ANALYTICAL REPORT

Job Number: 440-256528-1

Job Description: ACMS - BP Yerington OU-4b_OU-5 Soil

For:
Wood E&I Solutions Inc
10940 White Rock Road Suite 190
Rancho Cordova, CA 95670

Attention: Kent Parrish

Approved for release.
Christian M Bondoc
Project Manager I
1/16/2020 4:31 PM

Christian M Bondoc, Project Manager I
17461 Derian Ave, Irvine, CA, 92614-5817
(949)260-3218
christian.bondoc@testamericainc.com
01/16/2020

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Job Number: 440-256528-1

Job Description: ACMS - BP Yerington OU-4b_OU-5 Soil

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPLAMP Technical Specifications, applicable federal, state, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPLAMP. This Laboratory Report is confidential and is intended for the sole use of Eurofins TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The signature on the cover page extends to the case narrative and all the data and forms in the package. The Chain of Custody is included and is an integral part of this report.

Approved for release.
Christian M Bondoc
Project Manager I
1/16/2020 4:31 PM

Christian M Bondoc

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Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD 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.
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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Job Narrative
440-256528-1

Comments
No additional comments.

Receipt
The samples were received on 12/5/2019 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0º C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision of Magnesium, Potassium and Strontium for preparation batch 440-584703 and analytical batch 440-584992 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) precision was within acceptance limits.

Method 6010B: The post digestion spike % recovery for Phosphorus associated with batch 440-584992 was outside of control limits. The following sample is impacted: (440-256528-B-1-A PDS ^5).

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-584703 and analytical batch 440-584880 were outside control limits for Antimony. Sample matrix interference is suspected. The associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020: The method blank for preparation batch 440-584703 and analytical batch 440-584880 contained Selenium above the method detection limit. This target analyte concentration was less than half the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

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

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

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB32_0-0.5 — Lab Sample ID: 440-256528-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7900		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	4000		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	13000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	6.1		5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6400	F2	11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	380		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200	F1 F2	66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	250		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	62	F1	5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	400		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	1.1	F1	1.1	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.4		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	43		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Chromium	5.6		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.8		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	2100		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	3.7		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	61		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	4.4		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	7.3		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	4.2	B	1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Silver	0.11	J	0.53	0.11	mg/Kg	20	☼	6020	Total/NA
Vanadium	20		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	15		11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.12		0.021	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB32_0.5-3 — Lab Sample ID: 440-256528-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8400		10	7.9	mg/Kg	5	☼	6010B	Total/NA
Calcium	3400		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	15000		10	7.1	mg/Kg	5	☼	6010B	Total/NA
Lithium	4.6	J	5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5900		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	310		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1000		65	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	86		65	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	79		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	400		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	2.6		1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	8.7		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	51		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.22	J	0.31	0.15	mg/Kg	20	☼	6020	Total/NA
Chromium	5.5		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.2		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	1400		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	4.2		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	48		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	3.6		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	6.5		1.0	0.52	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB32_0.5-3 (Continued) — Lab Sample ID: 440-256528-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	4.4	B	1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Silver	0.12	J	0.52	0.10	mg/Kg	20	☼	6020	Total/NA
Vanadium	21		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	12		10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.67		0.020	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB32_3-6 — Lab Sample ID: 440-256528-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8300		12	9.0	mg/Kg	5	☼	6010B	Total/NA
Calcium	3300		29	16	mg/Kg	5	☼	6010B	Total/NA
Iron	16000		12	8.0	mg/Kg	5	☼	6010B	Total/NA
Lithium	5.1	J	5.8	3.3	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6000		12	5.8	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	360		5.8	2.9	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		73	38	mg/Kg	5	☼	6010B	Total/NA
Sodium	70	J	73	37	mg/Kg	5	☼	6010B	Total/NA
Strontium	56		5.8	2.9	mg/Kg	5	☼	6010B	Total/NA
Titanium	310		2.3	1.2	mg/Kg	5	☼	6010B	Total/NA
Antimony	5.7		1.2	0.31	mg/Kg	20	☼	6020	Total/NA
Arsenic	8.4		0.58	0.29	mg/Kg	20	☼	6020	Total/NA
Barium	68		0.58	0.29	mg/Kg	20	☼	6020	Total/NA
Chromium	5.1		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.9		0.58	0.24	mg/Kg	20	☼	6020	Total/NA
Copper	1400		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Lead	3.7		0.58	0.29	mg/Kg	20	☼	6020	Total/NA
Manganese	57		0.58	0.29	mg/Kg	20	☼	6020	Total/NA
Molybdenum	3.8		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Nickel	7.1		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Selenium	3.9	B	1.2	0.23	mg/Kg	20	☼	6020	Total/NA
Vanadium	22		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Zinc	17		12	5.8	mg/Kg	20	☼	6020	Total/NA
Mercury	0.47		0.023	0.014	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB32_6-15 — Lab Sample ID: 440-256528-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6500		10	7.8	mg/Kg	5	☼	6010B	Total/NA
Calcium	4200		25	14	mg/Kg	5	☼	6010B	Total/NA
Iron	15000		10	7.0	mg/Kg	5	☼	6010B	Total/NA
Lithium	4.4	J	5.1	2.8	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5400		10	5.1	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	540		5.1	2.5	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		63	33	mg/Kg	5	☼	6010B	Total/NA
Sodium	85		63	32	mg/Kg	5	☼	6010B	Total/NA
Strontium	36		5.1	2.5	mg/Kg	5	☼	6010B	Total/NA
Titanium	320		2.0	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.54	J	1.0	0.27	mg/Kg	20	☼	6020	Total/NA
Arsenic	3.6		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Barium	39		0.51	0.25	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB32_6-15 (Continued) — Lab Sample ID: 440-256528-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.20	J	0.30	0.15	mg/Kg	20	☼	6020	Total/NA
Chromium	6.0		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Cobalt	5.1		0.51	0.21	mg/Kg	20	☼	6020	Total/NA
Copper	1100		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Lead	2.4		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Manganese	68		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.8		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Nickel	7.8		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Selenium	2.3	B	1.0	0.20	mg/Kg	20	☼	6020	Total/NA
Silver	0.10	J	0.51	0.10	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Zinc	15		10	5.1	mg/Kg	20	☼	6020	Total/NA
Mercury	0.091		0.021	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB34_0-0.5 — Lab Sample ID: 440-256528-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7000		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	3600		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	11000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.7	J	5.3	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5600		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	300		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	960		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	66		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	66		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	340		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.49	J	1.1	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.8		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	34		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Chromium	4.5		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	2.8		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	530		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	3.4		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	45		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	3.5		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.8		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	2.0	B	1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	12		11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.063		0.021	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB34_0.5-3 — Lab Sample ID: 440-256528-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7800		10	8.0	mg/Kg	5	☼	6010B	Total/NA
Calcium	3800		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	12000		10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.4	J	5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6300		10	5.2	mg/Kg	5	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB34_0.5-3 (Continued) — Lab Sample ID: 440-256528-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	360		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1300		65	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	38	J	65	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	81		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	480		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.51	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.4		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	47		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.21	J	0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	4.4		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	2.8		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	630		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	3.7		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	38		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	3.2		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	6.0		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	2.5	B	1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	25		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	10		10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.12		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB34_3-6 — Lab Sample ID: 440-256528-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7900		10	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	3600		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	13000		10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	4.3	J	5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6600		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	390		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	51	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	81		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	440		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	1.4		1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	5.9		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	42		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.17	J	0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	4.6		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.0		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	940		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	3.2		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	41		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	3.5		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	6.9		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	4.0	B	1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Silver	0.20	J	0.52	0.10	mg/Kg	20	☼	6020	Total/NA
Vanadium	24		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	11		10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.12		0.020	0.012	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB34_3-6 (Continued) — Lab Sample ID: 440-256528-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB34_6-15 — Lab Sample ID: 440-256528-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9100		12	9.3	mg/Kg	5	☼	6010B	Total/NA
Calcium	6000		30	16	mg/Kg	5	☼	6010B	Total/NA
Iron	17000		12	8.4	mg/Kg	5	☼	6010B	Total/NA
Lithium	5.3	J	6.1	3.4	mg/Kg	5	☼	6010B	Total/NA
Magnesium	7200		12	6.1	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	720		6.1	3.0	mg/Kg	5	☼	6010B	Total/NA
Potassium	2000		76	39	mg/Kg	5	☼	6010B	Total/NA
Sodium	140		76	39	mg/Kg	5	☼	6010B	Total/NA
Strontium	56		6.1	3.0	mg/Kg	5	☼	6010B	Total/NA
Titanium	480		2.4	1.2	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.40	J	1.2	0.33	mg/Kg	20	☼	6020	Total/NA
Arsenic	3.5		0.61	0.30	mg/Kg	20	☼	6020	Total/NA
Barium	59		0.61	0.30	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.35	J	0.36	0.18	mg/Kg	20	☼	6020	Total/NA
Chromium	7.5		1.2	0.61	mg/Kg	20	☼	6020	Total/NA
Cobalt	7.0		0.61	0.25	mg/Kg	20	☼	6020	Total/NA
Copper	1100		1.2	0.61	mg/Kg	20	☼	6020	Total/NA
Lead	3.0		0.61	0.30	mg/Kg	20	☼	6020	Total/NA
Manganese	110		0.61	0.30	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.8		1.2	0.61	mg/Kg	20	☼	6020	Total/NA
Nickel	9.6		1.2	0.61	mg/Kg	20	☼	6020	Total/NA
Selenium	3.4	B	1.2	0.24	mg/Kg	20	☼	6020	Total/NA
Silver	0.15	J	0.61	0.12	mg/Kg	20	☼	6020	Total/NA
Vanadium	24		1.2	0.61	mg/Kg	20	☼	6020	Total/NA
Zinc	19		12	6.1	mg/Kg	20	☼	6020	Total/NA
Mercury	0.095		0.024	0.015	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB34-FD_3-6 — Lab Sample ID: 440-256528-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8000		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	3700		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	13000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	4.1	J	5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6600		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	440		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1300		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	63	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	67		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	430		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.69	J	1.1	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.1		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	48		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.17	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	4.5		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.7		0.53	0.22	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB34-FD_3-6 (Continued) — Lab Sample ID: 440-256528-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	890		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	3.3		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	43		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	3.6		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	6.7		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	3.3	B	1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	25		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	11		11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.14		0.020	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB33_0-0.5 — Lab Sample ID: 440-256528-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7500		10	7.8	mg/Kg	5	☼	6010B	Total/NA
Calcium	3700		25	14	mg/Kg	5	☼	6010B	Total/NA
Iron	12000		10	7.0	mg/Kg	5	☼	6010B	Total/NA
Lithium	5.3		5.1	2.8	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5600		10	5.1	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	350		5.1	2.5	mg/Kg	5	☼	6010B	Total/NA
Potassium	470		64	33	mg/Kg	5	☼	6010B	Total/NA
Sodium	110		64	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	85		5.1	2.5	mg/Kg	5	☼	6010B	Total/NA
Titanium	370		2.0	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.93	J	1.0	0.27	mg/Kg	20	☼	6020	Total/NA
Arsenic	8.2		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Barium	42		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.19	J	0.31	0.15	mg/Kg	20	☼	6020	Total/NA
Chromium	4.5		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.2		0.51	0.21	mg/Kg	20	☼	6020	Total/NA
Copper	850		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Lead	2.8		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Manganese	41		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Molybdenum	3.2		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Nickel	5.9		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Selenium	4.7	B	1.0	0.20	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Zinc	6.9	J	10	5.1	mg/Kg	20	☼	6020	Total/NA
Mercury	0.11		0.021	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB33_0.5-3 — Lab Sample ID: 440-256528-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5800		10	8.0	mg/Kg	5	☼	6010B	Total/NA
Calcium	2600		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	12000		10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.1	J	5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	4900		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	520		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	840		65	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	53	J	65	33	mg/Kg	5	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB33_0.5-3 (Continued) — Lab Sample ID: 440-256528-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Strontium	46		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	370		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.57	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.5		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	31		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Chromium	4.7		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	2.8		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	530		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	1.7		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	43		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.5		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	5.9		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	3.4	B	1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	18		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	8.9	J	10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.090		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB33-FD_0.5-3 — Lab Sample ID: 440-256528-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5700		10	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	2500		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	12000		10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.3	J	5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	4900		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	470		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	750		65	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	45	J	65	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	44		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	360		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.46	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.6		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	28		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Chromium	4.4		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	2.7		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	550		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	1.7		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	42		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.2		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	5.5		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	2.6	B	1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	17		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	8.3	J	10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.12		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB33_3-6 — Lab Sample ID: 440-256528-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5400		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	5500		26	14	mg/Kg	5	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB33_3-6 (Continued) — Lab Sample ID: 440-256528-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	12000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.6	J	5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5000		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	700		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1300		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	63	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	36		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	440		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Arsenic	1.1		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	33		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.16	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	5.1		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.6		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	500		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	1.4		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	68		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.0		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	6.8		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.3	B	1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	17		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	11		11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.046		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB33_6-15 — Lab Sample ID: 440-256528-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	4800		11	8.4	mg/Kg	5	☼	6010B	Total/NA
Calcium	4100		27	15	mg/Kg	5	☼	6010B	Total/NA
Iron	10000		11	7.6	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.3	J	5.5	3.1	mg/Kg	5	☼	6010B	Total/NA
Magnesium	4600		11	5.5	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	570		5.5	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1100		68	36	mg/Kg	5	☼	6010B	Total/NA
Sodium	63	J	68	35	mg/Kg	5	☼	6010B	Total/NA
Strontium	31		5.5	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	330		2.2	1.1	mg/Kg	5	☼	6010B	Total/NA
Arsenic	1.2		0.55	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	31		0.55	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.24	J	0.33	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	6.2		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.5		0.55	0.23	mg/Kg	20	☼	6020	Total/NA
Copper	740		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Lead	1.3		0.55	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	52		0.55	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.6		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Nickel	6.7		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Selenium	1.6	B	1.1	0.22	mg/Kg	20	☼	6020	Total/NA
Vanadium	15		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Zinc	11		11	5.5	mg/Kg	20	☼	6020	Total/NA
Mercury	0.041		0.022	0.013	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB33_6-15 (Continued) — Lab Sample ID: 440-256528-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB35_0-0.5 — Lab Sample ID: 440-256528-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9100		10	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	3600		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	16000		10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	5.1	J	5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	7600		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	460		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1400		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	53	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	66		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	300		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.70	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.9		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	54		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.25	J	0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	6.2		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.6		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	880		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	2.8		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	57		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	4.4		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	7.6		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	3.0	B	1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	21		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	16		10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.17		0.022	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB35_0.5-3 — Lab Sample ID: 440-256528-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6600		10	7.8	mg/Kg	5	☼	6010B	Total/NA
Calcium	3300		25	14	mg/Kg	5	☼	6010B	Total/NA
Iron	10000		10	7.0	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.3	J	5.1	2.8	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5100		10	5.1	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	350		5.1	2.5	mg/Kg	5	☼	6010B	Total/NA
Potassium	980		64	33	mg/Kg	5	☼	6010B	Total/NA
Sodium	51	J	64	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	59		5.1	2.5	mg/Kg	5	☼	6010B	Total/NA
Titanium	310		2.0	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	1.0		1.0	0.27	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.6		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Barium	43		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.20	J	0.31	0.15	mg/Kg	20	☼	6020	Total/NA
Chromium	4.2		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Cobalt	2.5		0.51	0.21	mg/Kg	20	☼	6020	Total/NA
Copper	690		1.0	0.51	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB35_0.5-3 (Continued) — Lab Sample ID: 440-256528-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	3.0		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Manganese	34		0.51	0.25	mg/Kg	20	☼	6020	Total/NA
Molybdenum	5.1		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Nickel	5.4		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Selenium	2.7	B	1.0	0.20	mg/Kg	20	☼	6020	Total/NA
Vanadium	17		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Zinc	10		10	5.1	mg/Kg	20	☼	6020	Total/NA
Mercury	0.23		0.020	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB35_3-6 — Lab Sample ID: 440-256528-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6900		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	3100		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	10000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.9	J	5.3	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5400		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	290		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1000		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	52	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	50		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	360		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.74	J	1.1	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	5.8		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	45		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.17	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	5.7		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	2.7		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	1000		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	3.2		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	35		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.4		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	6.3		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	3.5	B	1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	18		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	9.5	J	11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.25		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB35_6-15 — Lab Sample ID: 440-256528-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7400		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Calcium	2700		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	16000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	5.1	J	5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5500		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	370		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1300		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	58	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	47		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID: STSB35_6-15 (Continued) — Lab Sample ID: 440-256528-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Titanium	260		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.66	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.3		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	53		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.23	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	6.2		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.6		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	1300		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	3.3		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	44		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	3.3		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	6.8		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	3.1	B	1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	16		11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.31		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB32_0-0.5

Lab Sample ID: 440-256528-1
Date Collected: 11/25/19 13:25
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB32_0-0.5

Lab Sample ID: 440-256528-1
Date Collected: 11/25/19 13:25
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 95.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7900		11	8.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Boron	ND		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Calcium	4000		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Iron	13000		11	7.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Lithium	6.1		5.3	3.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Magnesium	6400	F2	11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Phosphorus	380		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Potassium	1200	F1 F2	66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Sodium	250		66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Strontium	62	F1	5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5
Titanium	400		2.1	1.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:19	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	F1	1.1	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Arsenic	6.4		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Barium	43		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Beryllium	ND		0.32	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Chromium	5.6		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Cobalt	3.8		0.53	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Copper	2100		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Lead	3.7		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Manganese	61		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Molybdenum	4.4		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Nickel	7.3		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Selenium	4.2	B	1.1	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Silver	0.11	J	0.53	0.11	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Thallium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Vanadium	20		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20
Zinc	15		11	5.3	mg/Kg	☼	12/09/19 12:18	12/09/19 20:46	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.021	0.012	mg/Kg	☼	12/09/19 13:06	12/10/19 13:58	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB32_0.5-3

Lab Sample ID: 440-256528-2
Date Collected: 11/25/19 13:40
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB32_0.5-3

Lab Sample ID: 440-256528-2
Date Collected: 11/25/19 13:40
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8400		10	7.9	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Calcium	3400		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Iron	15000		10	7.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Lithium	4.6	J	5.2	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Magnesium	5900		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Phosphorus	310		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Potassium	1000		65	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Sodium	86		65	33	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Strontium	79		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5
Titanium	400		2.1	1.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:38	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.6		1.0	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Arsenic	8.7		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Barium	51		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Beryllium	0.22	J	0.31	0.15	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Chromium	5.5		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Cobalt	3.2		0.52	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Copper	1400		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Lead	4.2		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Manganese	48		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Molybdenum	3.6		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Nickel	6.5		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Selenium	4.4	B	1.0	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Silver	0.12	J	0.52	0.10	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Vanadium	21		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20
Zinc	12		10	5.2	mg/Kg	☼	12/09/19 12:18	12/09/19 21:08	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.67		0.020	0.012	mg/Kg	☼	12/09/19 13:06	12/10/19 14:07	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB32_3-6

Lab Sample ID: 440-256528-3
Date Collected: 11/25/19 13:49
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB32_3-6

Lab Sample ID: 440-256528-3
Date Collected: 11/25/19 13:49
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 86.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8300		12	9.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Boron	ND		5.8	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Calcium	3300		29	16	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Iron	16000		12	8.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Lithium	5.1	J	5.8	3.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Magnesium	6000		12	5.8	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Phosphorus	360		5.8	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Potassium	1200		73	38	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Sodium	70	J	73	37	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Strontium	56		5.8	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Tin	ND		12	5.8	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5
Titanium	310		2.3	1.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:40	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.7		1.2	0.31	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Arsenic	8.4		0.58	0.29	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Barium	68		0.58	0.29	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Beryllium	ND		0.35	0.17	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Cadmium	ND		0.58	0.29	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Chromium	5.1		1.2	0.58	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Cobalt	3.9		0.58	0.24	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Copper	1400		1.2	0.58	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Lead	3.7		0.58	0.29	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Manganese	57		0.58	0.29	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Molybdenum	3.8		1.2	0.58	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Nickel	7.1		1.2	0.58	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Selenium	3.9	B	1.2	0.23	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Silver	ND		0.58	0.12	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Thallium	ND		0.58	0.29	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Vanadium	22		1.2	0.58	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20
Zinc	17		12	5.8	mg/Kg	☼	12/09/19 12:18	12/09/19 21:10	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.47		0.023	0.014	mg/Kg	☼	12/09/19 13:06	12/10/19 14:15	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB32_6-15

Lab Sample ID: 440-256528-4
Date Collected: 11/25/19 14:06
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB32_6-15

Lab Sample ID: 440-256528-4
Date Collected: 11/25/19 14:06
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 98.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6500		10	7.8	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Boron	ND		5.1	2.5	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Calcium	4200		25	14	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Iron	15000		10	7.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Lithium	4.4	J	5.1	2.8	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Magnesium	5400		10	5.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Phosphorus	540		5.1	2.5	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Potassium	1200		63	33	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Sodium	85		63	32	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Strontium	36		5.1	2.5	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Tin	ND		10	5.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5
Titanium	320		2.0	1.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:42	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	1.0	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Arsenic	3.6		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Barium	39		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Beryllium	0.20	J	0.30	0.15	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Cadmium	ND		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Chromium	6.0		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Cobalt	5.1		0.51	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Copper	1100		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Lead	2.4		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Manganese	68		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Molybdenum	2.8		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Nickel	7.8		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Selenium	2.3	B	1.0	0.20	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Silver	0.10	J	0.51	0.10	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Thallium	ND		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Vanadium	19		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20
Zinc	15		10	5.1	mg/Kg	☼	12/09/19 12:18	12/09/19 21:12	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.091		0.021	0.012	mg/Kg	☼	12/09/19 13:06	12/10/19 14:17	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB34_0-0.5

Lab Sample ID: 440-256528-5
Date Collected: 11/25/19 15:00
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB34_0-0.5

Lab Sample ID: 440-256528-5
Date Collected: 11/25/19 15:00
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 95.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7000		11	8.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Boron	ND		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Calcium	3600		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Iron	11000		11	7.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Lithium	3.7	J	5.3	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Magnesium	5600		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Phosphorus	300		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Potassium	960		66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Sodium	66		66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Strontium	66		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5
Titanium	340		2.1	1.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:44	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J	1.1	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Arsenic	4.8		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Barium	34		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Beryllium	ND		0.32	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Chromium	4.5		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Cobalt	2.8		0.53	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Copper	530		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Lead	3.4		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Manganese	45		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Molybdenum	3.5		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Nickel	5.8		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Selenium	2.0	B	1.1	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Silver	ND		0.53	0.11	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Thallium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Vanadium	19		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20
Zinc	12		11	5.3	mg/Kg	☼	12/09/19 12:18	12/09/19 21:15	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063		0.021	0.012	mg/Kg	☼	12/09/19 13:06	12/10/19 14:20	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB34_0.5-3

Lab Sample ID: 440-256528-6
Date Collected: 11/25/19 15:05
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB34_0.5-3

Lab Sample ID: 440-256528-6
Date Collected: 11/25/19 15:05
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7800		10	8.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Calcium	3800		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Iron	12000		10	7.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Lithium	3.4	J	5.2	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Magnesium	6300		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Phosphorus	360		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Potassium	1300		65	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Sodium	38	J	65	33	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Strontium	81		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5
Titanium	480		2.1	1.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:45	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.51	J	1.0	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Arsenic	4.4		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Barium	47		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Beryllium	0.21	J	0.31	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Chromium	4.4		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Cobalt	2.8		0.52	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Copper	630		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Lead	3.7		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Manganese	38		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Molybdenum	3.2		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Nickel	6.0		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Selenium	2.5	B	1.0	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Silver	ND		0.52	0.10	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Vanadium	25		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20
Zinc	10		10	5.2	mg/Kg	☼	12/09/19 12:18	12/09/19 21:17	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.021	0.013	mg/Kg	☼	12/09/19 13:06	12/10/19 14:22	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB34_3-6

Lab Sample ID: 440-256528-7
Date Collected: 11/25/19 15:12
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB34_3-6

Lab Sample ID: 440-256528-7
Date Collected: 11/25/19 15:12
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7900		10	8.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Calcium	3600		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Iron	13000		10	7.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Lithium	4.3	J	5.2	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Magnesium	6600		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Phosphorus	390		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Potassium	1200		66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Sodium	51	J	66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Strontium	81		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5
Titanium	440		2.1	1.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:47	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4		1.0	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Arsenic	5.9		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Barium	42		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Beryllium	0.17	J	0.31	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Chromium	4.6		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Cobalt	3.0		0.52	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Copper	940		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Lead	3.2		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Manganese	41		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Molybdenum	3.5		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Nickel	6.9		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Selenium	4.0	B	1.0	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Silver	0.20	J	0.52	0.10	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Vanadium	24		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20
Zinc	11		10	5.2	mg/Kg	☼	12/09/19 12:18	12/09/19 21:20	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.020	0.012	mg/Kg	☼	12/09/19 13:06	12/10/19 14:24	1

Client Sample ID: STSB34_6-15
Lab Sample ID: 440-256528-8

Date Collected: 11/25/19 15:28
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB34_6-15
Lab Sample ID: 440-256528-8

Date Collected: 11/25/19 15:28
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 82.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9100		12	9.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Boron	ND		6.1	3.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Calcium	6000		30	16	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Iron	17000		12	8.4	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Lithium	5.3	J	6.1	3.4	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Magnesium	7200		12	6.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Phosphorus	720		6.1	3.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Potassium	2000		76	39	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Sodium	140		76	39	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Strontium	56		6.1	3.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Tin	ND		12	6.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5
Titanium	480		2.4	1.2	mg/Kg	☼	12/09/19 12:18	12/10/19 11:49	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.40	J	1.2	0.33	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Arsenic	3.5		0.61	0.30	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Barium	59		0.61	0.30	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Beryllium	0.35	J	0.36	0.18	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Cadmium	ND		0.61	0.30	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Chromium	7.5		1.2	0.61	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Cobalt	7.0		0.61	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Copper	1100		1.2	0.61	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Lead	3.0		0.61	0.30	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Manganese	110		0.61	0.30	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Molybdenum	2.8		1.2	0.61	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Nickel	9.6		1.2	0.61	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Selenium	3.4	B	1.2	0.24	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Silver	0.15	J	0.61	0.12	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Thallium	ND		0.61	0.30	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Vanadium	24		1.2	0.61	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20
Zinc	19		12	6.1	mg/Kg	☼	12/09/19 12:18	12/09/19 21:22	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.095		0.024	0.015	mg/Kg	☼	12/09/19 13:06	12/10/19 14:27	1

Client Sample ID: STSB34-FD_3-6
Lab Sample ID: 440-256528-9

Date Collected: 11/25/19 15:12
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB34-FD_3-6
Lab Sample ID: 440-256528-9

Date Collected: 11/25/19 15:12
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8000		11	8.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Boron	ND		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Calcium	3700		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Iron	13000		11	7.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Lithium	4.1	J	5.3	3.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Magnesium	6600		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Phosphorus	440		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Potassium	1300		66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Sodium	63	J	66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Strontium	67		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5
Titanium	430		2.1	1.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:51	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.69	J	1.1	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Arsenic	6.1		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Barium	48		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Beryllium	0.17	J	0.32	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Chromium	4.5		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Cobalt	3.7		0.53	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Copper	890		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Lead	3.3		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Manganese	43		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Molybdenum	3.6		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Nickel	6.7		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Selenium	3.3	B	1.1	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Silver	ND		0.53	0.11	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Thallium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Vanadium	25		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20
Zinc	11		11	5.3	mg/Kg	☼	12/09/19 12:18	12/09/19 21:24	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.020	0.012	mg/Kg	☼	12/09/19 13:06	12/10/19 14:29	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB33_0-0.5

Lab Sample ID: 440-256528-10
Date Collected: 12/03/19 12:31
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB33_0-0.5

Lab Sample ID: 440-256528-10
Date Collected: 12/03/19 12:31
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7500		10	7.8	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Boron	ND		5.1	2.5	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Calcium	3700		25	14	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Iron	12000		10	7.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Lithium	5.3		5.1	2.8	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Magnesium	5600		10	5.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Phosphorus	350		5.1	2.5	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Potassium	470		64	33	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Sodium	110		64	33	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Strontium	85		5.1	2.5	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Tin	ND		10	5.1	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5
Titanium	370		2.0	1.0	mg/Kg	☼	12/09/19 12:18	12/10/19 11:53	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.93	J	1.0	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Arsenic	8.2		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Barium	42		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Beryllium	0.19	J	0.31	0.15	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Cadmium	ND		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Chromium	4.5		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Cobalt	4.2		0.51	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Copper	850		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Lead	2.8		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Manganese	41		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Molybdenum	3.2		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Nickel	5.9		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Selenium	4.7	B	1.0	0.20	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Silver	ND		0.51	0.10	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Thallium	ND		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Vanadium	19		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20
Zinc	6.9	J	10	5.1	mg/Kg	☼	12/09/19 12:18	12/09/19 21:27	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.021	0.012	mg/Kg	☼	12/09/19 13:06	12/10/19 14:31	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB33_0.5-3

Lab Sample ID: 440-256528-11
Date Collected: 12/03/19 12:40
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB33_0.5-3

Lab Sample ID: 440-256528-11
Date Collected: 12/03/19 12:40
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 95.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5800		10	8.0	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Calcium	2600		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Iron	12000		10	7.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Lithium	3.1	J	5.2	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Magnesium	4900		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Phosphorus	520		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Potassium	840		65	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Sodium	53	J	65	33	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Strontium	46		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5
Titanium	370		2.1	1.0	mg/Kg	☼	12/09/19 12:18	12/10/19 12:07	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.57	J	1.0	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Arsenic	4.5		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Barium	31		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Beryllium	ND		0.31	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Chromium	4.7		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Cobalt	2.8		0.52	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Copper	530		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Lead	1.7		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Manganese	43		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Molybdenum	2.5		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Nickel	5.9		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Selenium	3.4	B	1.0	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Silver	ND		0.52	0.10	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Vanadium	18		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20
Zinc	8.9	J	10	5.2	mg/Kg	☼	12/09/19 12:18	12/09/19 21:45	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.090		0.021	0.013	mg/Kg	☼	12/09/19 13:06	12/10/19 14:33	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB33-FD_0.5-3

Lab Sample ID: 440-256528-12
Date Collected: 12/03/19 12:48
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB33-FD_0.5-3

Lab Sample ID: 440-256528-12
Date Collected: 12/03/19 12:48
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5700		10	8.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Calcium	2500		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Iron	12000		10	7.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Lithium	3.3	J	5.2	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Magnesium	4900		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Phosphorus	470		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Potassium	750		65	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Sodium	45	J	65	33	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Strontium	44		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5
Titanium	360		2.1	1.0	mg/Kg	☼	12/09/19 12:18	12/10/19 12:09	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.0	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Arsenic	4.6		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Barium	28		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Beryllium	ND		0.31	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Chromium	4.4		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Cobalt	2.7		0.52	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Copper	550		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Lead	1.7		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Manganese	42		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Molybdenum	2.2		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Nickel	5.5		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Selenium	2.6	B	1.0	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Silver	ND		0.52	0.10	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Vanadium	17		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20
Zinc	8.3	J	10	5.2	mg/Kg	☼	12/09/19 12:18	12/09/19 21:47	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.021	0.013	mg/Kg	☼	12/09/19 13:06	12/10/19 14:36	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB33_3-6

Lab Sample ID: 440-256528-13
Date Collected: 12/03/19 12:51
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB33_3-6

Lab Sample ID: 440-256528-13
Date Collected: 12/03/19 12:51
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 93.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5400		11	8.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Boron	ND		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Calcium	5500		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Iron	12000		11	7.3	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Lithium	3.6	J	5.3	3.0	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Magnesium	5000		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Phosphorus	700		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Potassium	1300		66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Sodium	63	J	66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Strontium	36		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5
Titanium	440		2.1	1.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:11	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.29	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Arsenic	1.1		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Barium	33		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Beryllium	0.16	J	0.32	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Chromium	5.1		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Cobalt	4.6		0.53	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Copper	500		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Lead	1.4		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Manganese	68		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Molybdenum	2.0		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Nickel	6.8		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Selenium	1.3	B	1.1	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Silver	ND		0.53	0.11	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Thallium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Vanadium	17		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20
Zinc	11		11	5.3	mg/Kg	☼	12/09/19 12:18	12/09/19 21:49	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.021	0.013	mg/Kg	☼	12/09/19 13:06	12/10/19 14:42	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB33_6-15

Lab Sample ID: 440-256528-14

Date Collected: 12/03/19 13:05
Date Received: 12/05/19 10:00
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB33_6-15

Lab Sample ID: 440-256528-14

Date Collected: 12/03/19 13:05
Date Received: 12/05/19 10:00
Matrix: Solid
Percent Solids: 90.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4800		11	8.4	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Boron	ND		5.5	2.7	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Calcium	4100		27	15	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Iron	10000		11	7.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Lithium	3.3	J	5.5	3.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Magnesium	4600		11	5.5	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Phosphorus	570		5.5	2.7	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Potassium	1100		68	36	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Sodium	63	J	68	35	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Strontium	31		5.5	2.7	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Tin	ND		11	5.5	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5
Titanium	330		2.2	1.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:12	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.30	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Arsenic	1.2		0.55	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Barium	31		0.55	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Beryllium	0.24	J	0.33	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Cadmium	ND		0.55	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Chromium	6.2		1.1	0.55	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Cobalt	3.5		0.55	0.23	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Copper	740		1.1	0.55	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Lead	1.3		0.55	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Manganese	52		0.55	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Molybdenum	2.6		1.1	0.55	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Nickel	6.7		1.1	0.55	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Selenium	1.6	B	1.1	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Silver	ND		0.55	0.11	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Thallium	ND		0.55	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Vanadium	15		1.1	0.55	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20
Zinc	11		11	5.5	mg/Kg	☼	12/09/19 12:18	12/09/19 21:52	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.022	0.013	mg/Kg	☼	12/09/19 13:06	12/10/19 14:44	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB35_0-0.5

Lab Sample ID: 440-256528-15
Date Collected: 12/03/19 14:35
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB35_0-0.5

Lab Sample ID: 440-256528-15
Date Collected: 12/03/19 14:35
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 94.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9100		10	8.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Calcium	3600		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Iron	16000		10	7.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Lithium	5.1	J	5.2	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Magnesium	7600		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Phosphorus	460		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Potassium	1400		66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Sodium	53	J	66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Strontium	66		5.2	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5
Titanium	300		2.1	1.0	mg/Kg	☼	12/09/19 12:18	12/10/19 12:14	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.70	J	1.0	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Arsenic	6.9		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Barium	54		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Beryllium	0.25	J	0.31	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Chromium	6.2		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Cobalt	3.6		0.52	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Copper	880		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Lead	2.8		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Manganese	57		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Molybdenum	4.4		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Nickel	7.6		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Selenium	3.0	B	1.0	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Silver	ND		0.52	0.10	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Vanadium	21		1.0	0.52	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20
Zinc	16		10	5.2	mg/Kg	☼	12/09/19 12:18	12/09/19 21:54	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17		0.022	0.013	mg/Kg	☼	12/09/19 13:06	12/10/19 14:46	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB35_0.5-3

Lab Sample ID: 440-256528-16
Date Collected: 12/03/19 14:41
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB35_0.5-3

Lab Sample ID: 440-256528-16
Date Collected: 12/03/19 14:41
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6600		10	7.8	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Boron	ND		5.1	2.5	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Calcium	3300		25	14	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Iron	10000		10	7.0	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Lithium	3.3	J	5.1	2.8	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Magnesium	5100		10	5.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Phosphorus	350		5.1	2.5	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Potassium	980		64	33	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Sodium	51	J	64	33	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Strontium	59		5.1	2.5	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Tin	ND		10	5.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5
Titanium	310		2.0	1.0	mg/Kg	☼	12/09/19 12:18	12/10/19 12:16	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0		1.0	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Arsenic	4.6		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Barium	43		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Beryllium	0.20	J	0.31	0.15	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Cadmium	ND		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Chromium	4.2		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Cobalt	2.5		0.51	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Copper	690		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Lead	3.0		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Manganese	34		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Molybdenum	5.1		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Nickel	5.4		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Selenium	2.7	B	1.0	0.20	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Silver	ND		0.51	0.10	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Thallium	ND		0.51	0.25	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Vanadium	17		1.0	0.51	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20
Zinc	10		10	5.1	mg/Kg	☼	12/09/19 12:18	12/09/19 22:03	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23		0.020	0.012	mg/Kg	☼	12/09/19 13:06	12/10/19 14:49	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB35_3-6

Lab Sample ID: 440-256528-18

Date Collected: 12/03/19 14:54
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB35_3-6

Lab Sample ID: 440-256528-18

Date Collected: 12/03/19 14:54
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6900		11	8.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Boron	ND		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Calcium	3100		26	14	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Iron	10000		11	7.3	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Lithium	3.9	J	5.3	2.9	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Magnesium	5400		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Phosphorus	290		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Potassium	1000		66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Sodium	52	J	66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Strontium	50		5.3	2.6	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5
Titanium	360		2.1	1.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:18	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J	1.1	0.28	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Arsenic	5.8		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Barium	45		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Beryllium	0.17	J	0.32	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Chromium	5.7		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Cobalt	2.7		0.53	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Copper	1000		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Lead	3.2		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Manganese	35		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Molybdenum	2.4		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Nickel	6.3		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Selenium	3.5	B	1.1	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Silver	ND		0.53	0.11	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Thallium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Vanadium	18		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20
Zinc	9.5	J	11	5.3	mg/Kg	☼	12/09/19 12:18	12/09/19 22:05	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.021	0.013	mg/Kg	☼	12/09/19 13:06	12/10/19 14:51	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB35_6-15

Lab Sample ID: 440-256528-19

Date Collected: 12/03/19 15:00
Matrix: Solid
Date Received: 12/05/19 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/07/19 22:00	1

Client Sample ID: STSB35_6-15

Lab Sample ID: 440-256528-19

Date Collected: 12/03/19 15:00
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 93.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7400		11	8.2	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Boron	ND		5.3	2.7	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Calcium	2700		27	14	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Iron	16000		11	7.3	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Lithium	5.1	J	5.3	3.0	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Magnesium	5500		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Phosphorus	370		5.3	2.7	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Potassium	1300		66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Sodium	58	J	66	34	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Strontium	47		5.3	2.7	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5
Titanium	260		2.1	1.1	mg/Kg	☼	12/09/19 12:18	12/10/19 12:20	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.66	J	1.1	0.29	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Arsenic	6.3		0.53	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Barium	53		0.53	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Beryllium	0.23	J	0.32	0.16	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Cadmium	ND		0.53	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Chromium	6.2		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Cobalt	3.6		0.53	0.22	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Copper	1300		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Lead	3.3		0.53	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Manganese	44		0.53	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Molybdenum	3.3		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Nickel	6.8		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Selenium	3.1	B	1.1	0.21	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Silver	ND		0.53	0.11	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Thallium	ND		0.53	0.27	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Vanadium	19		1.1	0.53	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20
Zinc	16		11	5.3	mg/Kg	☼	12/09/19 12:18	12/09/19 22:11	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.31		0.021	0.013	mg/Kg	☼	12/09/19 13:06	12/10/19 14:53	1

Default Detection Limits

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Method: 6010B - Metals (ICP)

Prep: 3050B

Analyte	RL	MDL	Units
Aluminum	10	7.7	mg/Kg
Boron	5.0	2.5	mg/Kg
Calcium	25	14	mg/Kg
Iron	10	6.9	mg/Kg
Lithium	5.0	2.8	mg/Kg
Magnesium	10	5.0	mg/Kg
Phosphorus	5.0	2.5	mg/Kg
Potassium	63	33	mg/Kg
Sodium	63	32	mg/Kg
Strontium	5.0	2.5	mg/Kg
Tin	10	5.0	mg/Kg
Titanium	2.0	1.0	mg/Kg

Method: 6020 - Metals (ICP/MS)

Prep: 3050B

Analyte	RL	MDL	Units
Antimony	1.0	0.27	mg/Kg
Arsenic	0.50	0.25	mg/Kg
Barium	0.50	0.25	mg/Kg
Beryllium	0.30	0.15	mg/Kg
Cadmium	0.50	0.25	mg/Kg
Chromium	1.0	0.50	mg/Kg
Cobalt	0.50	0.21	mg/Kg
Copper	1.0	0.50	mg/Kg
Lead	0.50	0.25	mg/Kg
Manganese	0.50	0.25	mg/Kg
Molybdenum	1.0	0.50	mg/Kg
Nickel	1.0	0.50	mg/Kg
Selenium	1.0	0.20	mg/Kg
Silver	0.50	0.10	mg/Kg
Thallium	0.50	0.25	mg/Kg
Vanadium	1.0	0.50	mg/Kg
Zinc	10	5.0	mg/Kg

Method: 7471A - Mercury (CVAA)

Prep: 7471A

Analyte	RL	MDL	Units
Mercury	0.020	0.012	mg/Kg

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-584703/1-A ^5
Matrix: Solid
Analysis Batch: 584992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584703

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	7.7	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Boron	ND		5.0	2.5	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Calcium	ND		25	14	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Iron	ND		10	6.9	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Lithium	ND		5.0	2.8	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Magnesium	ND		10	5.0	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Phosphorus	ND		5.0	2.5	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Potassium	ND		63	33	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Sodium	ND		63	32	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Strontium	ND		5.0	2.5	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Tin	ND		10	5.0	mg/Kg		12/09/19 12:18	12/10/19 11:14	5
Titanium	ND		2.0	1.0	mg/Kg		12/09/19 12:18	12/10/19 11:14	5

Lab Sample ID: LCS 440-584703/2-A ^5
Matrix: Solid
Analysis Batch: 584992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 584703

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	50.3	45.8		mg/Kg		91	80 - 120
Boron	50.3	44.8		mg/Kg		89	80 - 120
Calcium	251	232		mg/Kg		92	80 - 120
Iron	50.3	60.3		mg/Kg		120	80 - 120
Lithium	50.3	45.5		mg/Kg		91	80 - 120
Magnesium	251	226		mg/Kg		90	80 - 120
Phosphorus	50.3	46.0		mg/Kg		92	80 - 120
Potassium	503	442		mg/Kg		88	80 - 120
Sodium	503	455		mg/Kg		91	80 - 120
Strontium	50.3	44.9		mg/Kg		89	80 - 120
Tin	50.3	46.5		mg/Kg		93	80 - 120
Titanium	50.3	46.0		mg/Kg		92	80 - 120

Lab Sample ID: 440-256528-1 MS
Matrix: Solid
Analysis Batch: 584992

Client Sample ID: STSB32_0-0.5
Prep Type: Total/NA
Prep Batch: 584703

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7900		52.4	10300	4	mg/Kg	☼	4581	75 - 125
Boron	ND		52.4	45.5		mg/Kg	☼	87	75 - 125
Calcium	4000		262	4190	4	mg/Kg	☼	82	75 - 125
Iron	13000		52.4	15300	4	mg/Kg	☼	3961	75 - 125
Lithium	6.1		52.4	54.8		mg/Kg	☼	93	75 - 125
Magnesium	6400	F2	262	6680	4	mg/Kg	☼	100	75 - 125
Phosphorus	380		52.4	401	4	mg/Kg	☼	41	75 - 125
Potassium	1200	F1 F2	524	1850		mg/Kg	☼	118	75 - 125
Sodium	250		524	749		mg/Kg	☼	94	75 - 125
Strontium	62	F1	52.4	117		mg/Kg	☼	104	75 - 125
Tin	ND		52.4	48.1		mg/Kg	☼	92	75 - 125
Titanium	400		52.4	568	4	mg/Kg	☼	325	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-256528-1 MSD
Client Sample ID: STSB32_0-0.5
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 584992
Prep Batch: 584703

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	7900		51.7	11000	4	mg/Kg	☼	5956	75 - 125	6	20
Boron	ND		51.7	43.9		mg/Kg	☼	85	75 - 125	3	20
Calcium	4000		258	3500	4	mg/Kg	☼	-183	75 - 125	18	20
Iron	13000		51.7	14600	4	mg/Kg	☼	2776	75 - 125	4	20
Lithium	6.1		51.7	53.5		mg/Kg	☼	92	75 - 125	2	20
Magnesium	6400	F2	258	9230	4 F2	mg/Kg	☼	1089	75 - 125	32	20
Phosphorus	380		51.7	357	4	mg/Kg	☼	-43	75 - 125	12	20
Potassium	1200	F1 F2	517	2390	F1 F2	mg/Kg	☼	225	75 - 125	26	20
Sodium	250		517	689		mg/Kg	☼	84	75 - 125	8	20
Strontium	62	F1	51.7	96.9	F1	mg/Kg	☼	67	75 - 125	18	20
Tin	ND		51.7	47.8		mg/Kg	☼	93	75 - 125	1	20
Titanium	400		51.7	697	4	mg/Kg	☼	579	75 - 125	20	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 440-584703/1-A ^20
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 584880
Prep Batch: 584703

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.27	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Arsenic	ND		0.50	0.25	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Barium	ND		0.50	0.25	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Beryllium	ND		0.30	0.15	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Cadmium	ND		0.50	0.25	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Chromium	ND		1.0	0.50	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Cobalt	ND		0.50	0.21	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Copper	ND		1.0	0.50	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Lead	ND		0.50	0.25	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Manganese	ND		0.50	0.25	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Molybdenum	ND		1.0	0.50	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Nickel	ND		1.0	0.50	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Selenium	0.213	J	1.0	0.20	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Silver	ND		0.50	0.10	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Thallium	ND		0.50	0.25	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Vanadium	ND		1.0	0.50	mg/Kg		12/09/19 12:18	12/09/19 20:41	20
Zinc	ND		10	5.0	mg/Kg		12/09/19 12:18	12/09/19 20:41	20

Lab Sample ID: LCS 440-584703/2-A ^20
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 584880
Prep Batch: 584703

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.3	47.0		mg/Kg		93	80 - 120
Arsenic	50.3	46.3		mg/Kg		92	80 - 120
Barium	50.3	47.5		mg/Kg		94	80 - 120
Beryllium	50.3	46.0		mg/Kg		92	80 - 120
Cadmium	50.3	46.1		mg/Kg		92	80 - 120
Chromium	50.3	46.2		mg/Kg		92	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 440-584703/2-A ^20
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 584880
Prep Batch: 584703

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	50.3	46.3		mg/Kg		92	80 - 120
Copper	50.3	46.6		mg/Kg		93	80 - 120
Lead	50.3	46.4		mg/Kg		92	80 - 120
Manganese	50.3	45.2		mg/Kg		90	80 - 120
Molybdenum	50.3	46.5		mg/Kg		92	80 - 120
Nickel	50.3	46.5		mg/Kg		93	80 - 120
Selenium	50.3	45.0		mg/Kg		90	80 - 120
Silver	25.1	24.1		mg/Kg		96	80 - 120
Thallium	50.3	46.0		mg/Kg		92	80 - 120
Vanadium	50.3	45.6		mg/Kg		91	80 - 120
Zinc	50.3	46.1		mg/Kg		92	80 - 120

Lab Sample ID: 440-256528-1 MS
Client Sample ID: STSB32_0-0.5
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 584880
Prep Batch: 584703

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.1	F1	52.4	34.3	F1	mg/Kg	☼	63	75 - 125
Arsenic	6.4		52.4	54.4		mg/Kg	☼	92	75 - 125
Barium	43		52.4	95.7		mg/Kg	☼	101	75 - 125
Beryllium	ND		52.4	45.0		mg/Kg	☼	86	75 - 125
Cadmium	ND		52.4	46.8		mg/Kg	☼	89	75 - 125
Chromium	5.6		52.4	50.1		mg/Kg	☼	85	75 - 125
Cobalt	3.8		52.4	49.0		mg/Kg	☼	86	75 - 125
Copper	2100		52.4	2250	4	mg/Kg	☼	345	75 - 125
Lead	3.7		52.4	50.7		mg/Kg	☼	90	75 - 125
Manganese	61		52.4	106		mg/Kg	☼	87	75 - 125
Molybdenum	4.4		52.4	50.6		mg/Kg	☼	88	75 - 125
Nickel	7.3		52.4	52.3		mg/Kg	☼	86	75 - 125
Selenium	4.2	B	52.4	50.5		mg/Kg	☼	88	75 - 125
Silver	0.11	J	26.2	24.3		mg/Kg	☼	92	75 - 125
Thallium	ND		52.4	46.4		mg/Kg	☼	88	75 - 125
Vanadium	20		52.4	67.4		mg/Kg	☼	91	75 - 125
Zinc	15		52.4	62.6		mg/Kg	☼	90	75 - 125

Lab Sample ID: 440-256528-1 MSD
Client Sample ID: STSB32_0-0.5
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 584880
Prep Batch: 584703

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.1	F1	51.7	34.7	F1	mg/Kg	☼	65	75 - 125	1	20
Arsenic	6.4		51.7	51.1		mg/Kg	☼	86	75 - 125	6	20
Barium	43		51.7	101		mg/Kg	☼	113	75 - 125	5	20
Beryllium	ND		51.7	44.0		mg/Kg	☼	85	75 - 125	2	20
Cadmium	ND		51.7	46.1		mg/Kg	☼	89	75 - 125	1	20
Chromium	5.6		51.7	49.4		mg/Kg	☼	85	75 - 125	1	20
Cobalt	3.8		51.7	48.5		mg/Kg	☼	86	75 - 125	1	20
Copper	2100		51.7	2110	4	mg/Kg	☼	69	75 - 125	7	20
Lead	3.7		51.7	48.1		mg/Kg	☼	86	75 - 125	5	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-256528-1 MSD — **Client Sample ID: STSB32_0-0.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 584880 — **Prep Batch: 584703**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	61		51.7	116		mg/Kg	☼	106	75 - 125	8	20
Molybdenum	4.4		51.7	49.5		mg/Kg	☼	87	75 - 125	2	20
Nickel	7.3		51.7	52.8		mg/Kg	☼	88	75 - 125	1	20
Selenium	4.2	B	51.7	46.2		mg/Kg	☼	81	75 - 125	9	20
Silver	0.11	J	25.8	24.1		mg/Kg	☼	93	75 - 125	1	20
Thallium	ND		51.7	44.9		mg/Kg	☼	87	75 - 125	3	20
Vanadium	20		51.7	71.8		mg/Kg	☼	101	75 - 125	6	20
Zinc	15		51.7	60.9		mg/Kg	☼	88	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 440-584718/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585046 — **Prep Batch: 584718**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.012	mg/Kg		12/09/19 13:06	12/10/19 13:53	1

Lab Sample ID: LCS 440-584718/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585046 — **Prep Batch: 584718**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.400	0.382		mg/Kg		96	80 - 120

Lab Sample ID: 440-256528-1 MS — **Client Sample ID: STSB32_0-0.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585046 — **Prep Batch: 584718**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.12		0.428	0.484		mg/Kg	☼	85	75 - 125

Lab Sample ID: 440-256528-1 MSD — **Client Sample ID: STSB32_0-0.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585046 — **Prep Batch: 584718**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.12		0.420	0.468		mg/Kg	☼	83	75 - 125	3	20

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Metals

Prep Batch: 584703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-256528-1	STSB32_0-0.5	Total/NA	Solid	3050B	
440-256528-2	STSB32_0.5-3	Total/NA	Solid	3050B	
440-256528-3	STSB32_3-6	Total/NA	Solid	3050B	
440-256528-4	STSB32_6-15	Total/NA	Solid	3050B	
440-256528-5	STSB34_0-0.5	Total/NA	Solid	3050B	
440-256528-6	STSB34_0.5-3	Total/NA	Solid	3050B	
440-256528-7	STSB34_3-6	Total/NA	Solid	3050B	
440-256528-8	STSB34_6-15	Total/NA	Solid	3050B	
440-256528-9	STSB34-FD_3-6	Total/NA	Solid	3050B	
440-256528-10	STSB33_0-0.5	Total/NA	Solid	3050B	
440-256528-11	STSB33_0.5-3	Total/NA	Solid	3050B	
440-256528-12	STSB33-FD_0.5-3	Total/NA	Solid	3050B	
440-256528-13	STSB33_3-6	Total/NA	Solid	3050B	
440-256528-14	STSB33_6-15	Total/NA	Solid	3050B	
440-256528-15	STSB35_0-0.5	Total/NA	Solid	3050B	
440-256528-16	STSB35_0.5-3	Total/NA	Solid	3050B	
440-256528-18	STSB35_3-6	Total/NA	Solid	3050B	
440-256528-19	STSB35_6-15	Total/NA	Solid	3050B	
MB 440-584703/1-A ^20	Method Blank	Total/NA	Solid	3050B	
MB 440-584703/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 440-584703/2-A ^20	Lab Control Sample	Total/NA	Solid	3050B	
LCS 440-584703/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
440-256528-1 MS	STSB32_0-0.5	Total/NA	Solid	3050B	
440-256528-1 MSD	STSB32_0-0.5	Total/NA	Solid	3050B	

Prep Batch: 584718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-256528-1	STSB32_0-0.5	Total/NA	Solid	7471A	
440-256528-2	STSB32_0.5-3	Total/NA	Solid	7471A	
440-256528-3	STSB32_3-6	Total/NA	Solid	7471A	
440-256528-4	STSB32_6-15	Total/NA	Solid	7471A	
440-256528-5	STSB34_0-0.5	Total/NA	Solid	7471A	
440-256528-6	STSB34_0.5-3	Total/NA	Solid	7471A	
440-256528-7	STSB34_3-6	Total/NA	Solid	7471A	
440-256528-8	STSB34_6-15	Total/NA	Solid	7471A	
440-256528-9	STSB34-FD_3-6	Total/NA	Solid	7471A	
440-256528-10	STSB33_0-0.5	Total/NA	Solid	7471A	
440-256528-11	STSB33_0.5-3	Total/NA	Solid	7471A	
440-256528-12	STSB33-FD_0.5-3	Total/NA	Solid	7471A	
440-256528-13	STSB33_3-6	Total/NA	Solid	7471A	
440-256528-14	STSB33_6-15	Total/NA	Solid	7471A	
440-256528-15	STSB35_0-0.5	Total/NA	Solid	7471A	
440-256528-16	STSB35_0.5-3	Total/NA	Solid	7471A	
440-256528-18	STSB35_3-6	Total/NA	Solid	7471A	
440-256528-19	STSB35_6-15	Total/NA	Solid	7471A	
MB 440-584718/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 440-584718/2-A	Lab Control Sample	Total/NA	Solid	7471A	
440-256528-1 MS	STSB32_0-0.5	Total/NA	Solid	7471A	
440-256528-1 MSD	STSB32_0-0.5	Total/NA	Solid	7471A	

Metals

Analysis Batch: 584880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-256528-1	STSB32_0-0.5	Total/NA	Solid	6020	584703
440-256528-2	STSB32_0.5-3	Total/NA	Solid	6020	584703
440-256528-3	STSB32_3-6	Total/NA	Solid	6020	584703
440-256528-4	STSB32_6-15	Total/NA	Solid	6020	584703
440-256528-5	STSB34_0-0.5	Total/NA	Solid	6020	584703
440-256528-6	STSB34_0.5-3	Total/NA	Solid	6020	584703
440-256528-7	STSB34_3-6	Total/NA	Solid	6020	584703
440-256528-8	STSB34_6-15	Total/NA	Solid	6020	584703
440-256528-9	STSB34-FD_3-6	Total/NA	Solid	6020	584703
440-256528-10	STSB33_0-0.5	Total/NA	Solid	6020	584703
440-256528-11	STSB33_0.5-3	Total/NA	Solid	6020	584703
440-256528-12	STSB33-FD_0.5-3	Total/NA	Solid	6020	584703
440-256528-13	STSB33_3-6	Total/NA	Solid	6020	584703
440-256528-14	STSB33_6-15	Total/NA	Solid	6020	584703
440-256528-15	STSB35_0-0.5	Total/NA	Solid	6020	584703
440-256528-16	STSB35_0.5-3	Total/NA	Solid	6020	584703
440-256528-18	STSB35_3-6	Total/NA	Solid	6020	584703
440-256528-19	STSB35_6-15	Total/NA	Solid	6020	584703
MB 440-584703/1-A ^20	Method Blank	Total/NA	Solid	6020	584703
LCS 440-584703/2-A ^20	Lab Control Sample	Total/NA	Solid	6020	584703
440-256528-1 MS	STSB32_0-0.5	Total/NA	Solid	6020	584703
440-256528-1 MSD	STSB32_0-0.5	Total/NA	Solid	6020	584703

Analysis Batch: 584992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-256528-1	STSB32_0-0.5	Total/NA	Solid	6010B	584703
440-256528-2	STSB32_0.5-3	Total/NA	Solid	6010B	584703
440-256528-3	STSB32_3-6	Total/NA	Solid	6010B	584703
440-256528-4	STSB32_6-15	Total/NA	Solid	6010B	584703
440-256528-5	STSB34_0-0.5	Total/NA	Solid	6010B	584703
440-256528-6	STSB34_0.5-3	Total/NA	Solid	6010B	584703
440-256528-7	STSB34_3-6	Total/NA	Solid	6010B	584703
440-256528-8	STSB34_6-15	Total/NA	Solid	6010B	584703
440-256528-9	STSB34-FD_3-6	Total/NA	Solid	6010B	584703
440-256528-10	STSB33_0-0.5	Total/NA	Solid	6010B	584703
440-256528-11	STSB33_0.5-3	Total/NA	Solid	6010B	584703
440-256528-12	STSB33-FD_0.5-3	Total/NA	Solid	6010B	584703
440-256528-13	STSB33_3-6	Total/NA	Solid	6010B	584703
440-256528-14	STSB33_6-15	Total/NA	Solid	6010B	584703
440-256528-15	STSB35_0-0.5	Total/NA	Solid	6010B	584703
440-256528-16	STSB35_0.5-3	Total/NA	Solid	6010B	584703
440-256528-18	STSB35_3-6	Total/NA	Solid	6010B	584703
440-256528-19	STSB35_6-15	Total/NA	Solid	6010B	584703
MB 440-584703/1-A ^5	Method Blank	Total/NA	Solid	6010B	584703
LCS 440-584703/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	584703
440-256528-1 MS	STSB32_0-0.5	Total/NA	Solid	6010B	584703
440-256528-1 MSD	STSB32_0-0.5	Total/NA	Solid	6010B	584703

Analysis Batch: 585046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-256528-1	STSB32_0-0.5	Total/NA	Solid	7471A	584718

Metals (Continued)

Analysis Batch: 585046 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-256528-2	STSB32_0.5-3	Total/NA	Solid	7471A	584718
440-256528-3	STSB32_3-6	Total/NA	Solid	7471A	584718
440-256528-4	STSB32_6-15	Total/NA	Solid	7471A	584718
440-256528-5	STSB34_0-0.5	Total/NA	Solid	7471A	584718
440-256528-6	STSB34_0.5-3	Total/NA	Solid	7471A	584718
440-256528-7	STSB34_3-6	Total/NA	Solid	7471A	584718
440-256528-8	STSB34_6-15	Total/NA	Solid	7471A	584718
440-256528-9	STSB34-FD_3-6	Total/NA	Solid	7471A	584718
440-256528-10	STSB33_0-0.5	Total/NA	Solid	7471A	584718
440-256528-11	STSB33_0.5-3	Total/NA	Solid	7471A	584718
440-256528-12	STSB33-FD_0.5-3	Total/NA	Solid	7471A	584718
440-256528-13	STSB33_3-6	Total/NA	Solid	7471A	584718
440-256528-14	STSB33_6-15	Total/NA	Solid	7471A	584718
440-256528-15	STSB35_0-0.5	Total/NA	Solid	7471A	584718
440-256528-16	STSB35_0.5-3	Total/NA	Solid	7471A	584718
440-256528-18	STSB35_3-6	Total/NA	Solid	7471A	584718
440-256528-19	STSB35_6-15	Total/NA	Solid	7471A	584718
MB 440-584718/1-A	Method Blank	Total/NA	Solid	7471A	584718
LCS 440-584718/2-A	Lab Control Sample	Total/NA	Solid	7471A	584718
440-256528-1 MS	STSB32_0-0.5	Total/NA	Solid	7471A	584718
440-256528-1 MSD	STSB32_0-0.5	Total/NA	Solid	7471A	584718

General Chemistry

Analysis Batch: 584500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-256528-1	STSB32_0-0.5	Total/NA	Solid	Moisture	
440-256528-2	STSB32_0.5-3	Total/NA	Solid	Moisture	
440-256528-3	STSB32_3-6	Total/NA	Solid	Moisture	
440-256528-4	STSB32_6-15	Total/NA	Solid	Moisture	
440-256528-5	STSB34_0-0.5	Total/NA	Solid	Moisture	
440-256528-6	STSB34_0.5-3	Total/NA	Solid	Moisture	
440-256528-7	STSB34_3-6	Total/NA	Solid	Moisture	
440-256528-8	STSB34_6-15	Total/NA	Solid	Moisture	
440-256528-9	STSB34-FD_3-6	Total/NA	Solid	Moisture	
440-256528-10	STSB33_0-0.5	Total/NA	Solid	Moisture	
440-256528-11	STSB33_0.5-3	Total/NA	Solid	Moisture	
440-256528-12	STSB33-FD_0.5-3	Total/NA	Solid	Moisture	
440-256528-13	STSB33_3-6	Total/NA	Solid	Moisture	
440-256528-14	STSB33_6-15	Total/NA	Solid	Moisture	
440-256528-15	STSB35_0-0.5	Total/NA	Solid	Moisture	
440-256528-16	STSB35_0.5-3	Total/NA	Solid	Moisture	
440-256528-18	STSB35_3-6	Total/NA	Solid	Moisture	
440-256528-19	STSB35_6-15	Total/NA	Solid	Moisture	
440-256528-1 MS	STSB32_0-0.5	Total/NA	Solid	Moisture	
440-256528-1 MSD	STSB32_0-0.5	Total/NA	Solid	Moisture	
440-256528-1 DU	STSB32_0-0.5	Total/NA	Solid	Moisture	

Analysis Batch: 585768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-256528-1	STSB32_0-0.5	Total/NA	Solid	Homogenization	

General Chemistry (Continued)

Analysis Batch: 585768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-256528-2	STSB32_0.5-3	Total/NA	Solid	Homogenization	
440-256528-3	STSB32_3-6	Total/NA	Solid	Homogenization	
440-256528-4	STSB32_6-15	Total/NA	Solid	Homogenization	
440-256528-5	STSB34_0-0.5	Total/NA	Solid	Homogenization	
440-256528-6	STSB34_0.5-3	Total/NA	Solid	Homogenization	
440-256528-7	STSB34_3-6	Total/NA	Solid	Homogenization	
440-256528-8	STSB34_6-15	Total/NA	Solid	Homogenization	
440-256528-9	STSB34-FD_3-6	Total/NA	Solid	Homogenization	
440-256528-10	STSB33_0-0.5	Total/NA	Solid	Homogenization	
440-256528-11	STSB33_0.5-3	Total/NA	Solid	Homogenization	
440-256528-12	STSB33-FD_0.5-3	Total/NA	Solid	Homogenization	
440-256528-13	STSB33_3-6	Total/NA	Solid	Homogenization	
440-256528-14	STSB33_6-15	Total/NA	Solid	Homogenization	
440-256528-15	STSB35_0-0.5	Total/NA	Solid	Homogenization	
440-256528-16	STSB35_0.5-3	Total/NA	Solid	Homogenization	
440-256528-18	STSB35_3-6	Total/NA	Solid	Homogenization	
440-256528-19	STSB35_6-15	Total/NA	Solid	Homogenization	
440-256528-1 MS	STSB32_0-0.5	Total/NA	Solid	Homogenization	
440-256528-1 MSD	STSB32_0-0.5	Total/NA	Solid	Homogenization	

Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID: STSB32_0-0.5
Lab Sample ID: 440-256528-1
Date Collected: 11/25/19 13:25
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB32_0-0.5
Lab Sample ID: 440-256528-1
Date Collected: 11/25/19 13:25
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:19	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 20:46	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 13:58	DB	TAL IRV

Client Sample ID: STSB32_0.5-3
Lab Sample ID: 440-256528-2
Date Collected: 11/25/19 13:40
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB32_0.5-3
Lab Sample ID: 440-256528-2
Date Collected: 11/25/19 13:40
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:38	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:08	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:07	DB	TAL IRV

Client Sample ID: STSB32_3-6
Lab Sample ID: 440-256528-3
Date Collected: 11/25/19 13:49
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID: STSB32_3-6
Lab Sample ID: 440-256528-3

Date Collected: 11/25/19 13:49
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:40	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:10	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:15	DB	TAL IRV

Client Sample ID: STSB32_6-15
Lab Sample ID: 440-256528-4

Date Collected: 11/25/19 14:06
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB32_6-15
Lab Sample ID: 440-256528-4

Date Collected: 11/25/19 14:06
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 98.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:42	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:12	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:17	DB	TAL IRV

Client Sample ID: STSB34_0-0.5
Lab Sample ID: 440-256528-5

Date Collected: 11/25/19 15:00
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB34_0-0.5
Lab Sample ID: 440-256528-5

Date Collected: 11/25/19 15:00
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:44	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:15	B1H	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID: STSB34_0-0.5
Lab Sample ID: 440-256528-5

Date Collected: 11/25/19 15:00
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:20	DB	TAL IRV

Client Sample ID: STSB34_0.5-3
Lab Sample ID: 440-256528-6

Date Collected: 11/25/19 15:05
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB34_0.5-3
Lab Sample ID: 440-256528-6

Date Collected: 11/25/19 15:05
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:45	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:17	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:22	DB	TAL IRV

Client Sample ID: STSB34_3-6
Lab Sample ID: 440-256528-7

Date Collected: 11/25/19 15:12
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB34_3-6
Lab Sample ID: 440-256528-7

Date Collected: 11/25/19 15:12
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:47	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:20	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:24	DB	TAL IRV

Client Sample ID: STSB34_6-15
Lab Sample ID: 440-256528-8

Date Collected: 11/25/19 15:28
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB34_6-15
Lab Sample ID: 440-256528-8

Date Collected: 11/25/19 15:28
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:49	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:22	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:27	DB	TAL IRV

Client Sample ID: STSB34-FD_3-6
Lab Sample ID: 440-256528-9

Date Collected: 11/25/19 15:12
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB34-FD_3-6
Lab Sample ID: 440-256528-9

Date Collected: 11/25/19 15:12
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:51	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:24	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:29	DB	TAL IRV

Client Sample ID: STSB33_0-0.5
Lab Sample ID: 440-256528-10

Date Collected: 12/03/19 12:31
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-256528-1

Client Sample ID: STSB33_0-0.5
Lab Sample ID: 440-256528-10
Date Collected: 12/03/19 12:31
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 11:53	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:27	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:31	DB	TAL IRV

Client Sample ID: STSB33_0.5-3
Lab Sample ID: 440-256528-11
Date Collected: 12/03/19 12:40
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB33_0.5-3
Lab Sample ID: 440-256528-11
Date Collected: 12/03/19 12:40
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:07	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:45	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:33	DB	TAL IRV

Client Sample ID: STSB33-FD_0.5-3
Lab Sample ID: 440-256528-12
Date Collected: 12/03/19 12:48
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB33-FD_0.5-3
Lab Sample ID: 440-256528-12
Date Collected: 12/03/19 12:48
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:09	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:47	B1H	TAL IRV

Client Sample ID: STSB33-FD_0.5-3
Lab Sample ID: 440-256528-12

Date Collected: 12/03/19 12:48
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:36	DB	TAL IRV

Client Sample ID: STSB33_3-6
Lab Sample ID: 440-256528-13

Date Collected: 12/03/19 12:51
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB33_3-6
Lab Sample ID: 440-256528-13

Date Collected: 12/03/19 12:51
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:11	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:49	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:42	DB	TAL IRV

Client Sample ID: STSB33_6-15
Lab Sample ID: 440-256528-14

Date Collected: 12/03/19 13:05
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB33_6-15
Lab Sample ID: 440-256528-14

Date Collected: 12/03/19 13:05
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:12	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:52	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:44	DB	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID: STSB35_0-0.5
Lab Sample ID: 440-256528-15

Date Collected: 12/03/19 14:35
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB35_0-0.5
Lab Sample ID: 440-256528-15

Date Collected: 12/03/19 14:35
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:14	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 21:54	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:46	DB	TAL IRV

Client Sample ID: STSB35_0.5-3
Lab Sample ID: 440-256528-16

Date Collected: 12/03/19 14:41
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Client Sample ID: STSB35_0.5-3
Lab Sample ID: 440-256528-16

Date Collected: 12/03/19 14:41
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:16	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 22:03	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:49	DB	TAL IRV

Client Sample ID: STSB35_3-6
Lab Sample ID: 440-256528-18

Date Collected: 12/03/19 14:54
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:04	KL	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID: STSB35_3-6
Lab Sample ID: 440-256528-18

Date Collected: 12/03/19 14:54
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:18	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 22:05	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:51	DB	TAL IRV

Client Sample ID: STSB35_6-15
Lab Sample ID: 440-256528-19

Date Collected: 12/03/19 15:00
Matrix: Solid
Date Received: 12/05/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585768	12/07/19 22:00	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584500	12/08/19 02:17	KL	TAL IRV

Client Sample ID: STSB35_6-15
Lab Sample ID: 440-256528-19

Date Collected: 12/03/19 15:00
Matrix: Solid
Date Received: 12/05/19 10:00
Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:20	TQN	TAL IRV
Total/NA	Prep	3050B			584703	12/09/19 12:18	NE1	TAL IRV
Total/NA	Analysis	6020		20	584880	12/09/19 22:11	B1H	TAL IRV
Total/NA	Prep	7471A			584718	12/09/19 13:06	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 14:53	DB	TAL IRV

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Nevada	State Program	CA015312020-4	07-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture

Method Summary

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL IRV
6020	Metals (ICP/MS)	SW846	TAL IRV
7471A	Mercury (CVAA)	SW846	TAL IRV
Homogenization	Homogenization	None	TAL IRV
Moisture	Percent Moisture	EPA	TAL IRV
3050B	Preparation, Metals	SW846	TAL IRV
7471A	Preparation, Mercury	SW846	TAL IRV

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Sample Summary

Client: Wood E&I Solutions Inc
Job ID: 440-256528-1
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-256528-1	STSB32_0-0.5	Solid	11/25/19 13:25	12/05/19 10:00	
440-256528-2	STSB32_0.5-3	Solid	11/25/19 13:40	12/05/19 10:00	
440-256528-3	STSB32_3-6	Solid	11/25/19 13:49	12/05/19 10:00	
440-256528-4	STSB32_6-15	Solid	11/25/19 14:06	12/05/19 10:00	
440-256528-5	STSB34_0-0.5	Solid	11/25/19 15:00	12/05/19 10:00	
440-256528-6	STSB34_0.5-3	Solid	11/25/19 15:05	12/05/19 10:00	
440-256528-7	STSB34_3-6	Solid	11/25/19 15:12	12/05/19 10:00	
440-256528-8	STSB34_6-15	Solid	11/25/19 15:28	12/05/19 10:00	
440-256528-9	STSB34-FD_3-6	Solid	11/25/19 15:12	12/05/19 10:00	
440-256528-10	STSB33_0-0.5	Solid	12/03/19 12:31	12/05/19 10:00	
440-256528-11	STSB33_0.5-3	Solid	12/03/19 12:40	12/05/19 10:00	
440-256528-12	STSB33-FD_0.5-3	Solid	12/03/19 12:48	12/05/19 10:00	
440-256528-13	STSB33_3-6	Solid	12/03/19 12:51	12/05/19 10:00	
440-256528-14	STSB33_6-15	Solid	12/03/19 13:05	12/05/19 10:00	
440-256528-15	STSB35_0-0.5	Solid	12/03/19 14:35	12/05/19 10:00	
440-256528-16	STSB35_0.5-3	Solid	12/03/19 14:41	12/05/19 10:00	
440-256528-18	STSB35_3-6	Solid	12/03/19 14:54	12/05/19 10:00	
440-256528-19	STSB35_6-15	Solid	12/03/19 15:00	12/05/19 10:00	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ICP STD A_00003	04/01/21	CPI, Lot 10099542-5			(Purchased Reagent)		Aluminum	200 mg/L
							Arsenic	200 mg/L
							Barium	200 mg/L
							Beryllium	200 mg/L
							Boron	200 mg/L
							Cadmium	200 mg/L
							Calcium	1000 mg/L
							Chromium	200 mg/L
							Cobalt	200 mg/L
							Copper	200 mg/L
							Iron	200 mg/L
							Lead	200 mg/L
							Lithium	200 mg/L
							Magnesium	1000 mg/L
							Manganese	200 mg/L
							Nickel	200 mg/L
							Phosphorus	200 mg/L
							Potassium	2000 mg/L
							Selenium	200 mg/L
							Silver	100 mg/L
							Sodium	2000 mg/L
							Strontium	200 mg/L
							Thallium	200 mg/L
							Vanadium	200 mg/L
							Zinc	200 mg/L
ICP STD B_00003	10/16/20	CPI, Lot 10099542-6			(Purchased Reagent)		Antimony	200 mg/L
							Molybdenum	200 mg/L
							Si	1000 mg/L
							SiO2	2150 mg/L
							Tin	200 mg/L
							Titanium	200 mg/L
							W	200 mg/L
							Zr	200 mg/L
ME 1 PPM HG1_00406	12/16/19	12/09/19	0.15% HNO3, Lot 0000216908	50 mL	ME 0.15% HNO3_00027	45 mL	Stock Chemical	13.5 mg/L
					ME 10PPM_00013	5 mL	Mercury	1 mg/L
.ME 0.15% HNO3_00027	07/08/20	07/08/19	Di Water, Lot N/A	1 L	ME HNO3_00492	1.5 mL	Stock Chemical	15 mg/L
..ME HNO3_00492	05/23/23	Macron Fine Chemicals, Lot 0000216908			(Purchased Reagent)		Stock Chemical	1 %
.ME 10PPM_00013	01/01/21	CPI, Lot 991303-38			(Purchased Reagent)		Mercury	10 mg/L
ME 1 PPM HG1_00407	12/16/19	12/09/19	0.15% HNO3, Lot 0000216908	50 mL	ME 0.15% HNO3_00027	45 mL	Stock Chemical	13.5 mg/L
					ME 10PPM HG2_00018	5 mL	Mercury	1 mg/L
.ME 0.15% HNO3_00027	07/08/20	07/08/19	Di Water, Lot N/A	1 L	ME HNO3_00492	1.5 mL	Stock Chemical	15 mg/L
..ME HNO3_00492	05/23/23	Macron Fine Chemicals, Lot 0000216908			(Purchased Reagent)		Stock Chemical	1 %
.ME 10PPM HG2_00018	07/30/20	Spex, Lot 24-68HGY			(Purchased Reagent)		Mercury	10 mg/L
ME 1:1 HNO3_00291	11/27/20	11/27/19	Di Water, Lot N/A	2000 mL	ME HNO3_00547	2000 mL	Stock Chemical	1 %

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.ME HNO3_00547	12/20/23		Macron, Lot 0000221803		(Purchased Reagent)		Stock Chemical	1 %
ME 30% H2O2_00108	11/22/20		Fisher, Lot 194733		(Purchased Reagent)		Stock Chemical	30 %
ME Aqua Regia_00769	12/10/19	12/09/19	Di Water, Lot n/a	400 mL	ME HCl_00546	300 mL	Stock Chemical	75.25 %
					ME HNO3_00540	100 mL	Stock Chemical	75.25 %
.ME HCl_00546	08/26/24		JT Baker, Lot 0000240180		(Purchased Reagent)		Stock Chemical	100 %
.ME HNO3_00540	12/20/23		Macron Fine Chemicals, Lot 0000221803		(Purchased Reagent)		Stock Chemical	1 %
ME HCl_00544	08/26/24		JT Baker, Lot 0000240180		(Purchased Reagent)		Stock Chemical	100 %
ME HNO3_00546	12/20/23		Macron, Lot 0000221803		(Purchased Reagent)		Stock Chemical	1 %
ME HYDROX SOL_00114	02/28/20	10/28/19	Di Water, Lot n/a	3 L	ME H8N2O6S_00072	360 g	Stock Chemical	24 %
					ME NACL_00030	360 g	Stock Chemical	24 %
.ME H8N2O6S_00072	07/27/20		fisher, Lot 175511		(Purchased Reagent)		Stock Chemical	100 %
.ME NACL_00030	08/04/20		Fisher Scientific, Lot 176877		(Purchased Reagent)		Stock Chemical	100 %
ME ICP PREP S_00024	12/24/19	11/24/19	1% HNO3, Lot N/A	50 mL	ICP STD A_00002	25 mL	Aluminum	100 mg/L
							Boron	100 mg/L
							Calcium	500 mg/L
							Iron	100 mg/L
							Lithium	100 mg/L
							Magnesium	500 mg/L
							Phosphorus	100 mg/L
							Potassium	1000 mg/L
							Sodium	1000 mg/L
							Strontium	100 mg/L
.ICP STD A_00002	03/18/21		CPI, Lot 10099542-4		(Purchased Reagent)		Aluminum	200 mg/L
							Boron	200 mg/L
							Calcium	1000 mg/L
							Iron	200 mg/L
							Lithium	200 mg/L
							Magnesium	1000 mg/L
							Phosphorus	200 mg/L
							Potassium	2000 mg/L
							Sodium	2000 mg/L
							Strontium	200 mg/L
ME ICP PREP S_00025	12/24/19	11/24/19	1% HNO3, Lot N/A	50 mL	ICP STD B_00002	25 mL	Tin	100 mg/L
							Titanium	100 mg/L
.ICP STD B_00002	02/28/21		CPI, Lot 10099542-3		(Purchased Reagent)		Tin	200 mg/L
							Titanium	200 mg/L
ME ICP STD3_03033	12/11/19	12/10/19	1%HNO3/2%HCL, Lot 211065110	100 mL	ICP STD A_00002	0.5 mL	Aluminum	1 ug/mL
							Boron	1 ug/mL
							Calcium	5 ug/mL
							Iron	1 ug/mL
							Lithium	1 ug/mL
							Magnesium	5 ug/mL
							Phosphorus	1 ug/mL
							Potassium	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sodium	10 ug/mL
							Strontium	1 ug/mL
					ICP STD B_00002	0.5 mL	Tin	1 ug/mL
							Titanium	1 ug/mL
.ICP STD A_00002	03/18/21	CPI, Lot 10099542-4			(Purchased Reagent)		Aluminum	200 mg/L
							Boron	200 mg/L
							Calcium	1000 mg/L
							Iron	200 mg/L
							Lithium	200 mg/L
							Magnesium	1000 mg/L
							Phosphorus	200 mg/L
							Potassium	2000 mg/L
							Sodium	2000 mg/L
							Strontium	200 mg/L
.ICP STD B_00002	02/28/21	CPI, Lot 10099542-3			(Purchased Reagent)		Tin	200 mg/L
							Titanium	200 mg/L
ME ICPMS CAL_00054	04/21/20	11/12/19	1% HNO3, Lot 5158118	500 mL	ICPMS STD AG_00002	5 mL	Silver	10 mg/L
					ICPMS STD ZN_00001	5 mL	Zinc	10 mg/L
					ME ICPMS CAL_00052	50 mL	Antimony	10 mg/L
							Arsenic	10 mg/L
							Barium	10 mg/L
							Beryllium	10 mg/L
							Cadmium	10 mg/L
							Chromium	10 mg/L
							Cobalt	10 mg/L
							Copper	10 mg/L
							Lead	10 mg/L
							Manganese	10 mg/L
							Molybdenum	10 mg/L
							Nickel	10 mg/L
							Selenium	10 mg/L
							Thallium	10 mg/L
							Vanadium	10 mg/L
.ICPMS STD AG_00002	10/04/20	CPI International, Lot 975475-22			(Purchased Reagent)		Silver	1000 ug/mL
.ICPMS STD ZN_00001	04/22/20	CPI International, Lot 166918-115			(Purchased Reagent)		Zinc	1000 ug/mL
.ME ICPMS CAL_00052	09/18/21	CPI International, Lot 1018875-2			(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Manganese	100 mg/L
							Molybdenum	100 mg/L
							Nickel	100 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Selenium	100 mg/L
							Thallium	100 mg/L
							Vanadium	100 mg/L
ME KMN04_00186	03/18/20	11/18/19	Di Water, Lot n/a	6 L	ME KMNO4_00045	300 g	Stock Chemical	5 %
.ME KMNO4_00045	06/27/20		Fisher, Lot 180124		(Purchased Reagent)		Stock Chemical	100 %
MEICPMS CCV_00293	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	250 mL	ME ICPMS CAL_00054	1.25 mL	Silver	50 ug/L
							Zinc	50 ug/L
							Antimony	50 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Lead	50 ug/L
							Manganese	50 ug/L
							Molybdenum	50 ug/L
							Nickel	50 ug/L
							Selenium	50 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
.ME ICPMS CAL_00054	04/21/20	11/12/19	1% HNO3, Lot 5158118	500 mL	ICPMS STD AG_00002	5 mL	Silver	10 mg/L
					ICPMS STD ZN_00001	5 mL	Zinc	10 mg/L
					ME ICPMS CAL_00052	50 mL	Antimony	10 mg/L
							Arsenic	10 mg/L
							Barium	10 mg/L
							Beryllium	10 mg/L
							Cadmium	10 mg/L
							Chromium	10 mg/L
							Cobalt	10 mg/L
							Copper	10 mg/L
							Lead	10 mg/L
							Manganese	10 mg/L
							Molybdenum	10 mg/L
							Nickel	10 mg/L
							Selenium	10 mg/L
							Thallium	10 mg/L
							Vanadium	10 mg/L
..ICPMS STD AG_00002	10/04/20		CPI International, Lot 975475-22		(Purchased Reagent)		Silver	1000 ug/mL
..ICPMS STD ZN_00001	04/22/20		CPI International, Lot 166918-115		(Purchased Reagent)		Zinc	1000 ug/mL
..ME ICPMS CAL_00052	09/18/21		CPI International, Lot 1018875-2		(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cobalt	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Manganese	100 mg/L
							Molybdenum	100 mg/L
							Nickel	100 mg/L
							Selenium	100 mg/L
							Thallium	100 mg/L
							Vanadium	100 mg/L
MEICPMS CRI1_00297	12/21/19	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	ME_CRI_30_00016	0.1 mL	Antimony	1 ug/L
							Arsenic	1 ug/L
							Barium	1 ug/L
							Beryllium	0.5 ug/L
							Cadmium	1 ug/L
							Chromium	1 ug/L
							Cobalt	1 ug/L
							Copper	1 ug/L
							Lead	1 ug/L
							Manganese	1 ug/L
							Molybdenum	1 ug/L
							Nickel	1 ug/L
							Selenium	1 ug/L
							Silver	1 ug/L
							Thallium	1 ug/L
							Vanadium	1 ug/L
							Zinc	10 ug/L
.ME_CRI_30_00016	12/21/19		VHG Labs, Lot 10071631-3		(Purchased Reagent)		Antimony	1 ug/mL
							Arsenic	1 ug/mL
							Barium	1 ug/mL
							Beryllium	0.5 ug/mL
							Cadmium	1 ug/mL
							Chromium	1 ug/mL
							Cobalt	1 ug/mL
							Copper	1 ug/mL
							Lead	1 ug/mL
							Manganese	1 ug/mL
							Molybdenum	1 ug/mL
							Nickel	1 ug/mL
							Selenium	1 ug/mL
							Silver	1 ug/mL
							Thallium	1 ug/mL
							Vanadium	1 ug/mL
							Zinc	10 ug/mL
MEICPMS CRI2_00294	12/21/19	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	ME_CRI_30_00016	0.2 mL	Antimony	2 ug/L
							Arsenic	2 ug/L
							Barium	2 ug/L
							Beryllium	1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cadmium	2 ug/L
							Chromium	2 ug/L
							Cobalt	2 ug/L
							Copper	2 ug/L
							Lead	2 ug/L
							Manganese	2 ug/L
							Molybdenum	2 ug/L
							Nickel	2 ug/L
							Selenium	2 ug/L
							Silver	2 ug/L
							Thallium	2 ug/L
							Vanadium	2 ug/L
							Zinc	20 ug/L
.ME_CRI_30_00016	12/21/19	VHG Labs, Lot 10071631-3			(Purchased Reagent)		Antimony	1 ug/mL
							Arsenic	1 ug/mL
							Barium	1 ug/mL
							Beryllium	0.5 ug/mL
							Cadmium	1 ug/mL
							Chromium	1 ug/mL
							Cobalt	1 ug/mL
							Copper	1 ug/mL
							Lead	1 ug/mL
							Manganese	1 ug/mL
							Molybdenum	1 ug/mL
							Nickel	1 ug/mL
							Selenium	1 ug/mL
							Silver	1 ug/mL
							Thallium	1 ug/mL
							Vanadium	1 ug/mL
							Zinc	10 ug/mL
MEICPMS ICSA_00323	08/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	ME ICPMS LLIC_00026	10 mL	Aluminum	100000 ug/L
							Iron	100000 ug/L
							Molybdenum	2000 ug/L
.ME ICPMS LLIC_00026	08/21/20	Inorganic Ventures, Lot P2-MEB676415			(Purchased Reagent)		Aluminum	1000 ug/mL
							Iron	1000 ug/mL
							Molybdenum	20 ug/mL
MEICPMS ICSAB_00247	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	ME ICPMS CAL_00054	0.2 mL	Ce	20 ug/L
							Cs	20 ug/L
							Rb	20 ug/L
							Th	20 ug/L
							Silver	20 ug/L
							Aluminum	100020 ug/L
							Iron	100200 ug/L
							U	20 ug/L
							Zinc	20 ug/L
							Antimony	20 ug/L
							Arsenic	20 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Barium	20 ug/L
							Beryllium	20 ug/L
							Cadmium	20 ug/L
							Chromium	20 ug/L
							Cobalt	20 ug/L
							Copper	20 ug/L
							Lead	20 ug/L
							Manganese	20 ug/L
							Molybdenum	2020 ug/L
							Nickel	20 ug/L
							Selenium	20 ug/L
							Strontium	20 ug/L
							Thallium	20 ug/L
							Tin	20 ug/L
							Vanadium	20 ug/L
					ME ICPMS LLIC_00026	10 mL	Aluminum	100020 ug/L
							Iron	100200 ug/L
							Molybdenum	2020 ug/L
.ME ICPMS CAL_00054	04/21/20	11/12/19	1% HNO3, Lot 5158118	500 mL	CECSRBTH 1ST_00001	5 mL	Ce	10 mg/L
							Cs	10 mg/L
							Rb	10 mg/L
							Th	10 mg/L
					ICPMS STD AG_00002	5 mL	Silver	10 mg/L
					ICPMS STD AL_00001	0.5 mL	Aluminum	10 mg/L
					ICPMS STD FE_00001	5 mL	Iron	100 mg/L
					ICPMS STD U_00001	5 mL	U	10 mg/L
					ICPMS STD ZN_00001	5 mL	Zinc	10 mg/L
					ME ICPMS CAL_00052	50 mL	Antimony	10 mg/L
							Arsenic	10 mg/L
							Barium	10 mg/L
							Beryllium	10 mg/L
							Cadmium	10 mg/L
							Chromium	10 mg/L
							Cobalt	10 mg/L
							Copper	10 mg/L
							Lead	10 mg/L
							Manganese	10 mg/L
							Molybdenum	10 mg/L
							Nickel	10 mg/L
							Selenium	10 mg/L
							Strontium	10 mg/L
							Thallium	10 mg/L
							Tin	10 mg/L
							Vanadium	10 mg/L
..CECSRBTH 1ST_00001	09/20/20	CPI International, Lot 10094558-1			(Purchased Reagent)		Ce	1000 ug/mL
							Cs	1000 ug/mL
							Rb	1000 ug/mL
							Th	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..ICPMS STD AG_00002	10/04/20	CPI International, Lot 975475-22			(Purchased Reagent)		Silver	1000 ug/mL
..ICPMS STD AL_00001	04/22/20	CPI International, Lot 169484-20			(Purchased Reagent)		Aluminum	10000 ug/mL
..ICPMS STD FE_00001	04/22/20	CPI International, Lot 156651-59			(Purchased Reagent)		Iron	10000 ug/mL
..ICPMS STD U_00001	04/22/20	CPI International, Lot 984257-3			(Purchased Reagent)		U	1000 ug/mL
..ICPMS STD ZN_00001	04/22/20	CPI International, Lot 166918-115			(Purchased Reagent)		Zinc	1000 ug/mL
..ME ICPMS CAL_00052	09/18/21	CPI International, Lot 1018875-2			(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Manganese	100 mg/L
							Molybdenum	100 mg/L
							Nickel	100 mg/L
							Selenium	100 mg/L
							Strontium	100 mg/L
							Thallium	100 mg/L
							Tin	100 mg/L
							Vanadium	100 mg/L
.ME ICPMS LLIC_00026	08/21/20	Inorganic Ventures, Lot P2-MEB676415			(Purchased Reagent)		Aluminum	1000 ug/mL
							Iron	1000 ug/mL
							Molybdenum	20 ug/mL
MEICPMS ICV_00295	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	ME ICPMS ICV_00230	250 uL	Antimony	25 ug/L
							Arsenic	25 ug/L
							Barium	25 ug/L
							Beryllium	25 ug/L
							Cadmium	25 ug/L
							Chromium	25 ug/L
							Cobalt	25 ug/L
							Copper	25 ug/L
							Lead	25 ug/L
							Manganese	25 ug/L
							Molybdenum	25 ug/L
							Nickel	25 ug/L
							Selenium	25 ug/L
							Thallium	25 ug/L
							Vanadium	25 ug/L
							Silver	25 ug/L
							Zinc	25 ug/L
.ME ICPMS ICV_00230	04/21/20	11/12/19	1% HNO3, Lot 5158118	500 mL	ME ICPMS CAL_00053	50 mL	Antimony	10 mg/L
							Arsenic	10 mg/L
							Barium	10 mg/L
							Beryllium	10 mg/L
							Cadmium	10 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chromium	10 mg/L
							Cobalt	10 mg/L
							Copper	10 mg/L
							Lead	10 mg/L
							Manganese	10 mg/L
							Molybdenum	10 mg/L
							Nickel	10 mg/L
							Selenium	10 mg/L
							Thallium	10 mg/L
							Vanadium	10 mg/L
					ME SILVER 2nd_00001	5 mL	Silver	10 mg/L
					ME ZINC 2nd_00001	5 mL	Zinc	10 mg/L
..ME ICPMS CAL_00053	03/27/21	CPI International, Lot 992738-1			(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Manganese	100 mg/L
							Molybdenum	100 mg/L
							Nickel	100 mg/L
							Selenium	100 mg/L
							Thallium	100 mg/L
							Vanadium	100 mg/L
..ME SILVER 2nd_00001	07/08/20	CPI International, Lot 711054039C-1			(Purchased Reagent)		Silver	1000 ug/mL
..ME ZINC 2nd_00001	07/08/20	CPI International, Lot 711054039B-1			(Purchased Reagent)		Zinc	1000 ug/mL
MEICPMS STD1_00298	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	MEICPMS STD3_00369	2 mL	Silver	0.2 ug/L
							Zinc	0.2 ug/L
							Antimony	0.2 ug/L
							Arsenic	0.2 ug/L
							Barium	0.2 ug/L
							Beryllium	0.2 ug/L
							Cadmium	0.2 ug/L
							Chromium	0.2 ug/L
							Cobalt	0.2 ug/L
							Copper	0.2 ug/L
							Lead	0.2 ug/L
							Manganese	0.2 ug/L
							Molybdenum	0.2 ug/L
							Nickel	0.2 ug/L
							Selenium	0.2 ug/L
							Thallium	0.2 ug/L
							Vanadium	0.2 ug/L
.MEICPMS STD3_00369	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	MEICPMS STD4_00296	10 mL	Silver	10 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Zinc	10 ug/L
							Antimony	10 ug/L
							Arsenic	10 ug/L
							Barium	10 ug/L
							Beryllium	10 ug/L
							Cadmium	10 ug/L
							Chromium	10 ug/L
							Cobalt	10 ug/L
							Copper	10 ug/L
							Lead	10 ug/L
							Manganese	10 ug/L
							Molybdenum	10 ug/L
							Nickel	10 ug/L
							Selenium	10 ug/L
							Thallium	10 ug/L
							Vanadium	10 ug/L
..MEICPMS STD4_00296	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	ME ICPMS CAL_00054	1 mL	Silver	100 ug/L
							Zinc	100 ug/L
							Antimony	100 ug/L
							Arsenic	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Lead	100 ug/L
							Manganese	100 ug/L
							Molybdenum	100 ug/L
							Nickel	100 ug/L
							Selenium	100 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
...ME ICPMS CAL_00054	04/21/20	11/12/19	1% HNO3, Lot 5158118	500 mL	ICPMS STD AG_00002	5 mL	Silver	10 mg/L
					ICPMS STD ZN_00001	5 mL	Zinc	10 mg/L
					ME ICPMS CAL_00052	50 mL	Antimony	10 mg/L
							Arsenic	10 mg/L
							Barium	10 mg/L
							Beryllium	10 mg/L
							Cadmium	10 mg/L
							Chromium	10 mg/L
							Cobalt	10 mg/L
							Copper	10 mg/L
							Lead	10 mg/L
							Manganese	10 mg/L
							Molybdenum	10 mg/L
							Nickel	10 mg/L
							Selenium	10 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Thallium	10 mg/L
							Vanadium	10 mg/L
....ICPMS STD AG_00002	10/04/20	CPI International, Lot 975475-22			(Purchased Reagent)		Silver	1000 ug/mL
....ICPMS STD ZN_00001	04/22/20	CPI International, Lot 166918-115			(Purchased Reagent)		Zinc	1000 ug/mL
....ME ICPMS CAL_00052	09/18/21	CPI International, Lot 1018875-2			(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Manganese	100 mg/L
							Molybdenum	100 mg/L
							Nickel	100 mg/L
							Selenium	100 mg/L
							Thallium	100 mg/L
							Vanadium	100 mg/L
MEICPMS STD3_00369	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	MEICPMS STD4_00296	10 mL	Silver	10 ug/L
							Zinc	10 ug/L
							Antimony	10 ug/L
							Arsenic	10 ug/L
							Barium	10 ug/L
							Beryllium	10 ug/L
							Cadmium	10 ug/L
							Chromium	10 ug/L
							Cobalt	10 ug/L
							Copper	10 ug/L
							Lead	10 ug/L
							Manganese	10 ug/L
							Molybdenum	10 ug/L
							Nickel	10 ug/L
							Selenium	10 ug/L
							Thallium	10 ug/L
							Vanadium	10 ug/L
.MEICPMS STD4_00296	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	ME ICPMS CAL_00054	1 mL	Silver	100 ug/L
							Zinc	100 ug/L
							Antimony	100 ug/L
							Arsenic	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Lead	100 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Manganese	100 ug/L
							Molybdenum	100 ug/L
							Nickel	100 ug/L
							Selenium	100 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
..ME ICPMS CAL_00054	04/21/20	11/12/19	1% HNO3, Lot 5158118	500 mL	ICPMS STD AG_00002	5 mL	Silver	10 mg/L
					ICPMS STD ZN_00001	5 mL	Zinc	10 mg/L
					ME ICPMS CAL_00052	50 mL	Antimony	10 mg/L
							Arsenic	10 mg/L
							Barium	10 mg/L
							Beryllium	10 mg/L
							Cadmium	10 mg/L
							Chromium	10 mg/L
							Cobalt	10 mg/L
							Copper	10 mg/L
							Lead	10 mg/L
							Manganese	10 mg/L
							Molybdenum	10 mg/L
							Nickel	10 mg/L
							Selenium	10 mg/L
							Thallium	10 mg/L
							Vanadium	10 mg/L
...ICPMS STD AG_00002	10/04/20	CPI International, Lot 975475-22			(Purchased Reagent)		Silver	1000 ug/mL
...ICPMS STD ZN_00001	04/22/20	CPI International, Lot 166918-115			(Purchased Reagent)		Zinc	1000 ug/mL
...ME ICPMS CAL_00052	09/18/21	CPI International, Lot 1018875-2			(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Manganese	100 mg/L
							Molybdenum	100 mg/L
							Nickel	100 mg/L
							Selenium	100 mg/L
							Thallium	100 mg/L
							Vanadium	100 mg/L
MEICPMS STD3_00370	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	MEICPMS STD3_00369	10 mL	Silver	1 ug/L
							Zinc	1 ug/L
							Antimony	1 ug/L
							Arsenic	1 ug/L
							Barium	1 ug/L
							Beryllium	1 ug/L
							Cadmium	1 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chromium	1 ug/L
							Cobalt	1 ug/L
							Copper	1 ug/L
							Lead	1 ug/L
							Manganese	1 ug/L
							Molybdenum	1 ug/L
							Nickel	1 ug/L
							Selenium	1 ug/L
							Thallium	1 ug/L
							Vanadium	1 ug/L
.MEICPMS STD3_00369	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	MEICPMS STD4_00296	10 mL	Silver	10 ug/L
							Zinc	10 ug/L
							Antimony	10 ug/L
							Arsenic	10 ug/L
							Barium	10 ug/L
							Beryllium	10 ug/L
							Cadmium	10 ug/L
							Chromium	10 ug/L
							Cobalt	10 ug/L
							Copper	10 ug/L
							Lead	10 ug/L
							Manganese	10 ug/L
							Molybdenum	10 ug/L
							Nickel	10 ug/L
							Selenium	10 ug/L
							Thallium	10 ug/L
							Vanadium	10 ug/L
..MEICPMS STD4_00296	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	ME ICPMS CAL_00054	1 mL	Silver	100 ug/L
							Zinc	100 ug/L
							Antimony	100 ug/L
							Arsenic	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Lead	100 ug/L
							Manganese	100 ug/L
							Molybdenum	100 ug/L
							Nickel	100 ug/L
							Selenium	100 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
...ME ICPMS CAL_00054	04/21/20	11/12/19	1% HNO3, Lot 5158118	500 mL	ICPMS STD AG_00002	5 mL	Silver	10 mg/L
					ICPMS STD ZN_00001	5 mL	Zinc	10 mg/L
					ME ICPMS CAL_00052	50 mL	Antimony	10 mg/L
							Arsenic	10 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Barium	10 mg/L
							Beryllium	10 mg/L
							Cadmium	10 mg/L
							Chromium	10 mg/L
							Cobalt	10 mg/L
							Copper	10 mg/L
							Lead	10 mg/L
							Manganese	10 mg/L
							Molybdenum	10 mg/L
							Nickel	10 mg/L
							Selenium	10 mg/L
							Thallium	10 mg/L
							Vanadium	10 mg/L
....ICPMS STD AG_00002	10/04/20	CPI International, Lot 975475-22			(Purchased Reagent)		Silver	1000 ug/mL
....ICPMS STD ZN_00001	04/22/20	CPI International, Lot 166918-115			(Purchased Reagent)		Zinc	1000 ug/mL
....ME ICPMS CAL_00052	09/18/21	CPI International, Lot 1018875-2			(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Manganese	100 mg/L
							Molybdenum	100 mg/L
							Nickel	100 mg/L
							Selenium	100 mg/L
							Thallium	100 mg/L
							Vanadium	100 mg/L
MEICPMS STD4_00296	04/21/20	12/09/19	1%HNO3/0.5%HCl, Lot N/A	100 mL	ME ICPMS CAL_00054	1 mL	Silver	100 ug/L
							Zinc	100 ug/L
							Antimony	100 ug/L
							Arsenic	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Lead	100 ug/L
							Manganese	100 ug/L
							Molybdenum	100 ug/L
							Nickel	100 ug/L
							Selenium	100 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.ME ICPMS CAL_00054	04/21/20	11/12/19	1% HNO3, Lot 5158118	500 mL	ICPMS STD AG_00002	5 mL	Silver	10 mg/L
					ICPMS STD ZN_00001	5 mL	Zinc	10 mg/L
					ME ICPMS CAL_00052	50 mL	Antimony	10 mg/L
							Arsenic	10 mg/L
							Barium	10 mg/L
							Beryllium	10 mg/L
							Cadmium	10 mg/L
							Chromium	10 mg/L
							Cobalt	10 mg/L
							Copper	10 mg/L
							Lead	10 mg/L
							Manganese	10 mg/L
							Molybdenum	10 mg/L
							Nickel	10 mg/L
							Selenium	10 mg/L
							Thallium	10 mg/L
							Vanadium	10 mg/L
..ICPMS STD AG_00002	10/04/20	CPI International, Lot 975475-22			(Purchased Reagent)		Silver	1000 ug/mL
..ICPMS STD ZN_00001	04/22/20	CPI International, Lot 166918-115			(Purchased Reagent)		Zinc	1000 ug/mL
..ME ICPMS CAL_00052	09/18/21	CPI International, Lot 1018875-2			(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Lead	100 mg/L
							Manganese	100 mg/L
							Molybdenum	100 mg/L
							Nickel	100 mg/L
							Selenium	100 mg/L
							Thallium	100 mg/L
							Vanadium	100 mg/L

Reagent

CECSRBTH 1ST_00001

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-FEB19-IRV1-100

Custom Standard

Lot #: 10094558-1

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ce	1000 ± 5 µg/mL	Rb	1000 ± 5 µg/mL
Cs	999.8 ± 5.0 µg/mL	Th	1000 ± 5 µg/mL

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 certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO Guide 34**, 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 reverse side)**. The solution was stabilized using 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 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 reverse side)**. 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

March 20, 2019
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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

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	1077a		Hf	3122	—		S	3154	2770
Al	3101a	1075a		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	1066a
Ba	3104a	1051b		La	3127a	3127a		Sm	3147a	—
Be	3105a	3105a		Li	3129a	3129a		Sn	3161a	1057b
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	1053a		Mo	3134	3134		Tb	3157a	—
Ce	3110	3110		Na	3152a	3152a		Te	3156	—
Cl^-	3182	1818a		Nb	3137	—		Th	3159	—
Co	3113	3113		Nd	3135a	—		Ti	3162a	3162a
Cr	3112a	1078b		Ni	3136	1065b		Tl	3158	3158
Cs	3111a	—		NO_3^-	3185	—		Tm	3160a	—
Cu	3114	1080a		P	3139a	3139a		U	3164	—
Dy	3115a	—		Pb	3128	3128		V	3165	1052b
Er	3116a	—		Pd	3138	—		W	3163	3163
Eu	3117a	—		PO_4^{-3}	3186	—		Y	3167a	3167a
F^-	3183	—		Pr	3142a	—		Yb	3166a	—
Fe	3126a	1079b		Pt	3140	3140		Zn	3168a	3168a
Ga	3119a	—		Rb	3145a	—		Zr	3169	3169
Gd	3118a	—		Re	3143	—				
Ge	3120a	—		Rh	3144	3144				

Reagent

ICP STD A_00002

Rec 9/20/19
5829485

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-MAR19-IRV1

Irvine Custom Mix

Lot #: 10099542-4

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	99.98 ± 1.00 µg/mL	Cr	200.1 ± 1.0 µg/mL	P	199.9 ± 1.0 µg/mL
Al	200.0 ± 1.0 µg/mL	Cu	200.0 ± 1.0 µg/mL	Pb	200.0 ± 1.0 µg/mL
As	199.9 ± 1.0 µg/mL	Fe	200.0 ± 1.0 µg/mL	Se	200.1 ± 1.0 µg/mL
B	200.0 ± 1.0 µg/mL	K	2000 ± 10 µg/mL	Sr	199.9 ± 1.0 µg/mL
Ba	200.0 ± 1.0 µg/mL	Li	200.0 ± 1.0 µg/mL	Tl	200.1 ± 1.0 µg/mL
Be	200.1 ± 1.0 µg/mL	Mg	1000 ± 10 µg/mL	V	200.0 ± 1.0 µg/mL
Ca	999.9 ± 5.0 µg/mL	Mn	200.0 ± 1.0 µg/mL	Zn	200.2 ± 1.0 µg/mL
Cd	200.0 ± 1.0 µg/mL	Na	2000 ± 10 µg/mL		
Co	200.0 ± 1.0 µg/mL	Ni	200.1 ± 1.0 µg/mL		

Source Material Lot# Chart

Element	Source Material Lot#	Element	Source Material Lot#	Element	Source Material Lot#
Ag	983032	Cr	880115	P	122196R
Al	169484	Cu	982824	Pb	168223
As	166531	Fe	998527	Se	929078
B	982186	K	983959	Sr	976606
Ba	150283R	Li	983034	Tl	983036
Be	989234	Mg	116835	V	983037
Ca	150704	Mn	985851	Zn	979871
Cd	173171	Na	994710		
Co	979870	Ni	752769		

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 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 reverse side)**. The solution was stabilized using 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 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 reverse side)**. 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

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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

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	1077a		Hf	3122	—		S	3154	2770
Al	3101a	1075a		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	1066a
Ba	3104a	1051b		La	3127a	3127a		Sm	3147a	—
Be	3105a	3105a		Li	3129a	3129a		Sn	3161a	1057b
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	1053a		Mo	3134	3134		Tb	3157a	—
Ce	3110	3110		Na	3152a	3152a		Te	3156	—
Cl^-	3182	1818a		Nb	3137	—		Th	3159	—
Co	3113	3113		Nd	3135a	—		Ti	3162a	3162a
Cr	3112a	1078b		Ni	3136	1065b		Tl	3158	3158
Cs	3111a	—		NO_3^-	3185	—		Tm	3160a	—
Cu	3114	1080a		P	3139a	3139a		U	3164	—
Dy	3115a	—		Pb	3128	3128		V	3165	1052b
Er	3116a	—		Pd	3138	—		W	3163	3163
Eu	3117a	—		PO_4^{-3}	3186	—		Y	3167a	3167a
F^-	3183	—		Pr	3142a	—		Yb	3166a	—
Fe	3126a	1079b		Pt	3140	3140		Zn	3168a	3168a
Ga	3119a	—		Rb	3145a	—		Zr	3169	3169
Gd	3118a	—		Re	3143	—				
Ge	3120a	—		Rh	3144	3144				

Reagent

ICP STD A_00003

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-MAR19-IRV1

Irvine Custom Mix

Lot #: 10099542-5

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	99.99 ± 1.00 µg/mL	Cr	200.0 ± 1.0 µg/mL	P	200.0 ± 1.0 µg/mL
Al	200.0 ± 1.0 µg/mL	Cu	200.0 ± 1.0 µg/mL	Pb	200.0 ± 1.0 µg/mL
As	200.0 ± 1.0 µg/mL	Fe	200.0 ± 1.0 µg/mL	Se	200.0 ± 1.0 µg/mL
B	200.0 ± 1.0 µg/mL	K	2000 ± 10 µg/mL	Sr	200.0 ± 1.0 µg/mL
Ba	200.0 ± 1.0 µg/mL	Li	200.0 ± 1.0 µg/mL	Tl	200.0 ± 1.0 µg/mL
Be	200.0 ± 1.0 µg/mL	Mg	1000 ± 10 µg/mL	V	200.0 ± 1.0 µg/mL
Ca	999.8 ± 5.0 µg/mL	Mn	200.0 ± 1.0 µg/mL	Zn	200.0 ± 1.0 µg/mL
Cd	200.0 ± 1.0 µg/mL	Na	2000 ± 10 µg/mL		
Co	200.0 ± 1.0 µg/mL	Ni	200.0 ± 1.0 µg/mL		

Source Material Lot# Chart

Element	Source Material Lot#	Element	Source Material Lot#	Element	Source Material Lot#
Ag	983032	Cr	880115	P	122196R
Al	992536	Cu	982824	Pb	168223
As	166531	Fe	998527	Se	929078
B	982186	K	983959	Sr	976606
Ba	150283R	Li	983034	Tl	983036
Be	989234	Mg	116835	V	983037
Ca	150704	Mn	985851	Zn	979871
Cd	173171	Na	994710		
Co	161695	Ni	752769		

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 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 reverse side)**. The solution was stabilized using 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 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 reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

USA
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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

Reagent

ICP STD B_00002

Rec 9/6/19
5829490

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-MAR19-IRV2

Irvine Custom Mix

Lot #: 10099542-3

Matrix: 2% HNO_3/tr. HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Mo	200.0 ± 2.0 µg/mL	Sn	200.1 ± 2.0 µg/mL	Zr	200.0 ± 2.0 µg/mL
Sb	200.0 ± 2.0 µg/mL	Ti	199.9 ± 2.0 µg/mL		
Si	999.9 ± 10.0 µg/mL	W	199.9 ± 2.0 µg/mL		

Source Material Lot# Chart

Element	Source Material Lot#	Element	Source Material Lot#	Element	Source Material Lot#
Mo	175215	Sn	171360	Zr	172925
Sb	978317	Ti	161694		
Si	977647	W	997482		

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 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 reverse side)**. 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 reverse side)**. 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

August 29, 2019
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

Reagent

ICP STD B_00003

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CM-MAR19-IRV2

Irvine Custom Mix

Lot #: 10099542-6

Matrix: 2% HNO_3/tr. HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Mo	200.0 ± 2.0 µg/mL	Sn	200.0 ± 2.0 µg/mL	Zr	200.0 ± 2.0 µg/mL
Sb	200.0 ± 2.0 µg/mL	Ti	200.0 ± 2.0 µg/mL		
Si	1000 ± 10 µg/mL	W	200.0 ± 2.0 µg/mL		

Source Material Lot# Chart

Element	Source Material Lot#	Element	Source Material Lot#	Element	Source Material Lot#
Mo	175215	Sn	1000985	Zr	999924
Sb	978317	Ti	161694		
Si	977647	W	997482		

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 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 reverse side)**. 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 reverse side)**. 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

October 11, 2019

Certification Date

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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

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Reagent

ICPMS STD AG_00002

5880911

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-1000511

SE Std Silver (Ag) – 1000 µg/mL

Lot #: 975475-22

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty
Ag	996 ± 3 µg/mL (w/v)
	987 ± 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 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) 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 3151, lot #992212**. 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	<0.5	Ge	<0.5	Lu	<0.2	P	<100	Sb	<0.5	Te	<1
Al	<2	Cs	<1	Hf	<0.2	Mg	<5	Pb	2	Sc	<5	Ti	<2
As	<2	Cr	<0.5	Hg	3	Mn	<1	Pd	<0.5	Se	<2	Tl	<0.5
Au	2	Cu	9	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	2	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

April 4, 2019

Certification Date

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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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

Reagent

ICPMS STD AL_00001

CPI INTERNATIONAL

515486

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-10M11

SE Std Aluminum (Al) – 10,000 µg/mL

Lot #: 169484-20

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty
Al	**10,030 ± 20 µg/mL (w/v)**
	9428 ± 22 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 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 10,000 µg/mL by gravimetric methods using 99.999% pure aluminum nitrate [$Al(NO_3)_3$] 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 3101a, lot #140903**. 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	Mg	<50	Pd	<5	Si	<1000	V	<10
Al	MAJOR	Cs	<5	Hf	<2	Mn	<10	Pr	<2	Sm	<2	W	16
As	<20	Cr	89	Hg	<5	Mo	<5	Pt	<5	Sn	<5	Y	<5
Au	<5	Cu	<10	Ho	<2	Na	3315	Rb	<5	Sr	<10	Yb	<2
B	<50	Dy	<2	In	nd	Nb	<5	Re	<2	Ta	<5	Zn	30
Ba	<10	Er	<2	Ir	<2	Nd	<2	Rh	<5	Tb	<5		
Bi	<2	Eu	<2	K	<250	Ni	<20	Ru	<5	Te	<10		
Ca	330	Fe	890	La	<5	Os	<5	Sb	<5	Ti	<20		
Cd	<5	Ga	681	Li	<20	P	<1000	Sc	<50	Tl	10		
Ce	<2	Gd	<2	Lu	<2	Pb	<10	Se	<20	Tm	<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 22, 2018

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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

Reagent

ICPMS STD FE_00001

515 8485

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-10M261

SE Std Iron (Fe) – 10,000 µg/mL

Lot #: 156651-59

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty
Fe	10,010 ± 40 µg/mL (w/v)
	9609 ± 34 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 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 10,000 µg/mL by gravimetric methods using 99.999% pure iron nitrate nonahydrate [$Fe(NO_3)_3$] 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 3126a, lot #140812**. 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	24	Ge	<5	Mg	<50	Pd	<5	Si	<1000	V	<10
Al	37	Cs	<5	Hf	<2	Mn	13	Pr	<2	Sm	<2	W	<5
As	<20	Cr	37	Hg	<5	Mo	<5	Pt	<5	Sn	<5	Y	<5
Au	<5	Cu	<10	Ho	<2	Na	<250	Rb	<5	Sr	<10	Yb	<2
B	<50	Dy	<2	In	nd	Nb	<5	Re	<2	Ta	<5	Zn	<20
Ba	27	Er	<2	Ir	<2	Nd	<2	Rh	<5	Tb	<5		
Bi	<2	Eu	<2	K	<250	Ni	<20	Ru	<5	Te	<10		
Ca	<250	Fe	MAJOR	La	<5	Os	<5	Sb	<5	Ti	<20		
Cd	<5	Ga	<5	Li	<20	P	<1000	Sc	<50	Tl	<5		
Ce	<2	Gd	<2	Lu	<2	Pb	<10	Se	<20	Tm	<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 22, 2018

Certification Date

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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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TÜV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-10M261

SE Std Iron (Fe) – 10,000 µg/mL

Product Lot #: 156651-59

Matrix: 5% HNO_3

Source Material Lot #: FED122015A1

Revised: 5/31/2019

Element	Certified Concentration & Uncertainty
Fe	**10,010 ± 40 µg/mL (w/v)**
	9609 ± 34 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 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 10,000 µg/mL by gravimetric methods using 99.999% pure iron nitrate nonahydrate [$Fe(NO_3)_3$] 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 3126a, lot #140812**. 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	24	Ge	<5	Mg	<50	Pd	<5	Si	<1000	V	<10
Al	37	Cs	<5	Hf	<2	Mn	13	Pr	<2	Sm	<2	W	<5
As	<20	Cr	37	Hg	<5	Mo	<5	Pt	<5	Sn	<5	Y	<5
Au	<5	Cu	<10	Ho	<2	Na	<250	Rb	<5	Sr	<10	Yb	<2
B	<50	Dy	<2	In	nd	Nb	<5	Re	<2	Ta	<5	Zn	<20
Ba	27	Er	<2	Ir	<2	Nd	<2	Rh	<5	Tb	<5		
Bi	<2	Eu	<2	K	<250	Ni	<20	Ru	<5	Te	<10		
Ca	<250	Fe	MAJOR	La	<5	Os	<5	Sb	<5	Ti	<20		
Cd	<5	Ga	<5	Li	<20	P	<1000	Sc	<50	Tl	<5		
Ce	<2	Gd	<2	Lu	<2	Pb	<10	Se	<20	Tm	<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

See Exp. Date on Container
Certification Date

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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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

Reagent

ICPMS STD U_00001

5158504

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-1000641

SE Std Uranium (U) – 1000 µg/mL

Lot #: 984257-3

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty
U	998 ± 3 µg/mL (w/v)
	993 ± 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 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 Uranyll (VI) Nitrate Hexahydrate 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 3164, lot #080521**. 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	<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	<0.2	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 22, 2018

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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

Reagent

ICPMS STD ZN_00001

5158481

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-1000681

SE Std Zinc (Zn) – 1000 µg/mL

Lot #: 166918-115

Matrix: 5% HNO_3

Element	Certified Concentration & Uncertainty
Zn	**997 ± 3 µg/mL (w/v)**
	991 ± 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 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 99.9999% pure zinc (Zn) 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 3168a, lot #120629**. 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	Mg	<5	Pd	<0.5	Si	<100	V	<1
Al	<2	Cs	<0.5	Hf	<0.2	Mn	<1	Pr	<0.2	Sm	<0.2	W	<0.5
As	32	Cr	<0.5	Hg	<0.5	Mo	<0.5	Pt	<0.5	Sn	<0.5	Y	<0.5
Au	<0.5	Cu	<1	Ho	<0.2	Na	<25	Rb	<0.5	Sr	<1	Yb	<0.2
B	<5	Dy	<0.2	In	nd	Nb	<0.5	Re	<0.2	Ta	<0.5	Zn	MAJOR
Ba	<1	Er	<0.2	Ir	<0.2	Nd	<0.2	Rh	<0.5	Tb	<0.5		
Bi	<0.2	Eu	<0.2	K	<25	Ni	<2	Ru	<0.5	Te	<1		
Ca	<25	Fe	<10	La	<0.5	Os	<0.5	Sb	<0.5	Ti	<2		
Cd	<0.5	Ga	<0.5	Li	<2	P	<100	Sc	<5	Tl	<0.5		
Ce	<0.2	Gd	<0.2	Lu	<0.2	Pb	3	Se	<2	Tm	<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

October 22, 2018
Certification Date

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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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

Reagent

ME 10PPM HG2_00018

ID: 5688455

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: PLHG2-1AY **Lot No.** 24-68HGY

Description: 10 µg/mL Mercury

EXSPIRES JULY. 30, 2020

Matrix: 5% HNO_3

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 10.0 µg/mL ±0.1 µg/mL

Certified Value is Traceable to: 3133*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

The CRM is prepared gravimetrically using high purity Mercury Metal, Lot# 03141E. The certified value listed is the average of values obtained by classical wet assay and ICP spectrometer analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 10.0 µg/mL

Method: This value was derived from dilution calculations of a Titrimetry analysis result of a Mercury concentrate. The concentrate was analyzed by EDTA titration using Ammonium Thiocyanate with Ferric Nitrate as indicator.

