 242.219
B (249.678 nm)	0.031455	ppm	0.000428	1.36	738.203000	Y 242.219
Ba (493.408 nm)	1.769440 o	ppm	0.000629	0.04	195914.000000	Y_R 488.368
Be (234.861 nm)	0.004024	ppm	0.000208	5.16	2838.580000	Y_R 488.368
Bi (223.061 nm)	-0.004033 u	ppm	0.001921	47.63	7.209580	Y 377.433
Ca (315.887 nm)	105.047003 o	ppm	0.239791	0.23	97237.905372	Y_R 377.433
Cd (214.439 nm)	0.000399	ppm	0.000095	23.82	129.568000	Y 377.433
Co (228.615 nm)	0.046838	ppm	0.000756	1.61	1052.110000	Y 242.219
Cr (205.560 nm)	0.118384	ppm	0.001071	0.90	1742.040000	Y 377.433
Cu (324.754 nm)	0.101818	ppm	0.001235	1.21	8634.560000	Y 377.433
Fe (238.204 nm)	109.713013 o	ppm	0.226644	0.21	387768.777628	Y_R 377.433
Fe H (259.940 nm)	111.970000	ppm	0.250446	0.22	233212.000000	Y_R 377.433
K (766.491 nm)	13.288900	ppm	0.045422	0.34	12457.100000	Y_R2 488.368
Li (670.783 nm)	0.083746	ppm	0.000795	0.95	1664.060000	Y_R2 488.368
Mg (279.078 nm)	54.915700 o	ppm	0.652232	1.19	331490.000000	Y 377.433
Mn (257.610 nm)	2.788780 o	ppm	0.031504	1.13	674963.000000	Y 377.433
Mo (202.032 nm)	0.003359	ppm	0.000448	13.33	33.840600	Y 377.433
Na (589.592 nm)	2.834430	ppm	0.007996	0.28	19770.200000	Y_R2 488.368
Na H (589.593 nm)	3.917346 u	ppm	0.006243	0.16	14357.279426	Y_R 488.368
Ni (231.604 nm)	0.091543	ppm	0.002113	2.31	667.538000	Y 377.433
P (213.618 nm)	7.064600	ppm	0.083438	1.18	16673.200000	Y 242.219
Pb (220.353 nm)	0.084929	ppm	0.002877	3.39	219.191000	Y 242.219
S (181.972 nm)	1.346725	ppm	0.016385	1.22	658.019982	Y 377.433
Sb (206.834 nm)	0.002332	ppm	0.000710	30.43	-16.096500	Y 377.433
Se (196.026 nm)	0.001264 u	ppm	0.002880	> 100.00	-9.792070	Y 242.219
Si (288.158 nm)	1.071530	ppm	0.032251	3.01	11628.900000	Y 377.433
Sn (189.925 nm)	0.008785	ppm	0.000338	3.85	24.018200	Y 377.433
Sr (421.552 nm)	1.023569	ppm	0.002426	0.24	229284.537917	Y_R 488.368
Th (288.505 nm)	0.086168	ppm	0.005063	5.88	404.591000	Y 377.433
Ti (336.122 nm)	4.724140 o	ppm	0.053568	1.13	705481.000000	Y 377.433
Tl (190.794 nm)	0.000582 u	ppm	0.001223	> 100.00	-26.006000	Y 377.433
U (409.013 nm)	-0.065607 u	ppm	0.003214	4.90	-307.428000	Y 377.433
V (292.401 nm)	0.327167	ppm	0.003584	1.10	13550.700000	Y 377.433
Zn (206.200 nm)	0.240060	ppm	0.003227	1.34	1290.590000	Y 377.433
Zr (343.823 nm)	0.115225	ppm	0.000362	0.31	16111.900000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.035280	8678.485374	0.003517	0.34
Y 377.433	0.995561	451357.269047	0.001924	0.19
Y_R 377.433	1.035550	35725.500000	0.006072	0.59
Y_R 488.368	1.052840	19838.500000	0.007679	0.73
Y_R2 488.368	1.018840	33742.737040	0.002958	0.29

Sample Name: 280-167828-A-25-B@2

Date: 10/28/2022 3:28:42 AM Rack:Tube: 1:68

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.074701	ppm	0.002413	3.23	171158.760171	Y 377.433
Ag (328.068 nm)	0.000119 n	ppm	0.000083	69.67	-202.802000	Y 377.433
Al (167.019 nm)	61.810800 o	ppm	0.254270	0.41	27647.300000	Y_R 377.433
Al H (396.152 nm)	66.555578	ppm	0.462236	0.69	184795.239295	Y_R 377.433
As (188.980 nm)	0.033868	ppm	0.002406	7.11	40.484200	Y 242.219
B (249.678 nm)	0.033811	ppm	0.000999	2.95	801.196000	Y 242.219
Ba (493.408 nm)	1.686990 o	ppm	0.022048	1.31	186794.000000	Y_R 488.368
Be (234.861 nm)	0.004465	ppm	0.000441	9.88	2985.510000	Y_R 488.368
Bi (223.061 nm)	-0.001525 u	ppm	0.002325	> 100.00	13.504500	Y 377.433
Ca (315.887 nm)	106.075522 o	ppm	0.603200	0.57	98190.040965	Y_R 377.433
Cd (214.439 nm)	0.000457	ppm	0.000071	15.54	134.650000	Y 377.433
Co (228.615 nm)	0.054865	ppm	0.001881	3.43	1218.740000	Y 242.219
Cr (205.560 nm)	0.134211	ppm	0.003408	2.54	1977.620000	Y 377.433
Cu (324.754 nm)	0.112134	ppm	0.002964	2.64	9346.220000	Y 377.433
Fe (238.204 nm)	111.188292 o	ppm	0.822137	0.74	392982.823824	Y_R 377.433
Fe H (259.940 nm)	113.616000	ppm	0.720370	0.63	236642.000000	Y_R 377.433
K (766.491 nm)	13.027700	ppm	0.131283	1.01	12196.800000	Y_R2 488.368
Li (670.783 nm)	0.078510	ppm	0.000181	0.23	1488.420000	Y_R2 488.368
Mg (279.078 nm)	60.628100 o	ppm	1.625350	2.68	365985.000000	Y 377.433
Mn (257.610 nm)	3.063530 o	ppm	0.086154	2.81	741452.000000	Y 377.433
Mo (202.032 nm)	0.003525	ppm	0.000523	14.83	35.258800	Y 377.433
Na (589.592 nm)	3.774880	ppm	0.008207	0.22	25325.100000	Y_R2 488.368
Na H (589.593 nm)	4.848256 u	ppm	0.032558	0.67	18013.781274	Y_R 488.368
Ni (231.604 nm)	0.096305	ppm	0.002405	2.50	701.227000	Y 377.433
P (213.618 nm)	7.238450	ppm	0.219253	3.03	17083.300000	Y 242.219
Pb (220.353 nm)	0.091798	ppm	0.002119	2.31	236.959000	Y 242.219
S (181.972 nm)	1.848486	ppm	0.052294	2.83	899.762018	Y 377.433
Sb (206.834 nm)	0.000325 u	ppm	0.003270	> 100.00	-21.106200	Y 377.433
Se (196.026 nm)	0.000212 u	ppm	0.002992	> 100.00	-10.832800	Y 242.219
Si (288.158 nm)	0.987841	ppm	0.051090	5.17	10912.500000	Y 377.433
Sn (189.925 nm)	0.007542	ppm	0.000865	11.47	21.377100	Y 377.433
Sr (421.552 nm)	1.159667 o	ppm	0.008022	0.69	259763.303368	Y_R 488.368
Th (288.505 nm)	0.090155	ppm	0.006321	7.01	422.842000	Y 377.433
Ti (336.122 nm)	5.107130 o	ppm	0.147947	2.90	762669.000000	Y 377.433
Tl (190.794 nm)	0.002293	ppm	0.000783	34.17	-23.967700	Y 377.433
U (409.013 nm)	-0.065614 u	ppm	0.003831	5.84	-306.872000	Y 377.433
V (292.401 nm)	0.364533	ppm	0.009986	2.74	15084.700000	Y 377.433
Zn (206.200 nm)	0.265862	ppm	0.007475	2.81	1428.300000	Y 377.433
Zr (343.823 nm)	0.124050	ppm	0.001659	1.34	17323.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.035393	8679.436206	0.010092	0.97
Y 377.433	0.997094	452052.158073	0.009992	1.00
Y_R 377.433	1.051950	36291.400000	0.001987	0.19
Y_R 488.368	1.068890	20140.900000	0.003904	0.37
Y_R2 488.368	1.029352	34090.870290	0.004492	0.44

Sample Name: 280-167828-A-26-B@2

Date: 10/28/2022 3:32:45 AM Rack:Tube: 1:69

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.071721	ppm	0.000978	1.36	164288.890412	Y 377.433
Ag (328.068 nm)	-0.000557 nu	ppm	0.000376	67.52	-321.318000	Y 377.433
Al (167.019 nm)	64.797100 o	ppm	0.357627	0.55	28982.400000	Y_R 377.433
Al H (396.152 nm)	69.656989	ppm	0.139187	0.20	193398.143106	Y_R 377.433
As (188.980 nm)	0.074039	ppm	0.002027	2.74	92.718200	Y 242.219
B (249.678 nm)	0.039690	ppm	0.000508	1.28	956.241000	Y 242.219
Ba (493.408 nm)	2.074710 o	ppm	0.010410	0.50	229693.000000	Y_R 488.368
Be (234.861 nm)	0.003818	ppm	0.000213	5.57	2871.190000	Y_R 488.368
Bi (223.061 nm)	-0.003107 u	ppm	0.000329	10.58	9.533360	Y 377.433
Ca (315.887 nm)	94.861251 o	ppm	0.090345	0.10	87808.598818	Y_R 377.433
Cd (214.439 nm)	0.000358	ppm	0.000016	4.42	132.799000	Y 377.433
Co (228.615 nm)	0.048924	ppm	0.001037	2.12	1133.370000	Y 242.219
Cr (205.560 nm)	0.367885	ppm	0.004930	1.34	5460.770000	Y 377.433
Cu (324.754 nm)	0.137218	ppm	0.001864	1.36	11135.600000	Y 377.433
Fe (238.204 nm)	115.412849 o	ppm	0.261613	0.23	407913.578465	Y_R 377.433
Fe H (259.940 nm)	117.834000	ppm	0.141979	0.12	245426.000000	Y_R 377.433
K (766.491 nm)	12.195500	ppm	0.081283	0.67	11367.200000	Y_R2 488.368
Li (670.783 nm)	0.080529	ppm	0.001069	1.33	1556.110000	Y_R2 488.368
Mg (279.078 nm)	57.347600 o	ppm	0.704546	1.23	346166.000000	Y 377.433
Mn (257.610 nm)	3.331160 o	ppm	0.036984	1.11	806219.000000	Y 377.433
Mo (202.032 nm)	0.010726	ppm	0.000333	3.11	96.944000	Y 377.433
Na (589.592 nm)	4.109790	ppm	0.004011	0.10	27883.900000	Y_R2 488.368
Na H (589.593 nm)	5.168901 u	ppm	0.014452	0.28	19720.278614	Y_R 488.368
Ni (231.604 nm)	0.154832	ppm	0.002673	1.73	1112.830000	Y 377.433
P (213.618 nm)	7.317570	ppm	0.096601	1.32	17269.900000	Y 242.219
Pb (220.353 nm)	0.223773	ppm	0.003319	1.48	602.837000	Y 242.219
S (181.972 nm)	2.814391	ppm	0.042368	1.51	1364.509280	Y 377.433
Sb (206.834 nm)	0.006627	ppm	0.001215	18.33	0.641650	Y 377.433
Se (196.026 nm)	0.000802 u	ppm	0.001617	> 100.00	-10.763600	Y 242.219
Si (288.158 nm)	0.935052	ppm	0.023412	2.50	10540.300000	Y 377.433
Sn (189.925 nm)	0.013691	ppm	0.000965	7.05	34.444300	Y 377.433
Sr (421.552 nm)	0.993266	ppm	0.001165	0.12	222498.234229	Y_R 488.368
Th (288.505 nm)	0.090081	ppm	0.002325	2.58	439.342000	Y 377.433
Ti (336.122 nm)	5.827280 o	ppm	0.059835	1.03	870158.000000	Y 377.433
Tl (190.794 nm)	0.000593	ppm	0.000601	> 100.00	-31.111500	Y 377.433
U (409.013 nm)	-0.067440 u	ppm	0.006577	9.75	-315.336000	Y 377.433
V (292.401 nm)	0.823898	ppm	0.008858	1.08	33889.300000	Y 377.433
Zn (206.200 nm)	0.285171	ppm	0.003404	1.19	1531.360000	Y 377.433
Zr (343.823 nm)	0.193250	ppm	0.002368	1.23	26798.600000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.037489	8697.009239	0.001109	0.11
Y 377.433	0.996053	451580.028174	0.000584	0.06
Y_R 377.433	1.066100	36779.400000	0.003862	0.36
Y_R 488.368	1.084250	20430.400000	0.006326	0.58
Y_R2 488.368	1.044166	34581.482369	0.003775	0.36

Sample Name: 280-167828-A-27-B@2

Date: 10/28/2022 3:36:47 AM Rack:Tube: 1:70

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.073679	ppm	0.000580	0.79	168804.673726	Y 377.433
Ag (328.068 nm)	0.000094 n	ppm	0.000058	61.61	-206.169000	Y 377.433
Al (167.019 nm)	66.023200 o	ppm	0.196626	0.30	29531.000000	Y_R 377.433
Al H (396.152 nm)	71.502874	ppm	0.092919	0.13	198520.497817	Y_R 377.433
As (188.980 nm)	0.042056	ppm	0.003543	8.42	51.130600	Y 242.219
B (249.678 nm)	0.035813	ppm	0.000196	0.55	843.274000	Y 242.219
Ba (493.408 nm)	1.860140 o	ppm	0.008530	0.46	205956.000000	Y_R 488.368
Be (234.861 nm)	0.003664	ppm	0.000136	3.70	2869.960000	Y_R 488.368
Bi (223.061 nm)	-0.005332 u	ppm	0.000730	13.68	3.949170	Y 377.433
Ca (315.887 nm)	94.578765 o	ppm	0.162495	0.17	87547.090847	Y_R 377.433
Cd (214.439 nm)	0.000400	ppm	0.000091	22.62	138.037000	Y 377.433
Co (228.615 nm)	0.055097	ppm	0.000648	1.18	1222.490000	Y 242.219
Cr (205.560 nm)	0.153243	ppm	0.001260	0.82	2259.520000	Y 377.433
Cu (324.754 nm)	0.105951	ppm	0.000686	0.65	8942.660000	Y 377.433
Fe (238.204 nm)	118.018879 o	ppm	0.133258	0.11	417124.012829	Y_R 377.433
Fe H (259.940 nm)	120.510000	ppm	0.124749	0.10	250998.000000	Y_R 377.433
K (766.491 nm)	13.072900	ppm	0.014028	0.11	12241.800000	Y_R2 488.368
Li (670.783 nm)	0.083121	ppm	0.000519	0.62	1643.100000	Y_R2 488.368
Mg (279.078 nm)	59.310800 o	ppm	0.438254	0.74	358018.000000	Y 377.433
Mn (257.610 nm)	3.427900 o	ppm	0.021023	0.61	829631.000000	Y 377.433
Mo (202.032 nm)	0.003970	ppm	0.000200	5.03	39.071700	Y 377.433
Na (589.592 nm)	3.664460	ppm	0.012020	0.33	24900.200000	Y_R2 488.368
Na H (589.593 nm)	4.672049 u	ppm	0.009472	0.20	17490.781431	Y_R 488.368
Ni (231.604 nm)	0.104079	ppm	0.002437	2.34	756.991000	Y 377.433
P (213.618 nm)	7.782880	ppm	0.042040	0.54	18367.400000	Y 242.219
Pb (220.353 nm)	0.108050	ppm	0.000864	0.80	280.891000	Y 242.219
S (181.972 nm)	1.416955	ppm	0.016241	1.15	693.268599	Y 377.433
Sb (206.834 nm)	0.002761	ppm	0.002116	76.65	-15.650400	Y 377.433
Se (196.026 nm)	0.002394	ppm	0.002369	98.96	-9.552530	Y 242.219
Si (288.158 nm)	1.000890	ppm	0.012217	1.22	11031.200000	Y 377.433
Sn (189.925 nm)	0.009560	ppm	0.001097	11.48	25.666400	Y 377.433
Sr (421.552 nm)	1.098061 o	ppm	0.002807	0.26	245966.761847	Y_R 488.368
Th (288.505 nm)	0.092725	ppm	0.002395	2.58	438.572000	Y 377.433
Ti (336.122 nm)	5.087030 o	ppm	0.023090	0.45	759630.000000	Y 377.433
Tl (190.794 nm)	0.000993 u	ppm	0.001534	> 100.00	-26.936600	Y 377.433
U (409.013 nm)	-0.069630 u	ppm	0.005593	8.03	-319.214000	Y 377.433
V (292.401 nm)	0.397862	ppm	0.002907	0.73	16452.000000	Y 377.433
Zn (206.200 nm)	0.277849	ppm	0.002031	0.73	1492.280000	Y 377.433
Zr (343.823 nm)	0.144153	ppm	0.000039	0.03	20093.200000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.052434	8822.287651	0.006993	0.66
Y 377.433	1.012493	459033.285118	0.007490	0.74
Y_R 377.433	1.089660	37592.200000	0.001071	0.10
Y_R 488.368	1.108700	20891.100000	0.004009	0.36
Y_R2 488.368	1.037766	34369.535050	0.002181	0.21

Sample Name: CCVH-7429327

Date: 10/28/2022 3:40:50 AM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000071	ppm	0.000003	4.70	-883.184323	Y 377.433
Ag (328.068 nm)	0.002198	ppm	0.000128	5.83	-108.451000	Y 377.433
Al (167.019 nm)	50.657200 o	ppm	0.170314	0.34	22636.400000	Y_R 377.433
Al H (396.152 nm)	51.347231	ppm	0.121633	0.24	142533.675040	Y_R 377.433
As (188.980 nm)	0.000534 u	ppm	0.001394	> 100.00	-2.859140	Y 242.219
B (249.678 nm)	0.001678	ppm	0.000250	14.91	23.873400	Y 242.219
Ba (493.408 nm)	0.000624	ppm	0.000189	30.37	164.686000	Y_R 488.368
Be (234.861 nm)	0.000089	ppm	0.000044	49.76	814.697000	Y_R 488.368
Bi (223.061 nm)	-0.002594 u	ppm	0.001912	73.74	10.823200	Y 377.433
Ca (315.887 nm)	-0.007121 u	ppm	0.001909	26.81	-14.371023	Y_R 377.433
Cd (214.439 nm)	-0.000137 u	ppm	0.000004	2.90	37.568600	Y 377.433
Co (228.615 nm)	-0.000347 u	ppm	0.000144	41.47	-20.588100	Y 242.219
Cr (205.560 nm)	0.000918	ppm	0.000130	14.12	6.722490	Y 377.433
Cu (324.754 nm)	0.002700	ppm	0.000211	7.83	2823.240000	Y 377.433
Fe (238.204 nm)	51.040744 o	ppm	0.112280	0.22	180404.706209	Y_R 377.433
Fe H (259.940 nm)	52.023400	ppm	0.118541	0.23	108364.000000	Y_R 377.433
K (766.491 nm)	0.084764	ppm	0.044983	53.07	-705.390000	Y_R2 488.368
Li (670.783 nm)	0.006393	ppm	0.000222	3.47	-930.837000	Y_R2 488.368
Mg (279.078 nm)	-0.006946 u	ppm	0.000480	6.90	-165.958000	Y 377.433
Mn (257.610 nm)	0.000276	ppm	0.000003	1.18	143.178000	Y 377.433
Mo (202.032 nm)	-0.000400 u	ppm	0.000182	45.49	1.634590	Y 377.433
Na (589.592 nm)	251.900000	ppm	0.926102	0.37	1518680.000000	Y_R2 488.368
Na H (589.593 nm)	249.126761	ppm	1.335654	0.54	998834.307940	Y_R 488.368
Ni (231.604 nm)	-0.000624 u	ppm	0.000280	44.94	10.327300	Y 377.433
P (213.618 nm)	5.020330	ppm	0.018011	0.36	11851.600000	Y 242.219
Pb (220.353 nm)	-0.005621 u	ppm	0.001116	19.86	-26.032500	Y 242.219
S (181.972 nm)	5.126240	ppm	0.019665	0.38	2467.561855	Y 377.433
Sb (206.834 nm)	0.000972 u	ppm	0.001741	> 100.00	-21.414200	Y 377.433
Se (196.026 nm)	0.003682	ppm	0.003184	86.47	1.082440	Y 242.219
Si (288.158 nm)	0.015070	ppm	0.000703	4.67	1005.840000	Y 377.433
Sn (189.925 nm)	0.001546	ppm	0.001288	83.29	8.637040	Y 377.433
Sr (421.552 nm)	0.000648	ppm	0.000008	1.22	203.488501	Y_R 488.368
Th (288.505 nm)	5.139160	ppm	0.024638	0.48	14538.200000	Y 377.433
Ti (336.122 nm)	0.001435	ppm	0.000089	6.18	-1.838840	Y 377.433
Tl (190.794 nm)	-0.002314 u	ppm	0.000350	15.10	-9.781990	Y 377.433
U (409.013 nm)	2.551380	ppm	0.001438	0.06	12827.000000	Y 377.433
V (292.401 nm)	-0.000532 u	ppm	0.000074	13.82	333.738000	Y 377.433
Zn (206.200 nm)	0.000756	ppm	0.000296	39.19	13.395100	Y 377.433
Zr (343.823 nm)	0.073448	ppm	0.009630	13.11	10217.600000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.967005	8106.155183	0.002500	0.26
Y 377.433	0.931111	422137.337311	0.004160	0.45
Y_R 377.433	0.969523	33447.700000	0.003752	0.39
Y_R 488.368	0.991587	18684.300000	0.006836	0.69
Y_R2 488.368	0.950792	31489.055012	0.002200	0.23

Sample Name: CCV-7429326

Date: 10/28/2022 3:44:53 AM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.468958	ppm	0.001792	0.38	1080029.852162	Y 377.433
Ag (328.068 nm)	0.512509	ppm	0.000549	0.11	27107.100000	Y 377.433
Al (167.019 nm)	0.545102	ppm	0.004934	0.91	245.346000	Y_R 377.433
Al H (396.152 nm)	0.525459 u	ppm	0.004938	0.94	1531.802150	Y_R 377.433
As (188.980 nm)	0.503961	ppm	0.002189	0.43	651.739000	Y 242.219
B (249.678 nm)	0.501717	ppm	0.000161	0.03	14073.800000	Y 242.219
Ba (493.408 nm)	0.507869	ppm	0.001683	0.33	56237.900000	Y_R 488.368
Be (234.861 nm)	0.516782	ppm	0.003126	0.60	144108.000000	Y_R 488.368
Bi (223.061 nm)	1.051840	ppm	0.002507	0.24	2657.340000	Y 377.433
Ca (315.887 nm)	5.289700	ppm	0.011515	0.22	4889.429495	Y_R 377.433
Cd (214.439 nm)	0.518446	ppm	0.004129	0.80	31705.400000	Y 377.433
Co (228.615 nm)	0.512617	ppm	0.002665	0.52	9724.520000	Y 242.219
Cr (205.560 nm)	0.520397	ppm	0.003875	0.74	7760.880000	Y 377.433
Cu (324.754 nm)	0.525901	ppm	0.000435	0.08	38752.600000	Y 377.433
Fe (238.204 nm)	2.556591	ppm	0.002493	0.10	9048.260720	Y_R 377.433
Fe H (259.940 nm)	2.627790 u	ppm	0.005362	0.20	5489.000000	Y_R 377.433
K (766.491 nm)	49.474700	ppm	0.145564	0.29	48529.000000	Y_R2 488.368
Li (670.783 nm)	0.490230	ppm	0.003918	0.80	15300.000000	Y_R2 488.368
Mg (279.078 nm)	20.612700	ppm	0.030526	0.15	124523.000000	Y 377.433
Mn (257.610 nm)	0.523157	ppm	0.000497	0.09	126681.000000	Y 377.433
Mo (202.032 nm)	0.524744	ppm	0.000703	0.13	4500.320000	Y 377.433
Na (589.592 nm)	25.674000	ppm	0.077876	0.30	155689.000000	Y_R2 488.368
Na H (589.593 nm)	26.211807	ppm	0.047410	0.18	102681.801995	Y_R 488.368
Ni (231.604 nm)	0.529194	ppm	0.000656	0.12	3721.990000	Y 377.433
P (213.618 nm)	0.008329	ppm	0.000918	11.03	30.241900	Y 242.219
Pb (220.353 nm)	0.503626	ppm	0.000772	0.15	1393.300000	Y 242.219
S (181.972 nm)	0.010172	ppm	0.007271	71.47	10.498713	Y 377.433
Sb (206.834 nm)	0.523885	ppm	0.001066	0.20	1319.730000	Y 377.433
Se (196.026 nm)	0.505117	ppm	0.002823	0.56	509.787000	Y 242.219
Si (288.158 nm)	5.136870	ppm	0.013089	0.25	48804.400000	Y 377.433
Sn (189.925 nm)	0.523309	ppm	0.001254	0.24	1117.350000	Y 377.433
Sr (421.552 nm)	0.503462	ppm	0.000322	0.06	112807.737347	Y_R 488.368
Th (288.505 nm)	0.024560	ppm	0.004607	18.76	177.613000	Y 377.433
Ti (336.122 nm)	0.512778	ppm	0.000190	0.04	76363.700000	Y 377.433
Tl (190.794 nm)	0.523828	ppm	0.001159	0.22	1148.620000	Y 377.433
U (409.013 nm)	0.001599 u	ppm	0.003820	> 100.00	-98.242100	Y 377.433
V (292.401 nm)	0.522769	ppm	0.000864	0.17	21325.200000	Y 377.433
Zn (206.200 nm)	0.524832	ppm	0.001012	0.19	2810.460000	Y 377.433
Zr (343.823 nm)	0.544797	ppm	0.011615	2.13	74518.400000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.970820	8138.135675	0.000546	0.06
Y 377.433	0.942895	427480.032984	0.001406	0.15
Y_R 377.433	0.998946	34462.800000	0.005521	0.55
Y_R 488.368	1.016870	19160.700000	0.005737	0.56
Y_R2 488.368	0.980874	32485.339387	0.004104	0.42

Sample Name: CCB

Date: 10/28/2022 3:48:55 AM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000040	ppm	0.000011	27.15	-954.155001	Y 377.433
Ag (328.068 nm)	0.000494	ppm	0.000204	41.34	-133.077000	Y 377.433
Al (167.019 nm)	-0.000159 u	ppm	0.003743	> 100.00	0.593938	Y_R 377.433
Al H (396.152 nm)	-0.005348 u	ppm	0.003652	68.29	8.918278	Y_R 377.433
As (188.980 nm)	0.000357 u	ppm	0.001468	> 100.00	-3.090040	Y 242.219
B (249.678 nm)	0.000544	ppm	0.000117	21.43	94.792400	Y 242.219
Ba (493.408 nm)	-0.000135 u	ppm	0.000208	> 100.00	34.151500	Y_R 488.368
Be (234.861 nm)	-0.000011 u	ppm	0.000013	> 100.00	-19.758800	Y_R 488.368
Bi (223.061 nm)	-0.002955 u	ppm	0.000357	12.08	9.916230	Y 377.433
Ca (315.887 nm)	0.008161	ppm	0.003179	38.95	-0.224413	Y_R 377.433
Cd (214.439 nm)	-0.000014 u	ppm	0.000004	28.66	-6.343530	Y 377.433
Co (228.615 nm)	-0.000242 u	ppm	0.000121	50.01	-18.631200	Y 242.219
Cr (205.560 nm)	0.000090 u	ppm	0.000181	> 100.00	8.493450	Y 377.433
Cu (324.754 nm)	0.001658	ppm	0.000075	4.54	1543.470000	Y 377.433
Fe (238.204 nm)	-0.000339 u	ppm	0.000359	> 100.00	11.360736	Y_R 377.433
Fe H (259.940 nm)	-0.004114 u	ppm	0.002466	59.94	7.602340	Y_R 377.433
K (766.491 nm)	0.061476 u	ppm	0.097038	> 100.00	-728.604000	Y_R2 488.368
Li (670.783 nm)	0.007306	ppm	0.002008	27.48	-900.192000	Y_R2 488.368
Mg (279.078 nm)	-0.001414 u	ppm	0.001806	> 100.00	34.662400	Y 377.433
Mn (257.610 nm)	-0.000164 u	ppm	0.000020	11.97	36.738100	Y 377.433
Mo (202.032 nm)	0.001338	ppm	0.000047	3.52	16.519500	Y 377.433
Na (589.592 nm)	-0.011618 u	ppm	0.012568	> 100.00	147.776000	Y_R2 488.368
Na H (589.593 nm)	1.220818 u	ppm	0.015515	1.27	1606.736343	Y_R 488.368
Ni (231.604 nm)	-0.000066 u	ppm	0.000587	> 100.00	5.383650	Y 377.433
P (213.618 nm)	-0.000525 u	ppm	0.000969	> 100.00	9.358840	Y 242.219
Pb (220.353 nm)	-0.002093 u	ppm	0.000680	32.50	-9.451230	Y 242.219
S (181.972 nm)	0.012926	ppm	0.003279	25.37	10.597379	Y 377.433
Sb (206.834 nm)	-0.001016 u	ppm	0.000050	4.93	-9.467960	Y 377.433
Se (196.026 nm)	-0.001410 u	ppm	0.002465	> 100.00	4.766990	Y 242.219
Si (288.158 nm)	0.003710	ppm	0.000695	18.74	899.855000	Y 377.433
Sn (189.925 nm)	-0.000960 u	ppm	0.000641	66.78	3.312290	Y 377.433
Sr (421.552 nm)	0.000034 u	ppm	0.000074	> 100.00	66.055134	Y_R 488.368
Th (288.505 nm)	0.003396	ppm	0.003104	91.39	108.320000	Y 377.433
Ti (336.122 nm)	-0.000002 u	ppm	0.000070	> 100.00	-216.405000	Y 377.433
Tl (190.794 nm)	0.001414	ppm	0.000830	58.71	-0.184688	Y 377.433
U (409.013 nm)	0.008053	ppm	0.004074	50.59	-19.262100	Y 377.433
V (292.401 nm)	-0.000186 u	ppm	0.000105	56.12	12.937900	Y 377.433
Zn (206.200 nm)	-0.000479 u	ppm	0.000188	39.31	6.804450	Y 377.433
Zr (343.823 nm)	0.000268	ppm	0.000045	16.81	53.089800	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.973971	8164.554970	0.006397	0.66
Y 377.433	0.947781	429694.856534	0.006289	0.66
Y_R 377.433	1.001180	34539.800000	0.001508	0.15
Y_R 488.368	1.020080	19221.200000	0.008183	0.80
Y_R2 488.368	0.984593	32608.508156	0.005094	0.52