Instrumental Analysis by ICP Spectrometer: 9.99 µg/mL

Uncertified Properties

Density: 1.024 g/mL @ 20.0°C

Trace Metallic Impurities in the Actual Solution via ICP-MS Analysis:

Element	µg/mL	Element	µg/mL	Element	µg/mL	Element	µg/mL	Element	µg/mL	Element	µg/mL
Ag	<0.001	Cr	<0.001	Ho	<0.001	Nb	<0.001	Ru	<0.001	Th	<0.001
Al	0.001	Cs	<0.001	In	<0.001	Nd	<0.001	Sb	<0.001	Ti	<0.001
As	<0.001	Cu	<0.001	Ir	<0.001	Ni	<0.001	Sc	<0.001	Tl	<0.001
Au	<0.001	Dy	<0.001	K	0.001	P	<0.1	Se	<0.003	Tm	<0.001
B	<0.001	Er	<0.001	La	<0.001	Pb	<0.001	Si	<0.05	U	<0.001
Ba	<0.001	Eu	<0.001	Li	<0.001	Pd	<0.001	Sm	<0.001	V	<0.001
Be	<0.001	Fe	<0.001	Lu	<0.001	Pr	<0.001	Sn	<0.001	W	<0.001
Bi	<0.001	Ga	<0.001	Mg	<0.001	Pt	<0.001	Sr	<0.001	Y	<0.001
Ca	0.007	Gd	<0.001	Mn	<0.001	Rb	<0.001	Ta	<0.001	Yb	<0.001
Cd	<0.001	Ge	<0.001	Mo	<0.001	Re	<0.001	Tb	<0.001	Zn	<0.001
Ce	<0.001	Hf	<0.001	Na	0.001	Rh	<0.001	Te	<0.001	Zr	<0.001
Co	<0.001										

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 1% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: JUL - - 2019 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

Page 1 of 2
Rev. 0

Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001, ISO 17025, and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c=combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:

All certified values reported were derived from the Certification Report, SPEX CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

SPEX CertiPrep.
Your Science is Our Passion.®

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www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647

Reagent

ME 10PPM_00013

received 7/29/19

ID: 5714200

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: G34-4400-10PPM331-100

Mercury (Hg) – 10 µg/mL

Lot #: 991303-38

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty
Hg	10.0 ± 0.1 µg/mL (w/v)
	10.0 ± 0.1 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 certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO Guide 34**, and **ISO/IEC 17025**. This CRM was prepared to a nominal concentration of 10.0 µg/mL by gravimetric methods using a single-element concentrate 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 3133, lot #061204**. 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	1	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	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	<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

July 18, 2019
Certification Date

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

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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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

Reagent

ME H8N2O6S_00072

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	**H331**	**Quality Test / Release Date 9/5/2017**	
Lot Number	**175511**		
Description	**HYDROXYLAMINE SULFATE, CERTIFIED**		
Country of Origin	**Japan**	*** Suggested Retest Date**	**Sep-2022**

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	Colorless to white crystals
ASSAY	%	>= 99	99.8
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

CERTIFIED BY

Jerusa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.
*Based on suggested storage condition.

Reagent

ME ICPMS CAL_00052

5880097

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CAL1

ICP ICPMS CAL Mix # 1

Lot #: 1018875-2

Matrix: 5% HNO_3/tr. HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
As	100.0 ± 0.5 mg/L	Li	100.0 ± 0.5 mg/L	Si	1000 ± 5 mg/L
Ba	100.0 ± 0.5 mg/L	Mn	99.99 ± 0.50 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	100.0 ± 0.5 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	100.0 ± 0.5 mg/L
Cu	100.0 ± 0.5 mg/L	Se	100.0 ± 0.5 mg/L		

Source Material Lot# Chart

Element	Source Material Lot#	Element	Source Material Lot#	Element	Source Material Lot#
As	166531	Li	170237	Si	983062
Ba	150283r	Mn	167540	Sn	171360
Be	989234	Mo	175215	Sr	976606
Cd	173171	Ni	752769	Ti	161694
Co	979870	Pb	168223	Tl	983036
Cr	880115	Sb	978317	V	983037
Cu	148793	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 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 reverse side)**. 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 reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

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The Netherlands

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 18, 2019

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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

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- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

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	1077a		Hf	3122	—		S	3154	2770
Al	3101a	1075a		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	1066a
Ba	3104a	1051b		La	3127a	3127a		Sm	3147a	—
Be	3105a	3105a		Li	3129a	3129a		Sn	3161a	1057b
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	1053a		Mo	3134	3134		Tb	3157a	—
Ce	3110	3110		Na	3152a	3152a		Te	3156	—
Cl^-	3182	1818a		Nb	3137	—		Th	3159	—
Co	3113	3113		Nd	3135a	—		Ti	3162a	3162a
Cr	3112a	1078b		Ni	3136	1065b		Tl	3158	3158
Cs	3111a	—		NO_3^-	3185	—		Tm	3160a	—
Cu	3114	1080a		P	3139a	3139a		U	3164	—
Dy	3115a	—		Pb	3128	3128		V	3165	1052b
Er	3116a	—		Pd	3138	—		W	3163	3163
Eu	3117a	—		PO_4^{-3}	3186	—		Y	3167a	3167a
F^-	3183	—		Pr	3142a	—		Yb	3166a	—
Fe	3126a	1079b		Pt	3140	3140		Zn	3168a	3168a
Ga	3119a	—		Rb	3145a	—		Zr	3169	3169
Gd	3118a	—		Re	3143	—				
Ge	3120a	—		Rh	3144	3144				

Reagent

ME ICPMS CAL_00053

5931160

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Multi-Element Aqueous CRM

Product #: TA-CAL1-SS

ICP ICPMS CAL Mix # 1

Lot #: 992738-1

Matrix: 5% HNO_3/tr. HF

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
As	100.1 ± 0.5 mg/L	Li	100.1 ± 0.5 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	100.1 ± 0.5 mg/L	Sr	100.1 ± 0.5 mg/L
Cd	100.0 ± 0.5 mg/L	Ni	100.0 ± 0.5 mg/L	Ti	100.0 ± 0.5 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	100.0 ± 0.5 mg/L
Cu	100.0 ± 0.5 mg/L	Se	100.0 ± 0.5 mg/L		

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 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 reverse side)**. 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 reverse side)**. 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

September 27, 2019
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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

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	1077a		Hf	3122	—		S	3154	2770
Al	3101a	1075a		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	1066a
Ba	3104a	1051b		La	3127a	3127a		Sm	3147a	—
Be	3105a	3105a		Li	3129a	3129a		Sn	3161a	1057b
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	1053a		Mo	3134	3134		Tb	3157a	—
Ce	3110	3110		Na	3152a	3152a		Te	3156	—
Cl^-	3182	1818a		Nb	3137	—		Th	3159	—
Co	3113	3113		Nd	3135a	—		Ti	3162a	3162a
Cr	3112a	1078b		Ni	3136	1065b		Tl	3158	3158
Cs	3111a	—		NO_3^-	3185	—		Tm	3160a	—
Cu	3114	1080a		P	3139a	3139a		U	3164	—
Dy	3115a	—		Pb	3128	3128		V	3165	1052b
Er	3116a	—		Pd	3138	—		W	3163	3163
Eu	3117a	—		PO_4^{-3}	3186	—		Y	3167a	3167a
F^-	3183	—		Pr	3142a	—		Yb	3166a	—
Fe	3126a	1079b		Pt	3140	3140		Zn	3168a	3168a
Ga	3119a	—		Rb	3145a	—		Zr	3169	3169
Gd	3118a	—		Re	3143	—				
Ge	3120a	—		Rh	3144	3144				

Reagent

ME ICPMS LLIC_00026

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: 6020ICS-0A

Lot Number: P2-MEB676415

Matrix: 1% (v/v) HNO3

Value / Analyte(s): 10 000 µg/mL ea:
Chloride,
2 000 µg/mL ea:
Carbon,
1 000 µg/mL ea:
Calcium, Aluminum, Iron,
Potassium, Magnesium, Sodium,
Phosphorus, Sulfur,
20 µg/mL ea:
Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**1 000 ± 3 µg/mL**	**Calcium, Ca**	**1 000 ± 4 µg/mL**
Carbon, C	**2 000 ± 4 µg/mL**	**Chloride, Cl**	**10 000.0 ± 60.0 µg/mL**
Iron, Fe	**1 000 ± 4 µg/mL**	**Magnesium, Mg**	**1 000 ± 4 µg/mL**
Molybdenum, Mo	**20.00 ± 0.11 µg/mL**	**Phosphorus, P**	**1 000 ± 5 µg/mL**
Potassium, K	**1 000 ± 4 µg/mL**	**Sodium, Na**	**1 000 ± 3 µg/mL**
Sulfur, S	**1 000 ± 4 µg/mL**	**Titanium, Ti**	**20.04 ± 0.14 µg/mL**

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	3154	892205
Ti	ICP Assay	3162a	130925

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	<	0.000200	M	Er	<	0.000100	M	Mn		0.002826	s	S	<		M	V	<	0.001074
s	Al	<		M	Eu	<	0.000100	s	Mo	<		M	Sb	<	0.003143	M	W	<	0.003110
O	As	<	0.003202	s	Fe	<		s	Na	<		M	Sc	<	0.000412	M	Y	<	0.000100
M	Au	<	0.000100	M	Ga	<	0.000160	M	Nb	<	0.000100	M	Se	<	0.002358	M	Yb	<	0.000100
M	B	<	0.004286	M	Gd	<	0.000100	M	Nd	<	0.000100	n	Si	<		M	Zn		0.002368
M	Ba		0.001206	M	Ge	<	0.000979	O	Ni	<	0.010330	M	Sm	<	0.000100	M	Zr	<	0.000645
M	Be	<	0.000100	M	Hf	<	0.000100	M	Os	<	0.000414	M	Sn		0.002600				
M	Bi	<	0.001328	M	Hg	<	0.000200	s	P	<		O	Sr		0.005578				
s	Ca	<		M	Ho	<	0.000100	M	Pb	<	0.001383	M	Ta	<	0.000196				
M	Cd		0.008401	M	In	<	0.000100	M	Pd	<	0.000136	M	Tb	<	0.000100				
M	Ce	<	0.000100	M	Ir	<	0.000100	M	Pr	<	0.000100	M	Te	<	0.001916				
M	Co		0.003323	s	K	<		M	Pt	<	0.000100	M	Th	<	0.000100				
M	Cr	<	0.003509	M	La	<	0.000100	M	Rb		0.011919	s	Ti	<					
M	Cs	<	0.000100	O	Li		0.002479	M	Re		0.002700	M	Tl	<	0.000100				
M	Cu		0.009781	M	Lu	<	0.000100	M	Rh	<	0.000100	M	Tm	<	0.000100				
M	Dy	<	0.000100	s	Mg	<		M	Ru	<	0.000163	M	U	<	0.000100				

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

February 16, 2019

- 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

- **February 16, 2023**

- 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:

Uyen Truong
Product Documentation Supervisor

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Reagent

ME KMNO4_00045

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

ThermoFisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. ThermoFisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing.ThermoFisher does not maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	P279	Quality Test / Release Date	02/19/2018
Lot Number	180124		
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Feb/2023
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Dark purple to purple green crystals
ASSAY	%	>= 99	99.1
CHLORIDE & CHLORATE	%	<= 0.005	<0.005
SULFATE (SO4)	%	<= 0.02	<0.02
INSOLUBLE MATTER	%	<= 0.2	<0.2
MERCURY (Hg)	ppm	<= 0.05	<0.004
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

ME SILVER 2nd_00001

5296059

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-1000511-SS

SE Std Silver (Ag) – 1000 µg/mL

Lot #: 711054039C-1

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty
Ag	1000 ± 3 µg/mL (w/v)
	984 ± 3 µg/g (w/w)

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 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 99.992% pure silver (Ag) 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 3151**. 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	<0.05	Ge	<0.02	Lu	<0.02	P	Nd	Sb	<0.02	Te	<0.02
Al	<0.05	Cr	<0.05	Hf	<0.02	Mg	<0.5	Pb	<0.05	Sc	<0.02	Ti	<0.1
As	<0.05	Cs	5	Hg	Nd	Mn	<0.05	Pd	<0.02	Se	<0.1	Tl	<0.02
Au	<0.02	Cu	<0.02	Ho	<0.02	Mo	<0.02	Pr	<0.02	Si	35	Tm	<0.02
B	<1	Dy	<0.02	In	<0.02	Na	<3	Pt	<0.02	Sm	<0.02	V	<0.05
Ba	<0.02	Er	<0.02	Ir	<0.2	Nb	<0.02	Rb	<0.02	Sn	<0.5	W	<0.02
Bi	<0.02	Eu	<0.02	K	<1	Nd	<0.02	Re	<0.02	Sr	<0.02	Y	<0.02
Ca	<1	Fe	<1	La	<0.02	Ni	<0.02	Rh	<0.02	Ta	<0.02	Yb	<0.02
Cd	<0.02	Ga	<0.02	Li	<0.5	Os	<0.02	Ru	<0.02	Tb	<0.02	Zn	<0.02
Ce	<0.02	Gd	<0.02										

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

January 8, 2019

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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

Reagent

ME ZINC 2nd_00001

5296054

CPI INTERNATIONAL

CERTIFICATE OF ANALYSIS

Single-Element Aqueous CRM

Product #: TA-1000681-SS

SE Std Zinc (Zn) – 1000 µg/mL

Lot #: 711054039B-1

Matrix: 2% HNO_3

Element	Certified Concentration & Uncertainty
Zn	**1000 ± 3 µg/mL (w/v)**
	989 ± 3 µg/g (w/w)

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 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 zinc (Zn) 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 3168a**. 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	<0.02	Co	<0.05	Ge	<0.02	Lu	<0.02	P	Nd	Sb	<0.02	Te	<0.1
Al	<0.05	Cr	<0.05	Hf	<0.02	Mg	<0.1	Pb	3	Sc	<0.02	Ti	<0.02
As	<0.05	Cs	<0.02	Hg	Nd	Mn	<0.05	Pd	<0.02	Se	<0.1	Tl	<0.02
Au	<0.02	Cu	<0.02	Ho	<0.02	Mo	<0.02	Pr	<0.02	Si	<5	Tm	<0.02
B	<1	Dy	<0.02	In	<0.02	Na	<3	Pt	<0.02	Sm	<0.02	V	<0.05
Ba	<0.02	Er	<0.02	Ir	<0.02	Nb	<0.02	Rb	<0.02	Sn	<0.5	W	<0.02
Bi	<0.02	Eu	<0.02	K	<1	Nd	<0.02	Re	<0.02	Sr	<0.02	Y	<0.02
Ca	<1	Fe	<1	La	<0.02	Ni	<0.02	Rh	<0.02	Ta	<0.02	Yb	<0.02
Cd	<0.4	Ga	<0.02	Li	<0.02	Os	<0.02	Ru	<0.02	Tb	<0.02	Zn	MAJOR
Ce	<0.02	Gd	<0.02										

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

January 8, 2019
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

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 Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 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. 5, 03/01/2013

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

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

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

Reagent

ME_CRI_30_00016

VHG LABS
Part of LGC Standards

CERTIFICATE OF ANALYSIS

LGC

Multi-Element Aqueous Standard

Custom Standard

Product #: VHG-ZTESTAME1701-500

Matrix: 2% HNO_3/tr. HF

Lot #: 10071631-3

Element	Certified Concentration	Element	Certified Concentration	Element	Certified Concentration
Ag	1.0 µg/mL	Cs	0.5 µg/mL	Sb	1.0 µg/mL
Al	10.0 µg/mL	Cu	1.0 µg/mL	Se	1.0 µg/mL
As	1.0 µg/mL	Fe	20.0 µg/mL	Sn	10.0 µg/mL
B	1.0 µg/mL	K	100 µg/mL	Sr	1.0 µg/mL
Ba	1.0 µg/mL	Mg	100 µg/mL	Th	0.5 µg/mL
Be	0.5 µg/mL	Mn	1.0 µg/mL	Ti	1.0 µg/mL
Ca	500 µg/mL	Mo	1.0 µg/mL	Tl	1.0 µg/mL
Cd	1.0 µg/mL	Na	100 µg/mL	U	1.0 µg/mL
Ce	1.0 µg/mL	Ni	1.0 µg/mL	V	1.0 µg/mL
Co	1.0 µg/mL	Pb	1.0 µg/mL	Zn	10.0 µg/mL
Cr	1.0 µg/mL	Rb	0.5 µg/mL	Zr	1.0 µg/mL

This solution is intended for use as a calibration or reference standard for plasma emission spectroscopy (ICP or DCP), inductively coupled plasma mass spectroscopy (ICP-MS), atomic absorption spectroscopy (AA or GFAA) or techniques using other modes of elemental detection.

Certification: VHG standards are manufactured and certified under a quality control system that is accredited to both **ISO 9001** and **ISO/IEC 17025.** This standard was prepared to the nominal concentrations shown above by utilizing gravimetric methods using single element concentrates of high purity. Matrix components (see "Matrix") were of high purity grade reagents and all dilutions were done with filtered (0.22µm), 18 M-ohm deionized water. Certified concentrations are based upon gravimetric procedures. The uncertainty associated with each certified concentration is +/- 0.5% relative, which is the sum of the estimated errors due to the purity of the raw materials, the gravimetric preparation of the solution and transpiration through the container wall. Secondary verification of the certified concentrations was done by plasma emission spectrometry (ICP-AES) calibrated and/or referenced against NIST Standard Reference Materials (see reverse side).

Tools: The balances used in the preparation of VHG CRMs are calibrated regularly with traceability to NIST. All volumetric dilutions are performed in class A glassware which is recalibrated regularly according to NIST recommended procedures. Measurement of standard preparation temperature was done using a calibrated thermometer maintained under internal procedure 4.11-A.

Recommendations: VHG guarantees the accuracy of this solution for **12 Months** from the certification date shown below, provided it is kept tightly capped and stored under normal laboratory conditions. We recommend that the analyst: (1) mix the solution by gentle shaking immediately prior to use, (2) use only pre-cleaned containers and transfer-ware, (3) make dilutions using certified volumetric class A flasks and pipets, and, (4) dilute with the same matrix as the original standard.

VHG Labs, Inc.

Chuck Goudreau

Chuck Goudreau, Certifying Officer

21 December 2018
Certification Date

ACCREDITED
REFERENCE MATERIALS PRODUCER CERT #2848.02
CHEMICAL TESTING CERT #2848.01

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

276 Abby Road, Manchester, NH 03103 USA
(603) 622-7660 Fax: (603) 622-5180 www.vhglabs.com

ISO 9001
ISO Guide 34
ISO/IEC 17025
ISO/IEC 17043

VHG Custom Standards are Traceable to the Following NIST SRMs:

Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM	Analyte	Aq. SRM	MO SRM
Ag	3151	1077a	Hf	3122	—	S	3154	2770
Al	3101a	1075a	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	1066a
Ba	3104a	1051b	La	3127a	3127a	Sm	3147a	—
Be	3105a	3105a	Li	3129a	3129a	Sn	3161a	1057b
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	1053a	Mo	3134	3134	Tb	3157a	—
Ce	3110	3110	Na	3152a	1069b	Te	3156	—
Cl^-	3182	1818a	Nb	3137	—	Th	3159	—
Co	3113	3113	Nd	3135a	—	Ti	3162a	3162a
Cr	3112a	1078b	Ni	3136	1065b	Tl	3158	3158
Cs	3111a	—	NO_3^-	3185	—	Tm	3160a	—
Cu	3114	1080a	P	3139a	3139a	U	3164	—
Dy	3115a	—	Pb	3128	1059c	V	3165	1052b
Er	3116a	—	Pd	3138	—	W	3163	3163
Eu	3117a	—	PO_4^{-3}	3186	—	Y	3167a	3167a
F^-	3183	—	Pr	3142a	—	Yb	3166a	—
Fe	3126a	1079b	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 Irvine Job Number: 440-256528-1

SDG No.:

Project: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID	Lab Sample ID
STSB32_0-0.5	440-256528-1
STSB32_0.5-3	440-256528-2
STSB32_3-6	440-256528-3
STSB32_6-15	440-256528-4
STSB34_0-0.5	440-256528-5
STSB34_0.5-3	440-256528-6
STSB34_3-6	440-256528-7
STSB34_6-15	440-256528-8
STSB34-FD_3-6	440-256528-9
STSB33_0-0.5	440-256528-10
STSB33_0.5-3	440-256528-11
STSB33-FD_0.5-3	440-256528-12
STSB33_3-6	440-256528-13
STSB33_6-15	440-256528-14
STSB35_0-0.5	440-256528-15
STSB35_0.5-3	440-256528-16
STSB35_3-6	440-256528-18
STSB35_6-15	440-256528-19

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB32_0-0.5
Lab Sample ID: 440-256528-1
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 13:25
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 95.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7900	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	4000	26	14	mg/Kg			5	6010B
7439-89-6	Iron	13000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	6.1	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	6400	11	5.3	mg/Kg		F2	5	6010B
7723-14-0	Phosphorus	380	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1200	66	34	mg/Kg		F1 F2	5	6010B
7440-23-5	Sodium	250	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	62	5.3	2.6	mg/Kg		F1	5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	400	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	1.1	1.1	0.28	mg/Kg		F1	20	6020
7440-38-2	Arsenic	6.4	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	43	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.6	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	3.8	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	2100	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	3.7	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	61	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	4.4	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	7.3	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	4.2	1.1	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	0.11	0.53	0.11	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	20	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	15	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.12	0.021	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB32_0.5-3
Lab Sample ID: 440-256528-2
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 13:40
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 96.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8400	10	7.9	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3400	26	14	mg/Kg			5	6010B
7439-89-6	Iron	15000	10	7.1	mg/Kg			5	6010B
7439-93-2	Lithium	4.6	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5900	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	310	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1000	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	86	65	33	mg/Kg			5	6010B
7440-24-6	Strontium	79	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	400	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	2.6	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	8.7	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	51	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.22	0.31	0.15	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.5	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	3.2	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	1400	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	4.2	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	48	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	3.6	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	6.5	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	4.4	1.0	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	0.12	0.52	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	21	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	12	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	0.67	0.020	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB32_3-6
Lab Sample ID: 440-256528-3
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 13:49
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 86.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8300	12	9.0	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.8	2.9	mg/Kg			5	6010B
7440-70-2	Calcium	3300	29	16	mg/Kg			5	6010B
7439-89-6	Iron	16000	12	8.0	mg/Kg			5	6010B
7439-93-2	Lithium	5.1	5.8	3.3	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6000	12	5.8	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.8	2.9	mg/Kg			5	6010B
7440-09-7	Potassium	1200	73	38	mg/Kg			5	6010B
7440-23-5	Sodium	70	73	37	mg/Kg	J		5	6010B
7440-24-6	Strontium	56	5.8	2.9	mg/Kg			5	6010B
7440-31-5	Tin	ND	12	5.8	mg/Kg			5	6010B
7440-32-6	Titanium	310	2.3	1.2	mg/Kg			5	6010B
7440-36-0	Antimony	5.7	1.2	0.31	mg/Kg			20	6020
7440-38-2	Arsenic	8.4	0.58	0.29	mg/Kg			20	6020
7440-39-3	Barium	68	0.58	0.29	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.35	0.17	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.58	0.29	mg/Kg			20	6020
7440-47-3	Chromium	5.1	1.2	0.58	mg/Kg			20	6020
7440-48-4	Cobalt	3.9	0.58	0.24	mg/Kg			20	6020
7440-50-8	Copper	1400	1.2	0.58	mg/Kg			20	6020
7439-92-1	Lead	3.7	0.58	0.29	mg/Kg			20	6020
7439-96-5	Manganese	57	0.58	0.29	mg/Kg			20	6020
7439-98-7	Molybdenum	3.8	1.2	0.58	mg/Kg			20	6020
7440-02-0	Nickel	7.1	1.2	0.58	mg/Kg			20	6020
7782-49-2	Selenium	3.9	1.2	0.23	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.58	0.12	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.58	0.29	mg/Kg			20	6020
7440-62-2	Vanadium	22	1.2	0.58	mg/Kg			20	6020
7440-66-6	Zinc	17	12	5.8	mg/Kg			20	6020
7439-97-6	Mercury	0.47	0.023	0.014	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB32_6-15
Lab Sample ID: 440-256528-4
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 14:06
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 98.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6500	10	7.8	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.1	2.5	mg/Kg			5	6010B
7440-70-2	Calcium	4200	25	14	mg/Kg			5	6010B
7439-89-6	Iron	15000	10	7.0	mg/Kg			5	6010B
7439-93-2	Lithium	4.4	5.1	2.8	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5400	10	5.1	mg/Kg			5	6010B
7723-14-0	Phosphorus	540	5.1	2.5	mg/Kg			5	6010B
7440-09-7	Potassium	1200	63	33	mg/Kg			5	6010B
7440-23-5	Sodium	85	63	32	mg/Kg			5	6010B
7440-24-6	Strontium	36	5.1	2.5	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.1	mg/Kg			5	6010B
7440-32-6	Titanium	320	2.0	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.54	1.0	0.27	mg/Kg	J		20	6020
7440-38-2	Arsenic	3.6	0.51	0.25	mg/Kg			20	6020
7440-39-3	Barium	39	0.51	0.25	mg/Kg			20	6020
7440-41-7	Beryllium	0.20	0.30	0.15	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.51	0.25	mg/Kg			20	6020
7440-47-3	Chromium	6.0	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	5.1	0.51	0.21	mg/Kg			20	6020
7440-50-8	Copper	1100	1.0	0.51	mg/Kg			20	6020
7439-92-1	Lead	2.4	0.51	0.25	mg/Kg			20	6020
7439-96-5	Manganese	68	0.51	0.25	mg/Kg			20	6020
7439-98-7	Molybdenum	2.8	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel	7.8	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	2.3	1.0	0.20	mg/Kg		B	20	6020
7440-22-4	Silver	0.10	0.51	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.51	0.25	mg/Kg			20	6020
7440-62-2	Vanadium	19	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	15	10	5.1	mg/Kg			20	6020
7439-97-6	Mercury	0.091	0.021	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB34_0-0.5
Lab Sample ID: 440-256528-5
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 15:00
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 95.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7000	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3600	26	14	mg/Kg			5	6010B
7439-89-6	Iron	11000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	3.7	5.3	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5600	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	300	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	960	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	66	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	66	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	340	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.49	1.1	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.8	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	34	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	4.5	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	2.8	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	530	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	3.4	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	45	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	3.5	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	5.8	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	2.0	1.1	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	19	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	12	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.063	0.021	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB34_0.5-3
Lab Sample ID: 440-256528-6
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 15:05
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 96.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7800	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3800	26	14	mg/Kg			5	6010B
7439-89-6	Iron	12000	10	7.2	mg/Kg			5	6010B
7439-93-2	Lithium	3.4	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6300	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1300	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	38	65	33	mg/Kg	J		5	6010B
7440-24-6	Strontium	81	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	480	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.51	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.4	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	47	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.21	0.31	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	4.4	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	2.8	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	630	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	3.7	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	38	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	3.2	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	6.0	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	2.5	1.0	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.52	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	25	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	10	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	0.12	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB34_3-6
Lab Sample ID: 440-256528-7
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 15:12
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 96.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7900	10	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3600	26	14	mg/Kg			5	6010B
7439-89-6	Iron	13000	10	7.2	mg/Kg			5	6010B
7439-93-2	Lithium	4.3	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6600	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	390	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1200	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	51	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	81	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	440	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	1.4	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	5.9	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	42	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.17	0.31	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	4.6	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	3.0	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	940	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	3.2	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	41	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	3.5	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	6.9	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	4.0	1.0	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	0.20	0.52	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	24	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	11	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	0.12	0.020	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB34_6-15
Lab Sample ID: 440-256528-8
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 15:28
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 82.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	9100	12	9.3	mg/Kg			5	6010B
7440-42-8	Boron	ND	6.1	3.0	mg/Kg			5	6010B
7440-70-2	Calcium	6000	30	16	mg/Kg			5	6010B
7439-89-6	Iron	17000	12	8.4	mg/Kg			5	6010B
7439-93-2	Lithium	5.3	6.1	3.4	mg/Kg	J		5	6010B
7439-95-4	Magnesium	7200	12	6.1	mg/Kg			5	6010B
7723-14-0	Phosphorus	720	6.1	3.0	mg/Kg			5	6010B
7440-09-7	Potassium	2000	76	39	mg/Kg			5	6010B
7440-23-5	Sodium	140	76	39	mg/Kg			5	6010B
7440-24-6	Strontium	56	6.1	3.0	mg/Kg			5	6010B
7440-31-5	Tin	ND	12	6.1	mg/Kg			5	6010B
7440-32-6	Titanium	480	2.4	1.2	mg/Kg			5	6010B
7440-36-0	Antimony	0.40	1.2	0.33	mg/Kg	J		20	6020
7440-38-2	Arsenic	3.5	0.61	0.30	mg/Kg			20	6020
7440-39-3	Barium	59	0.61	0.30	mg/Kg			20	6020
7440-41-7	Beryllium	0.35	0.36	0.18	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.61	0.30	mg/Kg			20	6020
7440-47-3	Chromium	7.5	1.2	0.61	mg/Kg			20	6020
7440-48-4	Cobalt	7.0	0.61	0.25	mg/Kg			20	6020
7440-50-8	Copper	1100	1.2	0.61	mg/Kg			20	6020
7439-92-1	Lead	3.0	0.61	0.30	mg/Kg			20	6020
7439-96-5	Manganese	110	0.61	0.30	mg/Kg			20	6020
7439-98-7	Molybdenum	2.8	1.2	0.61	mg/Kg			20	6020
7440-02-0	Nickel	9.6	1.2	0.61	mg/Kg			20	6020
7782-49-2	Selenium	3.4	1.2	0.24	mg/Kg		B	20	6020
7440-22-4	Silver	0.15	0.61	0.12	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.61	0.30	mg/Kg			20	6020
7440-62-2	Vanadium	24	1.2	0.61	mg/Kg			20	6020
7440-66-6	Zinc	19	12	6.1	mg/Kg			20	6020
7439-97-6	Mercury	0.095	0.024	0.015	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB34-FD_3-6
Lab Sample ID: 440-256528-9
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 15:12
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 96.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8000	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3700	26	14	mg/Kg			5	6010B
7439-89-6	Iron	13000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	4.1	5.3	3.0	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6600	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	440	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1300	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	63	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	67	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	430	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.69	1.1	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.1	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	48	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.17	0.32	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	4.5	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	3.7	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	890	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	3.3	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	43	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	3.6	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	6.7	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	3.3	1.1	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	25	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	11	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.14	0.020	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB33_0-0.5
Lab Sample ID: 440-256528-10
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 12:31
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 96.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7500	10	7.8	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.1	2.5	mg/Kg			5	6010B
7440-70-2	Calcium	3700	25	14	mg/Kg			5	6010B
7439-89-6	Iron	12000	10	7.0	mg/Kg			5	6010B
7439-93-2	Lithium	5.3	5.1	2.8	mg/Kg			5	6010B
7439-95-4	Magnesium	5600	10	5.1	mg/Kg			5	6010B
7723-14-0	Phosphorus	350	5.1	2.5	mg/Kg			5	6010B
7440-09-7	Potassium	470	64	33	mg/Kg			5	6010B
7440-23-5	Sodium	110	64	33	mg/Kg			5	6010B
7440-24-6	Strontium	85	5.1	2.5	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.1	mg/Kg			5	6010B
7440-32-6	Titanium	370	2.0	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.93	1.0	0.27	mg/Kg	J		20	6020
7440-38-2	Arsenic	8.2	0.51	0.25	mg/Kg			20	6020
7440-39-3	Barium	42	0.51	0.25	mg/Kg			20	6020
7440-41-7	Beryllium	0.19	0.31	0.15	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.51	0.25	mg/Kg			20	6020
7440-47-3	Chromium	4.5	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	4.2	0.51	0.21	mg/Kg			20	6020
7440-50-8	Copper	850	1.0	0.51	mg/Kg			20	6020
7439-92-1	Lead	2.8	0.51	0.25	mg/Kg			20	6020
7439-96-5	Manganese	41	0.51	0.25	mg/Kg			20	6020
7439-98-7	Molybdenum	3.2	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel	5.9	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	4.7	1.0	0.20	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.51	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.51	0.25	mg/Kg			20	6020
7440-62-2	Vanadium	19	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	6.9	10	5.1	mg/Kg	J		20	6020
7439-97-6	Mercury	0.11	0.021	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB33_0.5-3
Lab Sample ID: 440-256528-11
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 12:40
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 95.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5800	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	2600	26	14	mg/Kg			5	6010B
7439-89-6	Iron	12000	10	7.2	mg/Kg			5	6010B
7439-93-2	Lithium	3.1	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	4900	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	520	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	840	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	53	65	33	mg/Kg	J		5	6010B
7440-24-6	Strontium	46	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	370	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.57	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.5	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	31	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.31	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	4.7	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	2.8	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	530	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	1.7	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	43	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.5	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	5.9	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	3.4	1.0	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.52	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	18	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	8.9	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.090	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB33-FD_0.5-3
Lab Sample ID: 440-256528-12
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 12:48
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 96.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5700	10	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	2500	26	14	mg/Kg			5	6010B
7439-89-6	Iron	12000	10	7.2	mg/Kg			5	6010B
7439-93-2	Lithium	3.3	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	4900	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	470	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	750	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	45	65	33	mg/Kg	J		5	6010B
7440-24-6	Strontium	44	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	360	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.46	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.6	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	28	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.31	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	4.4	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	2.7	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	550	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	1.7	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	42	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.2	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	5.5	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	2.6	1.0	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.52	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	17	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	8.3	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.12	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB33_3-6
Lab Sample ID: 440-256528-13
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 12:51
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 93.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5400	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	5500	26	14	mg/Kg			5	6010B
7439-89-6	Iron	12000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	3.6	5.3	3.0	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5000	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	700	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1300	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	63	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	36	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	440	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	ND	1.1	0.29	mg/Kg			20	6020
7440-38-2	Arsenic	1.1	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	33	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.16	0.32	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.1	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.6	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	500	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	1.4	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	68	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.0	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	6.8	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.3	1.1	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	17	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	11	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.046	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB33_6-15
Lab Sample ID: 440-256528-14
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 13:05
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 90.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	4800	11	8.4	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.5	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	4100	27	15	mg/Kg			5	6010B
7439-89-6	Iron	10000	11	7.6	mg/Kg			5	6010B
7439-93-2	Lithium	3.3	5.5	3.1	mg/Kg	J		5	6010B
7439-95-4	Magnesium	4600	11	5.5	mg/Kg			5	6010B
7723-14-0	Phosphorus	570	5.5	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1100	68	36	mg/Kg			5	6010B
7440-23-5	Sodium	63	68	35	mg/Kg	J		5	6010B
7440-24-6	Strontium	31	5.5	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.5	mg/Kg			5	6010B
7440-32-6	Titanium	330	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	ND	1.1	0.30	mg/Kg			20	6020
7440-38-2	Arsenic	1.2	0.55	0.27	mg/Kg			20	6020
7440-39-3	Barium	31	0.55	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.24	0.33	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.55	0.27	mg/Kg			20	6020
7440-47-3	Chromium	6.2	1.1	0.55	mg/Kg			20	6020
7440-48-4	Cobalt	3.5	0.55	0.23	mg/Kg			20	6020
7440-50-8	Copper	740	1.1	0.55	mg/Kg			20	6020
7439-92-1	Lead	1.3	0.55	0.27	mg/Kg			20	6020
7439-96-5	Manganese	52	0.55	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	2.6	1.1	0.55	mg/Kg			20	6020
7440-02-0	Nickel	6.7	1.1	0.55	mg/Kg			20	6020
7782-49-2	Selenium	1.6	1.1	0.22	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.55	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.55	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	15	1.1	0.55	mg/Kg			20	6020
7440-66-6	Zinc	11	11	5.5	mg/Kg			20	6020
7439-97-6	Mercury	0.041	0.022	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB35_0-0.5
Lab Sample ID: 440-256528-15
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 14:35
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 94.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	9100	10	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3600	26	14	mg/Kg			5	6010B
7439-89-6	Iron	16000	10	7.2	mg/Kg			5	6010B
7439-93-2	Lithium	5.1	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	7600	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	460	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1400	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	53	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	66	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	300	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.70	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.9	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	54	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.25	0.31	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	6.2	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	3.6	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	880	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	2.8	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	57	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	4.4	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	7.6	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	3.0	1.0	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.52	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	21	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	16	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	0.17	0.022	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB35_0.5-3
Lab Sample ID: 440-256528-16
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 14:41
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 96.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6600	10	7.8	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.1	2.5	mg/Kg			5	6010B
7440-70-2	Calcium	3300	25	14	mg/Kg			5	6010B
7439-89-6	Iron	10000	10	7.0	mg/Kg			5	6010B
7439-93-2	Lithium	3.3	5.1	2.8	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5100	10	5.1	mg/Kg			5	6010B
7723-14-0	Phosphorus	350	5.1	2.5	mg/Kg			5	6010B
7440-09-7	Potassium	980	64	33	mg/Kg			5	6010B
7440-23-5	Sodium	51	64	33	mg/Kg	J		5	6010B
7440-24-6	Strontium	59	5.1	2.5	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.1	mg/Kg			5	6010B
7440-32-6	Titanium	310	2.0	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	1.0	1.0	0.27	mg/Kg			20	6020
7440-38-2	Arsenic	4.6	0.51	0.25	mg/Kg			20	6020
7440-39-3	Barium	43	0.51	0.25	mg/Kg			20	6020
7440-41-7	Beryllium	0.20	0.31	0.15	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.51	0.25	mg/Kg			20	6020
7440-47-3	Chromium	4.2	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	2.5	0.51	0.21	mg/Kg			20	6020
7440-50-8	Copper	690	1.0	0.51	mg/Kg			20	6020
7439-92-1	Lead	3.0	0.51	0.25	mg/Kg			20	6020
7439-96-5	Manganese	34	0.51	0.25	mg/Kg			20	6020
7439-98-7	Molybdenum	5.1	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel	5.4	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	2.7	1.0	0.20	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.51	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.51	0.25	mg/Kg			20	6020
7440-62-2	Vanadium	17	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	10	10	5.1	mg/Kg			20	6020
7439-97-6	Mercury	0.23	0.020	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB35_3-6
Lab Sample ID: 440-256528-18
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 14:54
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 96.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6900	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3100	26	14	mg/Kg			5	6010B
7439-89-6	Iron	10000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	3.9	5.3	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5400	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	290	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1000	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	52	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	50	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	360	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.74	1.1	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	5.8	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	45	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.17	0.32	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.7	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	2.7	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	1000	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	3.2	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	35	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.4	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	6.3	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	3.5	1.1	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	18	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	9.5	11	5.3	mg/Kg	J		20	6020
7439-97-6	Mercury	0.25	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB35_6-15
Lab Sample ID: 440-256528-19
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 15:00
Reporting Basis: DRY
Date Received: 12/05/2019 10:00
% Solids: 93.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7400	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	2700	27	14	mg/Kg			5	6010B
7439-89-6	Iron	16000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	5.1	5.3	3.0	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5500	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	370	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1300	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	58	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	47	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	260	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.66	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.3	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	53	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.23	0.32	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.53	0.27	mg/Kg			20	6020
7440-47-3	Chromium	6.2	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	3.6	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	1300	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	3.3	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	44	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	3.3	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	6.8	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	3.1	1.1	0.21	mg/Kg		B	20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	19	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	16	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.31	0.021	0.013	mg/Kg			1	7471A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

ICV Source: MEICPMS ICV_00295 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00293

Analyte	ICV 440-584880/8 12/09/2019 19:20				CCV 440-584880/20 12/09/2019 20:29				CCV 440-584880/29 12/09/2019 21:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	23.6		25.0	95	49.1		50.0	98	48.7		50.0	97
Arsenic	24.6		25.0	98	49.6		50.0	99	49.9		50.0	100
Barium	24.9		25.0	100	49.5		50.0	99	49.1		50.0	98
Beryllium	24.2		25.0	97	49.9		50.0	100	50.3		50.0	101
Cadmium	24.4		25.0	97	49.5		50.0	99	49.4		50.0	99
Chromium	25.0		25.0	100	50.1		50.0	100	50.8		50.0	102
Cobalt	25.2		25.0	101	49.8		50.0	100	51.2		50.0	102
Copper	25.1		25.0	100	50.1		50.0	100	51.8		50.0	104
Lead	23.8		25.0	95	47.1		50.0	94	48.6		50.0	97
Manganese	25.1		25.0	100	49.5		50.0	99	50.2		50.0	100
Molybdenum	24.9		25.0	99	49.7		50.0	99	50.0		50.0	100
Nickel	25.3		25.0	101	49.9		50.0	100	50.8		50.0	102
Selenium	25.8		25.0	103	50.1		50.0	100	50.0		50.0	100
Silver	25.4		25.0	101	49.9		50.0	100	49.7		50.0	99
Thallium	23.2		25.0	93	46.3		50.0	93	47.5		50.0	95
Vanadium	25.0		25.0	100	49.7		50.0	99	50.3		50.0	101
Zinc	26.2		25.0	105	50.1		50.0	100	49.7		50.0	99

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 Irvine Job No.: 440-256528-1

SDG No.:

ICV Source: MEICPMS ICV_00295 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00293

Analyte	CCV 440-584880/40 12/09/2019 21:38				CCV 440-584880/50 12/09/2019 22:18							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	48.6		50.0	97	49.0		50.0	98				
Arsenic	49.8		50.0	100	50.1		50.0	100				
Barium	48.9		50.0	98	49.5		50.0	99				
Beryllium	47.3		50.0	95	46.3		50.0	93				
Cadmium	48.5		50.0	97	49.0		50.0	98				
Chromium	50.2		50.0	100	50.2		50.0	100				
Cobalt	49.8		50.0	100	50.3		50.0	101				
Copper	50.1		50.0	100	50.5		50.0	101				
Lead	47.3		50.0	95	47.9		50.0	96				
Manganese	49.6		50.0	99	49.5		50.0	99				
Molybdenum	49.7		50.0	99	50.1		50.0	100				
Nickel	49.8		50.0	100	49.9		50.0	100				
Selenium	50.6		50.0	101	49.8		50.0	100				
Silver	49.6		50.0	99	49.7		50.0	99				
Thallium	46.5		50.0	93	46.8		50.0	94				
Vanadium	50.1		50.0	100	50.2		50.0	100				
Zinc	49.6		50.0	99	49.8		50.0	100				

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 Irvine Job No.: 440-256528-1

SDG No.:

ICV Source: ME 1 PPM HG1_00407 Concentration Units: mg/Kg

CCV Source: ME 1 PPM HG1_00406

Analyte	ICV 440-584674/1-A 12/10/2019 11:03				CCV 440-584674/3-A 12/10/2019 13:40				CCV 440-584674/3-A 12/10/2019 14:10			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.386		0.400	97	0.386		0.400	97	0.379		0.400	95

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 Irvine Job No.: 440-256528-1

SDG No.:

ICV Source: ME 1 PPM HG1_00407 Concentration Units: mg/Kg

CCV Source: ME 1 PPM HG1_00406

Analyte	CCV 440-584674/3-A 12/10/2019 14:38				CCV 440-584674/3-A 12/10/2019 15:06							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.384		0.400	96	0.385		0.400	96				

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 Irvine Job No.: 440-256528-1

SDG No.:

Method: 6020 Instrument ID: ICPMS5

Lab Sample ID: CRI 440-584880/12 Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00297

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.00	1.04	J	104	50-150
Arsenic	1.00	1.05		105	50-150
Barium	1.00	1.08		108	50-150
Beryllium	0.500	0.576		115	50-150
Cadmium	1.00	1.06		106	50-150
Chromium	1.00	0.989	J	99	50-150
Cobalt	1.00	1.06		106	50-150
Copper	1.00	1.07	J	107	50-150
Lead	1.00	0.953	J	95	50-150
Manganese	1.00	1.04		104	50-150
Molybdenum	1.00	1.05	J	105	50-150
Nickel	1.00	1.01	J	101	50-150
Selenium	1.00	0.962	J	96	50-150
Silver	1.00	1.05		105	50-150
Thallium	1.00	0.936	J	94	50-150
Vanadium	1.00	1.02	J	102	50-150
Zinc	10.0	10.5	J	105	50-150

Lab Sample ID: CRI 440-584880/13 Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00294

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.07		104	50-150
Arsenic	2.00	2.11		105	50-150
Barium	2.00	2.11		105	50-150
Beryllium	1.00	0.715		72	50-150
Cadmium	2.00	2.13		107	50-150
Chromium	2.00	2.15		107	50-150
Cobalt	2.00	2.16		108	50-150
Copper	2.00	2.23		112	50-150
Lead	2.00	1.99		100	50-150
Manganese	2.00	2.20		110	50-150
Molybdenum	2.00	2.12		106	50-150
Nickel	2.00	2.20		110	50-150
Selenium	2.00	2.41		121	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 Irvine Job No.: 440-256528-1

SDG No.:

Method: 6020 Instrument ID: ICPMS5

Lab Sample ID: CRI 440-584880/13 Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00294

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	2.00	2.15		108	50-150
Thallium	2.00	1.97		99	50-150
Vanadium	2.00	2.14		107	50-150
Zinc	20.0	21.4		107	50-150

Lab Sample ID: CRI 440-584880/53 Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00294

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.06		103	50-150
Arsenic	2.00	2.04		102	50-150
Barium	2.00	2.12		106	50-150
Beryllium	1.00	0.927		93	50-150
Cadmium	2.00	2.07		104	50-150
Chromium	2.00	2.12		106	50-150
Cobalt	2.00	2.19		110	50-150
Copper	2.00	2.35		118	50-150
Lead	2.00	2.02		101	50-150
Manganese	2.00	2.18		109	50-150
Molybdenum	2.00	2.21		110	50-150
Nickel	2.00	2.12		106	50-150
Selenium	2.00	2.28		114	50-150
Silver	2.00	2.13		107	50-150
Thallium	2.00	1.95		97	50-150
Vanadium	2.00	2.06		103	50-150
Zinc	20.0	20.7		104	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 Irvine Job No.: 440-256528-1

SDG No.:

Method: 7471A Instrument ID: CV-HG4

Lab Sample ID: CRA 440-584674/5-A Concentration Units: mg/Kg

CRQL Check Standard Source: ME 1 PPM HG1_00406

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.0200	0.0170	J	85	70-130

Lab Sample ID: CRA 440-584674/5-A Concentration Units: mg/Kg

CRQL Check Standard Source: ME 1 PPM HG1_00406

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.0200	0.0171	J	86	70-130

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 Irvine Job No.: 440-256528-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 440-584880/10 12/09/2019 19:34		CCB 440-584880/21 12/09/2019 20:31		CCB 440-584880/30 12/09/2019 21:05		CCB 440-584880/41 12/09/2019 21:42	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND		0.654	J	0.701	J	ND	
Arsenic	1.0	ND		ND		ND		ND	
Barium	1.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	1.0	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	1.0	ND		ND		ND		ND	
Copper	2.0	ND		ND		ND		ND	
Lead	1.0	ND		ND		ND		ND	
Manganese	1.0	ND		ND		ND		ND	
Molybdenum	2.0	ND		ND		ND		ND	
Nickel	2.0	ND		ND		ND		ND	
Selenium	2.0	ND		ND		ND		ND	
Silver	1.0	ND		ND		ND		ND	
Thallium	1.0	ND		ND		ND		ND	
Vanadium	2.0	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 440-584880/52 12/09/2019 22:23							
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND							
Arsenic	1.0	ND							
Barium	1.0	ND							
Beryllium	0.50	ND							
Cadmium	1.0	ND							
Chromium	2.0	ND							
Cobalt	1.0	ND							
Copper	2.0	ND							
Lead	1.0	ND							
Manganese	1.0	ND							
Molybdenum	2.0	ND							
Nickel	2.0	ND							
Selenium	2.0	ND							
Silver	1.0	ND							
Thallium	1.0	ND							
Vanadium	2.0	ND							
Zinc	20	ND							

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Concentration Units: mg/Kg

Analyte	RL	ICB 440-584674/2-A 12/10/2019 11:06		CCB 440-584674/4-A 12/10/2019 13:42		CCB 440-584674/4-A 12/10/2019 14:13		CCB 440-584674/4-A 12/10/2019 14:40	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.020	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Concentration Units: mg/Kg

Analyte	RL	CCB 440-584674/4-A 12/10/2019 15:08							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.020	ND							

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 440-584703/1-A ^5

Instrument Code: ICP8 Batch No.: 584992

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010B
7440-42-8	Boron	ND			6010B
7440-70-2	Calcium	ND			6010B
7439-89-6	Iron	ND			6010B
7439-93-2	Lithium	ND			6010B
7439-95-4	Magnesium	ND			6010B
7723-14-0	Phosphorus	ND			6010B
7440-09-7	Potassium	ND			6010B
7440-23-5	Sodium	ND			6010B
7440-24-6	Strontium	ND			6010B
7440-31-5	Tin	ND			6010B
7440-32-6	Titanium	ND			6010B

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 440-584703/1-A ^20

Instrument Code: ICPMS5 Batch No.: 584880

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			6020
7440-38-2	Arsenic	ND			6020
7440-39-3	Barium	ND			6020
7440-41-7	Beryllium	ND			6020
7440-43-9	Cadmium	ND			6020
7440-47-3	Chromium	ND			6020
7440-48-4	Cobalt	ND			6020
7440-50-8	Copper	ND			6020
7439-92-1	Lead	ND			6020
7439-96-5	Manganese	ND			6020
7439-98-7	Molybdenum	ND			6020
7440-02-0	Nickel	ND			6020
7782-49-2	Selenium	0.213	J		6020
7440-22-4	Silver	ND			6020
7440-28-0	Thallium	ND			6020
7440-62-2	Vanadium	ND			6020
7440-66-6	Zinc	ND			6020

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 440-584718/1-A

Instrument Code: CV-HG4 Batch No.: 585046

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7471A

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Lab Sample ID: ICSA 440-584880/14 Instrument ID: ICPMS5

Lab File ID: 014ICSA.d ICS Source: MEICPMS ICSA_00323

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.314**	
Arsenic		**0.0420**	
Barium		**0.163**	
Beryllium		**0.0000**	
Cadmium		**0.215**	
Chromium		**0.261**	
Cobalt		**0.288**	
Copper		**0.426**	
Lead		**0.0700**	
Manganese		**0.411**	
Molybdenum	**2000**	**2081**	**104**
Nickel		**0.305**	
Selenium		**0.0320**	
Silver		**0.0190**	
Thallium		**0.0060**	
Vanadium		**-0.0700**	
Zinc		**0.460**	
Aluminum	*100000*	*86208*	*86*
Cerium		*0.0120*	
Cesium		*0.0160*	
Iron	*100000*	*86740*	*87*
Strontium		*0.818*	
Tin		*0.404*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0060*	

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 Irvine Job No.: 440-256528-1

SDG No.:

Lab Sample ID: ICSAB 440-584880/15 Instrument ID: ICPMS5

Lab File ID: 015ICSB.d ICS Source: MEICPMS ICSAB_00247

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**21.6**	**108**
Arsenic	**20.0**	**20.1**	**101**
Barium	**20.0**	**20.9**	**105**
Beryllium	**20.0**	**20.2**	**101**
Cadmium	**20.0**	**19.4**	**97**
Chromium	**20.0**	**19.6**	**98**
Cobalt	**20.0**	**19.5**	**97**
Copper	**20.0**	**18.8**	**94**
Lead	**20.0**	**18.0**	**90**
Manganese	**20.0**	**19.7**	**98**
Molybdenum	**2020**	**2123**	**105**
Nickel	**20.0**	**19.0**	**95**
Selenium	**20.0**	**19.6**	**98**
Silver	**20.0**	**19.1**	**95**
Thallium	**20.0**	**17.5**	**87**
Vanadium	**20.0**	**19.8**	**99**
Zinc	**20.0**	**18.9**	**95**
Aluminum	*100000*	*91969*	*92*
Cerium	*20.0*	*19.6*	*98*
Cesium	*20.0*	*20.4*	*102*
Iron	*100000*	*93969*	*94*
Rubidium	*20.0*	*22.0*	*110*
Strontium	*20.0*	*21.9*	*109*
Thorium	*20.0*	*18.1*	*90*
Tin	*20.0*	*20.8*	*104*
Total Heavy Metals	*120*	*114*	*95*
Uranium	*20.0*	*18.9*	*94*

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 Irvine Job No.: 440-256528-1

SDG No.:

Lab Sample ID: ICSA 440-584880/54 Instrument ID: ICPMS5

Lab File ID: 058ICSA.d ICS Source: MEICPMS ICSA_00323

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.292**	
Arsenic		**0.0420**	
Barium		**0.169**	
Beryllium		**0.0000**	
Cadmium		**0.181**	
Chromium		**0.252**	
Cobalt		**0.296**	
Copper		**0.478**	
Lead		**0.0760**	
Manganese		**0.416**	
Molybdenum	**2000**	**2067**	**103**
Nickel		**0.344**	
Selenium		**0.318**	
Silver		**0.0180**	
Thallium		**0.0080**	
Vanadium		**-0.0980**	
Zinc		**0.493**	
Aluminum	*100000*	*87671*	*88*
Cerium		*0.0140*	
Cesium		*0.0160*	
Iron	*100000*	*88443*	*88*
Strontium		*0.849*	
Tin		*0.395*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0080*	

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 Irvine Job No.: 440-256528-1

SDG No.:

Lab Sample ID: ICSAB 440-584880/55 Instrument ID: ICPMS5

Lab File ID: 059ICSB.d ICS Source: MEICPMS ICSAB_00247

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**21.2**	**106**
Arsenic	**20.0**	**20.1**	**101**
Barium	**20.0**	**20.7**	**103**
Beryllium	**20.0**	**19.2**	**96**
Cadmium	**20.0**	**19.3**	**97**
Chromium	**20.0**	**19.6**	**98**
Cobalt	**20.0**	**19.4**	**97**
Copper	**20.0**	**18.6**	**93**
Lead	**20.0**	**17.9**	**90**
Manganese	**20.0**	**19.5**	**97**
Molybdenum	**2020**	**2086**	**103**
Nickel	**20.0**	**18.8**	**94**
Selenium	**20.0**	**19.3**	**97**
Silver	**20.0**	**18.9**	**95**
Thallium	**20.0**	**17.5**	**87**
Vanadium	**20.0**	**19.8**	**99**
Zinc	**20.0**	**18.5**	**92**
Aluminum	*100000*	*90878*	*91*
Cerium	*20.0*	*19.3*	*96*
Cesium	*20.0*	*20.3*	*102*
Iron	*100000*	*92331*	*92*
Rubidium	*20.0*	*22.3*	*111*
Strontium	*20.0*	*21.8*	*109*
Thorium	*20.0*	*18.1*	*91*
Tin	*20.0*	*20.5*	*103*
Total Heavy Metals	*120*	*113*	*94*
Uranium	*20.0*	*18.7*	*93*

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: STSB32_0-0.5 MS
Lab ID: 440-256528-1 MS
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 95.4

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	10300		7900		52.4	4581	75-125	4	6010B
Boron	45.5		ND		52.4	87	75-125		6010B
Calcium	4190		4000		262	82	75-125	4	6010B
Iron	15300		13000		52.4	3961	75-125	4	6010B
Lithium	54.8		6.1		52.4	93	75-125		6010B
Magnesium	6680		6400		262	100	75-125	4	6010B
Phosphorus	401		380		52.4	41	75-125	4	6010B
Potassium	1850		1200		524	118	75-125		6010B
Sodium	749		250		524	94	75-125		6010B
Strontium	117		62		52.4	104	75-125		6010B
Tin	48.1		ND		52.4	92	75-125		6010B
Titanium	568		400		52.4	325	75-125	4	6010B
Antimony	34.3		1.1		52.4	63	75-125	F1	6020
Arsenic	54.4		6.4		52.4	92	75-125		6020
Barium	95.7		43		52.4	101	75-125		6020
Beryllium	45.0		ND		52.4	86	75-125		6020
Cadmium	46.8		ND		52.4	89	75-125		6020
Chromium	50.1		5.6		52.4	85	75-125		6020
Cobalt	49.0		3.8		52.4	86	75-125		6020
Copper	2250		2100		52.4	345	75-125	4	6020
Lead	50.7		3.7		52.4	90	75-125		6020
Manganese	106		61		52.4	87	75-125		6020
Molybdenum	50.6		4.4		52.4	88	75-125		6020
Nickel	52.3		7.3		52.4	86	75-125		6020
Selenium	50.5		4.2		52.4	88	75-125		6020
Silver	24.3		0.11	J	26.2	92	75-125		6020
Thallium	46.4		ND		52.4	88	75-125		6020
Vanadium	67.4		20		52.4	91	75-125		6020
Zinc	62.6		15		52.4	90	75-125		6020
Mercury	0.484		0.12		0.428	85	75-125		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: STSB32_0-0.5 MSD

Lab ID: 440-256528-1 MSD

Lab Name: Eurofins Irvine

Job No.: 440-256528-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 95.3

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	11000		51.7	5956	75-125	6	20	4	6010B
Boron	43.9		51.7	85	75-125	3	20		6010B
Calcium	3500		258	-183	75-125	18	20	4	6010B
Iron	14600		51.7	2776	75-125	4	20	4	6010B
Lithium	53.5		51.7	92	75-125	2	20		6010B
Magnesium	9230		258	1089	75-125	32	20	4 F2	6010B
Phosphorus	357		51.7	-43	75-125	12	20	4	6010B
Potassium	2390		517	225	75-125	26	20	F1 F2	6010B
Sodium	689		517	84	75-125	8	20		6010B
Strontium	96.9		51.7	67	75-125	18	20	F1	6010B
Tin	47.8		51.7	93	75-125	1	20		6010B
Titanium	697		51.7	579	75-125	20	20	4	6010B
Antimony	34.7		51.7	65	75-125	1	20	F1	6020
Arsenic	51.1		51.7	86	75-125	6	20		6020
Barium	101		51.7	113	75-125	5	20		6020
Beryllium	44.0		51.7	85	75-125	2	20		6020
Cadmium	46.1		51.7	89	75-125	1	20		6020
Chromium	49.4		51.7	85	75-125	1	20		6020
Cobalt	48.5		51.7	86	75-125	1	20		6020
Copper	2110		51.7	69	75-125	7	20	4	6020
Lead	48.1		51.7	86	75-125	5	20		6020
Manganese	116		51.7	106	75-125	8	20		6020
Molybdenum	49.5		51.7	87	75-125	2	20		6020
Nickel	52.8		51.7	88	75-125	1	20		6020
Selenium	46.2		51.7	81	75-125	9	20		6020
Silver	24.1		25.8	93	75-125	1	20		6020
Thallium	44.9		51.7	87	75-125	3	20		6020
Vanadium	71.8		51.7	101	75-125	6	20		6020
Zinc	60.9		51.7	88	75-125	3	20		6020
Mercury	0.468		0.420	83	75-125	3	20		7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: STSB32_0-0.5 PDS
Lab ID: 440-256528-1 PDS
Lab Name: Eurofins Irvine
Job No.: 440-256528-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	8140		7900		52.8	NC	80-120		6010B
Boron	54.0		ND		52.8	102	80-120		6010B
Calcium	4280		4000		264	NC	80-120		6010B
Iron	13400		13000		52.8	NC	80-120		6010B
Lithium	57.9		6.1		52.8	98	80-120		6010B
Magnesium	6810		6400		264	NC	80-120		6010B
Phosphorus	450		380		52.8	135	80-120	W	6010B
Potassium	1750		1200		528	98	80-120		6010B
Sodium	776		250		528	99	80-120		6010B
Strontium	115		62		52.8	100	80-120		6010B
Tin	52.1		ND		52.8	99	80-120		6010B
Titanium	458		400		52.8	115	80-120		6010B
Antimony	53.4		1.1		52.8	99	75-125		6020
Arsenic	57.2		6.4		52.8	96	75-125		6020
Barium	95.2		43		52.8	100	75-125		6020
Beryllium	45.7		ND		52.8	87	75-125		6020
Cadmium	51.0		ND		52.8	97	75-125		6020
Chromium	56.0		5.6		52.8	96	75-125		6020
Cobalt	54.0		3.8		52.8	95	75-125		6020
Copper	2130		2100		52.8	NC	75-125		6020
Lead	54.1		3.7		52.8	95	75-125		6020
Manganese	112		61		52.8	97	75-125		6020
Molybdenum	57.1		4.4		52.8	100	75-125		6020
Nickel	56.9		7.3		52.8	94	75-125		6020
Selenium	53.5		4.2		52.8	93	75-125		6020
Silver	51.8		0.11	J	52.8	98	75-125		6020
Thallium	50.6		ND		52.8	96	75-125		6020
Vanadium	70.6		20		52.8	96	75-125		6020
Zinc	64.6		15		52.8	93	75-125		6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 440-584703/2-A ^5

Lab Name: Eurofins Irvine Job No.: 440-256528-1

Sample Matrix: Solid LCS Source: ICP STD A_00003

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	50.3	45.8		91	80	120		6010B
Boron	50.3	44.8		89	80	120		6010B
Calcium	251	232		92	80	120		6010B
Iron	50.3	60.3		120	80	120		6010B
Lithium	50.3	45.5		91	80	120		6010B
Magnesium	251	226		90	80	120		6010B
Phosphorus	50.3	46.0		92	80	120		6010B
Potassium	503	442		88	80	120		6010B
Sodium	503	455		91	80	120		6010B
Strontium	50.3	44.9		89	80	120		6010B
Tin	50.3	46.5		93	80	120		6010B
Titanium	50.3	46.0		92	80	120		6010B

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 440-584703/2-A ^20

Lab Name: Eurofins Irvine Job No.: 440-256528-1

Sample Matrix: Solid LCS Source: ICP STD B_00003

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.3	47.0		93	80	120		6020
Arsenic	50.3	46.3		92	80	120		6020
Barium	50.3	47.5		94	80	120		6020
Beryllium	50.3	46.0		92	80	120		6020
Cadmium	50.3	46.1		92	80	120		6020
Chromium	50.3	46.2		92	80	120		6020
Cobalt	50.3	46.3		92	80	120		6020
Copper	50.3	46.6		93	80	120		6020
Lead	50.3	46.4		92	80	120		6020
Manganese	50.3	45.2		90	80	120		6020
Molybdenum	50.3	46.5		92	80	120		6020
Nickel	50.3	46.5		93	80	120		6020
Selenium	50.3	45.0		90	80	120		6020
Silver	25.1	24.1		96	80	120		6020
Thallium	50.3	46.0		92	80	120		6020
Vanadium	50.3	45.6		91	80	120		6020
Zinc	50.3	46.1		92	80	120		6020

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 440-584718/2-A

Lab Name: Eurofins Irvine Job No.: 440-256528-1

Sample Matrix: Solid LCS Source: ME 1 PPM HG1_00406

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.400	0.382		96	80	120		7471A

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

Lab ID: 440-256528-1

SDG No:

Lab Name: Eurofins Irvine Job No: 440-256528-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	7900		7510		5.1		6010B
Boron	ND		ND		NC		6010B
Calcium	4000		3950		0.46		6010B
Iron	13000		13300		0.50		6010B
Lithium	6.1		ND		NC		6010B
Magnesium	6400		6530		1.7		6010B
Phosphorus	380		408		7.8		6010B
Potassium	1200		1190		NC		6010B
Sodium	250		257	J	NC		6010B
Strontium	62		62.1		NC		6010B
Tin	ND		ND		NC		6010B
Titanium	400		392		1.3		6010B

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

FORM VIII-IN

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

Lab ID: 440-256528-1

SDG No:

Lab Name: Eurofins Irvine Job No: 440-256528-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	1.1		ND		NC		6020
Arsenic	6.4		6.36		NC		6020
Barium	43		41.7		2.1		6020
Beryllium	ND		ND		NC		6020
Cadmium	ND		ND		NC		6020
Chromium	5.6		5.81		NC		6020
Cobalt	3.8		4.10		NC		6020
Copper	2100		2230		7.7		6020
Lead	3.7		3.78		NC		6020
Manganese	61		64.5		5.8		6020
Molybdenum	4.4		4.36	J	NC		6020
Nickel	7.3		7.79		NC		6020
Selenium	4.2		4.25	J	NC		6020
Silver	0.11	J	ND		NC		6020
Thallium	ND		ND		NC		6020
Vanadium	20		20.7		NC		6020
Zinc	15		ND		NC		6020

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG Number:

Matrix: Solid Instrument ID: ICP8

Method: 6010B MDL Date: 08/11/2017 12:45

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Aluminum	308.215	10	7.7
Boron	249.773	5	2.5
Calcium	315.887	25	13.5
Iron	238.204	10	6.9
Lithium	610.362	5	2.8
Magnesium	279.079	10	5
Phosphorus	214.914	5	2.5
Potassium		62.5	32.5
Sodium	589.592	62.5	32
Strontium	421.552	5	2.5
Tin	189.933	10	5
Titanium	334.941	2	1

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG Number:

Matrix: Solid Instrument ID: ICP8

Method: 6010B XMDL Date: 06/15/2017 17:46

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Aluminum	308.215	0.1	0.05
Boron	249.773	0.05	0.025
Calcium	315.887	0.1	0.05
Iron	238.204	0.1	0.05
Lithium	610.362	0.5	0.025
Magnesium	279.079	0.02	0.01
Phosphorus	214.914	0.2	0.1
Potassium	766.49	0.5	0.25
Sodium	589.592	0.5	0.26
Strontium	421.552	0.02	0.01
Tin	189.933	0.1	0.05
Titanium	334.941	0.005	0.0025

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG Number:

Matrix: Solid Instrument ID: ICPMS5

Method: 6020 MDL Date: 08/07/2015 16:43

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	121	1	0.27
Arsenic	75	0.5	0.25
Barium	135	0.5	0.25
Beryllium	9	0.3	0.15
Cadmium	114	0.5	0.25
Chromium	52	1	0.5
Cobalt	59	0.5	0.21
Copper		1	0.5
Lead	208	0.5	0.25
Manganese	55	0.5	0.25
Molybdenum	98	1	0.5
Nickel	60	1	0.5
Selenium		1	0.2
Silver	107	0.5	0.1
Thallium	205	0.5	0.25
Vanadium	51	1	0.5
Zinc	66	10	5

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG Number:

Matrix: Solid Instrument ID: ICPMS5

Method: 6020 XMDL Date: 05/13/2019 10:08

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121	2	0.5
Arsenic	75	1	0.5
Barium	135	1	0.5
Beryllium	9	0.5	0.25
Cadmium	114	1	0.25
Chromium	52	2	0.5
Cobalt	59	1	0.5
Copper		2	0.5
Lead	208	1	0.5
Manganese	55	1	0.5
Molybdenum	98	2	0.5
Nickel	60	2	0.5
Selenium		2	0.5
Silver	107	1	0.5
Thallium	205	1	0.2
Vanadium	51	2	1
Zinc	66	20	2.5

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG Number:

Matrix: Solid Instrument ID: CV-HG4

Method: 7471A MDL Date: 07/05/2011 10:19

Prep Method: 7471A

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury		0.02	0.012

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG Number:

Matrix: Solid Instrument ID: CV-HG4

Method: 7471A XMDL Date: 01/01/2016 16:44

Analyte	Wavelength/ Mass	XRL (mg/Kg)	XMDL (mg/Kg)
Mercury		0.02	0.012

FORM IX - IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/09/2019

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Aluminum	396.152		0.000013	-0.000018	0.000025	0.000008	-0.000036	0.000046	0	0.02689	-0.000079	-0.000019	-0.000203	0.000009	0.001073
Antimony	206.834	0.000009	0.000003	0.000006	0.010395	-0.000001	-0.00004	0.00005	-0.000075	-0.01878	-0.000037	0.000237	0.000208	0.00005	-0.000369
Arsenic	188.980	0.000011	-0.000005	-0.000018	-0.012816	0.00004	-0.00009	0.000008	-0.000015	0.000025	0.000095	-0.000094	-0.000062	-0.000062	0.000903
Barium	233.527	0	0	-0.000006	-0.000002	0.000001	0.000078	0.000001	0	-0.000191	-0.000007	-0.000001	0.000003	-0.000164	0.000137
Beryllium	234.861	0	0	0.000004	0	0	-0.00009	0	-0.000003	-0.000013	-0.000018	0.000001	0.000003	0.000001	0.000004
Boron	249.678	0	0.000001	0.00088	0.000452	-0.00002	-0.00011	0	-0.00007	-0.000017	-0.000005	-0.000014	-0.00003	-0.000018	-0.010398
Cadmium	214.439	-0.000001	0	0.000002	-0.000009	-0.000003	0.00006	0	0.000001	-0.000006	0.000004	0.000001	0.000005	0.000002	-0.000056
Calcium	422.673	-0.000006		0.000876	0.000377	-0.000272	-0.000064	0.000039	-0.000053	-0.000524	-0.000396	-0.000114	-0.000132	0.000387	-0.000193
Chromium	205.560	0.000001	0.000003	-0.000007		0.000042	0.000004	0	0.000025	-0.000681	-0.000317	0.000014	0.000028	-0.000018	0.000386
Cobalt	228.615	0	0.000001		0.000085	0.000016	0.000008	0.000002	-0.000003	0.000019	0.000157	0.000002	0.001777	-0.000007	0.000113
Copper	324.754	0.000001	-0.000019	0.000014	0.000019		0.00001	0.000002	0.000013	0.000217	0.000018	0.000014	0.000206	-0.000092	0.00002
Iron	238.204	-0.000007	0.000002	-0.000338	-0.000187	-0.00013		0.000024	0.000002	-0.000162	-0.000109	-0.000119	-0.000132	-0.000188	-0.000132
Lead	220.353	-0.000039	0.000003	-0.000498	0	-0.00009	0.000347	-0.0005	0.00009	-0.000819	-0.000019	0.000021	-0.000428	-0.000038	-0.000096
Lithium	670.783	0.000054	0.000021	-0.000148	-0.00023	-0.001097	-0.0001	0.000057	-0.000518	-0.000367	-0.000358	-0.001101	0.000381	-0.001377	-0.000136
Magnesium	279.078	-0.00001	0.000007	-0.000382	-0.000435	-0.0001	-0.000217		0.000627	-0.000188	-0.000014	-0.000068	-0.000188	0.000112	-0.00038
Manganese	259.372	0	0.000001	0.00001	-0.000007	-0.000001	0.00128	0.001474		0.004715	0.000013	0.000005	0.000019	0.00001	0.000005
Molybdenum	204.598	0.000025	0	0.000039	0.000067	0.000001	0.000004	0	0.000022		0.000085	-0.000008	0.00005	-0.000031	0.000033
Nickel	231.604	0.000001	-0.000003	-0.000756	0.000004	-0.000028	-0.000011	-0.000002	-0.000049	-0.000042		0.00006	0.000011	-0.000001	-0.000013
Phosphorus	213.618	0.000001	-0.000013	0.000141	0.000127	-0.03762	0.00005	0.000004	-0.000139	-0.020778	0.000094	-0.000098	0.000151	0.00024	-0.000573
Potassium	744.491	0.000095	0.000087	0.002408	0.001429	-0.000339	0.000196	0.000277	-0.000372	-0.001987	0.001312	0.001861	0.001852	0.001103	0.001579
Selenium	196.026	-0.000006	-0.000007	-0.00066	-0.000051	-0.000370	-0.000171	-0.00032	0.000565	-0.000003	-0.000241	0	-0.000066	-0.000483	0.009364
Silicon	251.611	0.000013	0.00002	0.000136	0.000095	0.000162	-0.000038	0.000048	0.000255	0.010982	0.000192	0.000679	0.004127	0.000213	0.053502
Silver	328.068	0	-0.000003	-0.000013	-0.000026	-0.000003	0.00000	-0.000002	0.000075	0.000029	0.000003	-0.000009	-0.000107	0.000009	0.000009
Sodium	589.592	0.00003	0.000041	0.000558	0.000239	0.000428	0	0.000018	0.000127	0.002128	0.000479	0.000076	0.000228	-0.00004	0.006467
Strontium	421.552	0	0.00003	0.000002	0.000003	-0.000001	0.000001	0	0	0.000001	0.000002	0.000002	0.000001	0	0.000017
Thallium	190.794	-0.000001	-0.000005	0.003078	0.000156	-0.000039	0.000057	0.000044	0.001388	0.000096	-0.000005	-0.000043	-0.010982	-0.02142	0.000265
Tin	189.925	0.000001	0	0.000083	0.000021	0.000021	0	0.000003	0.000047	0.000038	0.000039		-0.000119	0.000028	0.000028
Titanium	336.122	0	-0.000008	-0.000017	-0.000029	0.000002	0	0	0.000005	-0.00012	-0.000039	0.000005		-0.000364	0.000399
Tungsten	207.912	-0.000006	-0.000009	-0.000082	-0.000001	-0.000042	-0.00005	-0.000001	-0.000021	0.000144	-0.000024	-0.000005	-0.000009	-0.000019	
Vanadium	292.401	0.000004	0.000038	0.000001	0.000214	0.000012	-0.000004	0.000002	0.000014	-0.008504	0.000003	0.000009	0.000907		0.000183

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/09/2019

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Yttrium	371.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc	202.548	0.000003	0.000003	0.000013	-0.001604	0.0078	-0.00003	0	0.000044	0.00007	-0.000062	0.000012	0.000048	0.000036	0.000339
Zirconium	343.823	0	0.000002	-0.000097	0.000005	0.000002	-0.00029	0	-0.000025	-0.000012	-0.000009	0.000007	-0.000025	0.000005	0.000085

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/09/2019

Analyte	Wave Length	Zn	Zr												
Aluminum	396.152	-0.00005	0.008541												
Antimony	206.834	0.000096	-0.000086												
Arsenic	188.980	-0.000075	0.000125												
Barium	233.527	0.000001	-0.000001												
Beryllium	234.861	0.000001	0.000006												
Boron	249.678	0.00002	0.000445												
Cadmium	214.439	0.000005	0.000001												
Calcium	422.673	-0.000066	-0.000488												
Chromium	205.560	0.000037	0.000101												
Cobalt	228.615	-0.000013	-0.000003												
Copper	324.754	0.000016	0.00004												
Iron	238.204	0.00011	0.000622												
Lead	220.353	-0.000028	-0.000005												
Lithium	670.783	-0.00073	-0.000634												
Magnesium	279.078	-0.000119	-0.000067												
Manganese	259.372	0.000005	0.000048												
Molybdenum	204.598	0.000052	0.000002												
Nickel	231.604	0.000023	0.000028												
Phosphorus	213.618	-0.00009	0.000028												
Potassium	744.491	-0.001412	0.000491												
Selenium	196.026	-0.000101	-0.000166												
Silicon	251.611	0.001039	0.006759												
Silver	328.068	0.000001	0.003947												
Sodium	589.592	-0.000112	0.000318												
Strontium	421.552	0	-0.00002												
Thallium	190.794	-0.000027	0.000028												
Tin	189.925	0.000048	0.000557												
Titanium	336.122	0.000006	0.000122												
Tungsten	207.912	0.008281	0.000004												
Vanadium	292.401	0.000024	-0.000008												

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-256528-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/09/2019

Analyte	Wave Length	Zn	Zr												
Yttrium	371.029	0	0												
Zinc	202.548		0.000117												
Zirconium	343.823	0.000003													

X-IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-256528-1

SDG No.:

Instrument ID: ICP8 Date: 06/15/2017 18:16

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum		600	6010B
Boron		30	6010B
Calcium		600	6010B
Iron		600	6010B
Lithium		30	6010B
Magnesium		600	6010B
Phosphorus		30	6010B
Potassium		1000	6010B
Sodium		1000	6010B
Strontium		30	6010B
Tin		30	6010B
Titanium		30	6010B

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-256528-1

SDG No.:

Instrument ID: ICPMS5 Date: 07/03/2018 18:30

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		4500	6020
Arsenic		4500	6020
Barium		4500	6020
Beryllium		1800	6020
Cadmium		4500	6020
Chromium		4500	6020
Cobalt		4500	6020
Copper		4500	6020
Lead		4500	6020
Manganese		4500	6020
Molybdenum		4500	6020
Nickel		4500	6020
Selenium		4500	6020
Silver		100	6020
Thallium		2700	6020
Vanadium		2700	6020
Zinc		4500	6020

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-256528-1

SDG No.:

Instrument ID: CV-HG4 Date: 01/01/2019 13:06

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Mercury		10	7471A

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-584703/1-A ^5	12/09/2019 12:18	584703	2.00		50
LCS 440-584703/2-A ^5	12/09/2019 12:18	584703	1.99		50
440-256528-1	12/09/2019 12:18	584703	1.99		50
440-256528-1 MS	12/09/2019 12:18	584703	2.00		50
440-256528-1 MSD	12/09/2019 12:18	584703	2.03		50
440-256528-2	12/09/2019 12:18	584703	2.01		50
440-256528-3	12/09/2019 12:18	584703	1.98		50
440-256528-4	12/09/2019 12:18	584703	2.01		50
440-256528-5	12/09/2019 12:18	584703	2.00		50
440-256528-6	12/09/2019 12:18	584703	1.99		50
440-256528-7	12/09/2019 12:18	584703	1.97		50
440-256528-8	12/09/2019 12:18	584703	2.00		50
440-256528-9	12/09/2019 12:18	584703	1.97		50
440-256528-10	12/09/2019 12:18	584703	2.04		50
440-256528-11	12/09/2019 12:18	584703	2.00		50
440-256528-12	12/09/2019 12:18	584703	1.99		50
440-256528-13	12/09/2019 12:18	584703	2.02		50
440-256528-14	12/09/2019 12:18	584703	2.01		50
440-256528-15	12/09/2019 12:18	584703	2.02		50
440-256528-16	12/09/2019 12:18	584703	2.03		50
440-256528-18	12/09/2019 12:18	584703	1.98		50
440-256528-19	12/09/2019 12:18	584703	2.01		50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-584703/1-A ^20	12/09/2019 12:18	584703	2.00		50
LCS 440-584703/2-A ^20	12/09/2019 12:18	584703	1.99		50
440-256528-1	12/09/2019 12:18	584703	1.99		50
440-256528-1 MS	12/09/2019 12:18	584703	2.00		50
440-256528-1 MSD	12/09/2019 12:18	584703	2.03		50
440-256528-2	12/09/2019 12:18	584703	2.01		50
440-256528-3	12/09/2019 12:18	584703	1.98		50
440-256528-4	12/09/2019 12:18	584703	2.01		50
440-256528-5	12/09/2019 12:18	584703	2.00		50
440-256528-6	12/09/2019 12:18	584703	1.99		50
440-256528-7	12/09/2019 12:18	584703	1.97		50
440-256528-8	12/09/2019 12:18	584703	2.00		50
440-256528-9	12/09/2019 12:18	584703	1.97		50
440-256528-10	12/09/2019 12:18	584703	2.04		50
440-256528-11	12/09/2019 12:18	584703	2.00		50
440-256528-12	12/09/2019 12:18	584703	1.99		50
440-256528-13	12/09/2019 12:18	584703	2.02		50
440-256528-14	12/09/2019 12:18	584703	2.01		50
440-256528-15	12/09/2019 12:18	584703	2.02		50
440-256528-16	12/09/2019 12:18	584703	2.03		50
440-256528-18	12/09/2019 12:18	584703	1.98		50
440-256528-19	12/09/2019 12:18	584703	2.01		50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-584718/1-A	12/09/2019 13:06	584718	0.50		50
LCS 440-584718/2-A	12/09/2019 13:06	584718	0.50		50
440-256528-1	12/09/2019 13:06	584718	0.51		50
440-256528-1 MS	12/09/2019 13:06	584718	0.49		50
440-256528-1 MSD	12/09/2019 13:06	584718	0.50		50
440-256528-2	12/09/2019 13:06	584718	0.51		50
440-256528-3	12/09/2019 13:06	584718	0.50		50
440-256528-4	12/09/2019 13:06	584718	0.49		50
440-256528-5	12/09/2019 13:06	584718	0.51		50
440-256528-6	12/09/2019 13:06	584718	0.49		50
440-256528-7	12/09/2019 13:06	584718	0.51		50
440-256528-8	12/09/2019 13:06	584718	0.50		50
440-256528-9	12/09/2019 13:06	584718	0.51		50
440-256528-10	12/09/2019 13:06	584718	0.50		50
440-256528-11	12/09/2019 13:06	584718	0.50		50
440-256528-12	12/09/2019 13:06	584718	0.49		50
440-256528-13	12/09/2019 13:06	584718	0.50		50
440-256528-14	12/09/2019 13:06	584718	0.50		50
440-256528-15	12/09/2019 13:06	584718	0.49		50
440-256528-16	12/09/2019 13:06	584718	0.51		50
440-256528-18	12/09/2019 13:06	584718	0.49		50
440-256528-19	12/09/2019 13:06	584718	0.51		50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 12/10/2019 09:09 End Date: 12/10/2019 13:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti													
ICIS 440-584992/1			09:09	X	X	X	X	X	X	X	X	X	X	X	X													
STD1 440-584992/2 IC			09:11	X	X	X	X	X	X	X	X	X	X	X	X													
STD2 440-584992/3 IC			09:14	X	X	X	X	X	X	X	X	X	X	X	X													
STD3 440-584992/4 IC			09:16	X	X	X	X	X	X	X	X	X	X	X	X													
ICV 440-584992/5			09:21																									
ZZZZZZ			09:31																									
ZZZZZZ			09:33																									
ICV 440-584992/8			09:39																									
ZZZZZZ			09:42																									
ICB 440-584992/10			09:44																									
ICSA 440-584992/11			09:46																									
ICSAB 440-584992/12			09:49																									
ZZZZZZ			09:51																									
ZZZZZZ			09:53																									
ZZZZZZ			09:56																									
CRI 440-584992/16			09:58																									
ZZZZZZ			10:05																									
CCV 440-584992/18			10:33																									
CCB 440-584992/19			10:35																									
ZZZZZZ			10:48																									
CCV 440-584992/21			10:56																									
CCB 440-584992/22			11:06																									
MB 440-584703/1-A ^5	5	T	11:14	X	X	X	X	X	X	X	X	X	X	X	X													
LCS 440-584703/2-A ^5	5	T	11:15	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-1 SD	25	T	11:17	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-1	5	T	11:19	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-1 MS	5	T	11:21	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-1 MSD	5	T	11:23	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-1 PDS	5	T	11:25	X	X	X	X	X	X	X	X	X	X	X	X													
CCV 440-584992/30	1		11:32	X	X	X	X	X	X	X	X	X	X	X	X													
CCB 440-584992/31	1		11:36	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-2	5	T	11:38	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-3	5	T	11:40	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-4	5	T	11:42	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-5	5	T	11:44	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-6	5	T	11:45	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-7	5	T	11:47	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-8	5	T	11:49	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-9	5	T	11:51	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-10	5	T	11:53	X	X	X	X	X	X	X	X	X	X	X	X													
CCV 440-584992/41	1		12:00	X	X	X	X	X	X	X	X	X	X	X	X													
CCB 440-584992/42	1		12:05	X	X	X	X	X	X	X	X	X	X	X	X													

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 12/10/2019 09:09 End Date: 12/10/2019 13:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti													
440-256528-11	5	T	12:07	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-12	5	T	12:09	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-13	5	T	12:11	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-14	5	T	12:12	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-15	5	T	12:14	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-16	5	T	12:16	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-18	5	T	12:18	X	X	X	X	X	X	X	X	X	X	X	X													
440-256528-19	5	T	12:20	X	X	X	X	X	X	X	X	X	X	X	X													
CCV 440-584992/51	1		12:26	X	X	X	X	X	X	X	X	X	X	X	X													
CCB 440-584992/52	1		12:30	X	X	X	X	X	X	X	X	X	X	X	X													
ZZZZZZ			12:32																									
ZZZZZZ			12:34																									
ZZZZZZ			12:36																									
ZZZZZZ			12:37																									
ZZZZZZ			12:39																									
ZZZZZZ			12:41																									
ZZZZZZ			12:43																									
ZZZZZZ			12:45																									
ZZZZZZ			12:47																									
ZZZZZZ			12:48																									
CCV 440-584992/63			12:53																									
CCB 440-584992/64			12:58																									
ZZZZZZ			13:00																									
ZZZZZZ			13:01																									
ZZZZZZ			13:03																									
ZZZZZZ			13:05																									
ZZZZZZ			13:07																									
ZZZZZZ			13:09																									
ZZZZZZ			13:11																									
ZZZZZZ			13:12																									
ZZZZZZ			13:14																									
ZZZZZZ			13:16																									
CCV 440-584992/75			13:21																									
CCB 440-584992/76			13:25																									
ZZZZZZ			13:27																									
ZZZZZZ			13:28																									
ZZZZZZ			13:30																									
ZZZZZZ			13:32																									
ZZZZZZ			13:34																									
ZZZZZZ			13:36																									
CCV 440-584992/83			13:41																									
CCB 440-584992/84			13:45																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 12/10/2019 09:09 End Date: 12/10/2019 13:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti													
CRI 440-584992/85			13:47																									
ICSA 440-584992/86			13:48																									
ICSAB 440-584992/87			13:50																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: ICPMS5 Analysis Method: 6020

Start Date: 12/09/2019 19:03 End Date: 12/09/2019 22:31

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
RINSE 440-584880/1			19:03																									
ZZZZZZ			19:06																									
STD0 440-584880/3 IC	1		19:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD1 440-584880/4 IC	1		19:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD2 440-584880/5 IC	1		19:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD3 440-584880/6 IC	1		19:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
STD4 440-584880/7 IC	1		19:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 440-584880/8	1		19:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			19:32																									
ICB 440-584880/10	1		19:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			19:36																									
CRI 440-584880/12	1		19:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CRI 440-584880/13	1		19:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 440-584880/14	1		19:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSAB 440-584880/15	1		19:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
RINSE 440-584880/16			19:49																									
RINSE 440-584880/17			19:51																									
RINSE 440-584880/18			19:53																									
RINSE 440-584880/19			19:56																									
CCV 440-584880/20	1		20:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 440-584880/21	1		20:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
MB 440-584703/1-A ^20	20	T	20:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LCS 440-584703/2-A ^20	20	T	20:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-1	20	T	20:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-1 MS	20	T	20:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-1 MSD	20	T	20:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-1 PDS	20	T	20:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-1 SD	100	T	21:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 440-584880/29	1		21:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 440-584880/30	1		21:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-2	20	T	21:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-3	20	T	21:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-4	20	T	21:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-5	20	T	21:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-6	20	T	21:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-7	20	T	21:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-8	20	T	21:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-9	20	T	21:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-10	20	T	21:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 440-584880/40	1		21:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 440-584880/41	1		21:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-11	20	T	21:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: ICPMS5 Analysis Method: 6020

Start Date: 12/09/2019 19:03 End Date: 12/09/2019 22:31

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn								
440-256528-12	20	T	21:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-13	20	T	21:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-14	20	T	21:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-15	20	T	21:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-16	20	T	22:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-18	20	T	22:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
440-256528-19	20	T	22:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 440-584880/50	1		22:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			22:21																									
CCB 440-584880/52	1		22:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CRI 440-584880/53	1		22:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 440-584880/54	1		22:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSAB 440-584880/55	1		22:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: CV-HG4 Analysis Method: 7471A

Start Date: 12/10/2019 10:50 End Date: 12/10/2019 15:30

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
IC 440-584674/6-A			10:50	X																							
IC 440-584674/7-A			10:52	X																							
IC 440-584674/8-A			10:54	X																							
IC 440-584674/9-A			10:57	X																							
IC 440-584674/10-A			10:59	X																							
IC 440-584674/11-A			11:01	X																							
ICV 440-584674/1-A	1		11:03	X																							
ICB 440-584674/2-A	1		11:06	X																							
CRA 440-584674/5-A			11:08																								
CCV 440-584674/3-A			11:10																								
CCB 440-584674/4-A			11:12																								
ZZZZZZ			11:15																								
ZZZZZZ			11:17																								
ZZZZZZ			11:19																								
ZZZZZZ			11:21																								
ZZZZZZ			11:24																								
ZZZZZZ			11:27																								
ZZZZZZ			11:30																								
ZZZZZZ			11:33																								
ZZZZZZ			11:35																								
ZZZZZZ			11:38																								
CCV 440-584674/3-A			11:40																								
CCB 440-584674/4-A			11:43																								
ZZZZZZ			11:45																								
ZZZZZZ			11:47																								
ZZZZZZ			11:50																								
ZZZZZZ			11:53																								
ZZZZZZ			11:55																								
ZZZZZZ			11:58																								
ZZZZZZ			12:01																								
ZZZZZZ			12:03																								
ZZZZZZ			12:05																								
ZZZZZZ			12:08																								
CCV 440-584674/3-A			12:10																								
CCB 440-584674/4-A			12:12																								
ZZZZZZ			12:15																								
ZZZZZZ			12:17																								
ZZZZZZ			12:19																								
ZZZZZZ			12:21																								
ZZZZZZ			12:24																								
CRA 440-584674/5-A	1		12:26	X																							
CCV 440-584674/3-A			12:28																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: CV-HG4 Analysis Method: 7471A

Start Date: 12/10/2019 10:50 End Date: 12/10/2019 15:30

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
CCB 440-584674/4-A			12:31																								
CCV 440-584674/3-A			12:36																								
CCB 440-584674/4-A			12:39																								
ZZZZZZ			12:41																								
ZZZZZZ			12:43																								
ZZZZZZ			12:45																								
ZZZZZZ			12:48																								
ZZZZZZ			12:50																								
ZZZZZZ			12:53																								
ZZZZZZ			12:56																								
ZZZZZZ			12:59																								
ZZZZZZ			13:01																								
ZZZZZZ			13:05																								
CCV 440-584674/3-A			13:08																								
CCB 440-584674/4-A			13:11																								
ZZZZZZ			13:14																								
ZZZZZZ			13:16																								
ZZZZZZ			13:19																								
ZZZZZZ			13:22																								
ZZZZZZ			13:24																								
ZZZZZZ			13:27																								
ZZZZZZ			13:30																								
ZZZZZZ			13:32																								
ZZZZZZ			13:35																								
ZZZZZZ			13:37																								
CCV 440-584674/3-A	1		13:40	X																							
CCB 440-584674/4-A	1		13:42	X																							
ZZZZZZ			13:44																								
ZZZZZZ			13:46																								
ZZZZZZ			13:49																								
ZZZZZZ			13:51																								
MB 440-584718/1-A	1	T	13:53	X																							
LCS 440-584718/2-A	1	T	13:56	X																							
440-256528-1	1	T	13:58	X																							
440-256528-1 MS	1	T	14:00	X																							
440-256528-1 MSD	1	T	14:04	X																							
440-256528-2	1	T	14:07	X																							
CCV 440-584674/3-A	1		14:10	X																							
CCB 440-584674/4-A	1		14:13	X																							
440-256528-3	1	T	14:15	X																							
440-256528-4	1	T	14:17	X																							
440-256528-5	1	T	14:20	X																							

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: CV-HG4 Analysis Method: 7471A

Start Date: 12/10/2019 10:50 End Date: 12/10/2019 15:30

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
440-256528-6	1	T	14:22	X																							
440-256528-7	1	T	14:24	X																							
440-256528-8	1	T	14:27	X																							
440-256528-9	1	T	14:29	X																							
440-256528-10	1	T	14:31	X																							
440-256528-11	1	T	14:33	X																							
440-256528-12	1	T	14:36	X																							
CCV 440-584674/3-A	1		14:38	X																							
CCB 440-584674/4-A	1		14:40	X																							
440-256528-13	1	T	14:42	X																							
440-256528-14	1	T	14:44	X																							
440-256528-15	1	T	14:46	X																							
440-256528-16	1	T	14:49	X																							
440-256528-18	1	T	14:51	X																							
440-256528-19	1	T	14:53	X																							
ZZZZZZ			14:56																								
ZZZZZZ			14:59																								
ZZZZZZ			15:01																								
ZZZZZZ			15:03																								
CCV 440-584674/3-A	1		15:06	X																							
CCB 440-584674/4-A	1		15:08	X																							
ZZZZZZ			15:11																								
ZZZZZZ			15:13																								
ZZZZZZ			15:15																								
ZZZZZZ			15:18																								
ZZZZZZ			15:20																								
ZZZZZZ			15:23																								
CRA 440-584674/5-A	1		15:25	X																							
CCV 440-584674/3-A			15:28																								
CCB 440-584674/4-A			15:30																								

Prep Types:
T = Total/NA

FORM XIII-IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

ICP Instrument ID: ICP8 Start Date: 12/10/2019 End Date: 12/10/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
MB 440-584703/1-A ^5	11:14	101									
LCS 440-584703/2-A ^5	11:15	100									
440-256528-1 SD	11:17	100									
440-256528-1	11:19	99									
440-256528-1 MS	11:21	99									
440-256528-1 MSD	11:23	99									
440-256528-1 PDS	11:25	100									
CCV 440-584992/30	11:32	100									
CCB 440-584992/31	11:36	100									
440-256528-2	11:38	99									
440-256528-3	11:40	99									
440-256528-4	11:42	99									
440-256528-5	11:44	99									
440-256528-6	11:45	99									
440-256528-7	11:47	99									
440-256528-8	11:49	99									
440-256528-9	11:51	98									
440-256528-10	11:53	98									
CCV 440-584992/41	12:00	98									
CCB 440-584992/42	12:05	99									
440-256528-11	12:07	98									
440-256528-12	12:09	99									
440-256528-13	12:11	99									
440-256528-14	12:12	99									
440-256528-15	12:14	99									
440-256528-16	12:16	98									
440-256528-18	12:18	98									
440-256528-19	12:20	98									
CCV 440-584992/51	12:26	97									
CCB 440-584992/52	12:30	96									

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

ICP-MS Instrument ID: ICPMS5 Start Date: 12/09/2019 End Date: 12/09/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc-45	Q	Element Ge	Q	Element In-115	Q	Element Tb-159	Q	Element	Q
STD0 440-584880/3 IC	19:08	100		100		100		100			
STD1 440-584880/4 IC	19:11	102		99		100		102			
STD2 440-584880/5 IC	19:13	103		99		100		100			
STD3 440-584880/6 IC	19:15	103		100		102		101			
STD4 440-584880/7 IC	19:18	105		101		103		101			
ICV 440-584880/8	19:20	102		100		104		101			
ICB 440-584880/10	19:34	102		98		102		101			
CRI 440-584880/12	19:39	105		100		102		102			
CRI 440-584880/13	19:41	103		100		103		102			
ICSA 440-584880/14	19:44	106		96		93		97			
ICSAB 440-584880/15	19:46	105		98		96		98			
CCV 440-584880/20	20:29	108		104		105		102			
CCB 440-584880/21	20:31	106		104		104		100			
MB 440-584703/1-A ^20	20:41	107		103		104		100			
LCS 440-584703/2-A ^20	20:43	109		103		104		100			
440-256528-1	20:46	110		103		102		101			
440-256528-1 MS	20:48	113		105		104		100			
440-256528-1 MSD	20:50	115		107		104		102			
440-256528-1 PDS	20:53	112		106		104		101			
440-256528-1 SD	21:00	108		106		106		102			
CCV 440-584880/29	21:03	109		107		108		102			
CCB 440-584880/30	21:05	107		106		107		102			
440-256528-2	21:08	116		108		105		102			
440-256528-3	21:10	116		110		107		102			
440-256528-4	21:12	116		112		107		102			
440-256528-5	21:15	116		109		105		101			
440-256528-6	21:17	116		109		107		103			
440-256528-7	21:20	116		111		107		102			
440-256528-8	21:22	115		110		107		102			
440-256528-9	21:24	116		109		107		104			
440-256528-10	21:27	116		111		107		103			
CCV 440-584880/40	21:38	114		109		109		104			
CCB 440-584880/41	21:42	109		108		107		103			
440-256528-11	21:45	117		111		108		104			
440-256528-12	21:47	118		111		108		103			
440-256528-13	21:49	116		112		108		104			
440-256528-14	21:52	116		110		108		104			

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

ICP-MS Instrument ID: ICPMS5 Start Date: 12/09/2019 End Date: 12/09/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc-45	Q	Element Ge	Q	Element In-115	Q	Element Tb-159	Q	Element	Q
440-256528-15	21:54	119		113		108		103			
440-256528-16	22:03	119		110		107		104			
440-256528-18	22:05	118		112		108		104			
440-256528-19	22:11	119		112		107		104			
CCV 440-584880/50	22:18	116		112		111		104			
CCB 440-584880/52	22:23	112		109		109		103			
CRI 440-584880/53	22:26	113		110		111		104			
ICSA 440-584880/54	22:28	112		104		99		98			
ICSAB 440-584880/55	22:31	110		104		100		100			

FORM XV - IN

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584703 Batch Start Date: 12/09/19 12:17 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584703/1		3050B, 6010B		2.00 g	50 mL			5 mL	3 mL
LCS 440-584703/2		3050B, 6010B		1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-256528-B-1	STSB32_0-0.5	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-256528-B-1 MS	STSB32_0-0.5	3050B, 6010B	T	2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-256528-B-1 MSD	STSB32_0-0.5	3050B, 6010B	T	2.03 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-256528-B-2	STSB32_0.5-3	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-256528-B-3	STSB32_3-6	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-256528-B-4	STSB32_6-15	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-256528-B-5	STSB34_0-0.5	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-256528-B-6	STSB34_0.5-3	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-256528-B-7	STSB34_3-6	3050B, 6010B	T	1.97 g	50 mL			5 mL	3 mL
440-256528-B-8	STSB34_6-15	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-256528-B-9	STSB34-FD_3-6	3050B, 6010B	T	1.97 g	50 mL			5 mL	3 mL
440-256528-B-10	STSB33_0-0.5	3050B, 6010B	T	2.04 g	50 mL			5 mL	3 mL
440-256528-B-11	STSB33_0.5-3	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-256528-B-12	STSB33-FD_0.5-3	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-256528-B-13	STSB33_3-6	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL
440-256528-B-14	STSB33_6-15	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-256528-B-15	STSB35_0-0.5	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL
440-256528-B-16	STSB35_0.5-3	3050B, 6010B	T	2.03 g	50 mL			5 mL	3 mL
440-256528-B-18	STSB35_3-6	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-256528-B-19	STSB35_6-15	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546				
MB 440-584703/1		3050B, 6010B		5 mL	5 mL				
LCS 440-584703/2		3050B, 6010B		5 mL	5 mL				
440-256528-B-1	STSB32_0-0.5	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-1 MS	STSB32_0-0.5	3050B, 6010B	T	5 mL	5 mL				

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 Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584703 Batch Start Date: 12/09/19 12:17 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546				
440-256528-B-1 MSD	STSB32_0-0.5	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-2	STSB32_0.5-3	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-3	STSB32_3-6	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-4	STSB32_6-15	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-5	STSB34_0-0.5	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-6	STSB34_0.5-3	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-7	STSB34_3-6	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-8	STSB34_6-15	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-9	STSB34-FD_3-6	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-10	STSB33_0-0.5	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-11	STSB33_0.5-3	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-12	STSB33-FD_0.5-3	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-13	STSB33_3-6	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-14	STSB33_6-15	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-15	STSB35_0-0.5	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-16	STSB35_0.5-3	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-18	STSB35_3-6	3050B, 6010B	T	5 mL	5 mL				
440-256528-B-19	STSB35_6-15	3050B, 6010B	T	5 mL	5 mL				

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 Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584703 Batch Start Date: 12/09/19 12:17 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:25

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc. # A9) CF=-1.00
Temperature - Uncorrected - End	97 Degrees C
Temperature - Uncorrected - Start	97 Degrees C

Basis	Basis Description
T	Total/NA

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 Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584703 Batch Start Date: 12/09/19 12:17 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584703/1		3050B, 6020		2.00 g	50 mL			5 mL	3 mL
LCS 440-584703/2		3050B, 6020		1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-256528-B-1	STSB32_0-0.5	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-256528-B-1 MS	STSB32_0-0.5	3050B, 6020	T	2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-256528-B-1 MSD	STSB32_0-0.5	3050B, 6020	T	2.03 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-256528-B-2	STSB32_0.5-3	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-256528-B-3	STSB32_3-6	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-256528-B-4	STSB32_6-15	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-256528-B-5	STSB34_0-0.5	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-256528-B-6	STSB34_0.5-3	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-256528-B-7	STSB34_3-6	3050B, 6020	T	1.97 g	50 mL			5 mL	3 mL
440-256528-B-8	STSB34_6-15	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-256528-B-9	STSB34-FD_3-6	3050B, 6020	T	1.97 g	50 mL			5 mL	3 mL
440-256528-B-10	STSB33_0-0.5	3050B, 6020	T	2.04 g	50 mL			5 mL	3 mL
440-256528-B-11	STSB33_0.5-3	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-256528-B-12	STSB33-FD_0.5-3	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-256528-B-13	STSB33_3-6	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL
440-256528-B-14	STSB33_6-15	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-256528-B-15	STSB35_0-0.5	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL
440-256528-B-16	STSB35_0.5-3	3050B, 6020	T	2.03 g	50 mL			5 mL	3 mL
440-256528-B-18	STSB35_3-6	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-256528-B-19	STSB35_6-15	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546				
MB 440-584703/1		3050B, 6020		5 mL	5 mL				
LCS 440-584703/2		3050B, 6020		5 mL	5 mL				
440-256528-B-1	STSB32_0-0.5	3050B, 6020	T	5 mL	5 mL				
440-256528-B-1 MS	STSB32_0-0.5	3050B, 6020	T	5 mL	5 mL				

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 Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584703 Batch Start Date: 12/09/19 12:17 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546				
440-256528-B-1 MSD	STSB32_0-0.5	3050B, 6020	T	5 mL	5 mL				
440-256528-B-2	STSB32_0.5-3	3050B, 6020	T	5 mL	5 mL				
440-256528-B-3	STSB32_3-6	3050B, 6020	T	5 mL	5 mL				
440-256528-B-4	STSB32_6-15	3050B, 6020	T	5 mL	5 mL				
440-256528-B-5	STSB34_0-0.5	3050B, 6020	T	5 mL	5 mL				
440-256528-B-6	STSB34_0.5-3	3050B, 6020	T	5 mL	5 mL				
440-256528-B-7	STSB34_3-6	3050B, 6020	T	5 mL	5 mL				
440-256528-B-8	STSB34_6-15	3050B, 6020	T	5 mL	5 mL				
440-256528-B-9	STSB34-FD_3-6	3050B, 6020	T	5 mL	5 mL				
440-256528-B-10	STSB33_0-0.5	3050B, 6020	T	5 mL	5 mL				
440-256528-B-11	STSB33_0.5-3	3050B, 6020	T	5 mL	5 mL				
440-256528-B-12	STSB33-FD_0.5-3	3050B, 6020	T	5 mL	5 mL				
440-256528-B-13	STSB33_3-6	3050B, 6020	T	5 mL	5 mL				
440-256528-B-14	STSB33_6-15	3050B, 6020	T	5 mL	5 mL				
440-256528-B-15	STSB35_0-0.5	3050B, 6020	T	5 mL	5 mL				
440-256528-B-16	STSB35_0.5-3	3050B, 6020	T	5 mL	5 mL				
440-256528-B-18	STSB35_3-6	3050B, 6020	T	5 mL	5 mL				
440-256528-B-19	STSB35_6-15	3050B, 6020	T	5 mL	5 mL				

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 Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584703 Batch Start Date: 12/09/19 12:17 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:25

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc. # A9) CF=-1.00
Temperature - Uncorrected - End	97 Degrees C
Temperature - Uncorrected - Start	97 Degrees C

Basis	Basis Description
T	Total/NA

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 Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584674 Batch Start Date: 12/09/19 11:16 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HG1 00406	ME 1 PPM HG1 00407	ME Aqua Regia 00769	ME HYDROX SOL 00114
ICV 440-584674/1		7471A, 7471A		0.50 g	50 mL		200 uL	4.2 mL	5 mL
ICB 440-584674/2		7471A, 7471A		0.50 g	50 mL			4.2 mL	5 mL
CCV 440-584674/3		7471A, 7471A		0.50 g	50 mL	200 uL		4.2 mL	5 mL
CCB 440-584674/4		7471A, 7471A		0.50 g	50 mL			4.2 mL	5 mL
CRA 440-584674/5		7471A, 7471A		0.50 g	50 mL	10 uL		4.2 mL	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME KMN04 00186					
ICV 440-584674/1		7471A, 7471A		12.4 mL					
ICB 440-584674/2		7471A, 7471A		12.4 mL					
CCV 440-584674/3		7471A, 7471A		12.4 mL					
CCB 440-584674/4		7471A, 7471A		12.4 mL					
CRA 440-584674/5		7471A, 7471A		12.4 mL					

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 Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584674 Batch Start Date: 12/09/19 11:16 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:00

Batch Notes	
Balance ID	63
Batch Comment	ICB Loc: A6
Blank Matrix ID	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 15:04
Digestion Start Time	12/09/2019 14:34
Digestion Unit ID	8
Hydrochloric Acid ID	Lot: 0000240180
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/09/2019 18:45
Potassium Permanganate ID	5949091
Pipette/Syringe/Dispenser ID	801
Analyst ID - Spike Analyst	MM
Thermometer ID	P-120 CF -1 Loc: A9
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	97 Degrees C
Temperature - Uncorrected - Start	97 Degrees C

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.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584718 Batch Start Date: 12/09/19 13:06 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HG1 00406	ME Aqua Regia 00769	ME HYDROX SOL 00114	ME KMN04 00186
MB 440-584718/1		7471A, 7471A		0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
LCS 440-584718/2		7471A, 7471A		0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-256528-B-1	STSB32_0-0.5	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-1 MS	STSB32_0-0.5	7471A, 7471A	T	0.49 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-256528-B-1 MSD	STSB32_0-0.5	7471A, 7471A	T	0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-256528-B-2	STSB32_0.5-3	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-3	STSB32_3-6	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-4	STSB32_6-15	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-5	STSB34_0-0.5	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-6	STSB34_0.5-3	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-7	STSB34_3-6	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-8	STSB34_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-9	STSB34-FD_3-6	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-10	STSB33_0-0.5	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-11	STSB33_0.5-3	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-12	STSB33-FD_0.5-3	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-13	STSB33_3-6	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-14	STSB33_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-15	STSB35_0-0.5	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-16	STSB35_0.5-3	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-18	STSB35_3-6	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-256528-B-19	STSB35_6-15	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL

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 Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584718 Batch Start Date: 12/09/19 13:06 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:45

Batch Notes	
Balance ID	63
Batch Comment	MB Loc: B5
Blank Matrix ID	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 15:04
Digestion Start Time	12/09/2019 14:34
Digestion Unit ID	8
Hydrochloric Acid ID	Lot: 0000240180
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/09/2019 18:45
Potassium Permanganate ID	5949091
Pipette/Syringe/Dispenser ID	801
Analyst ID - Spike Analyst	MM
Thermometer ID	P-120 CF -1 Loc: A9
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	97 Degrees C
Temperature - Uncorrected - Start	97 Degrees C

Basis	Basis Description
T	Total/NA

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.

Date created: 12/10/2019 8:57:40 AM

Sequence table:

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
	IEC Blank	1.0	1.0	1.0
	STD3	1.0	1.0	1.0
	Al 600ppm	1.0	1.0	1.0
	Ca 600ppm	1.0	1.0	1.0
	Co 30ppm	1.0	1.0	1.0
	Cr 30ppm	1.0	1.0	1.0
	Cu 30ppm	1.0	1.0	1.0
	Fe 600ppm	1.0	1.0	1.0
	Mg 600ppm	1.0	1.0	1.0
	Mn 30ppm	1.0	1.0	1.0
	Mo 30ppm	1.0	1.0	1.0
	Ni 30ppm	1.0	1.0	1.0
	Sn 30ppm	1.0	1.0	1.0
	Ti 30ppm	1.0	1.0	1.0
	V 30ppm	1.0	1.0	1.0
	W 30ppm	1.0	1.0	1.0
	Zn 30ppm	1.0	1.0	1.0
	Zr 30ppm	1.0	1.0	1.0
S1:1	STD0 5993195	1.0	1.0	1.0
S1:2	STD1 5993198	1.0	1.0	1.0
S1:3	STD2 5993197	1.0	1.0	1.0
S1:4	STD3 5993196	1.0	1.0	1.0
S1:5	ICV 5993199	1.0	1.0	1.0
S1:5	IPC 5993199	1.0	1.0	1.0
S1:11	ICV2 5993207	1.0	1.0	1.0
S1:11	ICV2 5993207	1.0	1.0	1.0
S1:11	IPC2 5993207	1.0	1.0	1.0
S1:1	ICB 5993195	1.0	1.0	1.0
S1:6	ICSA 5993200	1.0	1.0	1.0
S1:7	ICSAB 5993202	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:8	XICIS 5993205	1.0	1.0	1.0
S1:9	XCRI 5993203	1.0	1.0	1.0
S1:10	CRI 5993204	1.0	1.0	1.0
S1:9	XCRI 5993203	1.0	1.0	1.0
1:1	MB 440-584711/1-A@5	1.0	1.0	1.0
1:2	LCS 440-584711/2-A@5	1.0	1.0	1.0
1:3	440-255674-B-23-D SD@25	1.0	1.0	1.0
1:4	440-255674-B-23-D@5	1.0	1.0	1.0
1:5	440-255674-B-23-E MS@5	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
1:6	440-255674-B-23-F MSD@5	1.0	1.0	1.0
1:7	440-255674-B-23-D PDS@5	1.0	1.0	1.0
1:8	440-255674-B-24-B@5	1.0	1.0	1.0
1:9	440-256594-E-1-E@5	1.0	1.0	1.0
1:10	440-256594-A-2-C@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
1:11	440-256594-E-3-C@5	1.0	1.0	1.0
1:12	440-256594-E-4-C@5	1.0	1.0	1.0
1:13	440-256594-A-5-D@5	1.0	1.0	1.0
1:14	440-256456-A-1-D@5	1.0	1.0	1.0
1:15	440-256528-a-17-b	1.0	1.0	1.0
1:16	440-256568-d-1-a	1.0	1.0	1.0
1:17	440-256298-I-1-A	1.0	1.0	1.0
1:18	440-256298-I-6-A bc	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
1:19	720-96362-6 Total bc eb	1.0	1.0	1.0
1:20	MB 440-584703/1-A@5	1.0	1.0	1.0
1:21	LCS 440-584703/2-A@5	1.0	1.0	1.0
1:22	440-256528-B-1-A SD@25	1.0	1.0	1.0
1:23	440-256528-B-1-A@5	1.0	1.0	1.0
1:24	440-256528-B-1-B MS@5	1.0	1.0	1.0
1:25	440-256528-B-1-C MSD@5	1.0	1.0	1.0
1:26	440-256528-B-1-A PDS@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
1:27	440-256528-B-2-A@5	1.0	1.0	1.0
1:28	440-256528-B-3-A@5	1.0	1.0	1.0
1:29	440-256528-B-4-A@5	1.0	1.0	1.0
1:30	440-256528-B-5-A@5	1.0	1.0	1.0
1:31	440-256528-B-6-A@5	1.0	1.0	1.0
1:32	440-256528-B-7-A@5	1.0	1.0	1.0
1:33	440-256528-B-8-A@5	1.0	1.0	1.0
1:34	440-256528-B-9-A@5	1.0	1.0	1.0
1:35	440-256528-B-10-A@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
1:36	440-256528-B-11-A@5	1.0	1.0	1.0
1:37	440-256528-B-12-A@5	1.0	1.0	1.0
1:38	440-256528-B-13-A@5	1.0	1.0	1.0
1:39	440-256528-B-14-A@5	1.0	1.0	1.0
1:40	440-256528-B-15-A@5	1.0	1.0	1.0
1:41	440-256528-B-16-A@5	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
1:42	440-256528-B-18-A@5	1.0	1.0	1.0
1:43	440-256528-B-19-A@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
1:44	MB 440-584717/1-A@5	1.0	1.0	1.0
1:45	LCS 440-584717/2-A@5	1.0	1.0	1.0
1:46	440-255674-C-12-B SD@25	1.0	1.0	1.0
1:47	440-255674-C-12-B@5	1.0	1.0	1.0
1:48	440-255674-B-12-C MS@5	1.0	1.0	1.0
1:49	440-255674-B-12-D MSD@5	1.0	1.0	1.0
1:50	440-255674-C-12-B PDS@5	1.0	1.0	1.0
1:51	440-255674-B-1-B@5	1.0	1.0	1.0
1:52	440-255674-B-2-B@5	1.0	1.0	1.0
1:53	440-255674-B-3-B@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
1:54	440-255674-B-5-B@5	1.0	1.0	1.0
1:55	440-255674-B-6-B@5	1.0	1.0	1.0
1:56	440-255674-B-7-B@5	1.0	1.0	1.0
1:57	440-255674-B-8-B@5	1.0	1.0	1.0
1:58	440-255674-B-9-B@5	1.0	1.0	1.0
1:59	440-255674-B-10-B@5	1.0	1.0	1.0
1:60	440-255674-B-11-B@5	1.0	1.0	1.0
2:1	440-255674-B-13-B@5	1.0	1.0	1.0
2:2	440-255674-B-14-B@5	1.0	1.0	1.0
2:3	440-255674-B-15-B@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
2:4	440-255674-B-16-B@5	1.0	1.0	1.0
2:5	440-255674-B-17-B@5	1.0	1.0	1.0
2:6	440-255674-B-18-B@5	1.0	1.0	1.0
2:7	440-255674-B-20-B@5	1.0	1.0	1.0
2:8	440-255674-B-21-B@5	1.0	1.0	1.0
2:9	440-255674-B-22-B@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
S1:10	CRI 5993204	1.0	1.0	1.0
S1:6	ICSA 5993200	1.0	1.0	1.0
S1:7	ICSAB 5993202	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
2:10	MB 440-584786/1-A@5	1.0	1.0	1.0
2:11	LCS 440-584786/2-A@5	1.0	1.0	1.0
2:12	440-256734-A-1-A SD@25	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
2:13	440-256734-A-1-A@5	1.0	1.0	1.0
2:14	440-256734-A-1-B MS@5	1.0	1.0	1.0
2:15	440-256734-A-1-C MSD@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
2:16	440-256734-A-1-A PDS@5	1.0	1.0	1.0
2:17	440-256738-A-1-A@5	1.0	1.0	1.0
2:18	440-256738-A-2-A@5	1.0	1.0	1.0
2:19	440-256737-A-1-A@5	1.0	1.0	1.0
2:20	440-256740-A-1-A@5	1.0	1.0	1.0
2:21	440-256740-A-2-A@5	1.0	1.0	1.0
2:22	440-256736-A-1-A@5	1.0	1.0	1.0
2:23	440-256667-A-1-A@5	1.0	1.0	1.0
2:24	440-256667-A-2-A@5	1.0	1.0	1.0
2:25	440-256667-A-3-A@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
2:26	440-256667-A-4-A@5	1.0	1.0	1.0
2:27	440-256667-A-5-A@5	1.0	1.0	1.0
2:28	440-256667-A-6-A@5	1.0	1.0	1.0
2:29	440-256667-A-7-A@5	1.0	1.0	1.0
2:30	440-256667-A-8-A@5	1.0	1.0	1.0
2:31	440-256664-A-1-A@5	1.0	1.0	1.0
2:32	440-256664-A-2-A@5	1.0	1.0	1.0
2:33	440-254794-A-147-B@5	1.0	1.0	1.0
2:34	440-254794-A-150-B@5	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
2:35	MB 440-584793/1-A	1.0	1.0	1.0
2:36	LCS 440-584793/2-A	1.0	1.0	1.0
2:37	440-256825-A-1-A sd@5	1.0	1.0	1.0
2:38	440-256825-A-1-A	1.0	1.0	1.0
2:39	440-256825-A-1-B MS	1.0	1.0	1.0
2:40	440-256825-A-1-C MSD	1.0	1.0	1.0
2:41	440-256825-A-1-D PDS	1.0	1.0	1.0
2:42	440-256825-A-2-A	1.0	1.0	1.0
2:43	440-256324-A-1-E	1.0	1.0	1.0
2:44	440-256324-A-2-E	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
S1:1	CCB 5993195	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
2:45	440-256324-A-3-E	1.0	1.0	1.0
2:46	440-256324-A-4-E	1.0	1.0	1.0
2:47	440-256324-A-5-E	1.0	1.0	1.0
2:48	440-256324-A-6-E	1.0	1.0	1.0
2:49	440-256324-A-7-E	1.0	1.0	1.0
2:50	440-256324-A-8-E	1.0	1.0	1.0
2:51	440-256324-A-9-O	1.0	1.0	1.0
2:52	440-256324-A-10-E	1.0	1.0	1.0
2:53	440-256324-A-11-I	1.0	1.0	1.0
2:54	280-131553-B-1-D	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
2:55	MB 440-584820/1-A	1.0	1.0	1.0
2:56	LCS 440-584820/2-A	1.0	1.0	1.0
2:57	440-256837-G-1-A	1.0	1.0	1.0
2:58	440-256837-G-1-B MS	1.0	1.0	1.0
2:59	440-256837-G-1-C MSD	1.0	1.0	1.0
2:60	440-256863-C-1-B	1.0	1.0	1.0
3:1	440-256168-E-9-B	1.0	1.0	1.0
3:2	440-255839-B-1-C	1.0	1.0	1.0
3:3	440-256848-D-1-A	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
3:4	580-91250-C-2-A	1.0	1.0	1.0
3:5	580-91250-C-5-A	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
3:6	MB 440-584733/1-A	1.0	1.0	1.0
3:7	LCS 440-584733/2-A	1.0	1.0	1.0
3:8	440-256570-A-1-B	1.0	1.0	1.0
3:9	440-256570-A-1-C MS	1.0	1.0	1.0
3:10	440-256570-A-1-D MSD	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
3:11	720-96385-B-1-B	1.0	1.0	1.0
3:12	720-96359-D-2-B	1.0	1.0	1.0
3:13	720-96382-B-1-B	1.0	1.0	1.0
3:14	720-96382-B-2-B	1.0	1.0	1.0
3:15	720-96359-D-1-B	1.0	1.0	1.0
3:16	440-256263-B-1-B	1.0	1.0	1.0
3:17	440-256330-E-11-D	1.0	1.0	1.0
3:18	440-256470-A-1-B	1.0	1.0	1.0
3:19	440-256470-A-2-B	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
S1:1	CCB 5993195	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
3:20	MB 440-584937/1-A	1.0	1.0	1.0
3:21	xLCS 440-584937/2-A	1.0	1.0	1.0
3:22	440-256891-A-1-A	1.0	1.0	1.0
3:23	440-256891-A-1-B MS	1.0	1.0	1.0
3:21	LCS 440-584937/2-A	1.0	1.0	1.0
3:24	440-256891-A-1-B MSd	1.0	1.0	1.0
3:25	440-256892-A-1-A	1.0	1.0	1.0
3:26	440-256892-A-2-A	1.0	1.0	1.0
3:27	440-256892-A-3-A	1.0	1.0	1.0
3:28	440-256892-A-4-A	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
3:29	440-256892-A-5-A	1.0	1.0	1.0
3:30	440-255886-A-1-D	1.0	1.0	1.0
3:31	440-255886-A-2-B	1.0	1.0	1.0
3:32	440-255886-A-3-B	1.0	1.0	1.0
3:33	440-255886-A-4-B	1.0	1.0	1.0
3:34	x440-256572-A-1-D	1.0	1.0	1.0
3:35	x440-256572-A-1-E MS	1.0	1.0	1.0
3:36	x440-256572-A-1-F MSD	1.0	1.0	1.0
3:37	x440-256572-A-2-B	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
3:34	440-256572-A-1-D@2	1.0	1.0	1.0
3:35	440-256572-A-1-E MS@2	1.0	1.0	1.0
3:36	440-256572-A-1-F MSD@2	1.0	1.0	1.0
3:37	440-256572-A-2-B@2	1.0	1.0	1.0
3:38	440-256572-A-3-B@2	1.0	1.0	1.0
3:39	440-256572-A-4-B@2	1.0	1.0	1.0
3:40	440-256572-A-5-B@2	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
3:41	MB 440-584953/1-A	1.0	1.0	1.0
3:42	LCS 440-584953/2-A	1.0	1.0	1.0
3:43	440-255886-B-1-B	1.0	1.0	1.0

Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
3:44	440-255886-B-1-C MS	1.0	1.0	1.0
3:45	440-255886-B-1-D MSD	1.0	1.0	1.0
3:46	440-255886-B-2-B	1.0	1.0	1.0
3:47	440-255886-B-3-B	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
3:48	440-255886-B-4-B	1.0	1.0	1.0
3:49	440-256622-H-1-A	1.0	1.0	1.0
3:50	440-256622-H-2-A	1.0	1.0	1.0
3:51	440-256622-H-3-A	1.0	1.0	1.0
3:52	440-256622-H-4-A	1.0	1.0	1.0
3:53	440-256622-H-5-A	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
3:54	MB 440-584948/1-A	1.0	1.0	1.0
3:55	LCS 440-584948/2-A	1.0	1.0	1.0
3:56	440-256855-U-1-A	1.0	1.0	1.0
3:57	440-256855-U-1-A	1.0	1.0	1.0
3:58	440-256855-U-1-B MS	1.0	1.0	1.0
3:59	440-256855-U-1-C MSD	1.0	1.0	1.0
4:17	440-256855-U-1-D PDS	1.0	1.0	1.0
4:1	440-256855-U-2-A	1.0	1.0	1.0
4:2	40-256855-U-3-A	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
4:3	440-256855-U-4-A	1.0	1.0	1.0
4:4	440-256855-U-5-A	1.0	1.0	1.0
4:5	440-256855-U-6-A	1.0	1.0	1.0
4:6	440-256855-U-7-A	1.0	1.0	1.0
4:7	440-256855-C-8-A	1.0	1.0	1.0
4:8	440-256855-C-9-A	1.0	1.0	1.0
4:9	440-256855-C-10-A	1.0	1.0	1.0
4:10	440-256855-U-11-A	1.0	1.0	1.0
4:11	440-256855-U-12-A	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
4:12	720-96305-C-1-B	1.0	1.0	1.0
4:13	440-256127-G-1-B	1.0	1.0	1.0
4:14	440-256127-G-3-B	1.0	1.0	1.0
4:15	440-256127-G-4-B	1.0	1.0	1.0
4:16	440-256127-G-5-B	1.0	1.0	1.0
4:17	440-256127-G-6-B	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0

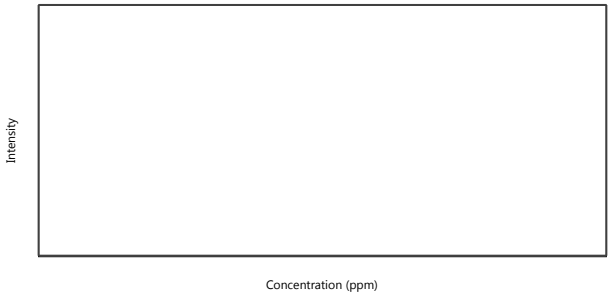
Rack:Tube	Sample Label	Weight (g)	Volume (mL)	Dilution
S1:1	CCB 5993195	1.0	1.0	1.0
4:18	MB 440-585065/1-A	1.0	1.0	1.0
4:19	LCS 440-585065/2-A	1.0	1.0	1.0
4:20	440-256944-H-1-A	1.0	1.0	1.0
4:21	440-256944-H-1-B MS	1.0	1.0	1.0
4:22	440-256944-H-1-C MSD	1.0	1.0	1.0
4:23	440-256944-H-2-A	1.0	1.0	1.0
4:24	440-256944-H-3-A	1.0	1.0	1.0
4:25	440-256944-H-4-A	1.0	1.0	1.0
4:26	440-256944-H-5-A	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
4:27	MB 440-584756/1-B	1.0	1.0	1.0
4:28	LCS 440-584756/2-B	1.0	1.0	1.0
4:29	440-256298-E-1-B sd@5	1.0	1.0	1.0
4:30	440-256298-E-1-B	1.0	1.0	1.0
4:31	440-256298-E-1-C MS	1.0	1.0	1.0
4:32	440-256298-E-1-D MSD	1.0	1.0	1.0
4:33	440-256298-E-2-B	1.0	1.0	1.0
4:34	440-256298-E-3-B	1.0	1.0	1.0
4:35	440-256298-E-4-B	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
4:36	440-256298-E-5-B	1.0	1.0	1.0
4:37	440-256298-E-6-B	1.0	1.0	1.0
4:38	440-256298-E-7-B	1.0	1.0	1.0
4:39	440-256298-E-8-B	1.0	1.0	1.0
4:40	440-256298-E-9-B	1.0	1.0	1.0
4:41	440-256298-E-10-B	1.0	1.0	1.0
4:42	440-256298-E-11-B	1.0	1.0	1.0
4:43	440-256298-E-12-B	1.0	1.0	1.0
4:44	440-256683-N-1-B	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0
4:45	440-256683-M-2-B	1.0	1.0	1.0
4:46	440-256683-N-3-B	1.0	1.0	1.0
4:47	440-256743-A-1-B	1.0	1.0	1.0
4:48	440-256743-A-2-B	1.0	1.0	1.0
S1:8	xRINSE 5993206	1.0	1.0	1.0
S1:4	CCV 5993196	1.0	1.0	1.0
S1:1	CCB 5993195	1.0	1.0	1.0

Calibration Curves:

Ag (328.068 nm)

Standards	Intensity

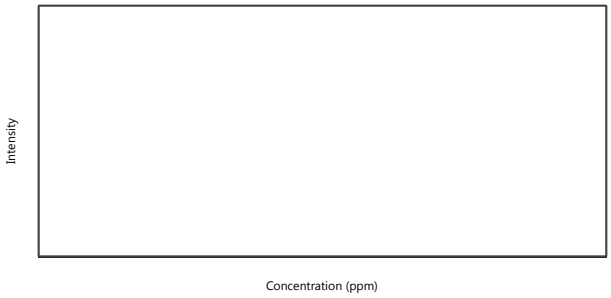
Ag (328.068 nm) Calibration



As (188.980 nm)

Standards	Intensity

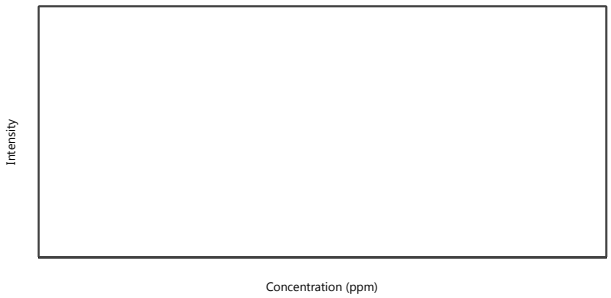
As (188.980 nm) Calibration



Ba (233.527 nm)

Standards	Intensity

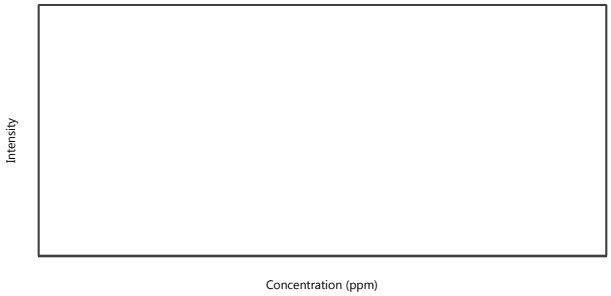
Ba (233.527 nm) Calibration



Cd (214.439 nm)

Standards	Intensity

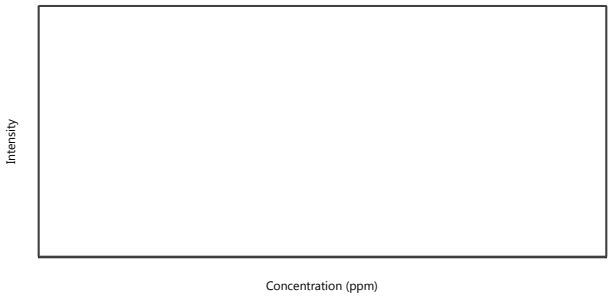
Cd (214.439 nm) Calibration



Co (228.615 nm)

Standards	Intensity

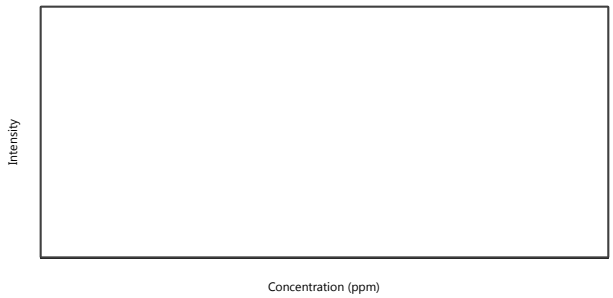
Co (228.615 nm) Calibration



Cr (205.560 nm)

Standards	Intensity

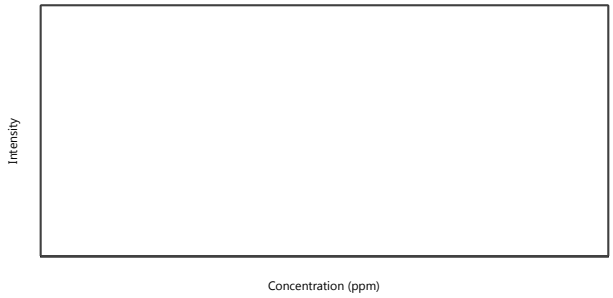
Cr (205.560 nm) Calibration



Cu (324.754 nm)

Standards	Intensity

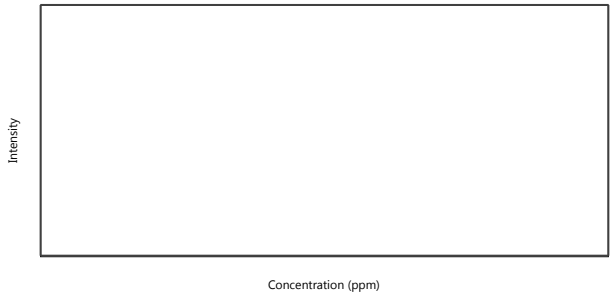
Cu (324.754 nm) Calibration



Fe (238.204 nm)

Standards	Intensity

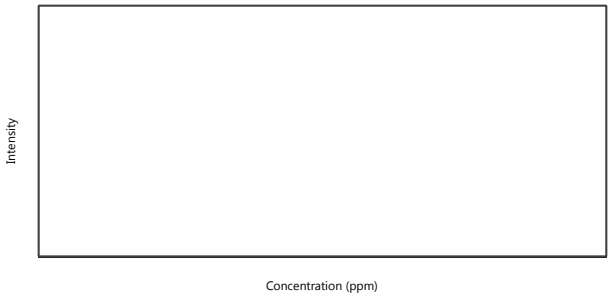
Fe (238.204 nm) Calibration



Na (589.592 nm)

Standards	Intensity

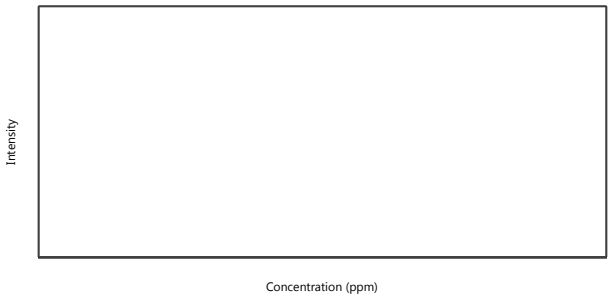
Na (589.592 nm) Calibration



Ni (231.604 nm)

Standards	Intensity

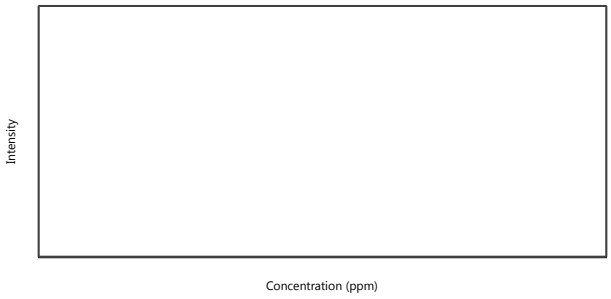
Ni (231.604 nm) Calibration



P (213.618 nm)

Standards	Intensity

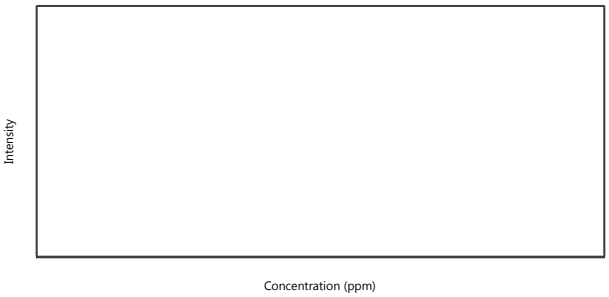
P (213.618 nm) Calibration



Pb (220.353 nm)

Standards	Intensity

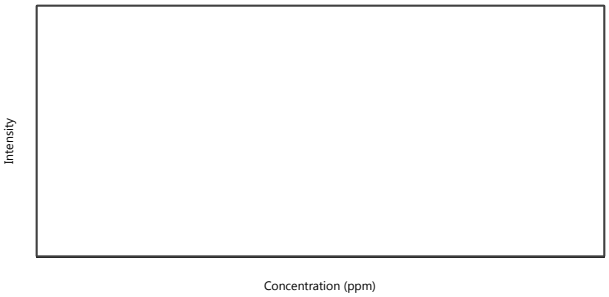
Pb (220.353 nm) Calibration



Sb (206.834 nm)

Standards	Intensity

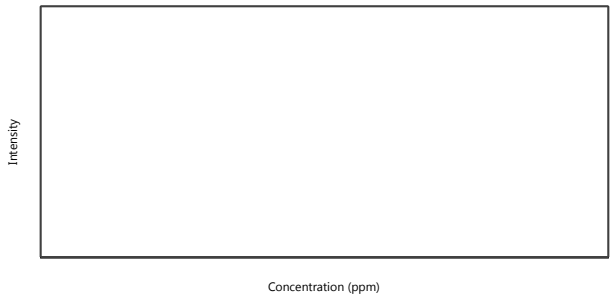
Sb (206.834 nm) Calibration



Se (196.026 nm)

Standards	Intensity

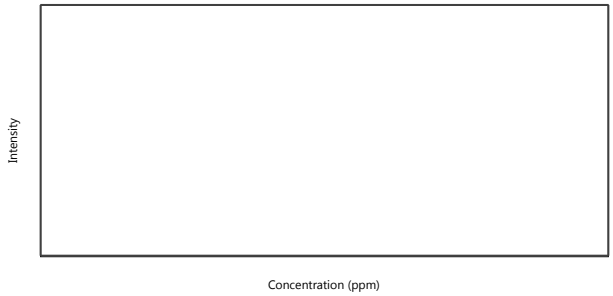
Se (196.026 nm) Calibration



Si (251.611 nm)

Standards	Intensity

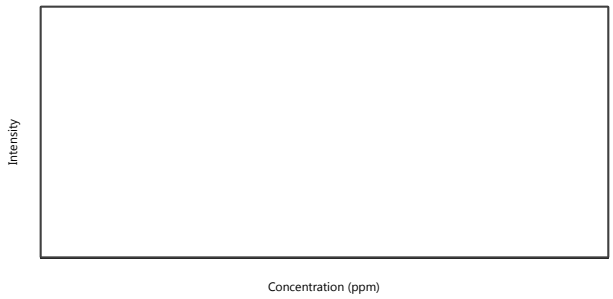
Si (251.611 nm) Calibration



Sn (189.925 nm)

Standards	Intensity

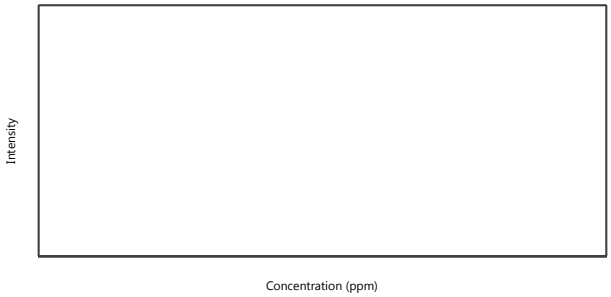
Sn (189.925 nm) Calibration



Sr (421.552 nm)

Standards	Intensity

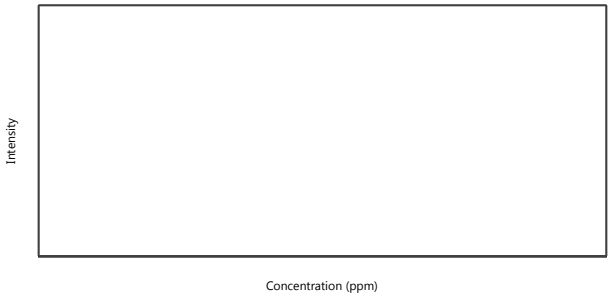
Sr (421.552 nm) Calibration



Tl (190.794 nm)

Standards	Intensity

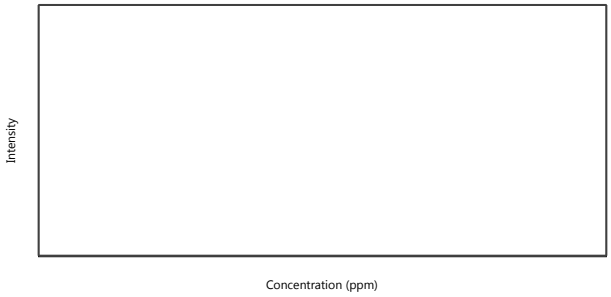
Tl (190.794 nm) Calibration



V (292.401 nm)

Standards	Intensity

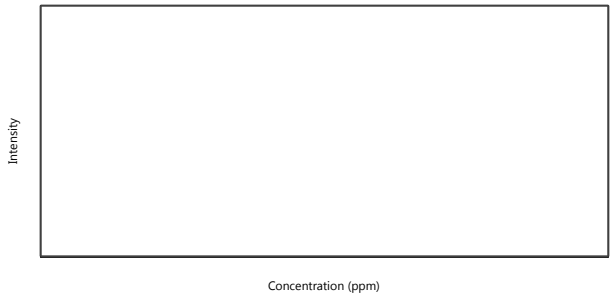
V (292.401 nm) Calibration



Zr (343.823 nm)

Standards	Intensity

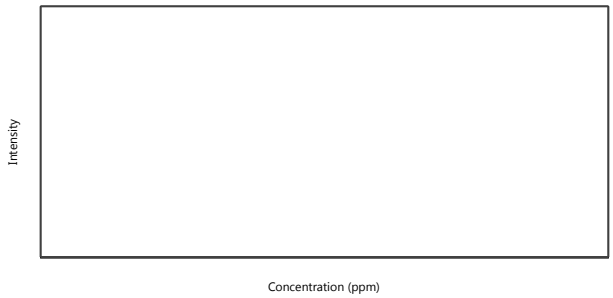
Zr (343.823 nm) Calibration



W (207.912 nm)

Standards	Intensity

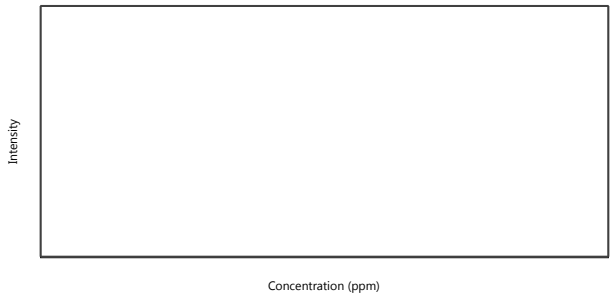
W (207.912 nm) Calibration



K (766.491 nm)

Standards	Intensity

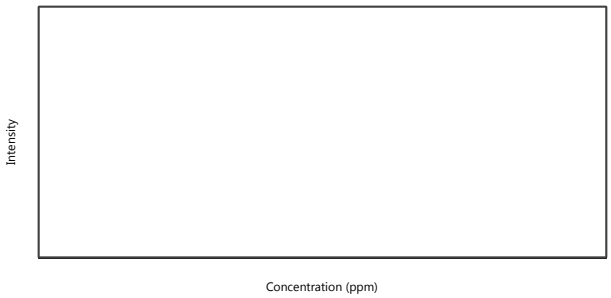
K (766.491 nm) Calibration



Mg (279.078 nm)

Standards	Intensity

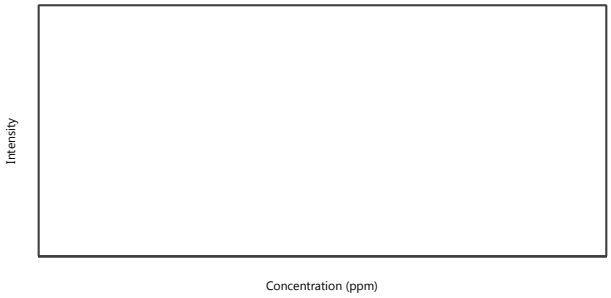
Mg (279.078 nm) Calibration



Al (396.152 nm)

Standards	Intensity

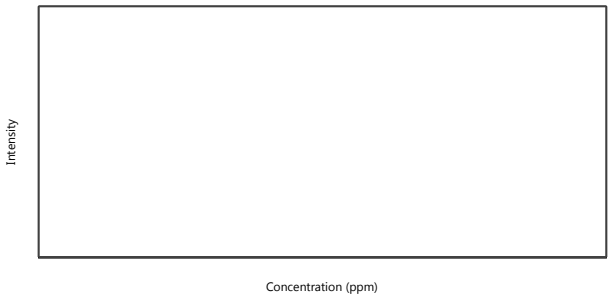
Al (396.152 nm) Calibration



Li (670.783 nm)

Standards	Intensity

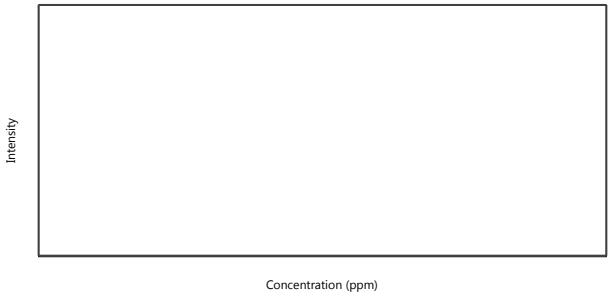
Li (670.783 nm) Calibration



Be (234.861 nm)

Standards	Intensity

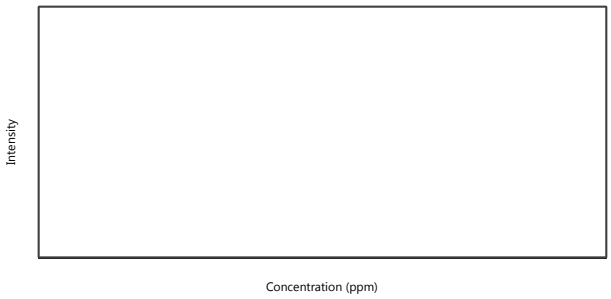
Be (234.861 nm) Calibration



Ca (422.673 nm)

Standards	Intensity

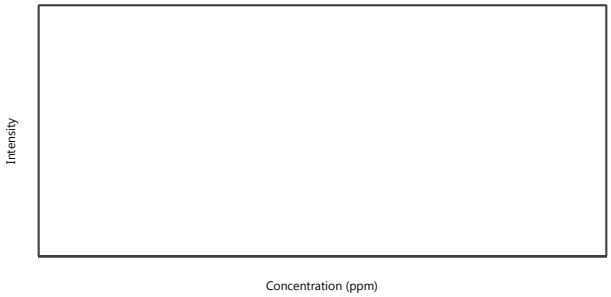
Ca (422.673 nm) Calibration



B (249.678 nm)

Standards	Intensity

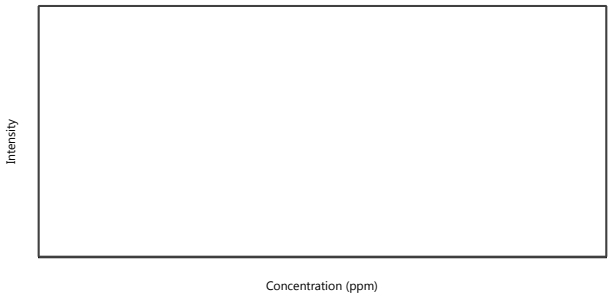
B (249.678 nm) Calibration



Mn (259.372 nm)

Standards	Intensity

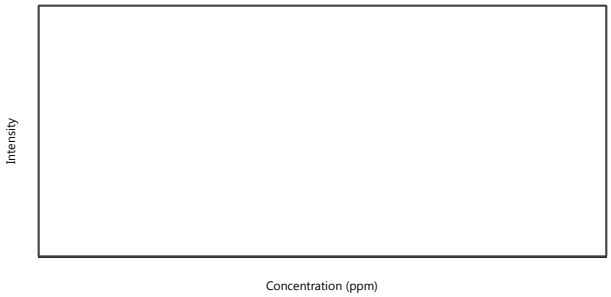
Mn (259.372 nm) Calibration



Mo (204.598 nm)

Standards	Intensity

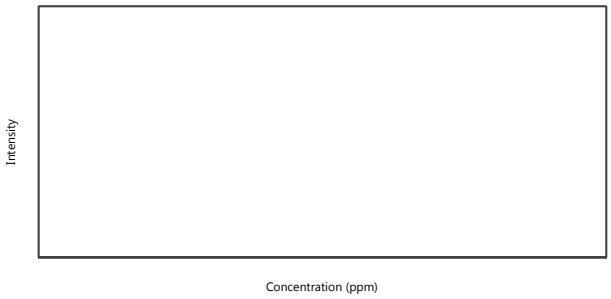
Mo (204.598 nm) Calibration



Ti (336.122 nm)

Standards	Intensity

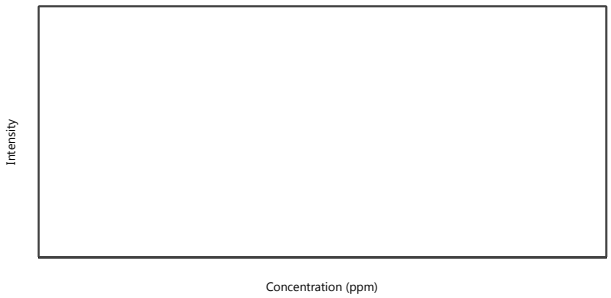
Ti (336.122 nm) Calibration



Zn (202.548 nm)

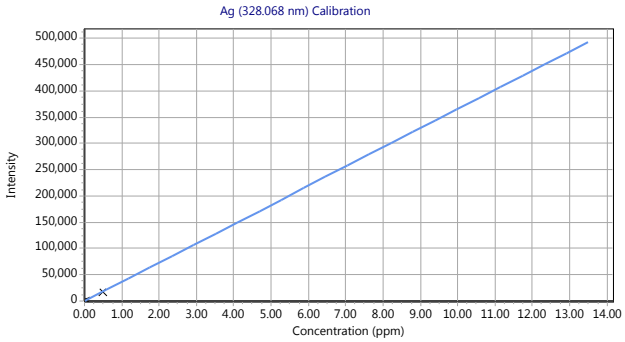
Standards	Intensity

Zn (202.548 nm) Calibration



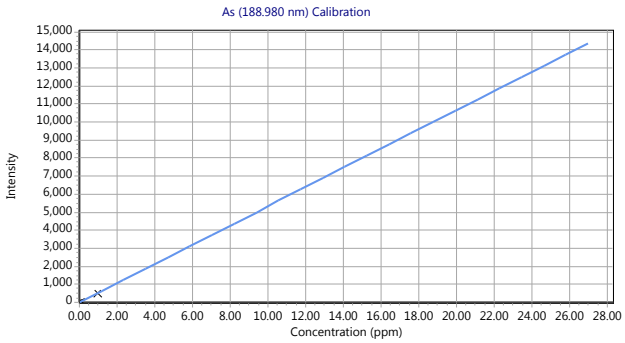
Ag (328.068 nm)
Intensity = 36557.07254161 * Concentration - 68.93461266
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-68.9300
STD1 5993198	28.6700
STD2 5993197	1767.0000
STD3 5993196	18210.0000



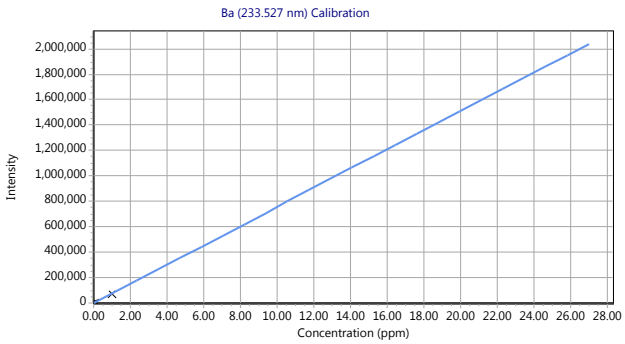
As (188.980 nm)
Intensity = 532.15479518 * Concentration + 1.59128752
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	1.5910
STD1 5993198	5.0240
STD2 5993197	54.9600
STD3 5993196	533.7000



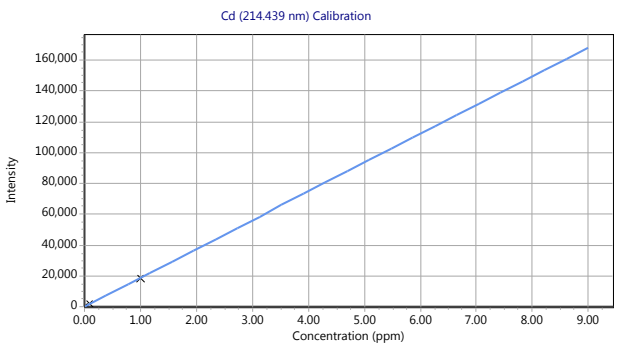
Ba (233.527 nm)
Intensity = 75529.19750223 * Concentration + 40.98252030
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	40.9800
STD1 5993198	411.3000
STD2 5993197	7636.0000
STD3 5993196	75570.0000



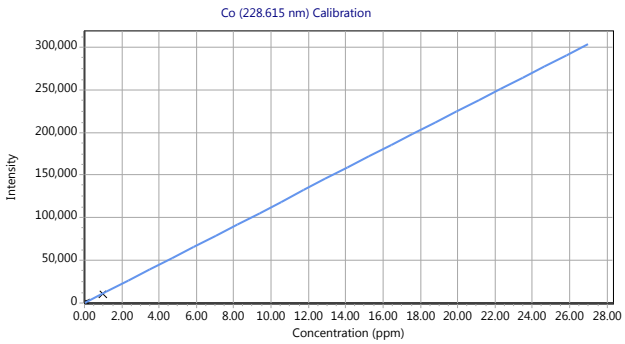
Cd (214.439 nm)
Intensity = 18690.81214583 * Concentration - 3.16749761
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-3.1670
STD1 5993198	88.5800
STD2 5993197	1887.0000
STD3 5993196	18690.0000



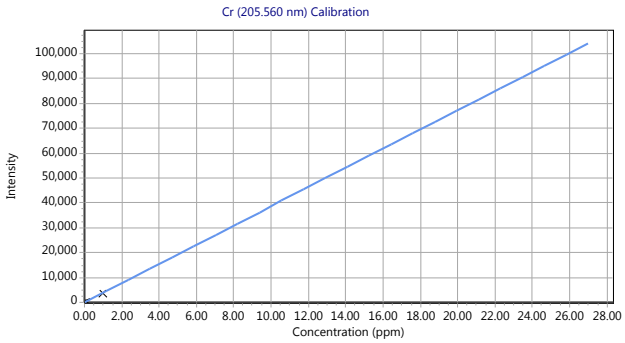
Co (228.615 nm)
Intensity = 11250.62799934 * Concentration - 12.88019319
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-12.8800
STD1 5993198	36.3900
STD2 5993197	1109.0000
STD3 5993196	11240.0000



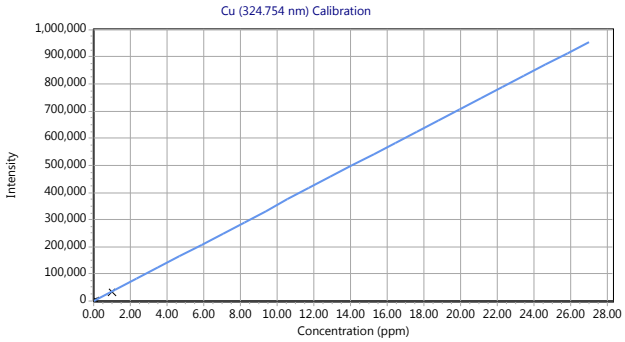
Cr (205.560 nm)
Intensity = 3860.33376882 * Concentration + 1.79431972
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	1.7940
STD1 5993198	19.4500
STD2 5993197	386.3000
STD3 5993196	3862.0000



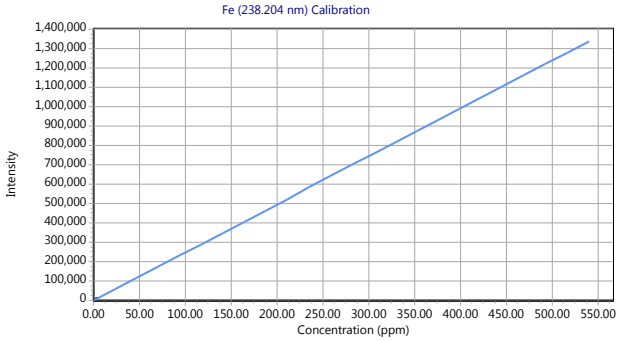
Cu (324.754 nm)
Intensity = 35386.46549315 * Concentration + 42.20503955
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	42.2100
STD1 5993198	220.9000
STD2 5993197	3500.0000
STD3 5993196	35440.0000



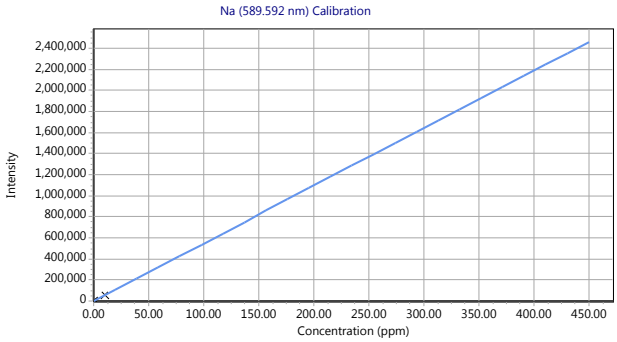
Fe (238.204 nm)
Intensity = 2478.23492900 * Concentration - 50.12732164
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-50.1300
STD2 5993197	202.4000
STD3 5993196	2428.0000



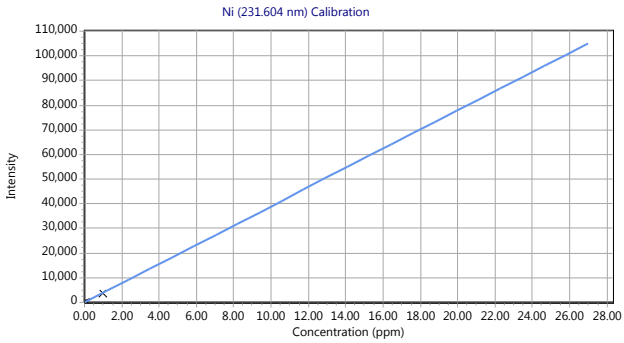
Na (589.592 nm)
Intensity = 5462.92198129 * Concentration + 913.02868460
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	913.0000
STD2 5993197	6375.0000
STD3 5993196	55540.0000



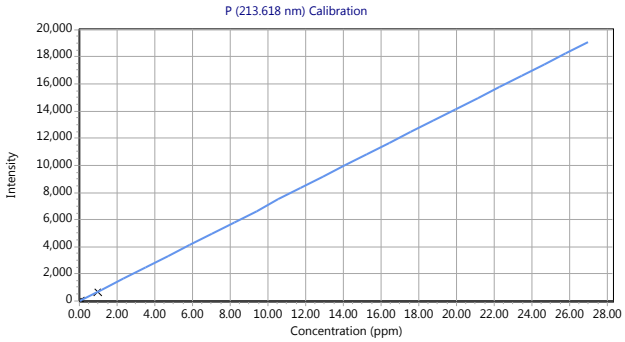
Ni (231.604 nm)
Intensity = 3896.39706472 * Concentration - 15.59773385
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-15.6000
STD1 5993198	14.0300
STD2 5993197	380.9000
STD3 5993196	3880.0000



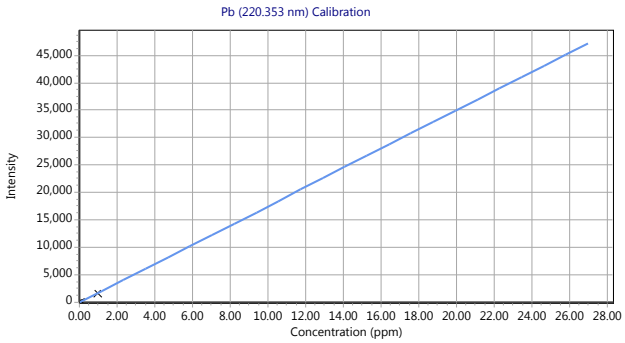
P (213.618 nm)
Intensity = 707.64425546 * Concentration + 0.31774308
Correlation coefficient: 0.99999

Standards	Intensity
STD0 5993195	0.3177
STD2 5993197	68.4600
STD3 5993196	708.2000



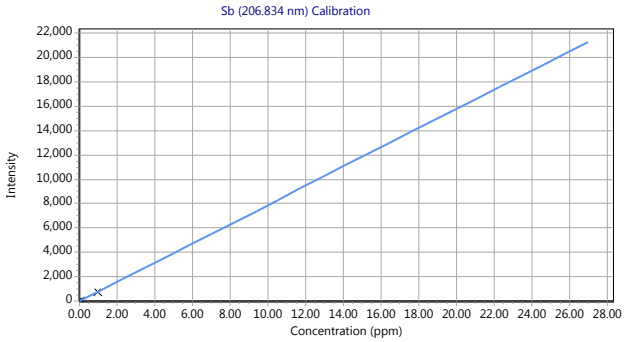
Pb (220.353 nm)
Intensity = 1748.66570891 * Concentration - 11.34965221
Correlation coefficient: 0.99999

Standards	Intensity
STD0 5993195	-11.3500
STD1 5993198	-1.9740
STD2 5993197	155.8000
STD3 5993196	1738.0000



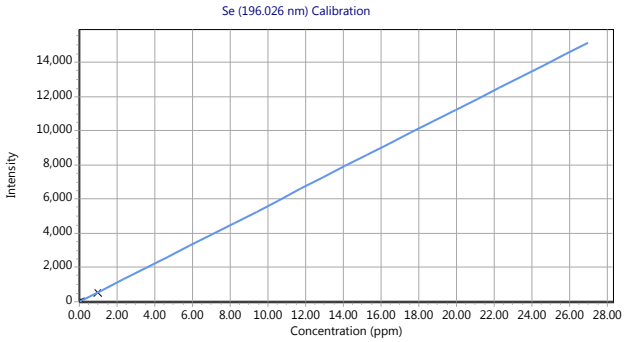
Sb (206.834 nm)
Intensity = 789.03170516 * Concentration - 3.29307044
Correlation coefficient: 0.99988

Standards	Intensity
STD0 5993195	-3.2930
STD1 5993198	5.1790
STD2 5993197	65.8800
STD3 5993196	786.7000



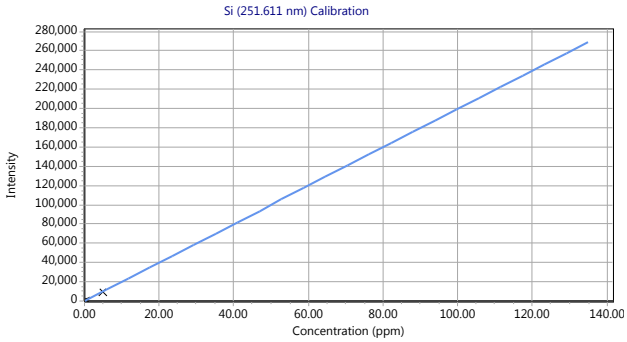
Se (196.026 nm)
Intensity = 560.98703573 * Concentration - 0.69066861
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-0.6907
STD1 5993198	1.8730
STD2 5993197	56.6800
STD3 5993196	560.2000



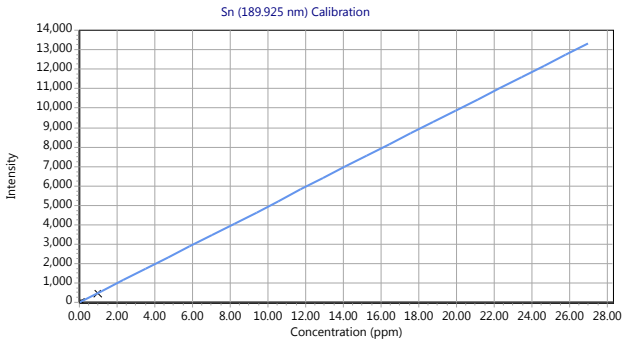
Si (251.611 nm)
Intensity = 1994.01606067 * Concentration + 10.63433960
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	10.6300
STD1 5993198	58.1500
STD2 5993197	1020.0000
STD3 5993196	9980.0000



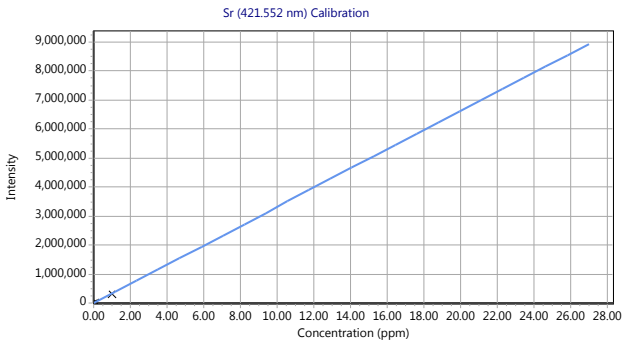
Sn (189.925 nm)
Intensity = 494.43397977 * Concentration - 1.44730581
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-1.4470
STD2 5993197	47.6500
STD3 5993196	493.0000



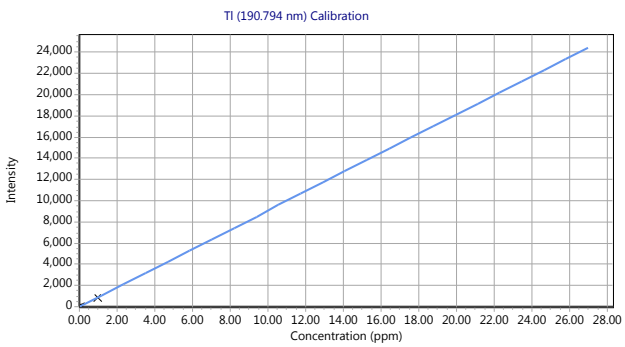
Sr (421.552 nm)
Intensity = 330955.52970410 * Concentration - 21.12824513
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-21.1300
STD1 5993198	1605.0000
STD2 5993197	32860.0000
STD3 5993196	331000.0000



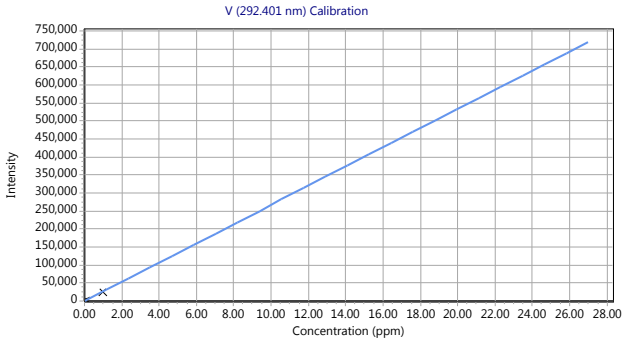
Tl (190.794 nm)
Intensity = 905.02587732 * Concentration + 4.51578783
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	4.5160
STD1 5993198	11.9500
STD2 5993197	94.9100
STD3 5993196	909.5000



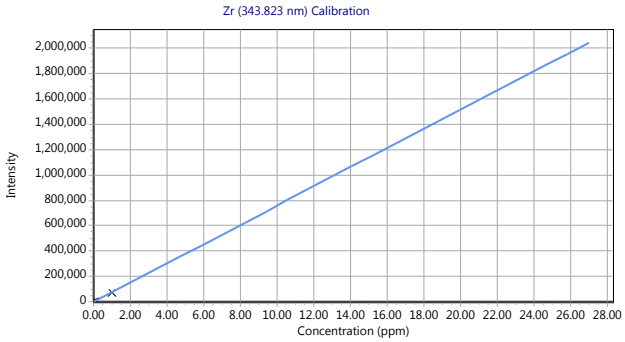
V (292.401 nm)
Intensity = 26658.24328330 * Concentration + 87.05264278
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	87.0500
STD1 5993198	213.9000
STD2 5993197	2727.0000
STD3 5993196	26750.0000



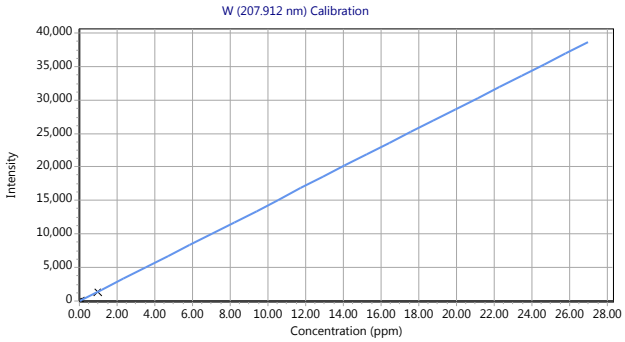
Zr (343.823 nm)
Intensity = 75779.24513952 * Concentration + 104.09002843
Correlation coefficient: 0.99938

Standards	Intensity
STD0 5993195	104.1000
STD1 5993198	163.9000
STD2 5993197	4881.0000
STD3 5993196	76170.0000



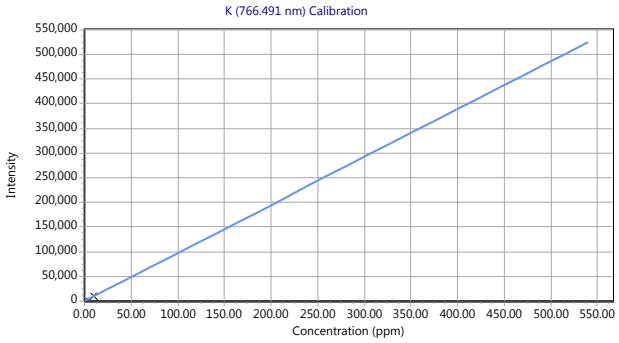
W (207.912 nm)
Intensity = 1432.38613492 * Concentration - 4.33362883
Correlation coefficient: 0.99996

Standards	Intensity
STD0 5993195	-4.3340
STD1 5993198	1.0880
STD2 5993197	126.3000
STD3 5993196	1429.0000



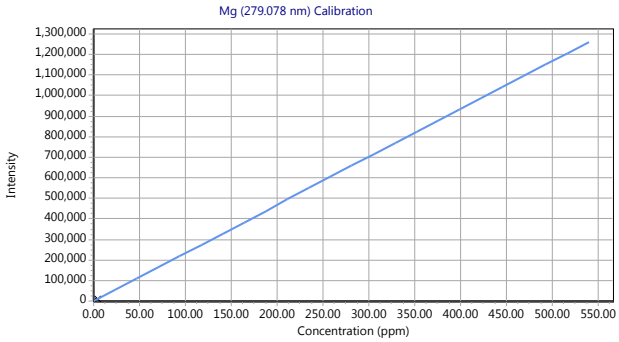
K (766.491 nm)
Intensity = 972.57899389 * Concentration - 78.18553716
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-78.1900
STD2 5993197	870.6000
STD3 5993196	9650.0000



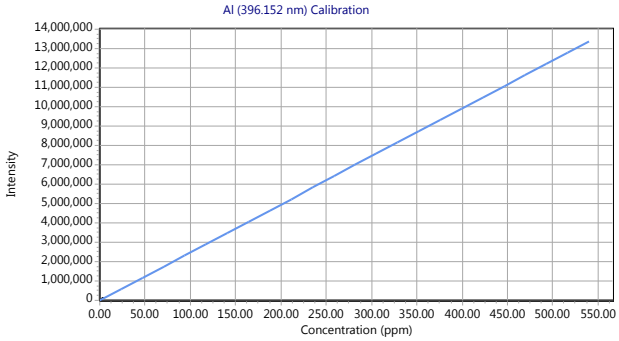
Mg (279.078 nm)
Intensity = 2336.61793266 * Concentration + 10.78516215
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	10.7900
STD1 5993198	80.5100
STD2 5993197	1177.0000
STD3 5993196	11690.0000



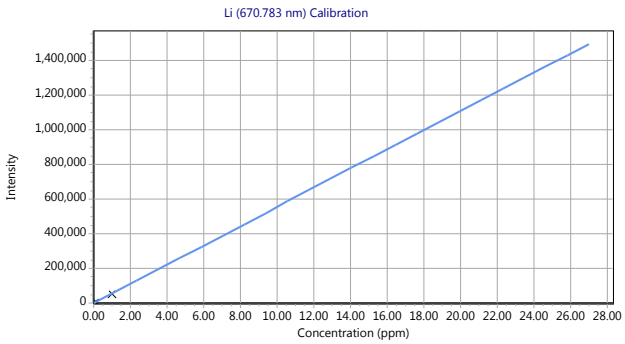
Al (396.152 nm)
Intensity = 24782.24267453 * Concentration - 325.72571230
Correlation coefficient: 0.99999

Standards	Intensity
STD0 5993195	-325.7000
STD2 5993197	2051.0000
STD3 5993196	24470.0000



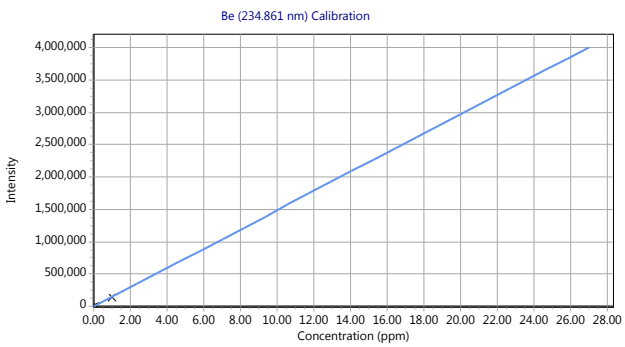
Li (670.783 nm)
Intensity = 55378.55725029 * Concentration + 54.01617255
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	54.0200
STD2 5993197	5547.0000
STD3 5993196	55440.0000



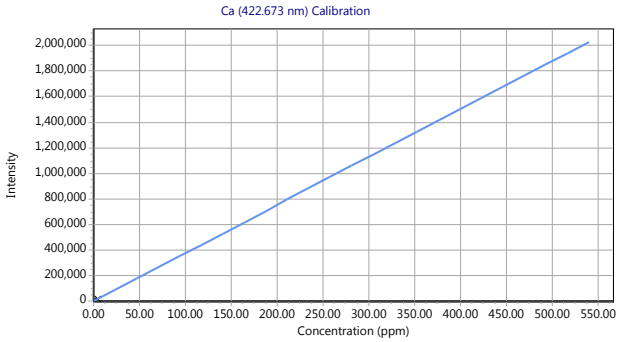
Be (234.861 nm)
Intensity = 148525.70324393 * Concentration + 22.08101954
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	22.0800
STD1 5993198	758.0000
STD2 5993197	14820.0000
STD3 5993196	148600.0000



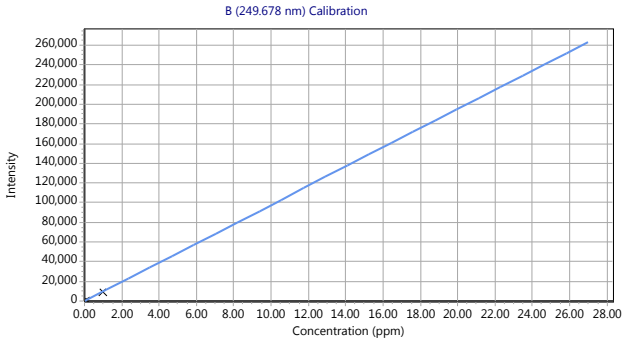
Ca (422.673 nm)
Intensity = 3756.67105750 * Concentration + 119.00308898
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	119.0000
STD1 5993198	205.7000
STD2 5993197	1984.0000
STD3 5993196	18900.0000



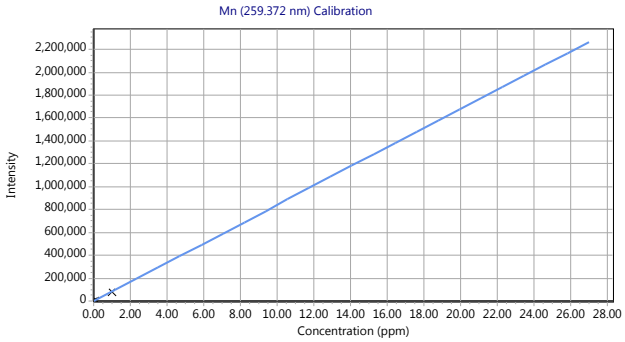
B (249.678 nm)
Intensity = 9756.86173067 * Concentration - 13.97097459
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-13.9700
STD2 5993197	948.8000
STD3 5993196	9744.0000



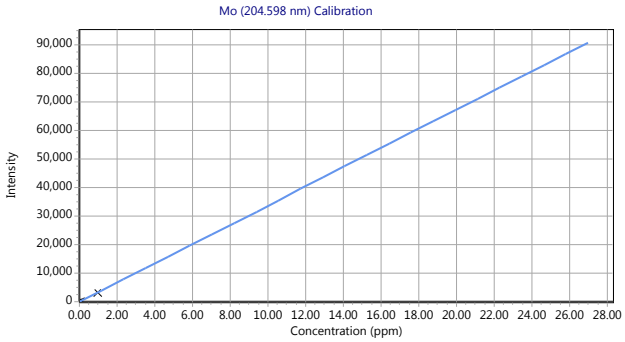
Mn (259.372 nm)
Intensity = 83904.49633847 * Concentration + 45.37984116
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	45.3800
STD1 5993198	464.5000
STD2 5993197	8502.0000
STD3 5993196	83940.0000



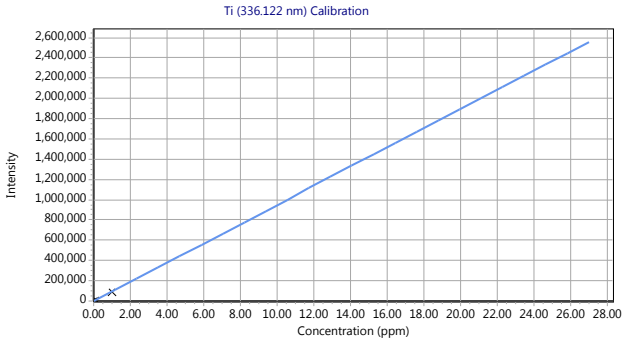
Mo (204.598 nm)
Intensity = 3361.74281758 * Concentration - 4.06594553
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-4.0660
STD1 5993198	13.4400
STD2 5993197	334.3000
STD3 5993196	3357.0000



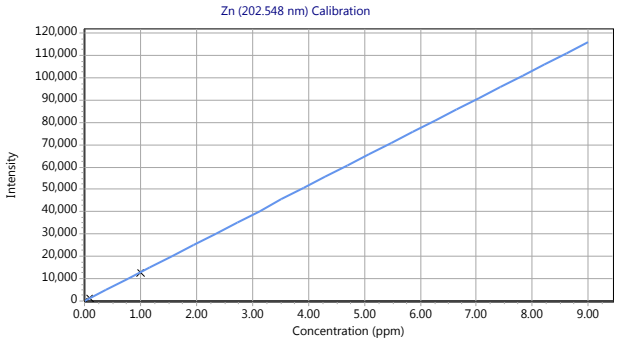
Ti (336.122 nm)
Intensity = 94740.29022171 * Concentration - 134.27432669
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	-134.3000
STD1 5993198	308.9000
STD2 5993197	9075.0000
STD3 5993196	94630.0000



Zn (202.548 nm)
Intensity = 12891.94453523 * Concentration + 12.65434327
Correlation coefficient: 1.00000

Standards	Intensity
STD0 5993195	12.6500
STD2 5993197	1325.0000
STD3 5993196	12900.0000



Sample Name: STD0 5993195

Date: 12/10/2019 9:09:04 AM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 !	ppm	N/A	N/A	-68.9300 !	0.0000 ! (ppm)
Al (396.152 nm)	0.0000 !	ppm	N/A	N/A	-325.7000 !	0.0000 ! (ppm)
As (188.980 nm)	0.0000 !	ppm	N/A	N/A	1.5910 !	0.0000 ! (ppm)
B (249.678 nm)	0.0000 !	ppm	N/A	N/A	-13.9700 !	0.0000 ! (ppm)
Ba (233.527 nm)	0.0000 !	ppm	N/A	N/A	40.9800 !	0.0000 ! (ppm)
Be (234.861 nm)	0.0000 !	ppm	N/A	N/A	22.0800 !	0.0000 ! (ppm)
Ca (422.673 nm)	0.0000 !	ppm	N/A	N/A	119.0000 !	0.0000 ! (ppm)
Cd (214.439 nm)	0.0000 !	ppm	N/A	N/A	-3.1670 !	0.0000 ! (ppm)
Co (228.615 nm)	0.0000 !	ppm	N/A	N/A	-12.8800 !	0.0000 ! (ppm)
Cr (205.560 nm)	0.0000 !	ppm	N/A	N/A	1.7940 !	0.0000 ! (ppm)
Cu (324.754 nm)	0.0000 !	ppm	N/A	N/A	42.2100 !	0.0000 ! (ppm)
Fe (238.204 nm)	0.0000 !	ppm	N/A	N/A	-50.1300 !	0.0000 ! (ppm)
K (766.491 nm)	0.0000 !	ppm	N/A	N/A	-78.1900 !	0.0000 ! (ppm)
Li (670.783 nm)	0.0000 !	ppm	N/A	N/A	54.0200 !	0.0000 ! (ppm)
Mg (279.078 nm)	0.0000 !	ppm	N/A	N/A	10.7900 !	0.0000 ! (ppm)
Mn (259.372 nm)	0.0000 !	ppm	N/A	N/A	45.3800 !	0.0000 ! (ppm)
Mo (204.598 nm)	0.0000 !	ppm	N/A	N/A	-4.0660 !	0.0000 ! (ppm)
Na (589.592 nm)	0.0000 !	ppm	N/A	N/A	913.0000 !	0.0000 ! (ppm)
Ni (231.604 nm)	0.0000 !	ppm	N/A	N/A	-15.6000 !	0.0000 ! (ppm)
P (213.618 nm)	0.0000 !	ppm	N/A	N/A	0.3177 !	0.0000 ! (ppm)
Pb (220.353 nm)	0.0000 !	ppm	N/A	N/A	-11.3500 !	0.0000 ! (ppm)
Sb (206.834 nm)	0.0000 !	ppm	N/A	N/A	-3.2930 !	0.0000 ! (ppm)
Se (196.026 nm)	0.0000 !	ppm	N/A	N/A	-0.6907 !	0.0000 ! (ppm)
Si (251.611 nm)	0.0000 !	ppm	N/A	N/A	10.6300 !	0.0000 ! (ppm)
Sn (189.925 nm)	0.0000 !	ppm	N/A	N/A	-1.4470 !	0.0000 ! (ppm)
Sr (421.552 nm)	0.0000 !	ppm	N/A	N/A	-21.1300 !	0.0000 ! (ppm)
Ti (336.122 nm)	0.0000 !	ppm	N/A	N/A	-134.3000 !	0.0000 ! (ppm)
Tl (190.794 nm)	0.0000 !	ppm	N/A	N/A	4.5160 !	0.0000 ! (ppm)
V (292.401 nm)	0.0000 !	ppm	N/A	N/A	87.0500 !	0.0000 ! (ppm)
W (207.912 nm)	0.0000 !	ppm	N/A	N/A	-4.3340 !	0.0000 ! (ppm)
Zn (202.548 nm)	0.0000 !	ppm	N/A	N/A	12.6500 !	0.0000 ! (ppm)
Zr (343.823 nm)	0.0000 !	ppm	N/A	N/A	104.1000 !	0.0000 ! (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0000 !	346100.0000 !	0.0000	0.00
Y_R 371.029	1.0000 !	48580.0000 !	0.0000	0.00

Sample Name: STD1 5993198

Date: 12/10/2019 9:11:23 AM Rack:Tube: S1:2

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0025 !	ppm	N/A	N/A	28.6700 !	0.0025 ! (ppm)
Al (396.152 nm)		ppm	N/A	N/A	-217.8000 !	
As (188.980 nm)	0.0050 !	ppm	N/A	N/A	5.0240 !	0.0050 ! (ppm)
B (249.678 nm)		ppm	N/A	N/A	32.8300 !	
Ba (233.527 nm)	0.0050 !	ppm	N/A	N/A	411.3000 !	0.0050 ! (ppm)
Be (234.861 nm)	0.0050 !	ppm	N/A	N/A	758.0000 !	0.0050 ! (ppm)
Ca (422.673 nm)	0.0250 !	ppm	N/A	N/A	205.7000 !	0.0250 ! (ppm)
Cd (214.439 nm)	0.0050 !	ppm	N/A	N/A	88.5800 !	0.0050 ! (ppm)
Co (228.615 nm)	0.0050 !	ppm	N/A	N/A	36.3900 !	0.0050 ! (ppm)
Cr (205.560 nm)	0.0050 !	ppm	N/A	N/A	19.4500 !	0.0050 ! (ppm)
Cu (324.754 nm)	0.0050 !	ppm	N/A	N/A	220.9000 !	0.0050 ! (ppm)
Fe (238.204 nm)		ppm	N/A	N/A	-47.3300 !	
K (766.491 nm)		ppm	N/A	N/A	56.7200 !	
Li (670.783 nm)		ppm	N/A	N/A	381.5000 !	
Mg (279.078 nm)	0.0250 !	ppm	N/A	N/A	80.5100 !	0.0250 ! (ppm)
Mn (259.372 nm)	0.0050 !	ppm	N/A	N/A	464.5000 !	0.0050 ! (ppm)
Mo (204.598 nm)	0.0050 !	ppm	N/A	N/A	13.4400 !	0.0050 ! (ppm)
Na (589.592 nm)		ppm	N/A	N/A	1203.0000 !	
Ni (231.604 nm)	0.0050 !	ppm	N/A	N/A	14.0300 !	0.0050 ! (ppm)
P (213.618 nm)		ppm	N/A	N/A	3.1770 !	
Pb (220.353 nm)	0.0050 !	ppm	N/A	N/A	-1.9740 !	0.0050 ! (ppm)
Sb (206.834 nm)	0.0050 !	ppm	N/A	N/A	5.1790 !	0.0050 ! (ppm)
Se (196.026 nm)	0.0050 !	ppm	N/A	N/A	1.8730 !	0.0050 ! (ppm)
Si (251.611 nm)	0.0250 !	ppm	N/A	N/A	58.1500 !	0.0250 ! (ppm)
Sn (189.925 nm)		ppm	N/A	N/A	1.8620 !	
Sr (421.552 nm)	0.0050 !	ppm	N/A	N/A	1605.0000 !	0.0050 ! (ppm)
Ti (336.122 nm)	0.0050 !	ppm	N/A	N/A	308.9000 !	0.0050 ! (ppm)
Tl (190.794 nm)	0.0050 !	ppm	N/A	N/A	11.9500 !	0.0050 ! (ppm)
V (292.401 nm)	0.0050 !	ppm	N/A	N/A	213.9000 !	0.0050 ! (ppm)
W (207.912 nm)	0.0050 !	ppm	N/A	N/A	1.0880 !	0.0050 ! (ppm)
Zn (202.548 nm)		ppm	N/A	N/A	86.2800 !	
Zr (343.823 nm)	0.0050 !	ppm	N/A	N/A	163.9000 !	0.0050 ! (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0000 !	346100.0000 !	0.0041	0.41
Y_R 371.029	0.9991 !	48540.0000 !	0.0008	0.08

Sample Name: STD2 5993197

Date: 12/10/2019 9:14:15 AM Rack:Tube: S1:3

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0500	ppm	N/A	N/A	1767.0000	0.0500 (ppm)
Al (396.152 nm)	0.1000	ppm	N/A	N/A	2051.0000	0.1000 (ppm)
As (188.980 nm)	0.1000	ppm	N/A	N/A	54.9600	0.1000 (ppm)
B (249.678 nm)	0.1000	ppm	N/A	N/A	948.8000	0.1000 (ppm)
Ba (233.527 nm)	0.1000	ppm	N/A	N/A	7636.0000	0.1000 (ppm)
Be (234.861 nm)	0.1000	ppm	N/A	N/A	14820.0000	0.1000 (ppm)
Ca (422.673 nm)	0.5000	ppm	N/A	N/A	1984.0000	0.5000 (ppm)
Cd (214.439 nm)	0.1000	ppm	N/A	N/A	1887.0000	0.1000 (ppm)
Co (228.615 nm)	0.1000	ppm	N/A	N/A	1109.0000	0.1000 (ppm)
Cr (205.560 nm)	0.1000	ppm	N/A	N/A	386.3000	0.1000 (ppm)
Cu (324.754 nm)	0.1000	ppm	N/A	N/A	3500.0000	0.1000 (ppm)
Fe (238.204 nm)	0.1000	ppm	N/A	N/A	202.4000	0.1000 (ppm)
K (766.491 nm)	1.0000	ppm	N/A	N/A	870.6000	1.0000 (ppm)
Li (670.783 nm)	0.1000	ppm	N/A	N/A	5547.0000	0.1000 (ppm)
Mg (279.078 nm)	0.5000	ppm	N/A	N/A	1177.0000	0.5000 (ppm)
Mn (259.372 nm)	0.1000	ppm	N/A	N/A	8502.0000	0.1000 (ppm)
Mo (204.598 nm)	0.1000	ppm	N/A	N/A	334.3000	0.1000 (ppm)
Na (589.592 nm)	1.0000	ppm	N/A	N/A	6375.0000	1.0000 (ppm)
Ni (231.604 nm)	0.1000	ppm	N/A	N/A	380.9000	0.1000 (ppm)
P (213.618 nm)	0.1000	ppm	N/A	N/A	68.4600	0.1000 (ppm)
Pb (220.353 nm)	0.1000	ppm	N/A	N/A	155.8000	0.1000 (ppm)
Sb (206.834 nm)	0.1000	ppm	N/A	N/A	65.8800	0.1000 (ppm)
Se (196.026 nm)	0.1000	ppm	N/A	N/A	56.6800	0.1000 (ppm)
Si (251.611 nm)	0.5000	ppm	N/A	N/A	1020.0000	0.5000 (ppm)
Sn (189.925 nm)	0.1000	ppm	N/A	N/A	47.6500	0.1000 (ppm)
Sr (421.552 nm)	0.1000	ppm	N/A	N/A	32860.0000	0.1000 (ppm)
Ti (336.122 nm)	0.1000	ppm	N/A	N/A	9075.0000	0.1000 (ppm)
Tl (190.794 nm)	0.1000	ppm	N/A	N/A	94.9100	0.1000 (ppm)
V (292.401 nm)	0.1000	ppm	N/A	N/A	2727.0000	0.1000 (ppm)
W (207.912 nm)	0.1000	ppm	N/A	N/A	126.3000	0.1000 (ppm)
Zn (202.548 nm)	0.1000	ppm	N/A	N/A	1325.0000	0.1000 (ppm)
Zr (343.823 nm)	0.1000	ppm	N/A	N/A	4881.0000	0.1000 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	347400.0000	0.0032	0.31
Y_R 371.029	1.0030	48720.0000	0.0007	0.07

Sample Name: STD3 5993196

Date: 12/10/2019 9:16:33 AM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5000	ppm	N/A	N/A	18210.0000	0.5000 (ppm)
Al (396.152 nm)	1.0000	ppm	N/A	N/A	24470.0000	1.0000 (ppm)
As (188.980 nm)	1.0000	ppm	N/A	N/A	533.7000	1.0000 (ppm)
B (249.678 nm)	1.0000	ppm	N/A	N/A	9744.0000	1.0000 (ppm)
Ba (233.527 nm)	1.0000	ppm	N/A	N/A	75570.0000	1.0000 (ppm)
Be (234.861 nm)	1.0000	ppm	N/A	N/A	148600.0000	1.0000 (ppm)
Ca (422.673 nm)	5.0000	ppm	N/A	N/A	18900.0000	5.0000 (ppm)
Cd (214.439 nm)	1.0000	ppm	N/A	N/A	18690.0000	1.0000 (ppm)
Co (228.615 nm)	1.0000	ppm	N/A	N/A	11240.0000	1.0000 (ppm)
Cr (205.560 nm)	1.0000	ppm	N/A	N/A	3862.0000	1.0000 (ppm)
Cu (324.754 nm)	1.0000	ppm	N/A	N/A	35440.0000	1.0000 (ppm)
Fe (238.204 nm)	1.0000	ppm	N/A	N/A	2428.0000	1.0000 (ppm)
K (766.491 nm)	10.0000	ppm	N/A	N/A	9650.0000	10.0000 (ppm)
Li (670.783 nm)	1.0000	ppm	N/A	N/A	55440.0000	1.0000 (ppm)
Mg (279.078 nm)	5.0000	ppm	N/A	N/A	11690.0000	5.0000 (ppm)
Mn (259.372 nm)	1.0000	ppm	N/A	N/A	83940.0000	1.0000 (ppm)
Mo (204.598 nm)	1.0000	ppm	N/A	N/A	3357.0000	1.0000 (ppm)
Na (589.592 nm)	10.0000	ppm	N/A	N/A	55540.0000	10.0000 (ppm)
Ni (231.604 nm)	1.0000	ppm	N/A	N/A	3880.0000	1.0000 (ppm)
P (213.618 nm)	1.0000	ppm	N/A	N/A	708.2000	1.0000 (ppm)
Pb (220.353 nm)	1.0000	ppm	N/A	N/A	1738.0000	1.0000 (ppm)
Sb (206.834 nm)	1.0000	ppm	N/A	N/A	786.7000	1.0000 (ppm)
Se (196.026 nm)	1.0000	ppm	N/A	N/A	560.2000	1.0000 (ppm)
Si (251.611 nm)	5.0000	ppm	N/A	N/A	9980.0000	5.0000 (ppm)
Sn (189.925 nm)	1.0000	ppm	N/A	N/A	493.0000	1.0000 (ppm)
Sr (421.552 nm)	1.0000	ppm	N/A	N/A	331000.0000	1.0000 (ppm)
Ti (336.122 nm)	1.0000	ppm	N/A	N/A	94630.0000	1.0000 (ppm)
Tl (190.794 nm)	1.0000	ppm	N/A	N/A	909.5000	1.0000 (ppm)
V (292.401 nm)	1.0000	ppm	N/A	N/A	26750.0000	1.0000 (ppm)
W (207.912 nm)	1.0000	ppm	N/A	N/A	1429.0000	1.0000 (ppm)
Zn (202.548 nm)	1.0000	ppm	N/A	N/A	12900.0000	1.0000 (ppm)
Zr (343.823 nm)	1.0000	ppm	N/A	N/A	76170.0000	1.0000 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9992	345900.0000	0.0033	0.33
Y_R 371.029	1.0020	48660.0000	0.0018	0.18

Sample Name: ICV 5993199

Date: 12/10/2019 9:21:43 AM
Rack:Tube: S1:5

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.9911	ppm	0.0009	0.09	36250.0000	0.9911 (ppm)
Al (396.152 nm)	0.9911	ppm	0.0040	0.40	25160.0000	0.9911 (ppm)
As (188.980 nm)	1.9960	ppm	0.0098	0.49	1057.0000	1.9960 (ppm)
B (249.678 nm)	1.0050	ppm	0.0069	0.69	9705.0000	1.0050 (ppm)
Ba (233.527 nm)	2.0040	ppm	0.0099	0.49	151400.0000	2.0040 (ppm)
Be (234.861 nm)	1.0030	ppm	0.0034	0.34	149000.0000	1.0030 (ppm)
Ca (422.673 nm)	5.0910	ppm	0.0118	0.23	19240.0000	5.0910 (ppm)
Cd (214.439 nm)	1.0040	ppm	0.0022	0.22	18760.0000	1.0040 (ppm)
Co (228.615 nm)	1.0030	ppm	0.0035	0.35	11300.0000	1.0030 (ppm)
Cr (205.560 nm)	1.0050	ppm	0.0027	0.26	3880.0000	1.0050 (ppm)
Cu (324.754 nm)	0.9935	ppm	0.0031	0.31	35210.0000	0.9935 (ppm)
Fe (238.204 nm)	1.0210	ppm	0.0009	0.08	2479.0000	1.0210 (ppm)
K (766.491 nm)	5.1300	ppm	0.0662	1.29	4922.0000	5.1300 (ppm)
Li (670.783 nm)	1.0060	ppm	0.0006	0.06	55400.0000	1.0060 (ppm)
Mg (279.078 nm)	5.0670	ppm	0.0342	0.67	11850.0000	5.0670 (ppm)
Mn (259.372 nm)	1.0090	ppm	0.0034	0.34	85280.0000	1.0090 (ppm)
Mo (204.598 nm)	1.0260	ppm	0.0021	0.21	3447.0000	1.0260 (ppm)
Na (589.592 nm)	5.3260 Q	ppm	0.0000	0.00	30080.0000 Q	5.3260 Q (ppm)
Ni (231.604 nm)	1.0020	ppm	0.0049	0.49	3886.0000	1.0020 (ppm)
P (213.618 nm)	2.0500	ppm	0.0200	0.98	1410.0000	2.0500 (ppm)
Pb (220.353 nm)	1.0000	ppm	0.0025	0.25	1736.0000	1.0000 (ppm)
Sb (206.834 nm)	0.9869	ppm	0.0266	2.70	768.7000	0.9869 (ppm)
Se (196.026 nm)	1.9900	ppm	0.0087	0.44	1120.0000	1.9900 (ppm)
Si (251.611 nm)	1.9970	ppm	0.0135	0.67	4148.0000	1.9970 (ppm)
Sn (189.925 nm)	1.9870	ppm	0.0027	0.14	981.5000	1.9870 (ppm)
Sr (421.552 nm)	1.0060	ppm	0.0009	0.09	332900.0000	1.0060 (ppm)
Ti (336.122 nm)	1.0050	ppm	0.0083	0.83	95090.0000	1.0050 (ppm)
Tl (190.794 nm)	1.9970	ppm	0.0152	0.76	1787.0000	1.9970 (ppm)
V (292.401 nm)	1.0040	ppm	0.0043	0.43	26650.0000	1.0040 (ppm)
W (207.912 nm)	0.9854	ppm	0.0001	0.02	1419.0000	0.9854 (ppm)
Zn (202.548 nm)	1.0140	ppm	0.0024	0.23	13170.0000	1.0140 (ppm)
Zr (343.823 nm)	1.0130	ppm	0.0113	1.12	76850.0000	1.0130 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9978	345400.0000	0.0040	0.40
Y_R 371.029	0.9972	48450.0000	0.0056	0.56

Sample Name: IPC 5993199

Date: 12/10/2019 9:31:33 AM
Rack:Tube: S1:5

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.9814	ppm	0.0020	0.20	35900.0000	0.9814 (ppm)
Al (396.152 nm)	0.9960	ppm	0.0057	0.58	25280.0000	0.9960 (ppm)
As (188.980 nm)	2.0160	ppm	0.0178	0.88	1068.0000	2.0160 (ppm)
B (249.678 nm)	1.0080	ppm	0.0072	0.72	9736.0000	1.0080 (ppm)
Ba (233.527 nm)	1.9940	ppm	0.0107	0.54	150700.0000	1.9940 (ppm)
Be (234.861 nm)	1.0060	ppm	0.0056	0.55	149400.0000	1.0060 (ppm)
Ca (422.673 nm)	5.0940	ppm	0.0055	0.11	19250.0000	5.0940 (ppm)
Cd (214.439 nm)	1.0070	ppm	0.0063	0.62	18810.0000	1.0070 (ppm)
Co (228.615 nm)	1.0090	ppm	0.0052	0.52	11360.0000	1.0090 (ppm)
Cr (205.560 nm)	1.0080	ppm	0.0043	0.43	3890.0000	1.0080 (ppm)
Cu (324.754 nm)	1.0000	ppm	0.0051	0.51	35450.0000	1.0000 (ppm)
Fe (238.204 nm)	1.0190	ppm	0.0024	0.24	2474.0000	1.0190 (ppm)
K (766.491 nm)	5.0960	ppm	0.1003	1.97	4890.0000	5.0960 (ppm)
Li (670.783 nm)	1.0110	ppm	0.0042	0.41	55620.0000	1.0110 (ppm)
Mg (279.078 nm)	5.0430	ppm	0.0272	0.54	11790.0000	5.0430 (ppm)
Mn (259.372 nm)	1.0120	ppm	0.0046	0.45	85460.0000	1.0120 (ppm)
Mo (204.598 nm)	1.0220	ppm	0.0062	0.60	3432.0000	1.0220 (ppm)
Na (589.592 nm)	5.3210 Q	ppm	0.0129	0.24	30050.0000 Q	5.3210 Q (ppm)
Ni (231.604 nm)	1.0050	ppm	0.0037	0.36	3896.0000	1.0050 (ppm)
P (213.618 nm)	2.0670	ppm	0.0126	0.61	1422.0000	2.0670 (ppm)
Pb (220.353 nm)	1.0030	ppm	0.0063	0.62	1741.0000	1.0030 (ppm)
Sb (206.834 nm)	0.9767	ppm	0.0328	3.36	760.7000	0.9767 (ppm)
Se (196.026 nm)	1.9910	ppm	0.0137	0.69	1121.0000	1.9910 (ppm)
Si (251.611 nm)	1.9970	ppm	0.0251	1.26	4149.0000	1.9970 (ppm)
Sn (189.925 nm)	1.9890	ppm	0.0171	0.86	982.3000	1.9890 (ppm)
Sr (421.552 nm)	1.0090	ppm	0.0033	0.33	333800.0000	1.0090 (ppm)
Ti (336.122 nm)	1.0040	ppm	0.0084	0.84	94970.0000	1.0040 (ppm)
Tl (190.794 nm)	1.9950	ppm	0.0209	1.05	1785.0000	1.9950 (ppm)
V (292.401 nm)	1.0100	ppm	0.0041	0.41	26810.0000	1.0100 (ppm)
W (207.912 nm)	0.9834	ppm	0.0047	0.47	1416.0000	0.9834 (ppm)
Zn (202.548 nm)	1.0170	ppm	0.0052	0.51	13210.0000	1.0170 (ppm)
Zr (343.823 nm)	1.0290	ppm	0.0104	1.01	78040.0000	1.0290 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9952	344500.0000	0.0049	0.49
Y_R 371.029	1.0030	48750.0000	0.0051	0.51

Sample Name: ICV2 5993207

Date: 12/10/2019 9:33:53 AM Rack:Tube: S1:11

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0022	ppm	0.0009	40.33	11.6400	0.0022 (ppm)
Al (396.152 nm)	0.0005	ppm	0.0001	13.93	-306.4000	0.0005 (ppm)
As (188.980 nm)	0.0035	ppm	0.0035	99.21	3.4730	0.0035 (ppm)
B (249.678 nm)	0.0009	ppm	0.0000	2.52	-5.3580	0.0009 (ppm)
Ba (233.527 nm)	0.0006	ppm	0.0002	29.02	87.9600	0.0006 (ppm)
Be (234.861 nm)	0.0004	ppm	0.0001	16.69	77.5900	0.0004 (ppm)
Ca (422.673 nm)	-0.0185 u	ppm	0.0141	76.51	49.6100	-0.0185 u (ppm)
Cd (214.439 nm)	0.0006	ppm	0.0002	31.92	7.1450	0.0006 (ppm)
Co (228.615 nm)	0.0003 u	ppm	0.0006	> 100.00	-9.2150	0.0003 u (ppm)
Cr (205.560 nm)	-0.0003 u	ppm	0.0005	> 100.00	0.7630	-0.0003 u (ppm)
Cu (324.754 nm)	0.0008	ppm	0.0003	43.91	68.9800	0.0008 (ppm)
Fe (238.204 nm)	0.0016 u	ppm	0.0062	> 100.00	-46.0500	0.0016 u (ppm)
K (766.491 nm)	0.0146 u	ppm	0.0813	> 100.00	-63.9600	0.0146 u (ppm)
Li (670.783 nm)	0.0015	ppm	0.0007	46.08	134.2000	0.0015 (ppm)
Mg (279.078 nm)	0.0055	ppm	0.0026	47.30	23.6500	0.0055 (ppm)
Mn (259.372 nm)	0.0004	ppm	0.0002	60.57	80.7300	0.0004 (ppm)
Mo (204.598 nm)	0.0090	ppm	0.0022	24.72	26.0800	0.0090 (ppm)
Na (589.592 nm)	4.6360 Q	ppm	0.0033	0.07	26240.0000 Q	4.6360 Q (ppm)
Ni (231.604 nm)	0.0027	ppm	0.0012	45.72	-5.2150	0.0027 (ppm)
P (213.618 nm)	0.0031	ppm	0.0025	81.09	2.3480	0.0031 (ppm)
Pb (220.353 nm)	0.0006 u	ppm	0.0024	> 100.00	-10.3400	0.0006 u (ppm)
Sb (206.834 nm)	0.0101	ppm	0.0065	63.93	4.5400	0.0101 (ppm)
Se (196.026 nm)	0.0006 u	ppm	0.0013	> 100.00	-0.2975	0.0006 u (ppm)
Si (251.611 nm)	0.0027	ppm	0.0028	> 100.00	17.0100	0.0027 (ppm)
Sn (189.925 nm)	0.0097	ppm	0.0032	32.96	3.3400	0.0097 (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0002	> 100.00	51.4100	0.0002 (ppm)
Ti (336.122 nm)	0.0032	ppm	0.0005	16.63	172.5000	0.0032 (ppm)
Tl (190.794 nm)	0.0068	ppm	0.0024	34.99	10.6100	0.0068 (ppm)
V (292.401 nm)	0.0003	ppm	0.0000	3.44	93.8300	0.0003 (ppm)
W (207.912 nm)	0.0047	ppm	0.0015	30.61	2.5740	0.0047 (ppm)
Zn (202.548 nm)	0.0093	ppm	0.0000	0.43	133.0000	0.0093 (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0001	> 100.00	105.3000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0010	346400.0000	0.0062	0.62
Y_R 371.029	1.0030	48710.0000	0.0007	0.07

Sample Name: ICV2 5993207

Date: 12/10/2019 9:39:49 AM Rack:Tube: S1:11

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0004	ppm	0.0005	> 100.00	-53.2900	0.0004 (ppm)
Al (396.152 nm)	-0.0007 u	ppm	0.0002	25.94	-342.2000	-0.0007 u (ppm)
As (188.980 nm)	-0.0033 u	ppm	0.0063	> 100.00	-0.1654	-0.0033 u (ppm)
B (249.678 nm)	0.0006	ppm	0.0004	71.29	-8.5930	0.0006 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	43.1100	0.0000 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	31.53	34.5100	0.0001 (ppm)
Ca (422.673 nm)	-0.0081 u	ppm	0.0037	45.12	88.4200	-0.0081 u (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	74.23	-5.8020	-0.0001 u (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0003	> 100.00	-11.4300	0.0001 u (ppm)
Cr (205.560 nm)	-0.0002 u	ppm	0.0002	89.16	1.0100	-0.0002 u (ppm)
Cu (324.754 nm)	0.0008	ppm	0.0003	33.26	71.2400	0.0008 (ppm)
Fe (238.204 nm)	0.0021 u	ppm	0.0036	> 100.00	-45.0000	0.0021 u (ppm)
K (766.491 nm)	0.1271	ppm	0.0915	72.03	45.3800	0.1271 (ppm)
Li (670.783 nm)	-0.0002 u	ppm	0.0004	> 100.00	40.9700	-0.0002 u (ppm)
Mg (279.078 nm)	0.0037	ppm	0.0028	75.41	19.5200	0.0037 (ppm)
Mn (259.372 nm)	0.0000 u	ppm	0.0002	> 100.00	43.9500	0.0000 u (ppm)
Mo (204.598 nm)	0.0014	ppm	0.0007	51.91	0.7059	0.0014 (ppm)
Na (589.592 nm)	4.9590	ppm	0.0089	0.18	28000.0000	4.9590 (ppm)
Ni (231.604 nm)	0.0017	ppm	0.0015	90.72	-8.9880	0.0017 (ppm)
P (213.618 nm)	-0.0062 u	ppm	0.0061	98.69	-4.1010	-0.0062 u (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0006	50.25	-13.5400	-0.0013 u (ppm)
Sb (206.834 nm)	0.0075	ppm	0.0033	43.43	2.6090	0.0075 (ppm)
Se (196.026 nm)	0.0011 u	ppm	0.0045	> 100.00	-0.0732	0.0011 u (ppm)
Si (251.611 nm)	-0.0004 u	ppm	0.0001	31.12	9.8300	-0.0004 u (ppm)
Sn (189.925 nm)	0.0035	ppm	0.0017	48.62	0.3053	0.0035 (ppm)
Sr (421.552 nm)	0.0000 u	ppm	0.0000	> 100.00	-26.2600	0.0000 u (ppm)
Ti (336.122 nm)	0.0002	ppm	0.0003	> 100.00	-115.4000	0.0002 (ppm)
Tl (190.794 nm)	0.0044	ppm	0.0021	47.97	8.5200	0.0044 (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0001	> 100.00	83.7500	-0.0001 u (ppm)
W (207.912 nm)	0.0017	ppm	0.0017	99.49	-1.8670	0.0017 (ppm)
Zn (202.548 nm)	0.0029	ppm	0.0006	20.04	49.7700	0.0029 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0000	25.17	92.1500	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0010	346600.0000	0.0057	0.57
Y_R 371.029	1.0040	48780.0000	0.0057	0.57

Sample Name: IPC2 5993207

Date: 12/10/2019 9:42:09 AM Rack:Tube: S1:11

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0003	> 100.00	-65.2900	0.0001 u (ppm)
Al (396.152 nm)	-0.0009 u	ppm	0.0001	9.67	-346.8000	-0.0009 u (ppm)
As (188.980 nm)	0.0010	ppm	0.0006	60.48	2.1260	0.0010 (ppm)
B (249.678 nm)	0.0005 u	ppm	0.0008	> 100.00	-9.0360	0.0005 u (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	53.15	36.4600	-0.0001 u (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	59.50	27.5800	0.0000 (ppm)
Ca (422.673 nm)	-0.0108 u	ppm	0.0025	23.58	78.5900	-0.0108 u (ppm)
Cd (214.439 nm)	-0.0003 u	ppm	0.0000	2.33	-7.8470	-0.0003 u (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0002	> 100.00	-11.7700	0.0001 u (ppm)
Cr (205.560 nm)	-0.0004 u	ppm	0.0002	44.01	0.3696	-0.0004 u (ppm)
Cu (324.754 nm)	0.0002	ppm	0.0002	77.17	49.7700	0.0002 (ppm)
Fe (238.204 nm)	-0.0012 u	ppm	0.0028	> 100.00	-53.1700	-0.0012 u (ppm)
K (766.491 nm)	-0.0440 u	ppm	0.0400	90.88	-121.0000	-0.0440 u (ppm)
Li (670.783 nm)	0.0002 u	ppm	0.0008	> 100.00	61.9200	0.0002 u (ppm)
Mg (279.078 nm)	0.0015	ppm	0.0009	63.35	14.2200	0.0015 (ppm)
Mn (259.372 nm)	-0.0001 u	ppm	0.0000	62.62	40.7000	-0.0001 u (ppm)
Mo (204.598 nm)	0.0014 u	ppm	0.0023	> 100.00	0.6268	0.0014 u (ppm)
Na (589.592 nm)	4.9530	ppm	0.0527	1.06	27970.0000	4.9530 (ppm)
Ni (231.604 nm)	0.0013	ppm	0.0007	53.90	-10.4500	0.0013 (ppm)
P (213.618 nm)	0.0030	ppm	0.0012	39.08	2.4180	0.0030 (ppm)
Pb (220.353 nm)	0.0004 u	ppm	0.0029	> 100.00	-10.7200	0.0004 u (ppm)
Sb (206.834 nm)	0.0043	ppm	0.0017	38.09	0.1151	0.0043 (ppm)
Se (196.026 nm)	-0.0021 u	ppm	0.0038	> 100.00	-1.8710	-0.0021 u (ppm)
Si (251.611 nm)	0.0005 u	ppm	0.0007	> 100.00	11.3300	0.0005 u (ppm)
Sn (189.925 nm)	0.0037	ppm	0.0045	> 100.00	0.4047	0.0037 (ppm)
Sr (421.552 nm)	-0.0001 u	ppm	0.0001	> 100.00	-40.3300	-0.0001 u (ppm)
Ti (336.122 nm)	-0.0002 u	ppm	0.0000	7.79	-152.1000	-0.0002 u (ppm)
Tl (190.794 nm)	-0.0016 u	ppm	0.0067	> 100.00	3.0870	-0.0016 u (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0002	> 100.00	82.9200	-0.0001 u (ppm)
W (207.912 nm)	0.0002 u	ppm	0.0013	> 100.00	-4.0550	0.0002 u (ppm)
Zn (202.548 nm)	0.0031	ppm	0.0003	11.29	52.5000	0.0031 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	47.95	94.4000	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0010	346600.0000	0.0042	0.42
Y_R 371.029	0.9996	48570.0000	0.0065	0.65

Sample Name: ICB 5993195

Date: 12/10/2019 9:44:29 AM
Rack:Tube: S1:1
Weight (g): 1
Volume (mL): 1
Dilution: 1

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0002	> 100.00	-65.4200	0.0001 u (ppm)
Al (396.152 nm)	-0.0003 u	ppm	0.0002	58.04	-332.9000	-0.0003 u (ppm)
As (188.980 nm)	0.0005	ppm	0.0004	75.21	1.8750	0.0005 (ppm)
B (249.678 nm)	0.0016	ppm	0.0003	18.49	2.0330	0.0016 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0001	68.20	33.7700	-0.0001 u (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	12.44	26.6600	0.0000 (ppm)
Ca (422.673 nm)	-0.0181 u	ppm	0.0069	38.19	51.1600	-0.0181 u (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	37.65	1.0350	0.0002 (ppm)
Co (228.615 nm)	-0.0005 u	ppm	0.0005	> 100.00	-18.4300	-0.0005 u (ppm)
Cr (205.560 nm)	0.0000 u	ppm	0.0001	> 100.00	1.9210	0.0000 u (ppm)
Cu (324.754 nm)	0.0006	ppm	0.0002	41.48	63.2200	0.0006 (ppm)
Fe (238.204 nm)	0.0019	ppm	0.0026	> 100.00	-45.3900	0.0019 (ppm)
K (766.491 nm)	-0.0230 u	ppm	0.0226	98.11	-100.6000	-0.0230 u (ppm)
Li (670.783 nm)	0.0005	ppm	0.0001	10.57	82.0900	0.0005 (ppm)
Mg (279.078 nm)	0.0038	ppm	0.0008	19.80	19.7000	0.0038 (ppm)
Mn (259.372 nm)	0.0000	ppm	0.0000	67.46	50.2700	0.0000 (ppm)
Mo (204.598 nm)	0.0008	ppm	0.0004	50.57	-1.3830	0.0008 (ppm)
Na (589.592 nm)	0.0030	ppm	0.0013	43.59	929.6000	0.0030 (ppm)
Ni (231.604 nm)	0.0014	ppm	0.0003	17.84	-10.1300	0.0014 (ppm)
P (213.618 nm)	-0.0004 u	ppm	0.0050	> 100.00	0.0044	-0.0004 u (ppm)
Pb (220.353 nm)	-0.0022 u	ppm	0.0015	70.92	-15.1300	-0.0022 u (ppm)
Sb (206.834 nm)	0.0070	ppm	0.0041	57.82	2.2300	0.0070 (ppm)
Se (196.026 nm)	0.0091	ppm	0.0018	19.19	4.4160	0.0091 (ppm)
Si (251.611 nm)	-0.0012 u	ppm	0.0019	> 100.00	8.0360	-0.0012 u (ppm)
Sn (189.925 nm)	0.0014 u	ppm	0.0030	> 100.00	-0.7338	0.0014 u (ppm)
Sr (421.552 nm)	0.0000 u	ppm	0.0000	> 100.00	-29.6800	0.0000 u (ppm)
Ti (336.122 nm)	0.0000 u	ppm	0.0000	85.04	-136.5000	0.0000 u (ppm)
Tl (190.794 nm)	0.0043	ppm	0.0023	52.91	8.4140	0.0043 (ppm)
V (292.401 nm)	-0.0004 u	ppm	0.0001	28.46	77.2300	-0.0004 u (ppm)
W (207.912 nm)	-0.0001 u	ppm	0.0006	> 100.00	-4.4340	-0.0001 u (ppm)
Zn (202.548 nm)	0.0000 u	ppm	0.0000	92.24	12.1600	0.0000 u (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0002	> 100.00	104.5000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9976	345300.0000	0.0048	0.48
Y_R 371.029	0.9979	48480.0000	0.0040	0.40

Sample Name: ICSA 5993200

Date: 12/10/2019 9:46:47 AM
Rack:Tube: S1:6

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0063 u	ppm	0.0005	7.46	-340.9000	-0.0063 u (ppm)
Al (396.152 nm)	651.4000 o	ppm	1.6550	0.25	16140000.0000	651.4000 o (ppm)
As (188.980 nm)	-0.0088 u	ppm	0.0072	80.94	-28.4600	-0.0088 u (ppm)
B (249.678 nm)	-0.0032 u	ppm	0.0017	53.23	-625.1000	-0.0032 u (ppm)
Ba (233.527 nm)	0.0022	ppm	0.0001	6.50	334.2000	0.0022 (ppm)
Be (234.861 nm)	-0.0003 u	ppm	0.0022	> 100.00	7503.0000	-0.0003 u (ppm)
Ca (422.673 nm)	620.1000 o	ppm	2.2200	0.36	2330000.0000	620.1000 o (ppm)
Cd (214.439 nm)	0.0011	ppm	0.0008	78.35	89.1700	0.0011 (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0048	> 100.00	58.9000	0.0001 u (ppm)
Cr (205.560 nm)	0.0025	ppm	0.0030	> 100.00	29.7400	0.0025 (ppm)
Cu (324.754 nm)	0.0047	ppm	0.0003	7.24	56.4000	0.0047 (ppm)
Fe (238.204 nm)	568.1000 o	ppm	0.3155	0.06	1408000.0000	568.1000 o (ppm)
K (766.491 nm)	-0.3978 u	ppm	0.0478	12.01	-92.6300	-0.3978 u (ppm)
Li (670.783 nm)	-0.0169 u	ppm	0.0001	0.36	388.7000	-0.0169 u (ppm)
Mg (279.078 nm)	576.7000 o	ppm	2.2950	0.40	1347000.0000	576.7000 o (ppm)
Mn (259.372 nm)	-0.0089 u	ppm	0.0034	37.56	61610.0000	-0.0089 u (ppm)
Mo (204.598 nm)	-0.0013 u	ppm	0.0005	41.19	51.6200	-0.0013 u (ppm)
Na (589.592 nm)	-0.5713 u	ppm	0.0098	1.71	2706.0000	-0.5713 u (ppm)
Ni (231.604 nm)	0.0072	ppm	0.0008	11.42	-21.1500	0.0072 (ppm)
P (213.618 nm)	-0.0462 u	ppm	0.0222	48.04	-14.2100	-0.0462 u (ppm)
Pb (220.353 nm)	-0.0046 u	ppm	0.0006	13.04	294.2000	-0.0046 u (ppm)
Sb (206.834 nm)	0.0193 u	ppm	0.0390	> 100.00	-0.9407	0.0193 u (ppm)
Se (196.026 nm)	-0.0030 u	ppm	0.0061	> 100.00	-61.1700	-0.0030 u (ppm)
Si (251.611 nm)	-0.0491 u	ppm	0.0059	12.06	-35.3700	-0.0491 u (ppm)
Sn (189.925 nm)	-0.0159 u	ppm	0.0020	12.83	-8.1190	-0.0159 u (ppm)
Sr (421.552 nm)	-0.0070 u	ppm	0.0001	1.17	3984.0000	-0.0070 u (ppm)
Ti (336.122 nm)	-0.0007 u	ppm	0.0001	9.21	-668.1000	-0.0007 u (ppm)
Tl (190.794 nm)	-0.0026 u	ppm	0.0061	> 100.00	31.9500	-0.0026 u (ppm)
V (292.401 nm)	0.0005 u	ppm	0.0009	> 100.00	763.3000	0.0005 u (ppm)
W (207.912 nm)	-0.0089 u	ppm	0.0092	> 100.00	-35.3200	-0.0089 u (ppm)
Zn (202.548 nm)	0.0023	ppm	0.0004	18.80	-110.0000	0.0023 (ppm)
Zr (343.823 nm)	0.1729	ppm	0.0002	0.10	919.8000	0.1729 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
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Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8848	306300.0000	0.0034	0.39
Y_R 371.029	0.9409	45710.0000	0.0047	0.50

Sample Name: ICSAB 5993202

Date: 12/10/2019 9:49:05 AM Rack:Tube: S1:7

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2684	ppm	0.0014	0.51	9725.0000	0.2684 (ppm)
Al (396.152 nm)	658.5000 o	ppm	3.3030	0.50	16320000.0000	658.5000 o (ppm)
As (188.980 nm)	0.4906	ppm	0.0023	0.46	234.0000	0.4906 (ppm)
B (249.678 nm)	0.5188	ppm	0.0075	1.44	4427.0000	0.5188 (ppm)
Ba (233.527 nm)	0.4652	ppm	0.0001	0.03	35300.0000	0.4652 (ppm)
Be (234.861 nm)	0.5231	ppm	0.0070	1.35	85290.0000	0.5231 (ppm)
Ca (422.673 nm)	618.3000 o	ppm	1.6900	0.27	2323000.0000	618.3000 o (ppm)
Cd (214.439 nm)	0.4506	ppm	0.0017	0.39	8491.0000	0.4506 (ppm)
Co (228.615 nm)	0.4524	ppm	0.0022	0.48	5160.0000	0.4524 (ppm)
Cr (205.560 nm)	0.4888	ppm	0.0008	0.16	1906.0000	0.4888 (ppm)
Cu (324.754 nm)	0.5732	ppm	0.0035	0.62	20180.0000	0.5732 (ppm)
Fe (238.204 nm)	571.2000 o	ppm	1.1280	0.20	1416000.0000	571.2000 o (ppm)
K (766.491 nm)	4.9170	ppm	0.0879	1.79	5081.0000	4.9170 (ppm)
Li (670.783 nm)	0.5144	ppm	0.0006	0.11	29650.0000	0.5144 (ppm)
Mg (279.078 nm)	577.4000 o	ppm	1.0490	0.18	1349000.0000	577.4000 o (ppm)
Mn (259.372 nm)	0.4758	ppm	0.0052	1.09	102900.0000	0.4758 (ppm)
Mo (204.598 nm)	0.4912	ppm	0.0051	1.04	1708.0000	0.4912 (ppm)
Na (589.592 nm)	4.6690	ppm	0.0146	0.31	31390.0000	4.6690 (ppm)
Ni (231.604 nm)	0.4489	ppm	0.0036	0.80	1698.0000	0.4489 (ppm)
P (213.618 nm)	0.4890	ppm	0.0131	2.68	342.4000	0.4890 (ppm)
Pb (220.353 nm)	0.4570	ppm	0.0159	3.47	1102.0000	0.4570 (ppm)
Sb (206.834 nm)	0.5598	ppm	0.0404	7.22	422.2000	0.5598 (ppm)
Se (196.026 nm)	0.4587	ppm	0.0003	0.08	199.5000	0.4587 (ppm)
Si (251.611 nm)	2.6120	ppm	0.0129	0.49	5338.0000	2.6120 (ppm)
Sn (189.925 nm)	0.4534	ppm	0.0074	1.64	224.1000	0.4534 (ppm)
Sr (421.552 nm)	0.5004	ppm	0.0005	0.11	171900.0000	0.5004 (ppm)
Ti (336.122 nm)	0.5242	ppm	0.0022	0.43	49050.0000	0.5242 (ppm)
Tl (190.794 nm)	0.4349	ppm	0.0143	3.28	415.1000	0.4349 (ppm)
V (292.401 nm)	0.5096	ppm	0.0029	0.57	14240.0000	0.5096 (ppm)
W (207.912 nm)	0.4292	ppm	0.0051	1.18	597.2000	0.4292 (ppm)
Zn (202.548 nm)	0.4258	ppm	0.0003	0.07	5399.0000	0.4258 (ppm)
Zr (343.823 nm)	0.4633	ppm	0.0095	2.05	22840.0000	0.4633 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8832	305700.0000	0.0035	0.40
Y_R 371.029	0.9463	45980.0000	0.0007	0.07

Sample Name: xRINSE 5993206

Date: 12/10/2019 9:51:23 AM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002 u	ppm	0.0004	> 100.00	-60.7400	0.0002 u (ppm)
Al (396.152 nm)	0.1522 Z	ppm	0.0617	40.57	3448.0000 Z	0.1522 Z (ppm)
As (188.980 nm)	-0.0039 u	ppm	0.0034	86.38	-0.5053	-0.0039 u (ppm)
B (249.678 nm)	0.0007	ppm	0.0006	84.74	-7.2690	0.0007 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	43.0600	0.0000 u (ppm)
Be (234.861 nm)	0.0002	ppm	0.0001	36.99	46.2800	0.0002 (ppm)
Ca (422.673 nm)	0.0855	ppm	0.0086	10.10	440.0000	0.0855 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0001	> 100.00	-2.1200	0.0001 u (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0006	> 100.00	-11.6100	0.0001 u (ppm)
Cr (205.560 nm)	-0.0007 u	ppm	0.0000	1.18	-0.9274	-0.0007 u (ppm)
Cu (324.754 nm)	0.0007	ppm	0.0000	1.91	66.0300	0.0007 (ppm)
Fe (238.204 nm)	0.1195 Z	ppm	0.0024	2.02	245.9000 Z	0.1195 Z (ppm)
K (766.491 nm)	0.0815	ppm	0.0588	72.08	1.2060	0.0815 (ppm)
Li (670.783 nm)	0.0000 u	ppm	0.0009	> 100.00	56.1900	0.0000 u (ppm)
Mg (279.078 nm)	0.1667 Z	ppm	0.0669	40.14	400.2000 Z	0.1667 Z (ppm)
Mn (259.372 nm)	0.0004	ppm	0.0002	45.30	93.5200	0.0004 (ppm)
Mo (204.598 nm)	0.0036	ppm	0.0019	53.22	8.0400	0.0036 (ppm)
Na (589.592 nm)	0.0019 u	ppm	0.0106	> 100.00	924.8000	0.0019 u (ppm)
Ni (231.604 nm)	0.0021	ppm	0.0003	16.06	-7.3890	0.0021 (ppm)
P (213.618 nm)	0.0015 u	ppm	0.0072	> 100.00	1.2940	0.0015 u (ppm)
Pb (220.353 nm)	0.0004 u	ppm	0.0049	> 100.00	-10.6000	0.0004 u (ppm)
Sb (206.834 nm)	0.0074	ppm	0.0023	31.02	2.4610	0.0074 (ppm)
Se (196.026 nm)	0.0026	ppm	0.0010	38.42	0.7765	0.0026 (ppm)
Si (251.611 nm)	0.0012	ppm	0.0013	> 100.00	13.5300	0.0012 (ppm)
Sn (189.925 nm)	0.0014	ppm	0.0010	68.53	-0.7608	0.0014 (ppm)
Sr (421.552 nm)	-0.0001 u	ppm	0.0001	> 100.00	-37.9400	-0.0001 u (ppm)
Ti (336.122 nm)	0.0001	ppm	0.0001	63.91	-121.8000	0.0001 (ppm)
Tl (190.794 nm)	0.0089	ppm	0.0045	50.50	12.5500	0.0089 (ppm)
V (292.401 nm)	0.0001 u	ppm	0.0004	> 100.00	90.0100	0.0001 u (ppm)
W (207.912 nm)	0.0055	ppm	0.0030	54.89	3.6320	0.0055 (ppm)
Zn (202.548 nm)	0.0059	ppm	0.0001	1.20	89.4100	0.0059 (ppm)
Zr (343.823 nm)	0.0003	ppm	0.0000	5.70	125.9000	0.0003 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0020	346900.0000	0.0009	0.09
Y_R 371.029	1.0050	48830.0000	0.0032	0.32

Sample Name: XICIS 5993205

Date: 12/10/2019 9:53:43 AM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002 u	ppm	0.0004	> 100.00	-60.0600	0.0002 u (ppm)
Al (396.152 nm)	0.0248	ppm	0.0044	17.76	290.1000	0.0248 (ppm)
As (188.980 nm)	0.0029 u	ppm	0.0136	> 100.00	3.1110	0.0029 u (ppm)
B (249.678 nm)	0.0002 u	ppm	0.0008	> 100.00	-11.5900	0.0002 u (ppm)
Ba (233.527 nm)	-0.0002 u	ppm	0.0001	41.08	25.8300	-0.0002 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	24.27	32.9100	0.0001 (ppm)
Ca (422.673 nm)	0.0029	ppm	0.0015	53.91	129.7000	0.0029 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0003	> 100.00	-3.6920	0.0000 u (ppm)
Co (228.615 nm)	0.0005 u	ppm	0.0009	> 100.00	-7.7750	0.0005 u (ppm)
Cr (205.560 nm)	-0.0002 u	ppm	0.0000	17.62	0.8610	-0.0002 u (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0000	> 100.00	41.5000	0.0000 u (ppm)
Fe (238.204 nm)	0.0259	ppm	0.0003	1.14	14.1200	0.0259 (ppm)
K (766.491 nm)	0.0466 u	ppm	0.0752	> 100.00	-32.9000	0.0466 u (ppm)
Li (670.783 nm)	0.0001 u	ppm	0.0014	> 100.00	59.1400	0.0001 u (ppm)
Mg (279.078 nm)	0.0292 Z	ppm	0.0004	1.45	78.9300 Z	0.0292 Z (ppm)
Mn (259.372 nm)	0.0001	ppm	0.0001	66.50	60.1400	0.0001 (ppm)
Mo (204.598 nm)	0.0009	ppm	0.0004	43.36	-1.0670	0.0009 (ppm)
Na (589.592 nm)	0.0101	ppm	0.0111	> 100.00	968.5000	0.0101 (ppm)
Ni (231.604 nm)	0.0015	ppm	0.0003	21.54	-9.5760	0.0015 (ppm)
P (213.618 nm)	-0.0037 u	ppm	0.0078	> 100.00	-2.3340	-0.0037 u (ppm)
Pb (220.353 nm)	-0.0024 u	ppm	0.0001	5.51	-15.5900	-0.0024 u (ppm)
Sb (206.834 nm)	0.0040	ppm	0.0001	2.32	-0.1129	0.0040 (ppm)
Se (196.026 nm)	0.0039 u	ppm	0.0099	> 100.00	1.5200	0.0039 u (ppm)
Si (251.611 nm)	0.0014 u	ppm	0.0031	> 100.00	13.5800	0.0014 u (ppm)
Sn (189.925 nm)	0.0046	ppm	0.0013	29.39	0.8123	0.0046 (ppm)
Sr (421.552 nm)	0.0000 u	ppm	0.0001	> 100.00	-18.9200	0.0000 u (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0000	7.40	-142.3000	-0.0001 u (ppm)
Tl (190.794 nm)	0.0019	ppm	0.0003	15.59	6.2250	0.0019 (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0001	39.84	82.9900	-0.0001 u (ppm)
W (207.912 nm)	0.0001 u	ppm	0.0004	> 100.00	-4.0990	0.0001 u (ppm)
Zn (202.548 nm)	0.0058	ppm	0.0000	0.78	87.6100	0.0058 (ppm)
Zr (343.823 nm)	0.0001	ppm	0.0000	38.86	113.0000	0.0001 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9986	345700.0000	0.0058	0.58
Y_R 371.029	1.0030	48720.0000	0.0019	0.19

Sample Name: XCRI 5993203

Date: 12/10/2019 9:56:01 AM
Rack:Tube: S1:9

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0053	ppm	0.0002	4.18	133.1000	0.0053 (ppm)
Al (396.152 nm)	0.1042	ppm	0.0019	1.81	2294.0000	0.1042 (ppm)
As (188.980 nm)	0.0087	ppm	0.0056	64.83	6.2280	0.0087 (ppm)
B (249.678 nm)	0.0493	ppm	0.0007	1.32	458.7000	0.0493 (ppm)
Ba (233.527 nm)	0.0097	ppm	0.0000	0.35	773.1000	0.0097 (ppm)
Be (234.861 nm)	0.0020	ppm	0.0000	2.06	320.4000	0.0020 (ppm)
Ca (422.673 nm)	0.0957	ppm	0.0011	1.12	478.1000	0.0957 (ppm)
Cd (214.439 nm)	0.0050	ppm	0.0000	0.33	89.7200	0.0050 (ppm)
Co (228.615 nm)	0.0098	ppm	0.0006	6.13	98.0100	0.0098 (ppm)
Cr (205.560 nm)	0.0047	ppm	0.0002	3.21	19.9600	0.0047 (ppm)
Cu (324.754 nm)	0.0098	ppm	0.0006	6.14	389.9000	0.0098 (ppm)
Fe (238.204 nm)	0.1146	ppm	0.0010	0.90	233.9000	0.1146 (ppm)
K (766.491 nm)	0.5324	ppm	0.0447	8.39	440.0000	0.5324 (ppm)
Li (670.783 nm)	0.0511	ppm	0.0005	0.88	2869.0000	0.0511 (ppm)
Mg (279.078 nm)	0.0338 R	ppm	0.0025	7.28	89.5500 R	0.0338 R (ppm)
Mn (259.372 nm)	0.0187	ppm	0.0000	0.16	1635.0000	0.0187 (ppm)
Mo (204.598 nm)	0.0212	ppm	0.0008	3.79	67.0700	0.0212 (ppm)
Na (589.592 nm)	0.4955	ppm	0.0128	2.58	3625.0000	0.4955 (ppm)
Ni (231.604 nm)	0.0098	ppm	0.0005	4.97	22.5200	0.0098 (ppm)
P (213.618 nm)	0.2068	ppm	0.0041	1.97	146.1000	0.2068 (ppm)
Pb (220.353 nm)	-0.0001 Ru	ppm	0.0016	> 100.00	-11.5800 R	-0.0001 Ru (ppm)
Sb (206.834 nm)	0.0139	ppm	0.0074	53.42	7.3630	0.0139 (ppm)
Se (196.026 nm)	0.0132	ppm	0.0018	13.62	7.1460	0.0132 (ppm)
Si (251.611 nm)	0.1980	ppm	0.0008	0.41	417.1000	0.1980 (ppm)
Sn (189.925 nm)	0.0995	ppm	0.0016	1.64	47.7900	0.0995 (ppm)
Sr (421.552 nm)	0.0200	ppm	0.0001	0.69	6614.0000	0.0200 (ppm)
Ti (336.122 nm)	0.0047	ppm	0.0002	3.79	311.6000	0.0047 (ppm)
Tl (190.794 nm)	0.0119	ppm	0.0010	8.50	15.1100	0.0119 (ppm)
V (292.401 nm)	0.0100	ppm	0.0006	5.69	348.8000	0.0100 (ppm)
W (207.912 nm)	0.0913	ppm	0.0031	3.37	126.7000	0.0913 (ppm)
Zn (202.548 nm)	0.0228	ppm	0.0002	0.67	307.5000	0.0228 (ppm)
Zr (343.823 nm)	0.1014	ppm	0.0029	2.87	7789.0000	0.1014 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0030	347300.0000	0.0011	0.11
Y_R 371.029	1.0080	48950.0000	0.0041	0.41

Sample Name: CRI 5993204

Date: 12/10/2019 9:58:21 AM
Rack:Tube: S1:10

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0109	ppm	0.0003	2.31	346.1000	0.0109 (ppm)
Al (396.152 nm)	0.1958	ppm	0.0012	0.62	4603.0000	0.1958 (ppm)
As (188.980 nm)	0.0228	ppm	0.0004	1.76	13.7500	0.0228 (ppm)
B (249.678 nm)	0.0995	ppm	0.0004	0.41	939.1000	0.0995 (ppm)
Ba (233.527 nm)	0.0205	ppm	0.0000	0.15	1586.0000	0.0205 (ppm)
Be (234.861 nm)	0.0040	ppm	0.0000	0.17	623.6000	0.0040 (ppm)
Ca (422.673 nm)	0.1910	ppm	0.0087	4.57	836.0000	0.1910 (ppm)
Cd (214.439 nm)	0.0102	ppm	0.0000	0.11	188.1000	0.0102 (ppm)
Co (228.615 nm)	0.0197	ppm	0.0007	3.64	209.5000	0.0197 (ppm)
Cr (205.560 nm)	0.0101	ppm	0.0002	1.78	41.0900	0.0101 (ppm)
Cu (324.754 nm)	0.0198	ppm	0.0001	0.60	744.8000	0.0198 (ppm)
Fe (238.204 nm)	0.2076	ppm	0.0000	0.02	464.5000	0.2076 (ppm)
K (766.491 nm)	1.0670	ppm	0.1582	14.83	960.0000	1.0670 (ppm)
Li (670.783 nm)	0.1005	ppm	0.0021	2.13	5594.0000	0.1005 (ppm)
Mg (279.078 nm)	0.0518	ppm	0.0018	3.50	131.4000	0.0518 (ppm)
Mn (259.372 nm)	0.0381	ppm	0.0001	0.18	3286.0000	0.0381 (ppm)
Mo (204.598 nm)	0.0424	ppm	0.0004	0.85	138.6000	0.0424 (ppm)
Na (589.592 nm)	0.9925	ppm	0.0010	0.10	6344.0000	0.9925 (ppm)
Ni (231.604 nm)	0.0212	ppm	0.0006	2.80	66.7800	0.0212 (ppm)
P (213.618 nm)	0.4069	ppm	0.0022	0.53	287.0000	0.4069 (ppm)
Pb (220.353 nm)	0.0079	ppm	0.0003	3.63	2.4500	0.0079 (ppm)
Sb (206.834 nm)	0.0142	ppm	0.0029	20.43	7.3320	0.0142 (ppm)
Se (196.026 nm)	0.0164	ppm	0.0007	4.40	9.4390	0.0164 (ppm)
Si (251.611 nm)	0.3990	ppm	0.0027	0.68	830.2000	0.3990 (ppm)
Sn (189.925 nm)	0.1947	ppm	0.0029	1.47	94.8600	0.1947 (ppm)
Sr (421.552 nm)	0.0402	ppm	0.0005	1.16	13270.0000	0.0402 (ppm)
Ti (336.122 nm)	0.0097	ppm	0.0000	0.50	791.5000	0.0097 (ppm)
Tl (190.794 nm)	0.0227	ppm	0.0002	0.86	24.7100	0.0227 (ppm)
V (292.401 nm)	0.0197	ppm	0.0001	0.66	603.1000	0.0197 (ppm)
W (207.912 nm)	0.1894	ppm	0.0021	1.12	267.5000	0.1894 (ppm)
Zn (202.548 nm)	0.0425	ppm	0.0002	0.37	563.1000	0.0425 (ppm)
Zr (343.823 nm)	0.2055	ppm	0.0026	1.29	15670.0000	0.2055 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0060	348100.0000	0.0027	0.27
Y_R 371.029	1.0040	48800.0000	0.0037	0.37