Sample Name: CCVL-7434568

Date: 10/28/2022 3:52:58 AM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014682	ppm	0.000006	0.04	32800.062422	Y 377.433
Ag (328.068 nm)	0.010445	ppm	0.000280	2.69	395.577000	Y 377.433
Al (167.019 nm)	0.110188	ppm	0.002204	2.00	49.897000	Y_R 377.433
Al H (396.152 nm)	0.104115 u	ppm	0.003123	3.00	314.511222	Y_R 377.433
As (188.980 nm)	0.014544	ppm	0.001486	10.22	15.356800	Y 242.219
B (249.678 nm)	0.100068	ppm	0.000291	0.29	2866.980000	Y 242.219
Ba (493.408 nm)	0.010050	ppm	0.000193	1.92	1161.000000	Y_R 488.368
Be (234.861 nm)	0.001022	ppm	0.000020	2.00	268.644000	Y_R 488.368
Bi (223.061 nm)	-0.004536 Qu	ppm	0.000646	14.25	5.946850 Q	Y 377.433
Ca (315.887 nm)	0.218459	ppm	0.008841	4.05	194.459188	Y_R 377.433
Cd (214.439 nm)	0.005254	ppm	0.000068	1.30	315.972000	Y 377.433
Co (228.615 nm)	0.010398	ppm	0.000178	1.71	183.437000	Y 242.219
Cr (205.560 nm)	0.010598	ppm	0.000182	1.72	165.104000	Y 377.433
Cu (324.754 nm)	0.017598	ppm	0.000479	2.72	2673.820000	Y 377.433
Fe (238.204 nm)	0.102851	ppm	0.000759	0.74	376.062596	Y_R 377.433
Fe H (259.940 nm)	0.104948 u	ppm	0.001404	1.34	234.743000	Y_R 377.433
K (766.491 nm)	3.101940	ppm	0.029366	0.95	2302.290000	Y_R2 488.368
Li (670.783 nm)	0.027336 Q	ppm	0.001057	3.87	-228.286000 Q	Y_R2 488.368
Mg (279.078 nm)	0.208021	ppm	0.000198	0.10	1297.830000	Y 377.433
Mn (257.610 nm)	0.010460	ppm	0.000033	0.31	2607.910000	Y 377.433
Mo (202.032 nm)	0.020209	ppm	0.000468	2.31	178.182000	Y 377.433
Na (589.592 nm)	1.084600	ppm	0.017101	1.58	6769.770000	Y_R2 488.368
Na H (589.593 nm)	2.235582 u	ppm	0.007762	0.35	5699.483828	Y_R 488.368
Ni (231.604 nm)	0.044417	ppm	0.000146	0.33	317.702000	Y 377.433
P (213.618 nm)	2.901740	ppm	0.016166	0.56	6854.660000	Y 242.219
Pb (220.353 nm)	0.008218	ppm	0.002150	26.16	19.226600	Y 242.219
S (181.972 nm)	0.106204	ppm	0.002686	2.53	55.442511	Y 377.433
Sb (206.834 nm)	0.021554	ppm	0.001032	4.79	47.318500	Y 377.433
Se (196.026 nm)	0.018345	ppm	0.003279	17.87	24.456400	Y 242.219
Si (288.158 nm)	0.498720	ppm	0.000679	0.14	5512.790000	Y 377.433
Sn (189.925 nm)	0.104966	ppm	0.001069	1.02	228.396000	Y 377.433
Sr (421.552 nm)	0.010079	ppm	0.000030	0.29	2315.600064	Y_R 488.368
Th (288.505 nm)	0.016285	ppm	0.003153	19.36	145.965000	Y 377.433
Ti (336.122 nm)	0.009831	ppm	0.000060	0.61	1252.470000	Y 377.433
Tl (190.794 nm)	0.015537	ppm	0.000621	4.00	30.866400	Y 377.433
U (409.013 nm)	0.068588	ppm	0.005098	7.43	284.233000	Y 377.433
V (292.401 nm)	0.010017	ppm	0.000134	1.34	426.320000	Y 377.433
Zn (206.200 nm)	0.021680	ppm	0.000413	1.91	125.070000	Y 377.433
Zr (343.823 nm)	0.013847 Q	ppm	0.000101	0.73	1910.030000 Q	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.983576	8245.071606	0.004357	0.44
Y 377.433	0.959498	435007.310879	0.004949	0.52
Y_R 377.433	1.006960	34739.100000	0.015736	1.56
Y_R 488.368	1.027970	19369.800000	0.015520	1.51
Y_R2 488.368	0.961813	31854.066146	0.005363	0.56

Sample Name: 280-167828-A-28-B@2

Date: 10/28/2022 3:57:00 AM Rack:Tube: 1:71

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.066210	ppm	0.000793	1.20	151586.198240	Y 377.433
Ag (328.068 nm)	0.000020 nu	ppm	0.000107	> 100.00	-224.921000	Y 377.433
Al (167.019 nm)	60.211900 o	ppm	0.325452	0.54	26932.300000	Y_R 377.433
Al H (396.152 nm)	64.417548	ppm	0.356610	0.55	178855.823404	Y_R 377.433
As (188.980 nm)	0.049788	ppm	0.002659	5.34	61.184600	Y 242.219
B (249.678 nm)	0.033131	ppm	0.000279	0.84	787.167000	Y 242.219
Ba (493.408 nm)	1.902500 o	ppm	0.011510	0.61	210634.000000	Y_R 488.368
Be (234.861 nm)	0.003558	ppm	0.000168	4.73	2691.720000	Y_R 488.368
Bi (223.061 nm)	-0.003922 u	ppm	0.000962	24.52	7.489210	Y 377.433
Ca (315.887 nm)	94.285363 o	ppm	0.368744	0.39	87275.478197	Y_R 377.433
Cd (214.439 nm)	0.000423	ppm	0.000150	35.55	129.978000	Y 377.433
Co (228.615 nm)	0.050253	ppm	0.000747	1.49	1118.470000	Y 242.219
Cr (205.560 nm)	0.171694	ppm	0.002215	1.29	2537.240000	Y 377.433
Cu (324.754 nm)	0.109467	ppm	0.001392	1.27	9185.320000	Y 377.433
Fe (238.204 nm)	108.647673 o	ppm	0.342440	0.32	384003.571668	Y_R 377.433
Fe H (259.940 nm)	110.804000	ppm	0.351693	0.32	230784.000000	Y_R 377.433
K (766.491 nm)	11.765100	ppm	0.037688	0.32	10938.100000	Y_R2 488.368
Li (670.783 nm)	0.076722	ppm	0.001009	1.31	1428.420000	Y_R2 488.368
Mg (279.078 nm)	55.447500 o	ppm	0.693245	1.25	334704.000000	Y 377.433
Mn (257.610 nm)	3.202030 o	ppm	0.034501	1.08	774971.000000	Y 377.433
Mo (202.032 nm)	0.006304	ppm	0.000667	10.58	59.064000	Y 377.433
Na (589.592 nm)	4.296670	ppm	0.012552	0.29	28770.100000	Y_R2 488.368
Na H (589.593 nm)	5.348578 u	ppm	0.022647	0.42	20257.670346	Y_R 488.368
Ni (231.604 nm)	0.096940	ppm	0.001085	1.12	705.242000	Y 377.433
P (213.618 nm)	6.944860	ppm	0.104538	1.51	16390.800000	Y 242.219
Pb (220.353 nm)	0.118090	ppm	0.000207	0.18	310.524000	Y 242.219
S (181.972 nm)	1.822555	ppm	0.024327	1.33	887.627088	Y 377.433
Sb (206.834 nm)	0.003909	ppm	0.001498	38.32	-10.363400	Y 377.433
Se (196.026 nm)	0.000392 u	ppm	0.001284	> 100.00	-10.090200	Y 242.219
Si (288.158 nm)	0.830166	ppm	0.019216	2.31	9387.390000	Y 377.433
Sn (189.925 nm)	0.008520	ppm	0.000821	9.63	23.455200	Y 377.433
Sr (421.552 nm)	1.037891	ppm	0.004137	0.40	232491.952393	Y_R 488.368
Th (288.505 nm)	0.086393	ppm	0.002071	2.40	416.013000	Y 377.433
Ti (336.122 nm)	4.765920 o	ppm	0.051678	1.08	711685.000000	Y 377.433
Tl (190.794 nm)	0.000377 u	ppm	0.001403	> 100.00	-26.616100	Y 377.433
U (409.013 nm)	-0.068512 u	ppm	0.003736	5.45	-317.560000	Y 377.433
V (292.401 nm)	0.390599	ppm	0.004755	1.22	16139.700000	Y 377.433
Zn (206.200 nm)	0.254693	ppm	0.002283	0.90	1368.700000	Y 377.433
Zr (343.823 nm)	0.078034	ppm	0.001465	1.88	11023.200000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.040063	8718.585354	0.003576	0.34
Y 377.433	1.002767	454624.156930	0.004413	0.44
Y_R 377.433	1.074560	37071.500000	0.001350	0.13
Y_R 488.368	1.095440	20641.200000	0.005556	0.51
Y_R2 488.368	1.030905	34142.318667	0.009231	0.90

Sample Name: 280-167828-A-29-B@2

Date: 10/28/2022 4:01:03 AM Rack:Tube: 1:72

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.072101	ppm	0.001160	1.61	165166.494229	Y 377.433
Ag (328.068 nm)	-0.000027 nu	ppm	0.000279	> 100.00	-222.746000	Y 377.433
Al (167.019 nm)	67.055300 o	ppm	0.199637	0.30	29993.000000	Y_R 377.433
Al H (396.152 nm)	72.989420	ppm	0.072577	0.10	202653.416969	Y_R 377.433
As (188.980 nm)	0.044878	ppm	0.003025	6.74	54.800800	Y 242.219
B (249.678 nm)	0.037036	ppm	0.000513	1.38	872.090000	Y 242.219
Ba (493.408 nm)	1.926790 o	ppm	0.020119	1.04	213332.000000	Y_R 488.368
Be (234.861 nm)	0.004014	ppm	0.000180	4.47	3006.780000	Y_R 488.368
Bi (223.061 nm)	-0.006219 u	ppm	0.001496	24.05	1.723550	Y 377.433
Ca (315.887 nm)	108.822535 o	ppm	0.072688	0.07	100733.047468	Y_R 377.433
Cd (214.439 nm)	0.000479	ppm	0.000054	11.20	145.329000	Y 377.433
Co (228.615 nm)	0.050375	ppm	0.001119	2.22	1132.620000	Y 242.219
Cr (205.560 nm)	0.164803	ppm	0.002134	1.30	2431.200000	Y 377.433
Cu (324.754 nm)	0.116363	ppm	0.001578	1.36	9656.920000	Y 377.433
Fe (238.204 nm)	120.525959 o	ppm	0.172449	0.14	425984.729276	Y_R 377.433
Fe H (259.940 nm)	123.136000	ppm	0.288100	0.23	256468.000000	Y_R 377.433
K (766.491 nm)	13.017300	ppm	0.025475	0.20	12186.400000	Y_R2 488.368
Li (670.783 nm)	0.082010	ppm	0.001715	2.09	1605.830000	Y_R2 488.368
Mg (279.078 nm)	62.810300 o	ppm	0.872567	1.39	379147.000000	Y 377.433
Mn (257.610 nm)	3.134850 o	ppm	0.043426	1.39	758712.000000	Y 377.433
Mo (202.032 nm)	0.006149	ppm	0.000131	2.12	57.737600	Y 377.433
Na (589.592 nm)	5.484000	ppm	0.018411	0.34	35961.500000	Y_R2 488.368
Na H (589.593 nm)	6.523797 u	ppm	0.023551	0.36	25011.394471	Y_R 488.368
Ni (231.604 nm)	0.106149	ppm	0.002191	2.06	771.955000	Y 377.433
P (213.618 nm)	7.768980	ppm	0.107442	1.38	18334.600000	Y 242.219
Pb (220.353 nm)	0.114296	ppm	0.002379	2.08	297.917000	Y 242.219
S (181.972 nm)	1.815146	ppm	0.028831	1.59	883.910505	Y 377.433
Sb (206.834 nm)	0.002505	ppm	0.001519	60.66	-16.311700	Y 377.433
Se (196.026 nm)	0.003597	ppm	0.002684	74.61	-9.041560	Y 242.219
Si (288.158 nm)	0.948793	ppm	0.023151	2.44	10544.400000	Y 377.433
Sn (189.925 nm)	0.009230	ppm	0.001008	10.92	24.964400	Y 377.433
Sr (421.552 nm)	1.142593 o	ppm	0.002152	0.19	255939.728699	Y_R 488.368
Th (288.505 nm)	0.088913	ppm	0.002985	3.36	421.721000	Y 377.433
Ti (336.122 nm)	5.079130 o	ppm	0.067272	1.32	758496.000000	Y 377.433
Tl (190.794 nm)	0.001476	ppm	0.001777	> 100.00	-25.925200	Y 377.433
U (409.013 nm)	-0.076462 u	ppm	0.002056	2.69	-352.358000	Y 377.433
V (292.401 nm)	0.422697	ppm	0.005394	1.28	17461.000000	Y 377.433
Zn (206.200 nm)	0.277926	ppm	0.003234	1.16	1492.690000	Y 377.433
Zr (343.823 nm)	0.125106	ppm	0.000922	0.74	17496.600000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.041942	8734.334267	0.001579	0.15
Y 377.433	1.003999	455182.576141	0.002608	0.26
Y_R 377.433	1.072580	37003.200000	0.000985	0.09
Y_R 488.368	1.094700	20627.300000	0.002718	0.25
Y_R2 488.368	1.030131	34116.681035	0.012649	1.23

Sample Name: MB 280-591169/1-A

Date: 10/28/2022 4:05:07 AM Rack:Tube: 1:73

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000052	ppm	0.000016	31.76	-927.687814	Y 377.433
Ag (328.068 nm)	0.000534 n	ppm	0.000202	37.79	-127.833000	Y 377.433
Al (167.019 nm)	0.007664	ppm	0.002793	36.44	4.098980	Y_R 377.433
Al H (396.152 nm)	0.001084 u	ppm	0.001507	> 100.00	26.689472	Y_R 377.433
As (188.980 nm)	0.000381 u	ppm	0.000941	> 100.00	-3.058670	Y 242.219
B (249.678 nm)	0.000593	ppm	0.000155	26.09	96.105500	Y 242.219
Ba (493.408 nm)	0.000298	ppm	0.000182	61.00	82.148700	Y_R 488.368
Be (234.861 nm)	-0.000019 u	ppm	0.000007	39.53	-21.426500	Y_R 488.368
Bi (223.061 nm)	-0.002887 u	ppm	0.002543	88.06	10.085600	Y 377.433
Ca (315.887 nm)	0.092090	ppm	0.003787	4.11	77.471216	Y_R 377.433
Cd (214.439 nm)	-0.000031 u	ppm	0.000058	> 100.00	-7.367790	Y 377.433
Co (228.615 nm)	-0.000042 u	ppm	0.000187	> 100.00	-14.815800	Y 242.219
Cr (205.560 nm)	0.001631	ppm	0.000093	5.71	31.465300	Y 377.433
Cu (324.754 nm)	0.002367	ppm	0.000213	9.02	1593.870000	Y 377.433
Fe (238.204 nm)	0.024014	ppm	0.001393	5.80	97.429267	Y_R 377.433
Fe H (259.940 nm)	0.022554 u	ppm	0.002244	9.95	63.143400	Y_R 377.433
K (766.491 nm)	0.041146	ppm	0.028563	69.42	-748.870000	Y_R2 488.368
Li (670.783 nm)	0.007374	ppm	0.001521	20.63	-897.921000	Y_R2 488.368
Mg (279.078 nm)	0.017499	ppm	0.000147	0.84	148.912000	Y 377.433
Mn (257.610 nm)	0.000375	ppm	0.000007	1.74	167.204000	Y 377.433
Mo (202.032 nm)	0.000070	ppm	0.000071	> 100.00	5.662610	Y 377.433
Na (589.592 nm)	0.045262	ppm	0.012275	27.12	490.834000	Y_R2 488.368
Na H (589.593 nm)	1.165882 u	ppm	0.004474	0.38	1385.887201	Y_R 488.368
Ni (231.604 nm)	0.000418	ppm	0.000328	78.61	8.784410	Y 377.433
P (213.618 nm)	0.015073	ppm	0.001424	9.45	46.149800	Y 242.219
Pb (220.353 nm)	-0.000091 u	ppm	0.000355	> 100.00	-3.888920	Y 242.219
S (181.972 nm)	0.018658	ppm	0.007260	38.91	13.353054	Y 377.433
Sb (206.834 nm)	-0.000608 u	ppm	0.000395	64.88	-8.416710	Y 377.433
Se (196.026 nm)	-0.000115 u	ppm	0.001905	> 100.00	6.054680	Y 242.219
Si (288.158 nm)	0.014045	ppm	0.000768	5.47	996.255000	Y 377.433
Sn (189.925 nm)	0.012845	ppm	0.000760	5.91	32.646400	Y 377.433
Sr (421.552 nm)	0.000484	ppm	0.000067	13.83	166.906119	Y_R 488.368
Th (288.505 nm)	0.003551	ppm	0.002222	62.59	108.701000	Y 377.433
Ti (336.122 nm)	0.001176	ppm	0.000085	7.26	-40.247700	Y 377.433
Tl (190.794 nm)	0.000602 u	ppm	0.001166	> 100.00	-1.972130	Y 377.433
U (409.013 nm)	0.006869	ppm	0.002142	31.18	-26.254500	Y 377.433
V (292.401 nm)	-0.000323 u	ppm	0.000035	10.87	7.067320	Y 377.433
Zn (206.200 nm)	0.001564	ppm	0.000471	30.12	17.707300	Y 377.433
Zr (343.823 nm)	0.011886	ppm	0.000525	4.42	1641.670000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.996343	8352.092631	0.011604	1.16
Y 377.433	0.968320	439006.807414	0.006567	0.68
Y_R 377.433	1.006280	34715.600000	0.002604	0.26
Y_R 488.368	1.021950	19256.500000	0.002843	0.28
Y_R2 488.368	0.996062	32988.350077	0.002930	0.29

Sample Name: LCS 280-591169/2-A

Date: 10/28/2022 4:09:09 AM Rack:Tube: 1:74

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.943573	ppm	0.000913	0.10	2174148.077653	Y 377.433
Ag (328.068 nm)	0.048458 n	ppm	0.000229	0.47	2443.050000	Y 377.433
Al (167.019 nm)	10.222500 o	ppm	0.037519	0.37	4568.260000	Y_R 377.433
Al H (396.152 nm)	10.018367	ppm	0.063467	0.63	27943.882998	Y_R 377.433
As (188.980 nm)	0.961303	ppm	0.003159	0.33	1246.410000	Y 242.219
B (249.678 nm)	1.868590 o	ppm	0.001747	0.09	52150.600000	Y 242.219
Ba (493.408 nm)	0.980061	ppm	0.005423	0.55	108484.000000	Y_R 488.368
Be (234.861 nm)	1.010810	ppm	0.002223	0.22	281957.000000	Y_R 488.368
Bi (223.061 nm)	-0.002817 u	ppm	0.001236	43.87	10.263500	Y 377.433
Ca (315.887 nm)	50.200114 o	ppm	0.126816	0.25	46464.877847	Y_R 377.433
Cd (214.439 nm)	0.976899	ppm	0.002540	0.26	59751.800000	Y 377.433
Co (228.615 nm)	0.948625	ppm	0.003733	0.39	18009.300000	Y 242.219
Cr (205.560 nm)	0.978892	ppm	0.005698	0.58	14590.500000	Y 377.433
Cu (324.754 nm)	0.993673	ppm	0.003262	0.33	71924.200000	Y 377.433
Fe (238.204 nm)	9.888389 o	ppm	0.013695	0.14	34960.867000	Y_R 377.433
Fe H (259.940 nm)	10.126100	ppm	0.039234	0.39	21105.500000	Y_R 377.433
K (766.491 nm)	47.469100	ppm	0.189141	0.40	46529.700000	Y_R2 488.368
Li (670.783 nm)	0.921204	ppm	0.005255	0.57	29757.400000	Y_R2 488.368
Mg (279.078 nm)	49.667000 o	ppm	0.138016	0.28	299973.000000	Y 377.433
Mn (257.610 nm)	1.006490	ppm	0.001610	0.16	243648.000000	Y 377.433
Mo (202.032 nm)	1.007360	ppm	0.002690	0.27	8634.640000	Y 377.433
Na (589.592 nm)	49.400200	ppm	0.142197	0.29	299370.000000	Y_R2 488.368
Na H (589.593 nm)	48.888032	ppm	0.092866	0.19	194406.600400	Y_R 488.368
Ni (231.604 nm)	0.984317	ppm	0.003440	0.35	6918.910000	Y 377.433
P (213.618 nm)	19.829600 o	ppm	0.009907	0.05	46780.800000	Y 242.219
Pb (220.353 nm)	0.958010	ppm	0.002229	0.23	2650.780000	Y 242.219
S (181.972 nm)	19.338876 o	ppm	0.030546	0.16	9299.130364	Y 377.433
Sb (206.834 nm)	1.055650	ppm	0.002222	0.21	2663.900000	Y 377.433
Se (196.026 nm)	0.962205	ppm	0.001976	0.21	964.724000	Y 242.219
Si (288.158 nm)	1.246530	ppm	0.001177	0.09	12641.600000	Y 377.433
Sn (189.925 nm)	1.013140	ppm	0.001837	0.18	2158.220000	Y 377.433
Sr (421.552 nm)	0.963305	ppm	0.002229	0.23	215788.486712	Y_R 488.368
Th (288.505 nm)	0.010262	ppm	0.000216	2.10	146.191000	Y 377.433
Ti (336.122 nm)	0.991883	ppm	0.001626	0.16	148042.000000	Y 377.433
Tl (190.794 nm)	0.990577	ppm	0.002175	0.22	2174.670000	Y 377.433
U (409.013 nm)	-0.001398 u	ppm	0.000532	38.08	-152.866000	Y 377.433
V (292.401 nm)	1.002740	ppm	0.000623	0.06	40888.300000	Y 377.433
Zn (206.200 nm)	0.985806	ppm	0.001451	0.15	5270.750000	Y 377.433
Zr (343.823 nm)	0.971833	ppm	0.002791	0.29	132933.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.968923	8122.235521	0.001530	0.16
Y 377.433	0.944636	428269.199874	0.002214	0.23
Y_R 377.433	0.987287	34060.600000	0.003674	0.37
Y_R 488.368	1.008140	18996.200000	0.002302	0.23
Y_R2 488.368	0.968258	32067.525176	0.003989	0.41

Sample Name: LCSD 280-591169/3-A

Date: 10/28/2022 4:13:12 AM Rack:Tube: 1:75

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.954207	ppm	0.002466	0.26	2198663.304727	Y 377.433
Ag (328.068 nm)	0.049124 n	ppm	0.000144	0.29	2481.210000	Y 377.433
Al (167.019 nm)	10.211000 o	ppm	0.007998	0.08	4563.160000	Y_R 377.433
Al H (396.152 nm)	9.989276	ppm	0.045745	0.46	27864.656013	Y_R 377.433
As (188.980 nm)	0.966304	ppm	0.001738	0.18	1252.920000	Y 242.219
B (249.678 nm)	1.884150 o	ppm	0.001522	0.08	52584.600000	Y 242.219
Ba (493.408 nm)	0.993436	ppm	0.011180	1.13	109964.000000	Y_R 488.368
Be (234.861 nm)	1.011430	ppm	0.003433	0.34	282130.000000	Y_R 488.368
Bi (223.061 nm)	-0.003748 u	ppm	0.000429	11.45	7.926800	Y 377.433
Ca (315.887 nm)	50.407779 o	ppm	0.157162	0.31	46657.127517	Y_R 377.433
Cd (214.439 nm)	0.986926	ppm	0.000898	0.09	60365.200000	Y 377.433
Co (228.615 nm)	0.960721	ppm	0.002022	0.21	18239.000000	Y 242.219
Cr (205.560 nm)	0.991326	ppm	0.001630	0.16	14775.900000	Y 377.433
Cu (324.754 nm)	0.997833	ppm	0.000556	0.06	72219.000000	Y 377.433
Fe (238.204 nm)	9.915285 o	ppm	0.033617	0.34	35055.925155	Y_R 377.433
Fe H (259.940 nm)	10.149200	ppm	0.022114	0.22	21153.700000	Y_R 377.433
K (766.491 nm)	47.817600	ppm	0.286407	0.60	46877.200000	Y_R2 488.368
Li (670.783 nm)	0.928719	ppm	0.004757	0.51	30009.500000	Y_R2 488.368
Mg (279.078 nm)	50.160800 o	ppm	0.039942	0.08	302955.000000	Y 377.433
Mn (257.610 nm)	1.015400	ppm	0.000231	0.02	245805.000000	Y 377.433
Mo (202.032 nm)	1.022480	ppm	0.000329	0.03	8764.170000	Y 377.433
Na (589.592 nm)	49.747700	ppm	0.211498	0.43	301483.000000	Y_R2 488.368
Na H (589.593 nm)	49.441563	ppm	0.254783	0.52	196648.166097	Y_R 488.368
Ni (231.604 nm)	0.994077	ppm	0.000694	0.07	6987.440000	Y 377.433
P (213.618 nm)	19.939300 o	ppm	0.012214	0.06	47039.600000	Y 242.219
Pb (220.353 nm)	0.966170	ppm	0.001842	0.19	2673.390000	Y 242.219
S (181.972 nm)	19.484289 o	ppm	0.045453	0.23	9369.021523	Y 377.433
Sb (206.834 nm)	1.069890	ppm	0.003117	0.29	2699.910000	Y 377.433
Se (196.026 nm)	0.965804	ppm	0.002405	0.25	968.314000	Y 242.219
Si (288.158 nm)	1.152120	ppm	0.000804	0.07	11763.700000	Y 377.433
Sn (189.925 nm)	1.023140	ppm	0.002545	0.25	2179.450000	Y 377.433
Sr (421.552 nm)	0.973696	ppm	0.005315	0.55	218115.636335	Y_R 488.368
Th (288.505 nm)	0.010461	ppm	0.002393	22.87	147.142000	Y 377.433
Ti (336.122 nm)	1.002280	ppm	0.000644	0.06	149594.000000	Y 377.433
Tl (190.794 nm)	0.999587	ppm	0.003165	0.32	2194.470000	Y 377.433
U (409.013 nm)	0.000221 u	ppm	0.005819	> 100.00	-146.467000	Y 377.433
V (292.401 nm)	1.013050	ppm	0.000776	0.08	41307.200000	Y 377.433
Zn (206.200 nm)	0.990565	ppm	0.002508	0.25	5296.150000	Y 377.433
Zr (343.823 nm)	0.991775	ppm	0.000312	0.03	135660.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.963557	8077.252302	0.003101	0.32
Y 377.433	0.937671	425111.406693	0.002892	0.31
Y_R 377.433	0.992734	34248.500000	0.002214	0.22
Y_R 488.368	1.010860	19047.400000	0.005793	0.57
Y_R2 488.368	0.972080	32194.093296	0.003889	0.40