Sample Name: XCRI 5993203

Date: 12/10/2019 10:05:17 AM Rack:Tube: S1:9

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0055	ppm	0.0000	0.59	138.0000	0.0055 (ppm)
Al (396.152 nm)	0.0991	ppm	0.0007	0.72	2162.0000	0.0991 (ppm)
As (188.980 nm)	0.0102	ppm	0.0014	13.76	6.9980	0.0102 (ppm)
B (249.678 nm)	0.0487	ppm	0.0001	0.27	452.5000	0.0487 (ppm)
Ba (233.527 nm)	0.0097	ppm	0.0000	0.31	777.2000	0.0097 (ppm)
Be (234.861 nm)	0.0020	ppm	0.0000	0.53	319.2000	0.0020 (ppm)
Ca (422.673 nm)	0.0855	ppm	0.0078	9.09	439.8000	0.0855 (ppm)
Cd (214.439 nm)	0.0052	ppm	0.0000	0.10	94.2100	0.0052 (ppm)
Co (228.615 nm)	0.0096	ppm	0.0004	3.71	95.0500	0.0096 (ppm)
Cr (205.560 nm)	0.0054	ppm	0.0002	3.98	22.6000	0.0054 (ppm)
Cu (324.754 nm)	0.0101	ppm	0.0001	1.00	399.5000	0.0101 (ppm)
Fe (238.204 nm)	0.1054	ppm	0.0044	4.14	211.2000	0.1054 (ppm)
K (766.491 nm)	0.5517	ppm	0.0031	0.56	458.7000	0.5517 (ppm)
Li (670.783 nm)	0.0483	ppm	0.0015	3.03	2715.0000	0.0483 (ppm)
Mg (279.078 nm)	0.0293	ppm	0.0016	5.38	79.1500	0.0293 (ppm)
Mn (259.372 nm)	0.0189	ppm	0.0001	0.42	1655.0000	0.0189 (ppm)
Mo (204.598 nm)	0.0217	ppm	0.0008	3.81	68.8000	0.0217 (ppm)
Na (589.592 nm)	0.4872	ppm	0.0099	2.04	3579.0000	0.4872 (ppm)
Ni (231.604 nm)	0.0116	ppm	0.0010	8.23	29.5700	0.0116 (ppm)
P (213.618 nm)	0.2000	ppm	0.0006	0.30	141.3000	0.2000 (ppm)
Pb (220.353 nm)	0.0035	ppm	0.0011	32.81	-5.2630	0.0035 (ppm)
Sb (206.834 nm)	0.0094	ppm	0.0001	0.82	3.8650	0.0094 (ppm)
Se (196.026 nm)	0.0135	ppm	0.0043	31.74	7.3260	0.0135 (ppm)
Si (251.611 nm)	0.2020	ppm	0.0006	0.29	424.7000	0.2020 (ppm)
Sn (189.925 nm)	0.1020	ppm	0.0020	1.98	49.0000	0.1020 (ppm)
Sr (421.552 nm)	0.0199	ppm	0.0001	0.58	6562.0000	0.0199 (ppm)
Ti (336.122 nm)	0.0047	ppm	0.0000	0.33	310.3000	0.0047 (ppm)
Tl (190.794 nm)	0.0135	ppm	0.0074	54.70	16.5600	0.0135 (ppm)
V (292.401 nm)	0.0096	ppm	0.0005	5.59	339.6000	0.0096 (ppm)
W (207.912 nm)	0.0921	ppm	0.0001	0.08	127.9000	0.0921 (ppm)
Zn (202.548 nm)	0.0228	ppm	0.0003	1.14	308.4000	0.0228 (ppm)
Zr (343.823 nm)	0.0740	ppm	0.0027	3.66	5713.0000	0.0740 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	347400.0000	0.0031	0.31
Y_R 371.029	1.0080	48970.0000	0.0003	0.03

Sample Name: MB 440-584711/1-A@5

Date: 12/10/2019 10:10:01 AM Rack:Tube: 1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0003	> 100.00	-68.3300	0.0000 u (ppm)
Al (396.152 nm)	0.0052	ppm	0.0002	3.72	-196.4000	0.0052 (ppm)
As (188.980 nm)	-0.0007 u	ppm	0.0015	> 100.00	1.2310	-0.0007 u (ppm)
B (249.678 nm)	0.0006 u	ppm	0.0009	> 100.00	-8.5490	0.0006 u (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	26.59	30.8900	-0.0001 u (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0000	4.75	7.1070	-0.0001 u (ppm)
Ca (422.673 nm)	0.0049 u	ppm	0.0076	> 100.00	137.3000	0.0049 u (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0003	> 100.00	-5.0980	-0.0001 u (ppm)
Co (228.615 nm)	0.0004	ppm	0.0001	34.92	-8.3100	0.0004 (ppm)
Cr (205.560 nm)	0.0000 u	ppm	0.0005	> 100.00	1.7280	0.0000 u (ppm)
Cu (324.754 nm)	0.0024	ppm	0.0006	26.12	128.8000	0.0024 (ppm)
Fe (238.204 nm)	0.0217	ppm	0.0018	8.43	3.5980	0.0217 (ppm)
K (766.491 nm)	-0.0058 u	ppm	0.0076	> 100.00	-83.8000	-0.0058 u (ppm)
Li (670.783 nm)	0.0030	ppm	0.0010	33.83	216.7000	0.0030 (ppm)
Mg (279.078 nm)	0.0084	ppm	0.0017	20.62	30.3400	0.0084 (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0001	84.92	61.1900	0.0002 (ppm)
Mo (204.598 nm)	0.0004	ppm	0.0003	58.96	-2.5610	0.0004 (ppm)
Na (589.592 nm)	0.0215	ppm	0.0026	12.05	1031.0000	0.0215 (ppm)
Ni (231.604 nm)	0.0024	ppm	0.0028	> 100.00	-6.0990	0.0024 (ppm)
P (213.618 nm)	0.0036	ppm	0.0024	67.27	2.8170	0.0036 (ppm)
Pb (220.353 nm)	-0.0009 u	ppm	0.0030	> 100.00	-12.9400	-0.0009 u (ppm)
Sb (206.834 nm)	0.0051	ppm	0.0012	23.93	0.7098	0.0051 (ppm)
Se (196.026 nm)	0.0056	ppm	0.0025	44.63	2.4250	0.0056 (ppm)
Si (251.611 nm)	0.0106	ppm	0.0014	13.24	31.8300	0.0106 (ppm)
Sn (189.925 nm)	0.0017 u	ppm	0.0041	> 100.00	-0.5927	0.0017 u (ppm)
Sr (421.552 nm)	0.0000 u	ppm	0.0002	> 100.00	-21.4300	0.0000 u (ppm)
Ti (336.122 nm)	-0.0004 u	ppm	0.0000	10.30	-169.6000	-0.0004 u (ppm)
Tl (190.794 nm)	-0.0021 u	ppm	0.0021	> 100.00	2.6650	-0.0021 u (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0001	43.18	81.3100	-0.0002 u (ppm)
W (207.912 nm)	0.0016 u	ppm	0.0029	> 100.00	-1.9700	0.0016 u (ppm)
Zn (202.548 nm)	0.0019	ppm	0.0002	12.65	37.8000	0.0019 (ppm)
Zr (343.823 nm)	0.0049	ppm	0.0007	13.85	477.9000	0.0049 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0080	349000.0000	0.0024	0.24
Y_R 371.029	1.0170	49410.0000	0.0068	0.67

Sample Name: LCS 440-584711/2-A@5

Date: 12/10/2019 10:12:19 AM Rack:Tube: 1:2

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1812	ppm	0.0008	0.43	6589.0000	0.1812 (ppm)
Al (396.152 nm)	0.3576	ppm	0.0016	0.46	8881.0000	0.3576 (ppm)
As (188.980 nm)	0.3537	ppm	0.0011	0.32	187.4000	0.3537 (ppm)
B (249.678 nm)	0.3523	ppm	0.0041	1.16	3392.0000	0.3523 (ppm)
Ba (233.527 nm)	0.3639	ppm	0.0024	0.65	27520.0000	0.3639 (ppm)
Be (234.861 nm)	0.3547	ppm	0.0003	0.08	52710.0000	0.3547 (ppm)
Ca (422.673 nm)	1.8190	ppm	0.0080	0.44	6950.0000	1.8190 (ppm)
Cd (214.439 nm)	0.3579	ppm	0.0033	0.91	6685.0000	0.3579 (ppm)
Co (228.615 nm)	0.3669	ppm	0.0000	0.01	4124.0000	0.3669 (ppm)
Cr (205.560 nm)	0.3684	ppm	0.0003	0.07	1423.0000	0.3684 (ppm)
Cu (324.754 nm)	0.3697	ppm	0.0020	0.54	13130.0000	0.3697 (ppm)
Fe (238.204 nm)	0.3862	ppm	0.0033	0.85	906.3000	0.3862 (ppm)
K (766.491 nm)	3.5620	ppm	0.0435	1.22	3390.0000	3.5620 (ppm)
Li (670.783 nm)	0.3639	ppm	0.0009	0.25	20090.0000	0.3639 (ppm)
Mg (279.078 nm)	1.8130	ppm	0.0085	0.47	4245.0000	1.8130 (ppm)
Mn (259.372 nm)	0.3659	ppm	0.0002	0.06	30950.0000	0.3659 (ppm)
Mo (204.598 nm)	0.3832	ppm	0.0018	0.47	1285.0000	0.3832 (ppm)
Na (589.592 nm)	3.6350	ppm	0.0100	0.28	20800.0000	3.6350 (ppm)
Ni (231.604 nm)	0.3689	ppm	0.0022	0.60	1421.0000	0.3689 (ppm)
P (213.618 nm)	0.3634	ppm	0.0164	4.50	242.0000	0.3634 (ppm)
Pb (220.353 nm)	0.3607	ppm	0.0049	1.35	618.5000	0.3607 (ppm)
Sb (206.834 nm)	0.3806	ppm	0.0087	2.30	294.4000	0.3806 (ppm)
Se (196.026 nm)	0.3297	ppm	0.0120	3.63	185.8000	0.3297 (ppm)
Si (251.611 nm)	0.2737	ppm	0.0074	2.69	613.4000	0.2737 (ppm)
Sn (189.925 nm)	0.3699	ppm	0.0039	1.06	181.6000	0.3699 (ppm)
Sr (421.552 nm)	0.3655	ppm	0.0018	0.49	120900.0000	0.3655 (ppm)
Ti (336.122 nm)	0.3626	ppm	0.0018	0.49	34210.0000	0.3626 (ppm)
Tl (190.794 nm)	0.3474	ppm	0.0038	1.10	309.9000	0.3474 (ppm)
V (292.401 nm)	0.3638	ppm	0.0021	0.59	9714.0000	0.3638 (ppm)
W (207.912 nm)	0.3600	ppm	0.0015	0.42	515.5000	0.3600 (ppm)
Zn (202.548 nm)	0.3560	ppm	0.0007	0.18	4635.0000	0.3560 (ppm)
Zr (343.823 nm)	0.3859	ppm	0.0018	0.47	29340.0000	0.3859 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0060	348000.0000	0.0042	0.42
Y_R 371.029	1.0120	49140.0000	0.0046	0.45

Sample Name: 440-255674-B-23-D SD@25

Date: 12/10/2019 10:14:39 AM Rack:Tube: 1:3

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0000	2.34	-92.6200	-0.0006 u (ppm)
Al (396.152 nm)	9.4690	ppm	0.0073	0.08	234300.0000	9.4690 (ppm)
As (188.980 nm)	0.0130	ppm	0.0004	2.81	7.5010	0.0130 (ppm)
B (249.678 nm)	0.0032	ppm	0.0004	11.47	-5.7680	0.0032 (ppm)
Ba (233.527 nm)	0.0669	ppm	0.0010	1.51	5097.0000	0.0669 (ppm)
Be (234.861 nm)	0.0006	ppm	0.0001	15.42	389.9000	0.0006 (ppm)
Ca (422.673 nm)	3.8180	ppm	0.0296	0.77	14460.0000	3.8180 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	0.3151	0.0000 u (ppm)
Co (228.615 nm)	0.0044	ppm	0.0001	2.25	45.0100	0.0044 (ppm)
Cr (205.560 nm)	0.0077	ppm	0.0007	8.65	32.3700	0.0077 (ppm)
Cu (324.754 nm)	1.6520	ppm	0.0100	0.61	58510.0000	1.6520 (ppm)
Fe (238.204 nm)	21.1000	ppm	0.0607	0.29	52230.0000	21.1000 (ppm)
K (766.491 nm)	1.5990	ppm	0.1698	10.62	1484.0000	1.5990 (ppm)
Li (670.783 nm)	0.0086	ppm	0.0025	29.05	370.0000	0.0086 (ppm)
Mg (279.078 nm)	7.4260	ppm	0.0998	1.34	17350.0000	7.4260 (ppm)
Mn (259.372 nm)	0.0768	ppm	0.0002	0.28	8765.0000	0.0768 (ppm)
Mo (204.598 nm)	0.0089	ppm	0.0013	14.14	26.8500	0.0089 (ppm)
Na (589.592 nm)	0.0692	ppm	0.0193	27.90	1470.0000	0.0692 (ppm)
Ni (231.604 nm)	0.0104	ppm	0.0016	14.97	23.6200	0.0104 (ppm)
P (213.618 nm)	0.5066	ppm	0.0258	5.08	315.5000	0.5066 (ppm)
Pb (220.353 nm)	-0.0008 u	ppm	0.0025	> 100.00	-0.5452	-0.0008 u (ppm)
Sb (206.834 nm)	0.0043	ppm	0.0033	76.58	-0.4708	0.0043 (ppm)
Se (196.026 nm)	0.0020	ppm	0.0009	44.79	-1.7120	0.0020 (ppm)
Si (251.611 nm)	0.2495	ppm	0.0066	2.66	510.9000	0.2495 (ppm)
Sn (189.925 nm)	-0.0029 u	ppm	0.0024	82.46	-2.8800	-0.0029 u (ppm)
Sr (421.552 nm)	0.0567	ppm	0.0007	1.17	18770.0000	0.0567 (ppm)
Ti (336.122 nm)	0.2772	ppm	0.0012	0.42	26120.0000	0.2772 (ppm)
Tl (190.794 nm)	0.0041	ppm	0.0043	> 100.00	6.1070	0.0041 (ppm)
V (292.401 nm)	0.0273	ppm	0.0002	0.76	823.5000	0.0273 (ppm)
W (207.912 nm)	-0.0002 u	ppm	0.0026	> 100.00	-4.5710	-0.0002 u (ppm)
Zn (202.548 nm)	0.0238	ppm	0.0003	1.08	478.9000	0.0238 (ppm)
Zr (343.823 nm)	0.0087	ppm	0.0002	2.53	304.4000	0.0087 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	347600.0000	0.0062	0.62
Y_R 371.029	1.0160	49380.0000	0.0082	0.80

Sample Name: 440-255674-B-23-D@5

Date: 12/10/2019 10:16:57 AM Rack:Tube: 1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0017 u	ppm	0.0004	25.74	-135.9000	-0.0017 u (ppm)
Al (396.152 nm)	52.8300	ppm	0.0132	0.02	1309000.0000	52.8300 (ppm)
As (188.980 nm)	0.0569	ppm	0.0054	9.40	26.6300	0.0569 (ppm)
B (249.678 nm)	0.0099	ppm	0.0008	8.24	-37.2800	0.0099 (ppm)
Ba (233.527 nm)	0.3498	ppm	0.0003	0.08	26470.0000	0.3498 (ppm)
Be (234.861 nm)	0.0013	ppm	0.0000	3.38	1698.0000	0.0013 (ppm)
Ca (422.673 nm)	20.5000	ppm	0.0881	0.43	77090.0000	20.5000 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0004	> 100.00	12.1300	0.0000 u (ppm)
Co (228.615 nm)	0.0252	ppm	0.0010	4.06	312.7000	0.0252 (ppm)
Cr (205.560 nm)	0.0397	ppm	0.0000	0.05	158.7000	0.0397 (ppm)
Cu (324.754 nm)	8.9070	ppm	0.0280	0.31	315300.0000	8.9070 (ppm)
Fe (238.204 nm)	111.7000	ppm	0.4851	0.43	276900.0000	111.7000 (ppm)
K (766.491 nm)	8.5060	ppm	0.0612	0.72	8232.0000	8.5060 (ppm)
Li (670.783 nm)	0.0362	ppm	0.0010	2.79	1196.0000	0.0362 (ppm)
Mg (279.078 nm)	38.8700	ppm	0.1289	0.33	90780.0000	38.8700 (ppm)
Mn (259.372 nm)	0.3985	ppm	0.0010	0.25	45550.0000	0.3985 (ppm)
Mo (204.598 nm)	0.0365	ppm	0.0016	4.31	124.8000	0.0365 (ppm)
Na (589.592 nm)	0.3737	ppm	0.0136	3.64	3906.0000	0.3737 (ppm)
Ni (231.604 nm)	0.0470	ppm	0.0004	0.88	161.3000	0.0470 (ppm)
P (213.618 nm)	2.6480	ppm	0.0648	2.45	1641.0000	2.6480 (ppm)
Pb (220.353 nm)	-0.0008 u	ppm	0.0008	> 100.00	51.5700	-0.0008 u (ppm)
Sb (206.834 nm)	0.0139	ppm	0.0074	53.28	4.9500	0.0139 (ppm)
Se (196.026 nm)	0.0254	ppm	0.0018	7.17	2.1710	0.0254 (ppm)
Si (251.611 nm)	1.3060	ppm	0.0051	0.39	2630.0000	1.3060 (ppm)
Sn (189.925 nm)	0.0011	ppm	0.0013	> 100.00	-0.7943	0.0011 (ppm)
Sr (421.552 nm)	0.3003	ppm	0.0009	0.30	99590.0000	0.3003 (ppm)
Ti (336.122 nm)	1.4880	ppm	0.0010	0.06	140800.0000	1.4880 (ppm)
Tl (190.794 nm)	0.0075	ppm	0.0063	83.75	0.1081	0.0075 (ppm)
V (292.401 nm)	0.1428	ppm	0.0002	0.14	3941.0000	0.1428 (ppm)
W (207.912 nm)	0.0019	ppm	0.0009	47.95	-1.5870	0.0019 (ppm)
Zn (202.548 nm)	0.1151	ppm	0.0005	0.41	2359.0000	0.1151 (ppm)
Zr (343.823 nm)	0.0540	ppm	0.0011	2.05	1752.0000	0.0540 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9956	344600.0000	0.0019	0.19
Y_R 371.029	1.0170	49400.0000	0.0040	0.39

Sample Name: 440-255674-B-23-E MS@5

Date: 12/10/2019 10:19:17 AM Rack:Tube: 1:5

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1717	ppm	0.0009	0.50	6227.0000	0.1717 (ppm)
Al (396.152 nm)	67.8600	ppm	0.2975	0.44	1682000.0000	67.8600 (ppm)
As (188.980 nm)	0.3966	ppm	0.0055	1.39	205.3000	0.3966 (ppm)
B (249.678 nm)	0.3179	ppm	0.0014	0.44	2952.0000	0.3179 (ppm)
Ba (233.527 nm)	0.7063	ppm	0.0042	0.59	53390.0000	0.7063 (ppm)
Be (234.861 nm)	0.3459	ppm	0.0015	0.44	52850.0000	0.3459 (ppm)
Ca (422.673 nm)	22.1700	ppm	0.0378	0.17	83360.0000	22.1700 (ppm)
Cd (214.439 nm)	0.3373	ppm	0.0010	0.28	6315.0000	0.3373 (ppm)
Co (228.615 nm)	0.3584	ppm	0.0023	0.64	4081.0000	0.3584 (ppm)
Cr (205.560 nm)	0.3853	ppm	0.0010	0.25	1492.0000	0.3853 (ppm)
Cu (324.754 nm)	9.0130	ppm	0.0111	0.12	319000.0000	9.0130 (ppm)
Fe (238.204 nm)	109.5000	ppm	0.2529	0.23	271300.0000	109.5000 (ppm)
K (766.491 nm)	12.4900	ppm	0.0365	0.29	12110.0000	12.4900 (ppm)
Li (670.783 nm)	0.3812	ppm	0.0022	0.59	20270.0000	0.3812 (ppm)
Mg (279.078 nm)	38.1800	ppm	0.2299	0.60	89160.0000	38.1800 (ppm)
Mn (259.372 nm)	0.7230	ppm	0.0028	0.39	72690.0000	0.7230 (ppm)
Mo (204.598 nm)	0.4294	ppm	0.0040	0.92	1447.0000	0.4294 (ppm)
Na (589.592 nm)	3.8720	ppm	0.0079	0.20	23020.0000	3.8720 (ppm)
Ni (231.604 nm)	0.3833	ppm	0.0019	0.50	1471.0000	0.3833 (ppm)
P (213.618 nm)	2.6910	ppm	0.0325	1.21	1663.0000	2.6910 (ppm)
Pb (220.353 nm)	0.3461	ppm	0.0006	0.18	654.2000	0.3461 (ppm)
Sb (206.834 nm)	0.2545	ppm	0.0011	0.43	192.2000	0.2545 (ppm)
Se (196.026 nm)	0.3607	ppm	0.0111	3.07	191.4000	0.3607 (ppm)
Si (251.611 nm)	2.0630	ppm	0.0071	0.35	4185.0000	2.0630 (ppm)
Sn (189.925 nm)	0.3442	ppm	0.0019	0.54	168.9000	0.3442 (ppm)
Sr (421.552 nm)	0.6951	ppm	0.0012	0.17	230300.0000	0.6951 (ppm)
Ti (336.122 nm)	2.4150	ppm	0.0120	0.50	228600.0000	2.4150 (ppm)
Tl (190.794 nm)	0.3349	ppm	0.0045	1.33	281.5000	0.3349 (ppm)
V (292.401 nm)	0.5036	ppm	0.0022	0.44	13500.0000	0.5036 (ppm)
W (207.912 nm)	0.2293	ppm	0.0025	1.09	327.9000	0.2293 (ppm)
Zn (202.548 nm)	0.4421	ppm	0.0016	0.36	6580.0000	0.4421 (ppm)
Zr (343.823 nm)	0.3514	ppm	0.0019	0.54	24340.0000	0.3514 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9942	344100.0000	0.0047	0.47
Y_R 371.029	1.0180	49460.0000	0.0045	0.44

Sample Name: 440-255674-B-23-F MSD@5

Date: 12/10/2019 10:21:35 AM
Rack:Tube: 1:6

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1749	ppm	0.0002	0.09	6344.0000	0.1749 (ppm)
Al (396.152 nm)	62.9200	ppm	0.1492	0.24	1559000.0000	62.9200 (ppm)
As (188.980 nm)	0.4146	ppm	0.0023	0.55	214.5000	0.4146 (ppm)
B (249.678 nm)	0.3284	ppm	0.0005	0.14	3045.0000	0.3284 (ppm)
Ba (233.527 nm)	0.6949	ppm	0.0067	0.96	52530.0000	0.6949 (ppm)
Be (234.861 nm)	0.3512	ppm	0.0004	0.12	53750.0000	0.3512 (ppm)
Ca (422.673 nm)	20.3100	ppm	0.0090	0.04	76390.0000	20.3100 (ppm)
Cd (214.439 nm)	0.3429	ppm	0.0010	0.28	6422.0000	0.3429 (ppm)
Co (228.615 nm)	0.3674	ppm	0.0017	0.48	4187.0000	0.3674 (ppm)
Cr (205.560 nm)	0.3886	ppm	0.0011	0.28	1505.0000	0.3886 (ppm)
Cu (324.754 nm)	8.9090	ppm	0.0317	0.36	315400.0000	8.9090 (ppm)
Fe (238.204 nm)	117.2000	ppm	0.1215	0.10	290400.0000	117.2000 (ppm)
K (766.491 nm)	13.0100	ppm	0.0833	0.64	12610.0000	13.0100 (ppm)
Li (670.783 nm)	0.3877	ppm	0.0024	0.62	20570.0000	0.3877 (ppm)
Mg (279.078 nm)	36.2800	ppm	0.3390	0.93	84710.0000	36.2800 (ppm)
Mn (259.372 nm)	0.6865	ppm	0.0022	0.31	70440.0000	0.6865 (ppm)
Mo (204.598 nm)	0.4081	ppm	0.0036	0.87	1375.0000	0.4081 (ppm)
Na (589.592 nm)	3.9110	ppm	0.0241	0.62	23290.0000	3.9110 (ppm)
Ni (231.604 nm)	0.3844	ppm	0.0002	0.06	1475.0000	0.3844 (ppm)
P (213.618 nm)	3.1550	ppm	0.0182	0.58	1995.0000	3.1550 (ppm)
Pb (220.353 nm)	0.3489	ppm	0.0021	0.62	664.0000	0.3489 (ppm)
Sb (206.834 nm)	0.2638	ppm	0.0048	1.84	199.6000	0.2638 (ppm)
Se (196.026 nm)	0.3438	ppm	0.0085	2.48	181.2000	0.3438 (ppm)
Si (251.611 nm)	2.1000	ppm	0.0050	0.24	4262.0000	2.1000 (ppm)
Sn (189.925 nm)	0.3522	ppm	0.0094	2.67	172.9000	0.3522 (ppm)
Sr (421.552 nm)	0.6634	ppm	0.0005	0.08	219800.0000	0.6634 (ppm)
Ti (336.122 nm)	2.6150	ppm	0.0076	0.29	247600.0000	2.6150 (ppm)
Tl (190.794 nm)	0.3443	ppm	0.0119	3.45	288.2000	0.3443 (ppm)
V (292.401 nm)	0.5176	ppm	0.0007	0.13	13880.0000	0.5176 (ppm)
W (207.912 nm)	0.2425	ppm	0.0031	1.29	346.8000	0.2425 (ppm)
Zn (202.548 nm)	0.4460	ppm	0.0016	0.37	6617.0000	0.4460 (ppm)
Zr (343.823 nm)	0.3849	ppm	0.0030	0.79	26700.0000	0.3849 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9932	343800.0000	0.0019	0.20
Y_R 371.029	1.0200	49550.0000	0.0099	0.97

Sample Name: 440-255674-B-23-D PDS@5

Date: 12/10/2019 10:23:55 AM Rack:Tube: 1:7

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1783	ppm	0.0007	0.40	6484.0000	0.1783 (ppm)
Al (396.152 nm)	53.2600	ppm	0.1256	0.24	1320000.0000	53.2600 (ppm)
As (188.980 nm)	0.4353	ppm	0.0023	0.54	225.6000	0.4353 (ppm)
B (249.678 nm)	0.3920	ppm	0.0031	0.80	3659.0000	0.3920 (ppm)
Ba (233.527 nm)	0.7261	ppm	0.0005	0.06	54890.0000	0.7261 (ppm)
Be (234.861 nm)	0.3835	ppm	0.0024	0.62	58460.0000	0.3835 (ppm)
Ca (422.673 nm)	22.3000	ppm	0.0257	0.12	83850.0000	22.3000 (ppm)
Cd (214.439 nm)	0.3747	ppm	0.0011	0.28	7016.0000	0.3747 (ppm)
Co (228.615 nm)	0.3945	ppm	0.0120	3.04	4477.0000	0.3945 (ppm)
Cr (205.560 nm)	0.4274	ppm	0.0038	0.90	1655.0000	0.4274 (ppm)
Cu (324.754 nm)	9.1850	ppm	0.0362	0.39	325100.0000	9.1850 (ppm)
Fe (238.204 nm)	110.7000	ppm	0.2019	0.18	274400.0000	110.7000 (ppm)
K (766.491 nm)	12.3900	ppm	0.0607	0.49	12010.0000	12.3900 (ppm)
Li (670.783 nm)	0.4230	ppm	0.0008	0.18	22500.0000	0.4230 (ppm)
Mg (279.078 nm)	40.6700	ppm	0.1235	0.30	94980.0000	40.6700 (ppm)
Mn (259.372 nm)	0.7801	ppm	0.0032	0.41	77620.0000	0.7801 (ppm)
Mo (204.598 nm)	0.4469	ppm	0.0023	0.52	1505.0000	0.4469 (ppm)
Na (589.592 nm)	4.2540	ppm	0.0107	0.25	25120.0000	4.2540 (ppm)
Ni (231.604 nm)	0.4186	ppm	0.0055	1.32	1608.0000	0.4186 (ppm)
P (213.618 nm)	3.0280	ppm	0.0431	1.42	1897.0000	3.0280 (ppm)
Pb (220.353 nm)	0.3812	ppm	0.0011	0.30	717.7000	0.3812 (ppm)
Sb (206.834 nm)	0.4016	ppm	0.0108	2.68	308.1000	0.4016 (ppm)
Se (196.026 nm)	0.3777	ppm	0.0018	0.46	201.6000	0.3777 (ppm)
Si (251.611 nm)	3.2140	ppm	0.0068	0.21	6496.0000	3.2140 (ppm)
Sn (189.925 nm)	0.3887	ppm	0.0025	0.64	191.0000	0.3887 (ppm)
Sr (421.552 nm)	0.6864	ppm	0.0005	0.07	227400.0000	0.6864 (ppm)
Ti (336.122 nm)	1.8760	ppm	0.0059	0.32	177600.0000	1.8760 (ppm)
Tl (190.794 nm)	0.3969	ppm	0.0076	1.90	342.8000	0.3969 (ppm)
V (292.401 nm)	0.5325	ppm	0.0027	0.51	14250.0000	0.5325 (ppm)
W (207.912 nm)	0.3841	ppm	0.0065	1.69	550.2000	0.3841 (ppm)
Zn (202.548 nm)	0.4810	ppm	0.0024	0.50	7098.0000	0.4810 (ppm)
Zr (343.823 nm)	0.5229	ppm	0.0001	0.01	37310.0000	0.5229 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9963	344800.0000	0.0016	0.16
Y_R 371.029	1.0140	49240.0000	0.0026	0.25

Sample Name: 440-255674-B-24-B@5

Date: 12/10/2019 10:26:15 AM Rack:Tube: 1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0018 u	ppm	0.0003	18.11	-146.9000	-0.0018 u (ppm)
Al (396.152 nm)	55.1600	ppm	0.2431	0.44	1367000.0000	55.1600 (ppm)
As (188.980 nm)	0.0333	ppm	0.0044	13.07	13.6100	0.0333 (ppm)
B (249.678 nm)	0.0106	ppm	0.0002	2.18	-33.7100	0.0106 (ppm)
Ba (233.527 nm)	0.3073	ppm	0.0017	0.55	23260.0000	0.3073 (ppm)
Be (234.861 nm)	0.0014	ppm	0.0003	20.39	1769.0000	0.0014 (ppm)
Ca (422.673 nm)	39.2300	ppm	0.1460	0.37	147500.0000	39.2300 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0003	> 100.00	18.2000	0.0003 (ppm)
Co (228.615 nm)	0.0434	ppm	0.0006	1.40	552.3000	0.0434 (ppm)
Cr (205.560 nm)	0.0565	ppm	0.0002	0.37	223.4000	0.0565 (ppm)
Cu (324.754 nm)	5.4800	ppm	0.0244	0.44	194000.0000	5.4800 (ppm)
Fe (238.204 nm)	115.3000	ppm	0.2324	0.20	285600.0000	115.3000 (ppm)
K (766.491 nm)	11.1400	ppm	0.0078	0.07	10810.0000	11.1400 (ppm)
Li (670.783 nm)	0.0338	ppm	0.0007	1.93	1336.0000	0.0338 (ppm)
Mg (279.078 nm)	46.1500	ppm	0.2427	0.53	107800.0000	46.1500 (ppm)
Mn (259.372 nm)	0.6192	ppm	0.0028	0.45	64450.0000	0.6192 (ppm)
Mo (204.598 nm)	0.0191	ppm	0.0019	9.84	66.7400	0.0191 (ppm)
Na (589.592 nm)	0.7305	ppm	0.0092	1.26	5882.0000	0.7305 (ppm)
Ni (231.604 nm)	0.0660	ppm	0.0014	2.05	235.3000	0.0660 (ppm)
P (213.618 nm)	4.7720	ppm	0.0494	1.03	3236.0000	4.7720 (ppm)
Pb (220.353 nm)	-0.0048 u	ppm	0.0006	13.35	45.2800	-0.0048 u (ppm)
Sb (206.834 nm)	0.0196	ppm	0.0084	42.83	9.9150	0.0196 (ppm)
Se (196.026 nm)	0.0112	ppm	0.0006	5.43	-6.0260	0.0112 (ppm)
Si (251.611 nm)	1.5040	ppm	0.0091	0.61	3037.0000	1.5040 (ppm)
Sn (189.925 nm)	-0.0016 u	ppm	0.0001	4.56	-2.2610	-0.0016 u (ppm)
Sr (421.552 nm)	0.3342	ppm	0.0006	0.18	111000.0000	0.3342 (ppm)
Ti (336.122 nm)	3.1940	ppm	0.0131	0.41	302500.0000	3.1940 (ppm)
Tl (190.794 nm)	0.0158	ppm	0.0040	25.30	-9.1970	0.0158 (ppm)
V (292.401 nm)	0.1620	ppm	0.0007	0.44	4517.0000	0.1620 (ppm)
W (207.912 nm)	0.0048	ppm	0.0021	43.57	1.9180	0.0048 (ppm)
Zn (202.548 nm)	0.1008	ppm	0.0001	0.12	1826.0000	0.1008 (ppm)
Zr (343.823 nm)	0.0514	ppm	0.0006	1.23	1482.0000	0.0514 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9946	344300.0000	0.0035	0.35
Y_R 371.029	1.0190	49510.0000	0.0046	0.45

Sample Name: 440-256594-E-1-E@5

Date: 12/10/2019 10:28:33 AM Rack:Tube: 1:9

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0025 u	ppm	0.0002	6.56	-164.4000	-0.0025 u (ppm)
Al (396.152 nm)	93.3900	ppm	0.2300	0.25	2314000.0000	93.3900 (ppm)
As (188.980 nm)	0.0178	ppm	0.0034	19.04	4.8220	0.0178 (ppm)
B (249.678 nm)	0.0422	ppm	0.0014	3.25	266.7000	0.0422 (ppm)
Ba (233.527 nm)	0.2874	ppm	0.0019	0.67	21760.0000	0.2874 (ppm)
Be (234.861 nm)	0.0034	ppm	0.0000	0.18	2165.0000	0.0034 (ppm)
Ca (422.673 nm)	15.6100	ppm	0.0422	0.27	58720.0000	15.6100 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	15.3200	0.0001 u (ppm)
Co (228.615 nm)	0.0330	ppm	0.0002	0.68	405.2000	0.0330 (ppm)
Cr (205.560 nm)	0.1090	ppm	0.0002	0.14	425.3000	0.1090 (ppm)
Cu (324.754 nm)	0.0807	ppm	0.0001	0.09	2949.0000	0.0807 (ppm)
Fe (238.204 nm)	123.1000	ppm	0.5547	0.45	305000.0000	123.1000 (ppm)
K (766.491 nm)	22.9800	ppm	0.2027	0.88	22310.0000	22.9800 (ppm)
Li (670.783 nm)	0.1277	ppm	0.0000	0.02	6809.0000	0.1277 (ppm)
Mg (279.078 nm)	32.8400	ppm	0.1309	0.40	76680.0000	32.8400 (ppm)
Mn (259.372 nm)	1.0830	ppm	0.0017	0.16	104100.0000	1.0830 (ppm)
Mo (204.598 nm)	0.0007 u	ppm	0.0013	> 100.00	7.9730	0.0007 u (ppm)
Na (589.592 nm)	9.0760	ppm	0.0398	0.44	51520.0000	9.0760 (ppm)
Ni (231.604 nm)	0.0496	ppm	0.0001	0.25	172.1000	0.0496 (ppm)
P (213.618 nm)	1.1010	ppm	0.0018	0.17	782.0000	1.1010 (ppm)
Pb (220.353 nm)	0.0463	ppm	0.0018	3.99	137.4000	0.0463 (ppm)
Sb (206.834 nm)	0.0161	ppm	0.0030	18.41	7.2500	0.0161 (ppm)
Se (196.026 nm)	0.0094	ppm	0.0052	55.37	-7.3030	0.0094 (ppm)
Si (251.611 nm)	1.1380	ppm	0.0008	0.07	2292.0000	1.1380 (ppm)
Sn (189.925 nm)	0.0026	ppm	0.0008	29.99	-0.1471	0.0026 (ppm)
Sr (421.552 nm)	0.3116	ppm	0.0016	0.52	103300.0000	0.3116 (ppm)
Ti (336.122 nm)	1.7390	ppm	0.0037	0.21	164600.0000	1.7390 (ppm)
Tl (190.794 nm)	0.0054	ppm	0.0036	67.54	-3.8020	0.0054 (ppm)
V (292.401 nm)	0.2073	ppm	0.0006	0.28	5669.0000	0.2073 (ppm)
W (207.912 nm)	-0.0006 u	ppm	0.0040	> 100.00	-3.9480	-0.0006 u (ppm)
Zn (202.548 nm)	0.2730	ppm	0.0003	0.12	3503.0000	0.2730 (ppm)
Zr (343.823 nm)	0.0456	ppm	0.0003	0.66	865.6000	0.0456 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0080	349000.0000	0.0025	0.25
Y_R 371.029	1.0290	50010.0000	0.0052	0.51

Sample Name: 440-256594-A-2-C@5

Date: 12/10/2019 10:30:53 AM Rack:Tube: 1:10

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0031 u	ppm	0.0004	13.16	-187.7000	-0.0031 u (ppm)
Al (396.152 nm)	84.4600	ppm	0.3071	0.36	2093000.0000	84.4600 (ppm)
As (188.980 nm)	0.0348	ppm	0.0016	4.46	14.0700	0.0348 (ppm)
B (249.678 nm)	0.0457	ppm	0.0016	3.40	306.8000	0.0457 (ppm)
Ba (233.527 nm)	0.2909	ppm	0.0014	0.50	22020.0000	0.2909 (ppm)
Be (234.861 nm)	0.0039	ppm	0.0000	0.14	2161.0000	0.0039 (ppm)
Ca (422.673 nm)	24.6700	ppm	0.0091	0.04	92790.0000	24.6700 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	17.52	16.0600	0.0002 (ppm)
Co (228.615 nm)	0.0444	ppm	0.0012	2.78	552.7000	0.0444 (ppm)
Cr (205.560 nm)	0.1045	ppm	0.0008	0.76	408.1000	0.1045 (ppm)
Cu (324.754 nm)	0.1080	ppm	0.0011	1.03	3914.0000	0.1080 (ppm)
Fe (238.204 nm)	117.4000	ppm	0.0317	0.03	290900.0000	117.4000 (ppm)
K (766.491 nm)	21.6300	ppm	0.0696	0.32	21000.0000	21.6300 (ppm)
Li (670.783 nm)	0.1256	ppm	0.0015	1.23	6703.0000	0.1256 (ppm)
Mg (279.078 nm)	33.4900	ppm	0.1823	0.54	78210.0000	33.4900 (ppm)
Mn (259.372 nm)	1.9120	ppm	0.0083	0.43	173100.0000	1.9120 (ppm)
Mo (204.598 nm)	0.0012	ppm	0.0014	> 100.00	9.1750	0.0012 (ppm)
Na (589.592 nm)	7.3610	ppm	0.0097	0.13	42110.0000	7.3610 (ppm)
Ni (231.604 nm)	0.0505	ppm	0.0001	0.27	175.6000	0.0505 (ppm)
P (213.618 nm)	1.9320	ppm	0.0014	0.07	1369.0000	1.9320 (ppm)
Pb (220.353 nm)	0.0677	ppm	0.0040	5.97	171.6000	0.0677 (ppm)
Sb (206.834 nm)	0.0135	ppm	0.0064	47.71	5.4500	0.0135 (ppm)
Se (196.026 nm)	0.0071	ppm	0.0030	42.55	-7.8840	0.0071 (ppm)
Si (251.611 nm)	1.2470	ppm	0.0069	0.55	2520.0000	1.2470 (ppm)
Sn (189.925 nm)	0.0019 u	ppm	0.0033	> 100.00	-0.5221	0.0019 u (ppm)
Sr (421.552 nm)	0.2885	ppm	0.0005	0.18	95750.0000	0.2885 (ppm)
Ti (336.122 nm)	2.7100	ppm	0.0107	0.39	256600.0000	2.7100 (ppm)
Tl (190.794 nm)	0.0097	ppm	0.0025	25.48	-9.0390	0.0097 (ppm)
V (292.401 nm)	0.2164	ppm	0.0004	0.16	5945.0000	0.2164 (ppm)
W (207.912 nm)	-0.0010 u	ppm	0.0004	39.71	-4.1450	-0.0010 u (ppm)
Zn (202.548 nm)	0.3104	ppm	0.0012	0.37	3988.0000	0.3104 (ppm)
Zr (343.823 nm)	0.0476	ppm	0.0002	0.41	1137.0000	0.0476 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0050	348000.0000	0.0010	0.10
Y_R 371.029	1.0270	49880.0000	0.0032	0.31

Sample Name: CCV 5993196

Date: 12/10/2019 10:33:11 AM
Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5053	ppm	0.0025	0.49	18490.0000	0.5053 (ppm)
Al (396.152 nm)	1.0660	ppm	0.0156	1.46	27020.0000	1.0660 (ppm)
As (188.980 nm)	1.0090	ppm	0.0026	0.26	532.1000	1.0090 (ppm)
B (249.678 nm)	1.0070	ppm	0.0068	0.67	9719.0000	1.0070 (ppm)
Ba (233.527 nm)	0.9997	ppm	0.0069	0.69	75530.0000	0.9997 (ppm)
Be (234.861 nm)	1.0090	ppm	0.0052	0.51	149900.0000	1.0090 (ppm)
Ca (422.673 nm)	5.0460	ppm	0.0377	0.75	19070.0000	5.0460 (ppm)
Cd (214.439 nm)	1.0130	ppm	0.0046	0.46	18930.0000	1.0130 (ppm)
Co (228.615 nm)	1.0140	ppm	0.0042	0.42	11420.0000	1.0140 (ppm)
Cr (205.560 nm)	1.0110	ppm	0.0073	0.72	3904.0000	1.0110 (ppm)
Cu (324.754 nm)	1.0190	ppm	0.0022	0.21	36130.0000	1.0190 (ppm)
Fe (238.204 nm)	1.0850	ppm	0.0007	0.07	2636.0000	1.0850 (ppm)
K (766.491 nm)	10.0400	ppm	0.0301	0.30	9694.0000	10.0400 (ppm)
Li (670.783 nm)	1.0050	ppm	0.0069	0.69	55380.0000	1.0050 (ppm)
Mg (279.078 nm)	5.0400	ppm	0.0438	0.87	11780.0000	5.0400 (ppm)
Mn (259.372 nm)	1.0130	ppm	0.0040	0.39	85600.0000	1.0130 (ppm)
Mo (204.598 nm)	1.0170	ppm	0.0005	0.05	3417.0000	1.0170 (ppm)
Na (589.592 nm)	10.0300	ppm	0.0469	0.47	55760.0000	10.0300 (ppm)
Ni (231.604 nm)	1.0110	ppm	0.0063	0.62	3921.0000	1.0110 (ppm)
P (213.618 nm)	1.0170	ppm	0.0044	0.43	677.6000	1.0170 (ppm)
Pb (220.353 nm)	1.0080	ppm	0.0099	0.98	1748.0000	1.0080 (ppm)
Sb (206.834 nm)	1.0060	ppm	0.0150	1.49	783.5000	1.0060 (ppm)
Se (196.026 nm)	0.9967	ppm	0.0123	1.24	562.9000	0.9967 (ppm)
Si (251.611 nm)	5.0330	ppm	0.0564	1.12	10210.0000	5.0330 (ppm)
Sn (189.925 nm)	1.0090	ppm	0.0140	1.39	497.7000	1.0090 (ppm)
Sr (421.552 nm)	1.0050	ppm	0.0062	0.62	332600.0000	1.0050 (ppm)
Ti (336.122 nm)	1.0290	ppm	0.0059	0.57	97340.0000	1.0290 (ppm)
Tl (190.794 nm)	1.0180	ppm	0.0110	1.08	900.3000	1.0180 (ppm)
V (292.401 nm)	1.0150	ppm	0.0042	0.41	26970.0000	1.0150 (ppm)
W (207.912 nm)	1.0140	ppm	0.0008	0.08	1460.0000	1.0140 (ppm)
Zn (202.548 nm)	1.0120	ppm	0.0057	0.56	13150.0000	1.0120 (ppm)
Zr (343.823 nm)	1.0260	ppm	0.0041	0.40	77800.0000	1.0260 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0000	346100.0000	0.0055	0.55
Y_R 371.029	1.0140	49270.0000	0.0069	0.68

Sample Name: CCB 5993195

Date: 12/10/2019 10:35:51 AM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002	ppm	0.0000	18.27	-60.6900	0.0002 (ppm)
Al (396.152 nm)	0.0047	ppm	0.0027	58.23	-206.0000	0.0047 (ppm)
As (188.980 nm)	0.0038 u	ppm	0.0065	> 100.00	3.6390	0.0038 u (ppm)
B (249.678 nm)	0.0011	ppm	0.0003	30.78	-3.1360	0.0011 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0002	99.52	55.4600	0.0002 (ppm)
Be (234.861 nm)	0.0004	ppm	0.0001	36.24	75.9600	0.0004 (ppm)
Ca (422.673 nm)	-0.0161 u	ppm	0.0053	32.87	58.7000	-0.0161 u (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0002	38.45	4.2230	0.0004 (ppm)
Co (228.615 nm)	0.0002	ppm	0.0000	6.59	-10.4300	0.0002 (ppm)
Cr (205.560 nm)	-0.0001 u	ppm	0.0002	> 100.00	1.5820	-0.0001 u (ppm)
Cu (324.754 nm)	0.0009	ppm	0.0001	5.77	73.7700	0.0009 (ppm)
Fe (238.204 nm)	0.0085	ppm	0.0009	10.71	-29.0800	0.0085 (ppm)
K (766.491 nm)	0.0328	ppm	0.0169	51.47	-46.3200	0.0328 (ppm)
Li (670.783 nm)	0.0014	ppm	0.0014	> 100.00	131.6000	0.0014 (ppm)
Mg (279.078 nm)	0.0079	ppm	0.0020	25.24	29.2300	0.0079 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0002	52.49	78.6100	0.0003 (ppm)
Mo (204.598 nm)	0.0053	ppm	0.0001	2.27	13.6100	0.0053 (ppm)
Na (589.592 nm)	-0.0132 u	ppm	0.0187	> 100.00	841.1000	-0.0132 u (ppm)
Ni (231.604 nm)	0.0028	ppm	0.0016	55.32	-4.5830	0.0028 (ppm)
P (213.618 nm)	-0.0040 u	ppm	0.0047	> 100.00	-2.5880	-0.0040 u (ppm)
Pb (220.353 nm)	-0.0011 u	ppm	0.0009	80.34	-13.2300	-0.0011 u (ppm)
Sb (206.834 nm)	0.0068	ppm	0.0001	1.10	1.9670	0.0068 (ppm)
Se (196.026 nm)	0.0032	ppm	0.0027	84.60	1.0860	0.0032 (ppm)
Si (251.611 nm)	0.0042	ppm	0.0012	29.31	19.3300	0.0042 (ppm)
Sn (189.925 nm)	0.0010	ppm	0.0014	> 100.00	-0.9434	0.0010 (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0000	4.21	43.2400	0.0002 (ppm)
Ti (336.122 nm)	0.0023	ppm	0.0002	9.13	85.5600	0.0023 (ppm)
Tl (190.794 nm)	0.0030	ppm	0.0017	57.20	7.1890	0.0030 (ppm)
V (292.401 nm)	0.0002	ppm	0.0001	30.96	90.1800	0.0002 (ppm)
W (207.912 nm)	0.0030	ppm	0.0017	55.35	0.0087	0.0030 (ppm)
Zn (202.548 nm)	0.0003	ppm	0.0001	50.53	16.4100	0.0003 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	97.62	98.3200	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0010	346600.0000	0.0027	0.27
Y_R 371.029	1.0070	48910.0000	0.0021	0.21

Sample Name: 440-256594-E-3-C@5

Date: 12/10/2019 10:39:35 AM Rack:Tube: 1:11

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0022 u	ppm	0.0002	8.42	-165.2000	-0.0022 u (ppm)
Al (396.152 nm)	101.5000	ppm	0.3446	0.34	2516000.0000	101.5000 (ppm)
As (188.980 nm)	0.0460	ppm	0.0066	14.28	18.2400	0.0460 (ppm)
B (249.678 nm)	0.0560	ppm	0.0006	1.15	365.6000	0.0560 (ppm)
Ba (233.527 nm)	0.2925	ppm	0.0010	0.33	22150.0000	0.2925 (ppm)
Be (234.861 nm)	0.0026	ppm	0.0006	23.01	2488.0000	0.0026 (ppm)
Ca (422.673 nm)	12.8800	ppm	0.0434	0.34	48450.0000	12.8800 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	30.25	22.0000	0.0002 (ppm)
Co (228.615 nm)	0.0297	ppm	0.0012	3.90	434.2000	0.0297 (ppm)
Cr (205.560 nm)	0.1090	ppm	0.0004	0.36	426.3000	0.1090 (ppm)
Cu (324.754 nm)	0.1174	ppm	0.0001	0.12	4286.0000	0.1174 (ppm)
Fe (238.204 nm)	156.1000	ppm	0.1242	0.08	386900.0000	156.1000 (ppm)
K (766.491 nm)	24.0800	ppm	0.1037	0.43	23400.0000	24.0800 (ppm)
Li (670.783 nm)	0.1388	ppm	0.0013	0.95	7321.0000	0.1388 (ppm)
Mg (279.078 nm)	33.1300	ppm	0.0629	0.19	77350.0000	33.1300 (ppm)
Mn (259.372 nm)	1.0700	ppm	0.0038	0.35	106600.0000	1.0700 (ppm)
Mo (204.598 nm)	0.0089	ppm	0.0005	6.02	37.1400	0.0089 (ppm)
Na (589.592 nm)	9.6420	ppm	0.0153	0.16	54890.0000	9.6420 (ppm)
Ni (231.604 nm)	0.0475	ppm	0.0019	3.93	162.8000	0.0475 (ppm)
P (213.618 nm)	1.1710	ppm	0.0041	0.35	832.1000	1.1710 (ppm)
Pb (220.353 nm)	0.0443	ppm	0.0027	6.07	150.9000	0.0443 (ppm)
Sb (206.834 nm)	0.0133	ppm	0.0001	0.76	4.4960	0.0133 (ppm)
Se (196.026 nm)	0.0033	ppm	0.0010	31.42	-14.0200	0.0033 (ppm)
Si (251.611 nm)	1.4220	ppm	0.0011	0.08	2883.0000	1.4220 (ppm)
Sn (189.925 nm)	0.0030 u	ppm	0.0081	> 100.00	-0.0885	0.0030 u (ppm)
Sr (421.552 nm)	0.2848	ppm	0.0006	0.21	94400.0000	0.2848 (ppm)
Ti (336.122 nm)	4.8930	ppm	0.0189	0.39	463400.0000	4.8930 (ppm)
Tl (190.794 nm)	0.0204	ppm	0.0041	20.31	-21.3400	0.0204 (ppm)
V (292.401 nm)	0.2890	ppm	0.0011	0.38	7917.0000	0.2890 (ppm)
W (207.912 nm)	-0.0028 u	ppm	0.0012	44.99	-7.2700	-0.0028 u (ppm)
Zn (202.548 nm)	0.2845	ppm	0.0011	0.40	3644.0000	0.2845 (ppm)
Zr (343.823 nm)	0.0593	ppm	0.0006	1.05	1177.0000	0.0593 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0000	346200.0000	0.0038	0.38
Y_R 371.029	1.0290	50000.0000	0.0020	0.19

Sample Name: 440-256594-E-4-C@5

Date: 12/10/2019 10:41:55 AM Rack:Tube: 1:12

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0028 u	ppm	0.0002	6.81	-185.1000	-0.0028 u (ppm)
Al (396.152 nm)	107.2000	ppm	0.2964	0.28	2655000.0000	107.2000 (ppm)
As (188.980 nm)	0.0537	ppm	0.0016	2.89	23.2700	0.0537 (ppm)
B (249.678 nm)	0.0556	ppm	0.0006	1.07	382.3000	0.0556 (ppm)
Ba (233.527 nm)	0.3088	ppm	0.0006	0.21	23370.0000	0.3088 (ppm)
Be (234.861 nm)	0.0033	ppm	0.0001	3.62	2330.0000	0.0033 (ppm)
Ca (422.673 nm)	13.0000	ppm	0.0371	0.29	48910.0000	13.0000 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	9.77	19.2800	0.0002 (ppm)
Co (228.615 nm)	0.0357	ppm	0.0001	0.41	499.5000	0.0357 (ppm)
Cr (205.560 nm)	0.1079	ppm	0.0009	0.83	421.5000	0.1079 (ppm)
Cu (324.754 nm)	0.1164	ppm	0.0003	0.27	4242.0000	0.1164 (ppm)
Fe (238.204 nm)	136.5000	ppm	0.3888	0.28	338300.0000	136.5000 (ppm)
K (766.491 nm)	24.5000	ppm	0.0135	0.05	23800.0000	24.5000 (ppm)
Li (670.783 nm)	0.1360	ppm	0.0008	0.57	7290.0000	0.1360 (ppm)
Mg (279.078 nm)	33.5400	ppm	0.0211	0.06	78310.0000	33.5400 (ppm)
Mn (259.372 nm)	1.1630	ppm	0.0038	0.33	112300.0000	1.1630 (ppm)
Mo (204.598 nm)	0.0041	ppm	0.0006	13.91	21.3200	0.0041 (ppm)
Na (589.592 nm)	8.7230	ppm	0.0160	0.18	49710.0000	8.7230 (ppm)
Ni (231.604 nm)	0.0481	ppm	0.0008	1.61	165.7000	0.0481 (ppm)
P (213.618 nm)	1.0060	ppm	0.0028	0.28	714.7000	1.0060 (ppm)
Pb (220.353 nm)	0.0502	ppm	0.0005	0.93	149.0000	0.0502 (ppm)
Sb (206.834 nm)	0.0062	ppm	0.0027	43.19	-0.3914	0.0062 (ppm)
Se (196.026 nm)	0.0048	ppm	0.0036	76.79	-11.3400	0.0048 (ppm)
Si (251.611 nm)	1.5400	ppm	0.0016	0.10	3120.0000	1.5400 (ppm)
Sn (189.925 nm)	0.0087	ppm	0.0029	33.58	2.7290	0.0087 (ppm)
Sr (421.552 nm)	0.2879	ppm	0.0012	0.43	95420.0000	0.2879 (ppm)
Ti (336.122 nm)	4.9030	ppm	0.0117	0.24	464400.0000	4.9030 (ppm)
Tl (190.794 nm)	0.0238	ppm	0.0014	5.95	-19.1700	0.0238 (ppm)
V (292.401 nm)	0.2794	ppm	0.0005	0.18	7665.0000	0.2794 (ppm)
W (207.912 nm)	-0.0012 u	ppm	0.0009	76.01	-4.9910	-0.0012 u (ppm)
Zn (202.548 nm)	0.2785	ppm	0.0016	0.56	3575.0000	0.2785 (ppm)
Zr (343.823 nm)	0.0559	ppm	0.0006	1.14	1352.0000	0.0559 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0100	349500.0000	0.0056	0.56
Y_R 371.029	1.0300	50030.0000	0.0044	0.43

Sample Name: 440-256594-A-5-D@5

Date: 12/10/2019 10:44:13 AM Rack:Tube: 1:13

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0040	ppm	0.0001	3.42	82.4800	0.0040 (ppm)
Al (396.152 nm)	15.5300	ppm	0.0160	0.10	384400.0000	15.5300 (ppm)
As (188.980 nm)	0.0114	ppm	0.0026	22.71	-3.3070	0.0114 (ppm)
B (249.678 nm)	0.0599	ppm	0.0004	0.68	360.8000	0.0599 (ppm)
Ba (233.527 nm)	2.1130	ppm	0.0121	0.57	159600.0000	2.1130 (ppm)
Be (234.861 nm)	0.0005	ppm	0.0002	46.58	2707.0000	0.0005 (ppm)
Ca (422.673 nm)	49.7100	ppm	0.1100	0.22	186800.0000	49.7100 (ppm)
Cd (214.439 nm)	0.0075	ppm	0.0001	1.30	166.3000	0.0075 (ppm)
Co (228.615 nm)	0.0042	ppm	0.0013	31.92	55.2600	0.0042 (ppm)
Cr (205.560 nm)	0.2229	ppm	0.0017	0.77	866.0000	0.2229 (ppm)
Cu (324.754 nm)	0.7519	ppm	0.0009	0.12	26690.0000	0.7519 (ppm)
Fe (238.204 nm)	196.8000	ppm	0.2044	0.10	487700.0000	196.8000 (ppm)
K (766.491 nm)	2.0140	ppm	0.0258	1.28	1924.0000	2.0140 (ppm)
Li (670.783 nm)	0.0243	ppm	0.0006	2.51	295.4000	0.0243 (ppm)
Mg (279.078 nm)	7.1680	ppm	0.0422	0.59	16660.0000	7.1680 (ppm)
Mn (259.372 nm)	0.4345	ppm	0.0019	0.44	57510.0000	0.4345 (ppm)
Mo (204.598 nm)	0.0553	ppm	0.0015	2.66	186.1000	0.0553 (ppm)
Na (589.592 nm)	2.8280	ppm	0.0056	0.20	17980.0000	2.8280 (ppm)
Ni (231.604 nm)	0.0752	ppm	0.0013	1.74	268.4000	0.0752 (ppm)
P (213.618 nm)	57.7000 o	ppm	0.5391	0.93	40820.0000	57.7000 o (ppm)
Pb (220.353 nm)	-0.0119 u	ppm	0.0020	16.68	85.6300	-0.0119 u (ppm)
Sb (206.834 nm)	0.0263	ppm	0.0055	20.76	12.6900	0.0263 (ppm)
Se (196.026 nm)	0.0674	ppm	0.0072	10.75	18.2100	0.0674 (ppm)
Si (251.611 nm)	1.7190	ppm	0.0125	0.73	3436.0000	1.7190 (ppm)
Sn (189.925 nm)	0.1267	ppm	0.0116	9.19	61.3000	0.1267 (ppm)
Sr (421.552 nm)	0.4838	ppm	0.0006	0.13	160600.0000	0.4838 (ppm)
Ti (336.122 nm)	0.1310	ppm	0.0006	0.45	12230.0000	0.1310 (ppm)
Tl (190.794 nm)	-0.0067 u	ppm	0.0058	86.83	5.7460	-0.0067 u (ppm)
V (292.401 nm)	0.1250	ppm	0.0007	0.56	3445.0000	0.1250 (ppm)
W (207.912 nm)	0.0031	ppm	0.0026	84.02	16.8400	0.0031 (ppm)
Zn (202.548 nm)	1.6140	ppm	0.0050	0.31	20800.0000	1.6140 (ppm)
Zr (343.823 nm)	0.1487	ppm	0.0040	2.70	7087.0000	0.1487 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0000	346100.0000	0.0048	0.48
Y_R 371.029	1.0210	49610.0000	0.0032	0.31

Sample Name: 440-256456-A-1-D@5

Date: 12/10/2019 10:46:31 AM Rack:Tube: 1:14

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0024 u	ppm	0.0000	1.70	-166.7000	-0.0024 u (ppm)
Al (396.152 nm)	71.5700	ppm	0.1537	0.21	1773000.0000	71.5700 (ppm)
As (188.980 nm)	0.0260	ppm	0.0030	11.74	9.8290	0.0260 (ppm)
B (249.678 nm)	0.0350	ppm	0.0006	1.83	212.9000	0.0350 (ppm)
Ba (233.527 nm)	0.1743	ppm	0.0002	0.11	13220.0000	0.1743 (ppm)
Be (234.861 nm)	0.0035	ppm	0.0003	7.24	1971.0000	0.0035 (ppm)
Ca (422.673 nm)	15.9100	ppm	0.0516	0.32	59850.0000	15.9100 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0002	90.18	16.1400	0.0002 (ppm)
Co (228.615 nm)	0.0334	ppm	0.0008	2.51	433.6000	0.0334 (ppm)
Cr (205.560 nm)	0.0964	ppm	0.0003	0.27	376.6000	0.0964 (ppm)
Cu (324.754 nm)	0.1166	ppm	0.0003	0.27	4221.0000	0.1166 (ppm)
Fe (238.204 nm)	107.9000	ppm	0.0958	0.09	267400.0000	107.9000 (ppm)
K (766.491 nm)	17.7500	ppm	0.0656	0.37	17230.0000	17.7500 (ppm)
Li (670.783 nm)	0.1237	ppm	0.0003	0.22	6635.0000	0.1237 (ppm)
Mg (279.078 nm)	31.6100	ppm	0.0825	0.26	73820.0000	31.6100 (ppm)
Mn (259.372 nm)	0.8547	ppm	0.0024	0.28	83370.0000	0.8547 (ppm)
Mo (204.598 nm)	0.0003 u	ppm	0.0010	> 100.00	4.8170	0.0003 u (ppm)
Na (589.592 nm)	5.9230	ppm	0.0051	0.09	34170.0000	5.9230 (ppm)
Ni (231.604 nm)	0.0621	ppm	0.0006	0.89	221.3000	0.0621 (ppm)
P (213.618 nm)	2.4610	ppm	0.0009	0.04	1743.0000	2.4610 (ppm)
Pb (220.353 nm)	0.0499	ppm	0.0023	4.53	135.0000	0.0499 (ppm)
Sb (206.834 nm)	0.0113	ppm	0.0038	33.79	3.9800	0.0113 (ppm)
Se (196.026 nm)	0.0038 u	ppm	0.0134	> 100.00	-9.0770	0.0038 u (ppm)
Si (251.611 nm)	1.1840	ppm	0.0003	0.03	2396.0000	1.1840 (ppm)
Sn (189.925 nm)	-0.0033 u	ppm	0.0021	64.39	-3.1350	-0.0033 u (ppm)
Sr (421.552 nm)	0.2022	ppm	0.0004	0.18	67080.0000	0.2022 (ppm)
Ti (336.122 nm)	2.9880	ppm	0.0055	0.18	283000.0000	2.9880 (ppm)
Tl (190.794 nm)	0.0140	ppm	0.0049	34.98	-9.1800	0.0140 (ppm)
V (292.401 nm)	0.1879	ppm	0.0003	0.14	5182.0000	0.1879 (ppm)
W (207.912 nm)	-0.0039 u	ppm	0.0018	46.14	-7.9050	-0.0039 u (ppm)
Zn (202.548 nm)	0.3217	ppm	0.0003	0.10	4140.0000	0.3217 (ppm)
Zr (343.823 nm)	0.0430	ppm	0.0009	2.06	1005.0000	0.0430 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0060	348400.0000	0.0024	0.24
Y_R 371.029	1.0280	49950.0000	0.0035	0.34

Sample Name: 440-256528-a-17-b

Date: 12/10/2019 10:48:51 AM Rack:Tube: 1:15

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	48.74	-76.8700	-0.0002 u (ppm)
Al (396.152 nm)	0.0890	ppm	0.0080	8.95	1882.0000	0.0890 (ppm)
As (188.980 nm)	0.0015	ppm	0.0021	> 100.00	2.3100	0.0015 (ppm)
B (249.678 nm)	0.0105	ppm	0.0001	1.07	88.6300	0.0105 (ppm)
Ba (233.527 nm)	0.0004	ppm	0.0001	30.57	69.6200	0.0004 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	> 100.00	25.9500	0.0000 (ppm)
Ca (422.673 nm)	0.1465	ppm	0.0033	2.24	669.2000	0.1465 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0001	> 100.00	-2.1760	0.0001 u (ppm)
Co (228.615 nm)	0.0006	ppm	0.0001	16.71	-6.1350	0.0006 (ppm)
Cr (205.560 nm)	0.0134	ppm	0.0012	8.96	53.6900	0.0134 (ppm)
Cu (324.754 nm)	0.0005	ppm	0.0002	46.14	60.3400	0.0005 (ppm)
Fe (238.204 nm)	0.1510	ppm	0.0006	0.37	324.2000	0.1510 (ppm)
K (766.491 nm)	0.0614	ppm	0.0286	46.60	-18.4400	0.0614 (ppm)
Li (670.783 nm)	0.0027	ppm	0.0012	44.34	202.8000	0.0027 (ppm)
Mg (279.078 nm)	0.0198	ppm	0.0057	28.58	56.9500	0.0198 (ppm)
Mn (259.372 nm)	0.0015	ppm	0.0002	15.98	185.2000	0.0015 (ppm)
Mo (204.598 nm)	0.0020	ppm	0.0002	9.46	2.5870	0.0020 (ppm)
Na (589.592 nm)	0.0583	ppm	0.0080	13.77	1233.0000	0.0583 (ppm)
Ni (231.604 nm)	0.0102	ppm	0.0006	5.61	24.2000	0.0102 (ppm)
P (213.618 nm)	0.0051	ppm	0.0013	26.47	3.8810	0.0051 (ppm)
Pb (220.353 nm)	-0.0031 u	ppm	0.0010	33.58	-16.6500	-0.0031 u (ppm)
Sb (206.834 nm)	0.0067	ppm	0.0044	66.21	2.0480	0.0067 (ppm)
Se (196.026 nm)	0.0057	ppm	0.0001	1.90	2.4990	0.0057 (ppm)
Si (251.611 nm)	0.0144	ppm	0.0003	2.35	39.6700	0.0144 (ppm)
Sn (189.925 nm)	0.0017 u	ppm	0.0028	> 100.00	-0.6044	0.0017 u (ppm)
Sr (421.552 nm)	0.0013	ppm	0.0001	8.84	395.6000	0.0013 (ppm)
Ti (336.122 nm)	0.0043	ppm	0.0002	5.29	274.5000	0.0043 (ppm)
Tl (190.794 nm)	0.0027	ppm	0.0010	36.87	6.9670	0.0027 (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0001	81.32	85.2300	-0.0001 u (ppm)
W (207.912 nm)	0.0037	ppm	0.0013	35.23	1.1130	0.0037 (ppm)
Zn (202.548 nm)	0.0178	ppm	0.0002	1.00	241.9000	0.0178 (ppm)
Zr (343.823 nm)	0.0003	ppm	0.0001	16.12	126.4000	0.0003 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0030	347100.0000	0.0018	0.18
Y_R 371.029	1.0110	49130.0000	0.0058	0.57

Sample Name: 440-256568-d-1-a

Date: 12/10/2019 10:51:19 AM Rack:Tube: 1:16

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0025 u	ppm	0.0001	5.17	-177.1000	-0.0025 u (ppm)
Al (396.152 nm)	0.4447	ppm	0.0011	0.25	10830.0000	0.4447 (ppm)
As (188.980 nm)	0.0306	ppm	0.0006	1.89	9.4090	0.0306 (ppm)
B (249.678 nm)	3.3870	ppm	0.0253	0.75	32880.0000	3.3870 (ppm)
Ba (233.527 nm)	0.1244	ppm	0.0017	1.36	9464.0000	0.1244 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0006	> 100.00	1977.0000	-0.0001 u (ppm)
Ca (422.673 nm)	385.2000	ppm	1.6320	0.42	1447000.0000	385.2000 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0003	77.07	25.8800	0.0004 (ppm)
Co (228.615 nm)	0.0055	ppm	0.0012	21.63	69.2000	0.0055 (ppm)
Cr (205.560 nm)	0.0333	ppm	0.0012	3.61	137.6000	0.0333 (ppm)
Cu (324.754 nm)	0.0003	ppm	0.0000	1.04	-142.8000	0.0003 (ppm)
Fe (238.204 nm)	148.4000	ppm	0.1929	0.13	367600.0000	148.4000 (ppm)
K (766.491 nm)	187.0000	ppm	0.1748	0.09	181900.0000	187.0000 (ppm)
Li (670.783 nm)	0.0694	ppm	0.0003	0.41	3756.0000	0.0694 (ppm)
Mg (279.078 nm)	122.3000	ppm	1.8740	1.53	285800.0000	122.3000 (ppm)
Mn (259.372 nm)	3.8930	ppm	0.0140	0.36	342900.0000	3.8930 (ppm)
Mo (204.598 nm)	0.0006 u	ppm	0.0011	> 100.00	0.3463	0.0006 u (ppm)
Na (589.592 nm)	439.4000	ppm	1.2880	0.29	2402000.0000	439.4000 (ppm)
Ni (231.604 nm)	0.0210	ppm	0.0009	4.52	53.7100	0.0210 (ppm)
P (213.618 nm)	1.1830	ppm	0.0256	2.16	839.9000	1.1830 (ppm)
Pb (220.353 nm)	-0.0407 u	ppm	0.0027	6.54	12.6600	-0.0407 u (ppm)
Sb (206.834 nm)	0.0225	ppm	0.0006	2.64	10.6500	0.0225 (ppm)
Se (196.026 nm)	0.0060	ppm	0.0034	57.60	-11.8300	0.0060 (ppm)
Si (251.611 nm)	9.5620	ppm	0.1264	1.32	19100.0000	9.5620 (ppm)
Sn (189.925 nm)	-0.0016 u	ppm	0.0032	> 100.00	-1.9440	-0.0016 u (ppm)
Sr (421.552 nm)	1.9200	ppm	0.0069	0.36	639400.0000	1.9200 (ppm)
Ti (336.122 nm)	0.0186	ppm	0.0003	1.62	1337.0000	0.0186 (ppm)
Tl (190.794 nm)	-0.0071 u	ppm	0.0068	96.27	9.3370	-0.0071 u (ppm)
V (292.401 nm)	0.0052	ppm	0.0001	2.59	608.9000	0.0052 (ppm)
W (207.912 nm)	-0.0047 u	ppm	0.0011	23.82	-5.2180	-0.0047 u (ppm)
Zn (202.548 nm)	1.0420	ppm	0.0044	0.42	13340.0000	1.0420 (ppm)
Zr (343.823 nm)	0.0696	ppm	0.0038	5.42	2191.0000	0.0696 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9281	321200.0000	0.0017	0.18
Y_R 371.029	0.9948	48330.0000	0.0088	0.89

Sample Name: 440-256298-I-1-A

Date: 12/10/2019 10:53:07 AM Rack:Tube: 1:17

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0003	> 100.00	-70.9900	0.0000 u (ppm)
Al (396.152 nm)	1.7090	ppm	0.0050	0.29	42030.0000	1.7090 (ppm)
As (188.980 nm)	0.0012	ppm	0.0003	23.07	2.1170	0.0012 (ppm)
B (249.678 nm)	0.0333	ppm	0.0003	0.83	309.5000	0.0333 (ppm)
Ba (233.527 nm)	0.0385	ppm	0.0001	0.18	2947.0000	0.0385 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	> 100.00	53.1800	0.0001 (ppm)
Ca (422.673 nm)	10.6800	ppm	0.0294	0.28	40230.0000	10.6800 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0002	> 100.00	0.6751	0.0002 (ppm)
Co (228.615 nm)	0.0015	ppm	0.0001	7.42	6.3600	0.0015 (ppm)
Cr (205.560 nm)	0.0030	ppm	0.0004	13.94	13.6700	0.0030 (ppm)
Cu (324.754 nm)	0.0064	ppm	0.0002	3.32	263.7000	0.0064 (ppm)
Fe (238.204 nm)	1.7670	ppm	0.0083	0.47	4330.0000	1.7670 (ppm)
K (766.491 nm)	4.0930	ppm	0.1030	2.52	3905.0000	4.0930 (ppm)
Li (670.783 nm)	0.0053	ppm	0.0012	22.92	358.9000	0.0053 (ppm)
Mg (279.078 nm)	2.2150	ppm	0.0226	1.02	5185.0000	2.2150 (ppm)
Mn (259.372 nm)	0.0883	ppm	0.0008	0.86	7653.0000	0.0883 (ppm)
Mo (204.598 nm)	0.0010	ppm	0.0004	42.56	-0.6206	0.0010 (ppm)
Na (589.592 nm)	3.5240	ppm	0.0348	0.99	20180.0000	3.5240 (ppm)
Ni (231.604 nm)	0.0037	ppm	0.0014	37.61	-1.2270	0.0037 (ppm)
P (213.618 nm)	0.2875	ppm	0.0066	2.30	203.6000	0.2875 (ppm)
Pb (220.353 nm)	0.0004 u	ppm	0.0016	> 100.00	-9.5820	0.0004 u (ppm)
Sb (206.834 nm)	0.0075	ppm	0.0011	14.24	2.6460	0.0075 (ppm)
Se (196.026 nm)	0.0096	ppm	0.0002	2.16	4.5200	0.0096 (ppm)
Si (251.611 nm)	4.5960	ppm	0.0216	0.47	9176.0000	4.5960 (ppm)
Sn (189.925 nm)	-0.0036 u	ppm	0.0010	28.02	-3.2440	-0.0036 u (ppm)
Sr (421.552 nm)	0.0415	ppm	0.0002	0.42	13800.0000	0.0415 (ppm)
Ti (336.122 nm)	0.0949	ppm	0.0013	1.34	8845.0000	0.0949 (ppm)
Tl (190.794 nm)	0.0015 u	ppm	0.0033	> 100.00	4.9240	0.0015 u (ppm)
V (292.401 nm)	0.0066	ppm	0.0003	3.91	275.4000	0.0066 (ppm)
W (207.912 nm)	0.0011	ppm	0.0005	47.36	-2.5280	0.0011 (ppm)
Zn (202.548 nm)	0.0321	ppm	0.0001	0.32	424.2000	0.0321 (ppm)
Zr (343.823 nm)	0.0023	ppm	0.0001	5.02	238.9000	0.0023 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0090	349400.0000	0.0025	0.25
Y_R 371.029	1.0210	49590.0000	0.0016	0.16

Sample Name: 440-256298-I-6-A bc

Date: 12/10/2019 10:54:55 AM Rack:Tube: 1:18

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0002	44.88	-88.8800	-0.0005 u (ppm)
Al (396.152 nm)	3.2100	ppm	0.0037	0.12	79240.0000	3.2100 (ppm)
As (188.980 nm)	0.0033	ppm	0.0028	85.10	3.1160	0.0033 (ppm)
B (249.678 nm)	0.0457	ppm	0.0000	0.10	429.6000	0.0457 (ppm)
Ba (233.527 nm)	0.1059	ppm	0.0009	0.88	8044.0000	0.1059 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	23.58	98.1200	0.0003 (ppm)
Ca (422.673 nm)	38.6400	ppm	0.1197	0.31	145300.0000	38.6400 (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0001	10.18	7.0680	0.0005 (ppm)
Co (228.615 nm)	0.0058	ppm	0.0001	1.48	54.1800	0.0058 (ppm)
Cr (205.560 nm)	0.0048	ppm	0.0000	0.81	21.0100	0.0048 (ppm)
Cu (324.754 nm)	0.0235	ppm	0.0007	3.01	849.5000	0.0235 (ppm)
Fe (238.204 nm)	2.5350	ppm	0.0867	3.42	6232.0000	2.5350 (ppm)
K (766.491 nm)	2.7010	ppm	0.0715	2.65	2555.0000	2.7010 (ppm)
Li (670.783 nm)	0.0054	ppm	0.0015	27.89	397.0000	0.0054 (ppm)
Mg (279.078 nm)	6.0090	ppm	0.0502	0.84	14050.0000	6.0090 (ppm)
Mn (259.372 nm)	0.2997	ppm	0.0005	0.17	25480.0000	0.2997 (ppm)
Mo (204.598 nm)	0.0014	ppm	0.0002	13.91	1.0040	0.0014 (ppm)
Na (589.592 nm)	8.4910	ppm	0.0093	0.11	47330.0000	8.4910 (ppm)
Ni (231.604 nm)	0.0094	ppm	0.0006	6.67	20.2400	0.0094 (ppm)
P (213.618 nm)	0.3337	ppm	0.0031	0.92	235.6000	0.3337 (ppm)
Pb (220.353 nm)	0.0228	ppm	0.0005	2.08	30.1900	0.0228 (ppm)
Sb (206.834 nm)	0.0012 u	ppm	0.0034	> 100.00	-2.3210	0.0012 u (ppm)
Se (196.026 nm)	0.0004 u	ppm	0.0009	> 100.00	-0.7788	0.0004 u (ppm)
Si (251.611 nm)	7.5420	ppm	0.0304	0.40	15050.0000	7.5420 (ppm)
Sn (189.925 nm)	-0.0028 u	ppm	0.0001	3.02	-2.8190	-0.0028 u (ppm)
Sr (421.552 nm)	0.1298	ppm	0.0003	0.26	43340.0000	0.1298 (ppm)
Ti (336.122 nm)	0.0435	ppm	0.0004	0.94	3953.0000	0.0435 (ppm)
Tl (190.794 nm)	0.0045	ppm	0.0002	4.97	8.1550	0.0045 (ppm)
V (292.401 nm)	0.0167	ppm	0.0007	4.30	571.5000	0.0167 (ppm)
W (207.912 nm)	-0.0040 u	ppm	0.0006	14.13	-9.5140	-0.0040 u (ppm)
Zn (202.548 nm)	0.0993	ppm	0.0003	0.34	1287.0000	0.0993 (ppm)
Zr (343.823 nm)	0.0016	ppm	0.0002	12.99	171.7000	0.0016 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0300	356500.0000	0.0090	0.87
Y_R 371.029	1.0530	51130.0000	0.0016	0.15

Sample Name: CCV 5993196

Date: 12/10/2019 10:56:43 AM
Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5064	ppm	0.0019	0.37	18520.0000	0.5064 (ppm)
Al (396.152 nm)	1.0220	ppm	0.0020	0.20	25910.0000	1.0220 (ppm)
As (188.980 nm)	1.0170	ppm	0.0063	0.62	536.0000	1.0170 (ppm)
B (249.678 nm)	1.0070	ppm	0.0051	0.50	9726.0000	1.0070 (ppm)
Ba (233.527 nm)	1.0010	ppm	0.0014	0.14	75630.0000	1.0010 (ppm)
Be (234.861 nm)	1.0100	ppm	0.0031	0.31	150100.0000	1.0100 (ppm)
Ca (422.673 nm)	5.0440	ppm	0.0198	0.39	19070.0000	5.0440 (ppm)
Cd (214.439 nm)	1.0150	ppm	0.0022	0.22	18970.0000	1.0150 (ppm)
Co (228.615 nm)	1.0170	ppm	0.0013	0.13	11460.0000	1.0170 (ppm)
Cr (205.560 nm)	1.0140	ppm	0.0039	0.38	3915.0000	1.0140 (ppm)
Cu (324.754 nm)	1.0260	ppm	0.0035	0.35	36370.0000	1.0260 (ppm)
Fe (238.204 nm)	1.0810	ppm	0.0114	1.05	2627.0000	1.0810 (ppm)
K (766.491 nm)	10.1500	ppm	0.0551	0.54	9802.0000	10.1500 (ppm)
Li (670.783 nm)	1.0090	ppm	0.0020	0.19	55600.0000	1.0090 (ppm)
Mg (279.078 nm)	5.0380	ppm	0.0021	0.04	11780.0000	5.0380 (ppm)
Mn (259.372 nm)	1.0130	ppm	0.0025	0.25	85570.0000	1.0130 (ppm)
Mo (204.598 nm)	1.0130	ppm	0.0031	0.31	3402.0000	1.0130 (ppm)
Na (589.592 nm)	10.0700	ppm	0.0092	0.09	55990.0000	10.0700 (ppm)
Ni (231.604 nm)	1.0130	ppm	0.0003	0.03	3926.0000	1.0130 (ppm)
P (213.618 nm)	1.0130	ppm	0.0013	0.13	674.9000	1.0130 (ppm)
Pb (220.353 nm)	1.0110	ppm	0.0022	0.22	1754.0000	1.0110 (ppm)
Sb (206.834 nm)	1.0120	ppm	0.0256	2.53	788.6000	1.0120 (ppm)
Se (196.026 nm)	1.0050	ppm	0.0097	0.97	567.5000	1.0050 (ppm)
Si (251.611 nm)	5.2740	ppm	0.0211	0.40	10680.0000	5.2740 (ppm)
Sn (189.925 nm)	1.0180	ppm	0.0012	0.12	502.2000	1.0180 (ppm)
Sr (421.552 nm)	1.0080	ppm	0.0022	0.22	333800.0000	1.0080 (ppm)
Ti (336.122 nm)	1.0270	ppm	0.0034	0.33	97150.0000	1.0270 (ppm)
Tl (190.794 nm)	1.0140	ppm	0.0097	0.96	896.7000	1.0140 (ppm)
V (292.401 nm)	1.0170	ppm	0.0010	0.10	27010.0000	1.0170 (ppm)
W (207.912 nm)	1.0110	ppm	0.0010	0.10	1456.0000	1.0110 (ppm)
Zn (202.548 nm)	1.0120	ppm	0.0025	0.24	13140.0000	1.0120 (ppm)
Zr (343.823 nm)	0.9616	ppm	0.0078	0.82	72940.0000	0.9616 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9972	345200.0000	0.0007	0.07
Y_R 371.029	1.0120	49150.0000	0.0001	0.01

Sample Name: CCB 5993195

Date: 12/10/2019 11:06:39 AM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	-69.6000	0.0000 u (ppm)
Al (396.152 nm)	0.0018	ppm	0.0004	19.47	-273.9000	0.0018 (ppm)
As (188.980 nm)	0.0007 u	ppm	0.0037	> 100.00	1.9570	0.0007 u (ppm)
B (249.678 nm)	0.0009	ppm	0.0011	> 100.00	-6.0790	0.0009 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0002	> 100.00	37.3500	0.0000 u (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	85.13	29.2500	0.0000 (ppm)
Ca (422.673 nm)	-0.0060 u	ppm	0.0043	71.92	96.5600	-0.0060 u (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-5.0280	-0.0001 u (ppm)
Co (228.615 nm)	-0.0003 u	ppm	0.0004	> 100.00	-16.4900	-0.0003 u (ppm)
Cr (205.560 nm)	-0.0005 u	ppm	0.0003	57.71	-0.0911	-0.0005 u (ppm)
Cu (324.754 nm)	0.0002 u	ppm	0.0005	> 100.00	47.7400	0.0002 u (ppm)
Fe (238.204 nm)	0.0052	ppm	0.0066	> 100.00	-37.1500	0.0052 (ppm)
K (766.491 nm)	0.0168	ppm	0.0199	> 100.00	-61.8800	0.0168 (ppm)
Li (670.783 nm)	0.0014	ppm	0.0005	32.18	133.2000	0.0014 (ppm)
Mg (279.078 nm)	0.0064	ppm	0.0001	0.80	25.7000	0.0064 (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0000	22.74	68.3300	0.0002 (ppm)
Mo (204.598 nm)	0.0097	ppm	0.0003	3.55	28.4300	0.0097 (ppm)
Na (589.592 nm)	-0.0077 u	ppm	0.0009	11.74	871.1000	-0.0077 u (ppm)
Ni (231.604 nm)	0.0021	ppm	0.0001	4.31	-7.3330	0.0021 (ppm)
P (213.618 nm)	0.0039	ppm	0.0041	> 100.00	2.9070	0.0039 (ppm)
Pb (220.353 nm)	-0.0038 u	ppm	0.0015	39.28	-18.0200	-0.0038 u (ppm)
Sb (206.834 nm)	0.0126 Z	ppm	0.0106	83.95	6.5200 Z	0.0126 Z (ppm)
Se (196.026 nm)	0.0067	ppm	0.0057	85.95	3.0810	0.0067 (ppm)
Si (251.611 nm)	0.0209	ppm	0.0008	3.69	53.0700	0.0209 (ppm)
Sn (189.925 nm)	0.0056	ppm	0.0013	22.68	1.3140	0.0056 (ppm)
Sr (421.552 nm)	-0.0001 u	ppm	0.0001	> 100.00	-55.4700	-0.0001 u (ppm)
Ti (336.122 nm)	0.0016	ppm	0.0001	8.09	15.5300	0.0016 (ppm)
Tl (190.794 nm)	0.0029	ppm	0.0011	38.40	7.1320	0.0029 (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0003	> 100.00	82.9200	-0.0001 u (ppm)
W (207.912 nm)	0.0052	ppm	0.0034	65.13	3.1140	0.0052 (ppm)
Zn (202.548 nm)	0.0037	ppm	0.0000	0.44	60.8300	0.0037 (ppm)
Zr (343.823 nm)	0.0001	ppm	0.0001	56.78	112.1000	0.0001 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0040	347400.0000	0.0035	0.35
Y_R 371.029	1.0170	49410.0000	0.0011	0.11

Sample Name: 720-96362-6 Total bc eb

Date: 12/10/2019 11:08:29 AM Rack:Tube: 1:19

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0006	> 100.00	-73.1400	-0.0001 u (ppm)
Al (396.152 nm)	0.0035	ppm	0.0009	24.56	-236.7000	0.0035 (ppm)
As (188.980 nm)	0.0014 u	ppm	0.0063	> 100.00	2.3230	0.0014 u (ppm)
B (249.678 nm)	0.0014	ppm	0.0000	1.77	-0.6144	0.0014 (ppm)
Ba (233.527 nm)	0.0000	ppm	0.0000	9.29	42.0800	0.0000 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	23.3900	0.0000 u (ppm)
Ca (422.673 nm)	0.0654	ppm	0.0094	14.33	364.8000	0.0654 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0002	> 100.00	-5.1430	-0.0001 u (ppm)
Co (228.615 nm)	0.0002	ppm	0.0000	19.26	-10.9500	0.0002 (ppm)
Cr (205.560 nm)	-0.0007 u	ppm	0.0005	63.95	-1.0160	-0.0007 u (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0001	> 100.00	40.8700	0.0000 u (ppm)
Fe (238.204 nm)	0.0005 u	ppm	0.0031	> 100.00	-48.8200	0.0005 u (ppm)
K (766.491 nm)	-0.0478 u	ppm	0.0895	> 100.00	-124.7000	-0.0478 u (ppm)
Li (670.783 nm)	0.0000 u	ppm	0.0011	> 100.00	53.1300	0.0000 u (ppm)
Mg (279.078 nm)	0.0063	ppm	0.0020	31.38	25.4100	0.0063 (ppm)
Mn (259.372 nm)	0.0000 u	ppm	0.0002	> 100.00	45.3200	0.0000 u (ppm)
Mo (204.598 nm)	0.0021	ppm	0.0012	56.99	2.9110	0.0021 (ppm)
Na (589.592 nm)	0.2968	ppm	0.0063	2.12	2534.0000	0.2968 (ppm)
Ni (231.604 nm)	0.0019	ppm	0.0000	2.54	-8.2270	0.0019 (ppm)
P (213.618 nm)	-0.0004 u	ppm	0.0002	49.16	-0.0018	-0.0004 u (ppm)
Pb (220.353 nm)	-0.0006 u	ppm	0.0009	> 100.00	-12.3700	-0.0006 u (ppm)
Sb (206.834 nm)	0.0041	ppm	0.0004	9.80	-0.1236	0.0041 (ppm)
Se (196.026 nm)	0.0019	ppm	0.0007	38.57	0.3718	0.0019 (ppm)
Si (251.611 nm)	0.1890	ppm	0.0005	0.26	387.7000	0.1890 (ppm)
Sn (189.925 nm)	-0.0005 u	ppm	0.0011	> 100.00	-1.6860	-0.0005 u (ppm)
Sr (421.552 nm)	0.0000	ppm	0.0000	75.27	-14.8400	0.0000 (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0000	23.92	-147.7000	-0.0001 u (ppm)
Tl (190.794 nm)	0.0031	ppm	0.0011	36.81	7.3270	0.0031 (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0002	> 100.00	82.8100	-0.0001 u (ppm)
W (207.912 nm)	0.0014 u	ppm	0.0027	> 100.00	-2.4010	0.0014 u (ppm)
Zn (202.548 nm)	-0.0002 u	ppm	0.0002	99.55	9.6980	-0.0002 u (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0000	> 100.00	105.3000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0140	351000.0000	0.0052	0.51
Y_R 371.029	1.0160	49350.0000	0.0022	0.22

Sample Name: MB 440-584703/1-A@5

Date: 12/10/2019 11:14:10 AM Rack:Tube: 1:20

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0004	> 100.00	-63.8300	0.0001 u (ppm)
Al (396.152 nm)	0.0052	ppm	0.0001	1.46	-197.4000	0.0052 (ppm)
As (188.980 nm)	0.0001 u	ppm	0.0026	> 100.00	1.6480	0.0001 u (ppm)
B (249.678 nm)	0.0010	ppm	0.0004	41.15	-4.6700	0.0010 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0000	7.80	54.2100	0.0002 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0000	10.13	13.6000	-0.0001 u (ppm)
Ca (422.673 nm)	0.0243	ppm	0.0020	8.07	210.3000	0.0243 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0002	> 100.00	-4.6330	-0.0001 u (ppm)
Co (228.615 nm)	-0.0005 u	ppm	0.0003	53.58	-18.2900	-0.0005 u (ppm)
Cr (205.560 nm)	0.0003	ppm	0.0001	36.79	2.7720	0.0003 (ppm)
Cu (324.754 nm)	0.0039	ppm	0.0003	6.80	179.7000	0.0039 (ppm)
Fe (238.204 nm)	0.0213	ppm	0.0014	6.70	2.6580	0.0213 (ppm)
K (766.491 nm)	-0.0215 u	ppm	0.0190	88.29	-99.1000	-0.0215 u (ppm)
Li (670.783 nm)	0.0007	ppm	0.0007	> 100.00	89.8400	0.0007 (ppm)
Mg (279.078 nm)	0.0081	ppm	0.0015	18.95	29.7600	0.0081 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0001	10.94	91.4400	0.0005 (ppm)
Mo (204.598 nm)	0.0006 u	ppm	0.0012	> 100.00	-2.1380	0.0006 u (ppm)
Na (589.592 nm)	0.0190	ppm	0.0040	20.94	1017.0000	0.0190 (ppm)
Ni (231.604 nm)	0.0023	ppm	0.0004	16.80	-6.8110	0.0023 (ppm)
P (213.618 nm)	0.0007 u	ppm	0.0024	> 100.00	0.6970	0.0007 u (ppm)
Pb (220.353 nm)	-0.0006 u	ppm	0.0010	> 100.00	-12.3400	-0.0006 u (ppm)
Sb (206.834 nm)	0.0071	ppm	0.0013	17.95	2.3130	0.0071 (ppm)
Se (196.026 nm)	0.0067	ppm	0.0029	44.05	3.0600	0.0067 (ppm)
Si (251.611 nm)	0.0222	ppm	0.0024	10.70	55.0100	0.0222 (ppm)
Sn (189.925 nm)	0.0040	ppm	0.0026	64.13	0.5395	0.0040 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	47.77	1.5040	0.0001 (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0000	45.43	-140.7000	-0.0001 u (ppm)
Tl (190.794 nm)	-0.0015 u	ppm	0.0045	> 100.00	3.1210	-0.0015 u (ppm)
V (292.401 nm)	-0.0006 u	ppm	0.0004	62.77	71.5900	-0.0006 u (ppm)
W (207.912 nm)	0.0014 u	ppm	0.0024	> 100.00	-2.2020	0.0014 u (ppm)
Zn (202.548 nm)	0.0056	ppm	0.0001	1.44	84.6400	0.0056 (ppm)
Zr (343.823 nm)	0.0002 u	ppm	0.0003	> 100.00	119.6000	0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0100	349600.0000	0.0067	0.67
Y_R 371.029	1.0180	49440.0000	0.0040	0.39

Sample Name: LCS 440-584703/2-A@5

Date: 12/10/2019 11:15:58 AM
Rack:Tube: 1:21

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1811	ppm	0.0004	0.23	6574.0000	0.1811 (ppm)
Al (396.152 nm)	0.3649	ppm	0.0017	0.48	9041.0000	0.3649 (ppm)
As (188.980 nm)	0.3588	ppm	0.0058	1.62	190.2000	0.3588 (ppm)
B (249.678 nm)	0.3565	ppm	0.0068	1.92	3433.0000	0.3565 (ppm)
Ba (233.527 nm)	0.3622	ppm	0.0004	0.11	27390.0000	0.3622 (ppm)
Be (234.861 nm)	0.3536	ppm	0.0012	0.34	52540.0000	0.3536 (ppm)
Ca (422.673 nm)	1.8440	ppm	0.0029	0.15	7045.0000	1.8440 (ppm)
Cd (214.439 nm)	0.3608	ppm	0.0042	1.17	6740.0000	0.3608 (ppm)
Co (228.615 nm)	0.3684	ppm	0.0034	0.91	4141.0000	0.3684 (ppm)
Cr (205.560 nm)	0.3669	ppm	0.0007	0.18	1418.0000	0.3669 (ppm)
Cu (324.754 nm)	0.3720	ppm	0.0014	0.39	13210.0000	0.3720 (ppm)
Fe (238.204 nm)	0.4796	ppm	0.0029	0.60	1138.0000	0.4796 (ppm)
K (766.491 nm)	3.5210	ppm	0.0171	0.49	3349.0000	3.5210 (ppm)
Li (670.783 nm)	0.3623	ppm	0.0006	0.17	20000.0000	0.3623 (ppm)
Mg (279.078 nm)	1.8010	ppm	0.0068	0.37	4219.0000	1.8010 (ppm)
Mn (259.372 nm)	0.3672	ppm	0.0006	0.16	31070.0000	0.3672 (ppm)
Mo (204.598 nm)	0.3869	ppm	0.0019	0.50	1297.0000	0.3869 (ppm)
Na (589.592 nm)	3.6220	ppm	0.0041	0.11	20730.0000	3.6220 (ppm)
Ni (231.604 nm)	0.3700	ppm	0.0007	0.18	1425.0000	0.3700 (ppm)
P (213.618 nm)	0.3662	ppm	0.0015	0.42	243.9000	0.3662 (ppm)
Pb (220.353 nm)	0.3640	ppm	0.0035	0.97	624.3000	0.3640 (ppm)
Sb (206.834 nm)	0.3837	ppm	0.0054	1.40	296.8000	0.3837 (ppm)
Se (196.026 nm)	0.3259	ppm	0.0041	1.25	183.7000	0.3259 (ppm)
Si (251.611 nm)	0.2835	ppm	0.0125	4.39	631.4000	0.2835 (ppm)
Sn (189.925 nm)	0.3701	ppm	0.0024	0.65	181.7000	0.3701 (ppm)
Sr (421.552 nm)	0.3575	ppm	0.0010	0.28	118300.0000	0.3575 (ppm)
Ti (336.122 nm)	0.3660	ppm	0.0022	0.60	34530.0000	0.3660 (ppm)
Tl (190.794 nm)	0.3488	ppm	0.0089	2.54	311.1000	0.3488 (ppm)
V (292.401 nm)	0.3662	ppm	0.0010	0.28	9777.0000	0.3662 (ppm)
W (207.912 nm)	0.3600	ppm	0.0016	0.44	515.5000	0.3600 (ppm)
Zn (202.548 nm)	0.3572	ppm	0.0006	0.16	4650.0000	0.3572 (ppm)
Zr (343.823 nm)	0.2774	ppm	0.0048	1.75	21110.0000	0.2774 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0050	347700.0000	0.0046	0.46
Y_R 371.029	1.0210	49610.0000	0.0021	0.20

Sample Name: 440-256528-B-1-A SD@25

Date: 12/10/2019 11:17:48 AM Rack:Tube: 1:22

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0002	> 100.00	-67.6500	0.0001 u (ppm)
Al (396.152 nm)	11.3900	ppm	0.0286	0.25	281900.0000	11.3900 (ppm)
As (188.980 nm)	0.0140	ppm	0.0009	6.20	8.1100	0.0140 (ppm)
B (249.678 nm)	0.0056	ppm	0.0010	17.87	18.8000	0.0056 (ppm)
Ba (233.527 nm)	0.0624	ppm	0.0000	0.02	4760.0000	0.0624 (ppm)
Be (234.861 nm)	0.0009	ppm	0.0001	17.41	416.7000	0.0009 (ppm)
Ca (422.673 nm)	5.9960	ppm	0.0026	0.04	22640.0000	5.9960 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0003	> 100.00	1.5690	0.0001 u (ppm)
Co (228.615 nm)	0.0061	ppm	0.0006	9.16	70.0300	0.0061 (ppm)
Cr (205.560 nm)	0.0092	ppm	0.0000	0.34	38.3500	0.0092 (ppm)
Cu (324.754 nm)	3.3560	ppm	0.0007	0.02	118800.0000	3.3560 (ppm)
Fe (238.204 nm)	20.1200	ppm	0.0326	0.16	49820.0000	20.1200 (ppm)
K (766.491 nm)	1.7980	ppm	0.0634	3.53	1679.0000	1.7980 (ppm)
Li (670.783 nm)	0.0096	ppm	0.0001	0.85	348.6000	0.0096 (ppm)
Mg (279.078 nm)	9.9050	ppm	0.0085	0.09	23140.0000	9.9050 (ppm)
Mn (259.372 nm)	0.0985	ppm	0.0003	0.30	10490.0000	0.0985 (ppm)
Mo (204.598 nm)	0.0101	ppm	0.0006	5.99	31.1100	0.0101 (ppm)
Na (589.592 nm)	0.3898	ppm	0.0073	1.86	3219.0000	0.3898 (ppm)
Ni (231.604 nm)	0.0127	ppm	0.0011	8.30	32.4700	0.0127 (ppm)
P (213.618 nm)	0.6192	ppm	0.0217	3.51	349.8000	0.6192 (ppm)
Pb (220.353 nm)	0.0035	ppm	0.0016	45.64	6.0960	0.0035 (ppm)
Sb (206.834 nm)	0.0091	ppm	0.0082	90.57	3.5050	0.0091 (ppm)
Se (196.026 nm)	0.0103	ppm	0.0070	67.37	2.9390	0.0103 (ppm)
Si (251.611 nm)	0.2328	ppm	0.0038	1.63	481.7000	0.2328 (ppm)
Sn (189.925 nm)	0.0038	ppm	0.0013	35.38	0.4365	0.0038 (ppm)
Sr (421.552 nm)	0.0942	ppm	0.0002	0.18	31220.0000	0.0942 (ppm)
Ti (336.122 nm)	0.5943	ppm	0.0032	0.54	56160.0000	0.5943 (ppm)
Tl (190.794 nm)	0.0100	ppm	0.0001	0.67	8.0870	0.0100 (ppm)
V (292.401 nm)	0.0322	ppm	0.0002	0.53	963.0000	0.0322 (ppm)
W (207.912 nm)	0.0034	ppm	0.0003	8.88	0.5116	0.0034 (ppm)
Zn (202.548 nm)	0.0233	ppm	0.0002	0.84	645.4000	0.0233 (ppm)
Zr (343.823 nm)	0.0085	ppm	0.0001	1.25	311.8000	0.0085 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0020	346800.0000	0.0048	0.48
Y_R 371.029	1.0180	49460.0000	0.0035	0.35

Sample Name: 440-256528-B-1-A@5

Date: 12/10/2019 11:19:38 AM Rack:Tube: 1:23

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0013 u	ppm	0.0001	4.55	-131.1000	-0.0013 u (ppm)
Al (396.152 nm)	60.0200	ppm	0.3053	0.51	1487000.0000	60.0200 (ppm)
As (188.980 nm)	0.0535	ppm	0.0092	17.24	25.4900	0.0535 (ppm)
B (249.678 nm)	0.0182	ppm	0.0004	2.37	54.8600	0.0182 (ppm)
Ba (233.527 nm)	0.3065	ppm	0.0018	0.58	23210.0000	0.3065 (ppm)
Be (234.861 nm)	0.0010	ppm	0.0002	16.92	1503.0000	0.0010 (ppm)
Ca (422.673 nm)	30.1200	ppm	0.0736	0.24	113200.0000	30.1200 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0002	> 100.00	13.3300	0.0002 (ppm)
Co (228.615 nm)	0.0287	ppm	0.0005	1.82	384.0000	0.0287 (ppm)
Cr (205.560 nm)	0.0419	ppm	0.0003	0.61	168.6000	0.0419 (ppm)
Cu (324.754 nm)	16.8600	ppm	0.0491	0.29	596900.0000	16.8600 (ppm)
Fe (238.204 nm)	100.1000	ppm	0.3300	0.33	248000.0000	100.1000 (ppm)
K (766.491 nm)	9.3210	ppm	0.0567	0.61	9027.0000	9.3210 (ppm)
Li (670.783 nm)	0.0465	ppm	0.0017	3.58	1440.0000	0.0465 (ppm)
Mg (279.078 nm)	48.6800	ppm	0.2761	0.57	113700.0000	48.6800 (ppm)
Mn (259.372 nm)	0.4800	ppm	0.0022	0.46	51150.0000	0.4800 (ppm)
Mo (204.598 nm)	0.0336	ppm	0.0001	0.24	115.7000	0.0336 (ppm)
Na (589.592 nm)	1.9320	ppm	0.0050	0.26	12350.0000	1.9320 (ppm)
Ni (231.604 nm)	0.0551	ppm	0.0004	0.71	192.5000	0.0551 (ppm)
P (213.618 nm)	2.8720	ppm	0.0538	1.87	1588.0000	2.8720 (ppm)
Pb (220.353 nm)	0.0108	ppm	0.0066	60.64	63.7600	0.0108 (ppm)
Sb (206.834 nm)	0.0139	ppm	0.0004	3.12	6.0570	0.0139 (ppm)
Se (196.026 nm)	0.0273	ppm	0.0026	9.64	3.7790	0.0273 (ppm)
Si (251.611 nm)	1.1210	ppm	0.0071	0.63	2277.0000	1.1210 (ppm)
Sn (189.925 nm)	-0.0004 u	ppm	0.0001	23.64	-1.5070	-0.0004 u (ppm)
Sr (421.552 nm)	0.4724	ppm	0.0019	0.40	156600.0000	0.4724 (ppm)
Ti (336.122 nm)	3.0120	ppm	0.0150	0.50	285200.0000	3.0120 (ppm)
Tl (190.794 nm)	0.0202	ppm	0.0024	11.67	-4.7760	0.0202 (ppm)
V (292.401 nm)	0.1602	ppm	0.0001	0.08	4456.0000	0.1602 (ppm)
W (207.912 nm)	0.0009	ppm	0.0001	13.70	-3.0930	0.0009 (ppm)
Zn (202.548 nm)	0.1026	ppm	0.0011	1.06	3003.0000	0.1026 (ppm)
Zr (343.823 nm)	0.0477	ppm	0.0004	0.86	1538.0000	0.0477 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9905	342900.0000	0.0055	0.55
Y_R 371.029	1.0200	49560.0000	0.0048	0.47

Sample Name: 440-256528-B-1-B MS@5

Date: 12/10/2019 11:21:26 AM Rack:Tube: 1:24

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1833	ppm	0.0002	0.11	6638.0000	0.1833 (ppm)
Al (396.152 nm)	78.7400	ppm	0.0666	0.08	1951000.0000	78.7400 (ppm)
As (188.980 nm)	0.4284	ppm	0.0082	1.91	221.9000	0.4284 (ppm)
B (249.678 nm)	0.3470	ppm	0.0007	0.21	3225.0000	0.3470 (ppm)
Ba (233.527 nm)	0.7155	ppm	0.0120	1.68	54090.0000	0.7155 (ppm)
Be (234.861 nm)	0.3684	ppm	0.0003	0.07	56290.0000	0.3684 (ppm)
Ca (422.673 nm)	31.9600	ppm	0.1269	0.40	120100.0000	31.9600 (ppm)
Cd (214.439 nm)	0.3595	ppm	0.0000	0.01	6731.0000	0.3595 (ppm)
Co (228.615 nm)	0.3897	ppm	0.0051	1.31	4475.0000	0.3897 (ppm)
Cr (205.560 nm)	0.4120	ppm	0.0011	0.27	1597.0000	0.4120 (ppm)
Cu (324.754 nm)	19.2400	ppm	0.1064	0.55	681000.0000	19.2400 (ppm)
Fe (238.204 nm)	116.6000	ppm	0.7214	0.62	288900.0000	116.6000 (ppm)
K (766.491 nm)	14.0900	ppm	0.1125	0.80	13670.0000	14.0900 (ppm)
Li (670.783 nm)	0.4179	ppm	0.0023	0.55	21750.0000	0.4179 (ppm)
Mg (279.078 nm)	50.9900	ppm	0.7942	1.56	119100.0000	50.9900 (ppm)
Mn (259.372 nm)	0.8801	ppm	0.0006	0.07	86650.0000	0.8801 (ppm)
Mo (204.598 nm)	0.4148	ppm	0.0013	0.32	1400.0000	0.4148 (ppm)
Na (589.592 nm)	5.7160	ppm	0.0449	0.79	33180.0000	5.7160 (ppm)
Ni (231.604 nm)	0.4164	ppm	0.0044	1.06	1598.0000	0.4164 (ppm)
P (213.618 nm)	3.0560	ppm	0.0255	0.84	1650.0000	3.0560 (ppm)
Pb (220.353 nm)	0.3795	ppm	0.0016	0.43	715.6000	0.3795 (ppm)
Sb (206.834 nm)	0.2855	ppm	0.0009	0.31	217.7000	0.2855 (ppm)
Se (196.026 nm)	0.3719	ppm	0.0034	0.92	196.3000	0.3719 (ppm)
Si (251.611 nm)	1.4840	ppm	0.0015	0.10	3053.0000	1.4840 (ppm)
Sn (189.925 nm)	0.3672	ppm	0.0012	0.32	180.3000	0.3672 (ppm)
Sr (421.552 nm)	0.8901	ppm	0.0047	0.52	294900.0000	0.8901 (ppm)
Ti (336.122 nm)	4.3320	ppm	0.0042	0.10	410200.0000	4.3320 (ppm)
Tl (190.794 nm)	0.3728	ppm	0.0081	2.17	295.8000	0.3728 (ppm)
V (292.401 nm)	0.5620	ppm	0.0009	0.16	15120.0000	0.5620 (ppm)
W (207.912 nm)	0.2497	ppm	0.0017	0.68	357.3000	0.2497 (ppm)
Zn (202.548 nm)	0.4652	ppm	0.0005	0.12	7905.0000	0.4652 (ppm)
Zr (343.823 nm)	0.3476	ppm	0.0012	0.34	23900.0000	0.3476 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9906	342900.0000	0.0057	0.57
Y_R 371.029	1.0170	49390.0000	0.0115	1.13

Sample Name: 440-256528-B-1-C MSD@5

Date: 12/10/2019 11:23:14 AM Rack:Tube: 1:25

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1802	ppm	0.0005	0.27	6524.0000	0.1802 (ppm)
Al (396.152 nm)	85.1000	ppm	0.0823	0.10	2109000.0000	85.1000 (ppm)
As (188.980 nm)	0.4024	ppm	0.0035	0.88	208.3000	0.4024 (ppm)
B (249.678 nm)	0.3399	ppm	0.0004	0.12	3160.0000	0.3399 (ppm)
Ba (233.527 nm)	0.7420	ppm	0.0000	0.00	56090.0000	0.7420 (ppm)
Be (234.861 nm)	0.3613	ppm	0.0003	0.08	55180.0000	0.3613 (ppm)
Ca (422.673 nm)	27.1000	ppm	0.0877	0.32	101900.0000	27.1000 (ppm)
Cd (214.439 nm)	0.3508	ppm	0.0008	0.24	6568.0000	0.3508 (ppm)
Co (228.615 nm)	0.3822	ppm	0.0034	0.88	4412.0000	0.3822 (ppm)
Cr (205.560 nm)	0.4030	ppm	0.0002	0.05	1562.0000	0.4030 (ppm)
Cu (324.754 nm)	17.7900	ppm	0.0780	0.44	629600.0000	17.7900 (ppm)
Fe (238.204 nm)	113.3000	ppm	0.0814	0.07	280700.0000	113.3000 (ppm)
K (766.491 nm)	18.5100	ppm	0.0183	0.10	17980.0000	18.5100 (ppm)
Li (670.783 nm)	0.4138	ppm	0.0009	0.21	21730.0000	0.4138 (ppm)
Mg (279.078 nm)	71.4700	ppm	0.0404	0.06	166900.0000	71.4700 (ppm)
Mn (259.372 nm)	0.9466	ppm	0.0000	0.00	91940.0000	0.9466 (ppm)
Mo (204.598 nm)	0.4043	ppm	0.0010	0.24	1365.0000	0.4043 (ppm)
Na (589.592 nm)	5.3320	ppm	0.0046	0.09	31050.0000	5.3320 (ppm)
Ni (231.604 nm)	0.4150	ppm	0.0037	0.88	1593.0000	0.4150 (ppm)
P (213.618 nm)	2.7610	ppm	0.0159	0.58	1480.0000	2.7610 (ppm)
Pb (220.353 nm)	0.3627	ppm	0.0063	1.74	683.3000	0.3627 (ppm)
Sb (206.834 nm)	0.2824	ppm	0.0104	3.70	215.6000	0.2824 (ppm)
Se (196.026 nm)	0.3617	ppm	0.0051	1.42	190.9000	0.3617 (ppm)
Si (251.611 nm)	1.5570	ppm	0.0018	0.11	3209.0000	1.5570 (ppm)
Sn (189.925 nm)	0.3702	ppm	0.0086	2.33	181.8000	0.3702 (ppm)
Sr (421.552 nm)	0.7502	ppm	0.0016	0.21	248600.0000	0.7502 (ppm)
Ti (336.122 nm)	5.3930	ppm	0.0035	0.06	510800.0000	5.3930 (ppm)
Tl (190.794 nm)	0.3628	ppm	0.0055	1.53	275.6000	0.3628 (ppm)
V (292.401 nm)	0.5943	ppm	0.0003	0.05	16010.0000	0.5943 (ppm)
W (207.912 nm)	0.2462	ppm	0.0003	0.11	352.2000	0.2462 (ppm)
Zn (202.548 nm)	0.4598	ppm	0.0000	0.01	7701.0000	0.4598 (ppm)
Zr (343.823 nm)	0.3716	ppm	0.0001	0.02	25790.0000	0.3716 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9870	341600.0000	0.0033	0.34
Y_R 371.029	1.0160	49370.0000	0.0026	0.25

Sample Name: 440-256528-B-1-A PDS@5

Date: 12/10/2019 11:25:04 AM Rack:Tube: 1:26

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1851	ppm	0.0013	0.71	6724.0000	0.1851 (ppm)
Al (396.152 nm)	61.7100	ppm	0.0823	0.13	1529000.0000	61.7100 (ppm)
As (188.980 nm)	0.4446	ppm	0.0111	2.50	231.0000	0.4446 (ppm)
B (249.678 nm)	0.4093	ppm	0.0008	0.20	3836.0000	0.4093 (ppm)
Ba (233.527 nm)	0.6964	ppm	0.0038	0.55	52640.0000	0.6964 (ppm)
Be (234.861 nm)	0.3922	ppm	0.0023	0.59	59630.0000	0.3922 (ppm)
Ca (422.673 nm)	32.4100	ppm	0.1543	0.48	121800.0000	32.4100 (ppm)
Cd (214.439 nm)	0.3829	ppm	0.0015	0.40	7167.0000	0.3829 (ppm)
Co (228.615 nm)	0.4048	ppm	0.0012	0.29	4626.0000	0.4048 (ppm)
Cr (205.560 nm)	0.4376	ppm	0.0025	0.56	1696.0000	0.4376 (ppm)
Cu (324.754 nm)	17.3400	ppm	0.0799	0.46	613800.0000	17.3400 (ppm)
Fe (238.204 nm)	101.4000	ppm	0.7221	0.71	251300.0000	101.4000 (ppm)
K (766.491 nm)	13.2500	ppm	0.0113	0.09	12850.0000	13.2500 (ppm)
Li (670.783 nm)	0.4388	ppm	0.0034	0.77	23030.0000	0.4388 (ppm)
Mg (279.078 nm)	51.6400	ppm	0.3325	0.64	120600.0000	51.6400 (ppm)
Mn (259.372 nm)	0.8803	ppm	0.0016	0.18	85070.0000	0.8803 (ppm)
Mo (204.598 nm)	0.4567	ppm	0.0002	0.04	1539.0000	0.4567 (ppm)
Na (589.592 nm)	5.8800	ppm	0.0603	1.02	33950.0000	5.8800 (ppm)
Ni (231.604 nm)	0.4293	ppm	0.0004	0.09	1649.0000	0.4293 (ppm)
P (213.618 nm)	3.4100	ppm	0.0083	0.24	1949.0000	3.4100 (ppm)
Pb (220.353 nm)	0.4066	ppm	0.0013	0.32	755.5000	0.4066 (ppm)
Sb (206.834 nm)	0.4153	ppm	0.0036	0.87	319.8000	0.4153 (ppm)
Se (196.026 nm)	0.3930	ppm	0.0138	3.52	210.5000	0.3930 (ppm)
Si (251.611 nm)	3.0790	ppm	0.0158	0.51	6245.0000	3.0790 (ppm)
Sn (189.925 nm)	0.3947	ppm	0.0081	2.05	194.0000	0.3947 (ppm)
Sr (421.552 nm)	0.8719	ppm	0.0053	0.61	288900.0000	0.8719 (ppm)
Ti (336.122 nm)	3.4700	ppm	0.0038	0.11	328600.0000	3.4700 (ppm)
Tl (190.794 nm)	0.4172	ppm	0.0029	0.69	344.0000	0.4172 (ppm)
V (292.401 nm)	0.5624	ppm	0.0015	0.26	15100.0000	0.5624 (ppm)
W (207.912 nm)	0.3964	ppm	0.0072	1.81	567.9000	0.3964 (ppm)
Zn (202.548 nm)	0.4754	ppm	0.0018	0.38	7852.0000	0.4754 (ppm)
Zr (343.823 nm)	0.5197	ppm	0.0017	0.33	37270.0000	0.5197 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9951	344400.0000	0.0008	0.08
Y_R 371.029	1.0190	49500.0000	0.0080	0.79

Sample Name: CCV 5993196

Date: 12/10/2019 11:32:30 AM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5056	ppm	0.0014	0.28	18500.0000	0.5056 (ppm)
Al (396.152 nm)	1.0170	ppm	0.0018	0.18	25780.0000	1.0170 (ppm)
As (188.980 nm)	1.0170	ppm	0.0041	0.40	536.1000	1.0170 (ppm)
B (249.678 nm)	1.0080	ppm	0.0037	0.37	9737.0000	1.0080 (ppm)
Ba (233.527 nm)	1.0010	ppm	0.0041	0.41	75640.0000	1.0010 (ppm)
Be (234.861 nm)	1.0100	ppm	0.0041	0.41	150000.0000	1.0100 (ppm)
Ca (422.673 nm)	5.0180	ppm	0.0140	0.28	18970.0000	5.0180 (ppm)
Cd (214.439 nm)	1.0170	ppm	0.0033	0.32	19000.0000	1.0170 (ppm)
Co (228.615 nm)	1.0200	ppm	0.0041	0.40	11490.0000	1.0200 (ppm)
Cr (205.560 nm)	1.0120	ppm	0.0004	0.04	3908.0000	1.0120 (ppm)
Cu (324.754 nm)	1.0250	ppm	0.0050	0.48	36330.0000	1.0250 (ppm)
Fe (238.204 nm)	1.0420	ppm	0.0000	0.00	2531.0000	1.0420 (ppm)
K (766.491 nm)	10.0700	ppm	0.0630	0.63	9721.0000	10.0700 (ppm)
Li (670.783 nm)	1.0040	ppm	0.0011	0.11	55320.0000	1.0040 (ppm)
Mg (279.078 nm)	5.0480	ppm	0.0170	0.34	11800.0000	5.0480 (ppm)
Mn (259.372 nm)	1.0140	ppm	0.0032	0.31	85650.0000	1.0140 (ppm)
Mo (204.598 nm)	1.0230	ppm	0.0026	0.25	3437.0000	1.0230 (ppm)
Na (589.592 nm)	9.9920	ppm	0.0033	0.03	55570.0000	9.9920 (ppm)
Ni (231.604 nm)	1.0160	ppm	0.0060	0.59	3940.0000	1.0160 (ppm)
P (213.618 nm)	1.0070	ppm	0.0030	0.30	670.8000	1.0070 (ppm)
Pb (220.353 nm)	1.0100	ppm	0.0091	0.90	1753.0000	1.0100 (ppm)
Sb (206.834 nm)	1.0190	ppm	0.0229	2.24	793.9000	1.0190 (ppm)
Se (196.026 nm)	0.9928	ppm	0.0102	1.02	560.7000	0.9928 (ppm)
Si (251.611 nm)	5.0440	ppm	0.0388	0.77	10230.0000	5.0440 (ppm)
Sn (189.925 nm)	1.0180	ppm	0.0018	0.18	502.3000	1.0180 (ppm)
Sr (421.552 nm)	1.0060	ppm	0.0002	0.02	333000.0000	1.0060 (ppm)
Ti (336.122 nm)	1.0250	ppm	0.0071	0.69	96940.0000	1.0250 (ppm)
Tl (190.794 nm)	1.0170	ppm	0.0065	0.64	899.7000	1.0170 (ppm)
V (292.401 nm)	1.0180	ppm	0.0018	0.17	27020.0000	1.0180 (ppm)
W (207.912 nm)	1.0130	ppm	0.0030	0.30	1458.0000	1.0130 (ppm)
Zn (202.548 nm)	1.0130	ppm	0.0047	0.46	13170.0000	1.0130 (ppm)
Zr (343.823 nm)	1.0010	ppm	0.0077	0.77	75970.0000	1.0010 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9998	346000.0000	0.0047	0.47
Y_R 371.029	1.0130	49240.0000	0.0052	0.51

Sample Name: CCB 5993195

Date: 12/10/2019 11:36:46 AM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	31.03	-75.6900	-0.0002 u (ppm)
Al (396.152 nm)	0.0014	ppm	0.0003	19.70	-290.2000	0.0014 (ppm)
As (188.980 nm)	0.0019	ppm	0.0011	60.74	2.5910	0.0019 (ppm)
B (249.678 nm)	0.0010	ppm	0.0007	69.92	-4.0650	0.0010 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	44.5000	0.0000 u (ppm)
Be (234.861 nm)	0.0002	ppm	0.0001	31.14	57.1600	0.0002 (ppm)
Ca (422.673 nm)	-0.0151 u	ppm	0.0010	6.73	62.3800	-0.0151 u (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	19.18	1.3430	0.0002 (ppm)
Co (228.615 nm)	-0.0002 u	ppm	0.0004	> 100.00	-14.7200	-0.0002 u (ppm)
Cr (205.560 nm)	-0.0005 u	ppm	0.0004	83.94	0.0244	-0.0005 u (ppm)
Cu (324.754 nm)	0.0007	ppm	0.0003	52.70	65.2600	0.0007 (ppm)
Fe (238.204 nm)	0.0058	ppm	0.0011	18.61	-35.7900	0.0058 (ppm)
K (766.491 nm)	0.0177 u	ppm	0.0367	> 100.00	-60.9600	0.0177 u (ppm)
Li (670.783 nm)	0.0001 u	ppm	0.0009	> 100.00	60.2500	0.0001 u (ppm)
Mg (279.078 nm)	0.0031 u	ppm	0.0046	> 100.00	17.9700	0.0031 u (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0001	41.12	70.7600	0.0003 (ppm)
Mo (204.598 nm)	0.0035	ppm	0.0015	44.30	7.6500	0.0035 (ppm)
Na (589.592 nm)	-0.0294 u	ppm	0.0034	11.53	752.3000	-0.0294 u (ppm)
Ni (231.604 nm)	0.0012	ppm	0.0009	75.10	-11.0600	0.0012 (ppm)
P (213.618 nm)	-0.0027 u	ppm	0.0016	59.35	-1.6600	-0.0027 u (ppm)
Pb (220.353 nm)	0.0014	ppm	0.0016	> 100.00	-8.8140	0.0014 (ppm)
Sb (206.834 nm)	0.0017 u	ppm	0.0091	> 100.00	-1.9690	0.0017 u (ppm)
Se (196.026 nm)	0.0054	ppm	0.0021	38.51	2.3360	0.0054 (ppm)
Si (251.611 nm)	0.0047	ppm	0.0018	38.68	19.9000	0.0047 (ppm)
Sn (189.925 nm)	0.0015 u	ppm	0.0066	> 100.00	-0.7147	0.0015 u (ppm)
Sr (421.552 nm)	0.0001 u	ppm	0.0002	> 100.00	7.5090	0.0001 u (ppm)
Ti (336.122 nm)	0.0009	ppm	0.0003	29.10	-51.8200	0.0009 (ppm)
Tl (190.794 nm)	-0.0004 u	ppm	0.0062	> 100.00	4.1280	-0.0004 u (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0001	> 100.00	83.5700	-0.0001 u (ppm)
W (207.912 nm)	-0.0002 u	ppm	0.0012	> 100.00	-4.5970	-0.0002 u (ppm)
Zn (202.548 nm)	0.0040	ppm	0.0000	0.38	64.3400	0.0040 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	> 100.00	99.6800	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9983	345500.0000	0.0054	0.54
Y_R 371.029	1.0080	48970.0000	0.0078	0.78

Sample Name: 440-256528-B-2-A@5

Date: 12/10/2019 11:38:34 AM Rack:Tube: 1:27

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0012 u	ppm	0.0003	23.03	-128.6000	-0.0012 u (ppm)
Al (396.152 nm)	65.1000	ppm	0.1972	0.30	1613000.0000	65.1000 (ppm)
As (188.980 nm)	0.0680	ppm	0.0020	2.97	32.4500	0.0680 (ppm)
B (249.678 nm)	0.0121	ppm	0.0004	3.41	-19.3700	0.0121 (ppm)
Ba (233.527 nm)	0.3848	ppm	0.0055	1.44	29120.0000	0.3848 (ppm)
Be (234.861 nm)	0.0017	ppm	0.0001	7.16	1792.0000	0.0017 (ppm)
Ca (422.673 nm)	26.0600	ppm	0.1035	0.40	97980.0000	26.0600 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0001	15.99	19.6800	0.0004 (ppm)
Co (228.615 nm)	0.0253	ppm	0.0001	0.57	347.8000	0.0253 (ppm)
Cr (205.560 nm)	0.0434	ppm	0.0014	3.30	173.7000	0.0434 (ppm)
Cu (324.754 nm)	11.7800	ppm	0.0376	0.32	417000.0000	11.7800 (ppm)
Fe (238.204 nm)	114.6000	ppm	0.7393	0.65	283900.0000	114.6000 (ppm)
K (766.491 nm)	7.8320	ppm	0.0379	0.48	7583.0000	7.8320 (ppm)
Li (670.783 nm)	0.0356	ppm	0.0011	3.13	1071.0000	0.0356 (ppm)
Mg (279.078 nm)	45.9900	ppm	0.6809	1.48	107400.0000	45.9900 (ppm)
Mn (259.372 nm)	0.3904	ppm	0.0030	0.78	45150.0000	0.3904 (ppm)
Mo (204.598 nm)	0.0304	ppm	0.0007	2.21	105.6000	0.0304 (ppm)
Na (589.592 nm)	0.6683	ppm	0.0190	2.84	5547.0000	0.6683 (ppm)
Ni (231.604 nm)	0.0517	ppm	0.0011	2.20	179.1000	0.0517 (ppm)
P (213.618 nm)	2.3820	ppm	0.2133	8.95	1377.0000	2.3820 (ppm)
Pb (220.353 nm)	0.0208	ppm	0.0003	1.41	88.9400	0.0208 (ppm)
Sb (206.834 nm)	0.0296	ppm	0.0054	18.12	17.8500	0.0296 (ppm)
Se (196.026 nm)	0.0393	ppm	0.0102	25.94	9.4090	0.0393 (ppm)
Si (251.611 nm)	1.1290	ppm	0.0048	0.42	2292.0000	1.1290 (ppm)
Sn (189.925 nm)	0.0004 u	ppm	0.0103	> 100.00	-1.1970	0.0004 u (ppm)
Sr (421.552 nm)	0.6157	ppm	0.0029	0.48	204000.0000	0.6157 (ppm)
Ti (336.122 nm)	3.1310	ppm	0.0141	0.45	296500.0000	3.1310 (ppm)
Tl (190.794 nm)	0.0143	ppm	0.0064	45.14	-10.8400	0.0143 (ppm)
V (292.401 nm)	0.1746	ppm	0.0008	0.47	4838.0000	0.1746 (ppm)
W (207.912 nm)	0.0028	ppm	0.0009	30.48	-0.7673	0.0028 (ppm)
Zn (202.548 nm)	0.0841	ppm	0.0008	0.97	2248.0000	0.0841 (ppm)
Zr (343.823 nm)	0.0438	ppm	0.0001	0.23	923.2000	0.0438 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9880	342000.0000	0.0051	0.52
Y_R 371.029	1.0120	49160.0000	0.0141	1.39

Sample Name: 440-256528-B-3-A@5

Date: 12/10/2019 11:40:24 AM Rack:Tube: 1:28

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0018 u	ppm	0.0004	20.63	-144.2000	-0.0018 u (ppm)
Al (396.152 nm)	56.9400	ppm	0.2655	0.47	1411000.0000	56.9400 (ppm)
As (188.980 nm)	0.0549	ppm	0.0037	6.74	25.7800	0.0549 (ppm)
B (249.678 nm)	0.0097	ppm	0.0025	25.71	-36.4700	0.0097 (ppm)
Ba (233.527 nm)	0.4312	ppm	0.0018	0.42	32620.0000	0.4312 (ppm)
Be (234.861 nm)	0.0012	ppm	0.0001	6.99	1645.0000	0.0012 (ppm)
Ca (422.673 nm)	22.6200	ppm	0.0300	0.13	85070.0000	22.6200 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0000	13.96	17.5200	0.0003 (ppm)
Co (228.615 nm)	0.0252	ppm	0.0004	1.77	326.3000	0.0252 (ppm)
Cr (205.560 nm)	0.0324	ppm	0.0003	0.79	130.7000	0.0324 (ppm)
Cu (324.754 nm)	9.5570	ppm	0.0270	0.28	338300.0000	9.5570 (ppm)
Fe (238.204 nm)	108.7000	ppm	0.0843	0.08	269400.0000	108.7000 (ppm)
K (766.491 nm)	8.3980	ppm	0.0580	0.69	8128.0000	8.3980 (ppm)
Li (670.783 nm)	0.0347	ppm	0.0007	2.13	1125.0000	0.0347 (ppm)
Mg (279.078 nm)	40.9200	ppm	0.1673	0.41	95560.0000	40.9200 (ppm)
Mn (259.372 nm)	0.3867	ppm	0.0018	0.47	44220.0000	0.3867 (ppm)
Mo (204.598 nm)	0.0279	ppm	0.0002	0.58	96.1500	0.0279 (ppm)
Na (589.592 nm)	0.4827	ppm	0.0066	1.37	4478.0000	0.4827 (ppm)
Ni (231.604 nm)	0.0468	ppm	0.0005	1.08	160.7000	0.0468 (ppm)
P (213.618 nm)	2.4780	ppm	0.1017	4.11	1503.0000	2.4780 (ppm)
Pb (220.353 nm)	0.0087	ppm	0.0014	16.07	65.5200	0.0087 (ppm)
Sb (206.834 nm)	0.0507	ppm	0.0034	6.64	34.3500	0.0507 (ppm)
Se (196.026 nm)	0.0308	ppm	0.0038	12.31	5.3760	0.0308 (ppm)
Si (251.611 nm)	0.9321	ppm	0.0016	0.17	1889.0000	0.9321 (ppm)
Sn (189.925 nm)	0.0024 u	ppm	0.0064	> 100.00	-0.1840	0.0024 u (ppm)
Sr (421.552 nm)	0.3830	ppm	0.0001	0.02	127000.0000	0.3830 (ppm)
Ti (336.122 nm)	2.1240	ppm	0.0109	0.51	201100.0000	2.1240 (ppm)
Tl (190.794 nm)	0.0070	ppm	0.0006	8.09	-7.1260	0.0070 (ppm)
V (292.401 nm)	0.1505	ppm	0.0005	0.33	4166.0000	0.1505 (ppm)
W (207.912 nm)	0.0013	ppm	0.0004	31.85	-2.5420	0.0013 (ppm)
Zn (202.548 nm)	0.1060	ppm	0.0005	0.45	2308.0000	0.1060 (ppm)
Zr (343.823 nm)	0.0407	ppm	0.0002	0.49	819.7000	0.0407 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9915	343200.0000	0.0022	0.22
Y_R 371.029	1.0150	49330.0000	0.0054	0.53

Sample Name: 440-256528-B-4-A@5

Date: 12/10/2019 11:42:14 AM Rack:Tube: 1:29

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0018 u	ppm	0.0003	14.59	-147.7000	-0.0018 u (ppm)
Al (396.152 nm)	51.2800	ppm	0.2023	0.39	1270000.0000	51.2800 (ppm)
As (188.980 nm)	0.0281	ppm	0.0015	5.42	10.7800	0.0281 (ppm)
B (249.678 nm)	0.0106	ppm	0.0002	1.77	-38.4800	0.0106 (ppm)
Ba (233.527 nm)	0.2924	ppm	0.0007	0.23	22140.0000	0.2924 (ppm)
Be (234.861 nm)	0.0017	ppm	0.0001	7.30	1870.0000	0.0017 (ppm)
Ca (422.673 nm)	32.7700	ppm	0.0990	0.30	123200.0000	32.7700 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0001	40.41	18.4200	0.0003 (ppm)
Co (228.615 nm)	0.0389	ppm	0.0002	0.58	488.6000	0.0389 (ppm)
Cr (205.560 nm)	0.0464	ppm	0.0003	0.56	184.8000	0.0464 (ppm)
Cu (324.754 nm)	8.7630	ppm	0.0616	0.70	310200.0000	8.7630 (ppm)
Fe (238.204 nm)	119.7000	ppm	0.4946	0.41	296600.0000	119.7000 (ppm)
K (766.491 nm)	9.1420	ppm	0.0469	0.51	8856.0000	9.1420 (ppm)
Li (670.783 nm)	0.0347	ppm	0.0005	1.35	1121.0000	0.0347 (ppm)
Mg (279.078 nm)	42.6800	ppm	0.0885	0.21	99680.0000	42.6800 (ppm)
Mn (259.372 nm)	0.5396	ppm	0.0019	0.35	58210.0000	0.5396 (ppm)
Mo (204.598 nm)	0.0234	ppm	0.0005	1.93	81.0300	0.0234 (ppm)
Na (589.592 nm)	0.6666	ppm	0.0023	0.34	5572.0000	0.6666 (ppm)
Ni (231.604 nm)	0.0587	ppm	0.0002	0.33	206.3000	0.0587 (ppm)
P (213.618 nm)	4.2480	ppm	0.1644	3.87	2778.0000	4.2480 (ppm)
Pb (220.353 nm)	-0.0009 u	ppm	0.0001	11.79	55.5000	-0.0009 u (ppm)
Sb (206.834 nm)	0.0177	ppm	0.0033	18.42	8.1220	0.0177 (ppm)
Se (196.026 nm)	0.0218	ppm	0.0046	20.94	-0.6724	0.0218 (ppm)
Si (251.611 nm)	1.0190	ppm	0.0000	0.00	2065.0000	1.0190 (ppm)
Sn (189.925 nm)	-0.0033 u	ppm	0.0063	> 100.00	-3.0010	-0.0033 u (ppm)
Sr (421.552 nm)	0.2852	ppm	0.0010	0.34	94730.0000	0.2852 (ppm)
Ti (336.122 nm)	2.5010	ppm	0.0106	0.42	236800.0000	2.5010 (ppm)
Tl (190.794 nm)	0.0111	ppm	0.0045	41.03	-6.5170	0.0111 (ppm)
V (292.401 nm)	0.1559	ppm	0.0002	0.15	4328.0000	0.1559 (ppm)
W (207.912 nm)	0.0014 u	ppm	0.0038	> 100.00	-2.6480	0.0014 u (ppm)
Zn (202.548 nm)	0.1077	ppm	0.0008	0.71	2244.0000	0.1077 (ppm)
Zr (343.823 nm)	0.0480	ppm	0.0001	0.23	1135.0000	0.0480 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9899	342600.0000	0.0047	0.47
Y_R 371.029	1.0140	49260.0000	0.0000	0.00

Sample Name: 440-256528-B-5-A@5

Date: 12/10/2019 11:44:04 AM Rack:Tube: 1:30

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0016 u	ppm	0.0000	0.91	-138.3000	-0.0016 u (ppm)
Al (396.152 nm)	53.4200	ppm	0.2037	0.38	1324000.0000	53.4200 (ppm)
As (188.980 nm)	0.0318	ppm	0.0046	14.42	14.5400	0.0318 (ppm)
B (249.678 nm)	0.0139	ppm	0.0005	3.37	32.6300	0.0139 (ppm)
Ba (233.527 nm)	0.2381	ppm	0.0005	0.22	18030.0000	0.2381 (ppm)
Be (234.861 nm)	0.0009	ppm	0.0001	7.17	1260.0000	0.0009 (ppm)
Ca (422.673 nm)	27.6600	ppm	0.0003	0.00	104000.0000	27.6600 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	7.3470	0.0000 u (ppm)
Co (228.615 nm)	0.0208	ppm	0.0001	0.71	282.1000	0.0208 (ppm)
Cr (205.560 nm)	0.0330	ppm	0.0014	4.23	131.7000	0.0330 (ppm)
Cu (324.754 nm)	4.1580	ppm	0.0148	0.36	147200.0000	4.1580 (ppm)
Fe (238.204 nm)	82.7900	ppm	0.1294	0.16	205100.0000	82.7900 (ppm)
K (766.491 nm)	7.3410	ppm	0.0210	0.29	7098.0000	7.3410 (ppm)
Li (670.783 nm)	0.0279	ppm	0.0009	3.07	1235.0000	0.0279 (ppm)
Mg (279.078 nm)	42.2900	ppm	0.1168	0.28	98790.0000	42.2900 (ppm)
Mn (259.372 nm)	0.3421	ppm	0.0014	0.40	37720.0000	0.3421 (ppm)
Mo (204.598 nm)	0.0270	ppm	0.0021	7.59	92.6500	0.0270 (ppm)
Na (589.592 nm)	0.5037	ppm	0.0274	5.45	4370.0000	0.5037 (ppm)
Ni (231.604 nm)	0.0412	ppm	0.0009	2.20	140.5000	0.0412 (ppm)
P (213.618 nm)	2.2620	ppm	0.0363	1.60	1494.0000	2.2620 (ppm)
Pb (220.353 nm)	0.0200	ppm	0.0041	20.52	69.1700	0.0200 (ppm)
Sb (206.834 nm)	0.0085	ppm	0.0031	36.12	1.6560	0.0085 (ppm)
Se (196.026 nm)	0.0168	ppm	0.0016	9.61	0.2995	0.0168 (ppm)
Si (251.611 nm)	0.9210	ppm	0.0020	0.22	1872.0000	0.9210 (ppm)
Sn (189.925 nm)	0.0066	ppm	0.0025	38.41	1.8200	0.0066 (ppm)
Sr (421.552 nm)	0.5026	ppm	0.0002	0.04	166600.0000	0.5026 (ppm)
Ti (336.122 nm)	2.5730	ppm	0.0108	0.42	243600.0000	2.5730 (ppm)
Tl (190.794 nm)	0.0093	ppm	0.0024	25.74	-10.7700	0.0093 (ppm)
V (292.401 nm)	0.1474	ppm	0.0006	0.39	4101.0000	0.1474 (ppm)
W (207.912 nm)	0.0003 u	ppm	0.0038	> 100.00	-4.3000	0.0003 u (ppm)
Zn (202.548 nm)	0.0833	ppm	0.0010	1.23	1483.0000	0.0833 (ppm)
Zr (343.823 nm)	0.0356	ppm	0.0000	0.01	993.9000	0.0356 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9861	341300.0000	0.0039	0.40
Y_R 371.029	1.0120	49150.0000	0.0037	0.37

Sample Name: 440-256528-B-6-A@5

Date: 12/10/2019 11:45:54 AM Rack:Tube: 1:31

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0016 u	ppm	0.0004	23.52	-142.7000	-0.0016 u (ppm)
Al (396.152 nm)	59.7200	ppm	0.3039	0.51	1480000.0000	59.7200 (ppm)
As (188.980 nm)	0.0368	ppm	0.0029	7.95	16.9500	0.0368 (ppm)
B (249.678 nm)	0.0089	ppm	0.0004	4.29	-21.0700	0.0089 (ppm)
Ba (233.527 nm)	0.3397	ppm	0.0002	0.05	25710.0000	0.3397 (ppm)
Be (234.861 nm)	0.0012	ppm	0.0003	25.22	1378.0000	0.0012 (ppm)
Ca (422.673 nm)	29.2500	ppm	0.0313	0.11	110000.0000	29.2500 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0004	> 100.00	6.4350	-0.0001 u (ppm)
Co (228.615 nm)	0.0207	ppm	0.0002	0.96	303.1000	0.0207 (ppm)
Cr (205.560 nm)	0.0318	ppm	0.0005	1.65	127.6000	0.0318 (ppm)
Cu (324.754 nm)	4.9750	ppm	0.0071	0.14	176100.0000	4.9750 (ppm)
Fe (238.204 nm)	88.7400	ppm	0.0289	0.03	219900.0000	88.7400 (ppm)
K (766.491 nm)	10.0300	ppm	0.0042	0.04	9717.0000	10.0300 (ppm)
Li (670.783 nm)	0.0262	ppm	0.0010	3.64	1123.0000	0.0262 (ppm)
Mg (279.078 nm)	48.5100	ppm	0.0150	0.03	113300.0000	48.5100 (ppm)
Mn (259.372 nm)	0.2940	ppm	0.0012	0.42	34320.0000	0.2940 (ppm)
Mo (204.598 nm)	0.0268	ppm	0.0016	5.91	92.7300	0.0268 (ppm)
Na (589.592 nm)	0.2946	ppm	0.0071	2.41	3281.0000	0.2946 (ppm)
Ni (231.604 nm)	0.0455	ppm	0.0011	2.36	156.7000	0.0455 (ppm)
P (213.618 nm)	2.7560	ppm	0.0074	0.27	1821.0000	2.7560 (ppm)
Pb (220.353 nm)	0.0196	ppm	0.0033	16.70	70.9200	0.0196 (ppm)
Sb (206.834 nm)	0.0119	ppm	0.0055	46.13	4.4660	0.0119 (ppm)
Se (196.026 nm)	0.0180	ppm	0.0049	27.06	0.2188	0.0180 (ppm)
Si (251.611 nm)	1.0850	ppm	0.0017	0.15	2207.0000	1.0850 (ppm)
Sn (189.925 nm)	-0.0064 u	ppm	0.0111	> 100.00	-4.6700	-0.0064 u (ppm)
Sr (421.552 nm)	0.6165	ppm	0.0006	0.10	204300.0000	0.6165 (ppm)
Ti (336.122 nm)	3.6480	ppm	0.0142	0.39	345400.0000	3.6480 (ppm)
Tl (190.794 nm)	0.0156	ppm	0.0046	29.76	-16.4300	0.0156 (ppm)
V (292.401 nm)	0.1924	ppm	0.0012	0.64	5330.0000	0.1924 (ppm)
W (207.912 nm)	-0.0032 u	ppm	0.0001	2.24	-9.6620	-0.0032 u (ppm)
Zn (202.548 nm)	0.0690	ppm	0.0007	1.06	1381.0000	0.0690 (ppm)
Zr (343.823 nm)	0.0355	ppm	0.0003	0.97	857.2000	0.0355 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9890	342300.0000	0.0006	0.06
Y_R 371.029	1.0120	49160.0000	0.0025	0.24

Sample Name: 440-256528-B-7-A@5

Date: 12/10/2019 11:47:44 AM Rack:Tube: 1:32

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0001	15.77	-102.8000	-0.0005 u (ppm)
Al (396.152 nm)	59.9400	ppm	0.1850	0.31	1485000.0000	59.9400 (ppm)
As (188.980 nm)	0.0499	ppm	0.0015	3.04	23.5000	0.0499 (ppm)
B (249.678 nm)	0.0090	ppm	0.0000	0.54	-31.6300	0.0090 (ppm)
Ba (233.527 nm)	0.3091	ppm	0.0008	0.25	23400.0000	0.3091 (ppm)
Be (234.861 nm)	0.0013	ppm	0.0002	11.69	1532.0000	0.0013 (ppm)
Ca (422.673 nm)	27.7700	ppm	0.0521	0.19	104400.0000	27.7700 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0002	88.48	6.4440	-0.0002 u (ppm)
Co (228.615 nm)	0.0230	ppm	0.0010	4.44	324.3000	0.0230 (ppm)
Cr (205.560 nm)	0.0347	ppm	0.0022	6.28	139.2000	0.0347 (ppm)
Cu (324.754 nm)	7.6870	ppm	0.0179	0.23	272100.0000	7.6870 (ppm)
Fe (238.204 nm)	98.8100	ppm	0.0875	0.09	244800.0000	98.8100 (ppm)
K (766.491 nm)	9.5320	ppm	0.1002	1.05	9236.0000	9.5320 (ppm)
Li (670.783 nm)	0.0325	ppm	0.0004	1.08	1245.0000	0.0325 (ppm)
Mg (279.078 nm)	50.0500	ppm	0.1088	0.22	116900.0000	50.0500 (ppm)
Mn (259.372 nm)	0.3201	ppm	0.0011	0.33	37590.0000	0.3201 (ppm)
Mo (204.598 nm)	0.0258	ppm	0.0013	5.06	89.4300	0.0258 (ppm)
Na (589.592 nm)	0.3881	ppm	0.0198	5.11	3879.0000	0.3881 (ppm)
Ni (231.604 nm)	0.0501	ppm	0.0010	1.92	174.2000	0.0501 (ppm)
P (213.618 nm)	2.9420	ppm	0.1390	4.72	1882.0000	2.9420 (ppm)
Pb (220.353 nm)	0.0085	ppm	0.0013	15.07	58.0800	0.0085 (ppm)
Sb (206.834 nm)	0.0228	ppm	0.0011	4.73	12.8400	0.0228 (ppm)
Se (196.026 nm)	0.0302	ppm	0.0005	1.68	6.0360	0.0302 (ppm)
Si (251.611 nm)	1.0110	ppm	0.0064	0.64	2059.0000	1.0110 (ppm)
Sn (189.925 nm)	0.0022 u	ppm	0.0075	> 100.00	-0.3763	0.0022 u (ppm)
Sr (421.552 nm)	0.6169	ppm	0.0012	0.19	204500.0000	0.6169 (ppm)
Ti (336.122 nm)	3.3250	ppm	0.0133	0.40	314900.0000	3.3250 (ppm)
Tl (190.794 nm)	0.0115	ppm	0.0020	17.25	-16.4300	0.0115 (ppm)
V (292.401 nm)	0.1923	ppm	0.0005	0.26	5318.0000	0.1923 (ppm)
W (207.912 nm)	0.0006 u	ppm	0.0037	> 100.00	-4.0930	0.0006 u (ppm)
Zn (202.548 nm)	0.0716	ppm	0.0005	0.69	1683.0000	0.0716 (ppm)
Zr (343.823 nm)	0.0388	ppm	0.0000	0.10	888.7000	0.0388 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9889	342300.0000	0.0045	0.45
Y_R 371.029	1.0160	49350.0000	0.0023	0.23

Sample Name: 440-256528-B-8-A@5

Date: 12/10/2019 11:49:34 AM Rack:Tube: 1:33

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0018 u	ppm	0.0002	13.29	-146.5000	-0.0018 u (ppm)
Al (396.152 nm)	60.0400	ppm	0.2093	0.35	1488000.0000	60.0400 (ppm)
As (188.980 nm)	0.0243	ppm	0.0046	19.01	8.9770	0.0243 (ppm)
B (249.678 nm)	0.0125	ppm	0.0009	7.57	-15.1400	0.0125 (ppm)
Ba (233.527 nm)	0.3640	ppm	0.0008	0.23	27550.0000	0.3640 (ppm)
Be (234.861 nm)	0.0021	ppm	0.0002	7.86	1858.0000	0.0021 (ppm)
Ca (422.673 nm)	39.6000	ppm	0.0360	0.09	148900.0000	39.6000 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0003	> 100.00	18.0400	0.0003 (ppm)
Co (228.615 nm)	0.0441	ppm	0.0010	2.18	560.3000	0.0441 (ppm)
Cr (205.560 nm)	0.0483	ppm	0.0006	1.29	192.2000	0.0483 (ppm)
Cu (324.754 nm)	7.3790	ppm	0.0128	0.17	261200.0000	7.3790 (ppm)
Fe (238.204 nm)	115.3000	ppm	0.4024	0.35	285600.0000	115.3000 (ppm)
K (766.491 nm)	13.0900	ppm	0.0948	0.72	12700.0000	13.0900 (ppm)
Li (670.783 nm)	0.0349	ppm	0.0029	8.35	1296.0000	0.0349 (ppm)
Mg (279.078 nm)	47.5000	ppm	0.0702	0.15	110900.0000	47.5000 (ppm)
Mn (259.372 nm)	0.6924	ppm	0.0030	0.44	70570.0000	0.6924 (ppm)
Mo (204.598 nm)	0.0195	ppm	0.0009	4.87	68.6000	0.0195 (ppm)
Na (589.592 nm)	0.8924	ppm	0.0067	0.75	6770.0000	0.8924 (ppm)
Ni (231.604 nm)	0.0600	ppm	0.0017	2.86	211.6000	0.0600 (ppm)
P (213.618 nm)	4.7600	ppm	0.0632	1.33	3177.0000	4.7600 (ppm)
Pb (220.353 nm)	0.0023	ppm	0.0015	64.72	57.2900	0.0023 (ppm)
Sb (206.834 nm)	0.0125	ppm	0.0000	0.18	4.3190	0.0125 (ppm)
Se (196.026 nm)	0.0192	ppm	0.0011	5.56	-1.6290	0.0192 (ppm)
Si (251.611 nm)	0.9565	ppm	0.0049	0.51	1947.0000	0.9565 (ppm)
Sn (189.925 nm)	0.0017	ppm	0.0018	> 100.00	-0.5743	0.0017 (ppm)
Sr (421.552 nm)	0.3703	ppm	0.0009	0.23	123000.0000	0.3703 (ppm)
Ti (336.122 nm)	3.1820	ppm	0.0132	0.42	301300.0000	3.1820 (ppm)
Tl (190.794 nm)	0.0130	ppm	0.0006	4.67	-11.8000	0.0130 (ppm)
V (292.401 nm)	0.1642	ppm	0.0009	0.54	4576.0000	0.1642 (ppm)
W (207.912 nm)	0.0021	ppm	0.0008	37.34	-1.7030	0.0021 (ppm)
Zn (202.548 nm)	0.1177	ppm	0.0004	0.31	2236.0000	0.1177 (ppm)
Zr (343.823 nm)	0.0467	ppm	0.0000	0.02	1131.0000	0.0467 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9902	342700.0000	0.0058	0.58
Y_R 371.029	1.0140	49260.0000	0.0007	0.07

Sample Name: 440-256528-B-9-A@5

Date: 12/10/2019 11:51:24 AM Rack:Tube: 1:34

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0014 u	ppm	0.0001	9.13	-132.9000	-0.0014 u (ppm)
Al (396.152 nm)	60.9000	ppm	0.0683	0.11	1509000.0000	60.9000 (ppm)
As (188.980 nm)	0.0504	ppm	0.0090	17.93	23.6600	0.0504 (ppm)
B (249.678 nm)	0.0108	ppm	0.0008	7.00	-16.8900	0.0108 (ppm)
Ba (233.527 nm)	0.3530	ppm	0.0046	1.30	26720.0000	0.3530 (ppm)
Be (234.861 nm)	0.0011	ppm	0.0004	37.62	1525.0000	0.0011 (ppm)
Ca (422.673 nm)	27.9500	ppm	0.2438	0.87	105100.0000	27.9500 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	11.3000	0.0000 u (ppm)
Co (228.615 nm)	0.0272	ppm	0.0002	0.77	371.4000	0.0272 (ppm)
Cr (205.560 nm)	0.0333	ppm	0.0006	1.70	133.9000	0.0333 (ppm)
Cu (324.754 nm)	7.1420	ppm	0.0179	0.25	252800.0000	7.1420 (ppm)
Fe (238.204 nm)	100.7000	ppm	1.1180	1.11	249500.0000	100.7000 (ppm)
K (766.491 nm)	9.6770	ppm	0.0626	0.65	9378.0000	9.6770 (ppm)
Li (670.783 nm)	0.0315	ppm	0.0024	7.55	1216.0000	0.0315 (ppm)
Mg (279.078 nm)	49.9200	ppm	0.6552	1.31	116600.0000	49.9200 (ppm)
Mn (259.372 nm)	0.3338	ppm	0.0003	0.08	38950.0000	0.3338 (ppm)
Mo (204.598 nm)	0.0289	ppm	0.0029	9.99	99.9900	0.0289 (ppm)
Na (589.592 nm)	0.4750	ppm	0.0068	1.44	4368.0000	0.4750 (ppm)
Ni (231.604 nm)	0.0490	ppm	0.0010	1.96	169.8000	0.0490 (ppm)
P (213.618 nm)	3.3410	ppm	0.0937	2.80	2179.0000	3.3410 (ppm)
Pb (220.353 nm)	0.0142	ppm	0.0027	18.71	69.1700	0.0142 (ppm)
Sb (206.834 nm)	0.0127	ppm	0.0010	8.03	4.6880	0.0127 (ppm)
Se (196.026 nm)	0.0261	ppm	0.0065	24.86	3.5840	0.0261 (ppm)
Si (251.611 nm)	0.9954	ppm	0.0054	0.55	2026.0000	0.9954 (ppm)
Sn (189.925 nm)	-0.0036 u	ppm	0.0112	> 100.00	-3.2350	-0.0036 u (ppm)
Sr (421.552 nm)	0.5108	ppm	0.0043	0.84	169300.0000	0.5108 (ppm)
Ti (336.122 nm)	3.2980	ppm	0.0023	0.07	312300.0000	3.2980 (ppm)
Tl (190.794 nm)	0.0219	ppm	0.0054	24.90	-6.6860	0.0219 (ppm)
V (292.401 nm)	0.1925	ppm	0.0008	0.41	5320.0000	0.1925 (ppm)
W (207.912 nm)	0.0026	ppm	0.0005	19.02	-1.2080	0.0026 (ppm)
Zn (202.548 nm)	0.0729	ppm	0.0004	0.48	1645.0000	0.0729 (ppm)
Zr (343.823 nm)	0.0388	ppm	0.0001	0.19	850.4000	0.0388 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9840	340600.0000	0.0010	0.11
Y_R 371.029	1.0080	48960.0000	0.0117	1.16

Sample Name: 440-256528-B-10-A@5

Date: 12/10/2019 11:53:14 AM Rack:Tube: 1:35

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0013 u	ppm	0.0006	44.90	-128.3000	-0.0013 u (ppm)
Al (396.152 nm)	58.9000	ppm	0.1400	0.24	1459000.0000	58.9000 (ppm)
As (188.980 nm)	0.0643	ppm	0.0042	6.46	31.2600	0.0643 (ppm)
B (249.678 nm)	0.0151	ppm	0.0001	0.95	29.7600	0.0151 (ppm)
Ba (233.527 nm)	0.3126	ppm	0.0006	0.18	23660.0000	0.3126 (ppm)
Be (234.861 nm)	0.0012	ppm	0.0000	4.03	1478.0000	0.0012 (ppm)
Ca (422.673 nm)	28.9800	ppm	0.0478	0.16	109000.0000	28.9800 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	10.1900	0.0000 u (ppm)
Co (228.615 nm)	0.0309	ppm	0.0002	0.58	404.5000	0.0309 (ppm)
Cr (205.560 nm)	0.0338	ppm	0.0009	2.73	135.8000	0.0338 (ppm)
Cu (324.754 nm)	7.0480	ppm	0.0519	0.74	249500.0000	7.0480 (ppm)
Fe (238.204 nm)	96.6400	ppm	0.0993	0.10	239500.0000	96.6400 (ppm)
K (766.491 nm)	3.6590	ppm	0.0629	1.72	3521.0000	3.6590 (ppm)
Li (670.783 nm)	0.0414	ppm	0.0005	1.22	1765.0000	0.0414 (ppm)
Mg (279.078 nm)	44.0500	ppm	0.0610	0.14	102900.0000	44.0500 (ppm)
Mn (259.372 nm)	0.3200	ppm	0.0014	0.45	37340.0000	0.3200 (ppm)
Mo (204.598 nm)	0.0247	ppm	0.0008	3.09	85.7200	0.0247 (ppm)
Na (589.592 nm)	0.8320	ppm	0.0330	3.96	6285.0000	0.8320 (ppm)
Ni (231.604 nm)	0.0430	ppm	0.0003	0.78	146.7000	0.0430 (ppm)
P (213.618 nm)	2.7170	ppm	0.0468	1.72	1739.0000	2.7170 (ppm)
Pb (220.353 nm)	0.0108	ppm	0.0031	29.17	60.9700	0.0108 (ppm)
Sb (206.834 nm)	0.0157	ppm	0.0030	19.25	7.1630	0.0157 (ppm)
Se (196.026 nm)	0.0401	ppm	0.0084	20.98	11.8500	0.0401 (ppm)
Si (251.611 nm)	0.8972	ppm	0.0046	0.51	1827.0000	0.8972 (ppm)
Sn (189.925 nm)	0.0002 u	ppm	0.0017	> 100.00	-1.3100	0.0002 u (ppm)
Sr (421.552 nm)	0.6683	ppm	0.0016	0.24	221500.0000	0.6683 (ppm)
Ti (336.122 nm)	2.9270	ppm	0.0102	0.35	277100.0000	2.9270 (ppm)
Tl (190.794 nm)	0.0126	ppm	0.0036	28.56	-10.6800	0.0126 (ppm)
V (292.401 nm)	0.1501	ppm	0.0000	0.00	4184.0000	0.1501 (ppm)
W (207.912 nm)	-0.0014 u	ppm	0.0007	51.32	-7.2530	-0.0014 u (ppm)
Zn (202.548 nm)	0.0467	ppm	0.0001	0.16	1296.0000	0.0467 (ppm)
Zr (343.823 nm)	0.0371	ppm	0.0004	0.95	807.3000	0.0371 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9835	340400.0000	0.0037	0.38
Y_R 371.029	1.0030	48710.0000	0.0006	0.06

Sample Name: CCV 5993196

Date: 12/10/2019 11:55:04 AM
Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5056	ppm	0.0017	0.34	18500.0000	0.5056 (ppm)
Al (396.152 nm)	1.0620	ppm	0.0162	1.52	26910.0000	1.0620 (ppm)
As (188.980 nm)	1.0210	ppm	0.0053	0.52	538.2000	1.0210 (ppm)
B (249.678 nm)	1.0050	ppm	0.0039	0.39	9703.0000	1.0050 (ppm)
Ba (233.527 nm)	1.0010	ppm	0.0012	0.12	75600.0000	1.0010 (ppm)
Be (234.861 nm)	1.0080	ppm	0.0025	0.24	149800.0000	1.0080 (ppm)
Ca (422.673 nm)	5.0490	ppm	0.0136	0.27	19090.0000	5.0490 (ppm)
Cd (214.439 nm)	1.0150	ppm	0.0009	0.09	18970.0000	1.0150 (ppm)
Co (228.615 nm)	1.0190	ppm	0.0019	0.18	11470.0000	1.0190 (ppm)
Cr (205.560 nm)	1.0140	ppm	0.0002	0.02	3914.0000	1.0140 (ppm)
Cu (324.754 nm)	1.0280	ppm	0.0037	0.36	36430.0000	1.0280 (ppm)
Fe (238.204 nm)	1.1250 Q	ppm	0.0044	0.39	2737.0000 Q	1.1250 Q (ppm)
K (766.491 nm)	10.1300	ppm	0.0589	0.58	9784.0000	10.1300 (ppm)
Li (670.783 nm)	1.0050	ppm	0.0031	0.31	55360.0000	1.0050 (ppm)
Mg (279.078 nm)	5.0770	ppm	0.0149	0.29	11870.0000	5.0770 (ppm)
Mn (259.372 nm)	1.0130	ppm	0.0010	0.10	85610.0000	1.0130 (ppm)
Mo (204.598 nm)	1.0180	ppm	0.0033	0.32	3419.0000	1.0180 (ppm)
Na (589.592 nm)	9.9820	ppm	0.0495	0.50	55510.0000	9.9820 (ppm)
Ni (231.604 nm)	1.0150	ppm	0.0028	0.28	3937.0000	1.0150 (ppm)
P (213.618 nm)	1.0100	ppm	0.0005	0.05	672.7000	1.0100 (ppm)
Pb (220.353 nm)	1.0070	ppm	0.0021	0.21	1748.0000	1.0070 (ppm)
Sb (206.834 nm)	1.0050	ppm	0.0120	1.19	782.9000	1.0050 (ppm)
Se (196.026 nm)	0.9931	ppm	0.0170	1.71	560.9000	0.9931 (ppm)
Si (251.611 nm)	5.0190	ppm	0.0328	0.65	10180.0000	5.0190 (ppm)
Sn (189.925 nm)	1.0240	ppm	0.0081	0.79	505.0000	1.0240 (ppm)
Sr (421.552 nm)	1.0050	ppm	0.0041	0.41	332800.0000	1.0050 (ppm)
Ti (336.122 nm)	1.0410	ppm	0.0023	0.22	98470.0000	1.0410 (ppm)
Tl (190.794 nm)	1.0150	ppm	0.0103	1.02	898.0000	1.0150 (ppm)
V (292.401 nm)	1.0170	ppm	0.0004	0.04	27010.0000	1.0170 (ppm)
W (207.912 nm)	1.0130	ppm	0.0044	0.43	1459.0000	1.0130 (ppm)
Zn (202.548 nm)	1.0130	ppm	0.0003	0.03	13160.0000	1.0130 (ppm)
Zr (343.823 nm)	0.9923	ppm	0.0022	0.22	75270.0000	0.9923 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9888	342300.0000	0.0019	0.19
Y_R 371.029	1.0030	48710.0000	0.0004	0.04

Sample Name: CCV 5993196

Date: 12/10/2019 12:00:52 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5062	ppm	0.0026	0.51	18520.0000	0.5062 (ppm)
Al (396.152 nm)	1.0140	ppm	0.0036	0.36	25730.0000	1.0140 (ppm)
As (188.980 nm)	1.0160	ppm	0.0015	0.15	535.8000	1.0160 (ppm)
B (249.678 nm)	1.0080	ppm	0.0019	0.18	9731.0000	1.0080 (ppm)
Ba (233.527 nm)	1.0030	ppm	0.0017	0.17	75770.0000	1.0030 (ppm)
Be (234.861 nm)	1.0090	ppm	0.0043	0.42	149900.0000	1.0090 (ppm)
Ca (422.673 nm)	5.0500	ppm	0.0213	0.42	19090.0000	5.0500 (ppm)
Cd (214.439 nm)	1.0190	ppm	0.0048	0.47	19030.0000	1.0190 (ppm)
Co (228.615 nm)	1.0190	ppm	0.0035	0.35	11480.0000	1.0190 (ppm)
Cr (205.560 nm)	1.0160	ppm	0.0052	0.51	3921.0000	1.0160 (ppm)
Cu (324.754 nm)	1.0210	ppm	0.0015	0.15	36170.0000	1.0210 (ppm)
Fe (238.204 nm)	1.0340	ppm	0.0016	0.16	2510.0000	1.0340 (ppm)
K (766.491 nm)	10.0600	ppm	0.0927	0.92	9714.0000	10.0600 (ppm)
Li (670.783 nm)	1.0060	ppm	0.0013	0.13	55420.0000	1.0060 (ppm)
Mg (279.078 nm)	5.0500	ppm	0.0142	0.28	11810.0000	5.0500 (ppm)
Mn (259.372 nm)	1.0150	ppm	0.0041	0.41	85730.0000	1.0150 (ppm)
Mo (204.598 nm)	1.0250	ppm	0.0005	0.05	3443.0000	1.0250 (ppm)
Na (589.592 nm)	9.9940	ppm	0.0155	0.16	55580.0000	9.9940 (ppm)
Ni (231.604 nm)	1.0200	ppm	0.0064	0.63	3957.0000	1.0200 (ppm)
P (213.618 nm)	1.0120	ppm	0.0060	0.59	674.0000	1.0120 (ppm)
Pb (220.353 nm)	1.0100	ppm	0.0018	0.18	1752.0000	1.0100 (ppm)
Sb (206.834 nm)	1.0170	ppm	0.0236	2.32	792.5000	1.0170 (ppm)
Se (196.026 nm)	0.9922	ppm	0.0041	0.41	560.4000	0.9922 (ppm)
Si (251.611 nm)	5.0210	ppm	0.0443	0.88	10180.0000	5.0210 (ppm)
Sn (189.925 nm)	1.0060	ppm	0.0016	0.15	496.2000	1.0060 (ppm)
Sr (421.552 nm)	1.0060	ppm	0.0016	0.16	333100.0000	1.0060 (ppm)
Ti (336.122 nm)	1.0250	ppm	0.0100	0.97	96990.0000	1.0250 (ppm)
Tl (190.794 nm)	1.0270	ppm	0.0128	1.25	908.4000	1.0270 (ppm)
V (292.401 nm)	1.0190	ppm	0.0038	0.38	27070.0000	1.0190 (ppm)
W (207.912 nm)	1.0210	ppm	0.0065	0.63	1470.0000	1.0210 (ppm)
Zn (202.548 nm)	1.0150	ppm	0.0013	0.13	13180.0000	1.0150 (ppm)
Zr (343.823 nm)	0.9835	ppm	0.0093	0.94	74610.0000	0.9835 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9827	340100.0000	0.0025	0.25
Y_R 371.029	0.9960	48390.0000	0.0026	0.26

Sample Name: CCB 5993195

Date: 12/10/2019 12:05:34 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000	ppm	0.0000	56.46	-68.2200	0.0000 (ppm)
Al (396.152 nm)	0.0013	ppm	0.0004	32.61	-291.7000	0.0013 (ppm)
As (188.980 nm)	0.0047	ppm	0.0019	39.95	4.1040	0.0047 (ppm)
B (249.678 nm)	0.0016	ppm	0.0001	4.72	1.3020	0.0016 (ppm)
Ba (233.527 nm)	0.0001	ppm	0.0000	23.86	49.9000	0.0001 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	41.76	66.5000	0.0003 (ppm)
Ca (422.673 nm)	-0.0143 u	ppm	0.0045	31.75	65.2100	-0.0143 u (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0001	24.17	2.6070	0.0003 (ppm)
Co (228.615 nm)	0.0005	ppm	0.0003	58.99	-7.0210	0.0005 (ppm)
Cr (205.560 nm)	0.0002	ppm	0.0001	56.53	2.4490	0.0002 (ppm)
Cu (324.754 nm)	0.0002	ppm	0.0003	> 100.00	50.9400	0.0002 (ppm)
Fe (238.204 nm)	0.0054	ppm	0.0023	43.49	-36.7600	0.0054 (ppm)
K (766.491 nm)	0.0720	ppm	0.0019	2.58	-8.1430	0.0720 (ppm)
Li (670.783 nm)	-0.0005 u	ppm	0.0002	47.99	27.1500	-0.0005 u (ppm)
Mg (279.078 nm)	0.0050	ppm	0.0023	45.57	22.5600	0.0050 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0002	37.75	85.2500	0.0005 (ppm)
Mo (204.598 nm)	0.0034	ppm	0.0010	31.07	7.2740	0.0034 (ppm)
Na (589.592 nm)	-0.0283 u	ppm	0.0094	33.38	758.6000	-0.0283 u (ppm)
Ni (231.604 nm)	0.0014	ppm	0.0007	49.29	-9.9550	0.0014 (ppm)
P (213.618 nm)	-0.0044 u	ppm	0.0023	52.84	-2.8810	-0.0044 u (ppm)
Pb (220.353 nm)	-0.0010 u	ppm	0.0025	> 100.00	-13.0500	-0.0010 u (ppm)
Sb (206.834 nm)	0.0099	ppm	0.0003	3.28	4.4900	0.0099 (ppm)
Se (196.026 nm)	0.0010	ppm	0.0000	2.10	-0.1292	0.0010 (ppm)
Si (251.611 nm)	0.0042	ppm	0.0009	20.96	19.1300	0.0042 (ppm)
Sn (189.925 nm)	0.0012	ppm	0.0013	> 100.00	-0.8526	0.0012 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	12.25	1.9070	0.0001 (ppm)
Ti (336.122 nm)	0.0012	ppm	0.0002	14.57	-17.8900	0.0012 (ppm)
Tl (190.794 nm)	0.0033	ppm	0.0013	37.68	7.5040	0.0033 (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0000	29.04	83.7900	-0.0001 u (ppm)
W (207.912 nm)	0.0017	ppm	0.0020	> 100.00	-1.8200	0.0017 (ppm)
Zn (202.548 nm)	0.0039	ppm	0.0002	4.59	63.5300	0.0039 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	> 100.00	97.5300	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9888	342300.0000	0.0036	0.36
Y_R 371.029	0.9976	48470.0000	0.0041	0.41

Sample Name: 440-256528-B-11-A@5

Date: 12/10/2019 12:07:24 PM Rack:Tube: 1:36

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0013 u	ppm	0.0002	15.60	-128.5000	-0.0013 u (ppm)
Al (396.152 nm)	44.6500	ppm	0.1594	0.36	1106000.0000	44.6500 (ppm)
As (188.980 nm)	0.0451	ppm	0.0009	1.92	21.0600	0.0451 (ppm)
B (249.678 nm)	0.0099	ppm	0.0021	20.68	-17.3800	0.0099 (ppm)
Ba (233.527 nm)	0.2276	ppm	0.0021	0.92	17240.0000	0.2276 (ppm)
Be (234.861 nm)	0.0009	ppm	0.0000	0.06	1397.0000	0.0009 (ppm)
Ca (422.673 nm)	20.1900	ppm	0.0291	0.14	75950.0000	20.1900 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	9.5130	0.0000 u (ppm)
Co (228.615 nm)	0.0198	ppm	0.0017	8.49	276.6000	0.0198 (ppm)
Cr (205.560 nm)	0.0347	ppm	0.0015	4.42	138.4000	0.0347 (ppm)
Cu (324.754 nm)	4.2870	ppm	0.0011	0.03	151800.0000	4.2870 (ppm)
Fe (238.204 nm)	93.8800	ppm	0.3791	0.40	232600.0000	93.8800 (ppm)
K (766.491 nm)	6.3930	ppm	0.0220	0.34	6177.0000	6.3930 (ppm)
Li (670.783 nm)	0.0238	ppm	0.0017	7.11	896.3000	0.0238 (ppm)
Mg (279.078 nm)	37.7900	ppm	0.3581	0.95	88250.0000	37.7900 (ppm)
Mn (259.372 nm)	0.3339	ppm	0.0018	0.53	38180.0000	0.3339 (ppm)
Mo (204.598 nm)	0.0205	ppm	0.0007	3.55	70.2000	0.0205 (ppm)
Na (589.592 nm)	0.4042	ppm	0.0020	0.48	3913.0000	0.4042 (ppm)
Ni (231.604 nm)	0.0422	ppm	0.0011	2.64	143.8000	0.0422 (ppm)
P (213.618 nm)	3.9850	ppm	0.0286	0.72	2710.0000	3.9850 (ppm)
Pb (220.353 nm)	-0.0029 u	ppm	0.0001	2.44	36.1300	-0.0029 u (ppm)
Sb (206.834 nm)	0.0170	ppm	0.0124	72.95	8.1330	0.0170 (ppm)
Se (196.026 nm)	0.0205	ppm	0.0011	5.36	1.3630	0.0205 (ppm)
Si (251.611 nm)	0.9949	ppm	0.0037	0.38	2019.0000	0.9949 (ppm)
Sn (189.925 nm)	0.0051	ppm	0.0059	> 100.00	1.0730	0.0051 (ppm)
Sr (421.552 nm)	0.3491	ppm	0.0005	0.15	115800.0000	0.3491 (ppm)
Ti (336.122 nm)	2.8010	ppm	0.0138	0.49	265200.0000	2.8010 (ppm)
Tl (190.794 nm)	0.0105	ppm	0.0040	38.58	-11.3000	0.0105 (ppm)
V (292.401 nm)	0.1410	ppm	0.0009	0.62	3929.0000	0.1410 (ppm)
W (207.912 nm)	0.0013 u	ppm	0.0020	> 100.00	-3.0070	0.0013 u (ppm)
Zn (202.548 nm)	0.0634	ppm	0.0003	0.55	1235.0000	0.0634 (ppm)
Zr (343.823 nm)	0.0361	ppm	0.0001	0.25	795.6000	0.0361 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9830	340200.0000	0.0052	0.53
Y_R 371.029	1.0090	49010.0000	0.0082	0.82

Sample Name: 440-256528-B-12-A@5

Date: 12/10/2019 12:09:12 PM Rack:Tube: 1:37

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0010 u	ppm	0.0002	23.46	-118.1000	-0.0010 u (ppm)
Al (396.152 nm)	43.7000	ppm	0.0656	0.15	1083000.0000	43.7000 (ppm)
As (188.980 nm)	0.0372	ppm	0.0020	5.40	16.9700	0.0372 (ppm)
B (249.678 nm)	0.0072	ppm	0.0004	5.81	-41.8500	0.0072 (ppm)
Ba (233.527 nm)	0.2138	ppm	0.0007	0.34	16200.0000	0.2138 (ppm)
Be (234.861 nm)	0.0010	ppm	0.0004	39.21	1386.0000	0.0010 (ppm)
Ca (422.673 nm)	19.3700	ppm	0.0189	0.10	72860.0000	19.3700 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0003	> 100.00	12.1600	0.0001 u (ppm)
Co (228.615 nm)	0.0204	ppm	0.0003	1.50	281.6000	0.0204 (ppm)
Cr (205.560 nm)	0.0332	ppm	0.0005	1.51	132.8000	0.0332 (ppm)
Cu (324.754 nm)	4.4560	ppm	0.0008	0.02	157800.0000	4.4560 (ppm)
Fe (238.204 nm)	92.0200	ppm	0.0138	0.01	228000.0000	92.0200 (ppm)
K (766.491 nm)	5.7450	ppm	0.0910	1.58	5546.0000	5.7450 (ppm)
Li (670.783 nm)	0.0252	ppm	0.0027	10.82	966.6000	0.0252 (ppm)
Mg (279.078 nm)	37.1200	ppm	0.1188	0.32	86710.0000	37.1200 (ppm)
Mn (259.372 nm)	0.3307	ppm	0.0002	0.05	37720.0000	0.3307 (ppm)
Mo (204.598 nm)	0.0181	ppm	0.0021	11.52	61.9700	0.0181 (ppm)
Na (589.592 nm)	0.3475	ppm	0.0177	5.08	3588.0000	0.3475 (ppm)
Ni (231.604 nm)	0.0408	ppm	0.0013	3.24	138.7000	0.0408 (ppm)
P (213.618 nm)	3.6080	ppm	0.0010	0.03	2438.0000	3.6080 (ppm)
Pb (220.353 nm)	-0.0033 u	ppm	0.0003	9.41	34.4600	-0.0033 u (ppm)
Sb (206.834 nm)	0.0147	ppm	0.0033	22.35	6.3580	0.0147 (ppm)
Se (196.026 nm)	0.0234	ppm	0.0080	34.15	3.1540	0.0234 (ppm)
Si (251.611 nm)	1.0350	ppm	0.0027	0.26	2097.0000	1.0350 (ppm)
Sn (189.925 nm)	-0.0023 u	ppm	0.0050	> 100.00	-2.5830	-0.0023 u (ppm)
Sr (421.552 nm)	0.3394	ppm	0.0006	0.17	112500.0000	0.3394 (ppm)
Ti (336.122 nm)	2.7380	ppm	0.0052	0.19	259200.0000	2.7380 (ppm)
Tl (190.794 nm)	0.0072	ppm	0.0074	> 100.00	-13.5800	0.0072 (ppm)
V (292.401 nm)	0.1364	ppm	0.0004	0.33	3804.0000	0.1364 (ppm)
W (207.912 nm)	0.0016	ppm	0.0009	55.59	-2.5310	0.0016 (ppm)
Zn (202.548 nm)	0.0598	ppm	0.0004	0.65	1206.0000	0.0598 (ppm)
Zr (343.823 nm)	0.0348	ppm	0.0001	0.34	734.9000	0.0348 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9856	341100.0000	0.0063	0.64
Y_R 371.029	1.0080	48960.0000	0.0024	0.24

Sample Name: 440-256528-B-13-A@5

Date: 12/10/2019 12:11:02 PM Rack:Tube: 1:38

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0013 u	ppm	0.0000	1.62	-130.0000	-0.0013 u (ppm)
Al (396.152 nm)	40.5000	ppm	0.1685	0.42	1003000.0000	40.5000 (ppm)
As (188.980 nm)	0.0081	ppm	0.0027	33.52	1.5680	0.0081 (ppm)
B (249.678 nm)	0.0079	ppm	0.0000	0.17	-30.1800	0.0079 (ppm)
Ba (233.527 nm)	0.2386	ppm	0.0003	0.14	18070.0000	0.2386 (ppm)
Be (234.861 nm)	0.0011	ppm	0.0001	9.70	1342.0000	0.0011 (ppm)
Ca (422.673 nm)	41.2500	ppm	0.3012	0.73	155000.0000	41.2500 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0002	> 100.00	12.1800	0.0002 (ppm)
Co (228.615 nm)	0.0327	ppm	0.0004	1.24	431.3000	0.0327 (ppm)
Cr (205.560 nm)	0.0380	ppm	0.0009	2.41	151.3000	0.0380 (ppm)
Cu (324.754 nm)	3.9140	ppm	0.0220	0.56	138600.0000	3.9140 (ppm)
Fe (238.204 nm)	87.5600	ppm	0.6294	0.72	217000.0000	87.5600 (ppm)
K (766.491 nm)	9.5410	ppm	0.1868	1.96	9240.0000	9.5410 (ppm)
Li (670.783 nm)	0.0275	ppm	0.0006	2.08	1178.0000	0.0275 (ppm)
Mg (279.078 nm)	38.1400	ppm	0.0897	0.24	89080.0000	38.1400 (ppm)
Mn (259.372 nm)	0.5189	ppm	0.0019	0.37	53040.0000	0.5189 (ppm)
Mo (204.598 nm)	0.0158	ppm	0.0007	4.28	54.2900	0.0158 (ppm)
Na (589.592 nm)	0.4795	ppm	0.0098	2.05	4277.0000	0.4795 (ppm)
Ni (231.604 nm)	0.0488	ppm	0.0002	0.34	169.6000	0.0488 (ppm)
P (213.618 nm)	5.2690	ppm	0.0107	0.20	3628.0000	5.2690 (ppm)
Pb (220.353 nm)	-0.0021 u	ppm	0.0026	> 100.00	33.8900	-0.0021 u (ppm)
Sb (206.834 nm)	0.0063	ppm	0.0028	44.85	0.0657	0.0063 (ppm)
Se (196.026 nm)	0.0115	ppm	0.0043	37.44	-3.1590	0.0115 (ppm)
Si (251.611 nm)	1.1870	ppm	0.0034	0.29	2407.0000	1.1870 (ppm)
Sn (189.925 nm)	0.0011 u	ppm	0.0041	> 100.00	-0.9631	0.0011 u (ppm)
Sr (421.552 nm)	0.2703	ppm	0.0024	0.89	89870.0000	0.2703 (ppm)
Ti (336.122 nm)	3.3180	ppm	0.0117	0.35	314200.0000	3.3180 (ppm)
Tl (190.794 nm)	0.0131	ppm	0.0025	19.10	-13.9900	0.0131 (ppm)
V (292.401 nm)	0.1305	ppm	0.0002	0.18	3683.0000	0.1305 (ppm)
W (207.912 nm)	-0.0034 u	ppm	0.0022	65.77	-9.7150	-0.0034 u (ppm)
Zn (202.548 nm)	0.0789	ppm	0.0007	0.88	1395.0000	0.0789 (ppm)
Zr (343.823 nm)	0.0401	ppm	0.0004	0.91	1231.0000	0.0401 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9860	341300.0000	0.0022	0.22
Y_R 371.029	1.0100	49050.0000	0.0019	0.18

Sample Name: 440-256528-B-14-A@5

Date: 12/10/2019 12:12:50 PM Rack:Tube: 1:39

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0012 u	ppm	0.0000	1.32	-123.7000	-0.0012 u (ppm)
Al (396.152 nm)	35.4500	ppm	0.1534	0.43	878200.0000	35.4500 (ppm)
As (188.980 nm)	0.0112	ppm	0.0033	29.54	3.8040	0.0112 (ppm)
B (249.678 nm)	0.0081	ppm	0.0017	20.37	-14.6600	0.0081 (ppm)
Ba (233.527 nm)	0.2185	ppm	0.0000	0.02	16560.0000	0.2185 (ppm)
Be (234.861 nm)	0.0008	ppm	0.0001	12.38	1136.0000	0.0008 (ppm)
Ca (422.673 nm)	30.2000	ppm	0.1259	0.42	113500.0000	30.2000 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	8.3270	0.0001 u (ppm)
Co (228.615 nm)	0.0245	ppm	0.0017	7.14	319.8000	0.0245 (ppm)
Cr (205.560 nm)	0.0452	ppm	0.0008	1.69	179.0000	0.0452 (ppm)
Cu (324.754 nm)	5.6300	ppm	0.0288	0.51	199300.0000	5.6300 (ppm)
Fe (238.204 nm)	75.3400	ppm	0.2541	0.34	186700.0000	75.3400 (ppm)
K (766.491 nm)	8.3180	ppm	0.1068	1.28	8044.0000	8.3180 (ppm)
Li (670.783 nm)	0.0243	ppm	0.0014	5.64	913.7000	0.0243 (ppm)
Mg (279.078 nm)	33.9900	ppm	0.0258	0.08	79400.0000	33.9900 (ppm)
Mn (259.372 nm)	0.3858	ppm	0.0023	0.60	40550.0000	0.3858 (ppm)
Mo (204.598 nm)	0.0196	ppm	0.0003	1.67	66.1600	0.0196 (ppm)
Na (589.592 nm)	0.4574	ppm	0.0047	1.02	4055.0000	0.4574 (ppm)
Ni (231.604 nm)	0.0474	ppm	0.0005	1.10	164.8000	0.0474 (ppm)
P (213.618 nm)	4.1700	ppm	0.1003	2.41	2804.0000	4.1700 (ppm)
Pb (220.353 nm)	-0.0038 u	ppm	0.0027	71.41	24.2700	-0.0038 u (ppm)
Sb (206.834 nm)	0.0062 u	ppm	0.0088	> 100.00	0.2401	0.0062 u (ppm)
Se (196.026 nm)	0.0125	ppm	0.0018	14.67	-1.4380	0.0125 (ppm)
Si (251.611 nm)	0.9943	ppm	0.0042	0.42	2016.0000	0.9943 (ppm)
Sn (189.925 nm)	0.0024	ppm	0.0012	51.05	-0.2735	0.0024 (ppm)
Sr (421.552 nm)	0.2277	ppm	0.0010	0.42	75660.0000	0.2277 (ppm)
Ti (336.122 nm)	2.4190	ppm	0.0087	0.36	229000.0000	2.4190 (ppm)
Tl (190.794 nm)	0.0102	ppm	0.0004	3.81	-8.2270	0.0102 (ppm)
V (292.401 nm)	0.1127	ppm	0.0000	0.03	3177.0000	0.1127 (ppm)
W (207.912 nm)	-0.0031 u	ppm	0.0015	48.68	-9.0340	-0.0031 u (ppm)
Zn (202.548 nm)	0.0727	ppm	0.0005	0.69	1492.0000	0.0727 (ppm)
Zr (343.823 nm)	0.0322	ppm	0.0005	1.57	902.8000	0.0322 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9912	343100.0000	0.0025	0.25
Y_R 371.029	1.0110	49130.0000	0.0009	0.09

Sample Name: 440-256528-B-15-A@5

Date: 12/10/2019 12:14:38 PM Rack:Tube: 1:40

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0020 u	ppm	0.0002	9.43	-153.1000	-0.0020 u (ppm)
Al (396.152 nm)	69.3300	ppm	0.3091	0.45	1718000.0000	69.3300 (ppm)
As (188.980 nm)	0.0498	ppm	0.0005	0.97	22.4700	0.0498 (ppm)
B (249.678 nm)	0.0126	ppm	0.0012	9.79	-17.5200	0.0126 (ppm)
Ba (233.527 nm)	0.3815	ppm	0.0008	0.21	28870.0000	0.3815 (ppm)
Be (234.861 nm)	0.0014	ppm	0.0001	4.79	1802.0000	0.0014 (ppm)
Ca (422.673 nm)	27.1500	ppm	0.1468	0.54	102100.0000	27.1500 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0002	95.03	16.8200	0.0002 (ppm)
Co (228.615 nm)	0.0256	ppm	0.0015	5.97	335.3000	0.0256 (ppm)
Cr (205.560 nm)	0.0467	ppm	0.0000	0.08	185.6000	0.0467 (ppm)
Cu (324.754 nm)	7.0630	ppm	0.0796	1.13	250000.0000	7.0630 (ppm)
Fe (238.204 nm)	118.8000	ppm	0.5623	0.47	294300.0000	118.8000 (ppm)
K (766.491 nm)	10.3800	ppm	0.0612	0.59	10070.0000	10.3800 (ppm)
Li (670.783 nm)	0.0389	ppm	0.0013	3.41	1555.0000	0.0389 (ppm)
Mg (279.078 nm)	57.7400	ppm	0.2077	0.36	134900.0000	57.7400 (ppm)
Mn (259.372 nm)	0.4325	ppm	0.0020	0.47	49160.0000	0.4325 (ppm)
Mo (204.598 nm)	0.0335	ppm	0.0010	2.95	116.2000	0.0335 (ppm)
Na (589.592 nm)	0.4076	ppm	0.0079	1.95	4147.0000	0.4076 (ppm)
Ni (231.604 nm)	0.0549	ppm	0.0020	3.67	191.9000	0.0549 (ppm)
P (213.618 nm)	3.5160	ppm	0.1317	3.75	2305.0000	3.5160 (ppm)
Pb (220.353 nm)	0.0091	ppm	0.0005	5.19	71.3900	0.0091 (ppm)
Sb (206.834 nm)	0.0165	ppm	0.0001	0.41	7.0720	0.0165 (ppm)
Se (196.026 nm)	0.0176	ppm	0.0005	2.95	-2.8400	0.0176 (ppm)
Si (251.611 nm)	1.0000	ppm	0.0029	0.29	2028.0000	1.0000 (ppm)
Sn (189.925 nm)	0.0031	ppm	0.0038	> 100.00	0.1809	0.0031 (ppm)
Sr (421.552 nm)	0.5059	ppm	0.0015	0.30	167700.0000	0.5059 (ppm)
Ti (336.122 nm)	2.3200	ppm	0.0117	0.51	219600.0000	2.3200 (ppm)
Tl (190.794 nm)	0.0120	ppm	0.0027	22.40	-4.2070	0.0120 (ppm)
V (292.401 nm)	0.1670	ppm	0.0012	0.75	4616.0000	0.1670 (ppm)
W (207.912 nm)	0.0008	ppm	0.0006	68.38	-3.5170	0.0008 (ppm)
Zn (202.548 nm)	0.1105	ppm	0.0006	0.58	2117.0000	0.1105 (ppm)
Zr (343.823 nm)	0.0455	ppm	0.0003	0.56	962.5000	0.0455 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9862	341300.0000	0.0058	0.58
Y_R 371.029	1.0050	48820.0000	0.0012	0.11

Sample Name: 440-256528-B-16-A@5

Date: 12/10/2019 12:16:26 PM Rack:Tube: 1:41

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0016 u	ppm	0.0000	0.80	-136.5000	-0.0016 u (ppm)
Al (396.152 nm)	51.8000	ppm	0.1702	0.33	1283000.0000	51.8000 (ppm)
As (188.980 nm)	0.0284	ppm	0.0038	13.38	12.8300	0.0284 (ppm)
B (249.678 nm)	0.0090	ppm	0.0010	11.12	-13.3900	0.0090 (ppm)
Ba (233.527 nm)	0.3236	ppm	0.0003	0.10	24500.0000	0.3236 (ppm)
Be (234.861 nm)	0.0012	ppm	0.0005	42.23	1289.0000	0.0012 (ppm)
Ca (422.673 nm)	26.2600	ppm	0.0754	0.29	98740.0000	26.2600 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0000	63.89	8.9800	0.0001 (ppm)
Co (228.615 nm)	0.0177	ppm	0.0011	6.04	245.6000	0.0177 (ppm)
Cr (205.560 nm)	0.0327	ppm	0.0004	1.23	131.0000	0.0327 (ppm)
Cu (324.754 nm)	5.7960	ppm	0.0040	0.07	205200.0000	5.7960 (ppm)
Fe (238.204 nm)	81.8100	ppm	0.2028	0.25	202700.0000	81.8100 (ppm)
K (766.491 nm)	7.7180	ppm	0.0075	0.10	7464.0000	7.7180 (ppm)
Li (670.783 nm)	0.0256	ppm	0.0007	2.72	1004.0000	0.0256 (ppm)
Mg (279.078 nm)	40.3500	ppm	0.0245	0.06	94240.0000	40.3500 (ppm)
Mn (259.372 nm)	0.2728	ppm	0.0018	0.67	31780.0000	0.2728 (ppm)
Mo (204.598 nm)	0.0416	ppm	0.0021	5.05	141.7000	0.0416 (ppm)
Na (589.592 nm)	0.4011	ppm	0.0025	0.62	3803.0000	0.4011 (ppm)
Ni (231.604 nm)	0.0424	ppm	0.0000	0.07	145.0000	0.0424 (ppm)
P (213.618 nm)	2.7790	ppm	0.0057	0.20	1815.0000	2.7790 (ppm)
Pb (220.353 nm)	0.0157	ppm	0.0038	24.35	61.2700	0.0157 (ppm)
Sb (206.834 nm)	0.0220	ppm	0.0018	8.12	12.2200	0.0220 (ppm)
Se (196.026 nm)	0.0199	ppm	0.0095	47.80	2.0660	0.0199 (ppm)
Si (251.611 nm)	1.0470	ppm	0.0015	0.14	2123.0000	1.0470 (ppm)
Sn (189.925 nm)	0.0010 u	ppm	0.0022	> 100.00	-0.9237	0.0010 u (ppm)
Sr (421.552 nm)	0.4637	ppm	0.0012	0.26	153700.0000	0.4637 (ppm)
Ti (336.122 nm)	2.4620	ppm	0.0091	0.37	233100.0000	2.4620 (ppm)
Tl (190.794 nm)	0.0148	ppm	0.0018	12.16	-4.8300	0.0148 (ppm)
V (292.401 nm)	0.1374	ppm	0.0001	0.10	3828.0000	0.1374 (ppm)
W (207.912 nm)	0.0024	ppm	0.0006	25.50	-1.3610	0.0024 (ppm)
Zn (202.548 nm)	0.0743	ppm	0.0002	0.28	1532.0000	0.0743 (ppm)
Zr (343.823 nm)	0.0329	ppm	0.0001	0.45	818.9000	0.0329 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9820	339900.0000	0.0043	0.44
Y_R 371.029	1.0030	48710.0000	0.0013	0.13

Sample Name: 440-256528-B-18-A@5

Date: 12/10/2019 12:18:16 PM Rack:Tube: 1:42

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0011 u	ppm	0.0003	27.90	-120.3000	-0.0011 u (ppm)
Al (396.152 nm)	52.5800	ppm	0.1101	0.21	1303000.0000	52.5800 (ppm)
As (188.980 nm)	0.0453	ppm	0.0048	10.53	21.9100	0.0453 (ppm)
B (249.678 nm)	0.0110	ppm	0.0002	2.17	7.5750	0.0110 (ppm)
Ba (233.527 nm)	0.3241	ppm	0.0024	0.73	24530.0000	0.3241 (ppm)
Be (234.861 nm)	0.0011	ppm	0.0004	35.25	1238.0000	0.0011 (ppm)
Ca (422.673 nm)	23.6900	ppm	0.0073	0.03	89090.0000	23.6900 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	7.6110	0.0000 u (ppm)
Co (228.615 nm)	0.0202	ppm	0.0003	1.44	278.9000	0.0202 (ppm)
Cr (205.560 nm)	0.0425	ppm	0.0012	2.73	169.1000	0.0425 (ppm)
Cu (324.754 nm)	8.3520	ppm	0.0062	0.07	295600.0000	8.3520 (ppm)
Fe (238.204 nm)	79.2000	ppm	0.0746	0.09	196200.0000	79.2000 (ppm)
K (766.491 nm)	7.9380	ppm	0.0645	0.81	7677.0000	7.9380 (ppm)
Li (670.783 nm)	0.0293	ppm	0.0014	4.70	1073.0000	0.0293 (ppm)
Mg (279.078 nm)	41.2300	ppm	0.2460	0.60	96310.0000	41.2300 (ppm)
Mn (259.372 nm)	0.2718	ppm	0.0009	0.32	31420.0000	0.2718 (ppm)
Mo (204.598 nm)	0.0192	ppm	0.0008	4.12	66.4600	0.0192 (ppm)
Na (589.592 nm)	0.3958	ppm	0.0098	2.48	3760.0000	0.3958 (ppm)
Ni (231.604 nm)	0.0463	ppm	0.0009	1.90	160.0000	0.0463 (ppm)
P (213.618 nm)	2.2300	ppm	0.0779	3.49	1359.0000	2.2300 (ppm)
Pb (220.353 nm)	0.0173	ppm	0.0003	1.85	62.4200	0.0173 (ppm)
Sb (206.834 nm)	0.0128	ppm	0.0028	21.71	5.6250	0.0128 (ppm)
Se (196.026 nm)	0.0201	ppm	0.0016	7.89	2.2070	0.0201 (ppm)
Si (251.611 nm)	0.9358	ppm	0.0073	0.78	1904.0000	0.9358 (ppm)
Sn (189.925 nm)	0.0028 u	ppm	0.0047	> 100.00	-0.0341	0.0028 u (ppm)
Sr (421.552 nm)	0.3814	ppm	0.0005	0.13	126500.0000	0.3814 (ppm)
Ti (336.122 nm)	2.7450	ppm	0.0081	0.30	259900.0000	2.7450 (ppm)
Tl (190.794 nm)	0.0131	ppm	0.0000	0.13	-9.4400	0.0131 (ppm)
V (292.401 nm)	0.1416	ppm	0.0000	0.00	3950.0000	0.1416 (ppm)
W (207.912 nm)	0.0022	ppm	0.0001	3.32	-1.5870	0.0022 (ppm)
Zn (202.548 nm)	0.0628	ppm	0.0009	1.41	1641.0000	0.0628 (ppm)
Zr (343.823 nm)	0.0322	ppm	0.0002	0.49	818.0000	0.0322 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9817	339800.0000	0.0031	0.31
Y_R 371.029	0.9991	48540.0000	0.0047	0.47

Sample Name: 440-256528-B-19-A@5

Date: 12/10/2019 12:20:04 PM Rack:Tube: 1:43

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0019 u	ppm	0.0003	14.80	-148.6000	-0.0019 u (ppm)
Al (396.152 nm)	55.4900	ppm	0.1442	0.26	1375000.0000	55.4900 (ppm)
As (188.980 nm)	0.0525	ppm	0.0018	3.40	23.8900	0.0525 (ppm)
B (249.678 nm)	0.0103	ppm	0.0020	19.96	-43.0300	0.0103 (ppm)
Ba (233.527 nm)	0.3852	ppm	0.0020	0.51	29150.0000	0.3852 (ppm)
Be (234.861 nm)	0.0012	ppm	0.0001	7.24	1795.0000	0.0012 (ppm)
Ca (422.673 nm)	20.6000	ppm	0.1678	0.81	77470.0000	20.6000 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0002	> 100.00	15.4000	0.0001 (ppm)
Co (228.615 nm)	0.0255	ppm	0.0005	2.10	327.4000	0.0255 (ppm)
Cr (205.560 nm)	0.0459	ppm	0.0008	1.82	183.1000	0.0459 (ppm)
Cu (324.754 nm)	10.5600	ppm	0.0300	0.28	373800.0000	10.5600 (ppm)
Fe (238.204 nm)	120.3000	ppm	0.9511	0.79	298100.0000	120.3000 (ppm)
K (766.491 nm)	9.9980	ppm	0.1122	1.12	9686.0000	9.9980 (ppm)
Li (670.783 nm)	0.0382	ppm	0.0007	1.81	1187.0000	0.0382 (ppm)
Mg (279.078 nm)	41.2000	ppm	0.2173	0.53	96230.0000	41.2000 (ppm)
Mn (259.372 nm)	0.3453	ppm	0.0009	0.27	41960.0000	0.3453 (ppm)
Mo (204.598 nm)	0.0255	ppm	0.0019	7.40	88.2300	0.0255 (ppm)
Na (589.592 nm)	0.4383	ppm	0.0084	1.91	4329.0000	0.4383 (ppm)
Ni (231.604 nm)	0.0512	ppm	0.0006	1.09	177.3000	0.0512 (ppm)
P (213.618 nm)	2.8130	ppm	0.0557	1.98	1715.0000	2.8130 (ppm)
Pb (220.353 nm)	0.0051	ppm	0.0040	77.74	66.3600	0.0051 (ppm)
Sb (206.834 nm)	0.0144	ppm	0.0046	32.19	5.5180	0.0144 (ppm)
Se (196.026 nm)	0.0228	ppm	0.0047	20.80	-0.2225	0.0228 (ppm)
Si (251.611 nm)	0.9558	ppm	0.0008	0.09	1935.0000	0.9558 (ppm)
Sn (189.925 nm)	0.0029 u	ppm	0.0067	> 100.00	0.0722	0.0029 u (ppm)
Sr (421.552 nm)	0.3549	ppm	0.0032	0.90	117700.0000	0.3549 (ppm)
Ti (336.122 nm)	1.9450	ppm	0.0034	0.17	184100.0000	1.9450 (ppm)
Tl (190.794 nm)	0.0116	ppm	0.0020	16.95	-0.8174	0.0116 (ppm)
V (292.401 nm)	0.1564	ppm	0.0001	0.09	4318.0000	0.1564 (ppm)
W (207.912 nm)	0.0018 u	ppm	0.0038	> 100.00	-1.8580	0.0018 u (ppm)
Zn (202.548 nm)	0.1106	ppm	0.0002	0.19	2464.0000	0.1106 (ppm)
Zr (343.823 nm)	0.0462	ppm	0.0001	0.26	982.1000	0.0462 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9839	340600.0000	0.0013	0.13
Y_R 371.029	0.9966	48420.0000	0.0015	0.15

Sample Name: CCV 5993196

Date: 12/10/2019 12:21:52 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5043	ppm	0.0012	0.24	18450.0000	0.5043 (ppm)
Al (396.152 nm)	1.0540	ppm	0.0144	1.37	26700.0000	1.0540 (ppm)
As (188.980 nm)	1.0090	ppm	0.0066	0.66	531.9000	1.0090 (ppm)
B (249.678 nm)	1.0040	ppm	0.0055	0.55	9693.0000	1.0040 (ppm)
Ba (233.527 nm)	1.0060	ppm	0.0031	0.31	75980.0000	1.0060 (ppm)
Be (234.861 nm)	1.0040	ppm	0.0036	0.36	149100.0000	1.0040 (ppm)
Ca (422.673 nm)	5.0220	ppm	0.0009	0.02	18980.0000	5.0220 (ppm)
Cd (214.439 nm)	1.0120	ppm	0.0040	0.39	18920.0000	1.0120 (ppm)
Co (228.615 nm)	1.0150	ppm	0.0029	0.29	11430.0000	1.0150 (ppm)
Cr (205.560 nm)	1.0110	ppm	0.0044	0.44	3903.0000	1.0110 (ppm)
Cu (324.754 nm)	1.0260	ppm	0.0035	0.34	36370.0000	1.0260 (ppm)
Fe (238.204 nm)	1.1230 Q	ppm	0.0048	0.43	2732.0000 Q	1.1230 Q (ppm)
K (766.491 nm)	10.1000	ppm	0.0783	0.78	9751.0000	10.1000 (ppm)
Li (670.783 nm)	1.0030	ppm	0.0011	0.11	55270.0000	1.0030 (ppm)
Mg (279.078 nm)	5.0960	ppm	0.0302	0.59	11920.0000	5.0960 (ppm)
Mn (259.372 nm)	1.0100	ppm	0.0031	0.31	85350.0000	1.0100 (ppm)
Mo (204.598 nm)	1.0170	ppm	0.0005	0.05	3415.0000	1.0170 (ppm)
Na (589.592 nm)	9.9570	ppm	0.0189	0.19	55380.0000	9.9570 (ppm)
Ni (231.604 nm)	1.0130	ppm	0.0052	0.51	3930.0000	1.0130 (ppm)
P (213.618 nm)	1.0120	ppm	0.0031	0.31	674.2000	1.0120 (ppm)
Pb (220.353 nm)	1.0060	ppm	0.0015	0.15	1746.0000	1.0060 (ppm)
Sb (206.834 nm)	0.9990	ppm	0.0156	1.56	778.3000	0.9990 (ppm)
Se (196.026 nm)	0.9946	ppm	0.0048	0.48	561.7000	0.9946 (ppm)
Si (251.611 nm)	5.0090	ppm	0.0383	0.76	10160.0000	5.0090 (ppm)
Sn (189.925 nm)	1.0180	ppm	0.0041	0.40	502.4000	1.0180 (ppm)
Sr (421.552 nm)	1.0010	ppm	0.0007	0.07	331400.0000	1.0010 (ppm)
Ti (336.122 nm)	1.0350	ppm	0.0046	0.44	97960.0000	1.0350 (ppm)
Tl (190.794 nm)	1.0160	ppm	0.0026	0.26	898.3000	1.0160 (ppm)
V (292.401 nm)	1.0160	ppm	0.0021	0.20	26980.0000	1.0160 (ppm)
W (207.912 nm)	1.0130	ppm	0.0032	0.32	1458.0000	1.0130 (ppm)
Zn (202.548 nm)	1.0100	ppm	0.0016	0.16	13120.0000	1.0100 (ppm)
Zr (343.823 nm)	0.9858	ppm	0.0028	0.29	74780.0000	0.9858 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9830	340200.0000	0.0034	0.35
Y_R 371.029	0.9888	48040.0000	0.0022	0.22

Sample Name: CCV 5993196

Date: 12/10/2019 12:26:28 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5051	ppm	0.0027	0.53	18480.0000	0.5051 (ppm)
Al (396.152 nm)	1.0100	ppm	0.0038	0.38	25610.0000	1.0100 (ppm)
As (188.980 nm)	1.0130	ppm	0.0023	0.23	534.1000	1.0130 (ppm)
B (249.678 nm)	1.0060	ppm	0.0071	0.70	9715.0000	1.0060 (ppm)
Ba (233.527 nm)	1.0120	ppm	0.0055	0.55	76470.0000	1.0120 (ppm)
Be (234.861 nm)	1.0050	ppm	0.0042	0.42	149400.0000	1.0050 (ppm)
Ca (422.673 nm)	5.0280	ppm	0.0288	0.57	19010.0000	5.0280 (ppm)
Cd (214.439 nm)	1.0140	ppm	0.0027	0.27	18960.0000	1.0140 (ppm)
Co (228.615 nm)	1.0200	ppm	0.0031	0.30	11490.0000	1.0200 (ppm)
Cr (205.560 nm)	1.0130	ppm	0.0063	0.62	3910.0000	1.0130 (ppm)
Cu (324.754 nm)	1.0200	ppm	0.0036	0.36	36160.0000	1.0200 (ppm)
Fe (238.204 nm)	1.0370	ppm	0.0008	0.08	2519.0000	1.0370 (ppm)
K (766.491 nm)	10.0900	ppm	0.1128	1.12	9744.0000	10.0900 (ppm)
Li (670.783 nm)	1.0030	ppm	0.0085	0.85	55270.0000	1.0030 (ppm)
Mg (279.078 nm)	5.1040	ppm	0.0227	0.44	11930.0000	5.1040 (ppm)
Mn (259.372 nm)	1.0110	ppm	0.0042	0.42	85450.0000	1.0110 (ppm)
Mo (204.598 nm)	1.0250	ppm	0.0012	0.12	3442.0000	1.0250 (ppm)
Na (589.592 nm)	9.9950	ppm	0.0533	0.53	55590.0000	9.9950 (ppm)
Ni (231.604 nm)	1.0130	ppm	0.0010	0.10	3928.0000	1.0130 (ppm)
P (213.618 nm)	1.0010	ppm	0.0029	0.29	666.4000	1.0010 (ppm)
Pb (220.353 nm)	1.0100	ppm	0.0009	0.09	1752.0000	1.0100 (ppm)
Sb (206.834 nm)	1.0190	ppm	0.0143	1.41	793.9000	1.0190 (ppm)
Se (196.026 nm)	0.9911	ppm	0.0133	1.34	559.7000	0.9911 (ppm)
Si (251.611 nm)	5.0050	ppm	0.0440	0.88	10150.0000	5.0050 (ppm)
Sn (189.925 nm)	1.0090	ppm	0.0103	1.02	497.8000	1.0090 (ppm)
Sr (421.552 nm)	1.0020	ppm	0.0051	0.50	331700.0000	1.0020 (ppm)
Ti (336.122 nm)	1.0230	ppm	0.0075	0.73	96790.0000	1.0230 (ppm)
Tl (190.794 nm)	1.0210	ppm	0.0132	1.29	903.3000	1.0210 (ppm)
V (292.401 nm)	1.0160	ppm	0.0042	0.41	26990.0000	1.0160 (ppm)
W (207.912 nm)	1.0150	ppm	0.0014	0.14	1461.0000	1.0150 (ppm)
Zn (202.548 nm)	1.0120	ppm	0.0045	0.45	13150.0000	1.0120 (ppm)
Zr (343.823 nm)	0.9793	ppm	0.0079	0.81	74290.0000	0.9793 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9708	336000.0000	0.0023	0.24
Y_R 371.029	0.9714	47200.0000	0.0037	0.38

Sample Name: CCB 5993195

Date: 12/10/2019 12:30:38 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	41.69	-75.7100	-0.0002 u (ppm)
Al (396.152 nm)	0.0006	ppm	0.0006	> 100.00	-307.8000	0.0006 (ppm)
As (188.980 nm)	0.0027 u	ppm	0.0045	> 100.00	3.0200	0.0027 u (ppm)
B (249.678 nm)	0.0019	ppm	0.0001	7.44	4.3840	0.0019 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	44.4400	0.0000 u (ppm)
Be (234.861 nm)	0.0004	ppm	0.0000	13.71	74.6000	0.0004 (ppm)
Ca (422.673 nm)	-0.0053 u	ppm	0.0003	5.71	99.1500	-0.0053 u (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0000	13.01	-0.6136	0.0001 (ppm)
Co (228.615 nm)	0.0002	ppm	0.0002	82.48	-10.4000	0.0002 (ppm)
Cr (205.560 nm)	-0.0004 u	ppm	0.0003	67.20	0.1624	-0.0004 u (ppm)
Cu (324.754 nm)	0.0004	ppm	0.0001	26.25	56.1700	0.0004 (ppm)
Fe (238.204 nm)	0.0028	ppm	0.0019	67.91	-43.1400	0.0028 (ppm)
K (766.491 nm)	0.0472 u	ppm	0.1248	> 100.00	-32.2600	0.0472 u (ppm)
Li (670.783 nm)	0.0000 u	ppm	0.0011	> 100.00	54.5800	0.0000 u (ppm)
Mg (279.078 nm)	0.0047	ppm	0.0007	15.45	21.8100	0.0047 (ppm)
Mn (259.372 nm)	0.0004	ppm	0.0002	43.77	80.8000	0.0004 (ppm)
Mo (204.598 nm)	0.0037	ppm	0.0008	21.46	8.5300	0.0037 (ppm)
Na (589.592 nm)	-0.0230 u	ppm	0.0062	27.03	787.8000	-0.0230 u (ppm)
Ni (231.604 nm)	0.0006	ppm	0.0004	66.19	-13.3200	0.0006 (ppm)
P (213.618 nm)	0.0012	ppm	0.0002	14.09	1.0830	0.0012 (ppm)
Pb (220.353 nm)	-0.0007 u	ppm	0.0003	47.30	-12.5000	-0.0007 u (ppm)
Sb (206.834 nm)	0.0103 Z	ppm	0.0047	45.76	4.8020 Z	0.0103 Z (ppm)
Se (196.026 nm)	0.0065	ppm	0.0003	4.15	2.9580	0.0065 (ppm)
Si (251.611 nm)	0.0033	ppm	0.0012	36.89	17.4900	0.0033 (ppm)
Sn (189.925 nm)	-0.0013 u	ppm	0.0068	> 100.00	-2.0870	-0.0013 u (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	37.38	-1.0350	0.0001 (ppm)
Ti (336.122 nm)	0.0012	ppm	0.0003	25.84	-23.3200	0.0012 (ppm)
Tl (190.794 nm)	0.0012	ppm	0.0002	14.18	5.5480	0.0012 (ppm)
V (292.401 nm)	0.0006	ppm	0.0000	0.50	101.8000	0.0006 (ppm)
W (207.912 nm)	0.0032	ppm	0.0034	> 100.00	0.3350	0.0032 (ppm)
Zn (202.548 nm)	0.0038	ppm	0.0001	2.09	61.6600	0.0038 (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0001	> 100.00	104.6000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9644	333800.0000	0.0056	0.58
Y_R 371.029	0.9611	46690.0000	0.0098	1.02

Sample Name: MB 440-584717/1-A@5

Date: 12/10/2019 12:32:26 PM Rack:Tube: 1:44

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0002	69.89	-79.3200	-0.0003 u (ppm)
Al (396.152 nm)	0.0067	ppm	0.0004	5.44	-159.2000	0.0067 (ppm)
As (188.980 nm)	-0.0023 u	ppm	0.0043	> 100.00	0.3327	-0.0023 u (ppm)
B (249.678 nm)	0.0014	ppm	0.0006	44.40	-0.6770	0.0014 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0000	16.20	52.5500	0.0002 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	22.3100	0.0000 u (ppm)
Ca (422.673 nm)	0.0148	ppm	0.0044	29.65	174.4000	0.0148 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-5.0350	-0.0001 u (ppm)
Co (228.615 nm)	0.0005 u	ppm	0.0007	> 100.00	-7.6010	0.0005 u (ppm)
Cr (205.560 nm)	0.0034	ppm	0.0007	21.25	14.7500	0.0034 (ppm)
Cu (324.754 nm)	0.0043	ppm	0.0003	6.44	194.6000	0.0043 (ppm)
Fe (238.204 nm)	0.2243	ppm	0.0057	2.52	505.7000	0.2243 (ppm)
K (766.491 nm)	0.1164	ppm	0.0760	65.24	35.0900	0.1164 (ppm)
Li (670.783 nm)	0.0009 u	ppm	0.0022	> 100.00	104.7000	0.0009 u (ppm)
Mg (279.078 nm)	0.0080	ppm	0.0026	33.05	29.2700	0.0080 (ppm)
Mn (259.372 nm)	0.0020	ppm	0.0002	9.38	239.9000	0.0020 (ppm)
Mo (204.598 nm)	0.0022	ppm	0.0001	2.57	3.2210	0.0022 (ppm)
Na (589.592 nm)	0.0007 u	ppm	0.0051	> 100.00	918.9000	0.0007 u (ppm)
Ni (231.604 nm)	0.0045	ppm	0.0011	23.74	2.0640	0.0045 (ppm)
P (213.618 nm)	0.0017 u	ppm	0.0055	> 100.00	1.3800	0.0017 u (ppm)
Pb (220.353 nm)	-0.0032 u	ppm	0.0025	78.34	-16.7400	-0.0032 u (ppm)
Sb (206.834 nm)	0.0097	ppm	0.0046	47.66	4.3460	0.0097 (ppm)
Se (196.026 nm)	0.0019 u	ppm	0.0059	> 100.00	0.3594	0.0019 u (ppm)
Si (251.611 nm)	0.0197	ppm	0.0018	9.04	50.0100	0.0197 (ppm)
Sn (189.925 nm)	0.0049 u	ppm	0.0091	> 100.00	0.9633	0.0049 u (ppm)
Sr (421.552 nm)	0.0001 u	ppm	0.0001	> 100.00	3.8700	0.0001 u (ppm)
Ti (336.122 nm)	0.0010	ppm	0.0002	16.64	-42.1000	0.0010 (ppm)
Tl (190.794 nm)	0.0032	ppm	0.0041	> 100.00	7.4020	0.0032 (ppm)
V (292.401 nm)	0.0000 u	ppm	0.0003	> 100.00	86.1600	0.0000 u (ppm)
W (207.912 nm)	0.0007	ppm	0.0005	76.98	-3.3680	0.0007 (ppm)
Zn (202.548 nm)	0.0010	ppm	0.0001	6.19	26.0400	0.0010 (ppm)
Zr (343.823 nm)	0.0005	ppm	0.0000	7.76	138.9000	0.0005 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
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Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9724	336600.0000	0.0025	0.26
Y_R 371.029	0.9787	47550.0000	0.0045	0.46

Sample Name: LCS 440-584717/2-A@5

Date: 12/10/2019 12:34:14 PM Rack:Tube: 1:45

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1827	ppm	0.0005	0.27	6635.0000	0.1827 (ppm)
Al (396.152 nm)	0.3646	ppm	0.0021	0.59	9041.0000	0.3646 (ppm)
As (188.980 nm)	0.3629	ppm	0.0022	0.61	192.3000	0.3629 (ppm)
B (249.678 nm)	0.3578	ppm	0.0013	0.35	3445.0000	0.3578 (ppm)
Ba (233.527 nm)	0.3692	ppm	0.0019	0.51	27920.0000	0.3692 (ppm)
Be (234.861 nm)	0.3580	ppm	0.0023	0.65	53200.0000	0.3580 (ppm)
Ca (422.673 nm)	1.8510	ppm	0.0099	0.53	7073.0000	1.8510 (ppm)
Cd (214.439 nm)	0.3670	ppm	0.0010	0.26	6857.0000	0.3670 (ppm)
Co (228.615 nm)	0.3706	ppm	0.0029	0.77	4165.0000	0.3706 (ppm)
Cr (205.560 nm)	0.3743	ppm	0.0015	0.41	1446.0000	0.3743 (ppm)
Cu (324.754 nm)	0.3754	ppm	0.0011	0.29	13330.0000	0.3754 (ppm)
Fe (238.204 nm)	0.4221	ppm	0.0004	0.09	995.3000	0.4221 (ppm)
K (766.491 nm)	3.8650	ppm	0.0547	1.41	3684.0000	3.8650 (ppm)
Li (670.783 nm)	0.3663	ppm	0.0011	0.30	20220.0000	0.3663 (ppm)
Mg (279.078 nm)	1.8470	ppm	0.0080	0.43	4325.0000	1.8470 (ppm)
Mn (259.372 nm)	0.3737	ppm	0.0010	0.27	31610.0000	0.3737 (ppm)
Mo (204.598 nm)	0.3926	ppm	0.0046	1.16	1316.0000	0.3926 (ppm)
Na (589.592 nm)	3.6410	ppm	0.0215	0.59	20830.0000	3.6410 (ppm)
Ni (231.604 nm)	0.3762	ppm	0.0047	1.24	1449.0000	0.3762 (ppm)
P (213.618 nm)	0.3711	ppm	0.0020	0.53	247.2000	0.3711 (ppm)
Pb (220.353 nm)	0.3671	ppm	0.0000	0.01	629.8000	0.3671 (ppm)
Sb (206.834 nm)	0.3887	ppm	0.0049	1.26	300.7000	0.3887 (ppm)
Se (196.026 nm)	0.3388	ppm	0.0135	3.99	191.0000	0.3388 (ppm)
Si (251.611 nm)	0.4684	ppm	0.0065	1.38	1001.0000	0.4684 (ppm)
Sn (189.925 nm)	0.3760	ppm	0.0003	0.09	184.6000	0.3760 (ppm)
Sr (421.552 nm)	0.3651	ppm	0.0007	0.20	120800.0000	0.3651 (ppm)
Ti (336.122 nm)	0.3712	ppm	0.0022	0.59	35030.0000	0.3712 (ppm)
Tl (190.794 nm)	0.3555	ppm	0.0045	1.28	317.1000	0.3555 (ppm)
V (292.401 nm)	0.3686	ppm	0.0016	0.44	9841.0000	0.3686 (ppm)
W (207.912 nm)	0.3672	ppm	0.0025	0.68	525.9000	0.3672 (ppm)
Zn (202.548 nm)	0.3617	ppm	0.0019	0.53	4709.0000	0.3617 (ppm)
Zr (343.823 nm)	0.3018	ppm	0.0041	1.34	22960.0000	0.3018 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9729	336800.0000	0.0041	0.42
Y_R 371.029	0.9787	47550.0000	0.0049	0.50

Sample Name: 440-255674-C-12-B SD@25

Date: 12/10/2019 12:36:02 PM Rack:Tube: 1:46

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0001	28.67	-87.8300	-0.0005 u (ppm)
Al (396.152 nm)	8.3850	ppm	0.0207	0.25	207500.0000	8.3850 (ppm)
As (188.980 nm)	0.0100	ppm	0.0036	36.13	5.9660	0.0100 (ppm)
B (249.678 nm)	0.0026	ppm	0.0026	> 100.00	-10.7200	0.0026 (ppm)
Ba (233.527 nm)	0.0483	ppm	0.0001	0.13	3687.0000	0.0483 (ppm)
Be (234.861 nm)	0.0006	ppm	0.0000	5.71	382.3000	0.0006 (ppm)
Ca (422.673 nm)	5.3180	ppm	0.0105	0.20	20090.0000	5.3180 (ppm)
Cd (214.439 nm)	0.0002 u	ppm	0.0003	> 100.00	3.6210	0.0002 u (ppm)
Co (228.615 nm)	0.0034	ppm	0.0005	15.35	37.4000	0.0034 (ppm)
Cr (205.560 nm)	0.0085	ppm	0.0016	19.29	35.2800	0.0085 (ppm)
Cu (324.754 nm)	1.2610	ppm	0.0045	0.35	44660.0000	1.2610 (ppm)
Fe (238.204 nm)	20.0000	ppm	0.0327	0.16	49500.0000	20.0000 (ppm)
K (766.491 nm)	1.8450	ppm	0.1539	8.34	1723.0000	1.8450 (ppm)
Li (670.783 nm)	0.0037	ppm	0.0018	48.12	133.0000	0.0037 (ppm)
Mg (279.078 nm)	7.5700	ppm	0.0080	0.11	17690.0000	7.5700 (ppm)
Mn (259.372 nm)	0.0547	ppm	0.0002	0.36	6784.0000	0.0547 (ppm)
Mo (204.598 nm)	0.0056	ppm	0.0004	6.48	15.9600	0.0056 (ppm)
Na (589.592 nm)	0.0151	ppm	0.0031	20.80	1165.0000	0.0151 (ppm)
Ni (231.604 nm)	0.0100	ppm	0.0017	17.32	22.2500	0.0100 (ppm)
P (213.618 nm)	0.9685	ppm	0.0241	2.49	652.8000	0.9685 (ppm)
Pb (220.353 nm)	-0.0043 u	ppm	0.0000	0.37	-7.5550	-0.0043 u (ppm)
Sb (206.834 nm)	0.0055	ppm	0.0014	25.07	0.6338	0.0055 (ppm)
Se (196.026 nm)	0.0044 u	ppm	0.0115	> 100.00	-0.2597	0.0044 u (ppm)
Si (251.611 nm)	0.2351	ppm	0.0031	1.31	484.1000	0.2351 (ppm)
Sn (189.925 nm)	0.0006 u	ppm	0.0034	> 100.00	-1.1580	0.0006 u (ppm)
Sr (421.552 nm)	0.0631	ppm	0.0000	0.02	20910.0000	0.0631 (ppm)
Ti (336.122 nm)	0.4802	ppm	0.0031	0.65	45350.0000	0.4802 (ppm)
Tl (190.794 nm)	0.0040	ppm	0.0015	38.18	3.8850	0.0040 (ppm)
V (292.401 nm)	0.0278	ppm	0.0002	0.90	842.4000	0.0278 (ppm)
W (207.912 nm)	0.0037	ppm	0.0005	13.75	0.8761	0.0037 (ppm)
Zn (202.548 nm)	0.0132	ppm	0.0004	3.06	303.6000	0.0132 (ppm)
Zr (343.823 nm)	0.0084	ppm	0.0000	0.57	304.7000	0.0084 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9685	335200.0000	0.0062	0.64
Y_R 371.029	0.9742	47330.0000	0.0024	0.25

Sample Name: 440-255674-C-12-B@5

Date: 12/10/2019 12:37:52 PM Rack:Tube: 1:47

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0018 u	ppm	0.0000	2.65	-145.9000	-0.0018 u (ppm)
Al (396.152 nm)	44.3700	ppm	0.0667	0.15	1099000.0000	44.3700 (ppm)
As (188.980 nm)	0.0249	ppm	0.0023	9.09	10.0100	0.0249 (ppm)
B (249.678 nm)	0.0085	ppm	0.0003	3.54	-38.3300	0.0085 (ppm)
Ba (233.527 nm)	0.2404	ppm	0.0004	0.18	18210.0000	0.2404 (ppm)
Be (234.861 nm)	0.0010	ppm	0.0002	16.76	1502.0000	0.0010 (ppm)
Ca (422.673 nm)	26.8600	ppm	0.0118	0.04	101000.0000	26.8600 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0003	> 100.00	12.6600	0.0001 u (ppm)
Co (228.615 nm)	0.0167	ppm	0.0002	1.26	235.7000	0.0167 (ppm)
Cr (205.560 nm)	0.0419	ppm	0.0010	2.27	166.7000	0.0419 (ppm)
Cu (324.754 nm)	6.4270	ppm	0.0020	0.03	227500.0000	6.4270 (ppm)
Fe (238.204 nm)	100.2000	ppm	0.1663	0.17	248300.0000	100.2000 (ppm)
K (766.491 nm)	8.7460	ppm	0.0575	0.66	8466.0000	8.7460 (ppm)
Li (670.783 nm)	0.0267	ppm	0.0026	9.88	893.5000	0.0267 (ppm)
Mg (279.078 nm)	37.8000	ppm	0.0714	0.19	88280.0000	37.8000 (ppm)
Mn (259.372 nm)	0.2696	ppm	0.0006	0.24	33440.0000	0.2696 (ppm)
Mo (204.598 nm)	0.0128	ppm	0.0007	5.49	44.3900	0.0128 (ppm)
Na (589.592 nm)	0.2759	ppm	0.0207	7.49	3268.0000	0.2759 (ppm)
Ni (231.604 nm)	0.0430	ppm	0.0016	3.63	146.4000	0.0430 (ppm)
P (213.618 nm)	4.8460	ppm	0.0005	0.01	3262.0000	4.8460 (ppm)
Pb (220.353 nm)	-0.0039 u	ppm	0.0016	42.31	38.5300	-0.0039 u (ppm)
Sb (206.834 nm)	0.0293	ppm	0.0057	19.50	17.8500	0.0293 (ppm)
Se (196.026 nm)	0.0222	ppm	0.0035	15.93	1.5990	0.0222 (ppm)
Si (251.611 nm)	1.1610	ppm	0.0077	0.66	2348.0000	1.1610 (ppm)
Sn (189.925 nm)	0.0013	ppm	0.0003	24.60	-0.7802	0.0013 (ppm)
Sr (421.552 nm)	0.3177	ppm	0.0008	0.25	105400.0000	0.3177 (ppm)
Ti (336.122 nm)	2.4480	ppm	0.0062	0.25	231800.0000	2.4480 (ppm)
Tl (190.794 nm)	0.0151	ppm	0.0003	2.20	-3.5490	0.0151 (ppm)
V (292.401 nm)	0.1376	ppm	0.0003	0.21	3837.0000	0.1376 (ppm)
W (207.912 nm)	0.0007 u	ppm	0.0019	> 100.00	-3.9970	0.0007 u (ppm)
Zn (202.548 nm)	0.0562	ppm	0.0000	0.04	1353.0000	0.0562 (ppm)
Zr (343.823 nm)	0.0467	ppm	0.0002	0.51	1463.0000	0.0467 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9616	332800.0000	0.0015	0.16
Y_R 371.029	0.9726	47250.0000	0.0002	0.02

Sample Name: 440-255674-B-12-C MS@5

Date: 12/10/2019 12:39:42 PM Rack:Tube: 1:48

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1704	ppm	0.0011	0.64	6172.0000	0.1704 (ppm)
Al (396.152 nm)	53.8600	ppm	0.0698	0.13	1335000.0000	53.8600 (ppm)
As (188.980 nm)	0.3869	ppm	0.0013	0.34	201.1000	0.3869 (ppm)
B (249.678 nm)	0.3318	ppm	0.0004	0.11	3112.0000	0.3318 (ppm)
Ba (233.527 nm)	0.5657	ppm	0.0026	0.47	42770.0000	0.5657 (ppm)
Be (234.861 nm)	0.3428	ppm	0.0002	0.05	52080.0000	0.3428 (ppm)
Ca (422.673 nm)	27.5000	ppm	0.0266	0.10	103400.0000	27.5000 (ppm)
Cd (214.439 nm)	0.3370	ppm	0.0001	0.04	6307.0000	0.3370 (ppm)
Co (228.615 nm)	0.3472	ppm	0.0033	0.96	3972.0000	0.3472 (ppm)
Cr (205.560 nm)	0.3902	ppm	0.0017	0.43	1511.0000	0.3902 (ppm)
Cu (324.754 nm)	7.0900	ppm	0.0141	0.20	251000.0000	7.0900 (ppm)
Fe (238.204 nm)	86.2100	ppm	0.1645	0.19	213600.0000	86.2100 (ppm)
K (766.491 nm)	10.0700	ppm	0.0117	0.12	9753.0000	10.0700 (ppm)
Li (670.783 nm)	0.3653	ppm	0.0011	0.30	19640.0000	0.3653 (ppm)
Mg (279.078 nm)	43.1600	ppm	0.1857	0.43	100800.0000	43.1600 (ppm)
Mn (259.372 nm)	0.5781	ppm	0.0002	0.04	58000.0000	0.5781 (ppm)
Mo (204.598 nm)	0.3758	ppm	0.0019	0.51	1266.0000	0.3758 (ppm)
Na (589.592 nm)	3.7250	ppm	0.0023	0.06	22020.0000	3.7250 (ppm)
Ni (231.604 nm)	0.3744	ppm	0.0013	0.34	1438.0000	0.3744 (ppm)
P (213.618 nm)	4.5360	ppm	0.1082	2.39	3020.0000	4.5360 (ppm)
Pb (220.353 nm)	0.3400	ppm	0.0039	1.16	629.6000	0.3400 (ppm)
Sb (206.834 nm)	0.2883	ppm	0.0023	0.79	220.3000	0.2883 (ppm)
Se (196.026 nm)	0.3376	ppm	0.0016	0.47	180.8000	0.3376 (ppm)
Si (251.611 nm)	1.5420	ppm	0.0001	0.01	3156.0000	1.5420 (ppm)
Sn (189.925 nm)	0.3564	ppm	0.0070	1.98	174.9000	0.3564 (ppm)
Sr (421.552 nm)	0.7542	ppm	0.0003	0.05	249900.0000	0.7542 (ppm)
Ti (336.122 nm)	3.2740	ppm	0.0024	0.07	310000.0000	3.2740 (ppm)
Tl (190.794 nm)	0.3397	ppm	0.0010	0.30	275.7000	0.3397 (ppm)
V (292.401 nm)	0.4954	ppm	0.0001	0.03	13320.0000	0.4954 (ppm)
W (207.912 nm)	0.2399	ppm	0.0002	0.07	342.4000	0.2399 (ppm)
Zn (202.548 nm)	0.3713	ppm	0.0000	0.01	5484.0000	0.3713 (ppm)
Zr (343.823 nm)	0.3188	ppm	0.0010	0.31	22390.0000	0.3188 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9587	331800.0000	0.0025	0.26
Y_R 371.029	0.9786	47540.0000	0.0006	0.06

Sample Name: 440-255674-B-12-D MSD@5

Date: 12/10/2019 12:41:32 PM Rack:Tube: 1:49

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1780	ppm	0.0002	0.11	6455.0000	0.1780 (ppm)
Al (396.152 nm)	57.4700	ppm	0.1572	0.27	1424000.0000	57.4700 (ppm)
As (188.980 nm)	0.4013	ppm	0.0097	2.41	208.6000	0.4013 (ppm)
B (249.678 nm)	0.3448	ppm	0.0008	0.22	3235.0000	0.3448 (ppm)
Ba (233.527 nm)	0.6010	ppm	0.0024	0.40	45440.0000	0.6010 (ppm)
Be (234.861 nm)	0.3569	ppm	0.0004	0.12	54200.0000	0.3569 (ppm)
Ca (422.673 nm)	29.5500	ppm	0.1001	0.34	111100.0000	29.5500 (ppm)
Cd (214.439 nm)	0.3513	ppm	0.0014	0.40	6576.0000	0.3513 (ppm)
Co (228.615 nm)	0.3679	ppm	0.0049	1.34	4209.0000	0.3679 (ppm)
Cr (205.560 nm)	0.4081	ppm	0.0005	0.12	1580.0000	0.4081 (ppm)
Cu (324.754 nm)	7.1300	ppm	0.0192	0.27	252400.0000	7.1300 (ppm)
Fe (238.204 nm)	88.4800	ppm	0.3949	0.45	219200.0000	88.4800 (ppm)
K (766.491 nm)	10.6200	ppm	0.0512	0.48	10300.0000	10.6200 (ppm)
Li (670.783 nm)	0.3796	ppm	0.0006	0.15	20440.0000	0.3796 (ppm)
Mg (279.078 nm)	45.1700	ppm	0.1718	0.38	105500.0000	45.1700 (ppm)
Mn (259.372 nm)	0.6197	ppm	0.0008	0.14	61740.0000	0.6197 (ppm)
Mo (204.598 nm)	0.4015	ppm	0.0045	1.12	1352.0000	0.4015 (ppm)
Na (589.592 nm)	3.8940	ppm	0.0446	1.15	22960.0000	3.8940 (ppm)
Ni (231.604 nm)	0.3931	ppm	0.0040	1.03	1510.0000	0.3931 (ppm)
P (213.618 nm)	4.8140	ppm	0.0622	1.29	3215.0000	4.8140 (ppm)
Pb (220.353 nm)	0.3571	ppm	0.0007	0.20	660.3000	0.3571 (ppm)
Sb (206.834 nm)	0.3062	ppm	0.0012	0.38	234.2000	0.3062 (ppm)
Se (196.026 nm)	0.3498	ppm	0.0016	0.46	187.4000	0.3498 (ppm)
Si (251.611 nm)	1.6920	ppm	0.0142	0.84	3460.0000	1.6920 (ppm)
Sn (189.925 nm)	0.3624	ppm	0.0014	0.39	177.8000	0.3624 (ppm)
Sr (421.552 nm)	0.7961	ppm	0.0036	0.45	263800.0000	0.7961 (ppm)
Ti (336.122 nm)	3.5030	ppm	0.0102	0.29	331700.0000	3.5030 (ppm)
Tl (190.794 nm)	0.3635	ppm	0.0058	1.59	294.7000	0.3635 (ppm)
V (292.401 nm)	0.5180	ppm	0.0007	0.14	13930.0000	0.5180 (ppm)
W (207.912 nm)	0.2578	ppm	0.0020	0.78	368.1000	0.2578 (ppm)
Zn (202.548 nm)	0.3863	ppm	0.0012	0.31	5681.0000	0.3863 (ppm)
Zr (343.823 nm)	0.3681	ppm	0.0017	0.46	26070.0000	0.3681 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9563	331000.0000	0.0042	0.44
Y_R 371.029	0.9771	47470.0000	0.0009	0.09

Sample Name: 440-255674-C-12-B PDS@5

Date: 12/10/2019 12:43:20 PM Rack:Tube: 1:50

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1854	ppm	0.0010	0.54	6735.0000	0.1854 (ppm)
Al (396.152 nm)	45.8900	ppm	0.1407	0.31	1137000.0000	45.8900 (ppm)
As (188.980 nm)	0.4199	ppm	0.0038	0.89	217.6000	0.4199 (ppm)
B (249.678 nm)	0.3970	ppm	0.0019	0.47	3719.0000	0.3970 (ppm)
Ba (233.527 nm)	0.6287	ppm	0.0031	0.49	47530.0000	0.6287 (ppm)
Be (234.861 nm)	0.3865	ppm	0.0023	0.59	58780.0000	0.3865 (ppm)
Ca (422.673 nm)	29.3000	ppm	0.1525	0.52	110200.0000	29.3000 (ppm)
Cd (214.439 nm)	0.3825	ppm	0.0022	0.58	7160.0000	0.3825 (ppm)
Co (228.615 nm)	0.3958	ppm	0.0046	1.15	4512.0000	0.3958 (ppm)
Cr (205.560 nm)	0.4374	ppm	0.0007	0.15	1693.0000	0.4374 (ppm)
Cu (324.754 nm)	6.9240	ppm	0.0061	0.09	245100.0000	6.9240 (ppm)
Fe (238.204 nm)	101.9000	ppm	0.4874	0.48	252400.0000	101.9000 (ppm)
K (766.491 nm)	12.8400	ppm	0.0896	0.70	12450.0000	12.8400 (ppm)
Li (670.783 nm)	0.4189	ppm	0.0005	0.11	22480.0000	0.4189 (ppm)
Mg (279.078 nm)	40.2800	ppm	0.3376	0.84	94080.0000	40.2800 (ppm)
Mn (259.372 nm)	0.6665	ppm	0.0021	0.31	67080.0000	0.6665 (ppm)
Mo (204.598 nm)	0.4326	ppm	0.0033	0.77	1456.0000	0.4326 (ppm)
Na (589.592 nm)	4.2110	ppm	0.0122	0.29	24800.0000	4.2110 (ppm)
Ni (231.604 nm)	0.4205	ppm	0.0014	0.34	1616.0000	0.4205 (ppm)
P (213.618 nm)	5.2310	ppm	0.0141	0.27	3515.0000	5.2310 (ppm)
Pb (220.353 nm)	0.3818	ppm	0.0043	1.13	712.6000	0.3818 (ppm)
Sb (206.834 nm)	0.4241	ppm	0.0008	0.19	326.4000	0.4241 (ppm)
Se (196.026 nm)	0.3790	ppm	0.0029	0.77	203.3000	0.3790 (ppm)
Si (251.611 nm)	3.1060	ppm	0.0078	0.25	6288.0000	3.1060 (ppm)
Sn (189.925 nm)	0.3964	ppm	0.0016	0.39	194.7000	0.3964 (ppm)
Sr (421.552 nm)	0.7176	ppm	0.0027	0.37	237800.0000	0.7176 (ppm)
Ti (336.122 nm)	2.8990	ppm	0.0091	0.31	274500.0000	2.8990 (ppm)
Tl (190.794 nm)	0.4067	ppm	0.0012	0.30	340.4000	0.4067 (ppm)
V (292.401 nm)	0.5375	ppm	0.0027	0.50	14420.0000	0.5375 (ppm)
W (207.912 nm)	0.3887	ppm	0.0019	0.49	556.0000	0.3887 (ppm)
Zn (202.548 nm)	0.4290	ppm	0.0017	0.39	6204.0000	0.4290 (ppm)
Zr (343.823 nm)	0.4845	ppm	0.0007	0.14	34610.0000	0.4845 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9578	331500.0000	0.0022	0.23
Y_R 371.029	0.9725	47250.0000	0.0069	0.71

Sample Name: 440-255674-B-1-B@5

Date: 12/10/2019 12:45:10 PM Rack:Tube: 1:51

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0014 u	ppm	0.0001	4.08	-130.4000	-0.0014 u (ppm)
Al (396.152 nm)	62.6900	ppm	0.2968	0.47	1553000.0000	62.6900 (ppm)
As (188.980 nm)	0.0406	ppm	0.0008	2.03	18.6900	0.0406 (ppm)
B (249.678 nm)	0.0154	ppm	0.0006	3.98	41.1400	0.0154 (ppm)
Ba (233.527 nm)	0.3158	ppm	0.0015	0.47	23910.0000	0.3158 (ppm)
Be (234.861 nm)	0.0020	ppm	0.0000	1.32	1508.0000	0.0020 (ppm)
Ca (422.673 nm)	56.2200	ppm	0.0391	0.07	211300.0000	56.2200 (ppm)
Cd (214.439 nm)	0.0006	ppm	0.0001	12.23	20.5100	0.0006 (ppm)
Co (228.615 nm)	0.0298	ppm	0.0002	0.62	378.5000	0.0298 (ppm)
Cr (205.560 nm)	0.0718	ppm	0.0001	0.17	282.0000	0.0718 (ppm)
Cu (324.754 nm)	5.0900	ppm	0.0099	0.19	180200.0000	5.0900 (ppm)
Fe (238.204 nm)	89.6200	ppm	0.1697	0.19	222000.0000	89.6200 (ppm)
K (766.491 nm)	3.5260	ppm	0.0454	1.29	3395.0000	3.5260 (ppm)
Li (670.783 nm)	0.0577	ppm	0.0008	1.35	2868.0000	0.0577 (ppm)
Mg (279.078 nm)	51.5700	ppm	0.1726	0.33	120500.0000	51.5700 (ppm)
Mn (259.372 nm)	0.6139	ppm	0.0028	0.46	61240.0000	0.6139 (ppm)
Mo (204.598 nm)	0.0243	ppm	0.0014	5.67	84.4200	0.0243 (ppm)
Na (589.592 nm)	2.2840	ppm	0.0064	0.28	14160.0000	2.2840 (ppm)
Ni (231.604 nm)	0.0803	ppm	0.0002	0.29	292.0000	0.0803 (ppm)
P (213.618 nm)	2.6320	ppm	0.0879	3.34	1730.0000	2.6320 (ppm)
Pb (220.353 nm)	0.0168	ppm	0.0026	15.28	67.7400	0.0168 (ppm)
Sb (206.834 nm)	0.0245	ppm	0.0007	2.99	14.5000	0.0245 (ppm)
Se (196.026 nm)	0.0264	ppm	0.0032	12.13	4.9880	0.0264 (ppm)
Si (251.611 nm)	1.1060	ppm	0.0015	0.13	2240.0000	1.1060 (ppm)
Sn (189.925 nm)	0.0035	ppm	0.0014	38.92	0.3516	0.0035 (ppm)
Sr (421.552 nm)	0.6136	ppm	0.0006	0.10	203600.0000	0.6136 (ppm)
Ti (336.122 nm)	2.2260	ppm	0.0094	0.42	210700.0000	2.2260 (ppm)
Tl (190.794 nm)	0.0116	ppm	0.0021	18.19	-4.8320	0.0116 (ppm)
V (292.401 nm)	0.1484	ppm	0.0003	0.21	4149.0000	0.1484 (ppm)
W (207.912 nm)	0.0065	ppm	0.0001	2.07	3.9180	0.0065 (ppm)
Zn (202.548 nm)	0.0643	ppm	0.0008	1.27	1324.0000	0.0643 (ppm)
Zr (343.823 nm)	0.0411	ppm	0.0001	0.29	1273.0000	0.0411 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9520	329500.0000	0.0042	0.45
Y_R 371.029	0.9692	47090.0000	0.0021	0.21