Sample Name: 280-167828-A-30-B@2

Date: 10/28/2022 4:17:14 AM Rack:Tube: 1:76

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.094434	ppm	0.000328	0.35	216649.480265	Y 377.433
Ag (328.068 nm)	0.000142 n	ppm	0.000115	81.18	-208.627000	Y 377.433
Al (167.019 nm)	77.162900 o	ppm	0.177759	0.23	34512.700000	Y_R 377.433
Al H (396.152 nm)	86.697496	ppm	0.225161	0.26	240712.374084	Y_R 377.433
As (188.980 nm)	0.048127	ppm	0.001945	4.04	59.025100	Y 242.219
B (249.678 nm)	0.044599	ppm	0.000330	0.74	1051.340000	Y 242.219
Ba (493.408 nm)	2.327890 o	ppm	0.014763	0.63	257723.000000	Y_R 488.368
Be (234.861 nm)	0.004827	ppm	0.000144	2.99	3486.630000	Y_R 488.368
Bi (223.061 nm)	0.000841 u	ppm	0.001989	> 100.00	19.442500	Y 377.433
Ca (315.887 nm)	135.132724 o	ppm	0.053591	0.04	125089.308795	Y_R 377.433
Cd (214.439 nm)	0.000609	ppm	0.000019	3.10	169.515000	Y 377.433
Co (228.615 nm)	0.065926	ppm	0.000573	0.87	1450.680000	Y 242.219
Cr (205.560 nm)	0.149137	ppm	0.000349	0.23	2193.140000	Y 377.433
Cu (324.754 nm)	0.124317	ppm	0.000591	0.48	10232.500000	Y 377.433
Fe (238.204 nm)	136.612182 o	ppm	0.130049	0.10	482837.902744	Y_R 377.433
Fe H (259.940 nm)	142.027000	ppm	0.262062	0.18	295812.000000	Y_R 377.433
K (766.491 nm)	14.808500	ppm	0.083359	0.56	13972.000000	Y_R2 488.368
Li (670.783 nm)	0.102315	ppm	0.000838	0.82	2286.960000	Y_R2 488.368
Mg (279.078 nm)	71.016300 o	ppm	0.244191	0.34	428676.000000	Y 377.433
Mn (257.610 nm)	4.505320 o	ppm	0.013255	0.29	1090370.000000	Y 377.433
Mo (202.032 nm)	0.011331	ppm	0.000803	7.09	102.126000	Y 377.433
Na (589.592 nm)	5.801080	ppm	0.021315	0.37	38431.500000	Y_R2 488.368
Na H (589.593 nm)	6.903195 u	ppm	0.016350	0.24	26968.689305	Y_R 488.368
Ni (231.604 nm)	0.111221	ppm	0.000468	0.42	810.351000	Y 377.433
P (213.618 nm)	8.563230	ppm	0.006887	0.08	20207.900000	Y 242.219
Pb (220.353 nm)	0.109960	ppm	0.000795	0.72	282.294000	Y 242.219
S (181.972 nm)	1.793198	ppm	0.006626	0.37	876.575024	Y 377.433
Sb (206.834 nm)	0.005070	ppm	0.000888	17.52	-13.253600	Y 377.433
Se (196.026 nm)	0.003396	ppm	0.002383	70.16	-10.888900	Y 242.219
Si (288.158 nm)	1.021390	ppm	0.006378	0.62	11322.500000	Y 377.433
Sn (189.925 nm)	0.016682	ppm	0.000566	3.39	40.799900	Y 377.433
Sr (421.552 nm)	1.282141 o	ppm	0.002132	0.17	287191.209930	Y_R 488.368
Th (288.505 nm)	0.108032	ppm	0.000893	0.83	505.039000	Y 377.433
Ti (336.122 nm)	5.697980 o	ppm	0.015635	0.27	850981.000000	Y 377.433
Tl (190.794 nm)	0.002065	ppm	0.000328	15.90	-27.776700	Y 377.433
U (409.013 nm)	-0.086715 u	ppm	0.002783	3.21	-393.859000	Y 377.433
V (292.401 nm)	0.411962	ppm	0.001196	0.29	17050.000000	Y 377.433
Zn (206.200 nm)	0.297720	ppm	0.001979	0.66	1598.340000	Y 377.433
Zr (343.823 nm)	0.137817	ppm	0.003456	2.51	19284.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.054194	8837.040549	0.004316	0.41
Y 377.433	1.016559	460876.839975	0.005227	0.51
Y_R 377.433	1.085120	37435.500000	0.001167	0.11
Y_R 488.368	1.100880	20743.700000	0.000833	0.08
Y_R2 488.368	1.062994	35205.039363	0.002130	0.20

Sample Name: 280-167828-A-30-BSD@10

Date: 10/28/2022 4:21:15 AM Rack:Tube: 1:77

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.017178	ppm	0.000050	0.29	38552.332953	Y 377.433
Ag (328.068 nm)	0.000730 n	ppm	0.000164	22.46	-130.357000	Y 377.433
Al (167.019 nm)	19.682100 o	ppm	0.037260	0.19	8801.710000	Y_R 377.433
Al H (396.152 nm)	19.243079	ppm	0.019525	0.10	53446.291335	Y_R 377.433
As (188.980 nm)	0.012140	ppm	0.001107	9.12	12.232100	Y 242.219
B (249.678 nm)	0.009980	ppm	0.000338	3.39	295.757000	Y 242.219
Ba (493.408 nm)	0.509101	ppm	0.002074	0.41	56402.800000	Y_R 488.368
Be (234.861 nm)	0.000995	ppm	0.000006	0.61	753.860000	Y_R 488.368
Bi (223.061 nm)	-0.004062 u	ppm	0.002315	57.00	7.136720	Y 377.433
Ca (315.887 nm)	30.497859 o	ppm	0.039937	0.13	28225.154771	Y_R 377.433
Cd (214.439 nm)	-0.000009 u	ppm	0.000041	> 100.00	25.437000	Y 377.433
Co (228.615 nm)	0.014869	ppm	0.000185	1.24	315.715000	Y 242.219
Cr (205.560 nm)	0.033491	ppm	0.000182	0.54	497.901000	Y 377.433
Cu (324.754 nm)	0.028223	ppm	0.000307	1.09	3426.810000	Y 377.433
Fe (238.204 nm)	31.220184 o	ppm	0.044096	0.14	110353.349152	Y_R 377.433
Fe H (259.940 nm)	32.142300	ppm	0.035234	0.11	66958.000000	Y_R 377.433
K (766.491 nm)	3.296760	ppm	0.121370	3.68	2496.490000	Y_R2 488.368
Li (670.783 nm)	0.028528	ppm	0.000616	2.16	-188.310000	Y_R2 488.368
Mg (279.078 nm)	15.566600	ppm	0.068480	0.44	93995.800000	Y 377.433
Mn (257.610 nm)	1.034640	ppm	0.003859	0.37	250460.000000	Y 377.433
Mo (202.032 nm)	0.002405	ppm	0.000301	12.51	25.660300	Y 377.433
Na (589.592 nm)	1.287410	ppm	0.007978	0.62	8688.300000	Y_R2 488.368
Na H (589.593 nm)	2.398653 u	ppm	0.004299	0.18	6892.591855	Y_R 488.368
Ni (231.604 nm)	0.024261	ppm	0.000369	1.52	181.583000	Y 377.433
P (213.618 nm)	1.886570	ppm	0.002379	0.13	4460.290000	Y 242.219
Pb (220.353 nm)	0.023172	ppm	0.000641	2.77	56.482200	Y 242.219
S (181.972 nm)	0.393615	ppm	0.007478	1.90	195.939136	Y 377.433
Sb (206.834 nm)	0.001601 u	ppm	0.003447	> 100.00	-7.280530	Y 377.433
Se (196.026 nm)	0.000917 u	ppm	0.001657	> 100.00	2.409000	Y 242.219
Si (288.158 nm)	0.223314	ppm	0.005200	2.33	3155.520000	Y 377.433
Sn (189.925 nm)	0.003087	ppm	0.000298	9.66	11.910100	Y 377.433
Sr (421.552 nm)	0.285518	ppm	0.000458	0.16	63999.523869	Y_R 488.368
Th (288.505 nm)	0.028682	ppm	0.003088	10.76	202.842000	Y 377.433
Ti (336.122 nm)	1.267660 o	ppm	0.003736	0.29	189156.000000	Y 377.433
Tl (190.794 nm)	0.000786	ppm	0.000361	46.01	-8.053190	Y 377.433
U (409.013 nm)	-0.015907 u	ppm	0.004273	26.86	-117.250000	Y 377.433
V (292.401 nm)	0.091619	ppm	0.000517	0.56	3808.260000	Y 377.433
Zn (206.200 nm)	0.068128	ppm	0.000061	0.09	372.968000	Y 377.433
Zr (343.823 nm)	0.041569	ppm	0.000786	1.89	5797.190000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.006370	8436.143292	0.009335	0.93
Y 377.433	0.968034	438877.115929	0.011083	1.14
Y_R 377.433	1.037680	35799.100000	0.002886	0.28
Y_R 488.368	1.055570	19890.000000	0.003985	0.38
Y_R2 488.368	1.015876	33644.573621	0.026303	2.59

Sample Name: 280-167828-A-30-C MS

Date: 10/28/2022 4:25:18 AM Rack:Tube: 1:78

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.542394	ppm	0.004165	0.77	1249320.242527	Y 377.433
Ag (328.068 nm)	0.021891 n	ppm	0.000228	1.04	977.119000	Y 377.433
Al (167.019 nm)	80.528100 o	ppm	0.845397	1.05	36010.500000	Y_R 377.433
Al H (396.152 nm)	91.756360	ppm	0.502351	0.55	254788.941169	Y_R 377.433
As (188.980 nm)	0.467523	ppm	0.003161	0.68	604.359000	Y 242.219
B (249.678 nm)	0.866089	ppm	0.004977	0.57	23966.500000	Y 242.219
Ba (493.408 nm)	2.333270 o	ppm	0.027121	1.16	258310.000000	Y_R 488.368
Be (234.861 nm)	0.446139	ppm	0.002470	0.55	126411.000000	Y_R 488.368
Bi (223.061 nm)	-0.004109 u	ppm	0.000737	17.94	7.020050	Y 377.433
Ca (315.887 nm)	131.074163 o	ppm	0.663506	0.51	121332.445831	Y_R 377.433
Cd (214.439 nm)	0.430370	ppm	0.003634	0.84	26446.400000	Y 377.433
Co (228.615 nm)	0.477508	ppm	0.004548	0.95	9220.920000	Y 242.219
Cr (205.560 nm)	0.584308	ppm	0.006408	1.10	8679.720000	Y 377.433
Cu (324.754 nm)	0.591696	ppm	0.005411	0.91	43426.800000	Y 377.433
Fe (238.204 nm)	129.214392 o	ppm	0.191921	0.15	456692.060890	Y_R 377.433
Fe H (259.940 nm)	133.261000	ppm	0.727819	0.55	277555.000000	Y_R 377.433
K (766.491 nm)	35.650600	ppm	0.186499	0.52	34748.400000	Y_R2 488.368
Li (670.783 nm)	0.507720	ppm	0.003228	0.64	15886.700000	Y_R2 488.368
Mg (279.078 nm)	95.035700 o	ppm	0.625311	0.66	573746.000000	Y 377.433
Mn (257.610 nm)	4.098650 o	ppm	0.031179	0.76	991951.000000	Y 377.433
Mo (202.032 nm)	0.433781	ppm	0.004241	0.98	3721.080000	Y 377.433
Na (589.592 nm)	26.823000	ppm	0.121922	0.45	165160.000000	Y_R2 488.368
Na H (589.593 nm)	27.145429	ppm	0.078842	0.29	108401.135612	Y_R 488.368
Ni (231.604 nm)	0.554139	ppm	0.003977	0.72	3918.970000	Y 377.433
P (213.618 nm)	20.774300 o	ppm	0.180485	0.87	49009.000000	Y 242.219
Pb (220.353 nm)	0.511488	ppm	0.004966	0.97	1393.520000	Y 242.219
S (181.972 nm)	10.879418	ppm	0.108753	1.00	5241.590576	Y 377.433
Sb (206.834 nm)	0.267638	ppm	0.002299	0.86	656.477000	Y 377.433
Se (196.026 nm)	0.412500	ppm	0.006601	1.60	398.136000	Y 242.219
Si (288.158 nm)	1.763090	ppm	0.023814	1.35	18085.600000	Y 377.433
Sn (189.925 nm)	0.437055	ppm	0.003357	0.77	934.063000	Y 377.433
Sr (421.552 nm)	1.448591 o	ppm	0.005298	0.37	324467.345710	Y_R 488.368
Th (288.505 nm)	0.107228	ppm	0.003217	3.00	491.366000	Y 377.433
Ti (336.122 nm)	4.812720 o	ppm	0.046920	0.97	718790.000000	Y 377.433
Tl (190.794 nm)	0.430190	ppm	0.004141	0.96	919.792000	Y 377.433
U (409.013 nm)	-0.095146 u	ppm	0.000820	0.86	-481.792000	Y 377.433
V (292.401 nm)	0.784284	ppm	0.006086	0.78	32166.300000	Y 377.433
Zn (206.200 nm)	0.730507	ppm	0.006854	0.94	3908.180000	Y 377.433
Zr (343.823 nm)	0.576413	ppm	0.009506	1.65	79234.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.072354	8989.271453	0.003003	0.28
Y 377.433	1.033508	468560.951333	0.004740	0.46
Y_R 377.433	1.123110	38746.200000	0.002996	0.27
Y_R 488.368	1.141550	21510.100000	0.003196	0.28
Y_R2 488.368	1.095122	36269.084169	0.006524	0.60

Sample Name: 280-167828-A-30-D MSD

Date: 10/28/2022 4:29:20 AM Rack:Tube: 1:79

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.547477	ppm	0.005975	1.09	1261038.507666	Y 377.433
Ag (328.068 nm)	0.022368 n	ppm	0.000167	0.75	998.199000	Y 377.433
Al (167.019 nm)	79.576900 o	ppm	0.428367	0.54	35581.300000	Y_R 377.433
Al H (396.152 nm)	90.065220	ppm	0.149246	0.17	250095.431074	Y_R 377.433
As (188.980 nm)	0.461661	ppm	0.005858	1.27	596.737000	Y 242.219
B (249.678 nm)	0.884560	ppm	0.007179	0.81	24497.900000	Y 242.219
Ba (493.408 nm)	2.347970 o	ppm	0.027088	1.15	259929.000000	Y_R 488.368
Be (234.861 nm)	0.452285	ppm	0.003601	0.80	127991.000000	Y_R 488.368
Bi (223.061 nm)	-0.008095 u	ppm	0.000428	5.28	-2.984550	Y 377.433
Ca (315.887 nm)	130.261318 o	ppm	0.038298	0.03	120579.972235	Y_R 377.433
Cd (214.439 nm)	0.438218	ppm	0.004318	0.99	26917.800000	Y 377.433
Co (228.615 nm)	0.475445	ppm	0.004895	1.03	9211.620000	Y 242.219
Cr (205.560 nm)	0.566398	ppm	0.005861	1.03	8414.930000	Y 377.433
Cu (324.754 nm)	0.574707	ppm	0.004438	0.77	42190.800000	Y 377.433
Fe (238.204 nm)	120.731368 o	ppm	0.757164	0.63	426710.700698	Y_R 377.433
Fe H (259.940 nm)	124.201000	ppm	0.253857	0.20	258687.000000	Y_R 377.433
K (766.491 nm)	35.864800	ppm	0.094830	0.26	34961.900000	Y_R2 488.368
Li (670.783 nm)	0.511698	ppm	0.002140	0.42	16020.100000	Y_R2 488.368
Mg (279.078 nm)	89.506500 o	ppm	0.500151	0.56	540370.000000	Y 377.433
Mn (257.610 nm)	3.856500 o	ppm	0.034494	0.89	933351.000000	Y 377.433
Mo (202.032 nm)	0.439535	ppm	0.003513	0.80	3770.370000	Y 377.433
Na (589.592 nm)	27.235800	ppm	0.037929	0.14	167669.000000	Y_R2 488.368
Na H (589.593 nm)	27.651749	ppm	0.116485	0.42	110453.843399	Y_R 488.368
Ni (231.604 nm)	0.546647	ppm	0.006114	1.12	3864.910000	Y 377.433
P (213.618 nm)	17.473400 o	ppm	0.148431	0.85	41223.600000	Y 242.219
Pb (220.353 nm)	0.523672	ppm	0.002812	0.54	1427.210000	Y 242.219
S (181.972 nm)	10.858762	ppm	0.091683	0.84	5231.094625	Y 377.433
Sb (206.834 nm)	0.254531	ppm	0.001882	0.74	624.248000	Y 377.433
Se (196.026 nm)	0.414308	ppm	0.001844	0.45	401.296000	Y 242.219
Si (288.158 nm)	1.639440	ppm	0.021080	1.29	17064.500000	Y 377.433
Sn (189.925 nm)	0.423595	ppm	0.005943	1.40	905.463000	Y 377.433
Sr (421.552 nm)	1.537962 o	ppm	0.008028	0.52	344481.759094	Y_R 488.368
Th (288.505 nm)	0.101493	ppm	0.003775	3.72	470.424000	Y 377.433
Ti (336.122 nm)	5.602220 o	ppm	0.044342	0.79	836667.000000	Y 377.433
Tl (190.794 nm)	0.437941	ppm	0.004235	0.97	933.517000	Y 377.433
U (409.013 nm)	-0.086773 u	ppm	0.002860	3.30	-448.127000	Y 377.433
V (292.401 nm)	0.800734	ppm	0.006996	0.87	32868.000000	Y 377.433
Zn (206.200 nm)	0.720622	ppm	0.009308	1.29	3855.420000	Y 377.433
Zr (343.823 nm)	0.573021	ppm	0.004454	0.78	78743.900000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.055321	8846.486487	0.007040	0.67
Y 377.433	1.015173	460248.634708	0.008064	0.79
Y_R 377.433	1.104000	38087.100000	0.002141	0.19
Y_R 488.368	1.124190	21183.000000	0.006768	0.60
Y_R2 488.368	1.084141	35905.425088	0.002506	0.23

Sample Name: 280-167828-A-30-Bpds@2

Date: 10/28/2022 4:33:23 AM Rack:Tube: 1:80

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.191382	ppm	0.000358	0.19	440140.858499	Y 377.433
Ag (328.068 nm)	0.046792 n	ppm	0.000313	0.67	2279.220000	Y 377.433
Al (167.019 nm)	76.255200 o	ppm	0.289628	0.38	34107.300000	Y_R 377.433
Al H (396.152 nm)	86.101164	ppm	0.098362	0.11	239069.774828	Y_R 377.433
As (188.980 nm)	0.234417	ppm	0.001402	0.60	301.255000	Y 242.219
B (249.678 nm)	0.131702	ppm	0.000433	0.33	3480.530000	Y 242.219
Ba (493.408 nm)	2.400420 o	ppm	0.021794	0.91	265747.000000	Y_R 488.368
Be (234.861 nm)	0.049724	ppm	0.000557	1.12	15996.300000	Y_R 488.368
Bi (223.061 nm)	-0.004395 u	ppm	0.001897	43.17	6.302750	Y 377.433
Ca (315.887 nm)	152.352677 o	ppm	0.366566	0.24	141030.452455	Y_R 377.433
Cd (214.439 nm)	0.047094	ppm	0.000242	0.51	3012.070000	Y 377.433
Co (228.615 nm)	0.110055	ppm	0.000280	0.25	2286.770000	Y 242.219
Cr (205.560 nm)	0.194196	ppm	0.000796	0.41	2864.740000	Y 377.433
Cu (324.754 nm)	0.171915	ppm	0.000396	0.23	13605.300000	Y 377.433
Fe (238.204 nm)	136.128583 o	ppm	0.197673	0.15	481128.728373	Y_R 377.433
Fe H (259.940 nm)	140.952000	ppm	0.428239	0.30	293572.000000	Y_R 377.433
K (766.491 nm)	32.720600	ppm	0.132674	0.41	31827.700000	Y_R2 488.368
Li (670.783 nm)	0.191657	ppm	0.000932	0.49	5284.030000	Y_R2 488.368
Mg (279.078 nm)	87.868300 o	ppm	0.290836	0.33	530436.000000	Y 377.433
Mn (257.610 nm)	4.473890 o	ppm	0.010377	0.23	1082760.000000	Y 377.433
Mo (202.032 nm)	0.056641	ppm	0.000132	0.23	490.277000	Y 377.433
Na (589.592 nm)	24.454100	ppm	0.055833	0.23	150974.000000	Y_R2 488.368
Na H (589.593 nm)	24.987903	ppm	0.081964	0.33	99794.798177	Y_R 488.368
Ni (231.604 nm)	0.156548	ppm	0.002579	1.65	1128.670000	Y 377.433
P (213.618 nm)	10.397700	ppm	0.104745	1.01	24534.700000	Y 242.219
Pb (220.353 nm)	0.198452	ppm	0.001495	0.75	529.409000	Y 242.219
S (181.972 nm)	1.786884	ppm	0.007369	0.41	873.475511	Y 377.433
Sb (206.834 nm)	0.104508	ppm	0.002210	2.11	236.054000	Y 377.433
Se (196.026 nm)	0.186618	ppm	0.003795	2.03	171.861000	Y 242.219
Si (288.158 nm)	5.738880	ppm	0.032468	0.57	55267.400000	Y 377.433
Sn (189.925 nm)	0.111509	ppm	0.001512	1.36	242.300000	Y 377.433
Sr (421.552 nm)	1.310194 o	ppm	0.005492	0.42	293473.611341	Y_R 488.368
Th (288.505 nm)	0.305839	ppm	0.002010	0.66	1068.150000	Y 377.433
Ti (336.122 nm)	5.682130 o	ppm	0.024154	0.43	848669.000000	Y 377.433
Tl (190.794 nm)	0.181402	ppm	0.002381	1.31	367.291000	Y 377.433
U (409.013 nm)	0.383861	ppm	0.000941	0.25	1958.880000	Y 377.433
V (292.401 nm)	0.454035	ppm	0.001052	0.23	18750.300000	Y 377.433
Zn (206.200 nm)	0.476278	ppm	0.003015	0.63	2551.330000	Y 377.433
Zr (343.823 nm)	0.264669	ppm	0.015003	5.67	36628.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.052266	8820.881332	0.010197	0.97
Y 377.433	1.016516	460857.372391	0.010307	1.01
Y_R 377.433	1.104060	38089.200000	0.001781	0.16
Y_R 488.368	1.121010	21123.000000	0.003004	0.27
Y_R2 488.368	1.079343	35746.526286	0.004051	0.38

Sample Name: CCVH-7429327

Date: 10/28/2022 4:37:25 AM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000074	ppm	0.000012	15.94	-876.084558	Y 377.433
Ag (328.068 nm)	0.002332	ppm	0.000125	5.37	-116.167000	Y 377.433
Al (167.019 nm)	50.663800 o	ppm	0.019289	0.04	22639.200000	Y_R 377.433
Al H (396.152 nm)	51.196080	ppm	0.169288	0.33	142114.209154	Y_R 377.433
As (188.980 nm)	-0.000721 u	ppm	0.001188	> 100.00	-4.491790	Y 242.219
B (249.678 nm)	0.002630	ppm	0.000088	3.35	50.768300	Y 242.219
Ba (493.408 nm)	0.000657	ppm	0.000538	81.95	168.167000	Y_R 488.368
Be (234.861 nm)	0.000054	ppm	0.000018	33.34	801.793000	Y_R 488.368
Bi (223.061 nm)	-0.001371 u	ppm	0.001181	86.13	13.891200	Y 377.433
Ca (315.887 nm)	-0.002353 u	ppm	0.001350	57.37	-9.957262	Y_R 377.433
Cd (214.439 nm)	-0.000145 u	ppm	0.000112	76.84	36.887100	Y 377.433
Co (228.615 nm)	-0.000274 u	ppm	0.000108	39.38	-19.214300	Y 242.219
Cr (205.560 nm)	0.000733	ppm	0.000253	34.52	4.019590	Y 377.433
Cu (324.754 nm)	0.002818	ppm	0.000322	11.44	2829.290000	Y 377.433
Fe (238.204 nm)	50.824003 o	ppm	0.083988	0.17	179638.681316	Y_R 377.433
Fe H (259.940 nm)	51.836900	ppm	0.120643	0.23	107976.000000	Y_R 377.433
K (766.491 nm)	0.085404	ppm	0.052695	61.70	-704.751000	Y_R2 488.368
Li (670.783 nm)	0.006696	ppm	0.000458	6.83	-920.655000	Y_R2 488.368
Mg (279.078 nm)	-0.007291 u	ppm	0.001639	22.48	-167.413000	Y 377.433
Mn (257.610 nm)	0.000301	ppm	0.000018	6.07	149.292000	Y 377.433
Mo (202.032 nm)	0.000046 u	ppm	0.000259	> 100.00	5.457860	Y 377.433
Na (589.592 nm)	250.767000	ppm	0.681614	0.27	1511860.000000	Y_R2 488.368
Na H (589.593 nm)	249.856761	ppm	0.650576	0.26	1001771.336751	Y_R 488.368
Ni (231.604 nm)	-0.000467 u	ppm	0.000209	44.71	11.398700	Y 377.433
P (213.618 nm)	5.017210	ppm	0.035771	0.71	11844.200000	Y 242.219
Pb (220.353 nm)	-0.005964 u	ppm	0.001450	24.30	-26.978500	Y 242.219
S (181.972 nm)	5.097154	ppm	0.016813	0.33	2453.586000	Y 377.433
Sb (206.834 nm)	0.001978 u	ppm	0.003105	> 100.00	-18.611300	Y 377.433
Se (196.026 nm)	0.005662	ppm	0.002084	36.80	3.089510	Y 242.219
Si (288.158 nm)	0.016309	ppm	0.000432	2.65	1017.380000	Y 377.433
Sn (189.925 nm)	0.000648	ppm	0.000438	67.61	6.728790	Y 377.433
Sr (421.552 nm)	0.000590	ppm	0.000093	15.73	190.535245	Y_R 488.368
Th (288.505 nm)	5.122180	ppm	0.009889	0.19	14490.500000	Y 377.433
Ti (336.122 nm)	0.001359	ppm	0.000040	2.96	-13.184100	Y 377.433
Tl (190.794 nm)	-0.002442 u	ppm	0.000377	15.45	-10.061200	Y 377.433
U (409.013 nm)	2.537950	ppm	0.006858	0.27	12764.500000	Y 377.433
V (292.401 nm)	-0.000531 u	ppm	0.000142	26.71	333.346000	Y 377.433
Zn (206.200 nm)	0.000919	ppm	0.000342	37.24	14.264800	Y 377.433
Zr (343.823 nm)	0.012988	ppm	0.000404	3.11	1949.940000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.966487	8101.816526	0.001825	0.19
Y 377.433	0.931548	422335.429728	0.002477	0.27
Y_R 377.433	0.976932	33703.300000	0.003961	0.41
Y_R 488.368	0.994568	18740.500000	0.003098	0.31
Y_R2 488.368	0.957102	31698.034753	0.003800	0.40

Sample Name: CCV-7429326

Date: 10/28/2022 4:41:28 AM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.468581	ppm	0.003941	0.84	1079160.270471	Y 377.433
Ag (328.068 nm)	0.513037	ppm	0.003407	0.66	27127.700000	Y 377.433
Al (167.019 nm)	0.551400 Q	ppm	0.004370	0.79	248.155000 Q	Y_R 377.433
Al H (396.152 nm)	0.518990 u	ppm	0.002221	0.43	1514.041582	Y_R 377.433
As (188.980 nm)	0.502470	ppm	0.004309	0.86	649.800000	Y 242.219
B (249.678 nm)	0.501332	ppm	0.001465	0.29	14063.300000	Y 242.219
Ba (493.408 nm)	0.508213	ppm	0.005239	1.03	56276.000000	Y_R 488.368
Be (234.861 nm)	0.522264	ppm	0.003634	0.70	145637.000000	Y_R 488.368
Bi (223.061 nm)	1.053470	ppm	0.006709	0.64	2661.430000	Y 377.433
Ca (315.887 nm)	5.266376	ppm	0.018641	0.35	4867.839672	Y_R 377.433
Cd (214.439 nm)	0.521520	ppm	0.002193	0.42	31893.400000	Y 377.433
Co (228.615 nm)	0.514237	ppm	0.001897	0.37	9755.250000	Y 242.219
Cr (205.560 nm)	0.521640	ppm	0.003550	0.68	7779.380000	Y 377.433
Cu (324.754 nm)	0.526523	ppm	0.003617	0.69	38799.700000	Y 377.433
Fe (238.204 nm)	2.547611	ppm	0.007912	0.31	9016.520822	Y_R 377.433
Fe H (259.940 nm)	2.613900 u	ppm	0.007381	0.28	5460.080000	Y_R 377.433
K (766.491 nm)	49.304400	ppm	0.180769	0.37	48359.200000	Y_R2 488.368
Li (670.783 nm)	0.486356	ppm	0.004390	0.90	15170.000000	Y_R2 488.368
Mg (279.078 nm)	20.620400	ppm	0.106710	0.52	124569.000000	Y 377.433
Mn (257.610 nm)	0.523773	ppm	0.003729	0.71	126830.000000	Y 377.433
Mo (202.032 nm)	0.526669	ppm	0.001896	0.36	4516.810000	Y 377.433
Na (589.592 nm)	25.649600	ppm	0.106364	0.41	155543.000000	Y_R2 488.368
Na H (589.593 nm)	26.163001	ppm	0.020580	0.08	102485.509403	Y_R 488.368
Ni (231.604 nm)	0.528988	ppm	0.002886	0.55	3720.540000	Y 377.433
P (213.618 nm)	0.006624	ppm	0.001419	21.43	26.221100	Y 242.219
Pb (220.353 nm)	0.499023	ppm	0.000999	0.20	1380.510000	Y 242.219
S (181.972 nm)	0.005149 u	ppm	0.006829	> 100.00	8.088070	Y 377.433
Sb (206.834 nm)	0.524658	ppm	0.006003	1.14	1321.830000	Y 377.433
Se (196.026 nm)	0.505505	ppm	0.001950	0.39	510.176000	Y 242.219
Si (288.158 nm)	5.153310	ppm	0.019668	0.38	48957.700000	Y 377.433
Sn (189.925 nm)	0.524201	ppm	0.003150	0.60	1119.240000	Y 377.433
Sr (421.552 nm)	0.501371	ppm	0.000812	0.16	112339.513854	Y_R 488.368
Th (288.505 nm)	0.037660	ppm	0.010368	27.53	214.254000	Y 377.433
Ti (336.122 nm)	0.512993	ppm	0.003263	0.64	76395.600000	Y 377.433
Tl (190.794 nm)	0.523676	ppm	0.002718	0.52	1148.290000	Y 377.433
U (409.013 nm)	0.002415 u	ppm	0.003703	> 100.00	-91.680500	Y 377.433
V (292.401 nm)	0.523658	ppm	0.003546	0.68	21361.900000	Y 377.433
Zn (206.200 nm)	0.523427	ppm	0.002589	0.49	2802.970000	Y 377.433
Zr (343.823 nm)	0.516297	ppm	0.001935	0.37	70621.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.970054	8131.714196	0.003268	0.34
Y 377.433	0.939898	426121.192843	0.001011	0.11
Y_R 377.433	0.988010	34085.500000	0.003100	0.31
Y_R 488.368	1.006340	18962.300000	0.003010	0.30
Y_R2 488.368	0.964435	31940.885593	0.003036	0.31

Sample Name: CCB

Date: 10/28/2022 4:45:31 AM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000053	ppm	0.000004	6.70	-923.390667	Y 377.433
Ag (328.068 nm)	0.000769	ppm	0.000268	34.79	-118.452000	Y 377.433
Al (167.019 nm)	-0.000028 u	ppm	0.002626	> 100.00	0.652816	Y_R 377.433
Al H (396.152 nm)	-0.006606 u	ppm	0.003217	48.69	5.437134	Y_R 377.433
As (188.980 nm)	-0.001536 u	ppm	0.001506	98.03	-5.550900	Y 242.219
B (249.678 nm)	0.000868	ppm	0.000221	25.43	103.826000	Y 242.219
Ba (493.408 nm)	-0.000039 u	ppm	0.000107	> 100.00	44.866500	Y_R 488.368
Be (234.861 nm)	-0.000029 u	ppm	0.000005	16.82	-24.825300	Y_R 488.368
Bi (223.061 nm)	-0.003542 u	ppm	0.000342	9.66	8.442590	Y 377.433
Ca (315.887 nm)	0.009473	ppm	0.005176	54.65	0.989761	Y_R 377.433
Cd (214.439 nm)	0.000003 u	ppm	0.000049	> 100.00	-5.309360	Y 377.433
Co (228.615 nm)	-0.000044 u	ppm	0.000252	> 100.00	-14.874800	Y 242.219
Cr (205.560 nm)	-0.000075 u	ppm	0.000062	81.64	6.023130	Y 377.433
Cu (324.754 nm)	0.001426	ppm	0.000148	10.36	1526.900000	Y 377.433
Fe (238.204 nm)	0.000666 u	ppm	0.000975	> 100.00	14.910748	Y_R 377.433
Fe H (259.940 nm)	-0.003628 u	ppm	0.000367	10.12	8.614090	Y_R 377.433
K (766.491 nm)	0.056583 u	ppm	0.050936	90.02	-733.481000	Y_R2 488.368
Li (670.783 nm)	0.007037	ppm	0.000521	7.41	-909.220000	Y_R2 488.368
Mg (279.078 nm)	-0.000091 u	ppm	0.000757	> 100.00	42.642700	Y 377.433
Mn (257.610 nm)	-0.000125 u	ppm	0.000020	16.32	46.240600	Y 377.433
Mo (202.032 nm)	0.001428	ppm	0.000278	19.48	17.295500	Y 377.433
Na (589.592 nm)	-0.007148 u	ppm	0.008254	> 100.00	174.584000	Y_R2 488.368
Na H (589.593 nm)	1.225827 u	ppm	0.006929	0.57	1626.779763	Y_R 488.368
Ni (231.604 nm)	0.000103	ppm	0.000078	75.95	6.571080	Y 377.433
P (213.618 nm)	0.000849	ppm	0.000648	76.31	12.600200	Y 242.219
Pb (220.353 nm)	-0.001089 u	ppm	0.000736	67.57	-6.660130	Y 242.219
S (181.972 nm)	0.010476	ppm	0.001276	12.18	9.420301	Y 377.433
Sb (206.834 nm)	-0.000499 u	ppm	0.000808	> 100.00	-8.170500	Y 377.433
Se (196.026 nm)	0.000951	ppm	0.001102	> 100.00	7.120810	Y 242.219
Si (288.158 nm)	0.003119	ppm	0.001065	34.15	894.344000	Y 377.433
Sn (189.925 nm)	0.000370 u	ppm	0.000877	> 100.00	6.137340	Y 377.433
Sr (421.552 nm)	0.000016 u	ppm	0.000085	> 100.00	62.023996	Y_R 488.368
Th (288.505 nm)	0.001939	ppm	0.001535	79.15	104.252000	Y 377.433
Ti (336.122 nm)	0.000019 u	ppm	0.000036	> 100.00	-213.267000	Y 377.433
Tl (190.794 nm)	0.001149	ppm	0.000670	58.35	-0.767580	Y 377.433
U (409.013 nm)	0.007264	ppm	0.002066	28.44	-23.242800	Y 377.433
V (292.401 nm)	-0.000118 u	ppm	0.000178	> 100.00	15.664600	Y 377.433
Zn (206.200 nm)	-0.000354 u	ppm	0.000400	> 100.00	7.470370	Y 377.433
Zr (343.823 nm)	0.000266	ppm	0.000058	21.92	52.765500	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.979700	8212.574906	0.005503	0.56
Y 377.433	0.955621	433249.638281	0.008137	0.85
Y_R 377.433	0.979126	33779.000000	0.003639	0.37
Y_R 488.368	0.993849	18726.900000	0.001423	0.14
Y_R2 488.368	0.966616	32013.122678	0.006907	0.71

Sample Name: CCVL-7434568

Date: 10/28/2022 4:49:34 AM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014648	ppm	0.000014	0.10	32720.691989	Y 377.433
Ag (328.068 nm)	0.010648	ppm	0.000245	2.30	406.186000	Y 377.433
Al (167.019 nm)	0.111976	ppm	0.001789	1.60	50.695900	Y_R 377.433
Al H (396.152 nm)	0.104473 u	ppm	0.001381	1.32	315.537328	Y_R 377.433
As (188.980 nm)	0.014847	ppm	0.001581	10.65	15.750800	Y 242.219
B (249.678 nm)	0.100313	ppm	0.000203	0.20	2873.810000	Y 242.219
Ba (493.408 nm)	0.009976	ppm	0.000227	2.27	1152.840000	Y_R 488.368
Be (234.861 nm)	0.001047	ppm	0.000020	1.96	275.633000	Y_R 488.368
Bi (223.061 nm)	-0.005402 Qu	ppm	0.001744	32.28	3.773990 Q	Y 377.433
Ca (315.887 nm)	0.223967	ppm	0.007316	3.27	199.558318	Y_R 377.433
Cd (214.439 nm)	0.005141	ppm	0.000017	0.33	309.016000	Y 377.433
Co (228.615 nm)	0.010367	ppm	0.000227	2.19	182.849000	Y 242.219
Cr (205.560 nm)	0.010279	ppm	0.000059	0.58	160.343000	Y 377.433
Cu (324.754 nm)	0.017818	ppm	0.000038	0.22	2689.130000	Y 377.433
Fe (238.204 nm)	0.104162	ppm	0.000355	0.34	380.696833	Y_R 377.433
Fe H (259.940 nm)	0.105856 u	ppm	0.000902	0.85	236.634000	Y_R 377.433
K (766.491 nm)	3.095470	ppm	0.054032	1.75	2295.840000	Y_R2 488.368
Li (670.783 nm)	0.028218 Q	ppm	0.001000	3.54	-198.685000 Q	Y_R2 488.368
Mg (279.078 nm)	0.208201	ppm	0.000692	0.33	1298.850000	Y 377.433
Mn (257.610 nm)	0.010438	ppm	0.000027	0.26	2602.510000	Y 377.433
Mo (202.032 nm)	0.020481	ppm	0.000081	0.39	180.512000	Y 377.433
Na (589.592 nm)	1.087010	ppm	0.010642	0.98	6784.770000	Y_R2 488.368
Na H (589.593 nm)	2.239058 u	ppm	0.017769	0.79	5713.826785	Y_R 488.368
Ni (231.604 nm)	0.044144	ppm	0.000426	0.97	315.783000	Y 377.433
P (213.618 nm)	2.886670	ppm	0.015287	0.53	6819.130000	Y 242.219
Pb (220.353 nm)	0.010074	ppm	0.000272	2.70	24.391700	Y 242.219
S (181.972 nm)	0.106776	ppm	0.002902	2.72	55.717123	Y 377.433
Sb (206.834 nm)	0.020766	ppm	0.000493	2.37	45.316100	Y 377.433
Se (196.026 nm)	0.020034	ppm	0.000236	1.18	26.139900	Y 242.219
Si (288.158 nm)	0.497908	ppm	0.000800	0.16	5505.220000	Y 377.433
Sn (189.925 nm)	0.104712	ppm	0.000464	0.44	227.857000	Y 377.433
Sr (421.552 nm)	0.010013	ppm	0.000139	1.39	2300.841196	Y_R 488.368
Th (288.505 nm)	0.015570	ppm	0.002435	15.64	144.024000	Y 377.433
Ti (336.122 nm)	0.009876	ppm	0.000009	0.09	1259.140000	Y 377.433
Tl (190.794 nm)	0.016074	ppm	0.002221	13.82	32.048400	Y 377.433
U (409.013 nm)	0.069087	ppm	0.002701	3.91	286.775000	Y 377.433
V (292.401 nm)	0.010235	ppm	0.000392	3.83	435.179000	Y 377.433
Zn (206.200 nm)	0.021946	ppm	0.000709	3.23	126.492000	Y 377.433
Zr (343.823 nm)	0.013396 Q	ppm	0.000107	0.80	1848.500000 Q	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.982454	8235.665332	0.004306	0.44
Y 377.433	0.957186	433958.767351	0.005143	0.54
Y_R 377.433	0.987329	34062.000000	0.007297	0.74
Y_R 488.368	1.005500	18946.400000	0.014900	1.48
Y_R2 488.368	0.968240	32066.913091	0.003105	0.32

Sample Name: 280-167828-A-31-B@2

Date: 10/28/2022 4:53:36 AM Rack:Tube: 1:81

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.060581	ppm	0.000743	1.23	138610.129009	Y 377.433
Ag (328.068 nm)	0.000218 n	ppm	0.000206	94.47	-197.612000	Y 377.433
Al (167.019 nm)	56.190900 o	ppm	0.241354	0.43	25134.100000	Y_R 377.433
Al H (396.152 nm)	59.456354	ppm	0.015708	0.03	165092.071347	Y_R 377.433
As (188.980 nm)	0.039476	ppm	0.000785	1.99	47.775700	Y 242.219
B (249.678 nm)	0.030148	ppm	0.000289	0.96	716.895000	Y 242.219
Ba (493.408 nm)	1.409240 o	ppm	0.009031	0.64	156056.000000	Y_R 488.368
Be (234.861 nm)	0.003548	ppm	0.000173	4.87	2584.290000	Y_R 488.368
Bi (223.061 nm)	-0.007233 u	ppm	0.000441	6.10	-0.820182	Y 377.433
Ca (315.887 nm)	106.096162 o	ppm	0.107827	0.10	98209.148144	Y_R 377.433
Cd (214.439 nm)	0.000392	ppm	0.000035	8.94	121.377000	Y 377.433
Co (228.615 nm)	0.042179	ppm	0.000751	1.78	933.475000	Y 242.219
Cr (205.560 nm)	0.112612	ppm	0.000459	0.41	1658.090000	Y 377.433
Cu (324.754 nm)	0.127284	ppm	0.001465	1.15	10440.800000	Y 377.433
Fe (238.204 nm)	101.964540 o	ppm	0.040274	0.04	360383.525317	Y_R 377.433
Fe H (259.940 nm)	104.192000	ppm	0.142404	0.14	217014.000000	Y_R 377.433
K (766.491 nm)	12.591300	ppm	0.032743	0.26	11761.700000	Y_R2 488.368
Li (670.783 nm)	0.070929	ppm	0.000954	1.34	1234.080000	Y_R2 488.368
Mg (279.078 nm)	50.741300 o	ppm	0.632016	1.25	306294.000000	Y 377.433
Mn (257.610 nm)	2.841660 o	ppm	0.034146	1.20	687759.000000	Y 377.433
Mo (202.032 nm)	0.005316	ppm	0.000317	5.97	50.602800	Y 377.433
Na (589.592 nm)	3.514240	ppm	0.014862	0.42	23366.300000	Y_R2 488.368
Na H (589.593 nm)	4.548740 u	ppm	0.014406	0.32	16509.739899	Y_R 488.368
Ni (231.604 nm)	0.082853	ppm	0.000878	1.06	605.200000	Y 377.433
P (213.618 nm)	7.437360	ppm	0.110028	1.48	17552.400000	Y 242.219
Pb (220.353 nm)	0.077775	ppm	0.000757	0.97	199.736000	Y 242.219
S (181.972 nm)	4.051757	ppm	0.041600	1.03	1957.925624	Y 377.433
Sb (206.834 nm)	0.002036	ppm	0.002974	> 100.00	-15.638500	Y 377.433
Se (196.026 nm)	-0.001076 u	ppm	0.003871	> 100.00	-10.691100	Y 242.219
Si (288.158 nm)	0.822686	ppm	0.017667	2.15	9177.720000	Y 377.433
Sn (189.925 nm)	0.008600	ppm	0.001244	14.47	23.625000	Y 377.433
Sr (421.552 nm)	0.885345	ppm	0.003178	0.36	198329.467238	Y_R 488.368
Th (288.505 nm)	0.082324	ppm	0.004695	5.70	394.923000	Y 377.433
Ti (336.122 nm)	3.917920 o	ppm	0.042982	1.10	585107.000000	Y 377.433
Tl (190.794 nm)	0.002301	ppm	0.001161	50.44	-18.431600	Y 377.433
U (409.013 nm)	-0.062892 u	ppm	0.004425	7.04	-298.171000	Y 377.433
V (292.401 nm)	0.306578	ppm	0.003032	0.99	12681.800000	Y 377.433
Zn (206.200 nm)	0.258049	ppm	0.002775	1.08	1386.600000	Y 377.433
Zr (343.823 nm)	0.071261	ppm	0.001181	1.66	10076.600000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.042527	8739.238699	0.002954	0.28
Y 377.433	1.001734	454155.631673	0.001863	0.19
Y_R 377.433	1.078940	37222.600000	0.006442	0.60
Y_R 488.368	1.098300	20695.000000	0.009298	0.85
Y_R2 488.368	1.071578	35489.360189	0.005890	0.55

Sample Name: 280-167828-A-32-B@2

Date: 10/28/2022 4:57:38 AM Rack:Tube: 1:82

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.071869	ppm	0.000316	0.44	164631.711415	Y 377.433
Ag (328.068 nm)	0.000321 n	ppm	0.000181	56.44	-197.446000	Y 377.433
Al (167.019 nm)	62.701800 o	ppm	0.232961	0.37	28043.900000	Y_R 377.433
Al H (396.152 nm)	67.544089	ppm	0.121007	0.18	187565.240848	Y_R 377.433
As (188.980 nm)	0.033685	ppm	0.001632	4.85	40.246500	Y 242.219
B (249.678 nm)	0.033252	ppm	0.000139	0.42	788.720000	Y 242.219
Ba (493.408 nm)	1.690250 o	ppm	0.008586	0.51	187153.000000	Y_R 488.368
Be (234.861 nm)	0.003742	ppm	0.000077	2.06	2754.710000	Y_R 488.368
Bi (223.061 nm)	-0.003383 u	ppm	0.002378	70.31	8.842400	Y 377.433
Ca (315.887 nm)	160.311372 o	ppm	0.235956	0.15	148398.062982	Y_R 377.433
Cd (214.439 nm)	0.000399	ppm	0.000027	6.68	129.224000	Y 377.433
Co (228.615 nm)	0.043184	ppm	0.000554	1.28	990.502000	Y 242.219
Cr (205.560 nm)	0.142988	ppm	0.000468	0.33	2109.000000	Y 377.433
Cu (324.754 nm)	0.095071	ppm	0.000700	0.74	8108.000000	Y 377.433
Fe (238.204 nm)	109.266144 o	ppm	0.212008	0.19	386189.417803	Y_R 377.433
Fe H (259.940 nm)	111.718000	ppm	0.308523	0.28	232688.000000	Y_R 377.433
K (766.491 nm)	13.128900	ppm	0.068411	0.52	12297.700000	Y_R2 488.368
Li (670.783 nm)	0.079482	ppm	0.000304	0.38	1521.000000	Y_R2 488.368
Mg (279.078 nm)	56.104500 o	ppm	0.340482	0.61	338670.000000	Y 377.433
Mn (257.610 nm)	2.485830 o	ppm	0.013954	0.56	601648.000000	Y 377.433
Mo (202.032 nm)	0.003894	ppm	0.000264	6.79	38.418300	Y 377.433
Na (589.592 nm)	3.960440	ppm	0.003376	0.09	26447.200000	Y_R2 488.368
Na H (589.593 nm)	4.967908 u	ppm	0.014957	0.30	18497.846499	Y_R 488.368
Ni (231.604 nm)	0.091705	ppm	0.000981	1.07	668.622000	Y 377.433
P (213.618 nm)	6.065320	ppm	0.024408	0.40	14316.300000	Y 242.219
Pb (220.353 nm)	0.084906	ppm	0.000264	0.31	217.263000	Y 242.219
S (181.972 nm)	1.819918	ppm	0.015018	0.83	884.688239	Y 377.433
Sb (206.834 nm)	0.002606	ppm	0.001572	60.31	-14.805900	Y 377.433
Se (196.026 nm)	0.000056 u	ppm	0.002230	> 100.00	-11.111800	Y 242.219
Si (288.158 nm)	0.871605	ppm	0.010106	1.16	9800.020000	Y 377.433
Sn (189.925 nm)	0.007574	ppm	0.000805	10.63	21.445700	Y 377.433
Sr (421.552 nm)	1.284634 o	ppm	0.004662	0.36	287749.415995	Y_R 488.368
Th (288.505 nm)	0.076691	ppm	0.004746	6.19	372.166000	Y 377.433
Ti (336.122 nm)	4.925810 o	ppm	0.026955	0.55	735768.000000	Y 377.433
Tl (190.794 nm)	0.001315 u	ppm	0.002398	> 100.00	-25.315900	Y 377.433
U (409.013 nm)	-0.055242 u	ppm	0.007336	13.28	-266.173000	Y 377.433
V (292.401 nm)	0.363010	ppm	0.001754	0.48	15019.500000	Y 377.433
Zn (206.200 nm)	0.232995	ppm	0.002291	0.98	1252.890000	Y 377.433
Zr (343.823 nm)	0.100673	ppm	0.001222	1.21	14121.100000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.025879	8599.683192	0.001182	0.12
Y 377.433	0.989433	448578.903897	0.004792	0.48
Y_R 377.433	1.045900	36082.800000	0.007595	0.73
Y_R 488.368	1.062980	20029.500000	0.006702	0.63
Y_R2 488.368	1.026127	33984.077616	0.003895	0.38

Sample Name: 280-167828-A-33-B@2

Date: 10/28/2022 5:01:40 AM Rack:Tube: 1:83

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.074160	ppm	0.000043	0.06	169911.946568	Y 377.433
Ag (328.068 nm)	0.000335 n	ppm	0.000326	97.37	-182.804000	Y 377.433
Al (167.019 nm)	58.855300 o	ppm	0.095434	0.16	26323.000000	Y_R 377.433
Al H (396.152 nm)	62.863455	ppm	0.198838	0.32	174551.673460	Y_R 377.433
As (188.980 nm)	0.039672	ppm	0.003259	8.22	48.031100	Y 242.219
B (249.678 nm)	0.030042	ppm	0.000324	1.08	714.614000	Y 242.219
Ba (493.408 nm)	1.678560 o	ppm	0.008746	0.52	185852.000000	Y_R 488.368
Be (234.861 nm)	0.003494	ppm	0.000119	3.40	2564.550000	Y_R 488.368
Bi (223.061 nm)	-0.006782 u	ppm	0.000169	2.50	0.310376	Y 377.433
Ca (315.887 nm)	113.354786 o	ppm	0.420030	0.37	104928.710114	Y_R 377.433
Cd (214.439 nm)	0.000408	ppm	0.000054	13.17	122.066000	Y 377.433
Co (228.615 nm)	0.042901	ppm	0.000291	0.68	954.655000	Y 242.219
Cr (205.560 nm)	0.121363	ppm	0.000639	0.53	1788.660000	Y 377.433
Cu (324.754 nm)	0.101133	ppm	0.000308	0.30	8583.650000	Y 377.433
Fe (238.204 nm)	101.612431 o	ppm	0.226735	0.22	359139.075858	Y_R 377.433
Fe H (259.940 nm)	104.043000	ppm	0.393240	0.38	216704.000000	Y_R 377.433
K (766.491 nm)	11.933500	ppm	0.088556	0.74	11106.000000	Y_R2 488.368
Li (670.783 nm)	0.085826	ppm	0.000962	1.12	1733.810000	Y_R2 488.368
Mg (279.078 nm)	51.750500 o	ppm	0.152693	0.30	312389.000000	Y 377.433
Mn (257.610 nm)	2.621760 o	ppm	0.006253	0.24	634544.000000	Y 377.433
Mo (202.032 nm)	0.004233	ppm	0.000403	9.52	41.323600	Y 377.433
Na (589.592 nm)	3.970260	ppm	0.020067	0.51	26491.000000	Y_R2 488.368
Na H (589.593 nm)	4.931220 u	ppm	0.010380	0.21	18338.358066	Y_R 488.368
Ni (231.604 nm)	0.088036	ppm	0.000696	0.79	641.527000	Y 377.433
P (213.618 nm)	7.373520	ppm	0.050587	0.69	17401.800000	Y 242.219
Pb (220.353 nm)	0.095113	ppm	0.001329	1.40	246.646000	Y 242.219
S (181.972 nm)	1.468623	ppm	0.005640	0.38	716.210305	Y 377.433
Sb (206.834 nm)	0.002588	ppm	0.002048	79.14	-14.229900	Y 377.433
Se (196.026 nm)	0.001474	ppm	0.001084	73.52	-8.221280	Y 242.219
Si (288.158 nm)	0.813353	ppm	0.004564	0.56	9123.630000	Y 377.433
Sn (189.925 nm)	0.010510	ppm	0.001108	10.55	27.684700	Y 377.433
Sr (421.552 nm)	1.038755	ppm	0.000951	0.09	232685.324504	Y_R 488.368
Th (288.505 nm)	0.079243	ppm	0.001686	2.13	381.472000	Y 377.433
Ti (336.122 nm)	4.115790 o	ppm	0.003636	0.09	614674.000000	Y 377.433
Tl (190.794 nm)	0.001148 u	ppm	0.001397	> 100.00	-21.849700	Y 377.433
U (409.013 nm)	-0.065946 u	ppm	0.007052	10.69	-318.791000	Y 377.433
V (292.401 nm)	0.310718	ppm	0.000515	0.17	12857.700000	Y 377.433
Zn (206.200 nm)	0.247713	ppm	0.000734	0.30	1331.440000	Y 377.433
Zr (343.823 nm)	0.109247	ppm	0.001099	1.01	15269.700000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.037943	8700.811615	0.008570	0.83
Y 377.433	0.998408	452647.965367	0.007028	0.70
Y_R 377.433	1.072090	36986.100000	0.004380	0.41
Y_R 488.368	1.093760	20609.600000	0.003629	0.33
Y_R2 488.368	1.037080	34346.828044	0.003722	0.36

Sample Name: 280-167828-A-34-B@2

Date: 10/28/2022 5:05:42 AM Rack:Tube: 1:84

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.061829	ppm	0.001141	1.85	141485.728516	Y 377.433
Ag (328.068 nm)	0.000349 nu	ppm	0.000305	87.60	-181.236000	Y 377.433
Al (167.019 nm)	54.804900 o	ppm	0.162264	0.30	24516.800000	Y_R 377.433
Al H (396.152 nm)	57.787469	ppm	0.247665	0.43	160461.244215	Y_R 377.433
As (188.980 nm)	0.030821	ppm	0.001093	3.54	36.522000	Y 242.219
B (249.678 nm)	0.029083	ppm	0.000442	1.52	682.796000	Y 242.219
Ba (493.408 nm)	1.908130 o	ppm	0.017528	0.92	211253.000000	Y_R 488.368
Be (234.861 nm)	0.003446	ppm	0.000080	2.33	2592.140000	Y_R 488.368
Bi (223.061 nm)	-0.001427 u	ppm	0.000815	57.09	13.750100	Y 377.433
Ca (315.887 nm)	108.734914 o	ppm	0.440015	0.40	100651.933059	Y_R 377.433
Cd (214.439 nm)	0.000428	ppm	0.000125	29.07	125.896000	Y 377.433
Co (228.615 nm)	0.044116	ppm	0.000905	2.05	981.000000	Y 242.219
Cr (205.560 nm)	0.103945	ppm	0.001624	1.56	1528.240000	Y 377.433
Cu (324.754 nm)	0.091393	ppm	0.001502	1.64	7894.020000	Y 377.433
Fe (238.204 nm)	104.205597 o	ppm	0.423884	0.41	368304.043340	Y_R 377.433
Fe H (259.940 nm)	106.565000	ppm	0.288903	0.27	221957.000000	Y_R 377.433
K (766.491 nm)	11.685000	ppm	0.043650	0.37	10858.300000	Y_R2 488.368
Li (670.783 nm)	0.071653	ppm	0.001455	2.03	1258.380000	Y_R2 488.368
Mg (279.078 nm)	48.035800 o	ppm	0.827803	1.72	289951.000000	Y 377.433
Mn (257.610 nm)	2.654080 o	ppm	0.039368	1.48	642364.000000	Y 377.433
Mo (202.032 nm)	0.002635	ppm	0.000198	7.52	27.638200	Y 377.433
Na (589.592 nm)	2.572260	ppm	0.005621	0.22	18383.700000	Y_R2 488.368
Na H (589.593 nm)	3.595073 u	ppm	0.006564	0.18	13210.454018	Y_R 488.368
Ni (231.604 nm)	0.083165	ppm	0.001387	1.67	607.785000	Y 377.433
P (213.618 nm)	6.502520	ppm	0.133967	2.06	15347.500000	Y 242.219
Pb (220.353 nm)	0.083737	ppm	0.000986	1.18	217.103000	Y 242.219
S (181.972 nm)	1.612668	ppm	0.028338	1.76	785.498800	Y 377.433
Sb (206.834 nm)	0.001727	ppm	0.002049	> 100.00	-17.031400	Y 377.433
Se (196.026 nm)	-0.000053 u	ppm	0.002355	> 100.00	-10.277300	Y 242.219
Si (288.158 nm)	0.948144	ppm	0.035109	3.70	10393.800000	Y 377.433
Sn (189.925 nm)	0.007135	ppm	0.000853	11.95	20.513000	Y 377.433
Sr (421.552 nm)	1.272052 o	ppm	0.003700	0.29	284931.674529	Y_R 488.368
Th (288.505 nm)	0.076596	ppm	0.003711	4.85	374.456000	Y 377.433
Ti (336.122 nm)	4.203640 o	ppm	0.072143	1.72	627777.000000	Y 377.433
Tl (190.794 nm)	0.001067 u	ppm	0.001101	> 100.00	-22.480600	Y 377.433
U (409.013 nm)	-0.058820 u	ppm	0.002420	4.12	-278.985000	Y 377.433
V (292.401 nm)	0.303869	ppm	0.004914	1.62	12584.000000	Y 377.433
Zn (206.200 nm)	0.222205	ppm	0.004378	1.97	1195.300000	Y 377.433
Zr (343.823 nm)	0.106855	ppm	0.000619	0.58	14950.700000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.038372	8704.410985	0.002611	0.25
Y 377.433	1.000674	453675.111274	0.002772	0.28
Y_R 377.433	1.070690	36937.800000	0.003049	0.28
Y_R 488.368	1.087920	20499.600000	0.002652	0.24
Y_R2 488.368	1.053023	34874.830771	0.002468	0.23