Sample Name: 440-255674-B-2-B@5

Date: 12/10/2019 12:47:00 PM Rack:Tube: 1:52

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0019 u	ppm	0.0004	21.27	-147.2000	-0.0019 u (ppm)
Al (396.152 nm)	62.9700	ppm	0.1914	0.30	1560000.0000	62.9700 (ppm)
As (188.980 nm)	0.0272	ppm	0.0042	15.41	11.5900	0.0272 (ppm)
B (249.678 nm)	0.0133	ppm	0.0008	6.07	20.4500	0.0133 (ppm)
Ba (233.527 nm)	0.2633	ppm	0.0003	0.12	19940.0000	0.2633 (ppm)
Be (234.861 nm)	0.0015	ppm	0.0001	6.94	1427.0000	0.0015 (ppm)
Ca (422.673 nm)	47.4400	ppm	0.0335	0.07	178300.0000	47.4400 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0001	> 100.00	10.4600	0.0001 u (ppm)
Co (228.615 nm)	0.0303	ppm	0.0001	0.45	385.2000	0.0303 (ppm)
Cr (205.560 nm)	0.0655	ppm	0.0005	0.82	257.9000	0.0655 (ppm)
Cu (324.754 nm)	5.3780	ppm	0.0199	0.37	190400.0000	5.3780 (ppm)
Fe (238.204 nm)	89.9000	ppm	0.0352	0.04	222700.0000	89.9000 (ppm)
K (766.491 nm)	2.9700	ppm	0.0059	0.20	2854.0000	2.9700 (ppm)
Li (670.783 nm)	0.0442	ppm	0.0014	3.28	2095.0000	0.0442 (ppm)
Mg (279.078 nm)	53.9500	ppm	0.0026	0.00	126000.0000	53.9500 (ppm)
Mn (259.372 nm)	0.6537	ppm	0.0026	0.40	64620.0000	0.6537 (ppm)
Mo (204.598 nm)	0.0173	ppm	0.0004	2.59	60.8000	0.0173 (ppm)
Na (589.592 nm)	2.0520	ppm	0.0191	0.93	12890.0000	2.0520 (ppm)
Ni (231.604 nm)	0.0833	ppm	0.0018	2.15	303.7000	0.0833 (ppm)
P (213.618 nm)	2.6450	ppm	0.0332	1.26	1732.0000	2.6450 (ppm)
Pb (220.353 nm)	0.0179	ppm	0.0010	5.51	69.8300	0.0179 (ppm)
Sb (206.834 nm)	0.0166	ppm	0.0048	29.25	8.2780	0.0166 (ppm)
Se (196.026 nm)	0.0189	ppm	0.0001	0.67	0.7123	0.0189 (ppm)
Si (251.611 nm)	1.0200	ppm	0.0078	0.76	2069.0000	1.0200 (ppm)
Sn (189.925 nm)	-0.0006 u	ppm	0.0102	> 100.00	-1.6970	-0.0006 u (ppm)
Sr (421.552 nm)	0.5390	ppm	0.0003	0.05	178900.0000	0.5390 (ppm)
Ti (336.122 nm)	2.2800	ppm	0.0091	0.40	215800.0000	2.2800 (ppm)
Tl (190.794 nm)	0.0114	ppm	0.0009	7.82	-5.5750	0.0114 (ppm)
V (292.401 nm)	0.1577	ppm	0.0001	0.04	4392.0000	0.1577 (ppm)
W (207.912 nm)	0.0036	ppm	0.0001	2.10	-0.0765	0.0036 (ppm)
Zn (202.548 nm)	0.0671	ppm	0.0006	0.91	1392.0000	0.0671 (ppm)
Zr (343.823 nm)	0.0386	ppm	0.0003	0.71	1078.0000	0.0386 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9531	329900.0000	0.0030	0.32
Y_R 371.029	0.9643	46850.0000	0.0005	0.05

Sample Name: 440-255674-B-3-B@5

Date: 12/10/2019 12:48:50 PM Rack:Tube: 1:53

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0015 u	ppm	0.0004	23.84	-136.1000	-0.0015 u (ppm)
Al (396.152 nm)	59.2100	ppm	0.2596	0.44	1467000.0000	59.2100 (ppm)
As (188.980 nm)	0.0417	ppm	0.0092	21.97	20.0400	0.0417 (ppm)
B (249.678 nm)	0.0074	ppm	0.0002	2.15	-26.4500	0.0074 (ppm)
Ba (233.527 nm)	0.1809	ppm	0.0009	0.48	13720.0000	0.1809 (ppm)
Be (234.861 nm)	0.0009	ppm	0.0002	16.07	1220.0000	0.0009 (ppm)
Ca (422.673 nm)	22.0000	ppm	0.0139	0.06	82740.0000	22.0000 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	6.3080	-0.0001 u (ppm)
Co (228.615 nm)	0.0313	ppm	0.0003	0.88	397.9000	0.0313 (ppm)
Cr (205.560 nm)	0.0383	ppm	0.0012	3.11	152.5000	0.0383 (ppm)
Cu (324.754 nm)	7.1890	ppm	0.0441	0.61	254500.0000	7.1890 (ppm)
Fe (238.204 nm)	79.8600	ppm	0.2026	0.25	197900.0000	79.8600 (ppm)
K (766.491 nm)	1.9210	ppm	0.0196	1.02	1828.0000	1.9210 (ppm)
Li (670.783 nm)	0.0272	ppm	0.0015	5.38	1068.0000	0.0272 (ppm)
Mg (279.078 nm)	51.6300	ppm	0.0919	0.18	120600.0000	51.6300 (ppm)
Mn (259.372 nm)	0.2745	ppm	0.0008	0.29	31740.0000	0.2745 (ppm)
Mo (204.598 nm)	0.0206	ppm	0.0003	1.55	71.3600	0.0206 (ppm)
Na (589.592 nm)	0.2872	ppm	0.0179	6.22	3169.0000	0.2872 (ppm)
Ni (231.604 nm)	0.0520	ppm	0.0003	0.55	182.4000	0.0520 (ppm)
P (213.618 nm)	2.7570	ppm	0.0611	2.21	1763.0000	2.7570 (ppm)
Pb (220.353 nm)	0.0177	ppm	0.0031	17.49	63.4300	0.0177 (ppm)
Sb (206.834 nm)	0.0160	ppm	0.0038	24.01	7.9880	0.0160 (ppm)
Se (196.026 nm)	0.0303	ppm	0.0166	54.78	7.9460	0.0303 (ppm)
Si (251.611 nm)	1.0500	ppm	0.0009	0.09	2130.0000	1.0500 (ppm)
Sn (189.925 nm)	-0.0009 u	ppm	0.0051	> 100.00	-1.8470	-0.0009 u (ppm)
Sr (421.552 nm)	0.5226	ppm	0.0002	0.04	173200.0000	0.5226 (ppm)
Ti (336.122 nm)	2.4360	ppm	0.0129	0.53	230600.0000	2.4360 (ppm)
Tl (190.794 nm)	0.0139	ppm	0.0004	3.22	-5.6290	0.0139 (ppm)
V (292.401 nm)	0.1459	ppm	0.0008	0.57	4058.0000	0.1459 (ppm)
W (207.912 nm)	0.0005 u	ppm	0.0009	> 100.00	-4.4910	0.0005 u (ppm)
Zn (202.548 nm)	0.0357	ppm	0.0009	2.51	1179.0000	0.0357 (ppm)
Zr (343.823 nm)	0.0340	ppm	0.0004	1.14	941.8000	0.0340 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029

Label	Internal Standard
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9575	331400.0000	0.0049	0.52
Y_R 371.029	0.9717	47210.0000	0.0014	0.14

Sample Name: CCV 5993196

Date: 12/10/2019 12:53:36 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5013	ppm	0.0019	0.38	18340.0000	0.5013 (ppm)
Al (396.152 nm)	1.0110	ppm	0.0003	0.03	25630.0000	1.0110 (ppm)
As (188.980 nm)	1.0100	ppm	0.0058	0.58	532.9000	1.0100 (ppm)
B (249.678 nm)	0.9978	ppm	0.0035	0.35	9634.0000	0.9978 (ppm)
Ba (233.527 nm)	0.9981	ppm	0.0038	0.38	75410.0000	0.9981 (ppm)
Be (234.861 nm)	0.9993	ppm	0.0035	0.35	148500.0000	0.9993 (ppm)
Ca (422.673 nm)	5.0080	ppm	0.0219	0.44	18930.0000	5.0080 (ppm)
Cd (214.439 nm)	1.0130	ppm	0.0021	0.21	18920.0000	1.0130 (ppm)
Co (228.615 nm)	1.0150	ppm	0.0038	0.37	11430.0000	1.0150 (ppm)
Cr (205.560 nm)	1.0110	ppm	0.0045	0.44	3903.0000	1.0110 (ppm)
Cu (324.754 nm)	1.0150	ppm	0.0011	0.11	35960.0000	1.0150 (ppm)
Fe (238.204 nm)	1.0370	ppm	0.0035	0.34	2519.0000	1.0370 (ppm)
K (766.491 nm)	10.0600	ppm	0.1582	1.57	9720.0000	10.0600 (ppm)
Li (670.783 nm)	0.9936	ppm	0.0006	0.06	54740.0000	0.9936 (ppm)
Mg (279.078 nm)	5.0380	ppm	0.0233	0.46	11780.0000	5.0380 (ppm)
Mn (259.372 nm)	1.0070	ppm	0.0025	0.25	85040.0000	1.0070 (ppm)
Mo (204.598 nm)	1.0190	ppm	0.0008	0.07	3424.0000	1.0190 (ppm)
Na (589.592 nm)	9.8970	ppm	0.0116	0.12	55050.0000	9.8970 (ppm)
Ni (231.604 nm)	1.0110	ppm	0.0033	0.33	3922.0000	1.0110 (ppm)
P (213.618 nm)	0.9911	ppm	0.0080	0.81	659.7000	0.9911 (ppm)
Pb (220.353 nm)	1.0100	ppm	0.0024	0.23	1753.0000	1.0100 (ppm)
Sb (206.834 nm)	1.0110	ppm	0.0201	1.99	787.4000	1.0110 (ppm)
Se (196.026 nm)	0.9832	ppm	0.0026	0.26	555.3000	0.9832 (ppm)
Si (251.611 nm)	4.9770	ppm	0.0383	0.77	10090.0000	4.9770 (ppm)
Sn (189.925 nm)	1.0160	ppm	0.0014	0.14	501.4000	1.0160 (ppm)
Sr (421.552 nm)	0.9971	ppm	0.0015	0.15	330000.0000	0.9971 (ppm)
Ti (336.122 nm)	1.0190	ppm	0.0055	0.54	96440.0000	1.0190 (ppm)
Tl (190.794 nm)	1.0180	ppm	0.0075	0.74	901.0000	1.0180 (ppm)
V (292.401 nm)	1.0100	ppm	0.0035	0.35	26820.0000	1.0100 (ppm)
W (207.912 nm)	1.0100	ppm	0.0072	0.71	1454.0000	1.0100 (ppm)
Zn (202.548 nm)	1.0090	ppm	0.0026	0.26	13110.0000	1.0090 (ppm)
Zr (343.823 nm)	1.0010	ppm	0.0048	0.48	75940.0000	1.0010 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9637	333600.0000	0.0039	0.40
Y_R 371.029	0.9732	47280.0000	0.0028	0.29

Sample Name: CCB 5993195

Date: 12/10/2019 12:58:18 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0002	> 100.00	-65.7500	0.0001 u (ppm)
Al (396.152 nm)	0.0030	ppm	0.0003	10.55	-250.1000	0.0030 (ppm)
As (188.980 nm)	0.0000 u	ppm	0.0003	> 100.00	1.5710	0.0000 u (ppm)
B (249.678 nm)	0.0008 u	ppm	0.0012	> 100.00	-6.3470	0.0008 u (ppm)
Ba (233.527 nm)	0.0001 u	ppm	0.0001	> 100.00	45.7200	0.0001 u (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	43.84	59.6200	0.0003 (ppm)
Ca (422.673 nm)	-0.0078 u	ppm	0.0068	86.98	89.8400	-0.0078 u (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0004	> 100.00	-3.0240	0.0000 u (ppm)
Co (228.615 nm)	0.0013	ppm	0.0005	39.97	2.2470	0.0013 (ppm)
Cr (205.560 nm)	-0.0003 u	ppm	0.0006	> 100.00	0.5738	-0.0003 u (ppm)
Cu (324.754 nm)	0.0004	ppm	0.0000	4.16	56.8600	0.0004 (ppm)
Fe (238.204 nm)	0.0050	ppm	0.0016	32.28	-37.8400	0.0050 (ppm)
K (766.491 nm)	0.0792	ppm	0.0456	57.57	-1.1670	0.0792 (ppm)
Li (670.783 nm)	0.0025	ppm	0.0003	13.00	191.8000	0.0025 (ppm)
Mg (279.078 nm)	0.0073	ppm	0.0031	41.88	27.8700	0.0073 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0001	31.60	85.2100	0.0005 (ppm)
Mo (204.598 nm)	0.0022	ppm	0.0007	30.97	3.3710	0.0022 (ppm)
Na (589.592 nm)	-0.0439 u	ppm	0.0089	20.35	673.3000	-0.0439 u (ppm)
Ni (231.604 nm)	0.0021	ppm	0.0006	28.27	-7.5210	0.0021 (ppm)
P (213.618 nm)	-0.0013 u	ppm	0.0073	> 100.00	-0.6220	-0.0013 u (ppm)
Pb (220.353 nm)	-0.0016 u	ppm	0.0016	97.28	-14.1600	-0.0016 u (ppm)
Sb (206.834 nm)	0.0078	ppm	0.0040	50.64	2.8360	0.0078 (ppm)
Se (196.026 nm)	0.0064	ppm	0.0022	34.33	2.9240	0.0064 (ppm)
Si (251.611 nm)	0.0023	ppm	0.0016	69.42	15.5500	0.0023 (ppm)
Sn (189.925 nm)	0.0028 u	ppm	0.0054	> 100.00	-0.0778	0.0028 u (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	27.86	21.6500	0.0001 (ppm)
Ti (336.122 nm)	0.0009	ppm	0.0001	10.31	-45.9300	0.0009 (ppm)
Tl (190.794 nm)	0.0045	ppm	0.0004	9.47	8.6000	0.0045 (ppm)
V (292.401 nm)	-0.0005 u	ppm	0.0004	91.03	74.1500	-0.0005 u (ppm)
W (207.912 nm)	0.0014	ppm	0.0008	60.24	-2.2760	0.0014 (ppm)
Zn (202.548 nm)	0.0039	ppm	0.0002	5.60	63.0600	0.0039 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	86.62	100.1000	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9595	332100.0000	0.0079	0.83
Y_R 371.029	0.9623	46750.0000	0.0074	0.77

Sample Name: 440-255674-B-5-B@5

Date: 12/10/2019 1:00:06 PM Rack:Tube: 1:54

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0016 u	ppm	0.0001	6.24	-138.8000	-0.0016 u (ppm)
Al (396.152 nm)	43.1100	ppm	0.0502	0.12	1068000.0000	43.1100 (ppm)
As (188.980 nm)	0.0198	ppm	0.0045	22.67	7.2200	0.0198 (ppm)
B (249.678 nm)	0.0087	ppm	0.0012	13.43	-35.6800	0.0087 (ppm)
Ba (233.527 nm)	0.2385	ppm	0.0001	0.03	18070.0000	0.2385 (ppm)
Be (234.861 nm)	0.0016	ppm	0.0000	2.93	1582.0000	0.0016 (ppm)
Ca (422.673 nm)	31.1500	ppm	0.0186	0.06	117100.0000	31.1500 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0001	96.56	7.8930	-0.0002 u (ppm)
Co (228.615 nm)	0.0482	ppm	0.0005	0.96	596.6000	0.0482 (ppm)
Cr (205.560 nm)	0.0480	ppm	0.0005	1.09	190.3000	0.0480 (ppm)
Cu (324.754 nm)	5.9670	ppm	0.0250	0.42	211200.0000	5.9670 (ppm)
Fe (238.204 nm)	99.8900	ppm	0.1118	0.11	247500.0000	99.8900 (ppm)
K (766.491 nm)	8.8520	ppm	0.0760	0.86	8570.0000	8.8520 (ppm)
Li (670.783 nm)	0.0256	ppm	0.0001	0.36	868.0000	0.0256 (ppm)
Mg (279.078 nm)	39.7300	ppm	0.0805	0.20	92780.0000	39.7300 (ppm)
Mn (259.372 nm)	0.5928	ppm	0.0010	0.17	60520.0000	0.5928 (ppm)
Mo (204.598 nm)	0.0183	ppm	0.0017	9.56	62.7100	0.0183 (ppm)
Na (589.592 nm)	0.4267	ppm	0.0138	3.24	4090.0000	0.4267 (ppm)
Ni (231.604 nm)	0.0586	ppm	0.0005	0.78	207.1000	0.0586 (ppm)
P (213.618 nm)	4.7320	ppm	0.1465	3.10	3194.0000	4.7320 (ppm)
Pb (220.353 nm)	-0.0039 u	ppm	0.0027	69.79	38.2100	-0.0039 u (ppm)
Sb (206.834 nm)	0.0137	ppm	0.0030	22.06	5.5110	0.0137 (ppm)
Se (196.026 nm)	0.0122	ppm	0.0130	> 100.00	-3.9330	0.0122 (ppm)
Si (251.611 nm)	1.1850	ppm	0.0060	0.51	2399.0000	1.1850 (ppm)
Sn (189.925 nm)	0.0003 u	ppm	0.0009	> 100.00	-1.2720	0.0003 u (ppm)
Sr (421.552 nm)	0.2760	ppm	0.0003	0.10	91660.0000	0.2760 (ppm)
Ti (336.122 nm)	2.7840	ppm	0.0069	0.25	263600.0000	2.7840 (ppm)
Tl (190.794 nm)	0.0130	ppm	0.0013	9.86	-8.4170	0.0130 (ppm)
V (292.401 nm)	0.1421	ppm	0.0007	0.47	3969.0000	0.1421 (ppm)
W (207.912 nm)	0.0009 u	ppm	0.0022	> 100.00	-3.3470	0.0009 u (ppm)
Zn (202.548 nm)	0.0908	ppm	0.0004	0.48	1752.0000	0.0908 (ppm)
Zr (343.823 nm)	0.0415	ppm	0.0000	0.02	1079.0000	0.0415 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9577	331500.0000	0.0012	0.13
Y_R 371.029	0.9755	47390.0000	0.0018	0.18

Sample Name: 440-255674-B-6-B@5

Date: 12/10/2019 1:01:56 PM Rack:Tube: 1:55

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0008 u	ppm	0.0004	46.75	-112.2000	-0.0008 u (ppm)
Al (396.152 nm)	54.2600	ppm	0.0247	0.05	1344000.0000	54.2600 (ppm)
As (188.980 nm)	0.0456	ppm	0.0006	1.40	22.2900	0.0456 (ppm)
B (249.678 nm)	0.0102	ppm	0.0013	12.75	7.2070	0.0102 (ppm)
Ba (233.527 nm)	0.3473	ppm	0.0025	0.73	26280.0000	0.3473 (ppm)
Be (234.861 nm)	0.0014	ppm	0.0000	0.43	1201.0000	0.0014 (ppm)
Ca (422.673 nm)	28.4600	ppm	0.1247	0.44	107000.0000	28.4600 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0004	> 100.00	5.3260	-0.0001 u (ppm)
Co (228.615 nm)	0.0251	ppm	0.0003	1.36	346.4000	0.0251 (ppm)
Cr (205.560 nm)	0.0337	ppm	0.0005	1.51	134.5000	0.0337 (ppm)
Cu (324.754 nm)	3.2350	ppm	0.0162	0.50	114500.0000	3.2350 (ppm)
Fe (238.204 nm)	73.7700	ppm	0.3715	0.50	182800.0000	73.7700 (ppm)
K (766.491 nm)	9.1720	ppm	0.1238	1.35	8880.0000	9.1720 (ppm)
Li (670.783 nm)	0.0213	ppm	0.0006	2.76	1002.0000	0.0213 (ppm)
Mg (279.078 nm)	41.8100	ppm	0.3581	0.86	97660.0000	41.8100 (ppm)
Mn (259.372 nm)	0.2616	ppm	0.0006	0.23	29960.0000	0.2616 (ppm)
Mo (204.598 nm)	0.0190	ppm	0.0004	2.37	65.8100	0.0190 (ppm)
Na (589.592 nm)	0.6654	ppm	0.0254	3.82	5177.0000	0.6654 (ppm)
Ni (231.604 nm)	0.0431	ppm	0.0007	1.60	148.5000	0.0431 (ppm)
P (213.618 nm)	3.2070	ppm	0.0074	0.23	2187.0000	3.2070 (ppm)
Pb (220.353 nm)	0.0148	ppm	0.0020	13.28	53.7800	0.0148 (ppm)
Sb (206.834 nm)	0.0142	ppm	0.0018	12.90	6.6520	0.0142 (ppm)
Se (196.026 nm)	0.0360	ppm	0.0067	18.49	11.9400	0.0360 (ppm)
Si (251.611 nm)	1.0870	ppm	0.0016	0.15	2210.0000	1.0870 (ppm)
Sn (189.925 nm)	0.0025	ppm	0.0009	37.80	-0.2693	0.0025 (ppm)
Sr (421.552 nm)	0.7193	ppm	0.0032	0.44	238300.0000	0.7193 (ppm)
Ti (336.122 nm)	3.3970	ppm	0.0013	0.04	321700.0000	3.3970 (ppm)
Tl (190.794 nm)	0.0178	ppm	0.0028	15.80	-11.9400	0.0178 (ppm)
V (292.401 nm)	0.1372	ppm	0.0001	0.06	3854.0000	0.1372 (ppm)
W (207.912 nm)	0.0025	ppm	0.0030	> 100.00	-1.5570	0.0025 (ppm)
Zn (202.548 nm)	0.0479	ppm	0.0001	0.23	937.0000	0.0479 (ppm)
Zr (343.823 nm)	0.0296	ppm	0.0003	1.13	742.4000	0.0296 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9549	330500.0000	0.0019	0.20
Y_R 371.029	0.9728	47260.0000	0.0044	0.46

Sample Name: 440-255674-B-7-B@5

Date: 12/10/2019 1:03:44 PM Rack:Tube: 1:56

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0011 u	ppm	0.0002	19.74	-121.0000	-0.0011 u (ppm)
Al (396.152 nm)	50.5600	ppm	0.1629	0.32	1253000.0000	50.5600 (ppm)
As (188.980 nm)	0.0366	ppm	0.0014	3.88	17.4500	0.0366 (ppm)
B (249.678 nm)	0.0113	ppm	0.0003	2.71	16.7900	0.0113 (ppm)
Ba (233.527 nm)	0.2442	ppm	0.0002	0.09	18500.0000	0.2442 (ppm)
Be (234.861 nm)	0.0012	ppm	0.0000	0.73	1188.0000	0.0012 (ppm)
Ca (422.673 nm)	27.7900	ppm	0.0256	0.09	104500.0000	27.7900 (ppm)
Cd (214.439 nm)	0.0003 u	ppm	0.0007	> 100.00	12.2600	0.0003 u (ppm)
Co (228.615 nm)	0.0194	ppm	0.0002	1.20	272.3000	0.0194 (ppm)
Cr (205.560 nm)	0.0353	ppm	0.0004	1.13	140.4000	0.0353 (ppm)
Cu (324.754 nm)	3.3940	ppm	0.0170	0.50	120200.0000	3.3940 (ppm)
Fe (238.204 nm)	74.2300	ppm	0.0849	0.11	183900.0000	74.2300 (ppm)
K (766.491 nm)	5.0590	ppm	0.0185	0.37	4878.0000	5.0590 (ppm)
Li (670.783 nm)	0.0174	ppm	0.0006	3.68	746.1000	0.0174 (ppm)
Mg (279.078 nm)	40.3400	ppm	0.0256	0.06	94230.0000	40.3400 (ppm)
Mn (259.372 nm)	0.2462	ppm	0.0001	0.06	28720.0000	0.2462 (ppm)
Mo (204.598 nm)	0.0211	ppm	0.0001	0.58	72.3400	0.0211 (ppm)
Na (589.592 nm)	0.7707	ppm	0.0017	0.22	5755.0000	0.7707 (ppm)
Ni (231.604 nm)	0.0386	ppm	0.0003	0.84	130.9000	0.0386 (ppm)
P (213.618 nm)	2.6470	ppm	0.0042	0.16	1786.0000	2.6470 (ppm)
Pb (220.353 nm)	0.0109	ppm	0.0035	32.28	47.9500	0.0109 (ppm)
Sb (206.834 nm)	0.0158	ppm	0.0050	31.66	7.8100	0.0158 (ppm)
Se (196.026 nm)	0.0335	ppm	0.0017	5.09	10.5300	0.0335 (ppm)
Si (251.611 nm)	1.1380	ppm	0.0048	0.42	2308.0000	1.1380 (ppm)
Sn (189.925 nm)	0.0041	ppm	0.0053	> 100.00	0.5223	0.0041 (ppm)
Sr (421.552 nm)	0.5286	ppm	0.0012	0.23	175200.0000	0.5286 (ppm)
Ti (336.122 nm)	2.8780	ppm	0.0076	0.27	272500.0000	2.8780 (ppm)
Tl (190.794 nm)	0.0127	ppm	0.0072	56.93	-11.1800	0.0127 (ppm)
V (292.401 nm)	0.1278	ppm	0.0001	0.11	3589.0000	0.1278 (ppm)
W (207.912 nm)	0.0059	ppm	0.0010	17.17	3.3710	0.0059 (ppm)
Zn (202.548 nm)	0.0447	ppm	0.0001	0.17	911.7000	0.0447 (ppm)
Zr (343.823 nm)	0.0292	ppm	0.0001	0.26	700.8000	0.0292 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9544	330300.0000	0.0029	0.30
Y_R 371.029	0.9699	47120.0000	0.0016	0.16

Sample Name: 440-255674-B-8-B@5

Date: 12/10/2019 1:05:34 PM Rack:Tube: 1:57

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0007 u	ppm	0.0005	70.49	-106.2000	-0.0007 u (ppm)
Al (396.152 nm)	54.6800	ppm	0.0983	0.18	1355000.0000	54.6800 (ppm)
As (188.980 nm)	0.0355	ppm	0.0032	8.89	16.8400	0.0355 (ppm)
B (249.678 nm)	0.0092	ppm	0.0000	0.31	-4.7340	0.0092 (ppm)
Ba (233.527 nm)	0.2490	ppm	0.0005	0.21	18860.0000	0.2490 (ppm)
Be (234.861 nm)	0.0011	ppm	0.0002	21.02	1198.0000	0.0011 (ppm)
Ca (422.673 nm)	26.3600	ppm	0.0005	0.00	99130.0000	26.3600 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0003	> 100.00	6.1020	-0.0001 u (ppm)
Co (228.615 nm)	0.0246	ppm	0.0007	2.88	327.5000	0.0246 (ppm)
Cr (205.560 nm)	0.0387	ppm	0.0013	3.25	153.8000	0.0387 (ppm)
Cu (324.754 nm)	4.4010	ppm	0.0105	0.24	155800.0000	4.4010 (ppm)
Fe (238.204 nm)	76.0500	ppm	0.0324	0.04	188400.0000	76.0500 (ppm)
K (766.491 nm)	4.9730	ppm	0.0388	0.78	4796.0000	4.9730 (ppm)
Li (670.783 nm)	0.0208	ppm	0.0003	1.35	889.4000	0.0208 (ppm)
Mg (279.078 nm)	47.5100	ppm	0.0990	0.21	111000.0000	47.5100 (ppm)
Mn (259.372 nm)	0.3289	ppm	0.0006	0.19	35880.0000	0.3289 (ppm)
Mo (204.598 nm)	0.0213	ppm	0.0004	1.98	73.5100	0.0213 (ppm)
Na (589.592 nm)	0.3155	ppm	0.0222	7.03	3286.0000	0.3155 (ppm)
Ni (231.604 nm)	0.0487	ppm	0.0019	3.98	170.1000	0.0487 (ppm)
P (213.618 nm)	2.8860	ppm	0.0183	0.64	1928.0000	2.8860 (ppm)
Pb (220.353 nm)	0.0135	ppm	0.0010	7.30	53.6700	0.0135 (ppm)
Sb (206.834 nm)	0.0188	ppm	0.0134	71.12	10.1900	0.0188 (ppm)
Se (196.026 nm)	0.0255	ppm	0.0056	21.78	5.8130	0.0255 (ppm)
Si (251.611 nm)	1.0780	ppm	0.0015	0.14	2185.0000	1.0780 (ppm)
Sn (189.925 nm)	-0.0030 u	ppm	0.0020	69.10	-2.9110	-0.0030 u (ppm)
Sr (421.552 nm)	0.3891	ppm	0.0002	0.05	129100.0000	0.3891 (ppm)
Ti (336.122 nm)	2.7140	ppm	0.0079	0.29	256900.0000	2.7140 (ppm)
Tl (190.794 nm)	0.0150	ppm	0.0064	42.79	-7.0710	0.0150 (ppm)
V (292.401 nm)	0.1193	ppm	0.0004	0.32	3357.0000	0.1193 (ppm)
W (207.912 nm)	-0.0003 u	ppm	0.0024	> 100.00	-5.5220	-0.0003 u (ppm)
Zn (202.548 nm)	0.0449	ppm	0.0003	0.66	1017.0000	0.0449 (ppm)
Zr (343.823 nm)	0.0291	ppm	0.0001	0.25	652.0000	0.0291 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9546	330400.0000	0.0035	0.37
Y_R 371.029	0.9675	47010.0000	0.0006	0.06

Sample Name: 440-255674-B-9-B@5

Date: 12/10/2019 1:07:24 PM Rack:Tube: 1:58

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0016 u	ppm	0.0005	30.48	-131.9000	-0.0016 u (ppm)
Al (396.152 nm)	30.1500	ppm	0.0814	0.27	747000.0000	30.1500 (ppm)
As (188.980 nm)	0.0167	ppm	0.0043	25.95	7.1440	0.0167 (ppm)
B (249.678 nm)	0.0046	ppm	0.0016	33.95	-41.2600	0.0046 (ppm)
Ba (233.527 nm)	0.1826	ppm	0.0004	0.23	13840.0000	0.1826 (ppm)
Be (234.861 nm)	0.0008	ppm	0.0001	13.98	1040.0000	0.0008 (ppm)
Ca (422.673 nm)	20.4800	ppm	0.0386	0.19	77050.0000	20.4800 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0004	> 100.00	4.8280	-0.0001 u (ppm)
Co (228.615 nm)	0.0157	ppm	0.0006	3.83	199.1000	0.0157 (ppm)
Cr (205.560 nm)	0.0346	ppm	0.0003	0.75	137.4000	0.0346 (ppm)
Cu (324.754 nm)	2.9610	ppm	0.0088	0.30	104900.0000	2.9610 (ppm)
Fe (238.204 nm)	68.0500	ppm	0.0154	0.02	168600.0000	68.0500 (ppm)
K (766.491 nm)	5.0300	ppm	0.0523	1.04	4840.0000	5.0300 (ppm)
Li (670.783 nm)	0.0203	ppm	0.0006	2.71	832.5000	0.0203 (ppm)
Mg (279.078 nm)	26.9300	ppm	0.0436	0.16	62890.0000	26.9300 (ppm)
Mn (259.372 nm)	0.2807	ppm	0.0010	0.35	30910.0000	0.2807 (ppm)
Mo (204.598 nm)	0.0120	ppm	0.0016	13.45	40.0600	0.0120 (ppm)
Na (589.592 nm)	0.3662	ppm	0.0070	1.91	3486.0000	0.3662 (ppm)
Ni (231.604 nm)	0.0334	ppm	0.0004	1.09	110.9000	0.0334 (ppm)
P (213.618 nm)	3.4360	ppm	0.1347	3.92	2356.0000	3.4360 (ppm)
Pb (220.353 nm)	-0.0008 u	ppm	0.0005	57.21	25.8000	-0.0008 u (ppm)
Sb (206.834 nm)	0.0104	ppm	0.0011	10.63	3.4500	0.0104 (ppm)
Se (196.026 nm)	0.0167	ppm	0.0012	7.19	1.8660	0.0167 (ppm)
Si (251.611 nm)	0.9181	ppm	0.0046	0.50	1854.0000	0.9181 (ppm)
Sn (189.925 nm)	-0.0002 u	ppm	0.0037	> 100.00	-1.5510	-0.0002 u (ppm)
Sr (421.552 nm)	0.2036	ppm	0.0002	0.08	67580.0000	0.2036 (ppm)
Ti (336.122 nm)	1.4030	ppm	0.0046	0.32	132700.0000	1.4030 (ppm)
Tl (190.794 nm)	0.0161	ppm	0.0004	2.23	7.3430	0.0161 (ppm)
V (292.401 nm)	0.0823	ppm	0.0004	0.47	2331.0000	0.0823 (ppm)
W (207.912 nm)	0.0017	ppm	0.0007	40.42	-2.2520	0.0017 (ppm)
Zn (202.548 nm)	0.0572	ppm	0.0008	1.45	1027.0000	0.0572 (ppm)
Zr (343.823 nm)	0.0267	ppm	0.0001	0.45	650.4000	0.0267 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9601	332300.0000	0.0050	0.52
Y_R 371.029	0.9730	47270.0000	0.0001	0.01

Sample Name: 440-255674-B-10-B@5

Date: 12/10/2019 1:09:14 PM Rack:Tube: 1:59

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0020 u	ppm	0.0001	6.57	-155.7000	-0.0020 u (ppm)
Al (396.152 nm)	61.4300	ppm	0.0748	0.12	1522000.0000	61.4300 (ppm)
As (188.980 nm)	0.0207	ppm	0.0154	74.31	7.3520	0.0207 (ppm)
B (249.678 nm)	0.0141	ppm	0.0004	2.87	11.6300	0.0141 (ppm)
Ba (233.527 nm)	0.3982	ppm	0.0027	0.68	30130.0000	0.3982 (ppm)
Be (234.861 nm)	0.0023	ppm	0.0001	4.42	1755.0000	0.0023 (ppm)
Ca (422.673 nm)	39.7000	ppm	0.1353	0.34	149200.0000	39.7000 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0003	> 100.00	11.8700	0.0000 u (ppm)
Co (228.615 nm)	0.0529	ppm	0.0004	0.67	661.9000	0.0529 (ppm)
Cr (205.560 nm)	0.0628	ppm	0.0010	1.52	247.4000	0.0628 (ppm)
Cu (324.754 nm)	4.7940	ppm	0.0378	0.79	169700.0000	4.7940 (ppm)
Fe (238.204 nm)	105.4000	ppm	0.3780	0.36	261300.0000	105.4000 (ppm)
K (766.491 nm)	14.0300	ppm	0.0537	0.38	13620.0000	14.0300 (ppm)
Li (670.783 nm)	0.0290	ppm	0.0006	2.09	1193.0000	0.0290 (ppm)
Mg (279.078 nm)	48.6100	ppm	0.3540	0.73	113500.0000	48.6100 (ppm)
Mn (259.372 nm)	0.7095	ppm	0.0019	0.26	70930.0000	0.7095 (ppm)
Mo (204.598 nm)	0.0159	ppm	0.0008	4.74	56.3400	0.0159 (ppm)
Na (589.592 nm)	1.0130	ppm	0.0107	1.06	7338.0000	1.0130 (ppm)
Ni (231.604 nm)	0.0753	ppm	0.0006	0.74	272.1000	0.0753 (ppm)
P (213.618 nm)	4.4500	ppm	0.0048	0.11	3026.0000	4.4500 (ppm)
Pb (220.353 nm)	0.0031	ppm	0.0044	> 100.00	52.3100	0.0031 (ppm)
Sb (206.834 nm)	0.0070	ppm	0.0096	> 100.00	0.4214	0.0070 (ppm)
Se (196.026 nm)	0.0160	ppm	0.0051	31.98	-2.3360	0.0160 (ppm)
Si (251.611 nm)	1.4240	ppm	0.0003	0.02	2881.0000	1.4240 (ppm)
Sn (189.925 nm)	0.0002 u	ppm	0.0055	> 100.00	-1.3670	0.0002 u (ppm)
Sr (421.552 nm)	0.3339	ppm	0.0003	0.10	110900.0000	0.3339 (ppm)
Ti (336.122 nm)	3.3380	ppm	0.0109	0.33	316000.0000	3.3380 (ppm)
Tl (190.794 nm)	0.0180	ppm	0.0070	38.98	-9.3100	0.0180 (ppm)
V (292.401 nm)	0.1562	ppm	0.0002	0.13	4370.0000	0.1562 (ppm)
W (207.912 nm)	-0.0026 u	ppm	0.0019	72.94	-8.3900	-0.0026 u (ppm)
Zn (202.548 nm)	0.1199	ppm	0.0003	0.27	2009.0000	0.1199 (ppm)
Zr (343.823 nm)	0.0469	ppm	0.0000	0.00	1369.0000	0.0469 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9526	329700.0000	0.0049	0.52
Y_R 371.029	0.9720	47230.0000	0.0036	0.37

Sample Name: 440-255674-B-11-B@5

Date: 12/10/2019 1:11:04 PM Rack:Tube: 1:60

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0001	19.56	-101.5000	-0.0006 u (ppm)
Al (396.152 nm)	54.8500	ppm	0.1532	0.28	1359000.0000	54.8500 (ppm)
As (188.980 nm)	0.0712	ppm	0.0046	6.47	36.4100	0.0712 (ppm)
B (249.678 nm)	0.0080	ppm	0.0012	15.24	-7.3640	0.0080 (ppm)
Ba (233.527 nm)	0.2939	ppm	0.0016	0.53	22250.0000	0.2939 (ppm)
Be (234.861 nm)	0.0009	ppm	0.0002	17.64	1034.0000	0.0009 (ppm)
Ca (422.673 nm)	22.2500	ppm	0.0660	0.30	83680.0000	22.2500 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0002	95.35	1.2500	-0.0002 u (ppm)
Co (228.615 nm)	0.0185	ppm	0.0007	3.65	253.0000	0.0185 (ppm)
Cr (205.560 nm)	0.0355	ppm	0.0007	2.10	141.9000	0.0355 (ppm)
Cu (324.754 nm)	9.3670	ppm	0.0006	0.01	331500.0000	9.3670 (ppm)
Fe (238.204 nm)	66.4300	ppm	0.0972	0.15	164600.0000	66.4300 (ppm)
K (766.491 nm)	2.9870	ppm	0.0603	2.02	2860.0000	2.9870 (ppm)
Li (670.783 nm)	0.0263	ppm	0.0003	1.18	935.1000	0.0263 (ppm)
Mg (279.078 nm)	45.5000	ppm	0.1622	0.36	106300.0000	45.5000 (ppm)
Mn (259.372 nm)	0.2059	ppm	0.0008	0.38	24520.0000	0.2059 (ppm)
Mo (204.598 nm)	0.0190	ppm	0.0020	10.65	65.5700	0.0190 (ppm)
Na (589.592 nm)	0.5799	ppm	0.0192	3.30	4663.0000	0.5799 (ppm)
Ni (231.604 nm)	0.0442	ppm	0.0007	1.66	152.3000	0.0442 (ppm)
P (213.618 nm)	2.4170	ppm	0.0536	2.22	1464.0000	2.4170 (ppm)
Pb (220.353 nm)	0.0183	ppm	0.0015	8.29	56.6800	0.0183 (ppm)
Sb (206.834 nm)	0.0501	ppm	0.0041	8.11	35.4000	0.0501 (ppm)
Se (196.026 nm)	0.0301	ppm	0.0029	9.60	8.9860	0.0301 (ppm)
Si (251.611 nm)	1.1130	ppm	0.0023	0.21	2257.0000	1.1130 (ppm)
Sn (189.925 nm)	0.0060	ppm	0.0050	83.09	1.5720	0.0060 (ppm)
Sr (421.552 nm)	0.9514	ppm	0.0019	0.20	315100.0000	0.9514 (ppm)
Ti (336.122 nm)	2.4130	ppm	0.0116	0.48	228400.0000	2.4130 (ppm)
Tl (190.794 nm)	0.0124	ppm	0.0010	7.86	-7.5700	0.0124 (ppm)
V (292.401 nm)	0.1304	ppm	0.0005	0.37	3644.0000	0.1304 (ppm)
W (207.912 nm)	0.0030	ppm	0.0034	> 100.00	-0.7728	0.0030 (ppm)
Zn (202.548 nm)	0.0267	ppm	0.0006	2.14	1285.0000	0.0267 (ppm)
Zr (343.823 nm)	0.0282	ppm	0.0002	0.60	793.3000	0.0282 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9494	328600.0000	0.0036	0.38
Y_R 371.029	0.9570	46500.0000	0.0032	0.34

Sample Name: 440-255674-B-13-B@5

Date: 12/10/2019 1:12:54 PM Rack:Tube: 2:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0011 u	ppm	0.0003	28.76	-123.9000	-0.0011 u (ppm)
Al (396.152 nm)	37.5900	ppm	0.0378	0.10	931100.0000	37.5900 (ppm)
As (188.980 nm)	0.0089	ppm	0.0020	22.99	1.7410	0.0089 (ppm)
B (249.678 nm)	0.0071	ppm	0.0006	8.86	-49.5600	0.0071 (ppm)
Ba (233.527 nm)	0.2049	ppm	0.0015	0.74	15530.0000	0.2049 (ppm)
Be (234.861 nm)	0.0021	ppm	0.0001	6.57	1622.0000	0.0021 (ppm)
Ca (422.673 nm)	26.4100	ppm	0.1545	0.58	99300.0000	26.4100 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	61.60	13.4600	0.0002 (ppm)
Co (228.615 nm)	0.0588	ppm	0.0013	2.23	725.0000	0.0588 (ppm)
Cr (205.560 nm)	0.0395	ppm	0.0022	5.54	158.8000	0.0395 (ppm)
Cu (324.754 nm)	14.6700	ppm	0.0542	0.37	519200.0000	14.6700 (ppm)
Fe (238.204 nm)	97.4100	ppm	0.3600	0.37	241400.0000	97.4100 (ppm)
K (766.491 nm)	10.2700	ppm	0.1163	1.13	9945.0000	10.2700 (ppm)
Li (670.783 nm)	0.0368	ppm	0.0001	0.27	944.3000	0.0368 (ppm)
Mg (279.078 nm)	37.6400	ppm	0.2888	0.77	87900.0000	37.6400 (ppm)
Mn (259.372 nm)	0.7139	ppm	0.0019	0.27	70410.0000	0.7139 (ppm)
Mo (204.598 nm)	0.0111	ppm	0.0003	2.66	38.1400	0.0111 (ppm)
Na (589.592 nm)	0.3443	ppm	0.0143	4.15	3637.0000	0.3443 (ppm)
Ni (231.604 nm)	0.0655	ppm	0.0039	5.90	233.1000	0.0655 (ppm)
P (213.618 nm)	4.8260	ppm	0.0093	0.19	3029.0000	4.8260 (ppm)
Pb (220.353 nm)	-0.0093 u	ppm	0.0001	1.24	27.8200	-0.0093 u (ppm)
Sb (206.834 nm)	0.0153	ppm	0.0048	31.56	7.3720	0.0153 (ppm)
Se (196.026 nm)	0.0100	ppm	0.0067	67.55	-5.4060	0.0100 (ppm)
Si (251.611 nm)	1.2470	ppm	0.0008	0.06	2527.0000	1.2470 (ppm)
Sn (189.925 nm)	-0.0006 u	ppm	0.0001	19.27	-1.6750	-0.0006 u (ppm)
Sr (421.552 nm)	0.2297	ppm	0.0011	0.49	76300.0000	0.2297 (ppm)
Ti (336.122 nm)	3.1460	ppm	0.0041	0.13	297900.0000	3.1460 (ppm)
Tl (190.794 nm)	0.0152	ppm	0.0046	30.21	-10.4000	0.0152 (ppm)
V (292.401 nm)	0.1434	ppm	0.0004	0.27	4011.0000	0.1434 (ppm)
W (207.912 nm)	-0.0028 u	ppm	0.0022	79.52	-7.9160	-0.0028 u (ppm)
Zn (202.548 nm)	0.1240	ppm	0.0002	0.13	3056.0000	0.1240 (ppm)
Zr (343.823 nm)	0.0420	ppm	0.0002	0.53	1171.0000	0.0420 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9486	328300.0000	0.0050	0.53
Y_R 371.029	0.9511	46210.0000	0.0033	0.35

Sample Name: 440-255674-B-14-B@5

Date: 12/10/2019 1:14:44 PM Rack:Tube: 2:2

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0015 u	ppm	0.0001	6.61	-134.5000	-0.0015 u (ppm)
Al (396.152 nm)	41.5700	ppm	0.0796	0.19	1030000.0000	41.5700 (ppm)
As (188.980 nm)	0.0125	ppm	0.0022	17.48	4.0740	0.0125 (ppm)
B (249.678 nm)	0.0080	ppm	0.0002	2.01	-24.0300	0.0080 (ppm)
Ba (233.527 nm)	0.2751	ppm	0.0016	0.59	20830.0000	0.2751 (ppm)
Be (234.861 nm)	0.0016	ppm	0.0003	20.66	1351.0000	0.0016 (ppm)
Ca (422.673 nm)	36.9400	ppm	0.0315	0.09	138900.0000	36.9400 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	88.14	11.2100	0.0002 (ppm)
Co (228.615 nm)	0.0314	ppm	0.0003	0.98	406.4000	0.0314 (ppm)
Cr (205.560 nm)	0.0555	ppm	0.0006	1.04	219.2000	0.0555 (ppm)
Cu (324.754 nm)	5.9770	ppm	0.0168	0.28	211600.0000	5.9770 (ppm)
Fe (238.204 nm)	82.6700	ppm	0.1767	0.21	204800.0000	82.6700 (ppm)
K (766.491 nm)	9.8540	ppm	0.0648	0.66	9541.0000	9.8540 (ppm)
Li (670.783 nm)	0.0250	ppm	0.0013	5.30	928.2000	0.0250 (ppm)
Mg (279.078 nm)	37.3900	ppm	0.2050	0.55	87330.0000	37.3900 (ppm)
Mn (259.372 nm)	0.4660	ppm	0.0007	0.15	48040.0000	0.4660 (ppm)
Mo (204.598 nm)	0.0135	ppm	0.0009	6.87	46.1900	0.0135 (ppm)
Na (589.592 nm)	0.5994	ppm	0.0254	4.24	4894.0000	0.5994 (ppm)
Ni (231.604 nm)	0.0558	ppm	0.0004	0.77	197.2000	0.0558 (ppm)
P (213.618 nm)	4.2580	ppm	0.0940	2.21	2858.0000	4.2580 (ppm)
Pb (220.353 nm)	0.0006	ppm	0.0000	0.18	35.8400	0.0006 (ppm)
Sb (206.834 nm)	0.0123	ppm	0.0009	7.28	5.1090	0.0123 (ppm)
Se (196.026 nm)	0.0100	ppm	0.0067	66.89	-3.5850	0.0100 (ppm)
Si (251.611 nm)	1.4440	ppm	0.0149	1.03	2915.0000	1.4440 (ppm)
Sn (189.925 nm)	-0.0019 u	ppm	0.0017	92.57	-2.3850	-0.0019 u (ppm)
Sr (421.552 nm)	0.2481	ppm	0.0004	0.15	82480.0000	0.2481 (ppm)
Ti (336.122 nm)	2.7730	ppm	0.0057	0.20	262600.0000	2.7730 (ppm)
Tl (190.794 nm)	0.0089	ppm	0.0047	52.30	-12.8000	0.0089 (ppm)
V (292.401 nm)	0.1211	ppm	0.0000	0.02	3416.0000	0.1211 (ppm)
W (207.912 nm)	-0.0041 u	ppm	0.0009	21.71	-10.5300	-0.0041 u (ppm)
Zn (202.548 nm)	0.0859	ppm	0.0007	0.85	1695.0000	0.0859 (ppm)
Zr (343.823 nm)	0.0383	ppm	0.0001	0.18	1213.0000	0.0383 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9465	327600.0000	0.0024	0.25
Y_R 371.029	0.9533	46310.0000	0.0045	0.47

Sample Name: 440-255674-B-15-B@5

Date: 12/10/2019 1:16:34 PM Rack:Tube: 2:3

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0015 u	ppm	0.0006	41.31	-135.5000	-0.0015 u (ppm)
Al (396.152 nm)	41.9400	ppm	0.0741	0.18	1039000.0000	41.9400 (ppm)
As (188.980 nm)	0.0069	ppm	0.0033	47.47	1.4080	0.0069 (ppm)
B (249.678 nm)	0.0082	ppm	0.0004	4.44	-14.2600	0.0082 (ppm)
Ba (233.527 nm)	0.2383	ppm	0.0020	0.83	18050.0000	0.2383 (ppm)
Be (234.861 nm)	0.0015	ppm	0.0003	17.11	1242.0000	0.0015 (ppm)
Ca (422.673 nm)	38.9700	ppm	0.1103	0.28	146500.0000	38.9700 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	6.2510	0.0000 u (ppm)
Co (228.615 nm)	0.0313	ppm	0.0004	1.31	409.8000	0.0313 (ppm)
Cr (205.560 nm)	0.0604	ppm	0.0005	0.79	237.9000	0.0604 (ppm)
Cu (324.754 nm)	6.0190	ppm	0.0107	0.18	213100.0000	6.0190 (ppm)
Fe (238.204 nm)	75.3500	ppm	0.2807	0.37	186700.0000	75.3500 (ppm)
K (766.491 nm)	9.4090	ppm	0.0104	0.11	9107.0000	9.4090 (ppm)
Li (670.783 nm)	0.0233	ppm	0.0002	1.05	886.3000	0.0233 (ppm)
Mg (279.078 nm)	38.0100	ppm	0.2288	0.60	88780.0000	38.0100 (ppm)
Mn (259.372 nm)	0.4937	ppm	0.0001	0.01	49590.0000	0.4937 (ppm)
Mo (204.598 nm)	0.0135	ppm	0.0020	14.86	46.4300	0.0135 (ppm)
Na (589.592 nm)	0.5825	ppm	0.0005	0.08	4743.0000	0.5825 (ppm)
Ni (231.604 nm)	0.0582	ppm	0.0004	0.71	206.7000	0.0582 (ppm)
P (213.618 nm)	4.1040	ppm	0.0320	0.78	2747.0000	4.1040 (ppm)
Pb (220.353 nm)	0.0012	ppm	0.0005	45.04	32.2500	0.0012 (ppm)
Sb (206.834 nm)	0.0078	ppm	0.0036	45.92	1.8830	0.0078 (ppm)
Se (196.026 nm)	0.0142	ppm	0.0005	3.68	-0.5172	0.0142 (ppm)
Si (251.611 nm)	1.4230	ppm	0.0004	0.03	2878.0000	1.4230 (ppm)
Sn (189.925 nm)	0.0034	ppm	0.0005	14.47	0.2179	0.0034 (ppm)
Sr (421.552 nm)	0.2620	ppm	0.0009	0.33	87100.0000	0.2620 (ppm)
Ti (336.122 nm)	3.0620	ppm	0.0075	0.24	290000.0000	3.0620 (ppm)
Tl (190.794 nm)	0.0128	ppm	0.0073	56.81	-12.5900	0.0128 (ppm)
V (292.401 nm)	0.1220	ppm	0.0001	0.05	3451.0000	0.1220 (ppm)
W (207.912 nm)	0.0034	ppm	0.0003	8.87	0.2236	0.0034 (ppm)
Zn (202.548 nm)	0.0822	ppm	0.0007	0.84	1654.0000	0.0822 (ppm)
Zr (343.823 nm)	0.0352	ppm	0.0004	1.10	1132.0000	0.0352 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9478	328000.0000	0.0004	0.04
Y_R 371.029	0.9561	46450.0000	0.0070	0.74

Sample Name: CCV 5993196

Date: 12/10/2019 1:18:22 PM
Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5017	ppm	0.0026	0.52	18360.0000	0.5017 (ppm)
Al (396.152 nm)	1.0410	ppm	0.0108	1.04	26370.0000	1.0410 (ppm)
As (188.980 nm)	0.9999	ppm	0.0155	1.55	527.2000	0.9999 (ppm)
B (249.678 nm)	0.9980	ppm	0.0046	0.46	9637.0000	0.9980 (ppm)
Ba (233.527 nm)	1.0100	ppm	0.0097	0.96	76300.0000	1.0100 (ppm)
Be (234.861 nm)	1.0010	ppm	0.0040	0.40	148600.0000	1.0010 (ppm)
Ca (422.673 nm)	5.0170	ppm	0.0017	0.03	18960.0000	5.0170 (ppm)
Cd (214.439 nm)	1.0130	ppm	0.0050	0.50	18920.0000	1.0130 (ppm)
Co (228.615 nm)	1.0190	ppm	0.0052	0.51	11480.0000	1.0190 (ppm)
Cr (205.560 nm)	1.0110	ppm	0.0046	0.46	3903.0000	1.0110 (ppm)
Cu (324.754 nm)	1.0230	ppm	0.0024	0.24	36270.0000	1.0230 (ppm)
Fe (238.204 nm)	1.1080 Q	ppm	0.0030	0.27	2693.0000 Q	1.1080 Q (ppm)
K (766.491 nm)	10.0900	ppm	0.0467	0.46	9747.0000	10.0900 (ppm)
Li (670.783 nm)	0.9978	ppm	0.0027	0.27	54980.0000	0.9978 (ppm)
Mg (279.078 nm)	5.1250	ppm	0.0587	1.15	11980.0000	5.1250 (ppm)
Mn (259.372 nm)	1.0090	ppm	0.0033	0.32	85250.0000	1.0090 (ppm)
Mo (204.598 nm)	1.0100	ppm	0.0009	0.09	3391.0000	1.0100 (ppm)
Na (589.592 nm)	9.9370	ppm	0.0069	0.07	55270.0000	9.9370 (ppm)
Ni (231.604 nm)	1.0130	ppm	0.0023	0.23	3929.0000	1.0130 (ppm)
P (213.618 nm)	1.0100	ppm	0.0039	0.39	672.7000	1.0100 (ppm)
Pb (220.353 nm)	1.0130	ppm	0.0048	0.47	1757.0000	1.0130 (ppm)
Sb (206.834 nm)	0.9936	ppm	0.0124	1.24	774.1000	0.9936 (ppm)
Se (196.026 nm)	0.9923	ppm	0.0095	0.95	560.3000	0.9923 (ppm)
Si (251.611 nm)	4.9870	ppm	0.0395	0.79	10110.0000	4.9870 (ppm)
Sn (189.925 nm)	1.0110	ppm	0.0037	0.37	499.0000	1.0110 (ppm)
Sr (421.552 nm)	0.9984	ppm	0.0005	0.05	330400.0000	0.9984 (ppm)
Ti (336.122 nm)	1.0350	ppm	0.0032	0.31	97940.0000	1.0350 (ppm)
Tl (190.794 nm)	1.0120	ppm	0.0088	0.87	894.7000	1.0120 (ppm)
V (292.401 nm)	1.0130	ppm	0.0027	0.26	26920.0000	1.0130 (ppm)
W (207.912 nm)	1.0070	ppm	0.0026	0.25	1449.0000	1.0070 (ppm)
Zn (202.548 nm)	1.0120	ppm	0.0041	0.41	13150.0000	1.0120 (ppm)
Zr (343.823 nm)	0.9830	ppm	0.0045	0.45	74570.0000	0.9830 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9473	327900.0000	0.0060	0.63
Y_R 371.029	0.9478	46050.0000	0.0059	0.62

Sample Name: CCV 5993196

Date: 12/10/2019 1:21:24 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5022	ppm	0.0020	0.40	18370.0000	0.5022 (ppm)
Al (396.152 nm)	1.0040	ppm	0.0034	0.34	25460.0000	1.0040 (ppm)
As (188.980 nm)	1.0140	ppm	0.0031	0.30	534.9000	1.0140 (ppm)
B (249.678 nm)	0.9992	ppm	0.0077	0.77	9648.0000	0.9992 (ppm)
Ba (233.527 nm)	1.0170	ppm	0.0016	0.16	76810.0000	1.0170 (ppm)
Be (234.861 nm)	1.0020	ppm	0.0037	0.37	148900.0000	1.0020 (ppm)
Ca (422.673 nm)	5.0220	ppm	0.0272	0.54	18980.0000	5.0220 (ppm)
Cd (214.439 nm)	1.0170	ppm	0.0035	0.34	19000.0000	1.0170 (ppm)
Co (228.615 nm)	1.0190	ppm	0.0032	0.32	11480.0000	1.0190 (ppm)
Cr (205.560 nm)	1.0160	ppm	0.0053	0.52	3921.0000	1.0160 (ppm)
Cu (324.754 nm)	1.0140	ppm	0.0035	0.35	35950.0000	1.0140 (ppm)
Fe (238.204 nm)	1.0310	ppm	0.0026	0.25	2502.0000	1.0310 (ppm)
K (766.491 nm)	10.1400	ppm	0.0495	0.49	9791.0000	10.1400 (ppm)
Li (670.783 nm)	0.9985	ppm	0.0032	0.32	55020.0000	0.9985 (ppm)
Mg (279.078 nm)	5.1320	ppm	0.0105	0.20	12000.0000	5.1320 (ppm)
Mn (259.372 nm)	1.0100	ppm	0.0026	0.26	85330.0000	1.0100 (ppm)
Mo (204.598 nm)	1.0260	ppm	0.0003	0.03	3447.0000	1.0260 (ppm)
Na (589.592 nm)	9.9660	ppm	0.0140	0.14	55430.0000	9.9660 (ppm)
Ni (231.604 nm)	1.0140	ppm	0.0019	0.19	3932.0000	1.0140 (ppm)
P (213.618 nm)	1.0100	ppm	0.0033	0.33	673.1000	1.0100 (ppm)
Pb (220.353 nm)	1.0120	ppm	0.0003	0.03	1756.0000	1.0120 (ppm)
Sb (206.834 nm)	1.0120	ppm	0.0201	1.99	788.2000	1.0120 (ppm)
Se (196.026 nm)	0.9877	ppm	0.0016	0.16	557.8000	0.9877 (ppm)
Si (251.611 nm)	4.9810	ppm	0.0482	0.97	10100.0000	4.9810 (ppm)
Sn (189.925 nm)	1.0060	ppm	0.0078	0.78	496.4000	1.0060 (ppm)
Sr (421.552 nm)	1.0000	ppm	0.0049	0.49	331000.0000	1.0000 (ppm)
Ti (336.122 nm)	1.0230	ppm	0.0074	0.73	96750.0000	1.0230 (ppm)
Tl (190.794 nm)	1.0190	ppm	0.0074	0.72	901.8000	1.0190 (ppm)
V (292.401 nm)	1.0140	ppm	0.0025	0.25	26940.0000	1.0140 (ppm)
W (207.912 nm)	1.0190	ppm	0.0007	0.07	1467.0000	1.0190 (ppm)
Zn (202.548 nm)	1.0140	ppm	0.0039	0.39	13180.0000	1.0140 (ppm)
Zr (343.823 nm)	0.9764	ppm	0.0064	0.66	74070.0000	0.9764 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9376	324500.0000	0.0035	0.37
Y_R 371.029	0.9324	45300.0000	0.0004	0.04

Sample Name: CCB 5993195

Date: 12/10/2019 1:25:16 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0005	> 100.00	-66.5400	0.0001 u (ppm)
Al (396.152 nm)	0.0014	ppm	0.0005	36.99	-288.8000	0.0014 (ppm)
As (188.980 nm)	0.0016	ppm	0.0020	> 100.00	2.4580	0.0016 (ppm)
B (249.678 nm)	0.0011	ppm	0.0005	45.87	-3.3010	0.0011 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0001	57.31	57.9900	0.0002 (ppm)
Be (234.861 nm)	0.0004	ppm	0.0000	10.05	75.7500	0.0004 (ppm)
Ca (422.673 nm)	-0.0075 u	ppm	0.0025	33.32	90.7000	-0.0075 u (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0002	> 100.00	0.0924	0.0002 (ppm)
Co (228.615 nm)	-0.0003 u	ppm	0.0007	> 100.00	-16.4600	-0.0003 u (ppm)
Cr (205.560 nm)	0.0003 u	ppm	0.0007	> 100.00	2.9480	0.0003 u (ppm)
Cu (324.754 nm)	-0.0001 u	ppm	0.0001	> 100.00	39.6800	-0.0001 u (ppm)
Fe (238.204 nm)	0.0053	ppm	0.0019	36.51	-37.1000	0.0053 (ppm)
K (766.491 nm)	0.0674	ppm	0.0532	79.01	-12.6500	0.0674 (ppm)
Li (670.783 nm)	0.0026	ppm	0.0000	1.07	196.3000	0.0026 (ppm)
Mg (279.078 nm)	0.0052	ppm	0.0035	67.38	22.9200	0.0052 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0002	46.74	87.8300	0.0005 (ppm)
Mo (204.598 nm)	0.0044	ppm	0.0007	17.00	10.5800	0.0044 (ppm)
Na (589.592 nm)	-0.0371 u	ppm	0.0149	40.02	710.4000	-0.0371 u (ppm)
Ni (231.604 nm)	0.0034	ppm	0.0004	10.35	-2.3550	0.0034 (ppm)
P (213.618 nm)	-0.0007 u	ppm	0.0004	56.10	-0.2306	-0.0007 u (ppm)
Pb (220.353 nm)	-0.0004 u	ppm	0.0017	> 100.00	-12.0800	-0.0004 u (ppm)
Sb (206.834 nm)	0.0087	ppm	0.0047	53.51	3.5190	0.0087 (ppm)
Se (196.026 nm)	0.0031 u	ppm	0.0091	> 100.00	1.0770	0.0031 u (ppm)
Si (251.611 nm)	0.0020	ppm	0.0017	84.75	15.2200	0.0020 (ppm)
Sn (189.925 nm)	0.0017	ppm	0.0007	42.36	-0.5852	0.0017 (ppm)
Sr (421.552 nm)	0.0003	ppm	0.0001	18.65	86.0900	0.0003 (ppm)
Ti (336.122 nm)	0.0015	ppm	0.0001	8.93	6.6000	0.0015 (ppm)
Tl (190.794 nm)	0.0064	ppm	0.0020	30.81	10.3200	0.0064 (ppm)
V (292.401 nm)	0.0007	ppm	0.0003	44.86	105.3000	0.0007 (ppm)
W (207.912 nm)	0.0041	ppm	0.0016	38.23	1.5640	0.0041 (ppm)
Zn (202.548 nm)	0.0043	ppm	0.0000	0.44	68.7400	0.0043 (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0002	> 100.00	105.1000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9293	321700.0000	0.0047	0.51
Y_R 371.029	0.9326	45310.0000	0.0069	0.74

Sample Name: 440-255674-B-16-B@5

Date: 12/10/2019 1:27:04 PM Rack:Tube: 2:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0020 u	ppm	0.0000	0.11	-151.8000	-0.0020 u (ppm)
Al (396.152 nm)	47.6200	ppm	0.0941	0.20	1180000.0000	47.6200 (ppm)
As (188.980 nm)	0.0367	ppm	0.0125	34.02	17.9500	0.0367 (ppm)
B (249.678 nm)	0.0136	ppm	0.0011	8.13	48.2900	0.0136 (ppm)
Ba (233.527 nm)	0.2176	ppm	0.0019	0.87	16480.0000	0.2176 (ppm)
Be (234.861 nm)	0.0015	ppm	0.0002	13.84	1114.0000	0.0015 (ppm)
Ca (422.673 nm)	34.4700	ppm	0.2087	0.61	129600.0000	34.4700 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0000	25.96	2.2480	-0.0002 u (ppm)
Co (228.615 nm)	0.0253	ppm	0.0005	1.93	313.2000	0.0253 (ppm)
Cr (205.560 nm)	0.0300	ppm	0.0002	0.75	120.1000	0.0300 (ppm)
Cu (324.754 nm)	4.5100	ppm	0.0226	0.50	159600.0000	4.5100 (ppm)
Fe (238.204 nm)	66.2000	ppm	0.4357	0.66	164000.0000	66.2000 (ppm)
K (766.491 nm)	2.0620	ppm	0.0647	3.14	1958.0000	2.0620 (ppm)
Li (670.783 nm)	0.0196	ppm	0.0003	1.72	806.1000	0.0196 (ppm)
Mg (279.078 nm)	35.2600	ppm	0.2553	0.72	82370.0000	35.2600 (ppm)
Mn (259.372 nm)	0.2519	ppm	0.0011	0.44	28340.0000	0.2519 (ppm)
Mo (204.598 nm)	0.0254	ppm	0.0004	1.77	86.3900	0.0254 (ppm)
Na (589.592 nm)	0.4671	ppm	0.0202	4.32	4033.0000	0.4671 (ppm)
Ni (231.604 nm)	0.0457	ppm	0.0010	2.12	158.6000	0.0457 (ppm)
P (213.618 nm)	2.7370	ppm	0.0545	1.99	1819.0000	2.7370 (ppm)
Pb (220.353 nm)	0.0265	ppm	0.0047	17.78	71.4300	0.0265 (ppm)
Sb (206.834 nm)	0.0195	ppm	0.0019	9.56	10.7300	0.0195 (ppm)
Se (196.026 nm)	0.0200	ppm	0.0026	12.97	3.6910	0.0200 (ppm)
Si (251.611 nm)	1.0470	ppm	0.0028	0.26	2116.0000	1.0470 (ppm)
Sn (189.925 nm)	0.0015 u	ppm	0.0076	> 100.00	-0.6648	0.0015 u (ppm)
Sr (421.552 nm)	0.4926	ppm	0.0034	0.70	163400.0000	0.4926 (ppm)
Ti (336.122 nm)	1.6560	ppm	0.0054	0.33	156700.0000	1.6560 (ppm)
Tl (190.794 nm)	0.0108	ppm	0.0011	10.12	-0.5757	0.0108 (ppm)
V (292.401 nm)	0.1017	ppm	0.0005	0.47	2868.0000	0.1017 (ppm)
W (207.912 nm)	0.0031	ppm	0.0026	84.46	-0.6034	0.0031 (ppm)
Zn (202.548 nm)	0.0427	ppm	0.0007	1.59	995.8000	0.0427 (ppm)
Zr (343.823 nm)	0.0265	ppm	0.0001	0.27	677.7000	0.0265 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9318	322500.0000	0.0048	0.51
Y_R 371.029	0.9399	45660.0000	0.0048	0.51

Sample Name: 440-255674-B-17-B@5

Date: 12/10/2019 1:28:53 PM Rack:Tube: 2:5

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0008 u	ppm	0.0001	7.98	-107.2000	-0.0008 u (ppm)
Al (396.152 nm)	49.0500	ppm	0.1332	0.27	1215000.0000	49.0500 (ppm)
As (188.980 nm)	0.0294	ppm	0.0016	5.40	14.0300	0.0294 (ppm)
B (249.678 nm)	0.0082	ppm	0.0018	21.76	-5.5950	0.0082 (ppm)
Ba (233.527 nm)	0.2211	ppm	0.0010	0.47	16750.0000	0.2211 (ppm)
Be (234.861 nm)	0.0014	ppm	0.0002	16.81	1124.0000	0.0014 (ppm)
Ca (422.673 nm)	20.9300	ppm	0.1325	0.63	78740.0000	20.9300 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0000	26.89	2.3690	-0.0002 u (ppm)
Co (228.615 nm)	0.0205	ppm	0.0003	1.57	265.5000	0.0205 (ppm)
Cr (205.560 nm)	0.0350	ppm	0.0014	4.00	139.2000	0.0350 (ppm)
Cu (324.754 nm)	4.7310	ppm	0.0008	0.02	167500.0000	4.7310 (ppm)
Fe (238.204 nm)	67.2500	ppm	0.3828	0.57	166600.0000	67.2500 (ppm)
K (766.491 nm)	2.0890	ppm	0.0449	2.15	1984.0000	2.0890 (ppm)
Li (670.783 nm)	0.0206	ppm	0.0000	0.06	833.7000	0.0206 (ppm)
Mg (279.078 nm)	35.4600	ppm	0.2258	0.64	82830.0000	35.4600 (ppm)
Mn (259.372 nm)	0.3255	ppm	0.0007	0.21	34620.0000	0.3255 (ppm)
Mo (204.598 nm)	0.0184	ppm	0.0022	11.90	62.9600	0.0184 (ppm)
Na (589.592 nm)	0.4214	ppm	0.0128	3.03	3790.0000	0.4214 (ppm)
Ni (231.604 nm)	0.0456	ppm	0.0014	3.09	158.4000	0.0456 (ppm)
P (213.618 nm)	2.4700	ppm	0.0209	0.85	1625.0000	2.4700 (ppm)
Pb (220.353 nm)	0.0221	ppm	0.0007	3.20	64.0300	0.0221 (ppm)
Sb (206.834 nm)	0.0131	ppm	0.0034	25.67	5.8170	0.0131 (ppm)
Se (196.026 nm)	0.0180	ppm	0.0031	17.43	2.4780	0.0180 (ppm)
Si (251.611 nm)	1.0400	ppm	0.0053	0.51	2103.0000	1.0400 (ppm)
Sn (189.925 nm)	-0.0024 u	ppm	0.0021	89.65	-2.5870	-0.0024 u (ppm)
Sr (421.552 nm)	0.4040	ppm	0.0020	0.49	133900.0000	0.4040 (ppm)
Ti (336.122 nm)	1.9520	ppm	0.0005	0.03	184800.0000	1.9520 (ppm)
Tl (190.794 nm)	0.0105	ppm	0.0083	79.07	-3.7290	0.0105 (ppm)
V (292.401 nm)	0.1050	ppm	0.0007	0.63	2952.0000	0.1050 (ppm)
W (207.912 nm)	0.0015 u	ppm	0.0043	> 100.00	-2.7620	0.0015 u (ppm)
Zn (202.548 nm)	0.0404	ppm	0.0000	0.07	992.0000	0.0404 (ppm)
Zr (343.823 nm)	0.0271	ppm	0.0003	0.94	696.1000	0.0271 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9357	323900.0000	0.0025	0.27
Y_R 371.029	0.9420	45770.0000	0.0013	0.14

Sample Name: 440-255674-B-18-B@5

Date: 12/10/2019 1:30:43 PM Rack:Tube: 2:6

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0012 u	ppm	0.0002	20.74	-124.9000	-0.0012 u (ppm)
Al (396.152 nm)	58.5500	ppm	0.0028	0.00	1451000.0000	58.5500 (ppm)
As (188.980 nm)	0.0423	ppm	0.0026	6.10	20.5400	0.0423 (ppm)
B (249.678 nm)	0.0097	ppm	0.0013	12.95	1.4460	0.0097 (ppm)
Ba (233.527 nm)	0.2329	ppm	0.0020	0.85	17640.0000	0.2329 (ppm)
Be (234.861 nm)	0.0012	ppm	0.0000	1.02	1189.0000	0.0012 (ppm)
Ca (422.673 nm)	31.9600	ppm	0.1147	0.36	120200.0000	31.9600 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0007	> 100.00	3.9930	-0.0001 u (ppm)
Co (228.615 nm)	0.0242	ppm	0.0002	0.64	325.1000	0.0242 (ppm)
Cr (205.560 nm)	0.0400	ppm	0.0011	2.83	159.0000	0.0400 (ppm)
Cu (324.754 nm)	5.9770	ppm	0.0227	0.38	211600.0000	5.9770 (ppm)
Fe (238.204 nm)	74.6500	ppm	0.2813	0.38	184900.0000	74.6500 (ppm)
K (766.491 nm)	2.5740	ppm	0.0779	3.03	2463.0000	2.5740 (ppm)
Li (670.783 nm)	0.0241	ppm	0.0001	0.56	1001.0000	0.0241 (ppm)
Mg (279.078 nm)	45.9500	ppm	0.4007	0.87	107300.0000	45.9500 (ppm)
Mn (259.372 nm)	0.2835	ppm	0.0003	0.11	31910.0000	0.2835 (ppm)
Mo (204.598 nm)	0.0164	ppm	0.0003	1.59	57.3600	0.0164 (ppm)
Na (589.592 nm)	0.3938	ppm	0.0131	3.33	3708.0000	0.3938 (ppm)
Ni (231.604 nm)	0.0521	ppm	0.0009	1.74	183.2000	0.0521 (ppm)
P (213.618 nm)	3.1150	ppm	0.0517	1.66	2049.0000	3.1150 (ppm)
Pb (220.353 nm)	0.0239	ppm	0.0095	39.79	70.6800	0.0239 (ppm)
Sb (206.834 nm)	0.0211	ppm	0.0002	1.05	12.2500	0.0211 (ppm)
Se (196.026 nm)	0.0351	ppm	0.0002	0.60	11.1900	0.0351 (ppm)
Si (251.611 nm)	1.0860	ppm	0.0062	0.57	2203.0000	1.0860 (ppm)
Sn (189.925 nm)	0.0037	ppm	0.0026	70.40	0.3739	0.0037 (ppm)
Sr (421.552 nm)	0.4415	ppm	0.0012	0.28	146400.0000	0.4415 (ppm)
Ti (336.122 nm)	2.7960	ppm	0.0016	0.06	264800.0000	2.7960 (ppm)
Tl (190.794 nm)	0.0182	ppm	0.0052	28.41	-5.4530	0.0182 (ppm)
V (292.401 nm)	0.1310	ppm	0.0002	0.16	3678.0000	0.1310 (ppm)
W (207.912 nm)	-0.0013 u	ppm	0.0005	35.45	-6.9860	-0.0013 u (ppm)
Zn (202.548 nm)	0.0456	ppm	0.0004	0.82	1184.0000	0.0456 (ppm)
Zr (343.823 nm)	0.0298	ppm	0.0002	0.73	739.1000	0.0298 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9291	321600.0000	0.0032	0.34
Y_R 371.029	0.9376	45550.0000	0.0042	0.44

Sample Name: 440-255674-B-20-B@5

Date: 12/10/2019 1:32:30 PM Rack:Tube: 2:7

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0020 u	ppm	0.0000	1.61	-153.6000	-0.0020 u (ppm)
Al (396.152 nm)	46.3100	ppm	0.0921	0.20	1147000.0000	46.3100 (ppm)
As (188.980 nm)	0.0185	ppm	0.0000	0.09	7.3150	0.0185 (ppm)
B (249.678 nm)	0.0094	ppm	0.0010	10.68	-9.2060	0.0094 (ppm)
Ba (233.527 nm)	0.3105	ppm	0.0017	0.55	23510.0000	0.3105 (ppm)
Be (234.861 nm)	0.0017	ppm	0.0002	11.46	1357.0000	0.0017 (ppm)
Ca (422.673 nm)	47.6600	ppm	0.0682	0.14	179100.0000	47.6600 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	13.98	11.4200	0.0002 (ppm)
Co (228.615 nm)	0.0409	ppm	0.0015	3.75	517.5000	0.0409 (ppm)
Cr (205.560 nm)	0.0466	ppm	0.0004	0.96	184.7000	0.0466 (ppm)
Cu (324.754 nm)	4.8240	ppm	0.0111	0.23	170800.0000	4.8240 (ppm)
Fe (238.204 nm)	82.3300	ppm	0.1165	0.14	204000.0000	82.3300 (ppm)
K (766.491 nm)	8.4430	ppm	0.0640	0.76	8172.0000	8.4430 (ppm)
Li (670.783 nm)	0.0231	ppm	0.0019	8.17	937.8000	0.0231 (ppm)
Mg (279.078 nm)	40.0600	ppm	0.2299	0.57	93580.0000	40.0600 (ppm)
Mn (259.372 nm)	0.4788	ppm	0.0018	0.38	49090.0000	0.4788 (ppm)
Mo (204.598 nm)	0.0134	ppm	0.0023	17.38	46.4500	0.0134 (ppm)
Na (589.592 nm)	0.6837	ppm	0.0040	0.58	5352.0000	0.6837 (ppm)
Ni (231.604 nm)	0.0568	ppm	0.0011	1.96	200.7000	0.0568 (ppm)
P (213.618 nm)	4.0170	ppm	0.1092	2.72	2717.0000	4.0170 (ppm)
Pb (220.353 nm)	0.0028	ppm	0.0015	53.02	39.0300	0.0028 (ppm)
Sb (206.834 nm)	0.0092	ppm	0.0026	28.55	2.7020	0.0092 (ppm)
Se (196.026 nm)	0.0089	ppm	0.0072	80.87	-4.1410	0.0089 (ppm)
Si (251.611 nm)	1.3290	ppm	0.0137	1.03	2689.0000	1.3290 (ppm)
Sn (189.925 nm)	-0.0010 u	ppm	0.0012	> 100.00	-1.9770	-0.0010 u (ppm)
Sr (421.552 nm)	0.4636	ppm	0.0005	0.11	153900.0000	0.4636 (ppm)
Ti (336.122 nm)	3.0030	ppm	0.0119	0.40	284300.0000	3.0030 (ppm)
Tl (190.794 nm)	0.0116	ppm	0.0085	73.28	-12.7000	0.0116 (ppm)
V (292.401 nm)	0.1243	ppm	0.0004	0.35	3518.0000	0.1243 (ppm)
W (207.912 nm)	-0.0020 u	ppm	0.0043	> 100.00	-7.8460	-0.0020 u (ppm)
Zn (202.548 nm)	0.0739	ppm	0.0002	0.22	1423.0000	0.0739 (ppm)
Zr (343.823 nm)	0.0369	ppm	0.0004	1.09	1111.0000	0.0369 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9284	321300.0000	0.0011	0.12
Y_R 371.029	0.9366	45510.0000	0.0048	0.51

Sample Name: 440-255674-B-21-B@5

Date: 12/10/2019 1:34:21 PM Rack:Tube: 2:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0024 u	ppm	0.0005	23.04	-165.1000	-0.0024 u (ppm)
Al (396.152 nm)	54.9700	ppm	0.0308	0.06	1362000.0000	54.9700 (ppm)
As (188.980 nm)	0.0499	ppm	0.0006	1.18	23.3400	0.0499 (ppm)
B (249.678 nm)	0.0197	ppm	0.0000	0.04	65.8300	0.0197 (ppm)
Ba (233.527 nm)	0.3008	ppm	0.0004	0.12	22780.0000	0.3008 (ppm)
Be (234.861 nm)	0.0014	ppm	0.0002	14.07	1608.0000	0.0014 (ppm)
Ca (422.673 nm)	22.2100	ppm	0.0754	0.34	83530.0000	22.2100 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	10.5800	0.0000 u (ppm)
Co (228.615 nm)	0.0289	ppm	0.0008	2.76	359.3000	0.0289 (ppm)
Cr (205.560 nm)	0.0395	ppm	0.0011	2.86	158.4000	0.0395 (ppm)
Cu (324.754 nm)	13.2300	ppm	0.0295	0.22	468300.0000	13.2300 (ppm)
Fe (238.204 nm)	104.5000	ppm	0.2942	0.28	258800.0000	104.5000 (ppm)
K (766.491 nm)	8.4790	ppm	0.0626	0.74	8205.0000	8.4790 (ppm)
Li (670.783 nm)	0.0392	ppm	0.0013	3.28	1161.0000	0.0392 (ppm)
Mg (279.078 nm)	41.3500	ppm	0.0742	0.18	96560.0000	41.3500 (ppm)
Mn (259.372 nm)	0.4550	ppm	0.0003	0.06	49460.0000	0.4550 (ppm)
Mo (204.598 nm)	0.0323	ppm	0.0009	2.89	110.8000	0.0323 (ppm)
Na (589.592 nm)	1.6470	ppm	0.0021	0.13	10810.0000	1.6470 (ppm)
Ni (231.604 nm)	0.0542	ppm	0.0017	3.08	189.1000	0.0542 (ppm)
P (213.618 nm)	2.6570	ppm	0.0863	3.25	1532.0000	2.6570 (ppm)
Pb (220.353 nm)	0.0070	ppm	0.0024	34.16	60.4100	0.0070 (ppm)
Sb (206.834 nm)	0.0224	ppm	0.0007	3.09	12.2500	0.0224 (ppm)
Se (196.026 nm)	0.0261	ppm	0.0090	34.61	2.9620	0.0261 (ppm)
Si (251.611 nm)	1.2930	ppm	0.0003	0.02	2608.0000	1.2930 (ppm)
Sn (189.925 nm)	0.0011	ppm	0.0015	> 100.00	-0.7408	0.0011 (ppm)
Sr (421.552 nm)	0.2752	ppm	0.0008	0.28	91310.0000	0.2752 (ppm)
Ti (336.122 nm)	1.6990	ppm	0.0015	0.09	160900.0000	1.6990 (ppm)
Tl (190.794 nm)	0.0116	ppm	0.0048	41.56	1.0020	0.0116 (ppm)
V (292.401 nm)	0.1467	ppm	0.0002	0.11	4057.0000	0.1467 (ppm)
W (207.912 nm)	-0.0033 u	ppm	0.0002	4.89	-8.6490	-0.0033 u (ppm)
Zn (202.548 nm)	0.1331	ppm	0.0015	1.09	3028.0000	0.1331 (ppm)
Zr (343.823 nm)	0.0425	ppm	0.0001	0.34	1056.0000	0.0425 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9324	322700.0000	0.0012	0.13
Y_R 371.029	0.9379	45570.0000	0.0007	0.07

Sample Name: 440-255674-B-22-B@5

Date: 12/10/2019 1:36:11 PM Rack:Tube: 2:9

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0019 u	ppm	0.0007	34.61	-145.3000	-0.0019 u (ppm)
Al (396.152 nm)	47.1500	ppm	0.1941	0.41	1168000.0000	47.1500 (ppm)
As (188.980 nm)	0.0562	ppm	0.0058	10.25	26.3000	0.0562 (ppm)
B (249.678 nm)	0.0077	ppm	0.0003	3.75	-59.0800	0.0077 (ppm)
Ba (233.527 nm)	0.3287	ppm	0.0002	0.05	24880.0000	0.3287 (ppm)
Be (234.861 nm)	0.0013	ppm	0.0002	14.99	1695.0000	0.0013 (ppm)
Ca (422.673 nm)	18.5500	ppm	0.0473	0.26	69780.0000	18.5500 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0000	28.64	13.4600	0.0001 (ppm)
Co (228.615 nm)	0.0247	ppm	0.0014	5.68	308.0000	0.0247 (ppm)
Cr (205.560 nm)	0.0353	ppm	0.0012	3.39	141.7000	0.0353 (ppm)
Cu (324.754 nm)	9.6350	ppm	0.0128	0.13	341000.0000	9.6350 (ppm)
Fe (238.204 nm)	111.7000	ppm	0.3028	0.27	276700.0000	111.7000 (ppm)
K (766.491 nm)	8.1280	ppm	0.0736	0.91	7863.0000	8.1280 (ppm)
Li (670.783 nm)	0.0317	ppm	0.0034	10.77	877.9000	0.0317 (ppm)
Mg (279.078 nm)	35.3700	ppm	0.0698	0.20	82600.0000	35.3700 (ppm)
Mn (259.372 nm)	0.3613	ppm	0.0010	0.28	42350.0000	0.3613 (ppm)
Mo (204.598 nm)	0.0305	ppm	0.0005	1.75	104.2000	0.0305 (ppm)
Na (589.592 nm)	0.3366	ppm	0.0027	0.81	3698.0000	0.3366 (ppm)
Ni (231.604 nm)	0.0448	ppm	0.0000	0.11	152.7000	0.0448 (ppm)
P (213.618 nm)	2.2120	ppm	0.0318	1.44	1313.0000	2.2120 (ppm)
Pb (220.353 nm)	0.0096	ppm	0.0017	17.58	69.6700	0.0096 (ppm)
Sb (206.834 nm)	0.0118	ppm	0.0035	29.66	3.4070	0.0118 (ppm)
Se (196.026 nm)	0.0229	ppm	0.0012	5.26	0.8186	0.0229 (ppm)
Si (251.611 nm)	1.0860	ppm	0.0009	0.08	2192.0000	1.0860 (ppm)
Sn (189.925 nm)	0.0000 u	ppm	0.0003	> 100.00	-1.3430	0.0000 u (ppm)
Sr (421.552 nm)	0.3698	ppm	0.0009	0.24	122600.0000	0.3698 (ppm)
Ti (336.122 nm)	1.5170	ppm	0.0049	0.32	143600.0000	1.5170 (ppm)
Tl (190.794 nm)	0.0062	ppm	0.0024	38.29	-1.4690	0.0062 (ppm)
V (292.401 nm)	0.1335	ppm	0.0001	0.09	3693.0000	0.1335 (ppm)
W (207.912 nm)	0.0049	ppm	0.0026	53.11	2.8280	0.0049 (ppm)
Zn (202.548 nm)	0.1219	ppm	0.0003	0.23	2519.0000	0.1219 (ppm)
Zr (343.823 nm)	0.0421	ppm	0.0001	0.35	863.2000	0.0421 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9268	320800.0000	0.0045	0.49
Y_R 371.029	0.9341	45380.0000	0.0002	0.03

Sample Name: CCV 5993196

Date: 12/10/2019 1:41:20 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4982	ppm	0.0025	0.50	18230.0000	0.4982 (ppm)
Al (396.152 nm)	0.9979	ppm	0.0058	0.58	25300.0000	0.9979 (ppm)
As (188.980 nm)	1.0040	ppm	0.0032	0.32	529.3000	1.0040 (ppm)
B (249.678 nm)	0.9901	ppm	0.0065	0.66	9561.0000	0.9901 (ppm)
Ba (233.527 nm)	0.9976	ppm	0.0043	0.43	75370.0000	0.9976 (ppm)
Be (234.861 nm)	0.9950	ppm	0.0051	0.51	147800.0000	0.9950 (ppm)
Ca (422.673 nm)	4.9980	ppm	0.0132	0.26	18890.0000	4.9980 (ppm)
Cd (214.439 nm)	1.0110	ppm	0.0060	0.60	18880.0000	1.0110 (ppm)
Co (228.615 nm)	1.0130	ppm	0.0059	0.58	11410.0000	1.0130 (ppm)
Cr (205.560 nm)	1.0080	ppm	0.0079	0.78	3891.0000	1.0080 (ppm)
Cu (324.754 nm)	1.0010	ppm	0.0077	0.77	35480.0000	1.0010 (ppm)
Fe (238.204 nm)	1.0300	ppm	0.0052	0.50	2501.0000	1.0300 (ppm)
K (766.491 nm)	9.9900	ppm	0.0284	0.28	9647.0000	9.9900 (ppm)
Li (670.783 nm)	0.9869	ppm	0.0014	0.14	54380.0000	0.9869 (ppm)
Mg (279.078 nm)	5.0280	ppm	0.0197	0.39	11760.0000	5.0280 (ppm)
Mn (259.372 nm)	1.0030	ppm	0.0044	0.44	84750.0000	1.0030 (ppm)
Mo (204.598 nm)	1.0130	ppm	0.0040	0.40	3402.0000	1.0130 (ppm)
Na (589.592 nm)	9.8710	ppm	0.0177	0.18	54910.0000	9.8710 (ppm)
Ni (231.604 nm)	1.0070	ppm	0.0051	0.50	3905.0000	1.0070 (ppm)
P (213.618 nm)	0.9920	ppm	0.0066	0.67	660.8000	0.9920 (ppm)
Pb (220.353 nm)	1.0040	ppm	0.0043	0.43	1742.0000	1.0040 (ppm)
Sb (206.834 nm)	0.9926	ppm	0.0202	2.03	773.3000	0.9926 (ppm)
Se (196.026 nm)	0.9854	ppm	0.0016	0.16	556.4000	0.9854 (ppm)
Si (251.611 nm)	4.9500	ppm	0.0519	1.05	10040.0000	4.9500 (ppm)
Sn (189.925 nm)	1.0050	ppm	0.0031	0.31	495.7000	1.0050 (ppm)
Sr (421.552 nm)	0.9910	ppm	0.0017	0.17	328000.0000	0.9910 (ppm)
Ti (336.122 nm)	1.0120	ppm	0.0109	1.07	95760.0000	1.0120 (ppm)
Tl (190.794 nm)	1.0140	ppm	0.0090	0.89	896.8000	1.0140 (ppm)
V (292.401 nm)	1.0060	ppm	0.0067	0.66	26720.0000	1.0060 (ppm)
W (207.912 nm)	0.9985	ppm	0.0013	0.13	1438.0000	0.9985 (ppm)
Zn (202.548 nm)	1.0110	ppm	0.0054	0.54	13130.0000	1.0110 (ppm)
Zr (343.823 nm)	0.9724	ppm	0.0105	1.08	73760.0000	0.9724 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9276	321100.0000	0.0038	0.41
Y_R 371.029	0.9336	45360.0000	0.0042	0.45

Sample Name: CCB 5993195

Date: 12/10/2019 1:45:15 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0007 u	ppm	0.0000	7.20	-93.8600	-0.0007 u (ppm)
Al (396.152 nm)	0.0020	ppm	0.0003	17.10	-275.1000	0.0020 (ppm)
As (188.980 nm)	0.0027 u	ppm	0.0080	> 100.00	3.0250	0.0027 u (ppm)
B (249.678 nm)	0.0012	ppm	0.0012	98.64	-2.6450	0.0012 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0002	> 100.00	54.6400	0.0002 (ppm)
Be (234.861 nm)	0.0004	ppm	0.0001	18.42	84.7000	0.0004 (ppm)
Ca (422.673 nm)	-0.0039 u	ppm	0.0211	> 100.00	104.5000	-0.0039 u (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	-3.0400	0.0000 u (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0001	> 100.00	-11.9000	0.0001 u (ppm)
Cr (205.560 nm)	-0.0007 u	ppm	0.0003	38.08	-0.7934	-0.0007 u (ppm)
Cu (324.754 nm)	-0.0001 u	ppm	0.0002	> 100.00	37.8000	-0.0001 u (ppm)
Fe (238.204 nm)	0.0074	ppm	0.0019	25.30	-31.7200	0.0074 (ppm)
K (766.491 nm)	0.0287 u	ppm	0.0602	> 100.00	-50.3200	0.0287 u (ppm)
Li (670.783 nm)	0.0023	ppm	0.0014	60.86	179.2000	0.0023 (ppm)
Mg (279.078 nm)	0.0086	ppm	0.0027	30.93	30.9600	0.0086 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0001	24.24	88.0400	0.0005 (ppm)
Mo (204.598 nm)	0.0028	ppm	0.0013	45.97	5.4420	0.0028 (ppm)
Na (589.592 nm)	-0.0375 u	ppm	0.0191	50.90	708.4000	-0.0375 u (ppm)
Ni (231.604 nm)	0.0022	ppm	0.0009	38.97	-7.0370	0.0022 (ppm)
P (213.618 nm)	0.0025 u	ppm	0.0061	> 100.00	2.0540	0.0025 u (ppm)
Pb (220.353 nm)	-0.0022 u	ppm	0.0001	6.57	-15.1500	-0.0022 u (ppm)
Sb (206.834 nm)	0.0012 u	ppm	0.0044	> 100.00	-2.4230	0.0012 u (ppm)
Se (196.026 nm)	0.0053	ppm	0.0042	79.00	2.2630	0.0053 (ppm)
Si (251.611 nm)	0.0043	ppm	0.0018	42.60	19.4200	0.0043 (ppm)
Sn (189.925 nm)	0.0022	ppm	0.0020	88.27	-0.3524	0.0022 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0001	64.11	20.8800	0.0001 (ppm)
Ti (336.122 nm)	0.0012	ppm	0.0002	13.29	-23.1100	0.0012 (ppm)
Tl (190.794 nm)	0.0065	ppm	0.0005	7.86	10.4200	0.0065 (ppm)
V (292.401 nm)	0.0001 u	ppm	0.0005	> 100.00	87.9500	0.0001 u (ppm)
W (207.912 nm)	0.0018	ppm	0.0006	33.22	-1.6860	0.0018 (ppm)
Zn (202.548 nm)	0.0041	ppm	0.0001	1.49	65.6700	0.0041 (ppm)
Zr (343.823 nm)	0.0003	ppm	0.0001	38.53	124.2000	0.0003 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9249	320100.0000	0.0068	0.74
Y_R 371.029	0.9168	44540.0000	0.0072	0.78

Sample Name: CRI 5993204

Date: 12/10/2019 1:47:03 PM Rack:Tube: S1:10

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0111	ppm	0.0002	1.70	347.7000	0.0111 (ppm)
Al (396.152 nm)	0.1899	ppm	0.0005	0.24	4436.0000	0.1899 (ppm)
As (188.980 nm)	0.0202	ppm	0.0059	29.08	12.3600	0.0202 (ppm)
B (249.678 nm)	0.1020	ppm	0.0033	3.21	963.2000	0.1020 (ppm)
Ba (233.527 nm)	0.0202	ppm	0.0004	1.95	1566.0000	0.0202 (ppm)
Be (234.861 nm)	0.0041	ppm	0.0000	0.77	633.4000	0.0041 (ppm)
Ca (422.673 nm)	0.1924	ppm	0.0109	5.69	841.4000	0.1924 (ppm)
Cd (214.439 nm)	0.0104	ppm	0.0001	1.09	190.7000	0.0104 (ppm)
Co (228.615 nm)	0.0205	ppm	0.0012	6.09	217.9000	0.0205 (ppm)
Cr (205.560 nm)	0.0098	ppm	0.0001	1.49	39.8500	0.0098 (ppm)
Cu (324.754 nm)	0.0192	ppm	0.0001	0.71	722.9000	0.0192 (ppm)
Fe (238.204 nm)	0.2058	ppm	0.0042	2.04	459.8000	0.2058 (ppm)
K (766.491 nm)	0.9669	ppm	0.1296	13.41	862.9000	0.9669 (ppm)
Li (670.783 nm)	0.0926	ppm	0.0007	0.80	5158.0000	0.0926 (ppm)
Mg (279.078 nm)	0.0446	ppm	0.0005	1.08	114.7000	0.0446 (ppm)
Mn (259.372 nm)	0.0382	ppm	0.0002	0.43	3292.0000	0.0382 (ppm)
Mo (204.598 nm)	0.0427	ppm	0.0014	3.37	139.6000	0.0427 (ppm)
Na (589.592 nm)	0.9501	ppm	0.0194	2.04	6112.0000	0.9501 (ppm)
Ni (231.604 nm)	0.0206	ppm	0.0013	6.50	64.5900	0.0206 (ppm)
P (213.618 nm)	0.4135	ppm	0.0040	0.98	291.7000	0.4135 (ppm)
Pb (220.353 nm)	0.0108	ppm	0.0016	15.13	7.5310	0.0108 (ppm)
Sb (206.834 nm)	0.0127	ppm	0.0028	22.13	6.1560	0.0127 (ppm)
Se (196.026 nm)	0.0266	ppm	0.0008	3.09	15.1400	0.0266 (ppm)
Si (251.611 nm)	0.4023	ppm	0.0014	0.34	834.8000	0.4023 (ppm)
Sn (189.925 nm)	0.2008	ppm	0.0023	1.13	97.8800	0.2008 (ppm)
Sr (421.552 nm)	0.0398	ppm	0.0002	0.42	13170.0000	0.0398 (ppm)
Ti (336.122 nm)	0.0110	ppm	0.0004	3.44	910.1000	0.0110 (ppm)
Tl (190.794 nm)	0.0241	ppm	0.0026	10.96	25.9300	0.0241 (ppm)
V (292.401 nm)	0.0208	ppm	0.0005	2.45	634.5000	0.0208 (ppm)
W (207.912 nm)	0.1866	ppm	0.0033	1.75	263.4000	0.1866 (ppm)
Zn (202.548 nm)	0.0431	ppm	0.0007	1.67	571.4000	0.0431 (ppm)
Zr (343.823 nm)	0.1097	ppm	0.0010	0.95	8415.0000	0.1097 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9247	320100.0000	0.0041	0.44
Y_R 371.029	0.9251	44940.0000	0.0056	0.61

Sample Name: ICSA 5993200

Date: 12/10/2019 1:48:53 PM Rack:Tube: S1:6

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0070 u	ppm	0.0006	8.02	-367.0000	-0.0070 u (ppm)
Al (396.152 nm)	652.6000 o	ppm	3.7050	0.57	16170000.0000	652.6000 o (ppm)
As (188.980 nm)	-0.0113 u	ppm	0.0044	38.66	-29.7300	-0.0113 u (ppm)
B (249.678 nm)	0.0035 u	ppm	0.0106	> 100.00	-560.3000	0.0035 u (ppm)
Ba (233.527 nm)	0.0023	ppm	0.0002	7.76	347.6000	0.0023 (ppm)
Be (234.861 nm)	0.0021	ppm	0.0009	44.83	7866.0000	0.0021 (ppm)
Ca (422.673 nm)	617.1000 o	ppm	8.1670	1.32	2318000.0000	617.1000 o (ppm)
Cd (214.439 nm)	0.0015	ppm	0.0008	52.98	97.9600	0.0015 (ppm)
Co (228.615 nm)	-0.0003 u	ppm	0.0024	> 100.00	54.6900	-0.0003 u (ppm)
Cr (205.560 nm)	-0.0060 u	ppm	0.0009	15.67	-2.9670	-0.0060 u (ppm)
Cu (324.754 nm)	0.0038	ppm	0.0004	9.56	26.3300	0.0038 (ppm)
Fe (238.204 nm)	572.0000 o	ppm	2.1830	0.38	1417000.0000	572.0000 o (ppm)
K (766.491 nm)	-0.4953 u	ppm	0.0884	17.84	-185.8000	-0.4953 u (ppm)
Li (670.783 nm)	-0.0208 u	ppm	0.0006	2.69	190.9000	-0.0208 u (ppm)
Mg (279.078 nm)	587.0000 o	ppm	0.2219	0.04	1371000.0000	587.0000 o (ppm)
Mn (259.372 nm)	-0.0038 u	ppm	0.0043	> 100.00	62080.0000	-0.0038 u (ppm)
Mo (204.598 nm)	-0.0011 u	ppm	0.0018	> 100.00	52.1600	-0.0011 u (ppm)
Na (589.592 nm)	-0.5961 u	ppm	0.0053	0.89	2572.0000	-0.5961 u (ppm)
Ni (231.604 nm)	0.0051	ppm	0.0007	14.37	-29.4400	0.0051 (ppm)
P (213.618 nm)	-0.0168 u	ppm	0.0394	> 100.00	6.6390	-0.0168 u (ppm)
Pb (220.353 nm)	0.0055 u	ppm	0.0093	> 100.00	312.2000	0.0055 u (ppm)
Sb (206.834 nm)	0.0267 K	ppm	0.0187	69.81	4.7870 K	0.0267 K (ppm)
Se (196.026 nm)	-0.0085 u	ppm	0.0025	29.38	-64.1900	-0.0085 u (ppm)
Si (251.611 nm)	-0.0514 u	ppm	0.0054	10.43	-38.9300	-0.0514 u (ppm)
Sn (189.925 nm)	-0.0169 u	ppm	0.0086	50.72	-8.6130	-0.0169 u (ppm)
Sr (421.552 nm)	-0.0070 u	ppm	0.0001	1.59	3927.0000	-0.0070 u (ppm)
Ti (336.122 nm)	-0.0005 u	ppm	0.0003	50.28	-649.7000	-0.0005 u (ppm)
Tl (190.794 nm)	0.0128	ppm	0.0018	13.66	45.9300	0.0128 (ppm)
V (292.401 nm)	0.0012	ppm	0.0005	37.26	777.4000	0.0012 (ppm)
W (207.912 nm)	-0.0048 u	ppm	0.0036	76.37	-29.2800	-0.0048 u (ppm)
Zn (202.548 nm)	0.0037	ppm	0.0006	15.49	-87.6300	0.0037 (ppm)
Zr (343.823 nm)	0.1749	ppm	0.0003	0.15	1062.0000	0.1749 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8183	283300.0000	0.0031	0.38
Y_R 371.029	0.8662	42080.0000	0.0005	0.05

Sample Name: ICSAB 5993202

Date: 12/10/2019 1:50:41 PM Rack:Tube: S1:7

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2639	ppm	0.0023	0.88	9559.0000	0.2639 (ppm)
Al (396.152 nm)	653.2000 o	ppm	6.3810	0.98	16190000.0000	653.2000 o (ppm)
As (188.980 nm)	0.4792	ppm	0.0021	0.43	228.1000	0.4792 (ppm)
B (249.678 nm)	0.5161	ppm	0.0021	0.40	4401.0000	0.5161 (ppm)
Ba (233.527 nm)	0.4683	ppm	0.0004	0.09	35530.0000	0.4683 (ppm)
Be (234.861 nm)	0.5181	ppm	0.0059	1.14	84530.0000	0.5181 (ppm)
Ca (422.673 nm)	613.3000 o	ppm	3.8030	0.62	2304000.0000	613.3000 o (ppm)
Cd (214.439 nm)	0.4535	ppm	0.0046	1.02	8546.0000	0.4535 (ppm)
Co (228.615 nm)	0.4540	ppm	0.0027	0.59	5178.0000	0.4540 (ppm)
Cr (205.560 nm)	0.4896	ppm	0.0051	1.04	1909.0000	0.4896 (ppm)
Cu (324.754 nm)	0.5614	ppm	0.0046	0.82	19770.0000	0.5614 (ppm)
Fe (238.204 nm)	573.2000 o	ppm	0.3977	0.07	1420000.0000	573.2000 o (ppm)
K (766.491 nm)	4.8650	ppm	0.0660	1.36	5031.0000	4.8650 (ppm)
Li (670.783 nm)	0.5028	ppm	0.0016	0.31	29010.0000	0.5028 (ppm)
Mg (279.078 nm)	584.1000 o	ppm	0.0986	0.02	1364000.0000	584.1000 o (ppm)
Mn (259.372 nm)	0.4767	ppm	0.0111	2.33	102700.0000	0.4767 (ppm)
Mo (204.598 nm)	0.4963	ppm	0.0078	1.56	1725.0000	0.4963 (ppm)
Na (589.592 nm)	4.5620	ppm	0.0073	0.16	30790.0000	4.5620 (ppm)
Ni (231.604 nm)	0.4524	ppm	0.0041	0.91	1712.0000	0.4524 (ppm)
P (213.618 nm)	0.4786	ppm	0.0211	4.41	335.3000	0.4786 (ppm)
Pb (220.353 nm)	0.4609	ppm	0.0054	1.17	1108.0000	0.4609 (ppm)
Sb (206.834 nm)	0.5263	ppm	0.0114	2.16	395.7000	0.5263 (ppm)
Se (196.026 nm)	0.4552	ppm	0.0148	3.25	197.8000	0.4552 (ppm)
Si (251.611 nm)	2.6030	ppm	0.0011	0.04	5321.0000	2.6030 (ppm)
Sn (189.925 nm)	0.4512	ppm	0.0149	3.31	222.9000	0.4512 (ppm)
Sr (421.552 nm)	0.4939	ppm	0.0008	0.16	169700.0000	0.4939 (ppm)
Ti (336.122 nm)	0.5216	ppm	0.0046	0.87	48810.0000	0.5216 (ppm)
Tl (190.794 nm)	0.4462	ppm	0.0193	4.32	425.3000	0.4462 (ppm)
V (292.401 nm)	0.5090	ppm	0.0052	1.03	14220.0000	0.5090 (ppm)
W (207.912 nm)	0.4333	ppm	0.0040	0.93	603.3000	0.4333 (ppm)
Zn (202.548 nm)	0.4301	ppm	0.0041	0.96	5458.0000	0.4301 (ppm)
Zr (343.823 nm)	0.4649	ppm	0.0067	1.43	23000.0000	0.4649 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8248	285500.0000	0.0057	0.69
Y_R 371.029	0.8766	42590.0000	0.0025	0.29

Sample Name: xRINSE 5993206

Date: 12/10/2019 1:52:31 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0003	> 100.00	-72.3600	-0.0001 u (ppm)
Al (396.152 nm)	0.2125 Z	ppm	0.1124	52.91	4946.0000 Z	0.2125 Z (ppm)
As (188.980 nm)	0.0066	ppm	0.0055	83.38	5.1020	0.0066 (ppm)
B (249.678 nm)	0.0013	ppm	0.0006	41.54	-2.2270	0.0013 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0000	9.62	54.4300	0.0002 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0001	47.04	53.3800	0.0002 (ppm)
Ca (422.673 nm)	0.0851	ppm	0.0036	4.17	438.5000	0.0851 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0002	46.31	3.0570	0.0003 (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0015	> 100.00	-14.1000	-0.0001 u (ppm)
Cr (205.560 nm)	0.0003 u	ppm	0.0007	> 100.00	3.0130	0.0003 u (ppm)
Cu (324.754 nm)	-0.0004 u	ppm	0.0006	> 100.00	29.6400	-0.0004 u (ppm)
Fe (238.204 nm)	0.1742 Z	ppm	0.0069	3.98	381.5000 Z	0.1742 Z (ppm)
K (766.491 nm)	-0.0143 u	ppm	0.0643	> 100.00	-91.9800	-0.0143 u (ppm)
Li (670.783 nm)	0.0039	ppm	0.0007	17.67	272.6000	0.0039 (ppm)
Mg (279.078 nm)	0.2308 Z	ppm	0.1210	52.44	550.0000 Z	0.2308 Z (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0001	21.29	108.1000	0.0005 (ppm)
Mo (204.598 nm)	0.0090	ppm	0.0004	4.98	26.2600	0.0090 (ppm)
Na (589.592 nm)	-0.0082 u	ppm	0.0189	> 100.00	870.2000	-0.0082 u (ppm)
Ni (231.604 nm)	0.0001 u	ppm	0.0004	> 100.00	-15.0500	0.0001 u (ppm)
P (213.618 nm)	-0.0005 u	ppm	0.0078	> 100.00	-0.1841	-0.0005 u (ppm)
Pb (220.353 nm)	-0.0028 u	ppm	0.0013	46.67	-16.0700	-0.0028 u (ppm)
Sb (206.834 nm)	0.0055	ppm	0.0010	18.57	0.9008	0.0055 (ppm)
Se (196.026 nm)	0.0033	ppm	0.0034	> 100.00	1.1760	0.0033 (ppm)
Si (251.611 nm)	0.0001 u	ppm	0.0005	> 100.00	12.1100	0.0001 u (ppm)
Sn (189.925 nm)	0.0033 u	ppm	0.0051	> 100.00	0.1668	0.0033 u (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0001	> 100.00	0.2778	0.0001 (ppm)
Ti (336.122 nm)	0.0004	ppm	0.0001	22.87	-91.4100	0.0004 (ppm)
Tl (190.794 nm)	0.0065	ppm	0.0007	10.20	10.4200	0.0065 (ppm)
V (292.401 nm)	0.0008	ppm	0.0003	37.17	105.8000	0.0008 (ppm)
W (207.912 nm)	0.0111	ppm	0.0019	16.77	11.5100	0.0111 (ppm)
Zn (202.548 nm)	0.0007	ppm	0.0002	23.34	21.3000	0.0007 (ppm)
Zr (343.823 nm)	0.0012	ppm	0.0000	2.51	190.1000	0.0012 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9263	320600.0000	0.0035	0.38
Y_R 371.029	0.9207	44730.0000	0.0020	0.22

Sample Name: MB 440-584786/1-A@5

Date: 12/10/2019 1:54:19 PM Rack:Tube: 2:10

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	43.88	-79.5600	-0.0003 u (ppm)
Al (396.152 nm)	0.0427	ppm	0.0033	7.72	736.7000	0.0427 (ppm)
As (188.980 nm)	0.0032	ppm	0.0006	17.96	3.2920	0.0032 (ppm)
B (249.678 nm)	0.0016	ppm	0.0004	22.29	1.6210	0.0016 (ppm)
Ba (233.527 nm)	0.0003	ppm	0.0001	21.80	63.0200	0.0003 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0000	27.02	14.8100	-0.0001 u (ppm)
Ca (422.673 nm)	0.0274	ppm	0.0038	13.90	221.7000	0.0274 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0001	38.29	-6.3430	-0.0002 u (ppm)
Co (228.615 nm)	0.0009	ppm	0.0000	3.37	-2.2950	0.0009 (ppm)
Cr (205.560 nm)	-0.0003 u	ppm	0.0001	52.14	0.7802	-0.0003 u (ppm)
Cu (324.754 nm)	0.0016	ppm	0.0000	1.55	97.5900	0.0016 (ppm)
Fe (238.204 nm)	0.0996	ppm	0.0028	2.82	196.6000	0.0996 (ppm)
K (766.491 nm)	-0.0304 u	ppm	0.0059	19.47	-107.7000	-0.0304 u (ppm)
Li (670.783 nm)	0.0032	ppm	0.0010	30.56	228.1000	0.0032 (ppm)
Mg (279.078 nm)	0.0311	ppm	0.0025	7.93	83.4100	0.0311 (ppm)
Mn (259.372 nm)	0.0018	ppm	0.0001	5.51	208.5000	0.0018 (ppm)
Mo (204.598 nm)	0.0035	ppm	0.0007	19.91	7.7750	0.0035 (ppm)
Na (589.592 nm)	0.0263	ppm	0.0066	25.28	1058.0000	0.0263 (ppm)
Ni (231.604 nm)	0.0015	ppm	0.0012	75.30	-9.5650	0.0015 (ppm)
P (213.618 nm)	0.0057	ppm	0.0055	95.94	4.2590	0.0057 (ppm)
Pb (220.353 nm)	-0.0025 u	ppm	0.0021	82.89	-15.7400	-0.0025 u (ppm)
Sb (206.834 nm)	0.0038	ppm	0.0010	25.96	-0.3284	0.0038 (ppm)
Se (196.026 nm)	0.0056	ppm	0.0050	89.03	2.4560	0.0056 (ppm)
Si (251.611 nm)	0.0508	ppm	0.0041	8.02	112.5000	0.0508 (ppm)
Sn (189.925 nm)	0.0093	ppm	0.0070	75.11	3.1700	0.0093 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0001	> 100.00	10.1300	0.0001 (ppm)
Ti (336.122 nm)	0.0030	ppm	0.0001	3.39	148.3000	0.0030 (ppm)
Tl (190.794 nm)	0.0052	ppm	0.0007	14.22	9.1610	0.0052 (ppm)
V (292.401 nm)	0.0002 u	ppm	0.0003	> 100.00	92.0200	0.0002 u (ppm)
W (207.912 nm)	0.0026 u	ppm	0.0046	> 100.00	-0.5167	0.0026 u (ppm)
Zn (202.548 nm)	0.0020	ppm	0.0002	9.98	38.4400	0.0020 (ppm)
Zr (343.823 nm)	0.0153	ppm	0.0011	7.12	1265.0000	0.0153 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9237	319700.0000	0.0011	0.12
Y_R 371.029	0.9181	44600.0000	0.0010	0.11

Sample Name: LCS 440-584786/2-A@5

Date: 12/10/2019 1:56:08 PM Rack:Tube: 2:11

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1816	ppm	0.0007	0.37	6606.0000	0.1816 (ppm)
Al (396.152 nm)	0.3682	ppm	0.0003	0.09	9161.0000	0.3682 (ppm)
As (188.980 nm)	0.3657	ppm	0.0027	0.74	193.8000	0.3657 (ppm)
B (249.678 nm)	0.3570	ppm	0.0036	1.01	3437.0000	0.3570 (ppm)
Ba (233.527 nm)	0.3715	ppm	0.0010	0.27	28090.0000	0.3715 (ppm)
Be (234.861 nm)	0.3546	ppm	0.0031	0.88	52690.0000	0.3546 (ppm)
Ca (422.673 nm)	1.8440	ppm	0.0035	0.19	7045.0000	1.8440 (ppm)
Cd (214.439 nm)	0.3614	ppm	0.0028	0.78	6751.0000	0.3614 (ppm)
Co (228.615 nm)	0.3736	ppm	0.0049	1.30	4199.0000	0.3736 (ppm)
Cr (205.560 nm)	0.3718	ppm	0.0023	0.61	1436.0000	0.3718 (ppm)
Cu (324.754 nm)	0.3720	ppm	0.0020	0.54	13210.0000	0.3720 (ppm)
Fe (238.204 nm)	0.4296	ppm	0.0037	0.86	1014.0000	0.4296 (ppm)
K (766.491 nm)	3.5720	ppm	0.0367	1.03	3400.0000	3.5720 (ppm)
Li (670.783 nm)	0.3584	ppm	0.0017	0.49	19770.0000	0.3584 (ppm)
Mg (279.078 nm)	1.8560	ppm	0.0008	0.04	4347.0000	1.8560 (ppm)
Mn (259.372 nm)	0.3716	ppm	0.0011	0.29	31440.0000	0.3716 (ppm)
Mo (204.598 nm)	0.3960	ppm	0.0024	0.61	1327.0000	0.3960 (ppm)
Na (589.592 nm)	3.6370	ppm	0.0048	0.13	20810.0000	3.6370 (ppm)
Ni (231.604 nm)	0.3708	ppm	0.0003	0.07	1428.0000	0.3708 (ppm)
P (213.618 nm)	0.3691	ppm	0.0016	0.44	245.8000	0.3691 (ppm)
Pb (220.353 nm)	0.3680	ppm	0.0030	0.83	631.4000	0.3680 (ppm)
Sb (206.834 nm)	0.3790	ppm	0.0049	1.28	293.0000	0.3790 (ppm)
Se (196.026 nm)	0.3374	ppm	0.0067	2.00	190.2000	0.3374 (ppm)
Si (251.611 nm)	0.4452	ppm	0.0097	2.17	957.4000	0.4452 (ppm)
Sn (189.925 nm)	0.3710	ppm	0.0050	1.35	182.1000	0.3710 (ppm)
Sr (421.552 nm)	0.3622	ppm	0.0001	0.02	119900.0000	0.3622 (ppm)
Ti (336.122 nm)	0.3719	ppm	0.0017	0.45	35100.0000	0.3719 (ppm)
Tl (190.794 nm)	0.3560	ppm	0.0060	1.68	317.6000	0.3560 (ppm)
V (292.401 nm)	0.3675	ppm	0.0018	0.49	9810.0000	0.3675 (ppm)
W (207.912 nm)	0.3740	ppm	0.0048	1.29	535.7000	0.3740 (ppm)
Zn (202.548 nm)	0.3622	ppm	0.0008	0.22	4715.0000	0.3622 (ppm)
Zr (343.823 nm)	0.4335	ppm	0.0050	1.15	32950.0000	0.4335 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9188	318000.0000	0.0043	0.47
Y_R 371.029	0.9138	44400.0000	0.0033	0.37

Sample Name: 440-256734-A-1-A SD@25

Date: 12/10/2019 1:57:56 PM Rack:Tube: 2:12

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0001	99.02	-74.3500	-0.0001 u (ppm)
Al (396.152 nm)	18.4900	ppm	0.0629	0.34	458000.0000	18.4900 (ppm)
As (188.980 nm)	0.0089	ppm	0.0043	47.95	4.6980	0.0089 (ppm)
B (249.678 nm)	0.0113	ppm	0.0001	1.32	63.1700	0.0113 (ppm)
Ba (233.527 nm)	0.2765	ppm	0.0017	0.62	20930.0000	0.2765 (ppm)
Be (234.861 nm)	0.0011	ppm	0.0001	9.52	578.1000	0.0011 (ppm)
Ca (422.673 nm)	4.9640	ppm	0.0085	0.17	18760.0000	4.9640 (ppm)
Cd (214.439 nm)	0.0015	ppm	0.0003	19.68	30.0400	0.0015 (ppm)
Co (228.615 nm)	0.0148	ppm	0.0012	8.28	179.9000	0.0148 (ppm)
Cr (205.560 nm)	0.0332	ppm	0.0009	2.77	130.8000	0.0332 (ppm)
Cu (324.754 nm)	0.0487	ppm	0.0001	0.17	1784.0000	0.0487 (ppm)
Fe (238.204 nm)	30.0500	ppm	0.0027	0.01	74410.0000	30.0500 (ppm)
K (766.491 nm)	3.9160	ppm	0.0363	0.93	3741.0000	3.9160 (ppm)
Li (670.783 nm)	0.0137	ppm	0.0006	4.42	691.0000	0.0137 (ppm)
Mg (279.078 nm)	4.8190	ppm	0.0261	0.54	11260.0000	4.8190 (ppm)
Mn (259.372 nm)	1.0480	ppm	0.0033	0.31	91190.0000	1.0480 (ppm)
Mo (204.598 nm)	0.0061	ppm	0.0003	4.28	18.6200	0.0061 (ppm)
Na (589.592 nm)	0.2400	ppm	0.0199	8.28	2474.0000	0.2400 (ppm)
Ni (231.604 nm)	0.0229	ppm	0.0011	4.95	72.2400	0.0229 (ppm)
P (213.618 nm)	0.9722	ppm	0.0081	0.83	688.0000	0.9722 (ppm)
Pb (220.353 nm)	0.2640	ppm	0.0056	2.11	466.7000	0.2640 (ppm)
Sb (206.834 nm)	0.0122	ppm	0.0042	34.43	5.9020	0.0122 (ppm)
Se (196.026 nm)	0.0024 u	ppm	0.0039	> 100.00	-2.0210	0.0024 u (ppm)
Si (251.611 nm)	0.2621	ppm	0.0017	0.64	544.4000	0.2621 (ppm)
Sn (189.925 nm)	0.0086	ppm	0.0004	4.97	2.8150	0.0086 (ppm)
Sr (421.552 nm)	0.0626	ppm	0.0003	0.47	20750.0000	0.0626 (ppm)
Ti (336.122 nm)	1.1810	ppm	0.0048	0.40	111700.0000	1.1810 (ppm)
Tl (190.794 nm)	0.0079	ppm	0.0016	20.31	1.5820	0.0079 (ppm)
V (292.401 nm)	0.0593	ppm	0.0000	0.07	1700.0000	0.0593 (ppm)
W (207.912 nm)	0.0037	ppm	0.0044	> 100.00	4.8350	0.0037 (ppm)
Zn (202.548 nm)	0.3647	ppm	0.0005	0.13	4710.0000	0.3647 (ppm)
Zr (343.823 nm)	0.0310	ppm	0.0029	9.25	1795.0000	0.0310 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9313	322400.0000	0.0052	0.55
Y_R 371.029	0.9267	45020.0000	0.0028	0.30