Sample Name: 280-167828-A-35-B@2

Date: 10/28/2022 5:09:44 AM Rack:Tube: 1:85

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.050780	ppm	0.000176	0.35	116015.681274	Y 377.433
Ag (328.068 nm)	0.000479 n	ppm	0.000263	54.91	-166.465000	Y 377.433
Al (167.019 nm)	42.939600 o	ppm	0.131059	0.31	19210.900000	Y_R 377.433
Al H (396.152 nm)	43.996065	ppm	0.099250	0.23	122173.143122	Y_R 377.433
As (188.980 nm)	0.018751	ppm	0.003185	16.98	20.828100	Y 242.219
B (249.678 nm)	0.018229	ppm	0.000297	1.63	418.479000	Y 242.219
Ba (493.408 nm)	1.100310 o	ppm	0.002421	0.22	121861.000000	Y_R 488.368
Be (234.861 nm)	0.002491	ppm	0.000356	14.29	2022.620000	Y_R 488.368
Bi (223.061 nm)	-0.003251 u	ppm	0.001906	58.62	9.173020	Y 377.433
Ca (315.887 nm)	85.905165 o	ppm	0.193369	0.23	79517.635665	Y_R 377.433
Cd (214.439 nm)	0.000204	ppm	0.000004	2.18	92.842500	Y 377.433
Co (228.615 nm)	0.034805	ppm	0.000037	0.11	776.678000	Y 242.219
Cr (205.560 nm)	0.072574	ppm	0.000150	0.21	1065.770000	Y 377.433
Cu (324.754 nm)	0.076686	ppm	0.000179	0.23	6853.060000	Y 377.433
Fe (238.204 nm)	85.030181 o	ppm	0.253125	0.30	300532.803896	Y_R 377.433
Fe H (259.940 nm)	86.825700	ppm	0.228316	0.26	180846.000000	Y_R 377.433
K (766.491 nm)	8.514350	ppm	0.058599	0.69	7697.650000	Y_R2 488.368
Li (670.783 nm)	0.065292	ppm	0.000572	0.88	1044.980000	Y_R2 488.368
Mg (279.078 nm)	37.486200	ppm	0.149774	0.40	226275.000000	Y 377.433
Mn (257.610 nm)	2.034360 o	ppm	0.007333	0.36	492394.000000	Y 377.433
Mo (202.032 nm)	0.001565	ppm	0.000231	14.75	18.464700	Y 377.433
Na (589.592 nm)	1.423370	ppm	0.001989	0.14	10332.000000	Y_R2 488.368
Na H (589.593 nm)	2.487205 u	ppm	0.008768	0.35	7884.867082	Y_R 488.368
Ni (231.604 nm)	0.063805	ppm	0.000434	0.68	468.545000	Y 377.433
P (213.618 nm)	4.904420	ppm	0.038661	0.79	11578.200000	Y 242.219
Pb (220.353 nm)	0.046413	ppm	0.001676	3.61	116.737000	Y 242.219
S (181.972 nm)	0.733654	ppm	0.003776	0.51	361.674666	Y 377.433
Sb (206.834 nm)	0.002584	ppm	0.001892	73.21	-12.396800	Y 377.433
Se (196.026 nm)	0.001821	ppm	0.001821	99.97	-5.550810	Y 242.219
Si (288.158 nm)	0.711793	ppm	0.007812	1.10	8070.120000	Y 377.433
Sn (189.925 nm)	0.007507	ppm	0.001104	14.71	21.303700	Y 377.433
Sr (421.552 nm)	0.784421	ppm	0.003211	0.41	175727.736011	Y_R 488.368
Th (288.505 nm)	0.058404	ppm	0.002258	3.87	308.903000	Y 377.433
Ti (336.122 nm)	3.465880 o	ppm	0.017209	0.50	517549.000000	Y 377.433
Tl (190.794 nm)	0.000612 u	ppm	0.002460	> 100.00	-19.693000	Y 377.433
U (409.013 nm)	-0.050386 u	ppm	0.002357	4.68	-248.999000	Y 377.433
V (292.401 nm)	0.232270	ppm	0.000899	0.39	9633.190000	Y 377.433
Zn (206.200 nm)	0.176934	ppm	0.001179	0.67	953.681000	Y 377.433
Zr (343.823 nm)	0.074882	ppm	0.000452	0.60	10519.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.023418	8579.051718	0.000955	0.09
Y 377.433	0.986953	447454.606815	0.002963	0.30
Y_R 377.433	1.049460	36205.300000	0.000809	0.08
Y_R 488.368	1.068040	20124.900000	0.001104	0.10
Y_R2 488.368	1.033924	34242.292213	0.007591	0.73

Sample Name: 280-167828-A-36-B@2

Date: 10/28/2022 5:13:46 AM Rack:Tube: 1:86

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.100119	ppm	0.001258	1.26	229755.593781	Y 377.433
Ag (328.068 nm)	0.000326 n	ppm	0.000261	80.22	-179.297000	Y 377.433
Al (167.019 nm)	60.401500 o	ppm	0.137430	0.23	27016.200000	Y_R 377.433
Al H (396.152 nm)	65.474431	ppm	0.103156	0.16	181804.723185	Y_R 377.433
As (188.980 nm)	0.030612	ppm	0.001757	5.74	36.250200	Y 242.219
B (249.678 nm)	0.032680	ppm	0.000588	1.80	777.068000	Y 242.219
Ba (493.408 nm)	1.418010 o	ppm	0.010762	0.76	157030.000000	Y_R 488.368
Be (234.861 nm)	0.003580	ppm	0.000076	2.12	2677.580000	Y_R 488.368
Bi (223.061 nm)	-0.003329 u	ppm	0.001287	38.66	8.977740	Y 377.433
Ca (315.887 nm)	126.080065 o	ppm	0.476134	0.38	116708.945316	Y_R 377.433
Cd (214.439 nm)	0.000486	ppm	0.000038	7.78	132.527000	Y 377.433
Co (228.615 nm)	0.049112	ppm	0.000894	1.82	1067.550000	Y 242.219
Cr (205.560 nm)	0.117929	ppm	0.001512	1.28	1735.900000	Y 377.433
Cu (324.754 nm)	0.115028	ppm	0.001654	1.44	9568.690000	Y 377.433
Fe (238.204 nm)	107.290358 o	ppm	0.422924	0.39	379206.442004	Y_R 377.433
Fe H (259.940 nm)	109.593000	ppm	0.347158	0.32	228263.000000	Y_R 377.433
K (766.491 nm)	11.227400	ppm	0.050649	0.45	10402.100000	Y_R2 488.368
Li (670.783 nm)	0.109767	ppm	0.000683	0.62	2536.940000	Y_R2 488.368
Mg (279.078 nm)	67.167500 o	ppm	0.923530	1.37	405485.000000	Y 377.433
Mn (257.610 nm)	3.045340 o	ppm	0.034878	1.15	737051.000000	Y 377.433
Mo (202.032 nm)	0.007596	ppm	0.000358	4.71	70.135300	Y 377.433
Na (589.592 nm)	3.775410	ppm	0.014201	0.38	24952.500000	Y_R2 488.368
Na H (589.593 nm)	4.762354 u	ppm	0.012836	0.27	17378.188291	Y_R 488.368
Ni (231.604 nm)	0.097565	ppm	0.001764	1.81	709.408000	Y 377.433
P (213.618 nm)	9.623340	ppm	0.134661	1.40	22708.300000	Y 242.219
Pb (220.353 nm)	0.103809	ppm	0.001270	1.22	270.345000	Y 242.219
S (181.972 nm)	1.901494	ppm	0.023048	1.21	925.195210	Y 377.433
Sb (206.834 nm)	0.002365	ppm	0.001899	80.33	-15.782200	Y 377.433
Se (196.026 nm)	0.004635	ppm	0.002066	44.58	-5.731520	Y 242.219
Si (288.158 nm)	0.967131	ppm	0.023552	2.44	10534.900000	Y 377.433
Sn (189.925 nm)	0.007525	ppm	0.000417	5.54	21.341000	Y 377.433
Sr (421.552 nm)	0.820956	ppm	0.002825	0.34	183909.696078	Y_R 488.368
Th (288.505 nm)	0.092525	ppm	0.002418	2.61	427.146000	Y 377.433
Ti (336.122 nm)	3.990430 o	ppm	0.043353	1.09	595997.000000	Y 377.433
Tl (190.794 nm)	0.000294 u	ppm	0.001209	> 100.00	-23.285300	Y 377.433
U (409.013 nm)	-0.067510 u	ppm	0.004701	6.96	-322.569000	Y 377.433
V (292.401 nm)	0.280518	ppm	0.002995	1.07	11615.200000	Y 377.433
Zn (206.200 nm)	0.431897	ppm	0.006182	1.43	2314.460000	Y 377.433
Zr (343.823 nm)	0.099279	ppm	0.000280	0.28	13924.200000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.068319	8955.447878	0.010552	0.99
Y 377.433	1.030761	467315.623090	0.011808	1.15
Y_R 377.433	1.108550	38244.200000	0.002162	0.20
Y_R 488.368	1.125950	21216.100000	0.000734	0.07
Y_R2 488.368	1.094597	36251.702404	0.009659	0.88

Sample Name: 280-167828-A-37-B@2

Date: 10/28/2022 5:17:49 AM Rack:Tube: 1:87

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.077647	ppm	0.000466	0.60	177950.053134	Y 377.433
Ag (328.068 nm)	0.000057 nu	ppm	0.000073	> 100.00	-215.492000	Y 377.433
Al (167.019 nm)	67.682200 o	ppm	0.310879	0.46	30277.200000	Y_R 377.433
Al H (396.152 nm)	73.988510	ppm	0.159665	0.22	205435.834161	Y_R 377.433
As (188.980 nm)	0.045893	ppm	0.000279	0.61	56.120000	Y 242.219
B (249.678 nm)	0.040135	ppm	0.000344	0.86	942.330000	Y 242.219
Ba (493.408 nm)	2.218240 o	ppm	0.007680	0.35	245585.000000	Y_R 488.368
Be (234.861 nm)	0.004147	ppm	0.000188	4.54	3171.230000	Y_R 488.368
Bi (223.061 nm)	-0.004530 u	ppm	0.002002	44.20	5.963010	Y 377.433
Ca (315.887 nm)	128.549483 o	ppm	0.294812	0.23	118994.972689	Y_R 377.433
Cd (214.439 nm)	0.000539	ppm	0.000070	13.04	157.147000	Y 377.433
Co (228.615 nm)	0.052367	ppm	0.000280	0.53	1171.210000	Y 242.219
Cr (205.560 nm)	0.154196	ppm	0.001019	0.66	2270.810000	Y 377.433
Cu (324.754 nm)	0.117903	ppm	0.000634	0.54	9778.090000	Y 377.433
Fe (238.204 nm)	128.530263 o	ppm	0.287172	0.22	454274.158155	Y_R 377.433
Fe H (259.940 nm)	133.028000	ppm	0.386405	0.29	277071.000000	Y_R 377.433
K (766.491 nm)	13.213100	ppm	0.091976	0.70	12381.600000	Y_R2 488.368
Li (670.783 nm)	0.087375	ppm	0.000210	0.24	1785.770000	Y_R2 488.368
Mg (279.078 nm)	63.972600 o	ppm	0.185167	0.29	386152.000000	Y 377.433
Mn (257.610 nm)	3.657310 o	ppm	0.021909	0.60	885148.000000	Y 377.433
Mo (202.032 nm)	0.004972	ppm	0.000384	7.72	47.651100	Y 377.433
Na (589.592 nm)	6.010010	ppm	0.002226	0.04	39538.200000	Y_R2 488.368
Na H (589.593 nm)	6.960032 u	ppm	0.012778	0.18	27079.488967	Y_R 488.368
Ni (231.604 nm)	0.103074	ppm	0.000741	0.72	751.769000	Y 377.433
P (213.618 nm)	8.049080	ppm	0.049059	0.61	18995.200000	Y 242.219
Pb (220.353 nm)	0.147057	ppm	0.001680	1.14	389.279000	Y 242.219
S (181.972 nm)	3.070414	ppm	0.021785	0.71	1488.297547	Y 377.433
Sb (206.834 nm)	0.004047	ppm	0.001407	34.76	-13.916000	Y 377.433
Se (196.026 nm)	0.000849 u	ppm	0.003111	> 100.00	-12.834600	Y 242.219
Si (288.158 nm)	0.955099	ppm	0.011948	1.25	10606.700000	Y 377.433
Sn (189.925 nm)	0.009601	ppm	0.000514	5.35	25.753400	Y 377.433
Sr (421.552 nm)	1.647286 o	ppm	0.003764	0.23	368964.662288	Y_R 488.368
Th (288.505 nm)	0.096446	ppm	0.000357	0.37	453.777000	Y 377.433
Ti (336.122 nm)	5.102010 o	ppm	0.018238	0.36	761975.000000	Y 377.433
Tl (190.794 nm)	0.001269 u	ppm	0.001505	> 100.00	-26.687600	Y 377.433
U (409.013 nm)	-0.081315 u	ppm	0.002980	3.67	-372.224000	Y 377.433
V (292.401 nm)	0.404718	ppm	0.001858	0.46	16733.800000	Y 377.433
Zn (206.200 nm)	0.300115	ppm	0.001322	0.44	1611.120000	Y 377.433
Zr (343.823 nm)	0.121325	ppm	0.002292	1.89	17004.500000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.049335	8796.310306	0.002350	0.22
Y 377.433	1.010503	458131.106988	0.001364	0.13
Y_R 377.433	1.080190	37265.600000	0.003390	0.31
Y_R 488.368	1.100100	20728.900000	0.002051	0.19
Y_R2 488.368	1.061242	35147.042407	0.004367	0.41

Sample Name: 280-167828-A-38-B@2

Date: 10/28/2022 5:21:53 AM Rack:Tube: 1:88

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.084382	ppm	0.000707	0.84	193475.892288	Y 377.433
Ag (328.068 nm)	0.000402 n	ppm	0.000070	17.37	-182.106000	Y 377.433
Al (167.019 nm)	65.754600 o	ppm	0.140584	0.21	29408.800000	Y_R 377.433
Al H (396.152 nm)	71.209920	ppm	0.096421	0.14	197718.671089	Y_R 377.433
As (188.980 nm)	0.031645	ppm	0.003097	9.79	37.593200	Y 242.219
B (249.678 nm)	0.043394	ppm	0.000357	0.82	1062.440000	Y 242.219
Ba (493.408 nm)	2.408640 o	ppm	0.030259	1.26	266637.000000	Y_R 488.368
Be (234.861 nm)	0.004014	ppm	0.000190	4.75	2901.180000	Y_R 488.368
Bi (223.061 nm)	-0.001329 u	ppm	0.000459	34.54	13.996800	Y 377.433
Ca (315.887 nm)	117.912108 o	ppm	0.152361	0.13	109147.582828	Y_R 377.433
Cd (214.439 nm)	0.000467	ppm	0.000071	15.27	137.861000	Y 377.433
Co (228.615 nm)	0.047997	ppm	0.000641	1.33	1064.370000	Y 242.219
Cr (205.560 nm)	0.120256	ppm	0.001116	0.93	1768.810000	Y 377.433
Cu (324.754 nm)	0.105638	ppm	0.000774	0.73	8913.620000	Y 377.433
Fe (238.204 nm)	113.742156 o	ppm	0.197607	0.17	402008.888067	Y_R 377.433
Fe H (259.940 nm)	116.206000	ppm	0.118364	0.10	242035.000000	Y_R 377.433
K (766.491 nm)	15.856500	ppm	0.022624	0.14	15016.600000	Y_R2 488.368
Li (670.783 nm)	0.092049	ppm	0.000496	0.54	1942.590000	Y_R2 488.368
Mg (279.078 nm)	57.544100 o	ppm	0.453232	0.79	347356.000000	Y 377.433
Mn (257.610 nm)	3.208840 o	ppm	0.022210	0.69	776618.000000	Y 377.433
Mo (202.032 nm)	0.002488	ppm	0.000252	10.12	26.374700	Y 377.433
Na (589.592 nm)	4.720600	ppm	0.015589	0.33	32031.300000	Y_R2 488.368
Na H (589.593 nm)	5.715838 u	ppm	0.015454	0.27	22279.636215	Y_R 488.368
Ni (231.604 nm)	0.094083	ppm	0.001059	1.13	686.084000	Y 377.433
P (213.618 nm)	6.141020	ppm	0.047445	0.77	14494.900000	Y 242.219
Pb (220.353 nm)	0.084846	ppm	0.001309	1.54	216.180000	Y 242.219
S (181.972 nm)	3.506656	ppm	0.035694	1.02	1696.866623	Y 377.433
Sb (206.834 nm)	0.002104 u	ppm	0.002601	> 100.00	-17.532800	Y 377.433
Se (196.026 nm)	0.001525	ppm	0.001510	98.96	-9.818540	Y 242.219
Si (288.158 nm)	0.952363	ppm	0.016767	1.76	10476.000000	Y 377.433
Sn (189.925 nm)	0.008677	ppm	0.001026	11.82	23.788700	Y 377.433
Sr (421.552 nm)	1.382991 o	ppm	0.002777	0.20	309776.255639	Y_R 488.368
Th (288.505 nm)	0.098253	ppm	0.003577	3.64	447.486000	Y 377.433
Ti (336.122 nm)	4.463830 o	ppm	0.036383	0.82	666656.000000	Y 377.433
Tl (190.794 nm)	0.001897 u	ppm	0.001922	> 100.00	-22.060200	Y 377.433
U (409.013 nm)	-0.062890 u	ppm	0.001172	1.86	-291.082000	Y 377.433
V (292.401 nm)	0.314858	ppm	0.002093	0.66	13039.000000	Y 377.433
Zn (206.200 nm)	0.258354	ppm	0.002591	1.00	1388.230000	Y 377.433
Zr (343.823 nm)	0.102721	ppm	0.000727	0.71	14415.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.030926	8641.987126	0.000743	0.07
Y 377.433	0.992232	449847.746772	0.001985	0.20
Y_R 377.433	1.074480	37068.600000	0.003567	0.33
Y_R 488.368	1.092720	20589.900000	0.005440	0.50
Y_R2 488.368	1.053894	34903.685896	0.007591	0.72

Sample Name: 280-167828-A-39-B@2

Date: 10/28/2022 5:25:55 AM Rack:Tube: 1:89

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.076427	ppm	0.000508	0.66	175138.724221	Y 377.433
Ag (328.068 nm)	0.000582 n	ppm	0.000342	58.73	-167.640000	Y 377.433
Al (167.019 nm)	61.195200 o	ppm	0.047638	0.08	27367.600000	Y_R 377.433
Al H (396.152 nm)	65.208392	ppm	0.117084	0.18	181057.663955	Y_R 377.433
As (188.980 nm)	0.031581	ppm	0.001793	5.68	37.510000	Y 242.219
B (249.678 nm)	0.034451	ppm	0.000237	0.69	836.553000	Y 242.219
Ba (493.408 nm)	2.019810 o	ppm	0.010994	0.54	223608.000000	Y_R 488.368
Be (234.861 nm)	0.003848	ppm	0.000093	2.42	2672.130000	Y_R 488.368
Bi (223.061 nm)	-0.002670 u	ppm	0.001805	67.59	10.631200	Y 377.433
Ca (315.887 nm)	108.992150 o	ppm	0.229701	0.21	100890.065173	Y_R 377.433
Cd (214.439 nm)	0.000533	ppm	0.000066	12.44	130.247000	Y 377.433
Co (228.615 nm)	0.048595	ppm	0.000374	0.77	1055.950000	Y 242.219
Cr (205.560 nm)	0.116250	ppm	0.000238	0.20	1712.260000	Y 377.433
Cu (324.754 nm)	0.098848	ppm	0.000602	0.61	8433.220000	Y 377.433
Fe (238.204 nm)	102.133319 o	ppm	0.306318	0.30	360980.037746	Y_R 377.433
Fe H (259.940 nm)	104.309000	ppm	0.265809	0.25	217258.000000	Y_R 377.433
K (766.491 nm)	14.343000	ppm	0.066862	0.47	13508.000000	Y_R2 488.368
Li (670.783 nm)	0.085962	ppm	0.000585	0.68	1738.370000	Y_R2 488.368
Mg (279.078 nm)	55.065300 o	ppm	0.242574	0.44	332407.000000	Y 377.433
Mn (257.610 nm)	3.119770 o	ppm	0.007213	0.23	755062.000000	Y 377.433
Mo (202.032 nm)	0.003457	ppm	0.000149	4.30	34.679700	Y 377.433
Na (589.592 nm)	3.972550	ppm	0.010557	0.27	26980.500000	Y_R2 488.368
Na H (589.593 nm)	4.948504 u	ppm	0.022975	0.46	18775.040288	Y_R 488.368
Ni (231.604 nm)	0.094881	ppm	0.000543	0.57	689.684000	Y 377.433
P (213.618 nm)	7.352480	ppm	0.042024	0.57	17352.200000	Y 242.219
Pb (220.353 nm)	0.082422	ppm	0.000703	0.85	210.603000	Y 242.219
S (181.972 nm)	3.118188	ppm	0.034493	1.11	1509.998040	Y 377.433
Sb (206.834 nm)	0.001287	ppm	0.001162	90.26	-17.826700	Y 377.433
Se (196.026 nm)	-0.000893 u	ppm	0.002714	> 100.00	-10.234200	Y 242.219
Si (288.158 nm)	0.677433	ppm	0.004919	0.73	7828.130000	Y 377.433
Sn (189.925 nm)	0.007156	ppm	0.000188	2.62	20.557700	Y 377.433
Sr (421.552 nm)	1.256459 o	ppm	0.003750	0.30	281439.649664	Y_R 488.368
Th (288.505 nm)	0.092999	ppm	0.001099	1.18	430.906000	Y 377.433
Ti (336.122 nm)	3.939280 o	ppm	0.022712	0.58	588306.000000	Y 377.433
Tl (190.794 nm)	0.001735	ppm	0.000687	39.58	-19.751500	Y 377.433
U (409.013 nm)	-0.062654 u	ppm	0.001603	2.56	-300.360000	Y 377.433
V (292.401 nm)	0.296487	ppm	0.001445	0.49	12271.100000	Y 377.433
Zn (206.200 nm)	0.241179	ppm	0.001373	0.57	1296.570000	Y 377.433
Zr (343.823 nm)	0.105447	ppm	0.001099	1.04	14751.900000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.052242	8820.678108	0.006269	0.60
Y 377.433	1.010800	458265.934081	0.008029	0.79
Y_R 377.433	1.073140	37022.400000	0.007601	0.71
Y_R 488.368	1.091980	20576.000000	0.006990	0.64
Y_R2 488.368	1.047329	34686.251919	0.008227	0.79

Sample Name: 280-167828-A-40-B@2

Date: 10/28/2022 5:29:58 AM Rack:Tube: 1:90

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.098047	ppm	0.001139	1.16	224979.483712	Y 377.433
Ag (328.068 nm)	0.000116 nu	ppm	0.000160	> 100.00	-194.180000	Y 377.433
Al (167.019 nm)	69.634900 o	ppm	0.186759	0.27	31145.300000	Y_R 377.433
Al H (396.152 nm)	77.136632	ppm	0.202752	0.26	214185.808628	Y_R 377.433
As (188.980 nm)	0.035531	ppm	0.001419	3.99	42.645900	Y 242.219
B (249.678 nm)	0.036469	ppm	0.000546	1.50	851.982000	Y 242.219
Ba (493.408 nm)	2.407210 o	ppm	0.016844	0.70	266486.000000	Y_R 488.368
Be (234.861 nm)	0.004347	ppm	0.000239	5.49	3132.660000	Y_R 488.368
Bi (223.061 nm)	-0.006271 u	ppm	0.000651	10.38	1.594020	Y 377.433
Ca (315.887 nm)	154.637540 o	ppm	0.391071	0.25	143145.598675	Y_R 377.433
Cd (214.439 nm)	0.000623	ppm	0.000089	14.24	156.270000	Y 377.433
Co (228.615 nm)	0.048483	ppm	0.000165	0.34	1070.050000	Y 242.219
Cr (205.560 nm)	0.117709	ppm	0.001117	0.95	1728.410000	Y 377.433
Cu (324.754 nm)	0.133644	ppm	0.000636	0.48	10886.700000	Y 377.433
Fe (238.204 nm)	122.385796 o	ppm	0.459591	0.38	432557.906904	Y_R 377.433
Fe H (259.940 nm)	126.563000	ppm	0.339446	0.27	263606.000000	Y_R 377.433
K (766.491 nm)	16.746500	ppm	0.038891	0.23	15903.800000	Y_R2 488.368
Li (670.783 nm)	0.107254	ppm	0.001061	0.99	2452.670000	Y_R2 488.368
Mg (279.078 nm)	61.304200 o	ppm	0.425984	0.69	370048.000000	Y 377.433
Mn (257.610 nm)	3.226830 o	ppm	0.018339	0.57	780971.000000	Y 377.433
Mo (202.032 nm)	0.003068	ppm	0.000295	9.62	31.341300	Y 377.433
Na (589.592 nm)	3.565810	ppm	0.010368	0.29	25068.900000	Y_R2 488.368
Na H (589.593 nm)	4.526485 u	ppm	0.004562	0.10	17494.377485	Y_R 488.368
Ni (231.604 nm)	0.101227	ppm	0.000563	0.56	737.761000	Y 377.433
P (213.618 nm)	8.798170	ppm	0.035439	0.40	20762.100000	Y 242.219
Pb (220.353 nm)	0.084037	ppm	0.001025	1.22	212.520000	Y 242.219
S (181.972 nm)	2.318950	ppm	0.015164	0.65	1126.223286	Y 377.433
Sb (206.834 nm)	0.000991	ppm	0.000432	43.54	-21.963300	Y 377.433
Se (196.026 nm)	0.001294 u	ppm	0.002304	> 100.00	-11.580400	Y 242.219
Si (288.158 nm)	1.042960	ppm	0.013024	1.25	11304.500000	Y 377.433
Sn (189.925 nm)	0.007853	ppm	0.001627	20.72	22.037700	Y 377.433
Sr (421.552 nm)	1.475835 o	ppm	0.002552	0.17	330568.483969	Y_R 488.368
Th (288.505 nm)	0.098637	ppm	0.002836	2.87	448.719000	Y 377.433
Ti (336.122 nm)	4.368150 o	ppm	0.031737	0.73	652487.000000	Y 377.433
Tl (190.794 nm)	-0.000244 u	ppm	0.001323	> 100.00	-26.591300	Y 377.433
U (409.013 nm)	-0.079405 u	ppm	0.002330	2.93	-374.682000	Y 377.433
V (292.401 nm)	0.323965	ppm	0.001764	0.54	13410.700000	Y 377.433
Zn (206.200 nm)	0.278159	ppm	0.002136	0.77	1493.930000	Y 377.433
Zr (343.823 nm)	0.123003	ppm	0.000485	0.39	17215.400000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.058059	8869.443690	0.003826	0.36
Y 377.433	1.021044	462910.096942	0.008588	0.84
Y_R 377.433	1.109160	38265.100000	0.004174	0.38
Y_R 488.368	1.131500	21320.600000	0.001828	0.16
Y_R2 488.368	1.081103	35804.799593	0.004732	0.44

Sample Name: CCVH-7429327

Date: 10/28/2022 5:34:01 AM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000092	ppm	0.000007	7.34	-834.367985	Y 377.433
Ag (328.068 nm)	0.002357	ppm	0.000132	5.61	-102.121000	Y 377.433
Al (167.019 nm)	50.509800 o	ppm	0.102004	0.20	22570.600000	Y_R 377.433
Al H (396.152 nm)	51.238274	ppm	0.028422	0.06	142231.269944	Y_R 377.433
As (188.980 nm)	-0.000045 u	ppm	0.002854	> 100.00	-3.612410	Y 242.219
B (249.678 nm)	0.001221	ppm	0.000187	15.31	11.030300	Y 242.219
Ba (493.408 nm)	0.000545	ppm	0.000159	29.21	155.987000	Y_R 488.368
Be (234.861 nm)	-0.000015 u	ppm	0.000027	> 100.00	786.516000	Y_R 488.368
Bi (223.061 nm)	-0.004114 u	ppm	0.001535	37.32	7.007500	Y 377.433
Ca (315.887 nm)	-0.007043 u	ppm	0.005942	84.36	-14.299044	Y_R 377.433
Cd (214.439 nm)	-0.000116 u	ppm	0.000152	> 100.00	38.912600	Y 377.433
Co (228.615 nm)	-0.000393 u	ppm	0.000095	24.10	-21.465500	Y 242.219
Cr (205.560 nm)	0.000745	ppm	0.000083	11.18	4.136100	Y 377.433
Cu (324.754 nm)	0.003197	ppm	0.000121	3.80	2852.390000	Y 377.433
Fe (238.204 nm)	50.990835 o	ppm	0.097182	0.19	180228.312606	Y_R 377.433
Fe H (259.940 nm)	52.054100	ppm	0.111514	0.21	108428.000000	Y_R 377.433
K (766.491 nm)	0.117854	ppm	0.053696	45.56	-672.403000	Y_R2 488.368
Li (670.783 nm)	0.008152	ppm	0.000961	11.79	-871.831000	Y_R2 488.368
Mg (279.078 nm)	-0.006789 u	ppm	0.000887	13.06	-165.279000	Y 377.433
Mn (257.610 nm)	0.000274	ppm	0.000011	3.88	142.883000	Y 377.433
Mo (202.032 nm)	-0.000457 u	ppm	0.000172	37.72	1.144200	Y 377.433
Na (589.592 nm)	250.958000	ppm	0.943436	0.38	1513000.000000	Y_R2 488.368
Na H (589.593 nm)	250.129993	ppm	1.260058	0.50	1002869.780826	Y_R 488.368
Ni (231.604 nm)	-0.000888 u	ppm	0.000853	96.02	8.482970	Y 377.433
P (213.618 nm)	5.008650	ppm	0.002876	0.06	11824.100000	Y 242.219
Pb (220.353 nm)	-0.006170 u	ppm	0.000135	2.18	-27.507500	Y 242.219
S (181.972 nm)	5.126437	ppm	0.020218	0.39	2467.656182	Y 377.433
Sb (206.834 nm)	-0.000061 u	ppm	0.001146	> 100.00	-24.005500	Y 377.433
Se (196.026 nm)	0.005449	ppm	0.001735	31.84	2.832410	Y 242.219
Si (288.158 nm)	0.016187	ppm	0.000947	5.85	1016.220000	Y 377.433
Sn (189.925 nm)	-0.000849 u	ppm	0.001062	> 100.00	3.546760	Y 377.433
Sr (421.552 nm)	0.000689	ppm	0.000025	3.62	212.670183	Y_R 488.368
Th (288.505 nm)	5.108370	ppm	0.016466	0.32	14452.200000	Y 377.433
Ti (336.122 nm)	0.001286	ppm	0.000092	7.13	-24.070800	Y 377.433
Tl (190.794 nm)	-0.001695 u	ppm	0.001281	75.55	-8.420020	Y 377.433
U (409.013 nm)	2.550470	ppm	0.005966	0.23	12823.100000	Y 377.433
V (292.401 nm)	-0.000494 u	ppm	0.000207	41.88	332.818000	Y 377.433
Zn (206.200 nm)	0.000369	ppm	0.000235	63.55	11.333600	Y 377.433
Zr (343.823 nm)	0.065416	ppm	0.007899	12.08	9119.470000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.971952	8147.626402	0.005359	0.55
Y 377.433	0.937981	425251.979949	0.005882	0.63
Y_R 377.433	1.004510	34654.900000	0.003756	0.37
Y_R 488.368	1.025420	19321.800000	0.001817	0.18
Y_R2 488.368	0.983916	32586.101488	0.005837	0.59

Sample Name: CCV-7429326

Date: 10/28/2022 5:38:05 AM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.465892	ppm	0.000815	0.17	1072963.213288	Y 377.433
Ag (328.068 nm)	0.512189	ppm	0.000281	0.05	27089.000000	Y 377.433
Al (167.019 nm)	0.549640	ppm	0.003216	0.59	247.373000	Y_R 377.433
Al H (396.152 nm)	0.526828 u	ppm	0.006296	1.20	1535.495875	Y_R 377.433
As (188.980 nm)	0.505331	ppm	0.004906	0.97	653.519000	Y 242.219
B (249.678 nm)	0.501102	ppm	0.000943	0.19	14056.900000	Y 242.219
Ba (493.408 nm)	0.508036	ppm	0.003819	0.75	56256.300000	Y_R 488.368
Be (234.861 nm)	0.526931	ppm	0.001937	0.37	146939.000000	Y_R 488.368
Bi (223.061 nm)	1.050170	ppm	0.002493	0.24	2653.150000	Y 377.433
Ca (315.887 nm)	5.287977	ppm	0.007998	0.15	4887.835915	Y_R 377.433
Cd (214.439 nm)	0.519500	ppm	0.000965	0.19	31769.900000	Y 377.433
Co (228.615 nm)	0.513495	ppm	0.000335	0.07	9741.110000	Y 242.219
Cr (205.560 nm)	0.518088	ppm	0.001038	0.20	7726.390000	Y 377.433
Cu (324.754 nm)	0.525532	ppm	0.000835	0.16	38724.600000	Y 377.433
Fe (238.204 nm)	2.553590	ppm	0.005699	0.22	9037.655046	Y_R 377.433
Fe H (259.940 nm)	2.621720 u	ppm	0.003881	0.15	5476.360000	Y_R 377.433
K (766.491 nm)	49.154600	ppm	0.243071	0.49	48209.900000	Y_R2 488.368
Li (670.783 nm)	0.484211	ppm	0.002972	0.61	15098.100000	Y_R2 488.368
Mg (279.078 nm)	20.534900	ppm	0.014638	0.07	124052.000000	Y 377.433
Mn (257.610 nm)	0.521398	ppm	0.000990	0.19	126255.000000	Y 377.433
Mo (202.032 nm)	0.522106	ppm	0.000749	0.14	4477.720000	Y 377.433
Na (589.592 nm)	25.595800	ppm	0.091167	0.36	155219.000000	Y_R2 488.368
Na H (589.593 nm)	26.162104	ppm	0.034333	0.13	102482.168871	Y_R 488.368
Ni (231.604 nm)	0.527227	ppm	0.001573	0.30	3708.180000	Y 377.433
P (213.618 nm)	0.009927	ppm	0.001360	13.70	34.011900	Y 242.219
Pb (220.353 nm)	0.498883	ppm	0.002943	0.59	1380.140000	Y 242.219
S (181.972 nm)	0.009438	ppm	0.002975	31.53	10.144902	Y 377.433
Sb (206.834 nm)	0.525388	ppm	0.001935	0.37	1323.450000	Y 377.433
Se (196.026 nm)	0.505009	ppm	0.002986	0.59	509.678000	Y 242.219
Si (288.158 nm)	5.128110	ppm	0.007493	0.15	48722.600000	Y 377.433
Sn (189.925 nm)	0.519549	ppm	0.000854	0.16	1109.360000	Y 377.433
Sr (421.552 nm)	0.502312	ppm	0.000774	0.15	112550.245320	Y_R 488.368
Th (288.505 nm)	0.022936	ppm	0.008811	38.42	172.951000	Y 377.433
Ti (336.122 nm)	0.510931	ppm	0.000673	0.13	76087.900000	Y 377.433
Tl (190.794 nm)	0.520602	ppm	0.001939	0.37	1141.540000	Y 377.433
U (409.013 nm)	0.004680	ppm	0.003710	79.29	-82.425500	Y 377.433
V (292.401 nm)	0.521612	ppm	0.001324	0.25	21277.300000	Y 377.433
Zn (206.200 nm)	0.521474	ppm	0.000717	0.14	2792.540000	Y 377.433
Zr (343.823 nm)	0.539889	ppm	0.010158	1.88	73847.200000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.976718	8187.575357	0.001675	0.17
Y 377.433	0.950539	430945.574303	0.001808	0.19
Y_R 377.433	0.989092	34122.800000	0.002022	0.20
Y_R 488.368	1.006740	18969.800000	0.003582	0.36
Y_R2 488.368	0.976200	32330.525989	0.006298	0.65

Sample Name: CCB

Date: 10/28/2022 5:42:07 AM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000063	ppm	0.000017	26.97	-900.356481	Y 377.433
Ag (328.068 nm)	0.000540	ppm	0.000128	23.72	-130.618000	Y 377.433
Al (167.019 nm)	0.002396 u	ppm	0.002553	> 100.00	1.734360	Y_R 377.433
Al H (396.152 nm)	-0.003303 u	ppm	0.003237	97.98	14.565041	Y_R 377.433
As (188.980 nm)	0.000712 u	ppm	0.001422	> 100.00	-2.628660	Y 242.219
B (249.678 nm)	0.000290	ppm	0.000213	73.31	87.718800	Y 242.219
Ba (493.408 nm)	0.000014 u	ppm	0.000080	> 100.00	50.709800	Y_R 488.368
Be (234.861 nm)	-0.000015 u	ppm	0.000019	> 100.00	-20.957500	Y_R 488.368
Bi (223.061 nm)	-0.000150 u	ppm	0.001223	> 100.00	16.956600	Y 377.433
Ca (315.887 nm)	0.003815 u	ppm	0.003652	95.72	-4.247314	Y_R 377.433
Cd (214.439 nm)	0.000007 u	ppm	0.000060	> 100.00	-5.057850	Y 377.433
Co (228.615 nm)	0.000021 u	ppm	0.000165	> 100.00	-13.654900	Y 242.219
Cr (205.560 nm)	-0.000033 u	ppm	0.000067	> 100.00	6.650440	Y 377.433
Cu (324.754 nm)	0.001557	ppm	0.000295	18.95	1536.310000	Y 377.433
Fe (238.204 nm)	-0.000357 u	ppm	0.000670	> 100.00	11.298602	Y_R 377.433
Fe H (259.940 nm)	-0.005096 u	ppm	0.001116	21.89	5.556800	Y_R 377.433
K (766.491 nm)	0.113675	ppm	0.029542	25.99	-676.570000	Y_R2 488.368
Li (670.783 nm)	0.008279	ppm	0.000961	11.61	-867.565000	Y_R2 488.368
Mg (279.078 nm)	0.000308 u	ppm	0.001730	> 100.00	45.001700	Y 377.433
Mn (257.610 nm)	-0.000146 u	ppm	0.000025	17.40	41.071000	Y 377.433
Mo (202.032 nm)	0.001000	ppm	0.000412	41.22	13.626600	Y 377.433
Na (589.592 nm)	-0.005551 u	ppm	0.009684	> 100.00	184.508000	Y_R2 488.368
Na H (589.593 nm)	1.193245 u	ppm	0.009115	0.76	1495.943388	Y_R 488.368
Ni (231.604 nm)	0.000198 u	ppm	0.000292	> 100.00	7.240820	Y 377.433
P (213.618 nm)	0.001667	ppm	0.000166	9.94	14.529600	Y 242.219
Pb (220.353 nm)	-0.001593 u	ppm	0.000601	37.75	-8.052060	Y 242.219
S (181.972 nm)	0.006959	ppm	0.004508	64.79	7.730240	Y 377.433
Sb (206.834 nm)	-0.000325 u	ppm	0.001554	> 100.00	-7.738490	Y 377.433
Se (196.026 nm)	0.000816 u	ppm	0.001402	> 100.00	6.986890	Y 242.219
Si (288.158 nm)	0.003239	ppm	0.000304	9.40	895.448000	Y 377.433
Sn (189.925 nm)	-0.000415 u	ppm	0.000432	> 100.00	4.468810	Y 377.433
Sr (421.552 nm)	0.000020 u	ppm	0.000065	> 100.00	63.002109	Y_R 488.368
Th (288.505 nm)	0.003469 u	ppm	0.003790	> 100.00	108.572000	Y 377.433
Ti (336.122 nm)	-0.000015 u	ppm	0.000103	> 100.00	-218.324000	Y 377.433
Tl (190.794 nm)	0.000176 u	ppm	0.000987	> 100.00	-2.910290	Y 377.433
U (409.013 nm)	0.009131	ppm	0.003476	38.07	-13.850500	Y 377.433
V (292.401 nm)	-0.000189 u	ppm	0.000104	55.17	12.791000	Y 377.433
Zn (206.200 nm)	-0.000610 u	ppm	0.000273	44.80	6.108040	Y 377.433
Zr (343.823 nm)	0.000312	ppm	0.000097	31.19	58.990300	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.986316	8268.034119	0.003103	0.31
Y 377.433	0.959778	435134.159995	0.008377	0.87
Y_R 377.433	0.988829	34113.700000	0.003333	0.34
Y_R 488.368	1.001940	18879.500000	0.006600	0.66
Y_R2 488.368	0.976088	32326.848683	0.004259	0.44

Sample Name: CCVL-7434568

Date: 10/28/2022 5:46:10 AM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014653	ppm	0.000025	0.17	32732.043934	Y 377.433
Ag (328.068 nm)	0.010623	ppm	0.000445	4.19	405.093000	Y 377.433
Al (167.019 nm)	0.110086	ppm	0.004340	3.94	49.851800	Y_R 377.433
Al H (396.152 nm)	0.098952 u	ppm	0.002143	2.17	300.183153	Y_R 377.433
As (188.980 nm)	0.015974	ppm	0.002011	12.59	17.216500	Y 242.219
B (249.678 nm)	0.100040	ppm	0.000262	0.26	2866.200000	Y 242.219
Ba (493.408 nm)	0.010032	ppm	0.000152	1.52	1159.020000	Y_R 488.368
Be (234.861 nm)	0.001013	ppm	0.000013	1.29	266.264000	Y_R 488.368
Bi (223.061 nm)	-0.003722 Qu	ppm	0.001197	32.15	7.991280 Q	Y 377.433
Ca (315.887 nm)	0.221450	ppm	0.003325	1.50	197.228506	Y_R 377.433
Cd (214.439 nm)	0.005177	ppm	0.000036	0.69	311.230000	Y 377.433
Co (228.615 nm)	0.010444	ppm	0.000102	0.98	184.310000	Y 242.219
Cr (205.560 nm)	0.010282	ppm	0.000179	1.74	160.399000	Y 377.433
Cu (324.754 nm)	0.017689	ppm	0.000151	0.85	2680.370000	Y 377.433
Fe (238.204 nm)	0.102591	ppm	0.001058	1.03	375.144908	Y_R 377.433
Fe H (259.940 nm)	0.105336 u	ppm	0.000370	0.35	235.552000	Y_R 377.433
K (766.491 nm)	3.136380	ppm	0.053838	1.72	2336.620000	Y_R2 488.368
Li (670.783 nm)	0.027170 Q	ppm	0.000876	3.22	-233.843000 Q	Y_R2 488.368
Mg (279.078 nm)	0.208884	ppm	0.000981	0.47	1303.110000	Y 377.433
Mn (257.610 nm)	0.010477	ppm	0.000056	0.53	2612.010000	Y 377.433
Mo (202.032 nm)	0.020135	ppm	0.000224	1.11	177.545000	Y 377.433
Na (589.592 nm)	1.075700	ppm	0.011510	1.07	6716.090000	Y_R2 488.368
Na H (589.593 nm)	2.188567 u	ppm	0.010149	0.46	5510.341496	Y_R 488.368
Ni (231.604 nm)	0.044443	ppm	0.000242	0.54	317.883000	Y 377.433
P (213.618 nm)	2.896260	ppm	0.002520	0.09	6841.730000	Y 242.219
Pb (220.353 nm)	0.008600	ppm	0.000935	10.88	20.282800	Y 242.219
S (181.972 nm)	0.100232	ppm	0.003371	3.36	52.572994	Y 377.433
Sb (206.834 nm)	0.021629	ppm	0.000915	4.23	47.501200	Y 377.433
Se (196.026 nm)	0.022592	ppm	0.002060	9.12	28.690100	Y 242.219
Si (288.158 nm)	0.499729	ppm	0.001098	0.22	5522.180000	Y 377.433
Sn (189.925 nm)	0.105448	ppm	0.001752	1.66	229.421000	Y 377.433
Sr (421.552 nm)	0.010024	ppm	0.000034	0.34	2303.227745	Y_R 488.368
Th (288.505 nm)	0.015398	ppm	0.002486	16.15	143.437000	Y 377.433
Ti (336.122 nm)	0.009832	ppm	0.000167	1.70	1252.520000	Y 377.433
Tl (190.794 nm)	0.016426	ppm	0.001596	9.72	32.824100	Y 377.433
U (409.013 nm)	0.065876	ppm	0.004674	7.10	270.585000	Y 377.433
V (292.401 nm)	0.010187	ppm	0.000156	1.53	433.516000	Y 377.433
Zn (206.200 nm)	0.021970	ppm	0.000373	1.70	126.621000	Y 377.433
Zr (343.823 nm)	0.013710 Q	ppm	0.000043	0.32	1891.330000 Q	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.986073	8266.003457	0.003290	0.33
Y 377.433	0.959304	434919.003985	0.001662	0.17
Y_R 377.433	1.015790	35044.000000	0.003305	0.33
Y_R 488.368	1.034260	19488.400000	0.005813	0.56
Y_R2 488.368	1.005445	33299.086114	0.007798	0.78

Sample Name: 280-167828-A-41-B@2

Date: 10/28/2022 5:50:12 AM Rack:Tube: 2:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.071559	ppm	0.000114	0.16	163917.622120	Y 377.433
Ag (328.068 nm)	0.000088 nu	ppm	0.000157	> 100.00	-206.479000	Y 377.433
Al (167.019 nm)	66.775700 o	ppm	0.237266	0.36	29866.300000	Y_R 377.433
Al H (396.152 nm)	72.988941	ppm	0.120430	0.16	202665.124706	Y_R 377.433
As (188.980 nm)	0.025562	ppm	0.001440	5.63	29.683500	Y 242.219
B (249.678 nm)	0.031036	ppm	0.000267	0.86	711.770000	Y 242.219
Ba (493.408 nm)	1.489650 o	ppm	0.022927	1.54	164966.000000	Y_R 488.368
Be (234.861 nm)	0.003755	ppm	0.000261	6.96	2881.560000	Y_R 488.368
Bi (223.061 nm)	-0.005307 u	ppm	0.001777	33.48	4.012460	Y 377.433
Ca (315.887 nm)	136.107161 o	ppm	0.376839	0.28	125991.379308	Y_R 377.433
Cd (214.439 nm)	0.000483	ppm	0.000050	10.37	142.225000	Y 377.433
Co (228.615 nm)	0.051495	ppm	0.000602	1.17	1149.820000	Y 242.219
Cr (205.560 nm)	0.088863	ppm	0.000266	0.30	1299.790000	Y 377.433
Cu (324.754 nm)	0.127782	ppm	0.000222	0.17	10447.500000	Y 377.433
Fe (238.204 nm)	116.841973 o	ppm	0.316543	0.27	412964.500550	Y_R 377.433
Fe H (259.940 nm)	119.478000	ppm	0.293766	0.25	248849.000000	Y_R 377.433
K (766.491 nm)	11.568000	ppm	0.061210	0.53	10741.700000	Y_R2 488.368
Li (670.783 nm)	0.082129	ppm	0.000644	0.78	1609.810000	Y_R2 488.368
Mg (279.078 nm)	63.415900 o	ppm	0.045035	0.07	382811.000000	Y 377.433
Mn (257.610 nm)	3.104810 o	ppm	0.004300	0.14	751442.000000	Y 377.433
Mo (202.032 nm)	0.002240	ppm	0.000174	7.76	24.251800	Y 377.433
Na (589.592 nm)	4.918260	ppm	0.012458	0.25	31942.600000	Y_R2 488.368
Na H (589.593 nm)	5.956690 u	ppm	0.014037	0.24	22260.455158	Y_R 488.368
Ni (231.604 nm)	0.089294	ppm	0.000456	0.51	653.047000	Y 377.433
P (213.618 nm)	9.180680	ppm	0.027390	0.30	21664.200000	Y 242.219
Pb (220.353 nm)	0.064577	ppm	0.001380	2.14	159.468000	Y 242.219
S (181.972 nm)	1.747078	ppm	0.013183	0.75	851.153990	Y 377.433
Sb (206.834 nm)	0.004341	ppm	0.001259	29.01	-13.274000	Y 377.433
Se (196.026 nm)	0.001741	ppm	0.000413	23.73	-10.280100	Y 242.219
Si (288.158 nm)	0.886899	ppm	0.004693	0.53	9950.060000	Y 377.433
Sn (189.925 nm)	0.008976	ppm	0.000681	7.58	24.423800	Y 377.433
Sr (421.552 nm)	1.370048 o	ppm	0.005158	0.38	306877.817322	Y_R 488.368
Th (288.505 nm)	0.090688	ppm	0.003485	3.84	423.938000	Y 377.433
Ti (336.122 nm)	4.966010 o	ppm	0.006371	0.13	741694.000000	Y 377.433
Tl (190.794 nm)	0.001356	ppm	0.000702	51.76	-25.602600	Y 377.433
U (409.013 nm)	-0.076369 u	ppm	0.001753	2.30	-357.289000	Y 377.433
V (292.401 nm)	0.323555	ppm	0.000330	0.10	13413.500000	Y 377.433
Zn (206.200 nm)	0.253004	ppm	0.000933	0.37	1359.680000	Y 377.433
Zr (343.823 nm)	0.079343	ppm	0.001879	2.37	11228.600000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.072124	8987.339465	0.003996	0.37
Y 377.433	1.034611	469060.937251	0.004148	0.40
Y_R 377.433	1.091930	37670.800000	0.006844	0.63
Y_R 488.368	1.111480	20943.400000	0.006702	0.60
Y_R2 488.368	1.074703	35592.844982	0.005599	0.52

Sample Name: 280-167828-A-42-B@2

Date: 10/28/2022 5:54:15 AM Rack:Tube: 2:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.071412	ppm	0.000121	0.17	163578.697666	Y 377.433
Ag (328.068 nm)	0.000536 n	ppm	0.000131	24.33	-175.329000	Y 377.433
Al (167.019 nm)	61.180400 o	ppm	0.092876	0.15	27365.100000	Y_R 377.433
Al H (396.152 nm)	65.947047	ppm	0.183233	0.28	183114.719337	Y_R 377.433
As (188.980 nm)	0.029160	ppm	0.001352	4.64	34.362100	Y 242.219
B (249.678 nm)	0.028281	ppm	0.000416	1.47	650.028000	Y 242.219
Ba (493.408 nm)	2.293150 o	ppm	0.018725	0.82	253856.000000	Y_R 488.368
Be (234.861 nm)	0.003380	ppm	0.000060	1.78	2657.310000	Y_R 488.368
Bi (223.061 nm)	-0.001859 u	ppm	0.002989	> 100.00	12.666300	Y 377.433
Ca (315.887 nm)	123.337569 o	ppm	0.298045	0.24	114170.121402	Y_R 377.433
Cd (214.439 nm)	0.000445	ppm	0.000025	5.71	132.267000	Y 377.433
Co (228.615 nm)	0.046819	ppm	0.000348	0.74	1048.250000	Y 242.219
Cr (205.560 nm)	0.095698	ppm	0.000544	0.57	1403.810000	Y 377.433
Cu (324.754 nm)	0.097973	ppm	0.000489	0.50	8356.240000	Y 377.433
Fe (238.204 nm)	109.288598 o	ppm	0.219746	0.20	386268.777526	Y_R 377.433
Fe H (259.940 nm)	111.804000	ppm	0.228661	0.20	232868.000000	Y_R 377.433
K (766.491 nm)	11.881300	ppm	0.060140	0.51	11054.000000	Y_R2 488.368
Li (670.783 nm)	0.080884	ppm	0.000588	0.73	1568.040000	Y_R2 488.368
Mg (279.078 nm)	58.122100 o	ppm	0.191895	0.33	350854.000000	Y 377.433
Mn (257.610 nm)	5.803140 o	ppm	0.007028	0.12	1404440.000000	Y 377.433
Mo (202.032 nm)	0.002794	ppm	0.000187	6.68	28.994600	Y 377.433
Na (589.592 nm)	3.283840	ppm	0.022865	0.70	23210.600000	Y_R2 488.368
Na H (589.593 nm)	4.255869 u	ppm	0.022857	0.54	16283.395782	Y_R 488.368
Ni (231.604 nm)	0.083222	ppm	0.000942	1.13	609.104000	Y 377.433
P (213.618 nm)	6.911540	ppm	0.005780	0.08	16312.200000	Y 242.219
Pb (220.353 nm)	0.074698	ppm	0.001710	2.29	189.493000	Y 242.219
S (181.972 nm)	1.428117	ppm	0.012178	0.85	704.235921	Y 377.433
Sb (206.834 nm)	0.002102	ppm	0.001571	74.76	-17.412500	Y 377.433
Se (196.026 nm)	-0.000248 u	ppm	0.001293	> 100.00	-8.686770	Y 242.219
Si (288.158 nm)	0.951233	ppm	0.002900	0.30	10492.800000	Y 377.433
Sn (189.925 nm)	0.007902	ppm	0.000700	8.86	22.142300	Y 377.433
Sr (421.552 nm)	1.238268 o	ppm	0.008028	0.65	277365.872995	Y_R 488.368
Th (288.505 nm)	0.110248	ppm	0.002548	2.31	540.011000	Y 377.433
Ti (336.122 nm)	4.623430 o	ppm	0.006005	0.13	690503.000000	Y 377.433
Tl (190.794 nm)	0.001562	ppm	0.001181	75.64	-23.427800	Y 377.433
U (409.013 nm)	-0.066083 u	ppm	0.005824	8.81	-312.469000	Y 377.433
V (292.401 nm)	0.311767	ppm	0.000945	0.30	12924.700000	Y 377.433
Zn (206.200 nm)	0.260718	ppm	0.001491	0.57	1400.850000	Y 377.433
Zr (343.823 nm)	0.098984	ppm	0.001388	1.40	13890.800000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.044035	8751.884133	0.002697	0.26
Y 377.433	1.005845	456019.670975	0.004390	0.44
Y_R 377.433	1.084900	37428.100000	0.004695	0.43
Y_R 488.368	1.105830	20837.000000	0.009088	0.82
Y_R2 488.368	1.063837	35232.984818	0.005497	0.52

Sample Name: 280-167868-B-4-A

Date: 10/28/2022 5:58:18 AM Rack:Tube: 2:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.068793	ppm	0.000156	0.23	157539.372910	Y 377.433
Ag (328.068 nm)	0.002898 n	ppm	0.000201	6.94	-29.430500	Y 377.433
Al (167.019 nm)	83.880800 o	ppm	0.259047	0.31	37481.000000	Y_R 377.433
Al H (396.152 nm)	93.961451	ppm	0.162074	0.17	260919.158681	Y_R 377.433
As (188.980 nm)	0.009450	ppm	0.002183	23.10	8.734260	Y 242.219
B (249.678 nm)	0.133898	ppm	0.000142	0.11	3644.290000	Y 242.219
Ba (493.408 nm)	0.758863	ppm	0.005927	0.78	84082.500000	Y_R 488.368
Be (234.861 nm)	0.006307	ppm	0.000051	0.81	3046.870000	Y_R 488.368
Bi (223.061 nm)	0.320009	ppm	0.004102	1.28	820.522000	Y 377.433
Ca (315.887 nm)	229.852569 o	ppm	0.574303	0.25	212774.780124	Y_R 377.433
Cd (214.439 nm)	0.001852	ppm	0.000076	4.08	191.014000	Y 377.433
Co (228.615 nm)	0.022338	ppm	0.000187	0.84	424.477000	Y 242.219
Cr (205.560 nm)	0.334029	ppm	0.000825	0.25	4965.020000	Y 377.433
Cu (324.754 nm)	5.466740 o	ppm	0.031578	0.58	389273.000000	Y 377.433
Fe (238.204 nm)	82.340845 o	ppm	0.272863	0.33	291027.943840	Y_R 377.433
Fe H (259.940 nm)	84.172900	ppm	0.343313	0.41	175321.000000	Y_R 377.433
K (766.491 nm)	15.827800	ppm	0.072033	0.46	14988.000000	Y_R2 488.368
Li (670.783 nm)	0.075902	ppm	0.001380	1.82	1400.900000	Y_R2 488.368
Mg (279.078 nm)	21.696300	ppm	0.017089	0.08	130922.000000	Y 377.433
Mn (257.610 nm)	1.274740 o	ppm	0.001016	0.08	308564.000000	Y 377.433
Mo (202.032 nm)	0.010937	ppm	0.000214	1.95	98.751700	Y 377.433
Na (589.592 nm)	3.897250	ppm	0.024234	0.62	24769.000000	Y_R2 488.368
Na H (589.593 nm)	4.913059 u	ppm	0.012515	0.25	17276.026716	Y_R 488.368
Ni (231.604 nm)	0.626078	ppm	0.002277	0.36	4415.360000	Y 377.433
P (213.618 nm)	56.361400 bo	ppm	0.700040	1.24	132945.000000	Y 242.219
Pb (220.353 nm)	0.051584	ppm	0.002455	4.76	112.797000	Y 242.219
S (181.972 nm)	19.284866 o	ppm	0.025922	0.13	9273.812930	Y 377.433
Sb (206.834 nm)	0.004691	ppm	0.002259	48.16	-1.309000	Y 377.433
Se (196.026 nm)	0.002896 u	ppm	0.003554	> 100.00	-3.872950	Y 242.219
Si (288.158 nm)	2.373840	ppm	0.004911	0.21	23045.500000	Y 377.433
Sn (189.925 nm)	0.037204	ppm	0.001344	3.61	84.406800	Y 377.433
Sr (421.552 nm)	0.691749	ppm	0.002550	0.37	154974.045395	Y_R 488.368
Th (288.505 nm)	0.027497	ppm	0.002312	8.41	205.287000	Y 377.433
Ti (336.122 nm)	0.402695	ppm	0.000584	0.14	60642.800000	Y 377.433
Tl (190.794 nm)	-0.000572 u	ppm	0.001442	> 100.00	-8.521130	Y 377.433
U (409.013 nm)	-0.003512 u	ppm	0.003634	> 100.00	-49.043400	Y 377.433
V (292.401 nm)	0.225635	ppm	0.000205	0.09	9196.660000	Y 377.433
Zn (206.200 nm)	2.156890 o	ppm	0.005993	0.28	11521.000000	Y 377.433
Zr (343.823 nm)	0.100921	ppm	0.013317	13.20	14071.800000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.988047	8282.548547	0.008115	0.82
Y 377.433	0.959357	434943.116692	0.005828	0.61
Y_R 377.433	1.035210	35713.900000	0.001754	0.17
Y_R 488.368	1.050920	19802.400000	0.003856	0.37
Y_R2 488.368	0.992894	32883.438390	0.006053	0.61