Sample Name: 440-256734-A-1-A@5

Date: 12/10/2019 1:59:47 PM Rack:Tube: 2:13

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0008 u	ppm	0.0001	14.85	-106.1000	-0.0008 u (ppm)
Al (396.152 nm)	97.1500	ppm	0.5780	0.59	2407000.0000	97.1500 (ppm)
As (188.980 nm)	0.0422	ppm	0.0009	2.10	16.0700	0.0422 (ppm)
B (249.678 nm)	0.0349	ppm	0.0002	0.52	164.9000	0.0349 (ppm)
Ba (233.527 nm)	1.3480	ppm	0.0030	0.22	101900.0000	1.3480 (ppm)
Be (234.861 nm)	0.0041	ppm	0.0001	2.55	2596.0000	0.0041 (ppm)
Ca (422.673 nm)	24.9200	ppm	0.1322	0.53	93690.0000	24.9200 (ppm)
Cd (214.439 nm)	0.0061	ppm	0.0002	3.04	132.6000	0.0061 (ppm)
Co (228.615 nm)	0.0735	ppm	0.0006	0.80	948.2000	0.0735 (ppm)
Cr (205.560 nm)	0.1614	ppm	0.0004	0.27	629.2000	0.1614 (ppm)
Cu (324.754 nm)	0.2494	ppm	0.0023	0.92	8956.0000	0.2494 (ppm)
Fe (238.204 nm)	148.8000	ppm	0.5833	0.39	368700.0000	148.8000 (ppm)
K (766.491 nm)	19.6800	ppm	0.1446	0.73	19120.0000	19.6800 (ppm)
Li (670.783 nm)	0.0792	ppm	0.0003	0.40	3868.0000	0.0792 (ppm)
Mg (279.078 nm)	23.5100	ppm	0.0622	0.26	54880.0000	23.5100 (ppm)
Mn (259.372 nm)	5.1610	ppm	0.0301	0.58	449000.0000	5.1610 (ppm)
Mo (204.598 nm)	0.0096	ppm	0.0006	6.61	39.8700	0.0096 (ppm)
Na (589.592 nm)	1.2390	ppm	0.0053	0.43	8921.0000	1.2390 (ppm)
Ni (231.604 nm)	0.1085	ppm	0.0003	0.27	399.7000	0.1085 (ppm)
P (213.618 nm)	4.7900	ppm	0.0462	0.96	3389.0000	4.7900 (ppm)
Pb (220.353 nm)	1.2950	ppm	0.0132	1.02	2334.0000	1.2950 (ppm)
Sb (206.834 nm)	0.0168	ppm	0.0053	31.34	7.9730	0.0168 (ppm)
Se (196.026 nm)	0.0048	ppm	0.0021	44.06	-11.2100	0.0048 (ppm)
Si (251.611 nm)	1.2820	ppm	0.0048	0.37	2619.0000	1.2820 (ppm)
Sn (189.925 nm)	0.0540	ppm	0.0056	10.41	25.1500	0.0540 (ppm)
Sr (421.552 nm)	0.3150	ppm	0.0013	0.40	104500.0000	0.3150 (ppm)
Ti (336.122 nm)	5.9350	ppm	0.0333	0.56	562100.0000	5.9350 (ppm)
Tl (190.794 nm)	0.0187	ppm	0.0014	7.32	-29.6500	0.0187 (ppm)
V (292.401 nm)	0.2953	ppm	0.0020	0.68	8127.0000	0.2953 (ppm)
W (207.912 nm)	0.0026	ppm	0.0010	38.78	17.7100	0.0026 (ppm)
Zn (202.548 nm)	1.7630	ppm	0.0140	0.79	22710.0000	1.7630 (ppm)
Zr (343.823 nm)	0.1004	ppm	0.0082	8.20	4466.0000	0.1004 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9343	323400.0000	0.0048	0.52
Y_R 371.029	0.9475	46030.0000	0.0027	0.29

Sample Name: 440-256734-A-1-B MS@5

Date: 12/10/2019 2:01:35 PM Rack:Tube: 2:14

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1688	ppm	0.0008	0.45	6116.0000	0.1688 (ppm)
Al (396.152 nm)	148.1000	ppm	0.4953	0.33	3671000.0000	148.1000 (ppm)
As (188.980 nm)	0.3614	ppm	0.0008	0.23	183.7000	0.3614 (ppm)
B (249.678 nm)	0.3687	ppm	0.0016	0.44	3381.0000	0.3687 (ppm)
Ba (233.527 nm)	1.7600	ppm	0.0069	0.39	133000.0000	1.7600 (ppm)
Be (234.861 nm)	0.3403	ppm	0.0005	0.14	52580.0000	0.3403 (ppm)
Ca (422.673 nm)	32.0100	ppm	0.0457	0.14	120300.0000	32.0100 (ppm)
Cd (214.439 nm)	0.3388	ppm	0.0008	0.25	6350.0000	0.3388 (ppm)
Co (228.615 nm)	0.4127	ppm	0.0053	1.29	4816.0000	0.4127 (ppm)
Cr (205.560 nm)	0.5161	ppm	0.0023	0.45	1998.0000	0.5161 (ppm)
Cu (324.754 nm)	0.6359	ppm	0.0015	0.23	22650.0000	0.6359 (ppm)
Fe (238.204 nm)	153.2000	ppm	0.4111	0.27	379600.0000	153.2000 (ppm)
K (766.491 nm)	24.6400	ppm	0.0757	0.31	23950.0000	24.6400 (ppm)
Li (670.783 nm)	0.4376	ppm	0.0024	0.55	23740.0000	0.4376 (ppm)
Mg (279.078 nm)	26.3000	ppm	0.1049	0.40	61390.0000	26.3000 (ppm)
Mn (259.372 nm)	5.5760	ppm	0.0078	0.14	484500.0000	5.5760 (ppm)
Mo (204.598 nm)	0.7057	ppm	0.0175	2.48	2385.0000	0.7057 (ppm)
Na (589.592 nm)	4.7070	ppm	0.0090	0.19	27940.0000	4.7070 (ppm)
Ni (231.604 nm)	0.4616	ppm	0.0006	0.13	1775.0000	0.4616 (ppm)
P (213.618 nm)	5.3950	ppm	0.0110	0.20	3796.0000	5.3950 (ppm)
Pb (220.353 nm)	1.8250	ppm	0.0079	0.43	3256.0000	1.8250 (ppm)
Sb (206.834 nm)	0.2120	ppm	0.0083	3.94	155.3000	0.2120 (ppm)
Se (196.026 nm)	0.3171	ppm	0.0092	2.91	165.1000	0.3171 (ppm)
Si (251.611 nm)	1.4480	ppm	0.0075	0.52	3039.0000	1.4480 (ppm)
Sn (189.925 nm)	0.7050	ppm	0.0102	1.45	347.1000	0.7050 (ppm)
Sr (421.552 nm)	0.6989	ppm	0.0008	0.12	231700.0000	0.6989 (ppm)
Ti (336.122 nm)	8.3880	ppm	0.0268	0.32	794500.0000	8.3880 (ppm)
Tl (190.794 nm)	0.3463	ppm	0.0145	4.20	237.0000	0.3463 (ppm)
V (292.401 nm)	0.6548	ppm	0.0025	0.38	17630.0000	0.6548 (ppm)
W (207.912 nm)	0.4034	ppm	0.0042	1.05	598.0000	0.4034 (ppm)
Zn (202.548 nm)	2.3350	ppm	0.0008	0.03	30130.0000	2.3350 (ppm)
Zr (343.823 nm)	0.4630	ppm	0.0040	0.87	31840.0000	0.4630 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9345	323400.0000	0.0001	0.01
Y_R 371.029	0.9494	46120.0000	0.0056	0.59

Sample Name: 440-256734-A-1-C MSD@5

Date: 12/10/2019 2:03:23 PM Rack:Tube: 2:15

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1769	ppm	0.0006	0.36	6399.0000	0.1769 (ppm)
Al (396.152 nm)	133.9000	ppm	0.6163	0.46	3317000.0000	133.9000 (ppm)
As (188.980 nm)	0.3814	ppm	0.0060	1.57	194.5000	0.3814 (ppm)
B (249.678 nm)	0.3837	ppm	0.0012	0.30	3554.0000	0.3837 (ppm)
Ba (233.527 nm)	1.7180	ppm	0.0032	0.19	129800.0000	1.7180 (ppm)
Be (234.861 nm)	0.3565	ppm	0.0012	0.33	54910.0000	0.3565 (ppm)
Ca (422.673 nm)	33.2400	ppm	0.1144	0.34	124900.0000	33.2400 (ppm)
Cd (214.439 nm)	0.3548	ppm	0.0002	0.04	6648.0000	0.3548 (ppm)
Co (228.615 nm)	0.4293	ppm	0.0001	0.01	4980.0000	0.4293 (ppm)
Cr (205.560 nm)	0.5252	ppm	0.0013	0.24	2033.0000	0.5252 (ppm)
Cu (324.754 nm)	0.6546	ppm	0.0027	0.42	23300.0000	0.6546 (ppm)
Fe (238.204 nm)	146.8000	ppm	0.4557	0.31	363700.0000	146.8000 (ppm)
K (766.491 nm)	23.5100	ppm	0.1148	0.49	22850.0000	23.5100 (ppm)
Li (670.783 nm)	0.4493	ppm	0.0004	0.08	24390.0000	0.4493 (ppm)
Mg (279.078 nm)	25.5800	ppm	0.0370	0.14	59720.0000	25.5800 (ppm)
Mn (259.372 nm)	5.4020	ppm	0.0171	0.32	469100.0000	5.4020 (ppm)
Mo (204.598 nm)	0.3977	ppm	0.0031	0.77	1348.0000	0.3977 (ppm)
Na (589.592 nm)	5.0900	ppm	0.0012	0.02	29970.0000	5.0900 (ppm)
Ni (231.604 nm)	0.4719	ppm	0.0005	0.10	1815.0000	0.4719 (ppm)
P (213.618 nm)	5.7010	ppm	0.0333	0.58	4017.0000	5.7010 (ppm)
Pb (220.353 nm)	1.8010	ppm	0.0047	0.26	3214.0000	1.8010 (ppm)
Sb (206.834 nm)	0.1141	ppm	0.0045	3.93	82.5900	0.1141 (ppm)
Se (196.026 nm)	0.3323	ppm	0.0090	2.72	173.3000	0.3323 (ppm)
Si (251.611 nm)	1.4170	ppm	0.0058	0.41	2937.0000	1.4170 (ppm)
Sn (189.925 nm)	0.3975	ppm	0.0013	0.32	195.1000	0.3975 (ppm)
Sr (421.552 nm)	0.7337	ppm	0.0026	0.36	243200.0000	0.7337 (ppm)
Ti (336.122 nm)	7.2490	ppm	0.0219	0.30	686600.0000	7.2490 (ppm)
Tl (190.794 nm)	0.3617	ppm	0.0118	3.26	261.8000	0.3617 (ppm)
V (292.401 nm)	0.6548	ppm	0.0013	0.20	17670.0000	0.6548 (ppm)
W (207.912 nm)	0.2056	ppm	0.0018	0.86	313.9000	0.2056 (ppm)
Zn (202.548 nm)	2.2690	ppm	0.0040	0.18	29280.0000	2.2690 (ppm)
Zr (343.823 nm)	0.2693	ppm	0.0051	1.91	17300.0000	0.2693 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9344	323400.0000	0.0030	0.32
Y_R 371.029	0.9415	45740.0000	0.0011	0.12

Sample Name: CCV 5993196

Date: 12/10/2019 2:05:13 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4970	ppm	0.0017	0.34	18180.0000	0.4970 (ppm)
Al (396.152 nm)	1.0730	ppm	0.0431	4.01	27180.0000	1.0730 (ppm)
As (188.980 nm)	0.9925	ppm	0.0048	0.48	523.4000	0.9925 (ppm)
B (249.678 nm)	0.9851	ppm	0.0033	0.34	9510.0000	0.9851 (ppm)
Ba (233.527 nm)	1.0070	ppm	0.0084	0.83	76060.0000	1.0070 (ppm)
Be (234.861 nm)	0.9869	ppm	0.0018	0.18	146600.0000	0.9869 (ppm)
Ca (422.673 nm)	4.9470	ppm	0.0152	0.31	18700.0000	4.9470 (ppm)
Cd (214.439 nm)	1.0020	ppm	0.0013	0.13	18720.0000	1.0020 (ppm)
Co (228.615 nm)	1.0080	ppm	0.0039	0.39	11350.0000	1.0080 (ppm)
Cr (205.560 nm)	0.9995	ppm	0.0010	0.10	3859.0000	0.9995 (ppm)
Cu (324.754 nm)	1.0010	ppm	0.0055	0.55	35480.0000	1.0010 (ppm)
Fe (238.204 nm)	1.1250 Q	ppm	0.0208	1.84	2737.0000 Q	1.1250 Q (ppm)
K (766.491 nm)	10.0200	ppm	0.0253	0.25	9678.0000	10.0200 (ppm)
Li (670.783 nm)	0.9866	ppm	0.0024	0.24	54360.0000	0.9866 (ppm)
Mg (279.078 nm)	5.0780	ppm	0.0409	0.81	11870.0000	5.0780 (ppm)
Mn (259.372 nm)	1.0010	ppm	0.0003	0.03	84560.0000	1.0010 (ppm)
Mo (204.598 nm)	1.0310	ppm	0.0016	0.16	3463.0000	1.0310 (ppm)
Na (589.592 nm)	9.8750	ppm	0.0356	0.36	54930.0000	9.8750 (ppm)
Ni (231.604 nm)	0.9995	ppm	0.0043	0.43	3876.0000	0.9995 (ppm)
P (213.618 nm)	0.9960	ppm	0.0063	0.63	663.4000	0.9960 (ppm)
Pb (220.353 nm)	0.9943	ppm	0.0027	0.27	1725.0000	0.9943 (ppm)
Sb (206.834 nm)	0.9978	ppm	0.0123	1.23	777.1000	0.9978 (ppm)
Se (196.026 nm)	0.9739	ppm	0.0101	1.03	550.1000	0.9739 (ppm)
Si (251.611 nm)	4.9970	ppm	0.0324	0.65	10130.0000	4.9970 (ppm)
Sn (189.925 nm)	1.0140	ppm	0.0005	0.05	500.4000	1.0140 (ppm)
Sr (421.552 nm)	0.9861	ppm	0.0021	0.21	326400.0000	0.9861 (ppm)
Ti (336.122 nm)	1.0490	ppm	0.0003	0.03	99220.0000	1.0490 (ppm)
Tl (190.794 nm)	1.0090	ppm	0.0091	0.90	892.2000	1.0090 (ppm)
V (292.401 nm)	1.0000	ppm	0.0026	0.26	26570.0000	1.0000 (ppm)
W (207.912 nm)	1.0210	ppm	0.0017	0.17	1469.0000	1.0210 (ppm)
Zn (202.548 nm)	1.0010	ppm	0.0016	0.16	13010.0000	1.0010 (ppm)
Zr (343.823 nm)	0.9934	ppm	0.0047	0.48	75350.0000	0.9934 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9279	321200.0000	0.0048	0.51
Y_R 371.029	0.9201	44700.0000	0.0034	0.37

Sample Name: CCB 5993195

Date: 12/10/2019 2:07:00 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0003	ppm	0.0001	38.80	-56.4800	0.0003 (ppm)
Al (396.152 nm)	0.0078	ppm	0.0022	28.80	-120.9000	0.0078 (ppm)
As (188.980 nm)	0.0061	ppm	0.0064	> 100.00	4.8420	0.0061 (ppm)
B (249.678 nm)	0.0022	ppm	0.0002	8.90	6.6030	0.0022 (ppm)
Ba (233.527 nm)	0.0006	ppm	0.0002	37.84	84.2000	0.0006 (ppm)
Be (234.861 nm)	0.0006	ppm	0.0002	37.40	106.1000	0.0006 (ppm)
Ca (422.673 nm)	-0.0046 u	ppm	0.0070	> 100.00	101.8000	-0.0046 u (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0001	17.24	3.9170	0.0004 (ppm)
Co (228.615 nm)	0.0005	ppm	0.0001	14.17	-7.0170	0.0005 (ppm)
Cr (205.560 nm)	0.0002 u	ppm	0.0004	> 100.00	2.3570	0.0002 u (ppm)
Cu (324.754 nm)	-0.0003 u	ppm	0.0004	> 100.00	30.1300	-0.0003 u (ppm)
Fe (238.204 nm)	0.0242	ppm	0.0041	16.94	9.7690	0.0242 (ppm)
K (766.491 nm)	-0.0401 u	ppm	0.0053	13.24	-117.2000	-0.0401 u (ppm)
Li (670.783 nm)	0.0034	ppm	0.0007	20.29	242.0000	0.0034 (ppm)
Mg (279.078 nm)	0.0113	ppm	0.0028	25.25	37.0300	0.0113 (ppm)
Mn (259.372 nm)	0.0010	ppm	0.0003	31.32	138.2000	0.0010 (ppm)
Mo (204.598 nm)	0.0194	ppm	0.0022	11.20	61.1100	0.0194 (ppm)
Na (589.592 nm)	-0.0101 u	ppm	0.0240	> 100.00	858.8000	-0.0101 u (ppm)
Ni (231.604 nm)	0.0003	ppm	0.0000	6.79	-14.3200	0.0003 (ppm)
P (213.618 nm)	0.0010 u	ppm	0.0045	> 100.00	0.7136	0.0010 u (ppm)
Pb (220.353 nm)	-0.0011 u	ppm	0.0060	> 100.00	-13.2400	-0.0011 u (ppm)
Sb (206.834 nm)	0.0120 Z	ppm	0.0052	43.88	5.8560 Z	0.0120 Z (ppm)
Se (196.026 nm)	-0.0003 u	ppm	0.0016	> 100.00	-0.7881	-0.0003 u (ppm)
Si (251.611 nm)	0.0040	ppm	0.0019	48.15	20.4200	0.0040 (ppm)
Sn (189.925 nm)	0.0037	ppm	0.0025	67.24	0.3782	0.0037 (ppm)
Sr (421.552 nm)	0.0003	ppm	0.0000	1.50	68.1700	0.0003 (ppm)
Ti (336.122 nm)	0.0055 Z	ppm	0.0004	6.76	391.7000 Z	0.0055 Z (ppm)
Tl (190.794 nm)	0.0056	ppm	0.0053	94.31	9.5530	0.0056 (ppm)
V (292.401 nm)	0.0009	ppm	0.0004	44.23	107.4000	0.0009 (ppm)
W (207.912 nm)	0.0120	ppm	0.0034	28.35	12.9200	0.0120 (ppm)
Zn (202.548 nm)	0.0031	ppm	0.0003	9.96	52.9400	0.0031 (ppm)
Zr (343.823 nm)	0.0002 u	ppm	0.0003	> 100.00	120.2000	0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9215	319000.0000	0.0029	0.31
Y_R 371.029	0.9139	44400.0000	0.0028	0.30

Sample Name: 440-256734-A-1-A PDS@5

Date: 12/10/2019 2:08:48 PM Rack:Tube: 2:16

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1831	ppm	0.0004	0.19	6647.0000	0.1831 (ppm)
Al (396.152 nm)	100.4000	ppm	0.4464	0.44	2489000.0000	100.4000 (ppm)
As (188.980 nm)	0.4264	ppm	0.0070	1.63	217.9000	0.4264 (ppm)
B (249.678 nm)	0.4169	ppm	0.0048	1.15	3855.0000	0.4169 (ppm)
Ba (233.527 nm)	1.7620	ppm	0.0086	0.49	133100.0000	1.7620 (ppm)
Be (234.861 nm)	0.3870	ppm	0.0028	0.72	59510.0000	0.3870 (ppm)
Ca (422.673 nm)	27.4100	ppm	0.1441	0.53	103100.0000	27.4100 (ppm)
Cd (214.439 nm)	0.3871	ppm	0.0021	0.54	7252.0000	0.3871 (ppm)
Co (228.615 nm)	0.4617	ppm	0.0121	2.62	5329.0000	0.4617 (ppm)
Cr (205.560 nm)	0.5560	ppm	0.0040	0.71	2152.0000	0.5560 (ppm)
Cu (324.754 nm)	0.6671	ppm	0.0033	0.50	23740.0000	0.6671 (ppm)
Fe (238.204 nm)	152.3000	ppm	0.7843	0.51	377400.0000	152.3000 (ppm)
K (766.491 nm)	24.0000	ppm	0.1544	0.64	23320.0000	24.0000 (ppm)
Li (670.783 nm)	0.4714	ppm	0.0022	0.46	25450.0000	0.4714 (ppm)
Mg (279.078 nm)	25.9900	ppm	0.1401	0.54	60670.0000	25.9900 (ppm)
Mn (259.372 nm)	5.6410	ppm	0.0222	0.39	489800.0000	5.6410 (ppm)
Mo (204.598 nm)	0.4309	ppm	0.0065	1.50	1457.0000	0.4309 (ppm)
Na (589.592 nm)	5.1480	ppm	0.0288	0.56	30330.0000	5.1480 (ppm)
Ni (231.604 nm)	0.4955	ppm	0.0062	1.24	1906.0000	0.4955 (ppm)
P (213.618 nm)	5.2780	ppm	0.0155	0.29	3717.0000	5.2780 (ppm)
Pb (220.353 nm)	1.6990	ppm	0.0027	0.16	3041.0000	1.6990 (ppm)
Sb (206.834 nm)	0.4305	ppm	0.0059	1.36	331.4000	0.4305 (ppm)
Se (196.026 nm)	0.3678	ppm	0.0106	2.88	193.8000	0.3678 (ppm)
Si (251.611 nm)	3.2200	ppm	0.0127	0.39	6547.0000	3.2200 (ppm)
Sn (189.925 nm)	0.4491	ppm	0.0002	0.04	220.7000	0.4491 (ppm)
Sr (421.552 nm)	0.7090	ppm	0.0030	0.43	234900.0000	0.7090 (ppm)
Ti (336.122 nm)	6.4540	ppm	0.0280	0.43	611300.0000	6.4540 (ppm)
Tl (190.794 nm)	0.3976	ppm	0.0011	0.28	302.3000	0.3976 (ppm)
V (292.401 nm)	0.6925	ppm	0.0037	0.53	18640.0000	0.6925 (ppm)
W (207.912 nm)	0.3933	ppm	0.0024	0.62	582.0000	0.3933 (ppm)
Zn (202.548 nm)	2.1690	ppm	0.0094	0.44	27980.0000	2.1690 (ppm)
Zr (343.823 nm)	0.4440	ppm	0.0026	0.58	30430.0000	0.4440 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9338	323200.0000	0.0008	0.09
Y_R 371.029	0.9445	45890.0000	0.0019	0.20

Sample Name: 440-256738-A-1-A@5

Date: 12/10/2019 2:10:39 PM Rack:Tube: 2:17

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0002	48.23	-102.5000	-0.0005 u (ppm)
Al (396.152 nm)	123.3000	ppm	0.2827	0.23	3056000.0000	123.3000 (ppm)
As (188.980 nm)	0.0469	ppm	0.0092	19.65	16.7900	0.0469 (ppm)
B (249.678 nm)	0.0603	ppm	0.0001	0.19	379.1000	0.0603 (ppm)
Ba (233.527 nm)	1.2750	ppm	0.0007	0.05	96360.0000	1.2750 (ppm)
Be (234.861 nm)	0.0078	ppm	0.0000	0.27	3590.0000	0.0078 (ppm)
Ca (422.673 nm)	37.8100	ppm	0.0943	0.25	142100.0000	37.8100 (ppm)
Cd (214.439 nm)	0.0107	ppm	0.0004	3.95	221.8000	0.0107 (ppm)
Co (228.615 nm)	0.0719	ppm	0.0002	0.21	943.7000	0.0719 (ppm)
Cr (205.560 nm)	0.2093	ppm	0.0017	0.83	814.4000	0.2093 (ppm)
Cu (324.754 nm)	0.2395	ppm	0.0012	0.51	8613.0000	0.2395 (ppm)
Fe (238.204 nm)	183.1000	ppm	0.3448	0.19	453700.0000	183.1000 (ppm)
K (766.491 nm)	37.8200	ppm	0.1869	0.49	36770.0000	37.8200 (ppm)
Li (670.783 nm)	0.1063	ppm	0.0023	2.20	5427.0000	0.1063 (ppm)
Mg (279.078 nm)	41.1100	ppm	0.0261	0.06	95980.0000	41.1100 (ppm)
Mn (259.372 nm)	3.0830	ppm	0.0075	0.24	278300.0000	3.0830 (ppm)
Mo (204.598 nm)	0.0264	ppm	0.0008	3.08	98.6300	0.0264 (ppm)
Na (589.592 nm)	4.0600	ppm	0.0197	0.49	24620.0000	4.0600 (ppm)
Ni (231.604 nm)	0.1725	ppm	0.0016	0.93	648.0000	0.1725 (ppm)
P (213.618 nm)	6.7700	ppm	0.0881	1.30	4791.0000	6.7700 (ppm)
Pb (220.353 nm)	0.3239	ppm	0.0021	0.66	653.6000	0.3239 (ppm)
Sb (206.834 nm)	0.0174	ppm	0.0065	37.21	7.8790	0.0174 (ppm)
Se (196.026 nm)	0.0107	ppm	0.0073	68.08	-11.9600	0.0107 (ppm)
Si (251.611 nm)	1.2810	ppm	0.0093	0.73	2619.0000	1.2810 (ppm)
Sn (189.925 nm)	0.0200	ppm	0.0066	33.13	8.3060	0.0200 (ppm)
Sr (421.552 nm)	0.3651	ppm	0.0010	0.26	121200.0000	0.3651 (ppm)
Ti (336.122 nm)	6.3930	ppm	0.0222	0.35	605500.0000	6.3930 (ppm)
Tl (190.794 nm)	0.0287	ppm	0.0003	1.03	-27.4400	0.0287 (ppm)
V (292.401 nm)	0.3670	ppm	0.0017	0.47	10060.0000	0.3670 (ppm)
W (207.912 nm)	0.0066	ppm	0.0021	32.19	11.9500	0.0066 (ppm)
Zn (202.548 nm)	0.8399	ppm	0.0020	0.24	10800.0000	0.8399 (ppm)
Zr (343.823 nm)	0.0853	ppm	0.0021	2.49	2583.0000	0.0853 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9221	319200.0000	0.0023	0.25
Y_R 371.029	0.9337	45360.0000	0.0006	0.07

Sample Name: 440-256738-A-2-A@5

Date: 12/10/2019 2:12:27 PM Rack:Tube: 2:18

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0028 u	ppm	0.0003	10.96	-192.6000	-0.0028 u (ppm)
Al (396.152 nm)	122.8000	ppm	0.5060	0.41	3043000.0000	122.8000 (ppm)
As (188.980 nm)	0.0347	ppm	0.0012	3.56	10.6000	0.0347 (ppm)
B (249.678 nm)	0.0422	ppm	0.0014	3.42	209.4000	0.0422 (ppm)
Ba (233.527 nm)	2.0780	ppm	0.0274	1.32	157000.0000	2.0780 (ppm)
Be (234.861 nm)	0.0050	ppm	0.0001	1.44	3079.0000	0.0050 (ppm)
Ca (422.673 nm)	53.1000	ppm	0.0950	0.18	199600.0000	53.1000 (ppm)
Cd (214.439 nm)	0.0076	ppm	0.0001	1.02	163.5000	0.0076 (ppm)
Co (228.615 nm)	0.0646	ppm	0.0007	1.04	871.5000	0.0646 (ppm)
Cr (205.560 nm)	0.2062	ppm	0.0009	0.46	802.5000	0.2062 (ppm)
Cu (324.754 nm)	0.2249	ppm	0.0006	0.25	8087.0000	0.2249 (ppm)
Fe (238.204 nm)	175.2000	ppm	0.8568	0.49	434200.0000	175.2000 (ppm)
K (766.491 nm)	32.8700	ppm	0.0171	0.05	31960.0000	32.8700 (ppm)
Li (670.783 nm)	0.1002	ppm	0.0004	0.40	5116.0000	0.1002 (ppm)
Mg (279.078 nm)	39.8600	ppm	0.4586	1.15	93060.0000	39.8600 (ppm)
Mn (259.372 nm)	3.0050	ppm	0.0096	0.32	270900.0000	3.0050 (ppm)
Mo (204.598 nm)	0.0174	ppm	0.0000	0.26	68.5400	0.0174 (ppm)
Na (589.592 nm)	1.6720	ppm	0.0195	1.16	11510.0000	1.6720 (ppm)
Ni (231.604 nm)	0.1607	ppm	0.0005	0.30	602.2000	0.1607 (ppm)
P (213.618 nm)	5.9310	ppm	0.0535	0.90	4198.0000	5.9310 (ppm)
Pb (220.353 nm)	0.7330	ppm	0.0016	0.22	1364.0000	0.7330 (ppm)
Sb (206.834 nm)	0.0337	ppm	0.0049	14.60	21.2600	0.0337 (ppm)
Se (196.026 nm)	0.0033 u	ppm	0.0092	> 100.00	-15.5100	0.0033 u (ppm)
Si (251.611 nm)	1.3820	ppm	0.0027	0.19	2829.0000	1.3820 (ppm)
Sn (189.925 nm)	0.0123	ppm	0.0038	30.61	4.4640	0.0123 (ppm)
Sr (421.552 nm)	0.3720	ppm	0.0012	0.31	123700.0000	0.3720 (ppm)
Ti (336.122 nm)	6.9060	ppm	0.0344	0.50	654100.0000	6.9060 (ppm)
Tl (190.794 nm)	0.0286	ppm	0.0028	9.87	-33.0100	0.0286 (ppm)
V (292.401 nm)	0.3512	ppm	0.0010	0.29	9668.0000	0.3512 (ppm)
W (207.912 nm)	0.0005 u	ppm	0.0032	> 100.00	16.1200	0.0005 u (ppm)
Zn (202.548 nm)	1.9540	ppm	0.0060	0.31	25160.0000	1.9540 (ppm)
Zr (343.823 nm)	0.0751	ppm	0.0016	2.07	1982.0000	0.0751 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9199	318400.0000	0.0035	0.38
Y_R 371.029	0.9298	45170.0000	0.0111	1.20

Sample Name: 440-256737-A-1-A@5

Date: 12/10/2019 2:14:15 PM Rack:Tube: 2:19

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0016 u	ppm	0.0002	13.37	-143.2000	-0.0016 u (ppm)
Al (396.152 nm)	131.2000	ppm	0.9738	0.74	3251000.0000	131.2000 (ppm)
As (188.980 nm)	0.0321	ppm	0.0097	30.11	8.7740	0.0321 (ppm)
B (249.678 nm)	0.0436	ppm	0.0015	3.38	209.8000	0.0436 (ppm)
Ba (233.527 nm)	1.8830	ppm	0.0040	0.21	142300.0000	1.8830 (ppm)
Be (234.861 nm)	0.0047	ppm	0.0000	0.98	3164.0000	0.0047 (ppm)
Ca (422.673 nm)	33.1700	ppm	0.0342	0.10	124700.0000	33.1700 (ppm)
Cd (214.439 nm)	0.0071	ppm	0.0002	2.67	156.0000	0.0071 (ppm)
Co (228.615 nm)	0.0753	ppm	0.0007	0.97	1009.0000	0.0753 (ppm)
Cr (205.560 nm)	0.2054	ppm	0.0005	0.26	800.1000	0.2054 (ppm)
Cu (324.754 nm)	0.3058	ppm	0.0016	0.52	10970.0000	0.3058 (ppm)
Fe (238.204 nm)	185.8000	ppm	0.2233	0.12	460400.0000	185.8000 (ppm)
K (766.491 nm)	28.7500	ppm	0.1292	0.45	27950.0000	28.7500 (ppm)
Li (670.783 nm)	0.1088	ppm	0.0005	0.48	5435.0000	0.1088 (ppm)
Mg (279.078 nm)	33.4100	ppm	0.1012	0.30	77990.0000	33.4100 (ppm)
Mn (259.372 nm)	5.9250	ppm	0.0435	0.73	517000.0000	5.9250 (ppm)
Mo (204.598 nm)	0.0079	ppm	0.0001	1.43	37.6400	0.0079 (ppm)
Na (589.592 nm)	1.2670	ppm	0.0193	1.52	9382.0000	1.2670 (ppm)
Ni (231.604 nm)	0.1354	ppm	0.0002	0.17	503.0000	0.1354 (ppm)
P (213.618 nm)	8.2100	ppm	0.2286	2.78	5809.0000	8.2100 (ppm)
Pb (220.353 nm)	1.6720	ppm	0.0197	1.18	3011.0000	1.6720 (ppm)
Sb (206.834 nm)	0.0284	ppm	0.0016	5.47	16.9000	0.0284 (ppm)
Se (196.026 nm)	0.0063	ppm	0.0020	31.30	-13.8700	0.0063 (ppm)
Si (251.611 nm)	1.2920	ppm	0.0078	0.60	2655.0000	1.2920 (ppm)
Sn (189.925 nm)	0.0783	ppm	0.0092	11.73	37.1500	0.0783 (ppm)
Sr (421.552 nm)	0.3451	ppm	0.0005	0.14	114600.0000	0.3451 (ppm)
Ti (336.122 nm)	7.7060	ppm	0.0539	0.70	729900.0000	7.7060 (ppm)
Tl (190.794 nm)	0.0262	ppm	0.0031	11.80	-39.3500	0.0262 (ppm)
V (292.401 nm)	0.3566	ppm	0.0033	0.93	9815.0000	0.3566 (ppm)
W (207.912 nm)	0.0013 u	ppm	0.0030	> 100.00	18.9600	0.0013 u (ppm)
Zn (202.548 nm)	2.0940	ppm	0.0142	0.68	26980.0000	2.0940 (ppm)
Zr (343.823 nm)	0.0752	ppm	0.0030	3.97	1755.0000	0.0752 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9210	318800.0000	0.0033	0.36
Y_R 371.029	0.9347	45410.0000	0.0002	0.02

Sample Name: 440-256740-A-1-A@5

Date: 12/10/2019 2:16:05 PM Rack:Tube: 2:20

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0003	> 100.00	-80.8800	0.0001 u (ppm)
Al (396.152 nm)	133.7000	ppm	0.4977	0.37	3313000.0000	133.7000 (ppm)
As (188.980 nm)	0.0404	ppm	0.0051	12.64	13.0900	0.0404 (ppm)
B (249.678 nm)	0.0334	ppm	0.0000	0.04	103.5000	0.0334 (ppm)
Ba (233.527 nm)	1.6370	ppm	0.0009	0.06	123700.0000	1.6370 (ppm)
Be (234.861 nm)	0.0051	ppm	0.0001	2.09	3310.0000	0.0051 (ppm)
Ca (422.673 nm)	20.4200	ppm	0.0428	0.21	76790.0000	20.4200 (ppm)
Cd (214.439 nm)	0.0063	ppm	0.0000	0.61	141.4000	0.0063 (ppm)
Co (228.615 nm)	0.0736	ppm	0.0000	0.03	971.0000	0.0736 (ppm)
Cr (205.560 nm)	0.1820	ppm	0.0033	1.81	709.6000	0.1820 (ppm)
Cu (324.754 nm)	0.3633	ppm	0.0015	0.43	13010.0000	0.3633 (ppm)
Fe (238.204 nm)	192.0000	ppm	0.0870	0.05	475900.0000	192.0000 (ppm)
K (766.491 nm)	28.8200	ppm	0.0022	0.01	28010.0000	28.8200 (ppm)
Li (670.783 nm)	0.0732	ppm	0.0014	1.87	3383.0000	0.0732 (ppm)
Mg (279.078 nm)	28.0600	ppm	0.0331	0.12	65490.0000	28.0600 (ppm)
Mn (259.372 nm)	5.0330	ppm	0.0213	0.42	442800.0000	5.0330 (ppm)
Mo (204.598 nm)	0.0058	ppm	0.0009	15.75	30.7300	0.0058 (ppm)
Na (589.592 nm)	0.9221	ppm	0.0203	2.20	7546.0000	0.9221 (ppm)
Ni (231.604 nm)	0.1635	ppm	0.0008	0.51	612.7000	0.1635 (ppm)
P (213.618 nm)	5.3360	ppm	0.0302	0.57	3774.0000	5.3360 (ppm)
Pb (220.353 nm)	1.3900	ppm	0.0052	0.37	2523.0000	1.3900 (ppm)
Sb (206.834 nm)	0.0294	ppm	0.0017	5.81	17.2100	0.0294 (ppm)
Se (196.026 nm)	0.0084	ppm	0.0060	72.06	-13.5300	0.0084 (ppm)
Si (251.611 nm)	1.3630	ppm	0.0061	0.45	2790.0000	1.3630 (ppm)
Sn (189.925 nm)	0.1042	ppm	0.0012	1.17	49.9500	0.1042 (ppm)
Sr (421.552 nm)	0.2173	ppm	0.0009	0.40	72160.0000	0.2173 (ppm)
Ti (336.122 nm)	6.8230	ppm	0.0308	0.45	646200.0000	6.8230 (ppm)
Tl (190.794 nm)	0.0283	ppm	0.0086	30.47	-29.4100	0.0283 (ppm)
V (292.401 nm)	0.3749	ppm	0.0020	0.54	10270.0000	0.3749 (ppm)
W (207.912 nm)	-0.0010 u	ppm	0.0030	> 100.00	22.4600	-0.0010 u (ppm)
Zn (202.548 nm)	2.6520	ppm	0.0138	0.52	34180.0000	2.6520 (ppm)
Zr (343.823 nm)	0.0676	ppm	0.0009	1.29	1038.0000	0.0676 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9242	319900.0000	0.0047	0.51
Y_R 371.029	0.9355	45450.0000	0.0018	0.19

Sample Name: 440-256740-A-2-A@5

Date: 12/10/2019 2:17:53 PM Rack:Tube: 2:21

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	53.49	-88.7000	-0.0002 u (ppm)
Al (396.152 nm)	127.0000	ppm	0.3673	0.29	3146000.0000	127.0000 (ppm)
As (188.980 nm)	0.0429	ppm	0.0012	2.87	14.9900	0.0429 (ppm)
B (249.678 nm)	0.0625	ppm	0.0009	1.43	402.2000	0.0625 (ppm)
Ba (233.527 nm)	2.1050	ppm	0.0130	0.62	159100.0000	2.1050 (ppm)
Be (234.861 nm)	0.0043	ppm	0.0000	0.51	3004.0000	0.0043 (ppm)
Ca (422.673 nm)	33.7500	ppm	0.2035	0.60	126900.0000	33.7500 (ppm)
Cd (214.439 nm)	0.0110	ppm	0.0000	0.02	227.5000	0.0110 (ppm)
Co (228.615 nm)	0.0713	ppm	0.0005	0.67	929.3000	0.0713 (ppm)
Cr (205.560 nm)	0.1902	ppm	0.0018	0.92	741.1000	0.1902 (ppm)
Cu (324.754 nm)	0.4177	ppm	0.0019	0.47	14920.0000	0.4177 (ppm)
Fe (238.204 nm)	176.9000	ppm	0.9883	0.56	438400.0000	176.9000 (ppm)
K (766.491 nm)	28.4000	ppm	0.1566	0.55	27610.0000	28.4000 (ppm)
Li (670.783 nm)	0.0961	ppm	0.0001	0.12	4659.0000	0.0961 (ppm)
Mg (279.078 nm)	28.7300	ppm	0.1843	0.64	67050.0000	28.7300 (ppm)
Mn (259.372 nm)	4.6400	ppm	0.0120	0.26	408200.0000	4.6400 (ppm)
Mo (204.598 nm)	0.0082	ppm	0.0011	13.44	38.3300	0.0082 (ppm)
Na (589.592 nm)	1.2980	ppm	0.0107	0.82	9479.0000	1.2980 (ppm)
Ni (231.604 nm)	0.1368	ppm	0.0028	2.05	509.3000	0.1368 (ppm)
P (213.618 nm)	7.9250	ppm	0.0625	0.79	5604.0000	7.9250 (ppm)
Pb (220.353 nm)	3.0060	ppm	0.0056	0.19	5340.0000	3.0060 (ppm)
Sb (206.834 nm)	0.0294	ppm	0.0067	22.95	17.7500	0.0294 (ppm)
Se (196.026 nm)	0.0071	ppm	0.0011	14.94	-12.9400	0.0071 (ppm)
Si (251.611 nm)	1.3710	ppm	0.0086	0.63	2806.0000	1.3710 (ppm)
Sn (189.925 nm)	0.1041	ppm	0.0068	6.49	49.9800	0.1041 (ppm)
Sr (421.552 nm)	0.4650	ppm	0.0024	0.52	154300.0000	0.4650 (ppm)
Ti (336.122 nm)	6.1200	ppm	0.0191	0.31	579600.0000	6.1200 (ppm)
Tl (190.794 nm)	0.0181	ppm	0.0103	56.61	-32.1100	0.0181 (ppm)
V (292.401 nm)	0.3348	ppm	0.0011	0.34	9196.0000	0.3348 (ppm)
W (207.912 nm)	0.0035	ppm	0.0012	33.98	49.5300	0.0035 (ppm)
Zn (202.548 nm)	4.4040	ppm	0.0135	0.31	56770.0000	4.4040 (ppm)
Zr (343.823 nm)	0.0672	ppm	0.0018	2.64	1345.0000	0.0672 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9229	319400.0000	0.0045	0.49
Y_R 371.029	0.9360	45480.0000	0.0032	0.34

Sample Name: 440-256736-A-1-A@5

Date: 12/10/2019 2:19:41 PM Rack:Tube: 2:22

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	17.67	-92.4000	-0.0004 u (ppm)
Al (396.152 nm)	62.2300	ppm	0.1353	0.22	1542000.0000	62.2300 (ppm)
As (188.980 nm)	0.0609	ppm	0.0071	11.67	26.0700	0.0609 (ppm)
B (249.678 nm)	0.0195	ppm	0.0010	4.93	21.4300	0.0195 (ppm)
Ba (233.527 nm)	1.0640	ppm	0.0018	0.17	80430.0000	1.0640 (ppm)
Be (234.861 nm)	0.0021	ppm	0.0000	2.02	2196.0000	0.0021 (ppm)
Ca (422.673 nm)	16.5900	ppm	0.0185	0.11	62400.0000	16.5900 (ppm)
Cd (214.439 nm)	0.0144	ppm	0.0001	0.48	286.5000	0.0144 (ppm)
Co (228.615 nm)	0.0513	ppm	0.0015	2.84	659.7000	0.0513 (ppm)
Cr (205.560 nm)	0.1871	ppm	0.0026	1.37	728.0000	0.1871 (ppm)
Cu (324.754 nm)	1.2660	ppm	0.0063	0.49	44900.0000	1.2660 (ppm)
Fe (238.204 nm)	141.2000	ppm	0.2621	0.19	349800.0000	141.2000 (ppm)
K (766.491 nm)	11.8300	ppm	0.0678	0.57	11470.0000	11.8300 (ppm)
Li (670.783 nm)	0.0696	ppm	0.0005	0.72	3131.0000	0.0696 (ppm)
Mg (279.078 nm)	21.9400	ppm	0.0205	0.09	51210.0000	21.9400 (ppm)
Mn (259.372 nm)	2.5820	ppm	0.0096	0.37	231800.0000	2.5820 (ppm)
Mo (204.598 nm)	0.0109	ppm	0.0006	5.46	41.3100	0.0109 (ppm)
Na (589.592 nm)	0.7553	ppm	0.0142	1.88	6208.0000	0.7553 (ppm)
Ni (231.604 nm)	0.1949	ppm	0.0006	0.32	737.6000	0.1949 (ppm)
P (213.618 nm)	5.1190	ppm	0.0012	0.02	3594.0000	5.1190 (ppm)
Pb (220.353 nm)	3.5940	ppm	0.0149	0.41	6352.0000	3.5940 (ppm)
Sb (206.834 nm)	0.0259	ppm	0.0007	2.79	15.4500	0.0259 (ppm)
Se (196.026 nm)	0.0051	ppm	0.0013	25.77	-10.9900	0.0051 (ppm)
Si (251.611 nm)	1.2890	ppm	0.0005	0.04	2624.0000	1.2890 (ppm)
Sn (189.925 nm)	0.1261	ppm	0.0023	1.81	60.8900	0.1261 (ppm)
Sr (421.552 nm)	0.1960	ppm	0.0001	0.05	65070.0000	0.1960 (ppm)
Ti (336.122 nm)	4.0790	ppm	0.0198	0.49	386300.0000	4.0790 (ppm)
Tl (190.794 nm)	0.0101	ppm	0.0000	0.14	-20.7100	0.0101 (ppm)
V (292.401 nm)	0.2076	ppm	0.0002	0.09	5735.0000	0.2076 (ppm)
W (207.912 nm)	0.0063	ppm	0.0068	> 100.00	53.2700	0.0063 (ppm)
Zn (202.548 nm)	4.2840	ppm	0.0163	0.38	55320.0000	4.2840 (ppm)
Zr (343.823 nm)	0.0493	ppm	0.0008	1.63	764.5000	0.0493 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9203	318500.0000	0.0039	0.42
Y_R 371.029	0.9197	44680.0000	0.0008	0.09

Sample Name: 440-256667-A-1-A@5

Date: 12/10/2019 2:21:31 PM Rack:Tube: 2:23

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0017 u	ppm	0.0003	19.42	-143.5000	-0.0017 u (ppm)
Al (396.152 nm)	68.4600	ppm	0.2330	0.34	1696000.0000	68.4600 (ppm)
As (188.980 nm)	0.0209	ppm	0.0047	22.69	6.7590	0.0209 (ppm)
B (249.678 nm)	0.0220	ppm	0.0008	3.82	78.1400	0.0220 (ppm)
Ba (233.527 nm)	0.8279	ppm	0.0037	0.45	62580.0000	0.8279 (ppm)
Be (234.861 nm)	0.0027	ppm	0.0000	0.28	1924.0000	0.0027 (ppm)
Ca (422.673 nm)	21.9300	ppm	0.0605	0.28	82480.0000	21.9300 (ppm)
Cd (214.439 nm)	0.0021	ppm	0.0000	2.13	52.1900	0.0021 (ppm)
Co (228.615 nm)	0.0465	ppm	0.0004	0.87	619.5000	0.0465 (ppm)
Cr (205.560 nm)	0.1019	ppm	0.0026	2.53	398.5000	0.1019 (ppm)
Cu (324.754 nm)	1.0190	ppm	0.0040	0.39	36180.0000	1.0190 (ppm)
Fe (238.204 nm)	113.1000	ppm	0.3682	0.33	280300.0000	113.1000 (ppm)
K (766.491 nm)	14.1800	ppm	0.1060	0.75	13750.0000	14.1800 (ppm)
Li (670.783 nm)	0.0438	ppm	0.0002	0.35	2028.0000	0.0438 (ppm)
Mg (279.078 nm)	19.7700	ppm	0.0822	0.42	46160.0000	19.7700 (ppm)
Mn (259.372 nm)	3.1710	ppm	0.0130	0.41	278200.0000	3.1710 (ppm)
Mo (204.598 nm)	0.0021	ppm	0.0013	60.19	11.2300	0.0021 (ppm)
Na (589.592 nm)	0.9600	ppm	0.0249	2.59	7103.0000	0.9600 (ppm)
Ni (231.604 nm)	0.0805	ppm	0.0019	2.32	292.6000	0.0805 (ppm)
P (213.618 nm)	3.5370	ppm	0.0479	1.35	2481.0000	3.5370 (ppm)
Pb (220.353 nm)	0.5791	ppm	0.0006	0.10	1063.0000	0.5791 (ppm)
Sb (206.834 nm)	0.0177	ppm	0.0026	14.53	9.2110	0.0177 (ppm)
Se (196.026 nm)	0.0074	ppm	0.0041	55.38	-6.8890	0.0074 (ppm)
Si (251.611 nm)	1.4070	ppm	0.0025	0.18	2858.0000	1.4070 (ppm)
Sn (189.925 nm)	0.1659	ppm	0.0013	0.76	80.4600	0.1659 (ppm)
Sr (421.552 nm)	0.1873	ppm	0.0006	0.33	62210.0000	0.1873 (ppm)
Ti (336.122 nm)	4.8490	ppm	0.0231	0.48	459200.0000	4.8490 (ppm)
Tl (190.794 nm)	0.0181	ppm	0.0017	9.62	-22.0300	0.0181 (ppm)
V (292.401 nm)	0.2134	ppm	0.0009	0.40	5916.0000	0.2134 (ppm)
W (207.912 nm)	-0.0015 u	ppm	0.0000	2.52	2.0590	-0.0015 u (ppm)
Zn (202.548 nm)	0.8797	ppm	0.0025	0.29	11420.0000	0.8797 (ppm)
Zr (343.823 nm)	0.0392	ppm	0.0006	1.47	603.1000	0.0392 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9198	318400.0000	0.0025	0.28
Y_R 371.029	0.9242	44900.0000	0.0043	0.47

Sample Name: 440-256667-A-2-A@5

Date: 12/10/2019 2:23:21 PM Rack:Tube: 2:24

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0031 u	ppm	0.0002	6.49	-195.2000	-0.0031 u (ppm)
Al (396.152 nm)	96.8500	ppm	0.3278	0.34	2400000.0000	96.8500 (ppm)
As (188.980 nm)	0.0247	ppm	0.0012	4.93	7.4410	0.0247 (ppm)
B (249.678 nm)	0.0236	ppm	0.0004	1.73	63.7100	0.0236 (ppm)
Ba (233.527 nm)	0.8070	ppm	0.0037	0.45	61000.0000	0.8070 (ppm)
Be (234.861 nm)	0.0036	ppm	0.0001	2.93	2418.0000	0.0036 (ppm)
Ca (422.673 nm)	17.9800	ppm	0.0496	0.28	67640.0000	17.9800 (ppm)
Cd (214.439 nm)	0.0009	ppm	0.0000	0.74	32.6400	0.0009 (ppm)
Co (228.615 nm)	0.0610	ppm	0.0003	0.51	811.4000	0.0610 (ppm)
Cr (205.560 nm)	0.1232	ppm	0.0003	0.21	481.1000	0.1232 (ppm)
Cu (324.754 nm)	0.1211	ppm	0.0004	0.33	4418.0000	0.1211 (ppm)
Fe (238.204 nm)	141.2000	ppm	0.0656	0.05	349900.0000	141.2000 (ppm)
K (766.491 nm)	13.2500	ppm	0.0692	0.52	12860.0000	13.2500 (ppm)
Li (670.783 nm)	0.0497	ppm	0.0001	0.15	2371.0000	0.0497 (ppm)
Mg (279.078 nm)	23.8600	ppm	0.0646	0.27	55680.0000	23.8600 (ppm)
Mn (259.372 nm)	4.0820	ppm	0.0133	0.33	357700.0000	4.0820 (ppm)
Mo (204.598 nm)	0.0021	ppm	0.0027	> 100.00	14.3000	0.0021 (ppm)
Na (589.592 nm)	1.0070	ppm	0.0221	2.19	7589.0000	1.0070 (ppm)
Ni (231.604 nm)	0.0797	ppm	0.0009	1.18	288.2000	0.0797 (ppm)
P (213.618 nm)	2.0690	ppm	0.0018	0.09	1467.0000	2.0690 (ppm)
Pb (220.353 nm)	0.1018	ppm	0.0077	7.54	242.2000	0.1018 (ppm)
Sb (206.834 nm)	0.0161	ppm	0.0028	17.32	7.4860	0.0161 (ppm)
Se (196.026 nm)	0.0058	ppm	0.0026	44.41	-10.2700	0.0058 (ppm)
Si (251.611 nm)	1.3250	ppm	0.0061	0.46	2702.0000	1.3250 (ppm)
Sn (189.925 nm)	0.0075	ppm	0.0082	> 100.00	2.0850	0.0075 (ppm)
Sr (421.552 nm)	0.1978	ppm	0.0001	0.07	65680.0000	0.1978 (ppm)
Ti (336.122 nm)	6.1580	ppm	0.0221	0.36	583200.0000	6.1580 (ppm)
Tl (190.794 nm)	0.0178	ppm	0.0064	36.13	-34.0400	0.0178 (ppm)
V (292.401 nm)	0.2831	ppm	0.0002	0.08	7801.0000	0.2831 (ppm)
W (207.912 nm)	-0.0025 u	ppm	0.0028	> 100.00	-5.5940	-0.0025 u (ppm)
Zn (202.548 nm)	0.3938	ppm	0.0001	0.02	5058.0000	0.3938 (ppm)
Zr (343.823 nm)	0.0505	ppm	0.0000	0.04	847.6000	0.0505 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9205	318600.0000	0.0024	0.27
Y_R 371.029	0.9230	44840.0000	0.0036	0.39

Sample Name: 440-256667-A-3-A@5

Date: 12/10/2019 2:25:09 PM Rack:Tube: 2:25

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0021 u	ppm	0.0001	5.37	-157.4000	-0.0021 u (ppm)
Al (396.152 nm)	80.0600	ppm	0.2190	0.27	1984000.0000	80.0600 (ppm)
As (188.980 nm)	0.0205	ppm	0.0030	14.45	5.9140	0.0205 (ppm)
B (249.678 nm)	0.0219	ppm	0.0003	1.25	61.9200	0.0219 (ppm)
Ba (233.527 nm)	0.7750	ppm	0.0001	0.01	58590.0000	0.7750 (ppm)
Be (234.861 nm)	0.0031	ppm	0.0000	1.14	2162.0000	0.0031 (ppm)
Ca (422.673 nm)	17.5600	ppm	0.0259	0.15	66070.0000	17.5600 (ppm)
Cd (214.439 nm)	0.0009	ppm	0.0000	1.54	32.3700	0.0009 (ppm)
Co (228.615 nm)	0.0563	ppm	0.0006	1.09	751.8000	0.0563 (ppm)
Cr (205.560 nm)	0.1092	ppm	0.0005	0.44	426.8000	0.1092 (ppm)
Cu (324.754 nm)	0.1641	ppm	0.0001	0.03	5930.0000	0.1641 (ppm)
Fe (238.204 nm)	126.9000	ppm	0.1778	0.14	314300.0000	126.9000 (ppm)
K (766.491 nm)	16.8900	ppm	0.0497	0.29	16400.0000	16.8900 (ppm)
Li (670.783 nm)	0.0440	ppm	0.0009	2.05	2073.0000	0.0440 (ppm)
Mg (279.078 nm)	20.9500	ppm	0.0098	0.05	48900.0000	20.9500 (ppm)
Mn (259.372 nm)	4.1400	ppm	0.0139	0.34	360900.0000	4.1400 (ppm)
Mo (204.598 nm)	0.0023	ppm	0.0012	51.66	13.0800	0.0023 (ppm)
Na (589.592 nm)	0.8575	ppm	0.0022	0.26	6655.0000	0.8575 (ppm)
Ni (231.604 nm)	0.0762	ppm	0.0004	0.51	275.0000	0.0762 (ppm)
P (213.618 nm)	1.8420	ppm	0.0128	0.69	1305.0000	1.8420 (ppm)
Pb (220.353 nm)	0.0423	ppm	0.0003	0.80	130.9000	0.0423 (ppm)
Sb (206.834 nm)	0.0148	ppm	0.0074	49.95	6.5670	0.0148 (ppm)
Se (196.026 nm)	0.0013	ppm	0.0015	> 100.00	-11.3600	0.0013 (ppm)
Si (251.611 nm)	1.4990	ppm	0.0142	0.94	3048.0000	1.4990 (ppm)
Sn (189.925 nm)	0.0007 u	ppm	0.0040	> 100.00	-1.2550	0.0007 u (ppm)
Sr (421.552 nm)	0.1818	ppm	0.0005	0.28	60370.0000	0.1818 (ppm)
Ti (336.122 nm)	5.8930	ppm	0.0241	0.41	558100.0000	5.8930 (ppm)
Tl (190.794 nm)	0.0218	ppm	0.0025	11.62	-27.8300	0.0218 (ppm)
V (292.401 nm)	0.2481	ppm	0.0008	0.32	6862.0000	0.2481 (ppm)
W (207.912 nm)	-0.0018 u	ppm	0.0028	> 100.00	-5.7030	-0.0018 u (ppm)
Zn (202.548 nm)	0.2813	ppm	0.0011	0.38	3616.0000	0.2813 (ppm)
Zr (343.823 nm)	0.0448	ppm	0.0001	0.32	726.5000	0.0448 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9229	319400.0000	0.0036	0.39
Y_R 371.029	0.9255	44970.0000	0.0001	0.01

Sample Name: CCV 5993196

Date: 12/10/2019 2:26:59 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4989	ppm	0.0008	0.17	18250.0000	0.4989 (ppm)
Al (396.152 nm)	1.0590	ppm	0.0287	2.71	26840.0000	1.0590 (ppm)
As (188.980 nm)	0.9974	ppm	0.0013	0.13	525.9000	0.9974 (ppm)
B (249.678 nm)	0.9912	ppm	0.0053	0.53	9569.0000	0.9912 (ppm)
Ba (233.527 nm)	1.0170	ppm	0.0031	0.30	76810.0000	1.0170 (ppm)
Be (234.861 nm)	0.9950	ppm	0.0048	0.48	147800.0000	0.9950 (ppm)
Ca (422.673 nm)	4.9970	ppm	0.0091	0.18	18890.0000	4.9970 (ppm)
Cd (214.439 nm)	1.0090	ppm	0.0039	0.39	18860.0000	1.0090 (ppm)
Co (228.615 nm)	1.0140	ppm	0.0067	0.66	11420.0000	1.0140 (ppm)
Cr (205.560 nm)	1.0080	ppm	0.0034	0.33	3892.0000	1.0080 (ppm)
Cu (324.754 nm)	1.0050	ppm	0.0028	0.28	35640.0000	1.0050 (ppm)
Fe (238.204 nm)	1.1270 Q	ppm	0.0050	0.44	2742.0000 Q	1.1270 Q (ppm)
K (766.491 nm)	10.1300	ppm	0.2506	2.47	9781.0000	10.1300 (ppm)
Li (670.783 nm)	0.9978	ppm	0.0021	0.21	54980.0000	0.9978 (ppm)
Mg (279.078 nm)	5.1350	ppm	0.0124	0.24	12000.0000	5.1350 (ppm)
Mn (259.372 nm)	1.0070	ppm	0.0018	0.18	85090.0000	1.0070 (ppm)
Mo (204.598 nm)	1.0300	ppm	0.0009	0.09	3460.0000	1.0300 (ppm)
Na (589.592 nm)	9.9380	ppm	0.0242	0.24	55280.0000	9.9380 (ppm)
Ni (231.604 nm)	1.0050	ppm	0.0035	0.35	3898.0000	1.0050 (ppm)
P (213.618 nm)	1.0070	ppm	0.0008	0.08	670.8000	1.0070 (ppm)
Pb (220.353 nm)	1.0060	ppm	0.0012	0.12	1746.0000	1.0060 (ppm)
Sb (206.834 nm)	1.0030	ppm	0.0105	1.04	781.5000	1.0030 (ppm)
Se (196.026 nm)	0.9817	ppm	0.0006	0.06	554.5000	0.9817 (ppm)
Si (251.611 nm)	5.0310	ppm	0.0344	0.68	10200.0000	5.0310 (ppm)
Sn (189.925 nm)	1.0310	ppm	0.0085	0.82	508.9000	1.0310 (ppm)
Sr (421.552 nm)	0.9931	ppm	0.0021	0.21	328700.0000	0.9931 (ppm)
Ti (336.122 nm)	1.0540	ppm	0.0007	0.07	99710.0000	1.0540 (ppm)
Tl (190.794 nm)	1.0080	ppm	0.0113	1.12	891.4000	1.0080 (ppm)
V (292.401 nm)	1.0070	ppm	0.0042	0.41	26750.0000	1.0070 (ppm)
W (207.912 nm)	1.0240	ppm	0.0009	0.08	1475.0000	1.0240 (ppm)
Zn (202.548 nm)	1.0090	ppm	0.0040	0.39	13110.0000	1.0090 (ppm)
Zr (343.823 nm)	0.9662	ppm	0.0069	0.72	73300.0000	0.9662 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9086	314500.0000	0.0064	0.70
Y_R 371.029	0.8984	43650.0000	0.0061	0.68

Sample Name: CCB 5993195

Date: 12/10/2019 2:28:47 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0004	ppm	0.0004	> 100.00	-55.6300	0.0004 (ppm)
Al (396.152 nm)	0.0089	ppm	0.0017	19.13	-91.8100	0.0089 (ppm)
As (188.980 nm)	0.0014 u	ppm	0.0050	> 100.00	2.3350	0.0014 u (ppm)
B (249.678 nm)	0.0021	ppm	0.0001	2.93	5.4830	0.0021 (ppm)
Ba (233.527 nm)	0.0007	ppm	0.0003	45.21	91.6900	0.0007 (ppm)
Be (234.861 nm)	0.0006	ppm	0.0002	26.80	111.0000	0.0006 (ppm)
Ca (422.673 nm)	-0.0130 u	ppm	0.0079	60.99	70.1600	-0.0130 u (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0000	2.71	4.3590	0.0004 (ppm)
Co (228.615 nm)	0.0004 u	ppm	0.0015	> 100.00	-8.6240	0.0004 u (ppm)
Cr (205.560 nm)	0.0006	ppm	0.0005	95.95	3.9620	0.0006 (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0004	> 100.00	41.4900	0.0000 u (ppm)
Fe (238.204 nm)	0.0280	ppm	0.0072	25.75	19.1900	0.0280 (ppm)
K (766.491 nm)	0.0706 u	ppm	0.1264	> 100.00	-9.5000	0.0706 u (ppm)
Li (670.783 nm)	0.0022	ppm	0.0010	46.21	175.6000	0.0022 (ppm)
Mg (279.078 nm)	0.0106	ppm	0.0019	17.58	35.5300	0.0106 (ppm)
Mn (259.372 nm)	0.0010	ppm	0.0002	19.21	141.6000	0.0010 (ppm)
Mo (204.598 nm)	0.0198	ppm	0.0032	16.21	62.5000	0.0198 (ppm)
Na (589.592 nm)	-0.0383 u	ppm	0.0160	41.74	704.4000	-0.0383 u (ppm)
Ni (231.604 nm)	0.0030	ppm	0.0006	20.73	-4.0400	0.0030 (ppm)
P (213.618 nm)	0.0023 u	ppm	0.0102	> 100.00	1.6190	0.0023 u (ppm)
Pb (220.353 nm)	-0.0022 u	ppm	0.0039	> 100.00	-15.3000	-0.0022 u (ppm)
Sb (206.834 nm)	0.0061	ppm	0.0018	29.92	1.2390	0.0061 (ppm)
Se (196.026 nm)	0.0064	ppm	0.0013	20.65	2.9650	0.0064 (ppm)
Si (251.611 nm)	0.0049	ppm	0.0007	15.22	22.0100	0.0049 (ppm)
Sn (189.925 nm)	0.0030	ppm	0.0016	51.51	0.0454	0.0030 (ppm)
Sr (421.552 nm)	0.0003	ppm	0.0001	28.25	72.5700	0.0003 (ppm)
Ti (336.122 nm)	0.0060 Z	ppm	0.0004	5.89	434.0000 Z	0.0060 Z (ppm)
Tl (190.794 nm)	0.0064	ppm	0.0045	70.95	10.2200	0.0064 (ppm)
V (292.401 nm)	0.0013	ppm	0.0009	72.71	116.7000	0.0013 (ppm)
W (207.912 nm)	0.0109	ppm	0.0001	0.71	11.2700	0.0109 (ppm)
Zn (202.548 nm)	0.0029	ppm	0.0005	16.00	50.5700	0.0029 (ppm)
Zr (343.823 nm)	0.0002	ppm	0.0001	50.90	122.2000	0.0002 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9069	313900.0000	0.0034	0.37
Y_R 371.029	0.8919	43330.0000	0.0000	0.00

Sample Name: 440-256667-A-4-A@5

Date: 12/10/2019 2:30:35 PM Rack:Tube: 2:26

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0030 u	ppm	0.0005	15.66	-193.3000	-0.0030 u (ppm)
Al (396.152 nm)	91.4700	ppm	0.2780	0.30	2266000.0000	91.4700 (ppm)
As (188.980 nm)	0.0208	ppm	0.0049	23.54	5.4840	0.0208 (ppm)
B (249.678 nm)	0.0241	ppm	0.0015	6.41	72.3900	0.0241 (ppm)
Ba (233.527 nm)	0.8279	ppm	0.0029	0.35	62580.0000	0.8279 (ppm)
Be (234.861 nm)	0.0035	ppm	0.0001	2.01	2367.0000	0.0035 (ppm)
Ca (422.673 nm)	19.2600	ppm	0.0871	0.45	72430.0000	19.2600 (ppm)
Cd (214.439 nm)	0.0010	ppm	0.0001	13.86	35.6800	0.0010 (ppm)
Co (228.615 nm)	0.0589	ppm	0.0003	0.48	786.8000	0.0589 (ppm)
Cr (205.560 nm)	0.1224	ppm	0.0010	0.83	478.2000	0.1224 (ppm)
Cu (324.754 nm)	0.1245	ppm	0.0000	0.00	4534.0000	0.1245 (ppm)
Fe (238.204 nm)	137.8000	ppm	0.5519	0.40	341500.0000	137.8000 (ppm)
K (766.491 nm)	14.5600	ppm	0.0407	0.28	14140.0000	14.5600 (ppm)
Li (670.783 nm)	0.0480	ppm	0.0004	0.86	2275.0000	0.0480 (ppm)
Mg (279.078 nm)	23.1300	ppm	0.0459	0.20	53990.0000	23.1300 (ppm)
Mn (259.372 nm)	4.2760	ppm	0.0081	0.19	373500.0000	4.2760 (ppm)
Mo (204.598 nm)	0.0079	ppm	0.0010	12.65	33.2300	0.0079 (ppm)
Na (589.592 nm)	1.1730	ppm	0.0039	0.33	8469.0000	1.1730 (ppm)
Ni (231.604 nm)	0.0781	ppm	0.0011	1.38	282.1000	0.0781 (ppm)
P (213.618 nm)	1.8380	ppm	0.0027	0.15	1303.0000	1.8380 (ppm)
Pb (220.353 nm)	0.0747	ppm	0.0013	1.73	193.1000	0.0747 (ppm)
Sb (206.834 nm)	0.0132	ppm	0.0011	8.11	5.1430	0.0132 (ppm)
Se (196.026 nm)	0.0056	ppm	0.0029	52.53	-9.9470	0.0056 (ppm)
Si (251.611 nm)	1.5420	ppm	0.0017	0.11	3134.0000	1.5420 (ppm)
Sn (189.925 nm)	0.0096	ppm	0.0012	12.20	3.1520	0.0096 (ppm)
Sr (421.552 nm)	0.1942	ppm	0.0011	0.56	64500.0000	0.1942 (ppm)
Ti (336.122 nm)	6.1250	ppm	0.0208	0.34	580200.0000	6.1250 (ppm)
Tl (190.794 nm)	0.0250	ppm	0.0022	8.93	-27.1100	0.0250 (ppm)
V (292.401 nm)	0.2716	ppm	0.0004	0.14	7494.0000	0.2716 (ppm)
W (207.912 nm)	0.0004 u	ppm	0.0010	> 100.00	-2.1160	0.0004 u (ppm)
Zn (202.548 nm)	0.3344	ppm	0.0013	0.40	4293.0000	0.3344 (ppm)
Zr (343.823 nm)	0.0514	ppm	0.0002	0.46	990.6000	0.0514 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9148	316700.0000	0.0022	0.24
Y_R 371.029	0.9213	44760.0000	0.0020	0.21

Sample Name: 440-256667-A-5-A@5

Date: 12/10/2019 2:32:23 PM Rack:Tube: 2:27

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0018 u	ppm	0.0004	24.24	-150.7000	-0.0018 u (ppm)
Al (396.152 nm)	83.4900	ppm	0.2367	0.28	2069000.0000	83.4900 (ppm)
As (188.980 nm)	0.0236	ppm	0.0066	28.13	7.3360	0.0236 (ppm)
B (249.678 nm)	0.0262	ppm	0.0007	2.55	100.7000	0.0262 (ppm)
Ba (233.527 nm)	0.8996	ppm	0.0011	0.12	68000.0000	0.8996 (ppm)
Be (234.861 nm)	0.0033	ppm	0.0000	0.79	2218.0000	0.0033 (ppm)
Ca (422.673 nm)	20.6400	ppm	0.0002	0.00	77640.0000	20.6400 (ppm)
Cd (214.439 nm)	0.0029	ppm	0.0000	1.14	68.5500	0.0029 (ppm)
Co (228.615 nm)	0.0560	ppm	0.0006	1.09	756.4000	0.0560 (ppm)
Cr (205.560 nm)	0.1167	ppm	0.0016	1.37	456.1000	0.1167 (ppm)
Cu (324.754 nm)	0.1764	ppm	0.0005	0.30	6368.0000	0.1764 (ppm)
Fe (238.204 nm)	129.7000	ppm	0.0171	0.01	321400.0000	129.7000 (ppm)
K (766.491 nm)	18.4600	ppm	0.0748	0.41	17930.0000	18.4600 (ppm)
Li (670.783 nm)	0.0479	ppm	0.0022	4.61	2268.0000	0.0479 (ppm)
Mg (279.078 nm)	21.5900	ppm	0.0043	0.02	50390.0000	21.5900 (ppm)
Mn (259.372 nm)	4.1330	ppm	0.0155	0.37	360600.0000	4.1330 (ppm)
Mo (204.598 nm)	0.0057	ppm	0.0001	1.56	25.2100	0.0057 (ppm)
Na (589.592 nm)	1.1930	ppm	0.0046	0.38	8510.0000	1.1930 (ppm)
Ni (231.604 nm)	0.0831	ppm	0.0012	1.47	301.8000	0.0831 (ppm)
P (213.618 nm)	2.3040	ppm	0.0070	0.30	1631.0000	2.3040 (ppm)
Pb (220.353 nm)	0.2983	ppm	0.0008	0.27	579.5000	0.2983 (ppm)
Sb (206.834 nm)	0.0146	ppm	0.0032	21.79	6.5350	0.0146 (ppm)
Se (196.026 nm)	0.0048	ppm	0.0028	58.26	-9.6810	0.0048 (ppm)
Si (251.611 nm)	1.8770	ppm	0.0232	1.24	3805.0000	1.8770 (ppm)
Sn (189.925 nm)	0.0204	ppm	0.0070	34.59	8.4600	0.0204 (ppm)
Sr (421.552 nm)	0.2002	ppm	0.0004	0.19	66490.0000	0.2002 (ppm)
Ti (336.122 nm)	6.2550	ppm	0.0244	0.39	592400.0000	6.2550 (ppm)
Tl (190.794 nm)	0.0214	ppm	0.0073	34.28	-31.9900	0.0214 (ppm)
V (292.401 nm)	0.2534	ppm	0.0012	0.47	7014.0000	0.2534 (ppm)
W (207.912 nm)	-0.0010 u	ppm	0.0017	> 100.00	2.9950	-0.0010 u (ppm)
Zn (202.548 nm)	0.9269	ppm	0.0030	0.32	11940.0000	0.9269 (ppm)
Zr (343.823 nm)	0.0482	ppm	0.0011	2.21	927.7000	0.0482 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9155	316900.0000	0.0034	0.37
Y_R 371.029	0.9186	44630.0000	0.0002	0.03

Sample Name: 440-256667-A-6-A@5

Date: 12/10/2019 2:34:13 PM Rack:Tube: 2:28

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0031 u	ppm	0.0005	15.80	-198.0000	-0.0031 u (ppm)
Al (396.152 nm)	107.7000	ppm	0.0129	0.01	2670000.0000	107.7000 (ppm)
As (188.980 nm)	0.0332	ppm	0.0014	4.26	11.3400	0.0332 (ppm)
B (249.678 nm)	0.0247	ppm	0.0010	4.00	61.7900	0.0247 (ppm)
Ba (233.527 nm)	0.8962	ppm	0.0074	0.82	67740.0000	0.8962 (ppm)
Be (234.861 nm)	0.0041	ppm	0.0001	1.48	2653.0000	0.0041 (ppm)
Ca (422.673 nm)	17.6200	ppm	0.0901	0.51	66270.0000	17.6200 (ppm)
Cd (214.439 nm)	0.0008	ppm	0.0001	11.81	33.6000	0.0008 (ppm)
Co (228.615 nm)	0.0662	ppm	0.0012	1.85	891.2000	0.0662 (ppm)
Cr (205.560 nm)	0.1351	ppm	0.0001	0.07	527.3000	0.1351 (ppm)
Cu (324.754 nm)	0.1216	ppm	0.0005	0.40	4447.0000	0.1216 (ppm)
Fe (238.204 nm)	153.1000	ppm	0.8251	0.54	379300.0000	153.1000 (ppm)
K (766.491 nm)	16.1900	ppm	0.1103	0.68	15720.0000	16.1900 (ppm)
Li (670.783 nm)	0.0563	ppm	0.0006	1.07	2712.0000	0.0563 (ppm)
Mg (279.078 nm)	25.0600	ppm	0.1619	0.65	58490.0000	25.0600 (ppm)
Mn (259.372 nm)	4.7390	ppm	0.0008	0.02	414000.0000	4.7390 (ppm)
Mo (204.598 nm)	0.0043	ppm	0.0004	9.53	22.8400	0.0043 (ppm)
Na (589.592 nm)	1.5610	ppm	0.0114	0.73	10720.0000	1.5610 (ppm)
Ni (231.604 nm)	0.0869	ppm	0.0017	1.99	315.8000	0.0869 (ppm)
P (213.618 nm)	1.9860	ppm	0.0010	0.05	1408.0000	1.9860 (ppm)
Pb (220.353 nm)	0.0390	ppm	0.0036	9.20	138.3000	0.0390 (ppm)
Sb (206.834 nm)	0.0178	ppm	0.0001	0.59	8.6700	0.0178 (ppm)
Se (196.026 nm)	-0.0016 u	ppm	0.0078	> 100.00	-15.3700	-0.0016 u (ppm)
Si (251.611 nm)	1.4800	ppm	0.0059	0.40	3019.0000	1.4800 (ppm)
Sn (189.925 nm)	0.0025 u	ppm	0.0078	> 100.00	-0.4281	0.0025 u (ppm)
Sr (421.552 nm)	0.1863	ppm	0.0008	0.46	61850.0000	0.1863 (ppm)
Ti (336.122 nm)	7.1360	ppm	0.0162	0.23	675900.0000	7.1360 (ppm)
Tl (190.794 nm)	0.0278	ppm	0.0021	7.62	-34.1400	0.0278 (ppm)
V (292.401 nm)	0.3069	ppm	0.0000	0.00	8460.0000	0.3069 (ppm)
W (207.912 nm)	-0.0015 u	ppm	0.0030	> 100.00	-5.0480	-0.0015 u (ppm)
Zn (202.548 nm)	0.3380	ppm	0.0000	0.01	4335.0000	0.3380 (ppm)
Zr (343.823 nm)	0.0550	ppm	0.0001	0.11	929.8000	0.0550 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029

Label	Internal Standard
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9180	317700.0000	0.0006	0.06
Y_R 371.029	0.9220	44800.0000	0.0065	0.70

Sample Name: 440-256667-A-7-A@5

Date: 12/10/2019 2:36:01 PM Rack:Tube: 2:29

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0022 u	ppm	0.0002	9.47	-164.9000	-0.0022 u (ppm)
Al (396.152 nm)	74.1100	ppm	0.2418	0.33	1836000.0000	74.1100 (ppm)
As (188.980 nm)	0.0194	ppm	0.0041	21.19	5.6640	0.0194 (ppm)
B (249.678 nm)	0.0181	ppm	0.0017	9.18	33.4200	0.0181 (ppm)
Ba (233.527 nm)	0.6702	ppm	0.0041	0.60	50670.0000	0.6702 (ppm)
Be (234.861 nm)	0.0029	ppm	0.0001	5.10	2040.0000	0.0029 (ppm)
Ca (422.673 nm)	14.8500	ppm	0.0279	0.19	55880.0000	14.8500 (ppm)
Cd (214.439 nm)	0.0008	ppm	0.0005	59.71	29.5200	0.0008 (ppm)
Co (228.615 nm)	0.0526	ppm	0.0006	1.16	709.3000	0.0526 (ppm)
Cr (205.560 nm)	0.1029	ppm	0.0002	0.19	402.1000	0.1029 (ppm)
Cu (324.754 nm)	0.1093	ppm	0.0001	0.10	3991.0000	0.1093 (ppm)
Fe (238.204 nm)	120.1000	ppm	0.2594	0.22	297500.0000	120.1000 (ppm)
K (766.491 nm)	15.6600	ppm	0.1161	0.74	15200.0000	15.6600 (ppm)
Li (670.783 nm)	0.0393	ppm	0.0006	1.41	1844.0000	0.0393 (ppm)
Mg (279.078 nm)	19.1400	ppm	0.1281	0.67	44660.0000	19.1400 (ppm)
Mn (259.372 nm)	3.7380	ppm	0.0095	0.25	326500.0000	3.7380 (ppm)
Mo (204.598 nm)	0.0037	ppm	0.0001	3.11	17.2000	0.0037 (ppm)
Na (589.592 nm)	0.8160	ppm	0.0196	2.40	6370.0000	0.8160 (ppm)
Ni (231.604 nm)	0.0663	ppm	0.0034	5.07	236.8000	0.0663 (ppm)
P (213.618 nm)	1.7250	ppm	0.0003	0.02	1223.0000	1.7250 (ppm)
Pb (220.353 nm)	0.0566	ppm	0.0012	2.05	151.8000	0.0566 (ppm)
Sb (206.834 nm)	0.0131	ppm	0.0018	13.99	5.3960	0.0131 (ppm)
Se (196.026 nm)	0.0044	ppm	0.0061	> 100.00	-9.0420	0.0044 (ppm)
Si (251.611 nm)	1.4720	ppm	0.0061	0.42	2992.0000	1.4720 (ppm)
Sn (189.925 nm)	0.0076	ppm	0.0028	36.10	2.1390	0.0076 (ppm)
Sr (421.552 nm)	0.1750	ppm	0.0003	0.19	58100.0000	0.1750 (ppm)
Ti (336.122 nm)	5.8800	ppm	0.0248	0.42	556900.0000	5.8800 (ppm)
Tl (190.794 nm)	0.0182	ppm	0.0070	38.43	-31.7600	0.0182 (ppm)
V (292.401 nm)	0.2352	ppm	0.0007	0.30	6515.0000	0.2352 (ppm)
W (207.912 nm)	-0.0011 u	ppm	0.0017	> 100.00	-4.6280	-0.0011 u (ppm)
Zn (202.548 nm)	0.2658	ppm	0.0011	0.42	3413.0000	0.2658 (ppm)
Zr (343.823 nm)	0.0429	ppm	0.0004	0.93	734.4000	0.0429 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9190	318100.0000	0.0004	0.05
Y_R 371.029	0.9179	44590.0000	0.0034	0.37

Sample Name: 440-256667-A-8-A@5

Date: 12/10/2019 2:37:49 PM Rack:Tube: 2:30

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0030 u	ppm	0.0005	15.68	-194.3000	-0.0030 u (ppm)
Al (396.152 nm)	108.2000	ppm	0.2707	0.25	2682000.0000	108.2000 (ppm)
As (188.980 nm)	0.0218	ppm	0.0042	19.27	5.4030	0.0218 (ppm)
B (249.678 nm)	0.0225	ppm	0.0008	3.38	42.3900	0.0225 (ppm)
Ba (233.527 nm)	0.7688	ppm	0.0027	0.35	58120.0000	0.7688 (ppm)
Be (234.861 nm)	0.0040	ppm	0.0000	0.12	2614.0000	0.0040 (ppm)
Ca (422.673 nm)	15.9800	ppm	0.0717	0.45	60090.0000	15.9800 (ppm)
Cd (214.439 nm)	0.0009	ppm	0.0001	11.41	34.2400	0.0009 (ppm)
Co (228.615 nm)	0.0631	ppm	0.0015	2.30	846.4000	0.0631 (ppm)
Cr (205.560 nm)	0.1326	ppm	0.0001	0.05	517.5000	0.1326 (ppm)
Cu (324.754 nm)	0.1092	ppm	0.0003	0.31	4006.0000	0.1092 (ppm)
Fe (238.204 nm)	151.5000	ppm	0.8046	0.53	375400.0000	151.5000 (ppm)
K (766.491 nm)	14.3300	ppm	0.1830	1.28	13910.0000	14.3300 (ppm)
Li (670.783 nm)	0.0546	ppm	0.0004	0.75	2624.0000	0.0546 (ppm)
Mg (279.078 nm)	24.6500	ppm	0.0730	0.30	57530.0000	24.6500 (ppm)
Mn (259.372 nm)	4.3650	ppm	0.0103	0.24	382400.0000	4.3650 (ppm)
Mo (204.598 nm)	0.0044	ppm	0.0010	21.72	23.0300	0.0044 (ppm)
Na (589.592 nm)	0.9445	ppm	0.0064	0.68	7334.0000	0.9445 (ppm)
Ni (231.604 nm)	0.0830	ppm	0.0015	1.75	300.7000	0.0830 (ppm)
P (213.618 nm)	1.9640	ppm	0.0112	0.57	1393.0000	1.9640 (ppm)
Pb (220.353 nm)	0.0274	ppm	0.0006	2.24	117.2000	0.0274 (ppm)
Sb (206.834 nm)	0.0150	ppm	0.0029	19.18	6.4050	0.0150 (ppm)
Se (196.026 nm)	0.0120	ppm	0.0006	4.90	-7.7060	0.0120 (ppm)
Si (251.611 nm)	1.3810	ppm	0.0096	0.69	2819.0000	1.3810 (ppm)
Sn (189.925 nm)	0.0074	ppm	0.0004	5.09	2.0480	0.0074 (ppm)
Sr (421.552 nm)	0.1866	ppm	0.0012	0.67	61940.0000	0.1866 (ppm)
Ti (336.122 nm)	6.6620	ppm	0.0253	0.38	631000.0000	6.6620 (ppm)
Tl (190.794 nm)	0.0194	ppm	0.0042	21.53	-37.4600	0.0194 (ppm)
V (292.401 nm)	0.3051	ppm	0.0010	0.33	8397.0000	0.3051 (ppm)
W (207.912 nm)	-0.0001 u	ppm	0.0023	> 100.00	-3.6120	-0.0001 u (ppm)
Zn (202.548 nm)	0.2860	ppm	0.0006	0.20	3664.0000	0.2860 (ppm)
Zr (343.823 nm)	0.0538	ppm	0.0002	0.33	875.9000	0.0538 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9164	317200.0000	0.0010	0.11
Y_R 371.029	0.9239	44890.0000	0.0024	0.26

Sample Name: 440-256664-A-1-A@5

Date: 12/10/2019 2:39:37 PM Rack:Tube: 2:31

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0040 u	ppm	0.0004	10.81	-257.4000	-0.0040 u (ppm)
Al (396.152 nm)	151.1000	ppm	0.4457	0.29	3745000.0000	151.1000 (ppm)
As (188.980 nm)	0.0205	ppm	0.0000	0.09	1.5710	0.0205 (ppm)
B (249.678 nm)	0.0329	ppm	0.0004	1.08	82.6600	0.0329 (ppm)
Ba (233.527 nm)	1.1060	ppm	0.0017	0.16	83620.0000	1.1060 (ppm)
Be (234.861 nm)	0.0053	ppm	0.0007	12.39	3598.0000	0.0053 (ppm)
Ca (422.673 nm)	61.2000	ppm	0.2003	0.33	230000.0000	61.2000 (ppm)
Cd (214.439 nm)	0.0009	ppm	0.0002	22.38	43.0500	0.0009 (ppm)
Co (228.615 nm)	0.0807	ppm	0.0017	2.12	1165.0000	0.0807 (ppm)
Cr (205.560 nm)	0.1677	ppm	0.0021	1.25	655.3000	0.1677 (ppm)
Cu (324.754 nm)	0.2011	ppm	0.0002	0.10	7293.0000	0.2011 (ppm)
Fe (238.204 nm)	210.8000	ppm	0.5084	0.24	522400.0000	210.8000 (ppm)
K (766.491 nm)	41.2500	ppm	0.1114	0.27	40140.0000	41.2500 (ppm)
Li (670.783 nm)	0.1130	ppm	0.0003	0.28	5970.0000	0.1130 (ppm)
Mg (279.078 nm)	64.5000	ppm	0.1560	0.24	150600.0000	64.5000 (ppm)
Mn (259.372 nm)	3.0990	ppm	0.0087	0.28	282600.0000	3.0990 (ppm)
Mo (204.598 nm)	0.0058	ppm	0.0011	19.53	32.9200	0.0058 (ppm)
Na (589.592 nm)	2.2220	ppm	0.0186	0.84	14820.0000	2.2220 (ppm)
Ni (231.604 nm)	0.1172	ppm	0.0033	2.84	431.1000	0.1172 (ppm)
P (213.618 nm)	9.3780	ppm	0.0525	0.56	6640.0000	9.3780 (ppm)
Pb (220.353 nm)	0.0268	ppm	0.0006	2.24	145.0000	0.0268 (ppm)
Sb (206.834 nm)	0.0197	ppm	0.0032	16.02	9.9090	0.0197 (ppm)
Se (196.026 nm)	0.0025	ppm	0.0001	5.75	-19.6100	0.0025 (ppm)
Si (251.611 nm)	0.8930	ppm	0.0043	0.48	1893.0000	0.8930 (ppm)
Sn (189.925 nm)	-0.0011 u	ppm	0.0049	> 100.00	-2.4680	-0.0011 u (ppm)
Sr (421.552 nm)	0.4999	ppm	0.0015	0.30	166100.0000	0.4999 (ppm)
Ti (336.122 nm)	12.2600	ppm	0.0348	0.28	1161000.0000	12.2600 (ppm)
Tl (190.794 nm)	0.0482	ppm	0.0032	6.62	-67.8600	0.0482 (ppm)
V (292.401 nm)	0.3860	ppm	0.0004	0.10	10740.0000	0.3860 (ppm)
W (207.912 nm)	-0.0032 u	ppm	0.0005	14.18	-7.0380	-0.0032 u (ppm)
Zn (202.548 nm)	0.4972	ppm	0.0032	0.64	6380.0000	0.4972 (ppm)
Zr (343.823 nm)	0.0758	ppm	0.0014	1.78	1256.0000	0.0758 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9047	313200.0000	0.0014	0.15
Y_R 371.029	0.9224	44820.0000	0.0011	0.11

Sample Name: 440-256664-A-2-A@5

Date: 12/10/2019 2:41:25 PM Rack:Tube: 2:32

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0040 u	ppm	0.0000	0.34	-255.1000	-0.0040 u (ppm)
Al (396.152 nm)	143.2000	ppm	0.3386	0.24	3549000.0000	143.2000 (ppm)
As (188.980 nm)	0.0284	ppm	0.0009	3.05	6.1930	0.0284 (ppm)
B (249.678 nm)	0.0283	ppm	0.0019	6.76	45.8200	0.0283 (ppm)
Ba (233.527 nm)	1.0580	ppm	0.0020	0.19	79970.0000	1.0580 (ppm)
Be (234.861 nm)	0.0038	ppm	0.0002	5.41	3268.0000	0.0038 (ppm)
Ca (422.673 nm)	58.4400	ppm	0.3717	0.64	219600.0000	58.4400 (ppm)
Cd (214.439 nm)	0.0008	ppm	0.0003	37.10	40.0700	0.0008 (ppm)
Co (228.615 nm)	0.0764	ppm	0.0036	4.67	1104.0000	0.0764 (ppm)
Cr (205.560 nm)	0.1608	ppm	0.0003	0.16	628.4000	0.1608 (ppm)
Cu (324.754 nm)	0.1797	ppm	0.0006	0.34	6530.0000	0.1797 (ppm)
Fe (238.204 nm)	203.0000	ppm	1.1450	0.56	503000.0000	203.0000 (ppm)
K (766.491 nm)	36.4900	ppm	0.2745	0.75	35500.0000	36.4900 (ppm)
Li (670.783 nm)	0.1086	ppm	0.0026	2.42	5728.0000	0.1086 (ppm)
Mg (279.078 nm)	61.6600	ppm	0.1546	0.25	144000.0000	61.6600 (ppm)
Mn (259.372 nm)	2.9360	ppm	0.0057	0.19	268100.0000	2.9360 (ppm)
Mo (204.598 nm)	0.0051	ppm	0.0005	8.96	29.7700	0.0051 (ppm)
Na (589.592 nm)	2.1120	ppm	0.0186	0.88	14150.0000	2.1120 (ppm)
Ni (231.604 nm)	0.1082	ppm	0.0019	1.79	396.5000	0.1082 (ppm)
P (213.618 nm)	8.8860	ppm	0.0938	1.06	6292.0000	8.8860 (ppm)
Pb (220.353 nm)	0.0227	ppm	0.0019	8.34	134.1000	0.0227 (ppm)
Sb (206.834 nm)	0.0184	ppm	0.0083	45.28	8.8980	0.0184 (ppm)
Se (196.026 nm)	0.0045	ppm	0.0001	2.25	-17.7800	0.0045 (ppm)
Si (251.611 nm)	0.8573	ppm	0.0064	0.75	1817.0000	0.8573 (ppm)
Sn (189.925 nm)	-0.0003 u	ppm	0.0076	> 100.00	-2.0460	-0.0003 u (ppm)
Sr (421.552 nm)	0.4855	ppm	0.0029	0.60	161300.0000	0.4855 (ppm)
Ti (336.122 nm)	11.7100	ppm	0.0318	0.27	1109000.0000	11.7100 (ppm)
Tl (190.794 nm)	0.0483	ppm	0.0024	5.00	-62.5100	0.0483 (ppm)
V (292.401 nm)	0.3707	ppm	0.0014	0.39	10310.0000	0.3707 (ppm)
W (207.912 nm)	-0.0043 u	ppm	0.0005	11.28	-8.8240	-0.0043 u (ppm)
Zn (202.548 nm)	0.4637	ppm	0.0007	0.14	5947.0000	0.4637 (ppm)
Zr (343.823 nm)	0.0718	ppm	0.0011	1.57	1121.0000	0.0718 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9085	314500.0000	0.0020	0.22
Y_R 371.029	0.9237	44880.0000	0.0020	0.22

Sample Name: 440-254794-A-147-B@5

Date: 12/10/2019 2:43:15 PM Rack:Tube: 2:33

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0022	ppm	0.0002	11.13	8.2580	0.0022 (ppm)
Al (396.152 nm)	114.1000	ppm	0.3873	0.34	2828000.0000	114.1000 (ppm)
As (188.980 nm)	0.0749	ppm	0.0011	1.52	32.5000	0.0749 (ppm)
B (249.678 nm)	0.6109	ppm	0.0021	0.34	5772.0000	0.6109 (ppm)
Ba (233.527 nm)	1.1630	ppm	0.0015	0.13	87870.0000	1.1630 (ppm)
Be (234.861 nm)	0.0038	ppm	0.0000	0.96	2723.0000	0.0038 (ppm)
Ca (422.673 nm)	73.9800	ppm	0.0124	0.02	278000.0000	73.9800 (ppm)
Cd (214.439 nm)	0.0126	ppm	0.0001	0.84	255.5000	0.0126 (ppm)
Co (228.615 nm)	0.0707	ppm	0.0007	1.06	940.6000	0.0707 (ppm)
Cr (205.560 nm)	0.1920	ppm	0.0012	0.63	748.5000	0.1920 (ppm)
Cu (324.754 nm)	0.5568	ppm	0.0012	0.22	19810.0000	0.5568 (ppm)
Fe (238.204 nm)	161.8000	ppm	0.0491	0.03	400900.0000	161.8000 (ppm)
K (766.491 nm)	24.1300	ppm	0.0720	0.30	23450.0000	24.1300 (ppm)
Li (670.783 nm)	0.0925	ppm	0.0007	0.77	4619.0000	0.0925 (ppm)
Mg (279.078 nm)	34.3600	ppm	0.0379	0.11	80220.0000	34.3600 (ppm)
Mn (259.372 nm)	3.7400	ppm	0.0119	0.32	331200.0000	3.7400 (ppm)
Mo (204.598 nm)	0.0056	ppm	0.0010	18.51	28.3800	0.0056 (ppm)
Na (589.592 nm)	3.0430	ppm	0.0030	0.10	18900.0000	3.0430 (ppm)
Ni (231.604 nm)	0.1337	ppm	0.0022	1.65	497.5000	0.1337 (ppm)
P (213.618 nm)	8.3180	ppm	0.0723	0.87	5877.0000	8.3180 (ppm)
Pb (220.353 nm)	1.4550	ppm	0.0002	0.01	2620.0000	1.4550 (ppm)
Sb (206.834 nm)	0.0267	ppm	0.0063	23.59	16.3000	0.0267 (ppm)
Se (196.026 nm)	0.0028 u	ppm	0.0124	> 100.00	-14.4000	0.0028 u (ppm)
Si (251.611 nm)	1.3800	ppm	0.0058	0.42	2835.0000	1.3800 (ppm)
Sn (189.925 nm)	0.0579	ppm	0.0038	6.60	27.1200	0.0579 (ppm)
Sr (421.552 nm)	0.4822	ppm	0.0000	0.01	160300.0000	0.4822 (ppm)
Ti (336.122 nm)	7.0340	ppm	0.0162	0.23	666200.0000	7.0340 (ppm)
Tl (190.794 nm)	0.0286	ppm	0.0062	21.78	-33.3200	0.0286 (ppm)
V (292.401 nm)	0.3067	ppm	0.0015	0.50	8511.0000	0.3067 (ppm)
W (207.912 nm)	0.0045	ppm	0.0037	81.56	45.2000	0.0045 (ppm)
Zn (202.548 nm)	3.9410	ppm	0.0106	0.27	50820.0000	3.9410 (ppm)
Zr (343.823 nm)	0.2635	ppm	0.0017	0.65	16550.0000	0.2635 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9102	315000.0000	0.0024	0.27
Y_R 371.029	0.9286	45120.0000	0.0003	0.04

Sample Name: 440-254794-A-150-B@5

Date: 12/10/2019 2:45:03 PM Rack:Tube: 2:34

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	-81.7400	0.0000 u (ppm)
Al (396.152 nm)	119.3000	ppm	0.6059	0.51	2957000.0000	119.3000 (ppm)
As (188.980 nm)	0.0962	ppm	0.0032	3.33	43.6800	0.0962 (ppm)
B (249.678 nm)	0.0623	ppm	0.0004	0.63	414.3000	0.0623 (ppm)
Ba (233.527 nm)	1.4320	ppm	0.0086	0.60	108200.0000	1.4320 (ppm)
Be (234.861 nm)	0.0039	ppm	0.0001	3.86	2793.0000	0.0039 (ppm)
Ca (422.673 nm)	46.1400	ppm	0.0441	0.10	173400.0000	46.1400 (ppm)
Cd (214.439 nm)	0.0131	ppm	0.0000	0.31	264.7000	0.0131 (ppm)
Co (228.615 nm)	0.0688	ppm	0.0001	0.19	897.6000	0.0688 (ppm)
Cr (205.560 nm)	0.2133	ppm	0.0004	0.18	830.1000	0.2133 (ppm)
Cu (324.754 nm)	0.8540	ppm	0.0048	0.57	30340.0000	0.8540 (ppm)
Fe (238.204 nm)	166.2000	ppm	0.2988	0.18	411900.0000	166.2000 (ppm)
K (766.491 nm)	25.4900	ppm	0.1237	0.49	24780.0000	25.4900 (ppm)
Li (670.783 nm)	0.0995	ppm	0.0010	1.02	4964.0000	0.0995 (ppm)
Mg (279.078 nm)	31.9800	ppm	0.1603	0.50	74650.0000	31.9800 (ppm)
Mn (259.372 nm)	3.7990	ppm	0.0132	0.35	336600.0000	3.7990 (ppm)
Mo (204.598 nm)	0.0130	ppm	0.0002	1.27	53.4100	0.0130 (ppm)
Na (589.592 nm)	1.5230	ppm	0.0059	0.39	10620.0000	1.5230 (ppm)
Ni (231.604 nm)	0.1664	ppm	0.0006	0.38	624.7000	0.1664 (ppm)
P (213.618 nm)	12.0600	ppm	0.1598	1.33	8515.0000	12.0600 (ppm)
Pb (220.353 nm)	3.2420	ppm	0.0043	0.13	5748.0000	3.2420 (ppm)
Sb (206.834 nm)	0.0308	ppm	0.0086	27.83	19.2400	0.0308 (ppm)
Se (196.026 nm)	0.0065	ppm	0.0089	> 100.00	-12.5900	0.0065 (ppm)
Si (251.611 nm)	1.1280	ppm	0.0027	0.24	2316.0000	1.1280 (ppm)
Sn (189.925 nm)	0.1524	ppm	0.0026	1.74	73.8300	0.1524 (ppm)
Sr (421.552 nm)	0.5466	ppm	0.0003	0.05	181400.0000	0.5466 (ppm)
Ti (336.122 nm)	5.9550	ppm	0.0302	0.51	564000.0000	5.9550 (ppm)
Tl (190.794 nm)	0.0178	ppm	0.0057	32.02	-31.8600	0.0178 (ppm)
V (292.401 nm)	0.3132	ppm	0.0014	0.43	8627.0000	0.3132 (ppm)
W (207.912 nm)	0.0034	ppm	0.0022	64.41	29.0900	0.0034 (ppm)
Zn (202.548 nm)	2.6840	ppm	0.0029	0.11	34640.0000	2.6840 (ppm)
Zr (343.823 nm)	0.0803	ppm	0.0043	5.39	2573.0000	0.0803 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9162	317100.0000	0.0026	0.28
Y_R 371.029	0.9328	45320.0000	0.0054	0.57

Sample Name: CCV 5993196

Date: 12/10/2019 2:46:53 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4974	ppm	0.0023	0.47	18200.0000	0.4974 (ppm)
Al (396.152 nm)	1.0880	ppm	0.0393	3.62	27550.0000	1.0880 (ppm)
As (188.980 nm)	1.0060	ppm	0.0005	0.05	530.5000	1.0060 (ppm)
B (249.678 nm)	0.9878	ppm	0.0034	0.34	9536.0000	0.9878 (ppm)
Ba (233.527 nm)	1.0110	ppm	0.0025	0.25	76410.0000	1.0110 (ppm)
Be (234.861 nm)	0.9901	ppm	0.0049	0.49	147100.0000	0.9901 (ppm)
Ca (422.673 nm)	4.9700	ppm	0.0107	0.22	18790.0000	4.9700 (ppm)
Cd (214.439 nm)	1.0060	ppm	0.0033	0.33	18800.0000	1.0060 (ppm)
Co (228.615 nm)	1.0110	ppm	0.0039	0.39	11390.0000	1.0110 (ppm)
Cr (205.560 nm)	1.0030	ppm	0.0061	0.60	3870.0000	1.0030 (ppm)
Cu (324.754 nm)	1.0040	ppm	0.0010	0.10	35590.0000	1.0040 (ppm)
Fe (238.204 nm)	1.1550 Q	ppm	0.0065	0.57	2811.0000 Q	1.1550 Q (ppm)
K (766.491 nm)	9.9890	ppm	0.0511	0.51	9647.0000	9.9890 (ppm)
Li (670.783 nm)	0.9879	ppm	0.0017	0.17	54440.0000	0.9879 (ppm)
Mg (279.078 nm)	5.1110	ppm	0.0187	0.37	11950.0000	5.1110 (ppm)
Mn (259.372 nm)	1.0030	ppm	0.0023	0.22	84770.0000	1.0030 (ppm)
Mo (204.598 nm)	1.0360	ppm	0.0016	0.15	3479.0000	1.0360 (ppm)
Na (589.592 nm)	9.8150	ppm	0.0024	0.02	54600.0000	9.8150 (ppm)
Ni (231.604 nm)	1.0050	ppm	0.0038	0.38	3895.0000	1.0050 (ppm)
P (213.618 nm)	1.0120	ppm	0.0058	0.57	674.5000	1.0120 (ppm)
Pb (220.353 nm)	1.0020	ppm	0.0092	0.91	1738.0000	1.0020 (ppm)
Sb (206.834 nm)	1.0090	ppm	0.0162	1.61	785.5000	1.0090 (ppm)
Se (196.026 nm)	0.9700	ppm	0.0020	0.21	547.9000	0.9700 (ppm)
Si (251.611 nm)	5.0260	ppm	0.0425	0.85	10190.0000	5.0260 (ppm)
Sn (189.925 nm)	1.0160	ppm	0.0087	0.86	501.2000	1.0160 (ppm)
Sr (421.552 nm)	0.9879	ppm	0.0012	0.12	327000.0000	0.9879 (ppm)
Ti (336.122 nm)	1.0540	ppm	0.0029	0.28	99760.0000	1.0540 (ppm)
Tl (190.794 nm)	1.0140	ppm	0.0075	0.74	896.6000	1.0140 (ppm)
V (292.401 nm)	1.0030	ppm	0.0040	0.40	26620.0000	1.0030 (ppm)
W (207.912 nm)	1.0240	ppm	0.0015	0.14	1474.0000	1.0240 (ppm)
Zn (202.548 nm)	1.0070	ppm	0.0027	0.27	13080.0000	1.0070 (ppm)
Zr (343.823 nm)	0.9622	ppm	0.0059	0.61	72990.0000	0.9622 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9180	317700.0000	0.0045	0.49
Y_R 371.029	0.9093	44180.0000	0.0001	0.01

Sample Name: CCB 5993195

Date: 12/10/2019 2:48:43 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0010	> 100.00	-86.0600	-0.0005 u (ppm)
Al (396.152 nm)	0.0115	ppm	0.0016	13.87	-29.7300	0.0115 (ppm)
As (188.980 nm)	0.0003 u	ppm	0.0014	> 100.00	1.7680	0.0003 u (ppm)
B (249.678 nm)	0.0015	ppm	0.0002	10.80	-0.6620	0.0015 (ppm)
Ba (233.527 nm)	0.0007	ppm	0.0001	16.64	89.9700	0.0007 (ppm)
Be (234.861 nm)	0.0007	ppm	0.0002	28.38	119.5000	0.0007 (ppm)
Ca (422.673 nm)	-0.0046 u	ppm	0.0151	> 100.00	101.8000	-0.0046 u (ppm)
Cd (214.439 nm)	0.0006	ppm	0.0000	2.59	7.7580	0.0006 (ppm)
Co (228.615 nm)	0.0011	ppm	0.0008	70.55	-0.6890	0.0011 (ppm)
Cr (205.560 nm)	0.0007	ppm	0.0003	44.38	4.4920	0.0007 (ppm)
Cu (324.754 nm)	0.0001 u	ppm	0.0003	> 100.00	44.1800	0.0001 u (ppm)
Fe (238.204 nm)	0.0262	ppm	0.0013	4.85	14.7600	0.0262 (ppm)
K (766.491 nm)	0.0435 u	ppm	0.1040	> 100.00	-35.9000	0.0435 u (ppm)
Li (670.783 nm)	0.0038	ppm	0.0019	49.20	261.5000	0.0038 (ppm)
Mg (279.078 nm)	0.0102	ppm	0.0001	1.24	34.6000	0.0102 (ppm)
Mn (259.372 nm)	0.0012	ppm	0.0004	31.87	153.2000	0.0012 (ppm)
Mo (204.598 nm)	0.0182	ppm	0.0012	6.38	57.1500	0.0182 (ppm)
Na (589.592 nm)	-0.0342 u	ppm	0.0121	35.23	727.0000	-0.0342 u (ppm)
Ni (231.604 nm)	0.0011	ppm	0.0008	76.10	-11.4800	0.0011 (ppm)
P (213.618 nm)	0.0060 u	ppm	0.0091	> 100.00	4.2820	0.0060 u (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0029	> 100.00	-13.5800	-0.0013 u (ppm)
Sb (206.834 nm)	0.0085	ppm	0.0019	22.66	3.1420	0.0085 (ppm)
Se (196.026 nm)	0.0038	ppm	0.0030	79.30	1.5030	0.0038 (ppm)
Si (251.611 nm)	0.0077	ppm	0.0034	43.58	27.4700	0.0077 (ppm)
Sn (189.925 nm)	0.0024	ppm	0.0009	38.12	-0.2711	0.0024 (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0001	71.48	46.5500	0.0002 (ppm)
Ti (336.122 nm)	0.0064 Z	ppm	0.0004	5.74	469.6000 Z	0.0064 Z (ppm)
Tl (190.794 nm)	0.0068	ppm	0.0023	34.21	10.5800	0.0068 (ppm)
V (292.401 nm)	0.0008	ppm	0.0001	8.63	103.7000	0.0008 (ppm)
W (207.912 nm)	0.0116	ppm	0.0034	29.45	12.3400	0.0116 (ppm)
Zn (202.548 nm)	0.0031	ppm	0.0003	10.04	53.1700	0.0031 (ppm)
Zr (343.823 nm)	0.0004	ppm	0.0001	26.10	132.8000	0.0004 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9205	318600.0000	0.0045	0.49
Y_R 371.029	0.9133	44370.0000	0.0031	0.33

Sample Name: CCV 5993196

Date: 12/10/2019 2:54:49 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4969	ppm	0.0027	0.54	18180.0000	0.4969 (ppm)
Al (396.152 nm)	0.9897	ppm	0.0020	0.20	25110.0000	0.9897 (ppm)
As (188.980 nm)	0.9910	ppm	0.0039	0.40	522.6000	0.9910 (ppm)
B (249.678 nm)	0.9868	ppm	0.0087	0.88	9527.0000	0.9868 (ppm)
Ba (233.527 nm)	1.0080	ppm	0.0022	0.22	76190.0000	1.0080 (ppm)
Be (234.861 nm)	0.9888	ppm	0.0068	0.69	146900.0000	0.9888 (ppm)
Ca (422.673 nm)	4.9690	ppm	0.0043	0.09	18780.0000	4.9690 (ppm)
Cd (214.439 nm)	1.0020	ppm	0.0054	0.54	18720.0000	1.0020 (ppm)
Co (228.615 nm)	1.0090	ppm	0.0058	0.57	11360.0000	1.0090 (ppm)
Cr (205.560 nm)	1.0010	ppm	0.0073	0.73	3866.0000	1.0010 (ppm)
Cu (324.754 nm)	0.9956	ppm	0.0014	0.14	35290.0000	0.9956 (ppm)
Fe (238.204 nm)	1.0200	ppm	0.0025	0.24	2476.0000	1.0200 (ppm)
K (766.491 nm)	10.0800	ppm	0.0905	0.90	9740.0000	10.0800 (ppm)
Li (670.783 nm)	0.9853	ppm	0.0022	0.22	54290.0000	0.9853 (ppm)
Mg (279.078 nm)	5.0770	ppm	0.0281	0.55	11870.0000	5.0770 (ppm)
Mn (259.372 nm)	0.9987	ppm	0.0054	0.54	84380.0000	0.9987 (ppm)
Mo (204.598 nm)	1.0330	ppm	0.0074	0.72	3470.0000	1.0330 (ppm)
Na (589.592 nm)	9.8390	ppm	0.0641	0.65	54730.0000	9.8390 (ppm)
Ni (231.604 nm)	1.0010	ppm	0.0058	0.58	3880.0000	1.0010 (ppm)
P (213.618 nm)	0.9967	ppm	0.0110	1.10	664.0000	0.9967 (ppm)
Pb (220.353 nm)	0.9983	ppm	0.0045	0.45	1732.0000	0.9983 (ppm)
Sb (206.834 nm)	1.0130	ppm	0.0191	1.89	789.2000	1.0130 (ppm)
Se (196.026 nm)	0.9764	ppm	0.0166	1.70	551.5000	0.9764 (ppm)
Si (251.611 nm)	5.0000	ppm	0.0471	0.94	10140.0000	5.0000 (ppm)
Sn (189.925 nm)	1.0220	ppm	0.0100	0.98	504.5000	1.0220 (ppm)
Sr (421.552 nm)	0.9872	ppm	0.0035	0.35	326800.0000	0.9872 (ppm)
Ti (336.122 nm)	1.0230	ppm	0.0098	0.95	96820.0000	1.0230 (ppm)
Tl (190.794 nm)	1.0180	ppm	0.0120	1.18	900.4000	1.0180 (ppm)
V (292.401 nm)	1.0000	ppm	0.0053	0.53	26560.0000	1.0000 (ppm)
W (207.912 nm)	1.0190	ppm	0.0034	0.34	1467.0000	1.0190 (ppm)
Zn (202.548 nm)	1.0020	ppm	0.0049	0.49	13020.0000	1.0020 (ppm)
Zr (343.823 nm)	0.9739	ppm	0.0101	1.04	73880.0000	0.9739 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9159	317000.0000	0.0071	0.78
Y_R 371.029	0.9070	44070.0000	0.0003	0.03

Sample Name: CCB 5993195

Date: 12/10/2019 2:56:39 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0002	79.84	-79.8700	-0.0003 u (ppm)
Al (396.152 nm)	0.0008	ppm	0.0003	33.10	-291.0000	0.0008 (ppm)
As (188.980 nm)	0.0012	ppm	0.0000	2.58	2.2240	0.0012 (ppm)
B (249.678 nm)	0.0017	ppm	0.0004	24.00	1.5340	0.0017 (ppm)
Ba (233.527 nm)	0.0005	ppm	0.0002	34.80	80.0700	0.0005 (ppm)
Be (234.861 nm)	0.0007	ppm	0.0003	39.77	122.8000	0.0007 (ppm)
Ca (422.673 nm)	-0.0098 u	ppm	0.0070	72.16	82.2500	-0.0098 u (ppm)
Cd (214.439 nm)	0.0006	ppm	0.0000	8.45	7.5100	0.0006 (ppm)
Co (228.615 nm)	0.0008	ppm	0.0003	33.03	-3.8260	0.0008 (ppm)
Cr (205.560 nm)	0.0003 u	ppm	0.0009	> 100.00	3.0170	0.0003 u (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0006	> 100.00	42.9800	0.0000 u (ppm)
Fe (238.204 nm)	0.0102	ppm	0.0022	21.63	-24.8500	0.0102 (ppm)
K (766.491 nm)	-0.0198 u	ppm	0.0668	> 100.00	-97.4100	-0.0198 u (ppm)
Li (670.783 nm)	0.0026	ppm	0.0005	21.28	195.2000	0.0026 (ppm)
Mg (279.078 nm)	0.0076	ppm	0.0025	32.45	28.4500	0.0076 (ppm)
Mn (259.372 nm)	0.0008	ppm	0.0002	27.46	117.9000	0.0008 (ppm)
Mo (204.598 nm)	0.0213 Z	ppm	0.0016	7.35	67.5800 Z	0.0213 Z (ppm)
Na (589.592 nm)	-0.0178 u	ppm	0.0024	13.75	816.5000	-0.0178 u (ppm)
Ni (231.604 nm)	0.0033	ppm	0.0015	45.60	-2.5990	0.0033 (ppm)
P (213.618 nm)	0.0036	ppm	0.0040	> 100.00	2.5410	0.0036 (ppm)
Pb (220.353 nm)	-0.0030 u	ppm	0.0014	48.01	-16.5500	-0.0030 u (ppm)
Sb (206.834 nm)	0.0133 Z	ppm	0.0022	16.55	6.9320 Z	0.0133 Z (ppm)
Se (196.026 nm)	0.0016 u	ppm	0.0025	> 100.00	0.2719	0.0016 u (ppm)
Si (251.611 nm)	0.0044	ppm	0.0026	59.91	21.1900	0.0044 (ppm)
Sn (189.925 nm)	0.0048	ppm	0.0033	68.70	0.9358	0.0048 (ppm)
Sr (421.552 nm)	0.0004	ppm	0.0003	70.16	110.1000	0.0004 (ppm)
Ti (336.122 nm)	0.0061 Z	ppm	0.0004	7.06	444.4000 Z	0.0061 Z (ppm)
Tl (190.794 nm)	0.0029	ppm	0.0022	76.43	7.1030	0.0029 (ppm)
V (292.401 nm)	0.0008	ppm	0.0000	0.13	103.4000	0.0008 (ppm)
W (207.912 nm)	0.0136	ppm	0.0006	4.57	15.1100	0.0136 (ppm)
Zn (202.548 nm)	0.0029	ppm	0.0005	17.04	50.5000	0.0029 (ppm)
Zr (343.823 nm)	0.0003	ppm	0.0001	35.32	125.3000	0.0003 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9184	317900.0000	0.0009	0.10
Y_R 371.029	0.9057	44000.0000	0.0019	0.21

Sample Name: xRINSE 5993206

Date: 12/10/2019 2:59:31 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	-69.9400	0.0000 u (ppm)
Al (396.152 nm)	0.0013	ppm	0.0004	32.17	-293.5000	0.0013 (ppm)
As (188.980 nm)	0.0031	ppm	0.0007	22.70	3.2510	0.0031 (ppm)
B (249.678 nm)	0.0011	ppm	0.0010	90.85	-3.2410	0.0011 (ppm)
Ba (233.527 nm)	0.0001	ppm	0.0000	23.16	48.5300	0.0001 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0001	31.04	50.0900	0.0002 (ppm)
Ca (422.673 nm)	-0.0058 u	ppm	0.0265	> 100.00	97.2200	-0.0058 u (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0001	17.12	3.4330	0.0004 (ppm)
Co (228.615 nm)	0.0002 u	ppm	0.0003	> 100.00	-10.9400	0.0002 u (ppm)
Cr (205.560 nm)	-0.0005 u	ppm	0.0009	> 100.00	0.0515	-0.0005 u (ppm)
Cu (324.754 nm)	-0.0008 u	ppm	0.0001	6.14	12.2000	-0.0008 u (ppm)
Fe (238.204 nm)	0.0056	ppm	0.0024	43.49	-36.2000	0.0056 (ppm)
K (766.491 nm)	0.0440	ppm	0.0425	96.51	-35.3600	0.0440 (ppm)
Li (670.783 nm)	0.0034	ppm	0.0024	70.88	239.6000	0.0034 (ppm)
Mg (279.078 nm)	0.0090	ppm	0.0033	37.06	31.7000	0.0090 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0001	43.09	71.7400	0.0003 (ppm)
Mo (204.598 nm)	0.0016	ppm	0.0007	45.04	1.2140	0.0016 (ppm)
Na (589.592 nm)	-0.0230 u	ppm	0.0010	4.54	787.3000	-0.0230 u (ppm)
Ni (231.604 nm)	0.0009	ppm	0.0001	15.65	-12.2700	0.0009 (ppm)
P (213.618 nm)	0.0072	ppm	0.0022	30.49	5.3700	0.0072 (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0016	> 100.00	-13.6900	-0.0013 u (ppm)
Sb (206.834 nm)	0.0040	ppm	0.0040	99.97	-0.1828	0.0040 (ppm)
Se (196.026 nm)	0.0055	ppm	0.0047	84.45	2.4300	0.0055 (ppm)
Si (251.611 nm)	0.0020	ppm	0.0014	70.42	14.9900	0.0020 (ppm)
Sn (189.925 nm)	0.0038	ppm	0.0010	27.45	0.4151	0.0038 (ppm)
Sr (421.552 nm)	0.0000 u	ppm	0.0000	86.81	-29.0800	0.0000 u (ppm)
Ti (336.122 nm)	0.0010	ppm	0.0003	31.62	-39.1000	0.0010 (ppm)
Tl (190.794 nm)	0.0014 u	ppm	0.0062	> 100.00	5.7610	0.0014 u (ppm)
V (292.401 nm)	0.0003	ppm	0.0002	60.41	95.4200	0.0003 (ppm)
W (207.912 nm)	0.0005 u	ppm	0.0033	> 100.00	-3.5960	0.0005 u (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0005	93.56	19.1700	0.0005 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0002	> 100.00	93.4700	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9169	317400.0000	0.0036	0.39
Y_R 371.029	0.9071	44070.0000	0.0032	0.36

Sample Name: CCV 5993196

Date: 12/10/2019 3:01:19 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4969	ppm	0.0020	0.41	18180.0000	0.4969 (ppm)
Al (396.152 nm)	0.9869	ppm	0.0061	0.62	25040.0000	0.9869 (ppm)
As (188.980 nm)	0.9949	ppm	0.0044	0.44	524.6000	0.9949 (ppm)
B (249.678 nm)	0.9906	ppm	0.0065	0.65	9564.0000	0.9906 (ppm)
Ba (233.527 nm)	1.0060	ppm	0.0007	0.07	75990.0000	1.0060 (ppm)
Be (234.861 nm)	0.9911	ppm	0.0040	0.41	147200.0000	0.9911 (ppm)
Ca (422.673 nm)	4.9560	ppm	0.0164	0.33	18740.0000	4.9560 (ppm)
Cd (214.439 nm)	1.0050	ppm	0.0034	0.34	18790.0000	1.0050 (ppm)
Co (228.615 nm)	1.0110	ppm	0.0063	0.62	11390.0000	1.0110 (ppm)
Cr (205.560 nm)	1.0070	ppm	0.0038	0.38	3886.0000	1.0070 (ppm)
Cu (324.754 nm)	1.0000	ppm	0.0043	0.43	35450.0000	1.0000 (ppm)
Fe (238.204 nm)	1.0120	ppm	0.0014	0.14	2456.0000	1.0120 (ppm)
K (766.491 nm)	9.9160	ppm	0.1180	1.19	9576.0000	9.9160 (ppm)
Li (670.783 nm)	0.9877	ppm	0.0022	0.22	54420.0000	0.9877 (ppm)
Mg (279.078 nm)	5.0560	ppm	0.0144	0.28	11820.0000	5.0560 (ppm)
Mn (259.372 nm)	1.0000	ppm	0.0033	0.33	84520.0000	1.0000 (ppm)
Mo (204.598 nm)	1.0300	ppm	0.0010	0.10	3460.0000	1.0300 (ppm)
Na (589.592 nm)	9.8180	ppm	0.0315	0.32	54620.0000	9.8180 (ppm)
Ni (231.604 nm)	1.0040	ppm	0.0050	0.50	3892.0000	1.0040 (ppm)
P (213.618 nm)	0.9907	ppm	0.0150	1.51	659.7000	0.9907 (ppm)
Pb (220.353 nm)	1.0010	ppm	0.0023	0.23	1737.0000	1.0010 (ppm)
Sb (206.834 nm)	1.0170	ppm	0.0201	1.98	791.9000	1.0170 (ppm)
Se (196.026 nm)	0.9938	ppm	0.0024	0.24	561.3000	0.9938 (ppm)
Si (251.611 nm)	5.0180	ppm	0.0443	0.88	10170.0000	5.0180 (ppm)
Sn (189.925 nm)	1.0080	ppm	0.0088	0.87	497.2000	1.0080 (ppm)
Sr (421.552 nm)	0.9865	ppm	0.0016	0.16	326500.0000	0.9865 (ppm)
Ti (336.122 nm)	1.0210	ppm	0.0086	0.84	96590.0000	1.0210 (ppm)
Tl (190.794 nm)	1.0140	ppm	0.0160	1.58	897.3000	1.0140 (ppm)
V (292.401 nm)	1.0010	ppm	0.0036	0.36	26600.0000	1.0010 (ppm)
W (207.912 nm)	1.0230	ppm	0.0036	0.35	1473.0000	1.0230 (ppm)
Zn (202.548 nm)	1.0040	ppm	0.0055	0.55	13050.0000	1.0040 (ppm)
Zr (343.823 nm)	0.9820	ppm	0.0073	0.75	74490.0000	0.9820 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9221	319100.0000	0.0046	0.50
Y_R 371.029	0.9185	44620.0000	0.0001	0.01