Sample Name: 280-167868-B-6-A

Date: 10/28/2022 6:02:20 AM Rack:Tube: 2:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.079030	ppm	0.000236	0.30	181139.017604	Y 377.433
Ag (328.068 nm)	0.002993 n	ppm	0.000110	3.67	-43.696500	Y 377.433
Al (167.019 nm)	89.450900 o	ppm	0.343358	0.38	39968.600000	Y_R 377.433
Al H (396.152 nm)	100.682664	ppm	0.333950	0.33	279559.339525	Y_R 377.433
As (188.980 nm)	0.015091	ppm	0.001539	10.20	16.069000	Y 242.219
B (249.678 nm)	0.124690	ppm	0.000475	0.38	3381.550000	Y 242.219
Ba (493.408 nm)	0.725850	ppm	0.004077	0.56	80432.900000	Y_R 488.368
Be (234.861 nm)	0.005617	ppm	0.000167	2.98	2905.590000	Y_R 488.368
Bi (223.061 nm)	0.269323	ppm	0.002901	1.08	693.304000	Y 377.433
Ca (315.887 nm)	201.372098 o	ppm	0.743581	0.37	186409.413211	Y_R 377.433
Cd (214.439 nm)	0.002387	ppm	0.000033	1.38	226.968000	Y 377.433
Co (228.615 nm)	0.026900	ppm	0.000212	0.79	509.235000	Y 242.219
Cr (205.560 nm)	0.315600	ppm	0.000456	0.14	4689.330000	Y 377.433
Cu (324.754 nm)	6.239270 o	ppm	0.049601	0.79	444117.000000	Y 377.433
Fe (238.204 nm)	85.575162 o	ppm	0.190423	0.22	302458.918897	Y_R 377.433
Fe H (259.940 nm)	87.513600	ppm	0.206302	0.24	182278.000000	Y_R 377.433
K (766.491 nm)	18.972000	ppm	0.091821	0.48	18122.400000	Y_R2 488.368
Li (670.783 nm)	0.086765	ppm	0.001254	1.45	1765.340000	Y_R2 488.368
Mg (279.078 nm)	26.322500	ppm	0.099401	0.38	158854.000000	Y 377.433
Mn (257.610 nm)	1.206530 o	ppm	0.004567	0.38	292057.000000	Y 377.433
Mo (202.032 nm)	0.009995	ppm	0.000394	3.94	90.684900	Y 377.433
Na (589.592 nm)	5.664330	ppm	0.033247	0.59	35375.300000	Y_R2 488.368
Na H (589.593 nm)	6.705046 u	ppm	0.025468	0.38	24449.096655	Y_R 488.368
Ni (231.604 nm)	0.645258	ppm	0.001566	0.24	4550.570000	Y 377.433
P (213.618 nm)	30.787800 o	ppm	0.040011	0.13	72626.900000	Y 242.219
Pb (220.353 nm)	0.051122	ppm	0.002243	4.39	109.380000	Y 242.219
S (181.972 nm)	20.796521 o	ppm	0.017771	0.09	10000.006004	Y 377.433
Sb (206.834 nm)	0.002143	ppm	0.002306	> 100.00	-8.797660	Y 377.433
Se (196.026 nm)	0.005901	ppm	0.003028	51.31	-1.438780	Y 242.219
Si (288.158 nm)	2.720490	ppm	0.012891	0.47	26267.200000	Y 377.433
Sn (189.925 nm)	0.020265	ppm	0.001576	7.77	48.413300	Y 377.433
Sr (421.552 nm)	0.568229	ppm	0.002903	0.51	127312.113119	Y_R 488.368
Th (288.505 nm)	0.031320	ppm	0.001212	3.87	214.764000	Y 377.433
Ti (336.122 nm)	0.356294	ppm	0.000541	0.15	53623.700000	Y 377.433
Tl (190.794 nm)	0.001504	ppm	0.001173	77.97	-3.808410	Y 377.433
U (409.013 nm)	-0.011460 u	ppm	0.003936	34.35	-74.158300	Y 377.433
V (292.401 nm)	0.244034	ppm	0.000820	0.34	9955.320000	Y 377.433
Zn (206.200 nm)	1.778980 o	ppm	0.007513	0.42	9504.050000	Y 377.433
Zr (343.823 nm)	0.040336	ppm	0.000578	1.43	5797.610000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.993411	8327.509727	0.001181	0.12
Y 377.433	0.961570	435946.688749	0.003026	0.31
Y_R 377.433	1.025270	35371.100000	0.001968	0.19
Y_R 488.368	1.044870	19688.300000	0.004615	0.44
Y_R2 488.368	1.007519	33367.804809	0.006090	0.60

Sample Name: 280-167868-B-7-A

Date: 10/28/2022 6:06:21 AM Rack:Tube: 2:5

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.152696	ppm	0.000680	0.45	350959.336166	Y 377.433
Ag (328.068 nm)	0.002708 n	ppm	0.000237	8.74	-111.371000	Y 377.433
Al (167.019 nm)	134.413000 o	ppm	0.162617	0.12	60065.700000	Y_R 377.433
Al H (396.152 nm)	172.035942 o	ppm	0.372074	0.22	477627.100208	Y_R 377.433
As (188.980 nm)	0.022795	ppm	0.000432	1.90	26.085800	Y 242.219
B (249.678 nm)	0.151206	ppm	0.000768	0.51	4007.770000	Y 242.219
Ba (493.408 nm)	0.898655	ppm	0.010604	1.18	99603.000000	Y_R 488.368
Be (234.861 nm)	0.009278	ppm	0.000103	1.11	4819.480000	Y_R 488.368
Bi (223.061 nm)	0.309662	ppm	0.001910	0.62	794.551000	Y 377.433
Ca (315.887 nm)	267.594901 o	ppm	0.354950	0.13	247714.178767	Y_R 377.433
Cd (214.439 nm)	0.004131	ppm	0.000067	1.61	390.641000	Y 377.433
Co (228.615 nm)	0.050236	ppm	0.000356	0.71	958.481000	Y 242.219
Cr (205.560 nm)	0.527092	ppm	0.002483	0.47	7827.270000	Y 377.433
Cu (324.754 nm)	7.513720 o	ppm	0.051924	0.69	534597.000000	Y 377.433
Fe (238.204 nm)	141.939752 o	ppm	0.137332	0.10	501667.013120	Y_R 377.433
Fe H (259.940 nm)	147.722000	ppm	0.286587	0.19	307674.000000	Y_R 377.433
K (766.491 nm)	32.171700	ppm	0.120909	0.38	31280.500000	Y_R2 488.368
Li (670.783 nm)	0.145583	ppm	0.000879	0.60	3738.430000	Y_R2 488.368
Mg (279.078 nm)	47.695000 o	ppm	0.187416	0.39	287824.000000	Y 377.433
Mn (257.610 nm)	2.085900 o	ppm	0.005950	0.29	504864.000000	Y 377.433
Mo (202.032 nm)	0.012341	ppm	0.000409	3.32	110.784000	Y 377.433
Na (589.592 nm)	29.037200	ppm	0.089536	0.31	176509.000000	Y_R2 488.368
Na H (589.593 nm)	29.473294	ppm	0.141261	0.48	116222.486967	Y_R 488.368
Ni (231.604 nm)	0.620574	ppm	0.002531	0.41	4387.100000	Y 377.433
P (213.618 nm)	25.861200 o	ppm	0.274136	1.06	61007.000000	Y 242.219
Pb (220.353 nm)	0.089064	ppm	0.003324	3.73	193.877000	Y 242.219
S (181.972 nm)	24.062343 o	ppm	0.058827	0.24	11571.311500	Y 377.433
Sb (206.834 nm)	0.007630	ppm	0.002760	36.18	0.103630	Y 377.433
Se (196.026 nm)	0.002856	ppm	0.002660	93.14	-13.215600	Y 242.219
Si (288.158 nm)	2.637430	ppm	0.006068	0.23	25523.200000	Y 377.433
Sn (189.925 nm)	0.035420	ppm	0.000482	1.36	80.616900	Y 377.433
Sr (421.552 nm)	0.579950	ppm	0.003456	0.60	129936.932169	Y_R 488.368
Th (288.505 nm)	0.059274	ppm	0.003134	5.29	316.205000	Y 377.433
Ti (336.122 nm)	0.538111	ppm	0.002593	0.48	80982.000000	Y 377.433
Tl (190.794 nm)	0.002408	ppm	0.001511	62.76	-4.074890	Y 377.433
U (409.013 nm)	-0.026369 u	ppm	0.003919	14.86	-106.400000	Y 377.433
V (292.401 nm)	0.513319	ppm	0.002392	0.47	20951.500000	Y 377.433
Zn (206.200 nm)	3.050660 o	ppm	0.012684	0.42	16291.200000	Y 377.433
Zr (343.823 nm)	0.066837	ppm	0.000513	0.77	9596.410000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.997212	8359.376573	0.005502	0.55
Y 377.433	0.962399	436322.595386	0.006034	0.63
Y_R 377.433	1.041830	35942.300000	0.004945	0.47
Y_R 488.368	1.063830	20045.600000	0.006617	0.62
Y_R2 488.368	1.020924	33811.754434	0.005823	0.57

Sample Name: 280-167868-B-8-A

Date: 10/28/2022 6:10:23 AM Rack:Tube: 2:6

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.221790	ppm	0.000530	0.24	510240.504175	Y 377.433
Ag (328.068 nm)	0.003718 n	ppm	0.000289	7.78	-80.787700	Y 377.433
Al (167.019 nm)	160.018000 o	ppm	0.284778	0.18	71519.700000	Y_R 377.433
Al H (396.152 nm)	233.990678 o	ppm	0.888940	0.38	649629.902609	Y_R 377.433
As (188.980 nm)	0.030628	ppm	0.002112	6.90	36.271700	Y 242.219
B (249.678 nm)	0.167243	ppm	0.000463	0.28	4356.970000	Y 242.219
Ba (493.408 nm)	1.253620 o	ppm	0.024744	1.97	138920.000000	Y_R 488.368
Be (234.861 nm)	0.011427	ppm	0.000065	0.57	6193.470000	Y_R 488.368
Bi (223.061 nm)	0.434819	ppm	0.000877	0.20	1108.680000	Y 377.433
Ca (315.887 nm)	374.631803 o	ppm	0.746811	0.20	346801.981756	Y_R 377.433
Cd (214.439 nm)	0.004835	ppm	0.000088	1.82	483.146000	Y 377.433
Co (228.615 nm)	0.068943	ppm	0.000329	0.48	1317.040000	Y 242.219
Cr (205.560 nm)	0.800119	ppm	0.002117	0.26	11884.800000	Y 377.433
Cu (324.754 nm)	8.522770 o	ppm	0.039881	0.47	606201.000000	Y 377.433
Fe (238.204 nm)	190.903000 o	ppm	0.921178	0.48	674716.711048	Y_R 377.433
Fe H (259.940 nm)	198.911000	ppm	0.602806	0.30	414283.000000	Y_R 377.433
K (766.491 nm)	42.063300	ppm	0.073553	0.17	41141.000000	Y_R2 488.368
Li (670.783 nm)	0.198108	ppm	0.001380	0.70	5500.450000	Y_R2 488.368
Mg (279.078 nm)	66.516200 o	ppm	0.187707	0.28	401399.000000	Y 377.433
Mn (257.610 nm)	2.822810 o	ppm	0.007123	0.25	683198.000000	Y 377.433
Mo (202.032 nm)	0.016939	ppm	0.000649	3.83	150.166000	Y 377.433
Na (589.592 nm)	54.353200	ppm	0.214156	0.39	329610.000000	Y_R2 488.368
Na H (589.593 nm)	55.594752	ppm	0.182851	0.33	221681.559726	Y_R 488.368
Ni (231.604 nm)	0.671982	ppm	0.002486	0.37	4756.490000	Y 377.433
P (213.618 nm)	28.858800 o	ppm	0.152889	0.53	68077.200000	Y 242.219
Pb (220.353 nm)	0.134227	ppm	0.000294	0.22	301.175000	Y 242.219
S (181.972 nm)	23.657642 o	ppm	0.086389	0.37	11378.585493	Y 377.433
Sb (206.834 nm)	0.007603	ppm	0.001581	20.80	-1.602620	Y 377.433
Se (196.026 nm)	0.004272	ppm	0.002490	58.30	-19.407700	Y 242.219
Si (288.158 nm)	2.832520	ppm	0.008043	0.28	27357.600000	Y 377.433
Sn (189.925 nm)	0.027540	ppm	0.000315	1.14	63.871600	Y 377.433
Sr (421.552 nm)	0.752513	ppm	0.002461	0.33	168582.136531	Y_R 488.368
Th (288.505 nm)	0.084762	ppm	0.000663	0.78	404.823000	Y 377.433
Ti (336.122 nm)	0.643540	ppm	0.000726	0.11	97063.500000	Y 377.433
Tl (190.794 nm)	0.001400 u	ppm	0.001798	> 100.00	-8.021220	Y 377.433
U (409.013 nm)	-0.043670 u	ppm	0.001035	2.37	-167.343000	Y 377.433
V (292.401 nm)	0.649855	ppm	0.001383	0.21	26480.400000	Y 377.433
Zn (206.200 nm)	2.939510 o	ppm	0.007033	0.24	15698.000000	Y 377.433
Zr (343.823 nm)	0.094742	ppm	0.000547	0.58	13564.000000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	1.012323	8486.048982	0.004612	0.46
Y 377.433	0.974772	441932.007137	0.006502	0.67
Y_R 377.433	1.085880	37461.800000	0.002947	0.27
Y_R 488.368	1.102540	20774.900000	0.005658	0.51
Y_R2 488.368	1.061465	35154.414425	0.003252	0.31

Sample Name: 660-124524-A-1-A

Date: 10/28/2022 6:14:25 AM Rack:Tube: 2:7

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.003511	ppm	0.000012	0.35	7046.552401	Y 377.433
Ag (328.068 nm)	0.000894 n	ppm	0.000176	19.74	-105.228000	Y 377.433
Al (167.019 nm)	13.056900 o	ppm	0.066524	0.51	5833.780000	Y_R 377.433
Al H (396.152 nm)	12.765704	ppm	0.025085	0.20	35511.992968	Y_R 377.433
As (188.980 nm)	0.020564	ppm	0.001745	8.49	23.185100	Y 242.219
B (249.678 nm)	0.116386	ppm	0.000341	0.29	3299.470000	Y 242.219
Ba (493.408 nm)	0.131881	ppm	0.000649	0.49	14649.800000	Y_R 488.368
Be (234.861 nm)	0.000687	ppm	0.000020	2.86	345.842000	Y_R 488.368
Bi (223.061 nm)	-0.002770 u	ppm	0.001637	59.10	10.379900	Y 377.433
Ca (315.887 nm)	116.860177 o	ppm	0.197924	0.17	108173.771464	Y_R 377.433
Cd (214.439 nm)	0.000264	ppm	0.000049	18.78	21.581300	Y 377.433
Co (228.615 nm)	0.002748	ppm	0.000160	5.82	42.379000	Y 242.219
Cr (205.560 nm)	0.023740	ppm	0.000167	0.70	358.103000	Y 377.433
Cu (324.754 nm)	0.036689	ppm	0.000022	0.06	3956.230000	Y 377.433
Fe (238.204 nm)	10.838822 o	ppm	0.008433	0.08	38319.961391	Y_R 377.433
Fe H (259.940 nm)	11.124600	ppm	0.022584	0.20	23185.200000	Y_R 377.433
K (766.491 nm)	1.244340	ppm	0.039614	3.18	450.534000	Y_R2 488.368
Li (670.783 nm)	0.013712	ppm	0.000234	1.71	-685.302000	Y_R2 488.368
Mg (279.078 nm)	9.484160	ppm	0.008405	0.09	57300.000000	Y 377.433
Mn (257.610 nm)	0.346864	ppm	0.000363	0.10	84017.700000	Y 377.433
Mo (202.032 nm)	0.013257	ppm	0.000346	2.61	118.624000	Y 377.433
Na (589.592 nm)	0.650329	ppm	0.002763	0.42	4321.960000	Y_R2 488.368
Na H (589.593 nm)	1.762289 u	ppm	0.006089	0.35	3926.813191	Y_R 488.368
Ni (231.604 nm)	0.008739	ppm	0.000774	8.85	69.083700	Y 377.433
P (213.618 nm)	2.368570	ppm	0.007639	0.32	5597.120000	Y 242.219
Pb (220.353 nm)	0.041250	ppm	0.000881	2.14	107.235000	Y 242.219
S (181.972 nm)	22.733863 o	ppm	0.031237	0.14	10928.888952	Y 377.433
Sb (206.834 nm)	-0.001684 u	ppm	0.002507	> 100.00	-12.761000	Y 377.433
Se (196.026 nm)	0.005128	ppm	0.001605	31.29	9.739660	Y 242.219
Si (288.158 nm)	2.307530	ppm	0.013775	0.60	22380.900000	Y 377.433
Sn (189.925 nm)	0.015422	ppm	0.000446	2.89	38.121800	Y 377.433
Sr (421.552 nm)	0.227220	ppm	0.000581	0.26	50943.823193	Y_R 488.368
Th (288.505 nm)	0.010929	ppm	0.003242	29.67	137.260000	Y 377.433
Ti (336.122 nm)	0.117419	ppm	0.000984	0.84	17687.900000	Y 377.433
Tl (190.794 nm)	-0.000625 u	ppm	0.000926	> 100.00	-5.505600	Y 377.433
U (409.013 nm)	0.007939	ppm	0.002709	34.13	-37.751800	Y 377.433
V (292.401 nm)	0.024844	ppm	0.000177	0.71	1037.180000	Y 377.433
Zn (206.200 nm)	0.066152	ppm	0.000609	0.92	362.425000	Y 377.433
Zr (343.823 nm)	0.048036	ppm	0.007881	16.41	6618.300000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.992809	8322.462277	0.001719	0.17
Y 377.433	0.967779	438761.359585	0.002741	0.28
Y_R 377.433	1.016170	35056.900000	0.006427	0.63
Y_R 488.368	1.035390	19509.700000	0.007641	0.74
Y_R2 488.368	0.994456	32935.166096	0.000855	0.09

Sample Name: 660-124524-A-2-A

Date: 10/28/2022 6:18:27 AM Rack:Tube: 2:8

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.003250	ppm	0.000001	0.02	6446.525777	Y 377.433
Ag (328.068 nm)	0.000826 n	ppm	0.000166	20.07	-116.733000	Y 377.433
Al (167.019 nm)	11.977900 o	ppm	0.081186	0.68	5352.870000	Y_R 377.433
Al H (396.152 nm)	11.850712	ppm	0.021399	0.18	33003.925243	Y_R 377.433
As (188.980 nm)	0.027785	ppm	0.001217	4.38	32.574000	Y 242.219
B (249.678 nm)	0.112489	ppm	0.000328	0.29	3188.590000	Y 242.219
Ba (493.408 nm)	0.170408	ppm	0.000208	0.12	18913.300000	Y_R 488.368
Be (234.861 nm)	0.000839	ppm	0.000022	2.60	406.776000	Y_R 488.368
Bi (223.061 nm)	-0.002049 u	ppm	0.002576	> 100.00	12.190200	Y 377.433
Ca (315.887 nm)	181.345017 o	ppm	0.377942	0.21	167869.642056	Y_R 377.433
Cd (214.439 nm)	0.000315	ppm	0.000058	18.46	25.905400	Y 377.433
Co (228.615 nm)	0.002450	ppm	0.000266	10.86	37.376100	Y 242.219
Cr (205.560 nm)	0.023208	ppm	0.000096	0.41	349.859000	Y 377.433
Cu (324.754 nm)	0.040082	ppm	0.000054	0.14	4147.710000	Y 377.433
Fe (238.204 nm)	12.006737 o	ppm	0.021701	0.18	42447.697313	Y_R 377.433
Fe H (259.940 nm)	12.327500	ppm	0.017713	0.14	25690.400000	Y_R 377.433
K (766.491 nm)	1.195430	ppm	0.033363	2.79	401.775000	Y_R2 488.368
Li (670.783 nm)	0.012024	ppm	0.000995	8.27	-741.952000	Y_R2 488.368
Mg (279.078 nm)	10.910700	ppm	0.016621	0.15	65913.100000	Y 377.433
Mn (257.610 nm)	0.468220	ppm	0.000916	0.20	113386.000000	Y 377.433
Mo (202.032 nm)	0.012836	ppm	0.000323	2.52	115.018000	Y 377.433
Na (589.592 nm)	0.846364	ppm	0.011120	1.31	5556.990000	Y_R2 488.368
Na H (589.593 nm)	1.949464 u	ppm	0.007159	0.37	4720.899189	Y_R 488.368
Ni (231.604 nm)	0.010057	ppm	0.000460	4.57	78.541500	Y 377.433
P (213.618 nm)	3.261120	ppm	0.005901	0.18	7702.310000	Y 242.219
Pb (220.353 nm)	0.051476	ppm	0.001339	2.60	136.053000	Y 242.219
S (181.972 nm)	26.341285 o	ppm	0.089968	0.34	12662.551986	Y 377.433
Sb (206.834 nm)	0.000290 u	ppm	0.002260	> 100.00	-7.822940	Y 377.433
Se (196.026 nm)	0.007699	ppm	0.003516	45.67	12.173700	Y 242.219
Si (288.158 nm)	2.153810	ppm	0.007240	0.34	20951.700000	Y 377.433
Sn (189.925 nm)	0.014811	ppm	0.001093	7.38	36.823900	Y 377.433
Sr (421.552 nm)	0.310612	ppm	0.000205	0.07	69619.398023	Y_R 488.368
Th (288.505 nm)	0.015501	ppm	0.000484	3.12	152.753000	Y 377.433
Ti (336.122 nm)	0.135213	ppm	0.000022	0.02	20550.100000	Y 377.433
Tl (190.794 nm)	-0.000137 u	ppm	0.001607	> 100.00	-4.538060	Y 377.433
U (409.013 nm)	0.009680	ppm	0.002629	27.16	-39.313100	Y 377.433
V (292.401 nm)	0.032082	ppm	0.000218	0.68	1335.490000	Y 377.433
Zn (206.200 nm)	0.067898	ppm	0.000389	0.57	371.744000	Y 377.433
Zr (343.823 nm)	0.022011	ppm	0.000544	2.47	3063.420000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.971619	8144.834199	0.000578	0.06
Y 377.433	0.952172	431685.963377	0.001235	0.13
Y_R 377.433	1.020910	35220.400000	0.004738	0.46
Y_R 488.368	1.039380	19584.800000	0.004230	0.41
Y_R2 488.368	0.996058	32988.221106	0.005811	0.58

Sample Name: 660-124524-A-3-A

Date: 10/28/2022 6:22:29 AM Rack:Tube: 2:9

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.003701	ppm	0.000018	0.49	7484.529269	Y 377.433
Ag (328.068 nm)	0.000718 n	ppm	0.000103	14.34	-122.918000	Y 377.433
Al (167.019 nm)	13.045200 o	ppm	0.035430	0.27	5829.440000	Y_R 377.433
Al H (396.152 nm)	12.864337	ppm	0.022427	0.17	35813.205290	Y_R 377.433
As (188.980 nm)	0.020170	ppm	0.001180	5.85	22.672500	Y 242.219
B (249.678 nm)	0.107435	ppm	0.000208	0.19	3046.890000	Y 242.219
Ba (493.408 nm)	0.163736	ppm	0.000367	0.22	18175.700000	Y_R 488.368
Be (234.861 nm)	0.000811	ppm	0.000027	3.31	406.296000	Y_R 488.368
Bi (223.061 nm)	-0.002987 u	ppm	0.001140	38.17	9.834380	Y 377.433
Ca (315.887 nm)	173.396837 o	ppm	0.489493	0.28	160511.734099	Y_R 377.433
Cd (214.439 nm)	0.000316	ppm	0.000024	7.67	26.455500	Y 377.433
Co (228.615 nm)	0.002580	ppm	0.000294	11.41	41.238700	Y 242.219
Cr (205.560 nm)	0.025834	ppm	0.000306	1.18	388.879000	Y 377.433
Cu (324.754 nm)	0.039815	ppm	0.000192	0.48	4134.590000	Y 377.433
Fe (238.204 nm)	12.470099 o	ppm	0.040999	0.33	44085.348480	Y_R 377.433
Fe H (259.940 nm)	12.803400	ppm	0.051228	0.40	26681.600000	Y_R 377.433
K (766.491 nm)	1.237630	ppm	0.091934	7.43	443.843000	Y_R2 488.368
Li (670.783 nm)	0.013318	ppm	0.002023	15.19	-698.528000	Y_R2 488.368
Mg (279.078 nm)	9.965140	ppm	0.023699	0.24	60201.800000	Y 377.433
Mn (257.610 nm)	0.397456	ppm	0.001084	0.27	96261.000000	Y 377.433
Mo (202.032 nm)	0.011877	ppm	0.000042	0.36	106.807000	Y 377.433
Na (589.592 nm)	0.797463	ppm	0.003871	0.49	5253.160000	Y_R2 488.368
Na H (589.593 nm)	1.866131 u	ppm	0.004242	0.23	4378.694164	Y_R 488.368
Ni (231.604 nm)	0.008972	ppm	0.000428	4.77	71.005400	Y 377.433
P (213.618 nm)	3.319070	ppm	0.009008	0.27	7838.980000	Y 242.219
Pb (220.353 nm)	0.056158	ppm	0.000784	1.40	148.754000	Y 242.219
S (181.972 nm)	24.846108 o	ppm	0.102553	0.41	11943.948569	Y 377.433
Sb (206.834 nm)	0.000221 u	ppm	0.000919	> 100.00	-8.016100	Y 377.433
Se (196.026 nm)	0.006700	ppm	0.002938	43.85	11.046100	Y 242.219
Si (288.158 nm)	2.120060	ppm	0.011583	0.55	20643.400000	Y 377.433
Sn (189.925 nm)	0.014656	ppm	0.002275	15.52	36.493400	Y 377.433
Sr (421.552 nm)	0.307548	ppm	0.000576	0.19	68933.117264	Y_R 488.368
Th (288.505 nm)	0.015087	ppm	0.002374	15.74	149.950000	Y 377.433
Ti (336.122 nm)	0.172127	ppm	0.000635	0.37	26036.600000	Y 377.433
Tl (190.794 nm)	0.001479 u	ppm	0.001639	> 100.00	-1.154360	Y 377.433
U (409.013 nm)	0.003071	ppm	0.000312	10.16	-69.837400	Y 377.433
V (292.401 nm)	0.026195	ppm	0.000196	0.75	1093.870000	Y 377.433
Zn (206.200 nm)	0.079772	ppm	0.000625	0.78	435.116000	Y 377.433
Zr (343.823 nm)	0.015949	ppm	0.000216	1.35	2235.930000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.980385	8218.319172	0.009296	0.95
Y 377.433	0.959640	435071.403962	0.003733	0.39
Y_R 377.433	1.025950	35394.400000	0.012224	1.19
Y_R 488.368	1.043980	19671.500000	0.013800	1.32
Y_R2 488.368	0.987200	32694.844151	0.001557	0.16

Sample Name: CCVH-7429327

Date: 10/28/2022 6:26:32 AM Rack:Tube: S1:1

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000074	ppm	0.000012	16.44	-876.713530	Y 377.433
Ag (328.068 nm)	0.002429	ppm	0.000083	3.41	-115.278000	Y 377.433
Al (167.019 nm)	50.628500 o	ppm	0.070998	0.14	22623.500000	Y_R 377.433
Al H (396.152 nm)	51.221562	ppm	0.036859	0.07	142184.886202	Y_R 377.433
As (188.980 nm)	-0.000335 u	ppm	0.001943	> 100.00	-3.989060	Y 242.219
B (249.678 nm)	0.001357	ppm	0.000245	18.06	15.159400	Y 242.219
Ba (493.408 nm)	0.000368	ppm	0.000025	6.68	136.256000	Y_R 488.368
Be (234.861 nm)	0.000005 u	ppm	0.000036	> 100.00	789.565000	Y_R 488.368
Bi (223.061 nm)	-0.000188 u	ppm	0.001133	> 100.00	16.860800	Y 377.433
Ca (315.887 nm)	-0.001617 u	ppm	0.004787	> 100.00	-9.275561	Y_R 377.433
Cd (214.439 nm)	-0.000113 u	ppm	0.000073	64.09	38.913600	Y 377.433
Co (228.615 nm)	-0.000455 u	ppm	0.000198	43.51	-22.663000	Y 242.219
Cr (205.560 nm)	0.000611	ppm	0.000069	11.24	2.174110	Y 377.433
Cu (324.754 nm)	0.003302	ppm	0.000267	8.10	2854.260000	Y 377.433
Fe (238.204 nm)	50.817700 o	ppm	0.026610	0.05	179616.406333	Y_R 377.433
Fe H (259.940 nm)	51.918600	ppm	0.087448	0.17	108146.000000	Y_R 377.433
K (766.491 nm)	0.103700	ppm	0.059727	57.60	-686.512000	Y_R2 488.368
Li (670.783 nm)	0.007996	ppm	0.001141	14.27	-877.069000	Y_R2 488.368
Mg (279.078 nm)	-0.006601 u	ppm	0.000694	10.52	-164.154000	Y 377.433
Mn (257.610 nm)	0.000256	ppm	0.000023	9.06	138.562000	Y 377.433
Mo (202.032 nm)	-0.000467 u	ppm	0.000253	54.18	1.060650	Y 377.433
Na (589.592 nm)	251.150000	ppm	0.993456	0.40	1514160.000000	Y_R2 488.368
Na H (589.593 nm)	250.051680	ppm	1.549394	0.62	1002554.510845	Y_R 488.368
Ni (231.604 nm)	-0.000885 u	ppm	0.000440	49.77	8.476260	Y 377.433
P (213.618 nm)	5.011630	ppm	0.018548	0.37	11831.100000	Y 242.219
Pb (220.353 nm)	-0.005010 u	ppm	0.001856	37.05	-24.268700	Y 242.219
S (181.972 nm)	5.107320	ppm	0.019081	0.37	2458.470660	Y 377.433
Sb (206.834 nm)	0.001804	ppm	0.001727	95.73	-19.083800	Y 377.433
Se (196.026 nm)	0.006305	ppm	0.001881	29.84	3.717340	Y 242.219
Si (288.158 nm)	0.016084	ppm	0.000732	4.55	1015.180000	Y 377.433
Sn (189.925 nm)	-0.000307 u	ppm	0.000981	> 100.00	4.699070	Y 377.433
Sr (421.552 nm)	0.000574	ppm	0.000060	10.44	187.036372	Y_R 488.368
Th (288.505 nm)	5.085760	ppm	0.070931	1.39	14389.100000	Y 377.433
Ti (336.122 nm)	0.000584	ppm	0.000033	5.70	-128.949000	Y 377.433
Tl (190.794 nm)	-0.002748 u	ppm	0.001857	67.60	-10.732000	Y 377.433
U (409.013 nm)	2.543790	ppm	0.001690	0.07	12795.200000	Y 377.433
V (292.401 nm)	-0.000435 u	ppm	0.000193	44.47	332.891000	Y 377.433
Zn (206.200 nm)	0.001231	ppm	0.000261	21.22	15.933400	Y 377.433
Zr (343.823 nm)	-0.000578 u	ppm	0.000061	10.51	95.133000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.962959	8072.241216	0.005233	0.54
Y 377.433	0.928264	420846.736741	0.005464	0.59
Y_R 377.433	0.994715	34316.800000	0.010595	1.07
Y_R 488.368	1.014540	19116.800000	0.009941	0.98
Y_R2 488.368	0.975721	32314.688079	0.006695	0.69

Sample Name: CCV-7429326

Date: 10/28/2022 6:30:36 AM Rack:Tube: S1:2

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.467186	ppm	0.000468	0.10	1075944.801711	Y 377.433
Ag (328.068 nm)	0.512322	ppm	0.001338	0.26	27078.300000	Y 377.433
Al (167.019 nm)	0.549593	ppm	0.009468	1.72	247.349000	Y_R 377.433
Al H (396.152 nm)	0.524520 u	ppm	0.002679	0.51	1529.044226	Y_R 377.433
As (188.980 nm)	0.504549	ppm	0.002334	0.46	652.503000	Y 242.219
B (249.678 nm)	0.500763	ppm	0.000641	0.13	14047.300000	Y 242.219
Ba (493.408 nm)	0.508636	ppm	0.002263	0.44	56322.800000	Y_R 488.368
Be (234.861 nm)	0.524111	ppm	0.001345	0.26	146152.000000	Y_R 488.368
Bi (223.061 nm)	1.047420	ppm	0.001977	0.19	2646.240000	Y 377.433
Ca (315.887 nm)	5.299059	ppm	0.014547	0.27	4898.093269	Y_R 377.433
Cd (214.439 nm)	0.517386	ppm	0.001781	0.34	31640.600000	Y 377.433
Co (228.615 nm)	0.511719	ppm	0.001857	0.36	9707.440000	Y 242.219
Cr (205.560 nm)	0.517967	ppm	0.001428	0.28	7724.610000	Y 377.433
Cu (324.754 nm)	0.526045	ppm	0.001390	0.26	38775.600000	Y 377.433
Fe (238.204 nm)	2.548040	ppm	0.004589	0.18	9018.039873	Y_R 377.433
Fe H (259.940 nm)	2.618510 u	ppm	0.005555	0.21	5469.670000	Y_R 377.433
K (766.491 nm)	49.159000	ppm	0.100257	0.20	48214.300000	Y_R2 488.368
Li (670.783 nm)	0.480477	ppm	0.001992	0.41	14972.800000	Y_R2 488.368
Mg (279.078 nm)	20.523600	ppm	0.040589	0.20	123984.000000	Y 377.433
Mn (257.610 nm)	0.520713	ppm	0.000966	0.19	126089.000000	Y 377.433
Mo (202.032 nm)	0.521936	ppm	0.000044	0.01	4476.270000	Y 377.433
Na (589.592 nm)	25.510700	ppm	0.022207	0.09	154706.000000	Y_R2 488.368
Na H (589.593 nm)	26.068827	ppm	0.109388	0.42	102107.079302	Y_R 488.368
Ni (231.604 nm)	0.528230	ppm	0.000848	0.16	3715.220000	Y 377.433
P (213.618 nm)	-0.031229 u	ppm	0.000350	1.12	-63.058300	Y 242.219
Pb (220.353 nm)	0.499757	ppm	0.001498	0.30	1382.560000	Y 242.219
S (181.972 nm)	0.007915	ppm	0.006576	83.09	9.411491	Y 377.433
Sb (206.834 nm)	0.523568	ppm	0.001678	0.32	1319.170000	Y 377.433
Se (196.026 nm)	0.502186	ppm	0.005084	1.01	506.864000	Y 242.219
Si (288.158 nm)	5.143630	ppm	0.011552	0.22	48867.100000	Y 377.433
Sn (189.925 nm)	0.522643	ppm	0.000140	0.03	1115.930000	Y 377.433
Sr (421.552 nm)	0.501242	ppm	0.001912	0.38	112310.477475	Y_R 488.368
Th (288.505 nm)	0.075880	ppm	0.031161	41.07	321.124000	Y 377.433
Ti (336.122 nm)	0.510835	ppm	0.000435	0.09	76073.500000	Y 377.433
Tl (190.794 nm)	0.519189	ppm	0.001151	0.22	1138.420000	Y 377.433
U (409.013 nm)	0.001112 u	ppm	0.003603	> 100.00	-94.136600	Y 377.433
V (292.401 nm)	0.521688	ppm	0.001098	0.21	21286.000000	Y 377.433
Zn (206.200 nm)	0.521788	ppm	0.001387	0.27	2794.220000	Y 377.433
Zr (343.823 nm)	0.469205	ppm	0.017795	3.79	64182.100000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.974999	8173.165627	0.003548	0.36
Y 377.433	0.947650	429635.855539	0.002976	0.31
Y_R 377.433	0.990292	34164.200000	0.001704	0.17
Y_R 488.368	1.010390	19038.500000	0.002351	0.23
Y_R2 488.368	0.960082	31796.725613	0.002082	0.22

Sample Name: CCB

Date: 10/28/2022 6:34:38 AM Rack:Tube: S1:4

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.000057	ppm	0.000011	19.69	-914.872653	Y 377.433
Ag (328.068 nm)	0.000508	ppm	0.000069	13.60	-132.312000	Y 377.433
Al (167.019 nm)	-0.000395 u	ppm	0.002361	> 100.00	0.489402	Y_R 377.433
Al H (396.152 nm)	-0.008049 u	ppm	0.005573	69.23	1.421638	Y_R 377.433
As (188.980 nm)	-0.000473 u	ppm	0.000313	66.23	-4.168730	Y 242.219
B (249.678 nm)	0.000328 u	ppm	0.000288	87.54	88.795400	Y 242.219
Ba (493.408 nm)	-0.000176 u	ppm	0.000085	48.14	29.641500	Y_R 488.368
Be (234.861 nm)	-0.000026 u	ppm	0.000006	22.41	-23.811200	Y_R 488.368
Bi (223.061 nm)	0.000573	ppm	0.000677	> 100.00	18.771700	Y 377.433
Ca (315.887 nm)	0.007227	ppm	0.004244	58.73	-1.088851	Y_R 377.433
Cd (214.439 nm)	-0.000029 u	ppm	0.000019	65.41	-7.260810	Y 377.433
Co (228.615 nm)	0.000024 u	ppm	0.000102	> 100.00	-13.611200	Y 242.219
Cr (205.560 nm)	-0.000060 u	ppm	0.000299	> 100.00	6.251380	Y 377.433
Cu (324.754 nm)	0.001422	ppm	0.000155	10.94	1526.700000	Y 377.433
Fe (238.204 nm)	0.001275	ppm	0.000472	36.98	17.066462	Y_R 377.433
Fe H (259.940 nm)	-0.001494 u	ppm	0.002130	> 100.00	13.058600	Y_R 377.433
K (766.491 nm)	0.087878 u	ppm	0.109660	> 100.00	-702.285000	Y_R2 488.368
Li (670.783 nm)	0.007860	ppm	0.000452	5.75	-881.620000	Y_R2 488.368
Mg (279.078 nm)	-0.000889 u	ppm	0.000167	18.78	37.840900	Y 377.433
Mn (257.610 nm)	-0.000155 u	ppm	0.000014	8.80	39.056700	Y 377.433
Mo (202.032 nm)	0.001413	ppm	0.000348	24.62	17.163900	Y 377.433
Na (589.592 nm)	-0.004862 u	ppm	0.001735	35.67	188.422000	Y_R2 488.368
Na H (589.593 nm)	1.161248 u	ppm	0.002513	0.22	1367.046312	Y_R 488.368
Ni (231.604 nm)	-0.000077 u	ppm	0.000386	> 100.00	5.310200	Y 377.433
P (213.618 nm)	0.000720 u	ppm	0.001173	> 100.00	12.296800	Y 242.219
Pb (220.353 nm)	0.000541 u	ppm	0.000689	> 100.00	-2.132880	Y 242.219
S (181.972 nm)	0.003794 u	ppm	0.005928	> 100.00	6.209306	Y 377.433
Sb (206.834 nm)	-0.001357 u	ppm	0.001596	> 100.00	-10.322800	Y 377.433
Se (196.026 nm)	0.000738 u	ppm	0.002789	> 100.00	6.908630	Y 242.219
Si (288.158 nm)	0.002994	ppm	0.000400	13.36	893.119000	Y 377.433
Sn (189.925 nm)	0.000097 u	ppm	0.000914	> 100.00	5.556490	Y 377.433
Sr (421.552 nm)	-0.000061 u	ppm	0.000138	> 100.00	44.887386	Y_R 488.368
Th (288.505 nm)	0.002302	ppm	0.000819	35.60	105.246000	Y 377.433
Ti (336.122 nm)	-0.000013 u	ppm	0.000076	> 100.00	-218.072000	Y 377.433
Tl (190.794 nm)	0.000349 u	ppm	0.001282	> 100.00	-2.528370	Y 377.433
U (409.013 nm)	0.005532	ppm	0.001762	31.85	-31.933100	Y 377.433
V (292.401 nm)	-0.000124 u	ppm	0.000101	81.59	15.513600	Y 377.433
Zn (206.200 nm)	-0.000681 u	ppm	0.000382	56.11	5.724910	Y 377.433
Zr (343.823 nm)	0.000136	ppm	0.000100	73.19	35.038000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.986713	8271.362414	0.006527	0.66
Y 377.433	0.961009	435692.411119	0.004836	0.50
Y_R 377.433	0.987184	34057.000000	0.001552	0.16
Y_R 488.368	1.008490	19002.900000	0.002508	0.25
Y_R2 488.368	0.964364	31938.534343	0.004892	0.51

Sample Name: CCVL-7434568

Date: 10/28/2022 6:38:40 AM Rack:Tube: S1:3

Weight (g): 1 Volume (mL): 1 Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Internal Standard
(Li-A) (670.783 nm)	0.014669	ppm	0.000030	0.21	32769.015013	Y 377.433
Ag (328.068 nm)	0.010801	ppm	0.000038	0.36	413.988000	Y 377.433
Al (167.019 nm)	0.107586	ppm	0.000675	0.63	48.736400	Y_R 377.433
Al H (396.152 nm)	0.100233 u	ppm	0.002945	2.94	303.749711	Y_R 377.433
As (188.980 nm)	0.015181	ppm	0.001953	12.87	16.185700	Y 242.219
B (249.678 nm)	0.100250	ppm	0.000307	0.31	2872.060000	Y 242.219
Ba (493.408 nm)	0.009979	ppm	0.000202	2.03	1153.210000	Y_R 488.368
Be (234.861 nm)	0.001013	ppm	0.000024	2.33	266.265000	Y_R 488.368
Bi (223.061 nm)	-0.002546 Qu	ppm	0.002029	79.70	10.942300 Q	Y 377.433
Ca (315.887 nm)	0.222133	ppm	0.002564	1.15	197.860816	Y_R 377.433
Cd (214.439 nm)	0.005140	ppm	0.000035	0.68	308.973000	Y 377.433
Co (228.615 nm)	0.010531	ppm	0.000078	0.74	185.965000	Y 242.219
Cr (205.560 nm)	0.010470	ppm	0.000091	0.87	163.197000	Y 377.433
Cu (324.754 nm)	0.017902	ppm	0.000072	0.40	2695.720000	Y 377.433
Fe (238.204 nm)	0.102947	ppm	0.001962	1.91	376.400697	Y_R 377.433
Fe H (259.940 nm)	0.105165 u	ppm	0.000863	0.82	235.196000	Y_R 377.433
K (766.491 nm)	3.065490	ppm	0.028068	0.92	2265.950000	Y_R2 488.368
Li (670.783 nm)	0.028411 Q	ppm	0.001288	4.53	-192.228000 Q	Y_R2 488.368
Mg (279.078 nm)	0.209245	ppm	0.000678	0.32	1305.150000	Y 377.433
Mn (257.610 nm)	0.010470	ppm	0.000023	0.22	2610.110000	Y 377.433
Mo (202.032 nm)	0.020192	ppm	0.000346	1.71	178.033000	Y 377.433
Na (589.592 nm)	1.074290	ppm	0.008218	0.76	6707.660000	Y_R2 488.368
Na H (589.593 nm)	2.185947 u	ppm	0.015578	0.71	5499.873143	Y_R 488.368
Ni (231.604 nm)	0.044125	ppm	0.000688	1.56	315.649000	Y 377.433
P (213.618 nm)	2.886150	ppm	0.010009	0.35	6817.890000	Y 242.219
Pb (220.353 nm)	0.008526	ppm	0.000451	5.29	20.090400	Y 242.219
S (181.972 nm)	0.108601	ppm	0.002799	2.58	56.594287	Y 377.433
Sb (206.834 nm)	0.022687	ppm	0.002155	9.50	50.155800	Y 377.433
Se (196.026 nm)	0.021716	ppm	0.000787	3.62	27.816900	Y 242.219
Si (288.158 nm)	0.498004	ppm	0.001422	0.29	5506.100000	Y 377.433
Sn (189.925 nm)	0.105097	ppm	0.000914	0.87	228.675000	Y 377.433
Sr (421.552 nm)	0.010042	ppm	0.000088	0.87	2307.291043	Y_R 488.368
Th (288.505 nm)	0.020145 Q	ppm	0.002268	11.26	156.835000 Q	Y 377.433
Ti (336.122 nm)	0.009788	ppm	0.000089	0.91	1246.020000	Y 377.433
Tl (190.794 nm)	0.016407	ppm	0.000669	4.08	32.782700	Y 377.433
U (409.013 nm)	0.070822	ppm	0.002760	3.90	295.599000	Y 377.433
V (292.401 nm)	0.010294	ppm	0.000098	0.95	437.760000	Y 377.433
Zn (206.200 nm)	0.022148	ppm	0.000354	1.60	127.571000	Y 377.433
Zr (343.823 nm)	0.012387	ppm	0.000187	1.51	1710.520000	Y 377.433

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 242.219	0.984371	8251.728915	0.002658	0.27
Y 377.433	0.958407	434512.398120	0.001734	0.18
Y_R 377.433	1.005100	34675.000000	0.003011	0.30
Y_R 488.368	1.021550	19248.900000	0.011142	1.09
Y_R2 488.368	0.984347	32600.372704	0.005112	0.52

Report Generated By Teledyne Leeman QuickTrace

Analyst: denmet

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\10-27-22-36B.wszf

Creation Date: 10/27/2022 5:11:07 PM

Comment:

Results

Sample Name					Type	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
STD0					STD	0.0000	893	2.16			1.0000	N/A
	Replicates	868.1	888.5	904.0	911.8							
STD1					STD	0.0600	1660	2.42	52.02%		1.0000	N/A
	Replicates	1624.5	1628.8	1683.0	1705.5							
STD2					STD	0.1200	2398	2.16	25.36%		1.0000	N/A
	Replicates	2332.8	2389.6	2412.5	2457.1							
STD3					STD	0.3000	4717	2.67	12.20%		1.0000	N/A
	Replicates	4569.9	4668.6	4765.7	4862.4							
STD4					STD	0.6000	7923	2.68	-0.99%		1.0000	N/A
	Replicates	7657.1	7866.4	8018.3	8150.8							
STD5					STD	1.2000	14997	2.80	-3.17%		1.0000	N/A
	Replicates	14484.1	14863.0	15184.2	15457.0							
STD6					STD	3.0000	35665	2.75	-5.95%		1.0000	N/A
	Replicates	34464.3	35351.2	36105.4	36737.9							
STD7					STD	6.0000	76434	2.73	1.58%		1.0000	N/A
	Replicates	73872.0	75792.3	77343.3	78729.6							

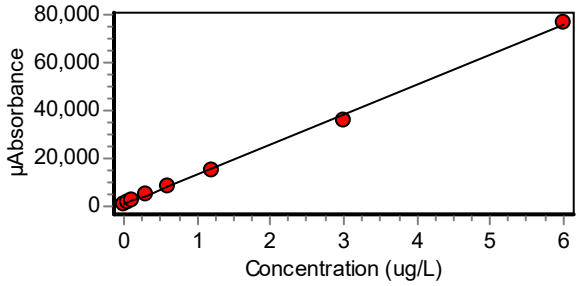
Calibration

Equation: Abs = 12454.949x + 524.450

R2: 0.99850 RSE: 26.63%

SEE: 1096.1620

Flags:



ICV 280-591442/9-A					ICV	2.2541	28599	2.80			1.0000	93.92
	Replicates	27626.9	28366.0	28951.3	29452.1							
ICB 280-591442/10-A					ICB	0.0307	907	6.76			1.0000	N/A
	Replicates	870.1	923.0	908.8	926.8							
CRA 280-591442/11-A					CRDL	0.1463	2347	3.24			1.0000	121.91
	Replicates	2280.0	2317.3	2377.0	2411.8							
CCV 280-591442/12-A					CCV	2.8132	35563	2.75			1.0000	93.77
	Replicates	34365.4	35278.0	36007.1	36599.8							
CCB 280-591442/13-A					CCB	0.0291	886	2.99			1.0000	N/A
	Replicates	872.1	888.8	886.3	898.3							

Sample Name				Type	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
LB2 280-591261/1-C				UNK	0.0388	1008	8.12			1.0000	N/A
Replicates	955.1	1011.2	1016.0	1049.9							
LCS 280-591261/2-C				UNK	3.1936	40301	2.03			1.0000	N/A
Replicates	39293.7	40071.4	40675.4	41161.9							
280-168095-A-3-E				UNK	-0.0176	305	2.35			1.0000	N/A
Replicates	311.4	303.3	299.0	305.1							
280-168095-A-3-F MS				UNK	-0.0084	420	9.92			1.0000	N/A
Replicates	410.1	413.6	424.8	432.6							
280-168095-A-3-G MSD				UNK	-0.0545	-155	3.12			1.0000	N/A
Replicates	-165.6	-178.8	-134.3	-139.6							
MB 280-591449/1-A				UNK	-0.0247	217	8.33			1.0000	N/A
Replicates	196.6	208.4	207.0	254.2							
LCS 280-591449/2-A				UNK	2.7436	34696	2.72			1.0000	N/A
Replicates	33558.8	34394.6	35114.3	35716.8							
280-168187-A-1-D				UNK	-0.0009	513	137.18			1.0000	N/A
Replicates	493.5	509.2	530.4	519.1							
CCV 280-591442/12-A				CCV	2.7536	34820	2.96			1.0000	91.79
Replicates	33574.0	34500.6	35271.8	35934.0							
CCB 280-591442/13-A				CCB	0.0263	852	5.55			1.0000	N/A
Replicates	829.8	844.6	863.6	869.6							
280-168187-A-1-D				UNK	0.0126	681	8.46			1.0000	N/A
Replicates	669.0	680.9	674.9	699.5							
280-168187-A-1-E MS				UNK	2.8603	36149	2.80			1.0000	N/A
Replicates	34926.2	35839.6	36577.3	37253.9							
280-168187-A-1-F MSD				UNK	2.7509	34787	2.83			1.0000	N/A
Replicates	33578.0	34508.7	35229.9	35830.1							
280-168187-A-2-B				UNK	0.0024	554	50.40			1.0000	N/A
Replicates	539.5	557.0	574.0	546.5							
280-168187-A-3-B				UNK	0.0661	1348	5.77			1.0000	N/A
Replicates	1285.9	1335.1	1380.2	1389.2							
280-167987-H-1-A				UNK	0.0186	757	13.34			1.0000	N/A
Replicates	712.0	759.1	779.1	776.1							
280-167987-H-2-A				UNK	0.0266	855	7.97			1.0000	N/A
Replicates	826.2	839.9	873.9	880.9							
280-167987-H-3-A				UNK	0.0259	847	9.16			1.0000	N/A
Replicates	822.5	837.8	839.0	890.3							
CCV 280-591442/12-A				CCV	2.8220	35672	2.97			1.0000	94.07
Replicates	34390.6	35357.5	36120.5	36820.8							

Sample Name					Type	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
CCB 280-591442/13-A					CCB	0.0330	936	5.54			1.0000	N/A
Replicates	906.6	933.0	942.7	961.3								
280-167988-C-1-D					UNK	0.0609	1283	5.38			1.0000	N/A
Replicates	1239.2	1259.6	1307.6	1326.9								
280-168095-A-3-E@10					UNK	-0.0372	61	3.19			1.0000	N/A
Replicates	40.2	66.4	64.1	74.6								
280-168095-A-3-F MS@10					UNK	-0.0097	404	12.18			1.0000	N/A
Replicates	405.1	383.2	417.4	409.9								
280-168095-A-3-G MSD@10					UNK	-0.0175	307	1.89			1.0000	N/A
Replicates	305.9	302.6	306.1	312.5								
280-167988-C-2-B					UNK	0.0570	1234	5.93			1.0000	N/A
Replicates	1180.5	1224.8	1252.2	1279.2								
280-167988-C-3-B					UNK	0.0637	1317	3.47			1.0000	N/A
Replicates	1293.4	1304.7	1314.4	1356.6								
280-168095-A-3-E@100					UNK	-0.0144	345	11.93			1.0000	N/A
Replicates	316.3	341.8	363.7	358.8								
280-168095-A-3-F MS@100					UNK	0.0123	678	24.66			1.0000	N/A
Replicates	641.4	676.0	663.2	730.2								
280-168095-A-3-G MSD@100					UNK	0.0116	669	19.68			1.0000	N/A
Replicates	635.8	656.1	699.7	683.2								
280-167988-C-4-B					UNK	0.1331	2183	4.00			1.0000	N/A
Replicates	2095.7	2176.9	2203.1	2254.8								
CCV 280-591442/12-A					CCV	2.8322	35800	2.89			1.0000	94.41
Replicates	34537.2	35514.5	36229.2	36917.2								
CCB 280-591442/13-A					CCB	0.0321	924	5.24			1.0000	N/A
Replicates	943.4	919.7	896.7	937.4								

Report Generated By Teledyne Leeman QuickTrace

Analyst: denmet

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\10-28-22-36A.wszf

Creation Date: 10/28/2022 12:32:59 PM

Comment:

Results

Sample Name					Type	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
STD0					STD	0.0000	291	3.19			1.0000	N/A
	Replicates	304.3	286.7	288.7	283.5							
STD1					STD	0.0600	1858	3.18	19.50%		1.0000	N/A
	Replicates	1778.6	1852.6	1884.6	1916.8							
STD2					STD	0.1200	2633	2.88	8.88%		1.0000	N/A
	Replicates	2546.6	2595.9	2672.4	2715.5							
STD3					STD	0.3000	4928	2.62	1.78%		1.0000	N/A
	Replicates	4766.6	4890.0	4987.6	5066.0							
STD4					STD	0.6000	9104	2.93	3.87%		1.0000	N/A
	Replicates	8773.0	9022.8	9227.8	9390.5							
STD5					STD	1.2000	17011	2.94	2.10%		1.0000	N/A
	Replicates	16393.4	16869.2	17222.3	17560.7							
STD6					STD	3.0000	39785	5.75	-1.37%		1.0000	N/A
	Replicates	37562.4	38416.0	40471.3	42689.5							
STD7					STD	6.0000	79901	3.01	0.21%		1.0000	N/A
	Replicates	76936.5	79184.3	80963.8	82521.1							

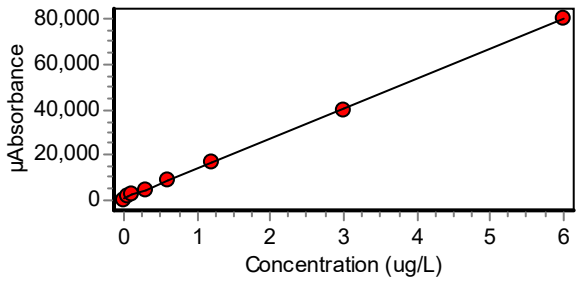
Calibration

Equation: Abs = 13136.547x + 916.247

R2: 0.99982 RSE: 9.84%

SEE: 400.5502

Flags:



ICV 280-591442/9-A					ICV	2.4014	32462	3.12			1.0000	100.06
	Replicates	31259.1	32136.3	32914.1	33537.9							
ICB 280-591442/10-A					ICB	-0.0578	157	6.22			1.0000	N/A
	Replicates	94.0	149.5	203.4	179.7							
CRA 280-591442/11-A					CRDL	0.1354	2695	4.61			1.0000	112.81
	Replicates	2592.7	2673.1	2726.8	2785.6							
CCV 280-591442/12-A					CCV	-0.0585	148	2.38		Q	1.0000	-1.95
	Replicates	154.3	146.3	123.3	166.8							
CCV 280-591442/12-A					CCV	3.0020	40352	2.98			1.0000	100.07
	Replicates	38895.7	40015.6	40855.5	41643.0							

Sample Name				Type	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
CCV 280-591442/12-A				CCV	2.9888	40179	3.04			1.0000	99.63
Replicates	38705.6	39817.4	40718.6	41474.9							
CCB 280-591442/13-A				CCB	-0.0611	114	1.67			1.0000	N/A
Replicates	114.8	98.9	131.2	110.2							
280-168095-A-3-E				UNK	-0.0668	38	1.02			1.0000	N/A
Replicates	32.9	48.0	28.6	43.1							
280-168095-A-3-E PDS				UNK	-0.0613	111	0.88			1.0000	N/A
Replicates	101.7	111.9	110.9	118.9							
CCV 280-591442/12-A				CCV	2.8301	38094	3.20			1.0000	94.34
Replicates	36624.5	37738.3	38620.3	39391.0							
CCB 280-591442/13-A				CCB	-0.0812	-151	3.69			1.0000	N/A
Replicates	-97.3	-152.6	-163.0	-191.3							

Shipping and Receiving Documents

Eurofins TestAmerica, Denver
4955 Yarrow Street

Arvada, CO 80002-4517
phone 303.736.0100 fax 303.431.7171

Chain of Custody Record

eurofins Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☑ RCRA ☐ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	**Project Manager: Brian Croft**	**Site Contact: Brian Croft**	**Date: 10/21/22**	COC No:
Tetra Tech Region 8 START	Email: Brian.Croft@tetratech.com	**Lab Contact: Maura McAleese**	**Carrier:**	___1___ of ___1___ COCs
1560 Broadway Suite 14000	**Tel/Fax:**			TALS Project #:
Denver, Colorado 80202	**Analysis Turnaround Time**			Sampler:
(xxx) xxx-xxxx Phone	☐ CALENDAR DAYS ☐ WORKING DAYS			**For Lab Use Only:**
(xxx) xxx-xxxx FAX	**TAT: 3 day PCB; 4 day TCLP Metals**			Walk-in Client:
Project Name: Basin School Chemical ER	☐ 2 weeks			Lab Sampling:
Site: Basin, WY	☐ 1 week			
P O # TBD - see Shelby Turner	☐ 2 days			Job / SDG No.:
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TCLP RCRA Metals 1311/7470/6010	Waste Dilution PCBs 3580/8082A	Sample Specific Notes:
BS-T-01-BIG	10/19/2022	13:40	G	Oil	1				x	
BS-T-02-SMALL	10/19/2022	13:50	G	Oil	1				x	
BS-DISPOSAL-01	10/19/2022	15:50	C	Non-soil solid	3			x		

280-168095 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:
Project number TBD - waiting on technical directive from EPA
Please narrate reasons for all dilutions; please notify ASAP of any delays

Please return cooler to. 5026 W 58th Ave Arvada CO 80002

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 24.4 Corr'd: 24.4 Therm ID No.: 12

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Maura McAleese	Tetra Tech	15:15 10/21/20	Affiat	Eurofins	10/21/2022 1515
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 280-168095-1

Login Number: 168095
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Refer to Job Narrative for details.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	False	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	