Sample Name: CCB 5993195

Date: 12/10/2019 3:03:09 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0003	> 100.00	-70.5400	0.0000 u (ppm)
Al (396.152 nm)	-0.0007 u	ppm	0.0002	30.92	-330.3000	-0.0007 u (ppm)
As (188.980 nm)	-0.0005 u	ppm	0.0039	> 100.00	1.3350	-0.0005 u (ppm)
B (249.678 nm)	0.0024	ppm	0.0011	44.91	7.6730	0.0024 (ppm)
Ba (233.527 nm)	0.0004	ppm	0.0002	45.57	72.1800	0.0004 (ppm)
Be (234.861 nm)	0.0006	ppm	0.0002	36.33	110.6000	0.0006 (ppm)
Ca (422.673 nm)	-0.0084 u	ppm	0.0128	> 100.00	87.3500	-0.0084 u (ppm)
Cd (214.439 nm)	0.0006	ppm	0.0001	10.60	8.7800	0.0006 (ppm)
Co (228.615 nm)	0.0000 u	ppm	0.0008	> 100.00	-12.4400	0.0000 u (ppm)
Cr (205.560 nm)	0.0006	ppm	0.0006	96.95	4.0720	0.0006 (ppm)
Cu (324.754 nm)	0.0003	ppm	0.0000	15.73	51.8300	0.0003 (ppm)
Fe (238.204 nm)	0.0036 u	ppm	0.0052	> 100.00	-41.2100	0.0036 u (ppm)
K (766.491 nm)	-0.0024 u	ppm	0.0877	> 100.00	-80.5100	-0.0024 u (ppm)
Li (670.783 nm)	0.0022	ppm	0.0009	42.41	172.3000	0.0022 (ppm)
Mg (279.078 nm)	0.0106	ppm	0.0003	2.63	35.5500	0.0106 (ppm)
Mn (259.372 nm)	0.0006	ppm	0.0001	23.54	103.1000	0.0006 (ppm)
Mo (204.598 nm)	0.0215 Z	ppm	0.0025	11.49	68.1600 Z	0.0215 Z (ppm)
Na (589.592 nm)	-0.0309 u	ppm	0.0007	2.28	744.9000	-0.0309 u (ppm)
Ni (231.604 nm)	0.0020	ppm	0.0002	12.65	-7.9590	0.0020 (ppm)
P (213.618 nm)	-0.0008 u	ppm	0.0060	> 100.00	-0.5568	-0.0008 u (ppm)
Pb (220.353 nm)	0.0005	ppm	0.0000	3.61	-10.5400	0.0005 (ppm)
Sb (206.834 nm)	0.0129 Z	ppm	0.0097	75.04	6.5850 Z	0.0129 Z (ppm)
Se (196.026 nm)	0.0080	ppm	0.0085	> 100.00	3.8590	0.0080 (ppm)
Si (251.611 nm)	0.0037	ppm	0.0018	47.53	20.0200	0.0037 (ppm)
Sn (189.925 nm)	0.0063	ppm	0.0031	49.84	1.6540	0.0063 (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0002	71.71	51.9600	0.0002 (ppm)
Ti (336.122 nm)	0.0063 Z	ppm	0.0005	7.18	461.6000 Z	0.0063 Z (ppm)
Tl (190.794 nm)	0.0067	ppm	0.0002	2.63	10.5300	0.0067 (ppm)
V (292.401 nm)	0.0011	ppm	0.0004	37.23	110.9000	0.0011 (ppm)
W (207.912 nm)	0.0151	ppm	0.0038	25.41	17.3200	0.0151 (ppm)
Zn (202.548 nm)	0.0030	ppm	0.0004	14.67	51.0000	0.0030 (ppm)
Zr (343.823 nm)	0.0002 u	ppm	0.0003	> 100.00	121.1000	0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9231	319500.0000	0.0040	0.43
Y_R 371.029	0.9113	44270.0000	0.0044	0.48

Sample Name: CCB 5993195

Date: 12/10/2019 3:09:23 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	33.21	-84.4400	-0.0004 u (ppm)
Al (396.152 nm)	0.0000 u	ppm	0.0005	> 100.00	-323.2000	0.0000 u (ppm)
As (188.980 nm)	0.0044	ppm	0.0008	18.61	3.9150	0.0044 (ppm)
B (249.678 nm)	0.0009	ppm	0.0010	> 100.00	-5.1180	0.0009 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	42.3600	0.0000 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	31.85	37.8700	0.0001 (ppm)
Ca (422.673 nm)	-0.0059 u	ppm	0.0062	> 100.00	96.7200	-0.0059 u (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-0.5716	0.0001 u (ppm)
Co (228.615 nm)	-0.0004 u	ppm	0.0006	> 100.00	-16.9900	-0.0004 u (ppm)
Cr (205.560 nm)	-0.0002 u	ppm	0.0008	> 100.00	1.0600	-0.0002 u (ppm)
Cu (324.754 nm)	-0.0004 u	ppm	0.0002	53.96	26.6500	-0.0004 u (ppm)
Fe (238.204 nm)	0.0024	ppm	0.0002	8.33	-44.2900	0.0024 (ppm)
K (766.491 nm)	0.0577 u	ppm	0.1387	> 100.00	-22.0800	0.0577 u (ppm)
Li (670.783 nm)	0.0022	ppm	0.0020	95.04	173.0000	0.0022 (ppm)
Mg (279.078 nm)	0.0081	ppm	0.0045	56.21	29.6200	0.0081 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0000	1.23	70.3800	0.0003 (ppm)
Mo (204.598 nm)	0.0024	ppm	0.0006	24.41	3.8890	0.0024 (ppm)
Na (589.592 nm)	-0.0446 u	ppm	0.0084	18.91	669.2000	-0.0446 u (ppm)
Ni (231.604 nm)	0.0013	ppm	0.0011	81.65	-10.4500	0.0013 (ppm)
P (213.618 nm)	-0.0003 u	ppm	0.0082	> 100.00	0.0820	-0.0003 u (ppm)
Pb (220.353 nm)	-0.0008 u	ppm	0.0007	88.27	-12.7000	-0.0008 u (ppm)
Sb (206.834 nm)	0.0087	ppm	0.0037	41.88	3.5610	0.0087 (ppm)
Se (196.026 nm)	0.0042	ppm	0.0019	44.69	1.6570	0.0042 (ppm)
Si (251.611 nm)	0.0022	ppm	0.0023	> 100.00	14.9800	0.0022 (ppm)
Sn (189.925 nm)	0.0018 u	ppm	0.0042	> 100.00	-0.5518	0.0018 u (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0002	> 100.00	23.4500	0.0001 (ppm)
Ti (336.122 nm)	0.0008	ppm	0.0002	23.63	-58.1800	0.0008 (ppm)
Tl (190.794 nm)	0.0091	ppm	0.0045	49.28	12.7500	0.0091 (ppm)
V (292.401 nm)	0.0000 u	ppm	0.0002	> 100.00	85.8900	0.0000 u (ppm)
W (207.912 nm)	-0.0009 u	ppm	0.0012	> 100.00	-5.6230	-0.0009 u (ppm)
Zn (202.548 nm)	0.0021	ppm	0.0004	18.21	39.7700	0.0021 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	76.68	97.1800	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9233	319600.0000	0.0026	0.28
Y_R 371.029	0.9170	44550.0000	0.0010	0.11

Sample Name: MB 440-584793/1-A

Date: 12/10/2019 3:11:53 PM Rack:Tube: 2:35

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0002	> 100.00	-73.8300	-0.0001 u (ppm)
Al (396.152 nm)	0.0128	ppm	0.0003	2.32	-8.4000	0.0128 (ppm)
As (188.980 nm)	0.0078	ppm	0.0011	13.53	5.7510	0.0078 (ppm)
B (249.678 nm)	0.0035	ppm	0.0002	5.17	20.3800	0.0035 (ppm)
Ba (233.527 nm)	0.0001 u	ppm	0.0002	> 100.00	47.0800	0.0001 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	0.68	33.7800	0.0001 (ppm)
Ca (422.673 nm)	0.0248	ppm	0.0070	28.12	212.2000	0.0248 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.3520	0.0000 u (ppm)
Co (228.615 nm)	0.0006 u	ppm	0.0009	> 100.00	-5.9120	0.0006 u (ppm)
Cr (205.560 nm)	0.0014	ppm	0.0012	90.70	7.0660	0.0014 (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0003	> 100.00	41.2600	0.0000 u (ppm)
Fe (238.204 nm)	0.0143	ppm	0.0001	0.78	-14.6300	0.0143 (ppm)
K (766.491 nm)	0.0526	ppm	0.0195	37.07	-27.0100	0.0526 (ppm)
Li (670.783 nm)	0.0033	ppm	0.0014	42.64	236.7000	0.0033 (ppm)
Mg (279.078 nm)	0.0080	ppm	0.0006	7.16	29.4700	0.0080 (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0001	31.25	63.4100	0.0002 (ppm)
Mo (204.598 nm)	0.0023	ppm	0.0009	39.56	3.8270	0.0023 (ppm)
Na (589.592 nm)	-0.0272 u	ppm	0.0115	42.09	764.3000	-0.0272 u (ppm)
Ni (231.604 nm)	0.0016	ppm	0.0008	50.82	-9.1980	0.0016 (ppm)
P (213.618 nm)	0.0079	ppm	0.0019	24.39	5.8300	0.0079 (ppm)
Pb (220.353 nm)	-0.0022 u	ppm	0.0009	41.63	-15.1400	-0.0022 u (ppm)
Sb (206.834 nm)	0.0068	ppm	0.0063	92.56	2.0430	0.0068 (ppm)
Se (196.026 nm)	0.0062	ppm	0.0043	69.11	2.8010	0.0062 (ppm)
Si (251.611 nm)	0.0052	ppm	0.0033	63.06	20.8400	0.0052 (ppm)
Sn (189.925 nm)	0.0022 u	ppm	0.0053	> 100.00	-0.3497	0.0022 u (ppm)
Sr (421.552 nm)	0.0003	ppm	0.0001	20.27	73.3100	0.0003 (ppm)
Ti (336.122 nm)	0.0003	ppm	0.0000	6.84	-101.3000	0.0003 (ppm)
Tl (190.794 nm)	0.0028	ppm	0.0038	> 100.00	6.9960	0.0028 (ppm)
V (292.401 nm)	0.0004	ppm	0.0005	> 100.00	97.0100	0.0004 (ppm)
W (207.912 nm)	-0.0013 u	ppm	0.0022	> 100.00	-6.2310	-0.0013 u (ppm)
Zn (202.548 nm)	0.0015	ppm	0.0001	6.09	32.2700	0.0015 (ppm)
Zr (343.823 nm)	0.0002	ppm	0.0001	57.64	116.1000	0.0002 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9229	319500.0000	0.0004	0.04
Y_R 371.029	0.9193	44660.0000	0.0048	0.53

Sample Name: LCS 440-584793/2-A

Date: 12/10/2019 3:13:41 PM Rack:Tube: 2:36

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4986	ppm	0.0010	0.20	18240.0000	0.4986 (ppm)
Al (396.152 nm)	1.0020	ppm	0.0066	0.66	25420.0000	1.0020 (ppm)
As (188.980 nm)	0.9922	ppm	0.0026	0.27	523.2000	0.9922 (ppm)
B (249.678 nm)	0.9873	ppm	0.0047	0.48	9531.0000	0.9873 (ppm)
Ba (233.527 nm)	1.0020	ppm	0.0005	0.05	75720.0000	1.0020 (ppm)
Be (234.861 nm)	0.9837	ppm	0.0045	0.46	146100.0000	0.9837 (ppm)
Ca (422.673 nm)	5.0130	ppm	0.0135	0.27	18950.0000	5.0130 (ppm)
Cd (214.439 nm)	0.9991	ppm	0.0047	0.47	18670.0000	0.9991 (ppm)
Co (228.615 nm)	1.0130	ppm	0.0012	0.12	11410.0000	1.0130 (ppm)
Cr (205.560 nm)	1.0050	ppm	0.0031	0.31	3881.0000	1.0050 (ppm)
Cu (324.754 nm)	1.0120	ppm	0.0067	0.67	35880.0000	1.0120 (ppm)
Fe (238.204 nm)	1.0490	ppm	0.0046	0.44	2547.0000	1.0490 (ppm)
K (766.491 nm)	9.8960	ppm	0.0659	0.67	9556.0000	9.8960 (ppm)
Li (670.783 nm)	0.9912	ppm	0.0056	0.56	54620.0000	0.9912 (ppm)
Mg (279.078 nm)	5.0310	ppm	0.0038	0.08	11760.0000	5.0310 (ppm)
Mn (259.372 nm)	1.0000	ppm	0.0047	0.47	84530.0000	1.0000 (ppm)
Mo (204.598 nm)	1.0640	ppm	0.0057	0.53	3573.0000	1.0640 (ppm)
Na (589.592 nm)	9.8400	ppm	0.0148	0.15	54740.0000	9.8400 (ppm)
Ni (231.604 nm)	1.0020	ppm	0.0033	0.33	3887.0000	1.0020 (ppm)
P (213.618 nm)	0.9852	ppm	0.0081	0.83	655.0000	0.9852 (ppm)
Pb (220.353 nm)	0.9977	ppm	0.0106	1.06	1731.0000	0.9977 (ppm)
Sb (206.834 nm)	1.0660	ppm	0.0019	0.18	830.8000	1.0660 (ppm)
Se (196.026 nm)	0.9369	ppm	0.0045	0.48	529.3000	0.9369 (ppm)
Si (251.611 nm)	4.8930	ppm	0.0434	0.89	9924.0000	4.8930 (ppm)
Sn (189.925 nm)	0.9970	ppm	0.0220	2.20	491.9000	0.9970 (ppm)
Sr (421.552 nm)	0.9920	ppm	0.0016	0.16	328300.0000	0.9920 (ppm)
Ti (336.122 nm)	1.0050	ppm	0.0071	0.71	95040.0000	1.0050 (ppm)
Tl (190.794 nm)	0.9426	ppm	0.0253	2.69	832.6000	0.9426 (ppm)
V (292.401 nm)	1.0030	ppm	0.0041	0.40	26640.0000	1.0030 (ppm)
W (207.912 nm)	1.0250	ppm	0.0014	0.14	1475.0000	1.0250 (ppm)
Zn (202.548 nm)	0.9917	ppm	0.0036	0.36	12890.0000	0.9917 (ppm)
Zr (343.823 nm)	0.9468	ppm	0.0077	0.81	71830.0000	0.9468 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9186	318000.0000	0.0027	0.29
Y_R 371.029	0.9190	44650.0000	0.0011	0.12

Sample Name: 440-256825-A-1-A sd@5

Date: 12/10/2019 3:15:29 PM Rack:Tube: 2:37

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	-69.8200	0.0000 u (ppm)
Al (396.152 nm)	6.9210	ppm	0.0100	0.14	171200.0000	6.9210 (ppm)
As (188.980 nm)	0.0026 u	ppm	0.0039	> 100.00	2.6700	0.0026 u (ppm)
B (249.678 nm)	0.0548	ppm	0.0004	0.72	513.2000	0.0548 (ppm)
Ba (233.527 nm)	0.0354	ppm	0.0002	0.47	2715.0000	0.0354 (ppm)
Be (234.861 nm)	0.0009	ppm	0.0000	1.01	242.1000	0.0009 (ppm)
Ca (422.673 nm)	4.6500	ppm	0.0068	0.15	17590.0000	4.6500 (ppm)
Cd (214.439 nm)	0.0006	ppm	0.0003	47.23	8.0570	0.0006 (ppm)
Co (228.615 nm)	0.0025	ppm	0.0009	34.87	19.2200	0.0025 (ppm)
Cr (205.560 nm)	0.0063	ppm	0.0004	6.90	26.1400	0.0063 (ppm)
Cu (324.754 nm)	0.0058	ppm	0.0001	1.49	248.3000	0.0058 (ppm)
Fe (238.204 nm)	6.3150	ppm	0.0125	0.20	15600.0000	6.3150 (ppm)
K (766.491 nm)	2.7530	ppm	0.0317	1.15	2603.0000	2.7530 (ppm)
Li (670.783 nm)	0.0014	ppm	0.0017	> 100.00	125.0000	0.0014 (ppm)
Mg (279.078 nm)	3.1090	ppm	0.0037	0.12	7273.0000	3.1090 (ppm)
Mn (259.372 nm)	0.1565	ppm	0.0000	0.01	13860.0000	0.1565 (ppm)
Mo (204.598 nm)	0.0116	ppm	0.0010	8.44	35.7300	0.0116 (ppm)
Na (589.592 nm)	4.9120	ppm	0.0228	0.46	27800.0000	4.9120 (ppm)
Ni (231.604 nm)	0.0055	ppm	0.0010	17.60	5.3090	0.0055 (ppm)
P (213.618 nm)	0.2729	ppm	0.0096	3.53	193.3000	0.2729 (ppm)
Pb (220.353 nm)	0.0013 u	ppm	0.0036	> 100.00	-5.8230	0.0013 u (ppm)
Sb (206.834 nm)	0.0070	ppm	0.0001	0.94	2.0080	0.0070 (ppm)
Se (196.026 nm)	-0.0015 u	ppm	0.0017	> 100.00	-2.1210	-0.0015 u (ppm)
Si (251.611 nm)	8.2280	ppm	0.0619	0.75	16420.0000	8.2280 (ppm)
Sn (189.925 nm)	0.0010	ppm	0.0009	87.42	-0.9296	0.0010 (ppm)
Sr (421.552 nm)	0.0351	ppm	0.0001	0.18	11660.0000	0.0351 (ppm)
Ti (336.122 nm)	0.1813	ppm	0.0012	0.68	17030.0000	0.1813 (ppm)
Tl (190.794 nm)	0.0091	ppm	0.0038	41.93	11.1900	0.0091 (ppm)
V (292.401 nm)	0.0117	ppm	0.0001	1.23	406.2000	0.0117 (ppm)
W (207.912 nm)	0.0076	ppm	0.0008	10.91	7.2270	0.0076 (ppm)
Zn (202.548 nm)	0.0678	ppm	0.0003	0.43	885.2000	0.0678 (ppm)
Zr (343.823 nm)	0.0042	ppm	0.0004	8.93	286.0000	0.0042 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9289	321500.0000	0.0065	0.70
Y_R 371.029	0.9190	44650.0000	0.0036	0.40

Sample Name: 440-256825-A-1-A

Date: 12/10/2019 3:17:17 PM Rack:Tube: 2:38

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0014 u	ppm	0.0005	38.30	-121.8000	-0.0014 u (ppm)
Al (396.152 nm)	34.4500	ppm	0.2422	0.70	853500.0000	34.4500 (ppm)
As (188.980 nm)	0.0228	ppm	0.0009	3.89	12.2300	0.0228 (ppm)
B (249.678 nm)	0.2447	ppm	0.0031	1.28	2341.0000	0.2447 (ppm)
Ba (233.527 nm)	0.1624	ppm	0.0007	0.43	12310.0000	0.1624 (ppm)
Be (234.861 nm)	0.0017	ppm	0.0001	6.39	677.2000	0.0017 (ppm)
Ca (422.673 nm)	22.2400	ppm	0.0011	0.01	83650.0000	22.2400 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	45.79	4.1620	0.0002 (ppm)
Co (228.615 nm)	0.0120	ppm	0.0001	1.00	143.2000	0.0120 (ppm)
Cr (205.560 nm)	0.0242	ppm	0.0002	0.79	96.1000	0.0242 (ppm)
Cu (324.754 nm)	0.0273	ppm	0.0004	1.32	1012.0000	0.0273 (ppm)
Fe (238.204 nm)	30.4100	ppm	0.0214	0.07	75300.0000	30.4100 (ppm)
K (766.491 nm)	12.9200	ppm	0.0347	0.27	12500.0000	12.9200 (ppm)
Li (670.783 nm)	0.0313	ppm	0.0010	3.15	1771.0000	0.0313 (ppm)
Mg (279.078 nm)	14.4400	ppm	0.0847	0.59	33730.0000	14.4400 (ppm)
Mn (259.372 nm)	0.7269	ppm	0.0053	0.73	64300.0000	0.7269 (ppm)
Mo (204.598 nm)	0.0069	ppm	0.0002	2.60	22.4500	0.0069 (ppm)
Na (589.592 nm)	23.4700	ppm	0.0223	0.09	129400.0000	23.4700 (ppm)
Ni (231.604 nm)	0.0189	ppm	0.0023	12.09	56.3400	0.0189 (ppm)
P (213.618 nm)	1.2600	ppm	0.0107	0.85	892.3000	1.2600 (ppm)
Pb (220.353 nm)	0.0108	ppm	0.0046	42.87	23.4600	0.0108 (ppm)
Sb (206.834 nm)	0.0098	ppm	0.0055	56.00	3.9560	0.0098 (ppm)
Se (196.026 nm)	0.0056	ppm	0.0049	87.62	-0.4619	0.0056 (ppm)
Si (251.611 nm)	38.5200	ppm	0.2590	0.67	76830.0000	38.5200 (ppm)
Sn (189.925 nm)	-0.0030 u	ppm	0.0022	74.51	-2.9210	-0.0030 u (ppm)
Sr (421.552 nm)	0.1654	ppm	0.0001	0.05	54930.0000	0.1654 (ppm)
Ti (336.122 nm)	0.8524	ppm	0.0076	0.89	80600.0000	0.8524 (ppm)
Tl (190.794 nm)	0.0091	ppm	0.0013	14.49	5.5100	0.0091 (ppm)
V (292.401 nm)	0.0533	ppm	0.0007	1.30	1552.0000	0.0533 (ppm)
W (207.912 nm)	0.0006 u	ppm	0.0040	> 100.00	-0.7197	0.0006 u (ppm)
Zn (202.548 nm)	0.3083	ppm	0.0030	0.96	3980.0000	0.3083 (ppm)
Zr (343.823 nm)	0.0186	ppm	0.0006	3.07	855.8000	0.0186 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9144	316500.0000	0.0028	0.30
Y_R 371.029	0.9179	44600.0000	0.0009	0.10

Sample Name: 440-256825-A-1-B MS

Date: 12/10/2019 3:19:05 PM Rack:Tube: 2:39

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.5011	ppm	0.0035	0.70	18320.0000	0.5011 (ppm)
Al (396.152 nm)	52.2000	ppm	0.3844	0.74	1294000.0000	52.2000 (ppm)
As (188.980 nm)	1.0060	ppm	0.0045	0.45	528.9000	1.0060 (ppm)
B (249.678 nm)	1.2610	ppm	0.0116	0.92	12170.0000	1.2610 (ppm)
Ba (233.527 nm)	1.1770	ppm	0.0047	0.40	88910.0000	1.1770 (ppm)
Be (234.861 nm)	0.9876	ppm	0.0065	0.66	147200.0000	0.9876 (ppm)
Ca (422.673 nm)	28.0300	ppm	0.1117	0.40	105400.0000	28.0300 (ppm)
Cd (214.439 nm)	0.9785	ppm	0.0062	0.63	18290.0000	0.9785 (ppm)
Co (228.615 nm)	1.0030	ppm	0.0073	0.73	11320.0000	1.0030 (ppm)
Cr (205.560 nm)	1.0240	ppm	0.0092	0.90	3953.0000	1.0240 (ppm)
Cu (324.754 nm)	1.0600	ppm	0.0055	0.52	37580.0000	1.0600 (ppm)
Fe (238.204 nm)	35.8600	ppm	0.0892	0.25	88830.0000	35.8600 (ppm)
K (766.491 nm)	25.1400	ppm	0.1474	0.59	24400.0000	25.1400 (ppm)
Li (670.783 nm)	1.0360	ppm	0.0015	0.15	57090.0000	1.0360 (ppm)
Mg (279.078 nm)	21.3200	ppm	0.1083	0.51	49800.0000	21.3200 (ppm)
Mn (259.372 nm)	1.7520	ppm	0.0119	0.68	151400.0000	1.7520 (ppm)
Mo (204.598 nm)	1.0640	ppm	0.0075	0.70	3579.0000	1.0640 (ppm)
Na (589.592 nm)	33.9100	ppm	0.0767	0.23	186500.0000	33.9100 (ppm)
Ni (231.604 nm)	0.9932	ppm	0.0041	0.41	3849.0000	0.9932 (ppm)
P (213.618 nm)	2.2830	ppm	0.0098	0.43	1574.0000	2.2830 (ppm)
Pb (220.353 nm)	0.9971	ppm	0.0088	0.88	1747.0000	0.9971 (ppm)
Sb (206.834 nm)	0.9669	ppm	0.0043	0.45	751.9000	0.9669 (ppm)
Se (196.026 nm)	0.9374	ppm	0.0090	0.96	525.9000	0.9374 (ppm)
Si (251.611 nm)	40.7400	ppm	0.0791	0.19	81410.0000	40.7400 (ppm)
Sn (189.925 nm)	0.9943	ppm	0.0153	1.54	490.6000	0.9943 (ppm)
Sr (421.552 nm)	1.1680	ppm	0.0026	0.22	386800.0000	1.1680 (ppm)
Ti (336.122 nm)	2.0780	ppm	0.0167	0.80	196700.0000	2.0780 (ppm)
Tl (190.794 nm)	0.9470	ppm	0.0355	3.75	827.1000	0.9470 (ppm)
V (292.401 nm)	1.0650	ppm	0.0057	0.53	28330.0000	1.0650 (ppm)
W (207.912 nm)	0.9537	ppm	0.0098	1.03	1376.0000	0.9537 (ppm)
Zn (202.548 nm)	1.2910	ppm	0.0098	0.76	16740.0000	1.2910 (ppm)
Zr (343.823 nm)	0.9526	ppm	0.0098	1.03	71510.0000	0.9526 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9071	314000.0000	0.0042	0.47
Y_R 371.029	0.9125	44330.0000	0.0024	0.26

Sample Name: 440-256825-A-1-C MSD

Date: 12/10/2019 3:20:55 PM Rack:Tube: 2:40

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4929	ppm	0.0025	0.52	18020.0000	0.4929 (ppm)
Al (396.152 nm)	49.7500	ppm	0.3248	0.65	1233000.0000	49.7500 (ppm)
As (188.980 nm)	0.9838	ppm	0.0009	0.10	517.3000	0.9838 (ppm)
B (249.678 nm)	1.2320	ppm	0.0115	0.94	11890.0000	1.2320 (ppm)
Ba (233.527 nm)	1.1530	ppm	0.0026	0.22	87130.0000	1.1530 (ppm)
Be (234.861 nm)	0.9725	ppm	0.0061	0.63	144900.0000	0.9725 (ppm)
Ca (422.673 nm)	27.0000	ppm	0.0309	0.11	101500.0000	27.0000 (ppm)
Cd (214.439 nm)	0.9641	ppm	0.0070	0.72	18020.0000	0.9641 (ppm)
Co (228.615 nm)	0.9865	ppm	0.0079	0.80	11130.0000	0.9865 (ppm)
Cr (205.560 nm)	1.0090	ppm	0.0063	0.62	3897.0000	1.0090 (ppm)
Cu (324.754 nm)	1.0420	ppm	0.0078	0.75	36940.0000	1.0420 (ppm)
Fe (238.204 nm)	34.4200	ppm	0.0887	0.26	85240.0000	34.4200 (ppm)
K (766.491 nm)	24.4000	ppm	0.0926	0.38	23680.0000	24.4000 (ppm)
Li (670.783 nm)	1.0220	ppm	0.0050	0.49	56340.0000	1.0220 (ppm)
Mg (279.078 nm)	20.5500	ppm	0.0093	0.05	48010.0000	20.5500 (ppm)
Mn (259.372 nm)	1.7050	ppm	0.0096	0.56	147200.0000	1.7050 (ppm)
Mo (204.598 nm)	1.0510	ppm	0.0065	0.62	3534.0000	1.0510 (ppm)
Na (589.592 nm)	32.8000	ppm	0.1120	0.34	180400.0000	32.8000 (ppm)
Ni (231.604 nm)	0.9763	ppm	0.0079	0.81	3784.0000	0.9763 (ppm)
P (213.618 nm)	2.2210	ppm	0.0127	0.57	1530.0000	2.2210 (ppm)
Pb (220.353 nm)	0.9823	ppm	0.0023	0.24	1721.0000	0.9823 (ppm)
Sb (206.834 nm)	0.9547	ppm	0.0030	0.31	742.3000	0.9547 (ppm)
Se (196.026 nm)	0.9413	ppm	0.0080	0.85	528.1000	0.9413 (ppm)
Si (251.611 nm)	37.7900	ppm	0.0814	0.22	75520.0000	37.7900 (ppm)
Sn (189.925 nm)	0.9837	ppm	0.0008	0.08	485.3000	0.9837 (ppm)
Sr (421.552 nm)	1.1450	ppm	0.0024	0.21	379100.0000	1.1450 (ppm)
Ti (336.122 nm)	2.0130	ppm	0.0132	0.66	190500.0000	2.0130 (ppm)
Tl (190.794 nm)	0.9299	ppm	0.0329	3.53	812.4000	0.9299 (ppm)
V (292.401 nm)	1.0460	ppm	0.0071	0.68	27840.0000	1.0460 (ppm)
W (207.912 nm)	0.9381	ppm	0.0042	0.45	1353.0000	0.9381 (ppm)
Zn (202.548 nm)	1.2640	ppm	0.0100	0.79	16390.0000	1.2640 (ppm)
Zr (343.823 nm)	0.9447	ppm	0.0062	0.66	70940.0000	0.9447 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9079	314200.0000	0.0038	0.42
Y_R 371.029	0.9124	44330.0000	0.0027	0.30

Sample Name: 440-256825-A-1-D PDS

Date: 12/10/2019 3:22:43 PM Rack:Tube: 2:41

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4679	ppm	0.0038	0.81	17120.0000	0.4679 (ppm)
Al (396.152 nm)	35.1200	ppm	0.2748	0.78	871000.0000	35.1200 (ppm)
As (188.980 nm)	0.9417	ppm	0.0129	1.37	495.3000	0.9417 (ppm)
B (249.678 nm)	1.1750	ppm	0.0107	0.91	11330.0000	1.1750 (ppm)
Ba (233.527 nm)	1.0830	ppm	0.0061	0.56	81850.0000	1.0830 (ppm)
Be (234.861 nm)	0.9270	ppm	0.0059	0.64	138100.0000	0.9270 (ppm)
Ca (422.673 nm)	25.9900	ppm	0.0516	0.20	97750.0000	25.9900 (ppm)
Cd (214.439 nm)	0.9207	ppm	0.0049	0.54	17210.0000	0.9207 (ppm)
Co (228.615 nm)	0.9409	ppm	0.0043	0.46	10620.0000	0.9409 (ppm)
Cr (205.560 nm)	0.9626	ppm	0.0025	0.26	3717.0000	0.9626 (ppm)
Cu (324.754 nm)	0.9944	ppm	0.0025	0.25	35250.0000	0.9944 (ppm)
Fe (238.204 nm)	30.2100	ppm	0.0240	0.08	74810.0000	30.2100 (ppm)
K (766.491 nm)	21.8400	ppm	0.0153	0.07	21190.0000	21.8400 (ppm)
Li (670.783 nm)	0.9640	ppm	0.0014	0.14	53110.0000	0.9640 (ppm)
Mg (279.078 nm)	18.4700	ppm	0.1088	0.59	43160.0000	18.4700 (ppm)
Mn (259.372 nm)	1.6250	ppm	0.0096	0.59	140000.0000	1.6250 (ppm)
Mo (204.598 nm)	1.0560	ppm	0.0106	1.01	3552.0000	1.0560 (ppm)
Na (589.592 nm)	31.6000	ppm	0.0574	0.18	173900.0000	31.6000 (ppm)
Ni (231.604 nm)	0.9292	ppm	0.0053	0.57	3600.0000	0.9292 (ppm)
P (213.618 nm)	2.1270	ppm	0.0080	0.37	1464.0000	2.1270 (ppm)
Pb (220.353 nm)	0.9332	ppm	0.0038	0.40	1633.0000	0.9332 (ppm)
Sb (206.834 nm)	1.0090	ppm	0.0184	1.82	784.4000	1.0090 (ppm)
Se (196.026 nm)	0.8802	ppm	0.0011	0.12	494.7000	0.8802 (ppm)
Si (251.611 nm)	39.1000	ppm	0.2260	0.58	78140.0000	39.1000 (ppm)
Sn (189.925 nm)	0.9866	ppm	0.0038	0.38	486.7000	0.9866 (ppm)
Sr (421.552 nm)	1.0910	ppm	0.0016	0.15	361200.0000	1.0910 (ppm)
Ti (336.122 nm)	1.8460	ppm	0.0145	0.78	174800.0000	1.8460 (ppm)
Tl (190.794 nm)	0.9473	ppm	0.0118	1.25	830.5000	0.9473 (ppm)
V (292.401 nm)	0.9938	ppm	0.0059	0.60	26430.0000	0.9938 (ppm)
W (207.912 nm)	1.0080	ppm	0.0047	0.47	1453.0000	1.0080 (ppm)
Zn (202.548 nm)	1.2030	ppm	0.0067	0.56	15610.0000	1.2030 (ppm)
Zr (343.823 nm)	0.9857	ppm	0.0051	0.51	74140.0000	0.9857 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9057	313500.0000	0.0038	0.42
Y_R 371.029	0.9150	44460.0000	0.0031	0.34

Sample Name: 440-256825-A-2-A

Date: 12/10/2019 3:24:31 PM Rack:Tube: 2:42

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0019 u	ppm	0.0001	3.56	-146.9000	-0.0019 u (ppm)
Al (396.152 nm)	61.5600	ppm	0.4057	0.66	1525000.0000	61.5600 (ppm)
As (188.980 nm)	0.0262	ppm	0.0035	13.22	12.8100	0.0262 (ppm)
B (249.678 nm)	0.6151	ppm	0.0046	0.75	5932.0000	0.6151 (ppm)
Ba (233.527 nm)	0.2888	ppm	0.0036	1.24	21860.0000	0.2888 (ppm)
Be (234.861 nm)	0.0031	ppm	0.0002	7.16	1152.0000	0.0031 (ppm)
Ca (422.673 nm)	83.8200	ppm	0.3801	0.45	315000.0000	83.8200 (ppm)
Cd (214.439 nm)	0.0018	ppm	0.0003	18.32	36.9800	0.0018 (ppm)
Co (228.615 nm)	0.0230	ppm	0.0009	3.90	283.0000	0.0230 (ppm)
Cr (205.560 nm)	0.0435	ppm	0.0004	0.93	172.2000	0.0435 (ppm)
Cu (324.754 nm)	0.0535	ppm	0.0004	0.74	1916.0000	0.0535 (ppm)
Fe (238.204 nm)	51.2100	ppm	0.1865	0.36	126900.0000	51.2100 (ppm)
K (766.491 nm)	25.0400	ppm	0.0677	0.27	24310.0000	25.0400 (ppm)
Li (670.783 nm)	0.0679	ppm	0.0004	0.56	3849.0000	0.0679 (ppm)
Mg (279.078 nm)	33.9000	ppm	0.4119	1.22	79190.0000	33.9000 (ppm)
Mn (259.372 nm)	1.2590	ppm	0.0073	0.58	111200.0000	1.2590 (ppm)
Mo (204.598 nm)	0.0157	ppm	0.0009	5.86	55.0600	0.0157 (ppm)
Na (589.592 nm)	212.1000	ppm	1.1900	0.56	1160000.0000	212.1000 (ppm)
Ni (231.604 nm)	0.0345	ppm	0.0000	0.12	115.6000	0.0345 (ppm)
P (213.618 nm)	2.2670	ppm	0.0133	0.59	1604.0000	2.2670 (ppm)
Pb (220.353 nm)	0.0370	ppm	0.0015	4.13	80.2100	0.0370 (ppm)
Sb (206.834 nm)	0.0148	ppm	0.0012	8.17	7.7400	0.0148 (ppm)
Se (196.026 nm)	0.0044 u	ppm	0.0073	> 100.00	-3.2740	0.0044 u (ppm)
Si (251.611 nm)	36.5700	ppm	0.0133	0.04	72950.0000	36.5700 (ppm)
Sn (189.925 nm)	-0.0045 u	ppm	0.0015	33.12	-3.6060	-0.0045 u (ppm)
Sr (421.552 nm)	1.0900	ppm	0.0048	0.44	361600.0000	1.0900 (ppm)
Ti (336.122 nm)	1.5580	ppm	0.0108	0.69	147400.0000	1.5580 (ppm)
Tl (190.794 nm)	0.0161	ppm	0.0013	7.77	5.7640	0.0161 (ppm)
V (292.401 nm)	0.0863	ppm	0.0003	0.31	2512.0000	0.0863 (ppm)
W (207.912 nm)	0.0082	ppm	0.0054	65.99	19.4500	0.0082 (ppm)
Zn (202.548 nm)	1.1990	ppm	0.0064	0.54	15460.0000	1.1990 (ppm)
Zr (343.823 nm)	0.0296	ppm	0.0006	2.00	1243.0000	0.0296 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8873	307100.0000	0.0017	0.20
Y_R 371.029	0.9060	44020.0000	0.0069	0.76

Sample Name: 440-256324-A-1-E

Date: 12/10/2019 3:26:19 PM Rack:Tube: 2:43

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0005	> 100.00	-73.0800	-0.0001 u (ppm)
Al (396.152 nm)	0.4582	ppm	0.0106	2.32	11040.0000	0.4582 (ppm)
As (188.980 nm)	0.0043	ppm	0.0056	> 100.00	3.8340	0.0043 (ppm)
B (249.678 nm)	0.0139	ppm	0.0012	8.55	120.0000	0.0139 (ppm)
Ba (233.527 nm)	0.0184	ppm	0.0001	0.50	1427.0000	0.0184 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0001	33.93	57.7900	0.0002 (ppm)
Ca (422.673 nm)	2.8940	ppm	0.0139	0.48	10990.0000	2.8940 (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0000	5.85	6.3480	0.0005 (ppm)
Co (228.615 nm)	0.0002 u	ppm	0.0002	> 100.00	-10.2100	0.0002 u (ppm)
Cr (205.560 nm)	0.0029	ppm	0.0014	48.65	13.1500	0.0029 (ppm)
Cu (324.754 nm)	0.0112	ppm	0.0002	2.06	436.4000	0.0112 (ppm)
Fe (238.204 nm)	0.7876	ppm	0.0071	0.90	1902.0000	0.7876 (ppm)
K (766.491 nm)	0.6577	ppm	0.1104	16.78	561.8000	0.6577 (ppm)
Li (670.783 nm)	0.0003	ppm	0.0002	66.64	63.7000	0.0003 (ppm)
Mg (279.078 nm)	0.3897	ppm	0.0057	1.47	921.0000	0.3897 (ppm)
Mn (259.372 nm)	0.0192	ppm	0.0001	0.74	1742.0000	0.0192 (ppm)
Mo (204.598 nm)	0.0095	ppm	0.0029	30.05	27.9400	0.0095 (ppm)
Na (589.592 nm)	2.7710	ppm	0.0280	1.01	16060.0000	2.7710 (ppm)
Ni (231.604 nm)	0.0041	ppm	0.0008	18.60	0.1333	0.0041 (ppm)
P (213.618 nm)	0.0953	ppm	0.0011	1.15	67.3300	0.0953 (ppm)
Pb (220.353 nm)	0.0387	ppm	0.0015	3.80	56.8200	0.0387 (ppm)
Sb (206.834 nm)	0.0131	ppm	0.0033	25.40	6.9620	0.0131 (ppm)
Se (196.026 nm)	0.0037	ppm	0.0010	26.52	1.3040	0.0037 (ppm)
Si (251.611 nm)	1.1530	ppm	0.0011	0.10	2311.0000	1.1530 (ppm)
Sn (189.925 nm)	0.0002 u	ppm	0.0010	> 100.00	-1.3300	0.0002 u (ppm)
Sr (421.552 nm)	0.0697	ppm	0.0003	0.39	23070.0000	0.0697 (ppm)
Ti (336.122 nm)	0.0307	ppm	0.0005	1.64	2773.0000	0.0307 (ppm)
Tl (190.794 nm)	0.0014 u	ppm	0.0026	> 100.00	5.5050	0.0014 u (ppm)
V (292.401 nm)	0.0025	ppm	0.0001	5.00	154.4000	0.0025 (ppm)
W (207.912 nm)	0.0027 u	ppm	0.0068	> 100.00	1.4750	0.0027 u (ppm)
Zn (202.548 nm)	0.1643	ppm	0.0003	0.20	2131.0000	0.1643 (ppm)
Zr (343.823 nm)	0.0027	ppm	0.0002	7.12	289.8000	0.0027 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9169	317400.0000	0.0047	0.51
Y_R 371.029	0.9082	44120.0000	0.0012	0.13

Sample Name: 440-256324-A-2-E

Date: 12/10/2019 3:28:07 PM Rack:Tube: 2:44

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0007 u	ppm	0.0000	4.92	-95.0300	-0.0007 u (ppm)
Al (396.152 nm)	0.5439	ppm	0.0024	0.44	13160.0000	0.5439 (ppm)
As (188.980 nm)	0.0024	ppm	0.0021	89.81	2.7920	0.0024 (ppm)
B (249.678 nm)	0.0166	ppm	0.0005	3.20	147.3000	0.0166 (ppm)
Ba (233.527 nm)	0.0265	ppm	0.0001	0.39	2039.0000	0.0265 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	34.74	40.0000	0.0001 (ppm)
Ca (422.673 nm)	4.1180	ppm	0.0197	0.48	15590.0000	4.1180 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	31.87	0.3952	0.0002 (ppm)
Co (228.615 nm)	0.0003	ppm	0.0002	84.51	-9.1030	0.0003 (ppm)
Cr (205.560 nm)	0.0029	ppm	0.0001	4.16	12.8900	0.0029 (ppm)
Cu (324.754 nm)	0.0116	ppm	0.0007	6.23	452.1000	0.0116 (ppm)
Fe (238.204 nm)	0.7834	ppm	0.0060	0.76	1891.0000	0.7834 (ppm)
K (766.491 nm)	1.2880	ppm	0.0301	2.33	1175.0000	1.2880 (ppm)
Li (670.783 nm)	0.0002 u	ppm	0.0006	> 100.00	63.7500	0.0002 u (ppm)
Mg (279.078 nm)	0.5312	ppm	0.0001	0.02	1252.0000	0.5312 (ppm)
Mn (259.372 nm)	0.0197	ppm	0.0001	0.61	1788.0000	0.0197 (ppm)
Mo (204.598 nm)	0.0042	ppm	0.0002	4.64	10.2300	0.0042 (ppm)
Na (589.592 nm)	2.8450	ppm	0.0002	0.01	16460.0000	2.8450 (ppm)
Ni (231.604 nm)	0.0041	ppm	0.0007	16.92	0.2922	0.0041 (ppm)
P (213.618 nm)	0.1152	ppm	0.0023	2.03	81.4600	0.1152 (ppm)
Pb (220.353 nm)	0.0225	ppm	0.0028	12.24	28.4200	0.0225 (ppm)
Sb (206.834 nm)	0.0102	ppm	0.0024	23.36	4.7420	0.0102 (ppm)
Se (196.026 nm)	0.0100	ppm	0.0006	5.63	4.8100	0.0100 (ppm)
Si (251.611 nm)	1.6120	ppm	0.0263	1.63	3226.0000	1.6120 (ppm)
Sn (189.925 nm)	-0.0039 u	ppm	0.0006	15.36	-3.3890	-0.0039 u (ppm)
Sr (421.552 nm)	0.2055	ppm	0.0001	0.03	68040.0000	0.2055 (ppm)
Ti (336.122 nm)	0.0304	ppm	0.0006	2.02	2745.0000	0.0304 (ppm)
Tl (190.794 nm)	0.0032 u	ppm	0.0066	> 100.00	7.0970	0.0032 u (ppm)
V (292.401 nm)	0.0031	ppm	0.0004	12.30	173.1000	0.0031 (ppm)
W (207.912 nm)	0.0003 u	ppm	0.0010	> 100.00	-2.4450	0.0003 u (ppm)
Zn (202.548 nm)	0.1290	ppm	0.0002	0.16	1676.0000	0.1290 (ppm)
Zr (343.823 nm)	0.0023	ppm	0.0000	1.28	262.9000	0.0023 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9156	316900.0000	0.0027	0.29
Y_R 371.029	0.9120	44310.0000	0.0021	0.23

Sample Name: CCV 5993196

Date: 12/10/2019 3:29:57 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4978	ppm	0.0034	0.68	18210.0000	0.4978 (ppm)
Al (396.152 nm)	0.9912	ppm	0.0062	0.63	25150.0000	0.9912 (ppm)
As (188.980 nm)	0.9910	ppm	0.0111	1.11	522.6000	0.9910 (ppm)
B (249.678 nm)	0.9884	ppm	0.0087	0.88	9543.0000	0.9884 (ppm)
Ba (233.527 nm)	1.0050	ppm	0.0041	0.41	75940.0000	1.0050 (ppm)
Be (234.861 nm)	0.9913	ppm	0.0052	0.53	147300.0000	0.9913 (ppm)
Ca (422.673 nm)	4.9770	ppm	0.0059	0.12	18810.0000	4.9770 (ppm)
Cd (214.439 nm)	1.0050	ppm	0.0050	0.50	18780.0000	1.0050 (ppm)
Co (228.615 nm)	1.0090	ppm	0.0068	0.67	11370.0000	1.0090 (ppm)
Cr (205.560 nm)	1.0040	ppm	0.0053	0.53	3877.0000	1.0040 (ppm)
Cu (324.754 nm)	1.0020	ppm	0.0023	0.23	35510.0000	1.0020 (ppm)
Fe (238.204 nm)	1.0140	ppm	0.0008	0.08	2460.0000	1.0140 (ppm)
K (766.491 nm)	10.0200	ppm	0.0172	0.17	9678.0000	10.0200 (ppm)
Li (670.783 nm)	0.9910	ppm	0.0004	0.04	54600.0000	0.9910 (ppm)
Mg (279.078 nm)	5.0700	ppm	0.0229	0.45	11850.0000	5.0700 (ppm)
Mn (259.372 nm)	1.0000	ppm	0.0050	0.50	84520.0000	1.0000 (ppm)
Mo (204.598 nm)	1.0240	ppm	0.0097	0.95	3439.0000	1.0240 (ppm)
Na (589.592 nm)	9.8890	ppm	0.0259	0.26	55010.0000	9.8890 (ppm)
Ni (231.604 nm)	1.0060	ppm	0.0065	0.65	3901.0000	1.0060 (ppm)
P (213.618 nm)	1.0010	ppm	0.0130	1.30	666.8000	1.0010 (ppm)
Pb (220.353 nm)	0.9976	ppm	0.0026	0.26	1731.0000	0.9976 (ppm)
Sb (206.834 nm)	1.0050	ppm	0.0266	2.65	783.1000	1.0050 (ppm)
Se (196.026 nm)	0.9778	ppm	0.0101	1.03	552.3000	0.9778 (ppm)
Si (251.611 nm)	5.1900	ppm	0.0654	1.26	10520.0000	5.1900 (ppm)
Sn (189.925 nm)	1.0200	ppm	0.0014	0.13	503.3000	1.0200 (ppm)
Sr (421.552 nm)	0.9893	ppm	0.0009	0.09	327400.0000	0.9893 (ppm)
Ti (336.122 nm)	1.0220	ppm	0.0100	0.98	96640.0000	1.0220 (ppm)
Tl (190.794 nm)	1.0010	ppm	0.0116	1.16	885.6000	1.0010 (ppm)
V (292.401 nm)	1.0020	ppm	0.0049	0.49	26620.0000	1.0020 (ppm)
W (207.912 nm)	1.0170	ppm	0.0004	0.04	1464.0000	1.0170 (ppm)
Zn (202.548 nm)	1.0050	ppm	0.0061	0.61	13060.0000	1.0050 (ppm)
Zr (343.823 nm)	0.9953	ppm	0.0098	0.99	75500.0000	0.9953 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9172	317500.0000	0.0061	0.67
Y_R 371.029	0.9125	44330.0000	0.0027	0.30

Sample Name: CCB 5993195

Date: 12/10/2019 3:31:47 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002	ppm	0.0002	> 100.00	-62.2100	0.0002 (ppm)
Al (396.152 nm)	0.0005	ppm	0.0005	93.84	-299.7000	0.0005 (ppm)
As (188.980 nm)	0.0011 u	ppm	0.0027	> 100.00	2.2020	0.0011 u (ppm)
B (249.678 nm)	0.0034	ppm	0.0015	43.35	17.4200	0.0034 (ppm)
Ba (233.527 nm)	0.0005	ppm	0.0002	32.56	81.0400	0.0005 (ppm)
Be (234.861 nm)	0.0008	ppm	0.0001	10.42	136.9000	0.0008 (ppm)
Ca (422.673 nm)	-0.0064 u	ppm	0.0051	80.03	94.8900	-0.0064 u (ppm)
Cd (214.439 nm)	0.0006	ppm	0.0000	2.92	7.3490	0.0006 (ppm)
Co (228.615 nm)	0.0009 u	ppm	0.0015	> 100.00	-2.8670	0.0009 u (ppm)
Cr (205.560 nm)	-0.0002 u	ppm	0.0001	59.76	1.1450	-0.0002 u (ppm)
Cu (324.754 nm)	0.0002 u	ppm	0.0007	> 100.00	49.4700	0.0002 u (ppm)
Fe (238.204 nm)	0.0039	ppm	0.0019	47.62	-40.4700	0.0039 (ppm)
K (766.491 nm)	-0.0487 u	ppm	0.0457	94.02	-125.5000	-0.0487 u (ppm)
Li (670.783 nm)	0.0006 u	ppm	0.0019	> 100.00	85.1800	0.0006 u (ppm)
Mg (279.078 nm)	0.0055	ppm	0.0003	6.19	23.6600	0.0055 (ppm)
Mn (259.372 nm)	0.0008	ppm	0.0002	25.50	119.6000	0.0008 (ppm)
Mo (204.598 nm)	0.0197	ppm	0.0010	5.05	62.1600	0.0197 (ppm)
Na (589.592 nm)	-0.0140 u	ppm	0.0002	1.32	837.5000	-0.0140 u (ppm)
Ni (231.604 nm)	0.0038	ppm	0.0002	5.39	-0.9476	0.0038 (ppm)
P (213.618 nm)	0.0007 u	ppm	0.0048	> 100.00	0.4970	0.0007 u (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0028	> 100.00	-13.6800	-0.0013 u (ppm)
Sb (206.834 nm)	0.0148 Z	ppm	0.0062	41.77	8.1010 Z	0.0148 Z (ppm)
Se (196.026 nm)	0.0113 Z	ppm	0.0055	48.57	5.7200 Z	0.0113 Z (ppm)
Si (251.611 nm)	0.0142	ppm	0.0024	16.77	40.7600	0.0142 (ppm)
Sn (189.925 nm)	0.0007 u	ppm	0.0061	> 100.00	-1.1020	0.0007 u (ppm)
Sr (421.552 nm)	0.0004	ppm	0.0000	1.31	116.0000	0.0004 (ppm)
Ti (336.122 nm)	0.0058 Z	ppm	0.0005	8.10	419.1000 Z	0.0058 Z (ppm)
Tl (190.794 nm)	0.0073	ppm	0.0017	23.12	11.0400	0.0073 (ppm)
V (292.401 nm)	0.0012	ppm	0.0003	21.69	114.9000	0.0012 (ppm)
W (207.912 nm)	0.0135	ppm	0.0008	6.12	14.9900	0.0135 (ppm)
Zn (202.548 nm)	0.0008	ppm	0.0002	20.58	23.4200	0.0008 (ppm)
Zr (343.823 nm)	0.0002 u	ppm	0.0003	> 100.00	117.0000	0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9200	318400.0000	0.0029	0.31
Y_R 371.029	0.9077	44100.0000	0.0063	0.70

Sample Name: CCB 5993195

Date: 12/10/2019 3:34:59 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0005	> 100.00	-76.3800	-0.0002 u (ppm)
Al (396.152 nm)	-0.0004 u	ppm	0.0001	31.87	-333.1000	-0.0004 u (ppm)
As (188.980 nm)	0.0055	ppm	0.0061	> 100.00	4.5350	0.0055 (ppm)
B (249.678 nm)	0.0016	ppm	0.0004	28.76	1.0010	0.0016 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0001	> 100.00	36.9000	-0.0001 u (ppm)
Be (234.861 nm)	0.0002	ppm	0.0000	3.07	46.0600	0.0002 (ppm)
Ca (422.673 nm)	-0.0023 u	ppm	0.0029	> 100.00	110.5000	-0.0023 u (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0004	> 100.00	-1.4580	0.0001 u (ppm)
Co (228.615 nm)	0.0003 u	ppm	0.0010	> 100.00	-9.1240	0.0003 u (ppm)
Cr (205.560 nm)	0.0001	ppm	0.0001	66.01	2.1480	0.0001 (ppm)
Cu (324.754 nm)	-0.0005 u	ppm	0.0002	48.96	24.8000	-0.0005 u (ppm)
Fe (238.204 nm)	-0.0014 u	ppm	0.0050	> 100.00	-53.5500	-0.0014 u (ppm)
K (766.491 nm)	0.0143 u	ppm	0.0888	> 100.00	-64.2400	0.0143 u (ppm)
Li (670.783 nm)	0.0005 u	ppm	0.0020	> 100.00	80.6200	0.0005 u (ppm)
Mg (279.078 nm)	0.0084	ppm	0.0009	10.23	30.3600	0.0084 (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0000	15.30	61.6800	0.0002 (ppm)
Mo (204.598 nm)	0.0032	ppm	0.0007	21.69	6.5540	0.0032 (ppm)
Na (589.592 nm)	-0.0170 u	ppm	0.0028	16.64	820.2000	-0.0170 u (ppm)
Ni (231.604 nm)	0.0011	ppm	0.0002	13.93	-11.2500	0.0011 (ppm)
P (213.618 nm)	-0.0021 u	ppm	0.0141	> 100.00	-1.2140	-0.0021 u (ppm)
Pb (220.353 nm)	-0.0019 u	ppm	0.0008	43.40	-14.6600	-0.0019 u (ppm)
Sb (206.834 nm)	0.0060	ppm	0.0015	24.48	1.3860	0.0060 (ppm)
Se (196.026 nm)	-0.0014 u	ppm	0.0013	95.47	-1.4440	-0.0014 u (ppm)
Si (251.611 nm)	0.0064	ppm	0.0011	16.44	23.7000	0.0064 (ppm)
Sn (189.925 nm)	0.0046	ppm	0.0006	12.75	0.8305	0.0046 (ppm)
Sr (421.552 nm)	0.0001 u	ppm	0.0002	> 100.00	-3.5890	0.0001 u (ppm)
Ti (336.122 nm)	0.0009	ppm	0.0003	37.30	-51.1300	0.0009 (ppm)
Tl (190.794 nm)	0.0045	ppm	0.0021	46.31	8.5540	0.0045 (ppm)
V (292.401 nm)	0.0004 u	ppm	0.0009	> 100.00	95.9000	0.0004 u (ppm)
W (207.912 nm)	0.0017	ppm	0.0023	> 100.00	-1.8460	0.0017 (ppm)
Zn (202.548 nm)	-0.0001 u	ppm	0.0001	> 100.00	11.4400	-0.0001 u (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0002	> 100.00	101.3000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9200	318400.0000	0.0023	0.25
Y_R 371.029	0.9073	44080.0000	0.0015	0.16

Sample Name: 440-256324-A-3-E

Date: 12/10/2019 3:36:47 PM Rack:Tube: 2:45

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0006	92.48	-91.8300	-0.0006 u (ppm)
Al (396.152 nm)	2.0570	ppm	0.0111	0.54	50660.0000	2.0570 (ppm)
As (188.980 nm)	0.0018	ppm	0.0020	> 100.00	2.3670	0.0018 (ppm)
B (249.678 nm)	0.0350	ppm	0.0005	1.50	324.3000	0.0350 (ppm)
Ba (233.527 nm)	0.0652	ppm	0.0008	1.27	4962.0000	0.0652 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	65.2500	0.0000 u (ppm)
Ca (422.673 nm)	7.5550	ppm	0.0339	0.45	28500.0000	7.5550 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.1720	0.0000 u (ppm)
Co (228.615 nm)	0.0008	ppm	0.0002	19.17	-1.2640	0.0008 (ppm)
Cr (205.560 nm)	0.0059	ppm	0.0000	0.01	24.6600	0.0059 (ppm)
Cu (324.754 nm)	0.0280	ppm	0.0004	1.35	1030.0000	0.0280 (ppm)
Fe (238.204 nm)	2.8820	ppm	0.0380	1.32	7092.0000	2.8820 (ppm)
K (766.491 nm)	2.6180	ppm	0.0551	2.10	2469.0000	2.6180 (ppm)
Li (670.783 nm)	0.0000 u	ppm	0.0011	> 100.00	48.7300	0.0000 u (ppm)
Mg (279.078 nm)	1.3120	ppm	0.0109	0.83	3074.0000	1.3120 (ppm)
Mn (259.372 nm)	0.0591	ppm	0.0003	0.57	5315.0000	0.0591 (ppm)
Mo (204.598 nm)	0.0051	ppm	0.0005	10.61	13.4900	0.0051 (ppm)
Na (589.592 nm)	5.0480	ppm	0.0354	0.70	28520.0000	5.0480 (ppm)
Ni (231.604 nm)	0.0077	ppm	0.0001	0.66	14.1900	0.0077 (ppm)
P (213.618 nm)	0.3616	ppm	0.0055	1.52	255.4000	0.3616 (ppm)
Pb (220.353 nm)	0.0184	ppm	0.0006	3.31	22.4500	0.0184 (ppm)
Sb (206.834 nm)	0.0067	ppm	0.0006	9.21	1.9210	0.0067 (ppm)
Se (196.026 nm)	-0.0011 u	ppm	0.0019	> 100.00	-1.6270	-0.0011 u (ppm)
Si (251.611 nm)	4.9920	ppm	0.0573	1.15	9967.0000	4.9920 (ppm)
Sn (189.925 nm)	-0.0013 u	ppm	0.0023	> 100.00	-2.0830	-0.0013 u (ppm)
Sr (421.552 nm)	0.2082	ppm	0.0011	0.52	68950.0000	0.2082 (ppm)
Ti (336.122 nm)	0.1107	ppm	0.0012	1.12	10350.0000	0.1107 (ppm)
Tl (190.794 nm)	0.0039	ppm	0.0038	96.42	7.0480	0.0039 (ppm)
V (292.401 nm)	0.0063	ppm	0.0007	10.64	264.4000	0.0063 (ppm)
W (207.912 nm)	0.0042	ppm	0.0010	25.04	4.0800	0.0042 (ppm)
Zn (202.548 nm)	0.2199	ppm	0.0014	0.63	2848.0000	0.2199 (ppm)
Zr (343.823 nm)	0.0047	ppm	0.0001	2.44	399.1000	0.0047 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9165	317200.0000	0.0017	0.18
Y_R 371.029	0.9151	44460.0000	0.0107	1.17

Sample Name: 440-256324-A-4-E

Date: 12/10/2019 3:38:35 PM Rack:Tube: 2:46

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0007	> 100.00	-81.9700	-0.0003 u (ppm)
Al (396.152 nm)	3.6180	ppm	0.0056	0.15	89330.0000	3.6180 (ppm)
As (188.980 nm)	0.0033 u	ppm	0.0053	> 100.00	3.0210	0.0033 u (ppm)
B (249.678 nm)	0.0199	ppm	0.0004	2.12	174.2000	0.0199 (ppm)
Ba (233.527 nm)	0.1184	ppm	0.0003	0.29	8984.0000	0.1184 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	52.75	99.2900	0.0001 (ppm)
Ca (422.673 nm)	7.5240	ppm	0.0254	0.34	28380.0000	7.5240 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0001	47.62	2.8500	0.0003 (ppm)
Co (228.615 nm)	0.0014	ppm	0.0011	78.53	6.7200	0.0014 (ppm)
Cr (205.560 nm)	0.0094	ppm	0.0010	10.52	38.5000	0.0094 (ppm)
Cu (324.754 nm)	0.0343	ppm	0.0001	0.42	1254.0000	0.0343 (ppm)
Fe (238.204 nm)	4.9310	ppm	0.0206	0.42	12170.0000	4.9310 (ppm)
K (766.491 nm)	1.9410	ppm	0.0042	0.21	1811.0000	1.9410 (ppm)
Li (670.783 nm)	0.0050	ppm	0.0006	11.78	311.8000	0.0050 (ppm)
Mg (279.078 nm)	1.5980	ppm	0.0035	0.22	3742.0000	1.5980 (ppm)
Mn (259.372 nm)	0.0991	ppm	0.0002	0.22	8894.0000	0.0991 (ppm)
Mo (204.598 nm)	0.0054	ppm	0.0011	20.14	14.6300	0.0054 (ppm)
Na (589.592 nm)	9.5490	ppm	0.0238	0.25	53120.0000	9.5490 (ppm)
Ni (231.604 nm)	0.0078	ppm	0.0015	19.70	14.4800	0.0078 (ppm)
P (213.618 nm)	0.3157	ppm	0.0041	1.28	222.8000	0.3157 (ppm)
Pb (220.353 nm)	0.0318	ppm	0.0019	5.91	46.9500	0.0318 (ppm)
Sb (206.834 nm)	0.0110	ppm	0.0086	78.02	5.3660	0.0110 (ppm)
Se (196.026 nm)	-0.0004 u	ppm	0.0023	> 100.00	-1.4140	-0.0004 u (ppm)
Si (251.611 nm)	8.0190	ppm	0.0062	0.08	16000.0000	8.0190 (ppm)
Sn (189.925 nm)	-0.0003 u	ppm	0.0052	> 100.00	-1.5720	-0.0003 u (ppm)
Sr (421.552 nm)	0.3675	ppm	0.0003	0.08	121700.0000	0.3675 (ppm)
Ti (336.122 nm)	0.1851	ppm	0.0008	0.44	17400.0000	0.1851 (ppm)
Tl (190.794 nm)	-0.0029 u	ppm	0.0007	23.50	0.2459	-0.0029 u (ppm)
V (292.401 nm)	0.0088	ppm	0.0000	0.35	333.9000	0.0088 (ppm)
W (207.912 nm)	0.0021	ppm	0.0008	37.69	3.0010	0.0021 (ppm)
Zn (202.548 nm)	0.3843	ppm	0.0008	0.22	4968.0000	0.3843 (ppm)
Zr (343.823 nm)	0.0068	ppm	0.0010	14.50	509.2000	0.0068 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9177	317600.0000	0.0018	0.20
Y_R 371.029	0.9190	44650.0000	0.0024	0.26

Sample Name: 440-256324-A-5-E

Date: 12/10/2019 3:40:25 PM Rack:Tube: 2:47

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0001	10.33	-89.1400	-0.0005 u (ppm)
Al (396.152 nm)	0.4240	ppm	0.0017	0.39	10180.0000	0.4240 (ppm)
As (188.980 nm)	0.0020 u	ppm	0.0040	> 100.00	2.5720	0.0020 u (ppm)
B (249.678 nm)	0.0153	ppm	0.0009	5.76	134.1000	0.0153 (ppm)
Ba (233.527 nm)	0.0254	ppm	0.0001	0.41	1961.0000	0.0254 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	65.30	26.6100	0.0000 u (ppm)
Ca (422.673 nm)	4.7810	ppm	0.0290	0.61	18080.0000	4.7810 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0001	62.62	-1.4090	0.0001 (ppm)
Co (228.615 nm)	-0.0003 u	ppm	0.0001	36.13	-15.6200	-0.0003 u (ppm)
Cr (205.560 nm)	0.0029	ppm	0.0004	15.02	13.1600	0.0029 (ppm)
Cu (324.754 nm)	0.0094	ppm	0.0001	1.02	371.3000	0.0094 (ppm)
Fe (238.204 nm)	0.6242	ppm	0.0016	0.26	1497.0000	0.6242 (ppm)
K (766.491 nm)	1.5130	ppm	0.0702	4.64	1394.0000	1.5130 (ppm)
Li (670.783 nm)	0.0018	ppm	0.0026	> 100.00	153.1000	0.0018 (ppm)
Mg (279.078 nm)	0.5272	ppm	0.0032	0.61	1242.0000	0.5272 (ppm)
Mn (259.372 nm)	0.0168	ppm	0.0002	1.09	1526.0000	0.0168 (ppm)
Mo (204.598 nm)	0.0029	ppm	0.0009	30.10	5.9100	0.0029 (ppm)
Na (589.592 nm)	3.1860	ppm	0.0015	0.05	18320.0000	3.1860 (ppm)
Ni (231.604 nm)	0.0053	ppm	0.0008	14.75	4.8600	0.0053 (ppm)
P (213.618 nm)	0.1327	ppm	0.0019	1.43	93.9000	0.1327 (ppm)
Pb (220.353 nm)	0.0012 u	ppm	0.0021	> 100.00	-8.8210	0.0012 u (ppm)
Sb (206.834 nm)	0.0103	ppm	0.0061	59.31	4.8560	0.0103 (ppm)
Se (196.026 nm)	-0.0046 u	ppm	0.0119	> 100.00	-3.3320	-0.0046 u (ppm)
Si (251.611 nm)	1.5530	ppm	0.0148	0.95	3109.0000	1.5530 (ppm)
Sn (189.925 nm)	0.0011 u	ppm	0.0037	> 100.00	-0.8899	0.0011 u (ppm)
Sr (421.552 nm)	0.3113	ppm	0.0005	0.15	103100.0000	0.3113 (ppm)
Ti (336.122 nm)	0.0222	ppm	0.0004	1.92	1967.0000	0.0222 (ppm)
Tl (190.794 nm)	0.0053	ppm	0.0021	40.90	9.0270	0.0053 (ppm)
V (292.401 nm)	0.0025	ppm	0.0000	0.37	159.5000	0.0025 (ppm)
W (207.912 nm)	0.0007 u	ppm	0.0013	> 100.00	-1.8930	0.0007 u (ppm)
Zn (202.548 nm)	0.1326	ppm	0.0001	0.09	1722.0000	0.1326 (ppm)
Zr (343.823 nm)	0.0017	ppm	0.0001	4.26	219.6000	0.0017 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9184	317900.0000	0.0046	0.50
Y_R 371.029	0.9167	44530.0000	0.0008	0.08

Sample Name: 440-256324-A-6-E

Date: 12/10/2019 3:42:15 PM Rack:Tube: 2:48

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0005	> 100.00	-77.6000	-0.0002 u (ppm)
Al (396.152 nm)	0.9843	ppm	0.0053	0.54	24070.0000	0.9843 (ppm)
As (188.980 nm)	0.0031 u	ppm	0.0071	> 100.00	3.1220	0.0031 u (ppm)
B (249.678 nm)	0.0398	ppm	0.0011	2.68	372.7000	0.0398 (ppm)
Ba (233.527 nm)	0.0402	ppm	0.0002	0.50	3076.0000	0.0402 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	4.75	43.3000	0.0000 (ppm)
Ca (422.673 nm)	8.0230	ppm	0.0135	0.17	30260.0000	8.0230 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-1.8670	0.0001 (ppm)
Co (228.615 nm)	0.0006	ppm	0.0004	66.62	-4.2570	0.0006 (ppm)
Cr (205.560 nm)	0.0046	ppm	0.0004	9.31	19.5200	0.0046 (ppm)
Cu (324.754 nm)	0.0255	ppm	0.0005	1.79	938.9000	0.0255 (ppm)
Fe (238.204 nm)	1.5050	ppm	0.0053	0.35	3679.0000	1.5050 (ppm)
K (766.491 nm)	2.5920	ppm	0.0391	1.51	2444.0000	2.5920 (ppm)
Li (670.783 nm)	0.0026	ppm	0.0015	57.86	198.1000	0.0026 (ppm)
Mg (279.078 nm)	1.1330	ppm	0.0009	0.08	2658.0000	1.1330 (ppm)
Mn (259.372 nm)	0.0418	ppm	0.0002	0.49	3719.0000	0.0418 (ppm)
Mo (204.598 nm)	0.0048	ppm	0.0005	9.46	12.3200	0.0048 (ppm)
Na (589.592 nm)	4.0200	ppm	0.0282	0.70	22890.0000	4.0200 (ppm)
Ni (231.604 nm)	0.0075	ppm	0.0009	11.50	13.3600	0.0075 (ppm)
P (213.618 nm)	0.3420	ppm	0.0049	1.44	241.6000	0.3420 (ppm)
Pb (220.353 nm)	0.0096	ppm	0.0008	8.47	6.2300	0.0096 (ppm)
Sb (206.834 nm)	0.0133	ppm	0.0087	65.14	7.1990	0.0133 (ppm)
Se (196.026 nm)	-0.0010 u	ppm	0.0070	> 100.00	-1.4200	-0.0010 u (ppm)
Si (251.611 nm)	2.7150	ppm	0.0095	0.35	5426.0000	2.7150 (ppm)
Sn (189.925 nm)	0.0015 u	ppm	0.0034	> 100.00	-0.6901	0.0015 u (ppm)
Sr (421.552 nm)	0.2318	ppm	0.0005	0.20	76760.0000	0.2318 (ppm)
Ti (336.122 nm)	0.0535	ppm	0.0005	0.88	4931.0000	0.0535 (ppm)
Tl (190.794 nm)	0.0039	ppm	0.0015	39.24	7.5220	0.0039 (ppm)
V (292.401 nm)	0.0045	ppm	0.0000	0.80	215.2000	0.0045 (ppm)
W (207.912 nm)	0.0000 u	ppm	0.0009	> 100.00	-2.3920	0.0000 u (ppm)
Zn (202.548 nm)	0.1760	ppm	0.0004	0.20	2282.0000	0.1760 (ppm)
Zr (343.823 nm)	0.0031	ppm	0.0004	13.71	303.7000	0.0031 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9211	318800.0000	0.0039	0.42
Y_R 371.029	0.9167	44540.0000	0.0007	0.08

Sample Name: 440-256324-A-7-E

Date: 12/10/2019 3:44:03 PM Rack:Tube: 2:49

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0004	74.80	-90.0900	-0.0006 u (ppm)
Al (396.152 nm)	3.9020	ppm	0.0225	0.58	96380.0000	3.9020 (ppm)
As (188.980 nm)	0.0036 u	ppm	0.0077	> 100.00	3.2640	0.0036 u (ppm)
B (249.678 nm)	0.0176	ppm	0.0005	2.95	153.4000	0.0176 (ppm)
Ba (233.527 nm)	0.0791	ppm	0.0001	0.09	6013.0000	0.0791 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	21.02	92.0400	0.0001 (ppm)
Ca (422.673 nm)	7.5180	ppm	0.0026	0.04	28360.0000	7.5180 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-1.5880	0.0001 u (ppm)
Co (228.615 nm)	0.0024	ppm	0.0008	32.17	19.2900	0.0024 (ppm)
Cr (205.560 nm)	0.0063	ppm	0.0016	25.48	26.2100	0.0063 (ppm)
Cu (324.754 nm)	0.0216	ppm	0.0004	1.67	806.4000	0.0216 (ppm)
Fe (238.204 nm)	4.1700	ppm	0.0031	0.07	10280.0000	4.1700 (ppm)
K (766.491 nm)	2.2010	ppm	0.0632	2.87	2065.0000	2.2010 (ppm)
Li (670.783 nm)	0.0040	ppm	0.0043	> 100.00	265.7000	0.0040 (ppm)
Mg (279.078 nm)	1.5940	ppm	0.0060	0.37	3734.0000	1.5940 (ppm)
Mn (259.372 nm)	0.0900	ppm	0.0005	0.54	8043.0000	0.0900 (ppm)
Mo (204.598 nm)	0.0037	ppm	0.0001	2.12	8.7060	0.0037 (ppm)
Na (589.592 nm)	3.2180	ppm	0.0310	0.96	18530.0000	3.2180 (ppm)
Ni (231.604 nm)	0.0072	ppm	0.0024	33.27	12.2800	0.0072 (ppm)
P (213.618 nm)	0.2392	ppm	0.0016	0.67	169.0000	0.2392 (ppm)
Pb (220.353 nm)	0.0179	ppm	0.0006	3.19	22.1100	0.0179 (ppm)
Sb (206.834 nm)	0.0012	ppm	0.0007	62.65	-2.4190	0.0012 (ppm)
Se (196.026 nm)	0.0065	ppm	0.0059	90.85	2.5430	0.0065 (ppm)
Si (251.611 nm)	9.0980	ppm	0.0949	1.04	18160.0000	9.0980 (ppm)
Sn (189.925 nm)	0.0033 u	ppm	0.0052	> 100.00	0.1857	0.0033 u (ppm)
Sr (421.552 nm)	0.2862	ppm	0.0002	0.06	94780.0000	0.2862 (ppm)
Ti (336.122 nm)	0.2248	ppm	0.0019	0.84	21160.0000	0.2248 (ppm)
Tl (190.794 nm)	0.0038	ppm	0.0047	> 100.00	5.7770	0.0038 (ppm)
V (292.401 nm)	0.0090	ppm	0.0003	3.41	339.5000	0.0090 (ppm)
W (207.912 nm)	-0.0009 u	ppm	0.0008	81.65	-2.6720	-0.0009 u (ppm)
Zn (202.548 nm)	0.2703	ppm	0.0015	0.56	3497.0000	0.2703 (ppm)
Zr (343.823 nm)	0.0043	ppm	0.0004	9.62	337.5000	0.0043 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9252	320200.0000	0.0013	0.14
Y_R 371.029	0.9236	44870.0000	0.0010	0.11

Sample Name: 440-256324-A-8-E

Date: 12/10/2019 3:45:51 PM Rack:Tube: 2:50

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0009 u	ppm	0.0003	38.70	-102.8000	-0.0009 u (ppm)
Al (396.152 nm)	9.6450	ppm	0.0954	0.99	238700.0000	9.6450 (ppm)
As (188.980 nm)	0.0039	ppm	0.0053	> 100.00	3.1150	0.0039 (ppm)
B (249.678 nm)	0.0408	ppm	0.0004	0.98	373.8000	0.0408 (ppm)
Ba (233.527 nm)	0.1842	ppm	0.0006	0.32	13950.0000	0.1842 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0000	24.91	179.1000	0.0002 (ppm)
Ca (422.673 nm)	13.7600	ppm	0.0388	0.28	51830.0000	13.7600 (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0003	72.06	6.8670	0.0005 (ppm)
Co (228.615 nm)	0.0043	ppm	0.0001	2.97	46.4900	0.0043 (ppm)
Cr (205.560 nm)	0.0129	ppm	0.0001	0.52	52.1900	0.0129 (ppm)
Cu (324.754 nm)	0.0532	ppm	0.0005	1.01	1922.0000	0.0532 (ppm)
Fe (238.204 nm)	9.6200	ppm	0.0361	0.38	23790.0000	9.6200 (ppm)
K (766.491 nm)	4.8840	ppm	0.0262	0.54	4677.0000	4.8840 (ppm)
Li (670.783 nm)	0.0093	ppm	0.0003	3.55	556.7000	0.0093 (ppm)
Mg (279.078 nm)	4.0110	ppm	0.0111	0.28	9379.0000	4.0110 (ppm)
Mn (259.372 nm)	0.2134	ppm	0.0015	0.68	18990.0000	0.2134 (ppm)
Mo (204.598 nm)	0.0086	ppm	0.0005	5.64	25.8300	0.0086 (ppm)
Na (589.592 nm)	6.6030	ppm	0.0184	0.28	37070.0000	6.6030 (ppm)
Ni (231.604 nm)	0.0127	ppm	0.0008	6.20	33.2500	0.0127 (ppm)
P (213.618 nm)	0.5684	ppm	0.0066	1.16	401.3000	0.5684 (ppm)
Pb (220.353 nm)	0.0522	ppm	0.0014	2.74	84.8900	0.0522 (ppm)
Sb (206.834 nm)	0.0173	ppm	0.0020	11.42	10.2400	0.0173 (ppm)
Se (196.026 nm)	0.0001 u	ppm	0.0031	> 100.00	-1.6020	0.0001 u (ppm)
Si (251.611 nm)	17.5800	ppm	0.0455	0.26	35060.0000	17.5800 (ppm)
Sn (189.925 nm)	0.0037	ppm	0.0012	33.10	0.3975	0.0037 (ppm)
Sr (421.552 nm)	0.4940	ppm	0.0010	0.21	163600.0000	0.4940 (ppm)
Ti (336.122 nm)	0.4822	ppm	0.0052	1.07	45540.0000	0.4822 (ppm)
Tl (190.794 nm)	0.0022 u	ppm	0.0055	> 100.00	2.0090	0.0022 u (ppm)
V (292.401 nm)	0.0205	ppm	0.0001	0.43	656.7000	0.0205 (ppm)
W (207.912 nm)	0.0010	ppm	0.0007	67.01	0.9439	0.0010 (ppm)
Zn (202.548 nm)	0.3554	ppm	0.0023	0.65	4595.0000	0.3554 (ppm)
Zr (343.823 nm)	0.0082	ppm	0.0006	7.44	514.3000	0.0082 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9242	319900.0000	0.0024	0.26
Y_R 371.029	0.9233	44860.0000	0.0028	0.30

Sample Name: 440-256324-A-9-O

Date: 12/10/2019 3:47:39 PM Rack:Tube: 2:51

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0008 u	ppm	0.0001	17.08	-97.3700	-0.0008 u (ppm)
Al (396.152 nm)	1.1560	ppm	0.0050	0.43	28340.0000	1.1560 (ppm)
As (188.980 nm)	-0.0009 u	ppm	0.0093	> 100.00	0.9487	-0.0009 u (ppm)
B (249.678 nm)	0.0391	ppm	0.0005	1.17	365.6000	0.0391 (ppm)
Ba (233.527 nm)	0.0404	ppm	0.0004	1.10	3094.0000	0.0404 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	> 100.00	46.4700	0.0000 (ppm)
Ca (422.673 nm)	8.7150	ppm	0.0290	0.33	32860.0000	8.7150 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0003	90.12	3.6490	0.0004 (ppm)
Co (228.615 nm)	0.0007	ppm	0.0007	95.85	-3.5920	0.0007 (ppm)
Cr (205.560 nm)	0.0061	ppm	0.0010	16.61	25.5300	0.0061 (ppm)
Cu (324.754 nm)	0.0219	ppm	0.0005	2.43	811.7000	0.0219 (ppm)
Fe (238.204 nm)	1.7040	ppm	0.0046	0.27	4172.0000	1.7040 (ppm)
K (766.491 nm)	2.2710	ppm	0.0327	1.44	2132.0000	2.2710 (ppm)
Li (670.783 nm)	0.0016	ppm	0.0009	57.78	138.5000	0.0016 (ppm)
Mg (279.078 nm)	1.0740	ppm	0.0094	0.88	2521.0000	1.0740 (ppm)
Mn (259.372 nm)	0.0426	ppm	0.0003	0.65	3805.0000	0.0426 (ppm)
Mo (204.598 nm)	0.0063	ppm	0.0004	6.30	17.1300	0.0063 (ppm)
Na (589.592 nm)	5.5680	ppm	0.0274	0.49	31350.0000	5.5680 (ppm)
Ni (231.604 nm)	0.0057	ppm	0.0011	18.70	6.2490	0.0057 (ppm)
P (213.618 nm)	0.2552	ppm	0.0006	0.22	180.2000	0.2552 (ppm)
Pb (220.353 nm)	0.0103	ppm	0.0027	26.05	7.5510	0.0103 (ppm)
Sb (206.834 nm)	0.0025 u	ppm	0.0036	> 100.00	-1.3110	0.0025 u (ppm)
Se (196.026 nm)	0.0046	ppm	0.0045	97.81	1.7000	0.0046 (ppm)
Si (251.611 nm)	3.1670	ppm	0.0411	1.30	6327.0000	3.1670 (ppm)
Sn (189.925 nm)	-0.0045 u	ppm	0.0025	56.42	-3.6590	-0.0045 u (ppm)
Sr (421.552 nm)	0.1634	ppm	0.0003	0.21	54130.0000	0.1634 (ppm)
Ti (336.122 nm)	0.0620	ppm	0.0002	0.33	5733.0000	0.0620 (ppm)
Tl (190.794 nm)	-0.0017 u	ppm	0.0031	> 100.00	2.3710	-0.0017 u (ppm)
V (292.401 nm)	0.0046	ppm	0.0006	12.91	218.7000	0.0046 (ppm)
W (207.912 nm)	0.0007 u	ppm	0.0012	> 100.00	-1.0690	0.0007 u (ppm)
Zn (202.548 nm)	0.2060	ppm	0.0011	0.53	2668.0000	0.2060 (ppm)
Zr (343.823 nm)	0.0028	ppm	0.0003	10.49	281.2000	0.0028 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9212	318800.0000	0.0019	0.20
Y_R 371.029	0.9154	44470.0000	0.0058	0.64

Sample Name: 440-256324-A-10-E

Date: 12/10/2019 3:49:27 PM Rack:Tube: 2:52

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0003	57.63	-90.2500	-0.0006 u (ppm)
Al (396.152 nm)	1.4950	ppm	0.0130	0.87	36720.0000	1.4950 (ppm)
As (188.980 nm)	0.0017	ppm	0.0004	22.61	2.3350	0.0017 (ppm)
B (249.678 nm)	0.0340	ppm	0.0004	1.08	315.2000	0.0340 (ppm)
Ba (233.527 nm)	0.0518	ppm	0.0001	0.18	3952.0000	0.0518 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	49.6200	0.0000 u (ppm)
Ca (422.673 nm)	8.0210	ppm	0.0204	0.25	30250.0000	8.0210 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0002	> 100.00	0.3990	0.0002 (ppm)
Co (228.615 nm)	0.0016	ppm	0.0004	26.39	7.3080	0.0016 (ppm)
Cr (205.560 nm)	0.0040	ppm	0.0011	28.46	17.2800	0.0040 (ppm)
Cu (324.754 nm)	0.0155	ppm	0.0000	0.31	587.1000	0.0155 (ppm)
Fe (238.204 nm)	1.9310	ppm	0.0042	0.22	4735.0000	1.9310 (ppm)
K (766.491 nm)	1.7340	ppm	0.1800	10.38	1609.0000	1.7340 (ppm)
Li (670.783 nm)	0.0014	ppm	0.0005	36.98	127.1000	0.0014 (ppm)
Mg (279.078 nm)	1.0780	ppm	0.0019	0.17	2529.0000	1.0780 (ppm)
Mn (259.372 nm)	0.0472	ppm	0.0004	0.84	4214.0000	0.0472 (ppm)
Mo (204.598 nm)	0.0071	ppm	0.0025	35.31	19.9200	0.0071 (ppm)
Na (589.592 nm)	4.2230	ppm	0.0085	0.20	24000.0000	4.2230 (ppm)
Ni (231.604 nm)	0.0043	ppm	0.0007	16.54	1.1000	0.0043 (ppm)
P (213.618 nm)	0.1496	ppm	0.0092	6.13	105.6000	0.1496 (ppm)
Pb (220.353 nm)	0.0230	ppm	0.0048	20.91	29.8400	0.0230 (ppm)
Sb (206.834 nm)	0.0037 u	ppm	0.0056	> 100.00	-0.4324	0.0037 u (ppm)
Se (196.026 nm)	0.0034	ppm	0.0021	62.91	0.9798	0.0034 (ppm)
Si (251.611 nm)	4.0490	ppm	0.0029	0.07	8086.0000	4.0490 (ppm)
Sn (189.925 nm)	0.0003 u	ppm	0.0008	> 100.00	-1.3170	0.0003 u (ppm)
Sr (421.552 nm)	0.7758	ppm	0.0023	0.29	256800.0000	0.7758 (ppm)
Ti (336.122 nm)	0.0822	ppm	0.0009	1.08	7646.0000	0.0822 (ppm)
Tl (190.794 nm)	-0.0028 u	ppm	0.0022	76.61	1.1630	-0.0028 u (ppm)
V (292.401 nm)	0.0054	ppm	0.0008	15.74	239.8000	0.0054 (ppm)
W (207.912 nm)	0.0009	ppm	0.0011	> 100.00	-1.1530	0.0009 (ppm)
Zn (202.548 nm)	0.1754	ppm	0.0016	0.92	2274.0000	0.1754 (ppm)
Zr (343.823 nm)	0.0026	ppm	0.0000	0.56	260.2000	0.0026 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9199	318400.0000	0.0053	0.57
Y_R 371.029	0.9132	44360.0000	0.0004	0.04

Sample Name: 440-256324-A-11-I

Date: 12/10/2019 3:51:15 PM Rack:Tube: 2:53

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0009 u	ppm	0.0004	44.79	-101.4000	-0.0009 u (ppm)
Al (396.152 nm)	0.6290	ppm	0.0028	0.45	15260.0000	0.6290 (ppm)
As (188.980 nm)	0.0025	ppm	0.0020	78.76	2.8620	0.0025 (ppm)
B (249.678 nm)	0.0164	ppm	0.0000	0.15	145.4000	0.0164 (ppm)
Ba (233.527 nm)	0.0282	ppm	0.0002	0.80	2169.0000	0.0282 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	> 100.00	37.9500	0.0000 (ppm)
Ca (422.673 nm)	4.2580	ppm	0.0098	0.23	16110.0000	4.2580 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	14.48	0.0680	0.0002 (ppm)
Co (228.615 nm)	0.0001	ppm	0.0001	> 100.00	-11.1500	0.0001 (ppm)
Cr (205.560 nm)	0.0023	ppm	0.0003	12.59	10.5800	0.0023 (ppm)
Cu (324.754 nm)	0.0109	ppm	0.0001	1.00	427.0000	0.0109 (ppm)
Fe (238.204 nm)	0.8938	ppm	0.0056	0.63	2165.0000	0.8938 (ppm)
K (766.491 nm)	1.3540	ppm	0.1051	7.76	1239.0000	1.3540 (ppm)
Li (670.783 nm)	0.0039	ppm	0.0002	5.86	268.7000	0.0039 (ppm)
Mg (279.078 nm)	0.5635	ppm	0.0001	0.01	1327.0000	0.5635 (ppm)
Mn (259.372 nm)	0.0212	ppm	0.0001	0.41	1921.0000	0.0212 (ppm)
Mo (204.598 nm)	0.0021	ppm	0.0012	57.13	3.1340	0.0021 (ppm)
Na (589.592 nm)	2.9280	ppm	0.0136	0.46	16920.0000	2.9280 (ppm)
Ni (231.604 nm)	0.0044	ppm	0.0009	19.60	1.4820	0.0044 (ppm)
P (213.618 nm)	0.1219	ppm	0.0005	0.42	86.2000	0.1219 (ppm)
Pb (220.353 nm)	0.0235	ppm	0.0030	12.77	30.2600	0.0235 (ppm)
Sb (206.834 nm)	0.0094	ppm	0.0007	7.92	4.0980	0.0094 (ppm)
Se (196.026 nm)	0.0032 u	ppm	0.0095	> 100.00	1.0240	0.0032 u (ppm)
Si (251.611 nm)	1.8760	ppm	0.0180	0.96	3753.0000	1.8760 (ppm)
Sn (189.925 nm)	-0.0006 u	ppm	0.0080	> 100.00	-1.7590	-0.0006 u (ppm)
Sr (421.552 nm)	0.2115	ppm	0.0001	0.05	70030.0000	0.2115 (ppm)
Ti (336.122 nm)	0.0354	ppm	0.0003	0.76	3217.0000	0.0354 (ppm)
Tl (190.794 nm)	0.0027 u	ppm	0.0054	> 100.00	6.5990	0.0027 u (ppm)
V (292.401 nm)	0.0030	ppm	0.0004	14.66	173.0000	0.0030 (ppm)
W (207.912 nm)	-0.0024 u	ppm	0.0028	> 100.00	-6.3420	-0.0024 u (ppm)
Zn (202.548 nm)	0.1320	ppm	0.0016	1.24	1714.0000	0.1320 (ppm)
Zr (343.823 nm)	0.0016	ppm	0.0002	15.29	207.9000	0.0016 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9155	316900.0000	0.0046	0.50
Y_R 371.029	0.9102	44220.0000	0.0045	0.50

Sample Name: 280-131553-B-1-D

Date: 12/10/2019 3:53:03 PM Rack:Tube: 2:54

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0014 u	ppm	0.0006	42.62	-144.3000	-0.0014 u (ppm)
Al (396.152 nm)	1.2550	ppm	0.0088	0.70	31150.0000	1.2550 (ppm)
As (188.980 nm)	0.0232	ppm	0.0086	37.11	12.5800	0.0232 (ppm)
B (249.678 nm)	0.6152	ppm	0.0047	0.76	5996.0000	0.6152 (ppm)
Ba (233.527 nm)	0.1971	ppm	0.0013	0.67	14960.0000	0.1971 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0000	51.01	32.6200	-0.0001 u (ppm)
Ca (422.673 nm)	424.6000	ppm	0.0046	0.00	1595000.0000	424.6000 (ppm)
Cd (214.439 nm)	0.0008	ppm	0.0003	43.44	11.2600	0.0008 (ppm)
Co (228.615 nm)	0.0040	ppm	0.0006	14.75	42.6600	0.0040 (ppm)
Cr (205.560 nm)	0.0050	ppm	0.0022	43.32	26.2600	0.0050 (ppm)
Cu (324.754 nm)	0.0927	ppm	0.0007	0.71	3052.0000	0.0927 (ppm)
Fe (238.204 nm)	1.5610	ppm	0.0025	0.16	3832.0000	1.5610 (ppm)
K (766.491 nm)	51.6400	ppm	0.0122	0.02	50230.0000	51.6400 (ppm)
Li (670.783 nm)	0.0243	ppm	0.0020	8.29	2441.0000	0.0243 (ppm)
Mg (279.078 nm)	191.6000	ppm	0.9750	0.51	447800.0000	191.6000 (ppm)
Mn (259.372 nm)	1.4850	ppm	0.0105	0.71	125400.0000	1.4850 (ppm)
Mo (204.598 nm)	0.0253	ppm	0.0022	8.62	81.0600	0.0253 (ppm)
Na (589.592 nm)	485.9000 o	ppm	0.4129	0.08	2656000.0000	485.9000 o (ppm)
Ni (231.604 nm)	0.0212	ppm	0.0006	2.88	60.1500	0.0212 (ppm)
P (213.618 nm)	1.4650	ppm	0.0070	0.48	1031.0000	1.4650 (ppm)
Pb (220.353 nm)	0.0048	ppm	0.0011	22.24	4.3280	0.0048 (ppm)
Sb (206.834 nm)	0.0053	ppm	0.0014	27.25	1.1860	0.0053 (ppm)
Se (196.026 nm)	0.0333	ppm	0.0008	2.51	16.4600	0.0333 (ppm)
Si (251.611 nm)	6.9900	ppm	0.0518	0.74	13980.0000	6.9900 (ppm)
Sn (189.925 nm)	-0.0175 u	ppm	0.0031	17.87	-9.7920	-0.0175 u (ppm)
Sr (421.552 nm)	2.9530	ppm	0.0024	0.08	981500.0000	2.9530 (ppm)
Ti (336.122 nm)	0.0543	ppm	0.0005	0.92	4691.0000	0.0543 (ppm)
Tl (190.794 nm)	0.0068	ppm	0.0047	70.17	10.8000	0.0068 (ppm)
V (292.401 nm)	-0.0059 u	ppm	0.0002	3.97	364.5000	-0.0059 u (ppm)
W (207.912 nm)	-0.0064 u	ppm	0.0027	42.56	-18.6500	-0.0064 u (ppm)
Zn (202.548 nm)	0.0526	ppm	0.0007	1.26	659.8000	0.0526 (ppm)
Zr (343.823 nm)	0.0365	ppm	0.0067	18.24	2899.0000	0.0365 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8406	291000.0000	0.0053	0.63
Y_R 371.029	0.8685	42190.0000	0.0034	0.39

Sample Name: CCV 5993196

Date: 12/10/2019 3:54:52 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4988	ppm	0.0027	0.54	18250.0000	0.4988 (ppm)
Al (396.152 nm)	0.9851	ppm	0.0042	0.43	24990.0000	0.9851 (ppm)
As (188.980 nm)	0.9910	ppm	0.0005	0.05	522.5000	0.9910 (ppm)
B (249.678 nm)	0.9876	ppm	0.0056	0.57	9535.0000	0.9876 (ppm)
Ba (233.527 nm)	1.0140	ppm	0.0006	0.06	76600.0000	1.0140 (ppm)
Be (234.861 nm)	0.9923	ppm	0.0035	0.35	147400.0000	0.9923 (ppm)
Ca (422.673 nm)	5.0270	ppm	0.0218	0.43	19000.0000	5.0270 (ppm)
Cd (214.439 nm)	1.0050	ppm	0.0049	0.49	18770.0000	1.0050 (ppm)
Co (228.615 nm)	1.0100	ppm	0.0074	0.74	11370.0000	1.0100 (ppm)
Cr (205.560 nm)	1.0080	ppm	0.0040	0.40	3890.0000	1.0080 (ppm)
Cu (324.754 nm)	0.9994	ppm	0.0061	0.61	35420.0000	0.9994 (ppm)
Fe (238.204 nm)	1.0060	ppm	0.0029	0.29	2441.0000	1.0060 (ppm)
K (766.491 nm)	10.0800	ppm	0.0544	0.54	9736.0000	10.0800 (ppm)
Li (670.783 nm)	0.9959	ppm	0.0009	0.09	54880.0000	0.9959 (ppm)
Mg (279.078 nm)	5.1860	ppm	0.0584	1.13	12120.0000	5.1860 (ppm)
Mn (259.372 nm)	1.0000	ppm	0.0037	0.37	84490.0000	1.0000 (ppm)
Mo (204.598 nm)	1.0190	ppm	0.0070	0.68	3422.0000	1.0190 (ppm)
Na (589.592 nm)	10.0100	ppm	0.0174	0.17	55660.0000	10.0100 (ppm)
Ni (231.604 nm)	1.0030	ppm	0.0081	0.80	3890.0000	1.0030 (ppm)
P (213.618 nm)	0.9863	ppm	0.0023	0.23	656.7000	0.9863 (ppm)
Pb (220.353 nm)	0.9990	ppm	0.0075	0.75	1733.0000	0.9990 (ppm)
Sb (206.834 nm)	1.0040	ppm	0.0210	2.09	782.1000	1.0040 (ppm)
Se (196.026 nm)	0.9804	ppm	0.0039	0.40	553.8000	0.9804 (ppm)
Si (251.611 nm)	5.1310	ppm	0.0566	1.10	10400.0000	5.1310 (ppm)
Sn (189.925 nm)	1.0090	ppm	0.0058	0.57	498.0000	1.0090 (ppm)
Sr (421.552 nm)	0.9888	ppm	0.0003	0.03	327300.0000	0.9888 (ppm)
Ti (336.122 nm)	1.0180	ppm	0.0087	0.86	96300.0000	1.0180 (ppm)
Tl (190.794 nm)	1.0060	ppm	0.0135	1.35	889.9000	1.0060 (ppm)
V (292.401 nm)	1.0040	ppm	0.0045	0.45	26660.0000	1.0040 (ppm)
W (207.912 nm)	1.0190	ppm	0.0045	0.44	1468.0000	1.0190 (ppm)
Zn (202.548 nm)	1.0040	ppm	0.0041	0.41	13040.0000	1.0040 (ppm)
Zr (343.823 nm)	0.9605	ppm	0.0160	1.67	72870.0000	0.9605 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9070	313900.0000	0.0030	0.33
Y_R 371.029	0.8951	43490.0000	0.0018	0.20

Sample Name: CCB 5993195

Date: 12/10/2019 3:59:12 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0004 u	ppm	0.0002	51.47	-82.3900	-0.0004 u (ppm)
Al (396.152 nm)	-0.0030 u	ppm	0.0004	13.52	-397.2000	-0.0030 u (ppm)
As (188.980 nm)	0.0025	ppm	0.0023	91.59	2.9180	0.0025 (ppm)
B (249.678 nm)	0.0008	ppm	0.0000	4.28	-6.2220	0.0008 (ppm)
Ba (233.527 nm)	0.0001	ppm	0.0000	16.40	49.4800	0.0001 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	45.44	61.5100	0.0003 (ppm)
Ca (422.673 nm)	-0.0125 u	ppm	0.0021	16.52	72.2100	-0.0125 u (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	12.78	1.4400	0.0002 (ppm)
Co (228.615 nm)	-0.0002 u	ppm	0.0006	> 100.00	-14.5900	-0.0002 u (ppm)
Cr (205.560 nm)	0.0003 u	ppm	0.0008	> 100.00	3.0620	0.0003 u (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0003	> 100.00	41.3600	0.0000 u (ppm)
Fe (238.204 nm)	0.0053	ppm	0.0025	47.83	-36.9600	0.0053 (ppm)
K (766.491 nm)	0.0980	ppm	0.0806	82.26	17.1300	0.0980 (ppm)
Li (670.783 nm)	0.0007 u	ppm	0.0022	> 100.00	92.7900	0.0007 u (ppm)
Mg (279.078 nm)	0.0068	ppm	0.0027	39.70	26.6200	0.0068 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0002	37.76	86.8000	0.0005 (ppm)
Mo (204.598 nm)	0.0030	ppm	0.0015	50.72	5.8760	0.0030 (ppm)
Na (589.592 nm)	-0.0129 u	ppm	0.0146	> 100.00	843.1000	-0.0129 u (ppm)
Ni (231.604 nm)	0.0017 u	ppm	0.0024	> 100.00	-9.1720	0.0017 u (ppm)
P (213.618 nm)	0.0033	ppm	0.0031	95.79	2.5610	0.0033 (ppm)
Pb (220.353 nm)	-0.0028 u	ppm	0.0025	87.16	-16.3000	-0.0028 u (ppm)
Sb (206.834 nm)	0.0092	ppm	0.0053	57.70	3.9090	0.0092 (ppm)
Se (196.026 nm)	0.0009 u	ppm	0.0018	> 100.00	-0.2003	0.0009 u (ppm)
Si (251.611 nm)	0.0029	ppm	0.0009	31.42	16.7000	0.0029 (ppm)
Sn (189.925 nm)	-0.0043 u	ppm	0.0039	90.77	-3.5650	-0.0043 u (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	44.62	5.2390	0.0001 (ppm)
Ti (336.122 nm)	0.0009	ppm	0.0003	36.85	-44.9900	0.0009 (ppm)
Tl (190.794 nm)	0.0008 u	ppm	0.0039	> 100.00	5.2540	0.0008 u (ppm)
V (292.401 nm)	0.0003	ppm	0.0002	77.98	94.3600	0.0003 (ppm)
W (207.912 nm)	0.0031	ppm	0.0005	15.90	0.0827	0.0031 (ppm)
Zn (202.548 nm)	0.0002	ppm	0.0001	26.37	15.9300	0.0002 (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0001	> 100.00	105.1000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9071	314000.0000	0.0040	0.44
Y_R 371.029	0.8976	43610.0000	0.0027	0.30

Sample Name: MB 440-584820/1-A

Date: 12/10/2019 4:05:10 PM Rack:Tube: 2:55

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0006	> 100.00	-79.7000	-0.0003 u (ppm)
Al (396.152 nm)	0.0000 u	ppm	0.0004	> 100.00	-325.9000	0.0000 u (ppm)
As (188.980 nm)	0.0060	ppm	0.0063	> 100.00	4.7870	0.0060 (ppm)
B (249.678 nm)	0.0011	ppm	0.0011	> 100.00	-3.1730	0.0011 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0000	45.83	38.5800	0.0000 u (ppm)
Be (234.861 nm)	0.0001 u	ppm	0.0001	> 100.00	31.7500	0.0001 u (ppm)
Ca (422.673 nm)	0.0019	ppm	0.0025	> 100.00	126.2000	0.0019 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0003	> 100.00	-1.7470	0.0001 u (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0003	> 100.00	-14.5400	-0.0001 u (ppm)
Cr (205.560 nm)	0.0002 u	ppm	0.0004	> 100.00	2.6480	0.0002 u (ppm)
Cu (324.754 nm)	-0.0005 u	ppm	0.0000	0.58	25.9100	-0.0005 u (ppm)
Fe (238.204 nm)	0.0043	ppm	0.0014	31.73	-39.3500	0.0043 (ppm)
K (766.491 nm)	0.0093 u	ppm	0.1086	> 100.00	-69.1300	0.0093 u (ppm)
Li (670.783 nm)	0.0015	ppm	0.0004	28.46	138.5000	0.0015 (ppm)
Mg (279.078 nm)	0.0089	ppm	0.0014	16.12	31.5000	0.0089 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0001	29.17	75.4700	0.0003 (ppm)
Mo (204.598 nm)	0.0000 u	ppm	0.0003	> 100.00	-4.0330	0.0000 u (ppm)
Na (589.592 nm)	-0.0189 u	ppm	0.0112	59.50	809.9000	-0.0189 u (ppm)
Ni (231.604 nm)	0.0022	ppm	0.0009	39.59	-7.0850	0.0022 (ppm)
P (213.618 nm)	0.0028	ppm	0.0024	84.40	2.3130	0.0028 (ppm)
Pb (220.353 nm)	-0.0051 u	ppm	0.0007	13.65	-20.1800	-0.0051 u (ppm)
Sb (206.834 nm)	0.0090	ppm	0.0007	7.20	3.8510	0.0090 (ppm)
Se (196.026 nm)	0.0020 u	ppm	0.0049	> 100.00	0.4450	0.0020 u (ppm)
Si (251.611 nm)	0.0032	ppm	0.0014	44.29	16.7800	0.0032 (ppm)
Sn (189.925 nm)	0.0022	ppm	0.0010	45.22	-0.3351	0.0022 (ppm)
Sr (421.552 nm)	0.0000	ppm	0.0000	25.82	-19.6300	0.0000 (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0001	> 100.00	-147.0000	-0.0001 u (ppm)
Tl (190.794 nm)	0.0013	ppm	0.0005	38.15	5.6960	0.0013 (ppm)
V (292.401 nm)	0.0002 u	ppm	0.0005	> 100.00	91.5600	0.0002 u (ppm)
W (207.912 nm)	-0.0011 u	ppm	0.0024	> 100.00	-5.9090	-0.0011 u (ppm)
Zn (202.548 nm)	0.0018	ppm	0.0001	4.63	35.8500	0.0018 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	23.95	96.6900	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9157	316900.0000	0.0054	0.59
Y_R 371.029	0.9054	43990.0000	0.0026	0.29

Sample Name: LCS 440-584820/2-A

Date: 12/10/2019 4:06:58 PM
Rack:Tube: 2:56

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2419	ppm	0.0056	2.33	8808.0000	0.2419 (ppm)
Al (396.152 nm)	0.4892	ppm	0.0032	0.65	12200.0000	0.4892 (ppm)
As (188.980 nm)	0.5029	ppm	0.0003	0.05	265.9000	0.5029 (ppm)
B (249.678 nm)	0.4928	ppm	0.0046	0.94	4755.0000	0.4928 (ppm)
Ba (233.527 nm)	0.5133	ppm	0.0003	0.05	38800.0000	0.5133 (ppm)
Be (234.861 nm)	0.5017	ppm	0.0018	0.36	74540.0000	0.5017 (ppm)
Ca (422.673 nm)	2.5420	ppm	0.0016	0.06	9668.0000	2.5420 (ppm)
Cd (214.439 nm)	0.5146	ppm	0.0009	0.18	9616.0000	0.5146 (ppm)
Co (228.615 nm)	0.5093	ppm	0.0047	0.93	5729.0000	0.5093 (ppm)
Cr (205.560 nm)	0.5129	ppm	0.0006	0.12	1981.0000	0.5129 (ppm)
Cu (324.754 nm)	0.5003	ppm	0.0008	0.15	17750.0000	0.5003 (ppm)
Fe (238.204 nm)	0.4709	ppm	0.0007	0.15	1116.0000	0.4709 (ppm)
K (766.491 nm)	5.1030	ppm	0.0834	1.64	4890.0000	5.1030 (ppm)
Li (670.783 nm)	0.4988	ppm	0.0001	0.01	27520.0000	0.4988 (ppm)
Mg (279.078 nm)	2.5770	ppm	0.0023	0.09	6030.0000	2.5770 (ppm)
Mn (259.372 nm)	0.5092	ppm	0.0015	0.29	43020.0000	0.5092 (ppm)
Mo (204.598 nm)	0.4650	ppm	0.0016	0.33	1560.0000	0.4650 (ppm)
Na (589.592 nm)	4.9960	ppm	0.0149	0.30	28240.0000	4.9960 (ppm)
Ni (231.604 nm)	0.5165	ppm	0.0007	0.14	1995.0000	0.5165 (ppm)
P (213.618 nm)	0.4953	ppm	0.0034	0.68	330.6000	0.4953 (ppm)
Pb (220.353 nm)	0.5088	ppm	0.0023	0.45	877.2000	0.5088 (ppm)
Sb (206.834 nm)	0.4922	ppm	0.0058	1.18	382.4000	0.4922 (ppm)
Se (196.026 nm)	0.5016	ppm	0.0056	1.12	282.7000	0.5016 (ppm)
Si (251.611 nm)	2.5190	ppm	0.0114	0.45	5104.0000	2.5190 (ppm)
Sn (189.925 nm)	0.4263	ppm	0.0035	0.81	209.5000	0.4263 (ppm)
Sr (421.552 nm)	0.4972	ppm	0.0005	0.10	164600.0000	0.4972 (ppm)
Ti (336.122 nm)	0.4805	ppm	0.0091	1.90	45390.0000	0.4805 (ppm)
Tl (190.794 nm)	0.5230	ppm	0.0011	0.21	465.5000	0.5230 (ppm)
V (292.401 nm)	0.5055	ppm	0.0023	0.46	13480.0000	0.5055 (ppm)
W (207.912 nm)	0.4561	ppm	0.0015	0.33	654.9000	0.4561 (ppm)
Zn (202.548 nm)	0.5147	ppm	0.0028	0.55	6691.0000	0.5147 (ppm)
Zr (343.823 nm)	0.4084	ppm	0.0179	4.37	31040.0000	0.4084 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9159	317000.0000	0.0044	0.49
Y_R 371.029	0.9055	43990.0000	0.0022	0.24

Sample Name: 440-256837-G-1-A

Date: 12/10/2019 4:08:48 PM Rack:Tube: 2:57

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0005	> 100.00	-78.2400	-0.0003 u (ppm)
Al (396.152 nm)	0.1147	ppm	0.0003	0.22	2528.0000	0.1147 (ppm)
As (188.980 nm)	0.0044	ppm	0.0003	6.56	3.8810	0.0044 (ppm)
B (249.678 nm)	0.0213	ppm	0.0001	0.36	192.1000	0.0213 (ppm)
Ba (233.527 nm)	0.0240	ppm	0.0000	0.06	1851.0000	0.0240 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	21.45	66.9900	0.0003 (ppm)
Ca (422.673 nm)	5.4490	ppm	0.0929	1.70	20590.0000	5.4490 (ppm)
Cd (214.439 nm)	0.0010	ppm	0.0001	8.32	15.9000	0.0010 (ppm)
Co (228.615 nm)	0.0012	ppm	0.0002	20.57	0.7996	0.0012 (ppm)
Cr (205.560 nm)	0.0051	ppm	0.0008	14.84	21.7000	0.0051 (ppm)
Cu (324.754 nm)	0.0091	ppm	0.0003	2.82	360.6000	0.0091 (ppm)
Fe (238.204 nm)	0.2576	ppm	0.0011	0.43	588.5000	0.2576 (ppm)
K (766.491 nm)	1.2400	ppm	0.0497	4.01	1128.0000	1.2400 (ppm)
Li (670.783 nm)	0.0014	ppm	0.0007	49.64	116.9000	0.0014 (ppm)
Mg (279.078 nm)	0.9333	ppm	0.0009	0.09	2191.0000	0.9333 (ppm)
Mn (259.372 nm)	0.0313	ppm	0.0000	0.04	2705.0000	0.0313 (ppm)
Mo (204.598 nm)	0.0153	ppm	0.0017	11.35	47.3900	0.0153 (ppm)
Na (589.592 nm)	4.8600	ppm	0.0058	0.12	27470.0000	4.8600 (ppm)
Ni (231.604 nm)	0.0050	ppm	0.0002	4.06	3.8650	0.0050 (ppm)
P (213.618 nm)	0.0810	ppm	0.0021	2.60	57.0400	0.0810 (ppm)
Pb (220.353 nm)	0.0028	ppm	0.0032	> 100.00	-6.3650	0.0028 (ppm)
Sb (206.834 nm)	0.0078	ppm	0.0033	42.03	2.7530	0.0078 (ppm)
Se (196.026 nm)	0.0059	ppm	0.0072	> 100.00	2.6050	0.0059 (ppm)
Si (251.611 nm)	0.8881	ppm	0.0029	0.33	1785.0000	0.8881 (ppm)
Sn (189.925 nm)	0.0116	ppm	0.0008	7.28	4.3200	0.0116 (ppm)
Sr (421.552 nm)	0.0301	ppm	0.0000	0.15	9980.0000	0.0301 (ppm)
Ti (336.122 nm)	0.0132	ppm	0.0000	0.37	1114.0000	0.0132 (ppm)
Tl (190.794 nm)	0.0070	ppm	0.0000	0.56	10.7300	0.0070 (ppm)
V (292.401 nm)	0.0024	ppm	0.0001	3.53	154.6000	0.0024 (ppm)
W (207.912 nm)	0.0097	ppm	0.0032	32.57	14.8600	0.0097 (ppm)
Zn (202.548 nm)	0.4533	ppm	0.0025	0.56	5857.0000	0.4533 (ppm)
Zr (343.823 nm)	0.0018	ppm	0.0001	5.64	236.5000	0.0018 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9171	317400.0000	0.0035	0.38
Y_R 371.029	0.9056	44000.0000	0.0032	0.35

Sample Name: 440-256837-G-1-B MS

Date: 12/10/2019 4:10:38 PM Rack:Tube: 2:58

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2337	ppm	0.0047	2.02	8513.0000	0.2337 (ppm)
Al (396.152 nm)	0.6701	ppm	0.0036	0.54	16710.0000	0.6701 (ppm)
As (188.980 nm)	0.5111	ppm	0.0028	0.55	270.2000	0.5111 (ppm)
B (249.678 nm)	0.5173	ppm	0.0018	0.35	4992.0000	0.5173 (ppm)
Ba (233.527 nm)	0.5352	ppm	0.0030	0.56	40460.0000	0.5352 (ppm)
Be (234.861 nm)	0.5055	ppm	0.0028	0.55	75110.0000	0.5055 (ppm)
Ca (422.673 nm)	8.0700	ppm	0.0057	0.07	30440.0000	8.0700 (ppm)
Cd (214.439 nm)	0.5123	ppm	0.0022	0.43	9572.0000	0.5123 (ppm)
Co (228.615 nm)	0.5179	ppm	0.0017	0.34	5827.0000	0.5179 (ppm)
Cr (205.560 nm)	0.5183	ppm	0.0045	0.86	2002.0000	0.5183 (ppm)
Cu (324.754 nm)	0.5213	ppm	0.0028	0.53	18490.0000	0.5213 (ppm)
Fe (238.204 nm)	0.7787	ppm	0.0016	0.20	1879.0000	0.7787 (ppm)
K (766.491 nm)	6.3110	ppm	0.0367	0.58	6064.0000	6.3110 (ppm)
Li (670.783 nm)	0.5017	ppm	0.0026	0.51	27660.0000	0.5017 (ppm)
Mg (279.078 nm)	3.5140	ppm	0.0229	0.65	8221.0000	3.5140 (ppm)
Mn (259.372 nm)	0.5411	ppm	0.0029	0.53	45730.0000	0.5411 (ppm)
Mo (204.598 nm)	0.4862	ppm	0.0015	0.31	1631.0000	0.4862 (ppm)
Na (589.592 nm)	9.9780	ppm	0.0047	0.05	55460.0000	9.9780 (ppm)
Ni (231.604 nm)	0.5207	ppm	0.0006	0.12	2012.0000	0.5207 (ppm)
P (213.618 nm)	0.5912	ppm	0.0120	2.04	397.6000	0.5912 (ppm)
Pb (220.353 nm)	0.5149	ppm	0.0047	0.90	888.2000	0.5149 (ppm)
Sb (206.834 nm)	0.5551	ppm	0.0030	0.55	431.8000	0.5551 (ppm)
Se (196.026 nm)	0.5016	ppm	0.0075	1.50	282.7000	0.5016 (ppm)
Si (251.611 nm)	3.5290	ppm	0.0182	0.52	7124.0000	3.5290 (ppm)
Sn (189.925 nm)	0.4559	ppm	0.0050	1.11	224.2000	0.4559 (ppm)
Sr (421.552 nm)	0.5320	ppm	0.0011	0.21	176100.0000	0.5320 (ppm)
Ti (336.122 nm)	0.5081	ppm	0.0067	1.32	47990.0000	0.5081 (ppm)
Tl (190.794 nm)	0.5280	ppm	0.0059	1.12	469.7000	0.5280 (ppm)
V (292.401 nm)	0.5129	ppm	0.0027	0.52	13680.0000	0.5129 (ppm)
W (207.912 nm)	0.4778	ppm	0.0011	0.23	690.7000	0.4778 (ppm)
Zn (202.548 nm)	0.9198	ppm	0.0031	0.34	11910.0000	0.9198 (ppm)
Zr (343.823 nm)	0.4632	ppm	0.0089	1.93	35180.0000	0.4632 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9156	316900.0000	0.0055	0.60
Y_R 371.029	0.9115	44290.0000	0.0053	0.58

Sample Name: 440-256837-G-1-C MSD

Date: 12/10/2019 4:12:26 PM
Rack:Tube: 2:59

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2327	ppm	0.0040	1.71	8478.0000	0.2327 (ppm)
Al (396.152 nm)	0.6631	ppm	0.0026	0.39	16540.0000	0.6631 (ppm)
As (188.980 nm)	0.4959	ppm	0.0123	2.48	262.2000	0.4959 (ppm)
B (249.678 nm)	0.5103	ppm	0.0035	0.68	4924.0000	0.5103 (ppm)
Ba (233.527 nm)	0.5329	ppm	0.0004	0.08	40280.0000	0.5329 (ppm)
Be (234.861 nm)	0.4987	ppm	0.0022	0.45	74110.0000	0.4987 (ppm)
Ca (422.673 nm)	7.9690	ppm	0.0190	0.24	30050.0000	7.9690 (ppm)
Cd (214.439 nm)	0.5058	ppm	0.0015	0.30	9451.0000	0.5058 (ppm)
Co (228.615 nm)	0.5052	ppm	0.0052	1.03	5684.0000	0.5052 (ppm)
Cr (205.560 nm)	0.5040	ppm	0.0004	0.08	1947.0000	0.5040 (ppm)
Cu (324.754 nm)	0.5144	ppm	0.0014	0.27	18250.0000	0.5144 (ppm)
Fe (238.204 nm)	0.7639	ppm	0.0006	0.08	1842.0000	0.7639 (ppm)
K (766.491 nm)	6.2220	ppm	0.0497	0.80	5978.0000	6.2220 (ppm)
Li (670.783 nm)	0.4965	ppm	0.0012	0.24	27380.0000	0.4965 (ppm)
Mg (279.078 nm)	3.4960	ppm	0.0056	0.16	8179.0000	3.4960 (ppm)
Mn (259.372 nm)	0.5334	ppm	0.0017	0.31	45090.0000	0.5334 (ppm)
Mo (204.598 nm)	0.4939	ppm	0.0020	0.40	1657.0000	0.4939 (ppm)
Na (589.592 nm)	9.8750	ppm	0.0279	0.28	54900.0000	9.8750 (ppm)
Ni (231.604 nm)	0.5093	ppm	0.0032	0.63	1967.0000	0.5093 (ppm)
P (213.618 nm)	0.5822	ppm	0.0003	0.06	391.3000	0.5822 (ppm)
Pb (220.353 nm)	0.5082	ppm	0.0046	0.90	876.5000	0.5082 (ppm)
Sb (206.834 nm)	0.5550	ppm	0.0020	0.36	431.5000	0.5550 (ppm)
Se (196.026 nm)	0.4939	ppm	0.0149	3.02	278.4000	0.4939 (ppm)
Si (251.611 nm)	3.4820	ppm	0.0174	0.50	7030.0000	3.4820 (ppm)
Sn (189.925 nm)	0.4637	ppm	0.0029	0.63	228.0000	0.4637 (ppm)
Sr (421.552 nm)	0.5261	ppm	0.0015	0.29	174200.0000	0.5261 (ppm)
Ti (336.122 nm)	0.5074	ppm	0.0054	1.06	47930.0000	0.5074 (ppm)
Tl (190.794 nm)	0.4900	ppm	0.0072	1.47	435.4000	0.4900 (ppm)
V (292.401 nm)	0.5058	ppm	0.0010	0.20	13490.0000	0.5058 (ppm)
W (207.912 nm)	0.4783	ppm	0.0034	0.71	691.3000	0.4783 (ppm)
Zn (202.548 nm)	0.9073	ppm	0.0048	0.53	11750.0000	0.9073 (ppm)
Zr (343.823 nm)	0.4642	ppm	0.0066	1.42	35260.0000	0.4642 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9179	317700.0000	0.0035	0.38
Y_R 371.029	0.9060	44020.0000	0.0006	0.07

Sample Name: 440-256863-C-1-B

Date: 12/10/2019 4:14:16 PM Rack:Tube: 2:60

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0004 u	ppm	0.0003	76.59	-82.0700	-0.0004 u (ppm)
Al (396.152 nm)	0.0610	ppm	0.0007	1.12	1201.0000	0.0610 (ppm)
As (188.980 nm)	0.0070	ppm	0.0016	22.80	5.2490	0.0070 (ppm)
B (249.678 nm)	0.0169	ppm	0.0004	2.37	149.6000	0.0169 (ppm)
Ba (233.527 nm)	0.0100	ppm	0.0001	0.86	793.8000	0.0100 (ppm)
Be (234.861 nm)	0.0004	ppm	0.0002	46.93	76.2600	0.0004 (ppm)
Ca (422.673 nm)	9.2620	ppm	0.0412	0.44	34910.0000	9.2620 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0002	53.76	3.0570	0.0003 (ppm)
Co (228.615 nm)	0.0010	ppm	0.0007	64.14	-0.9770	0.0010 (ppm)
Cr (205.560 nm)	0.0016	ppm	0.0006	33.49	8.2980	0.0016 (ppm)
Cu (324.754 nm)	0.0185	ppm	0.0001	0.28	689.2000	0.0185 (ppm)
Fe (238.204 nm)	0.1382	ppm	0.0028	2.06	292.4000	0.1382 (ppm)
K (766.491 nm)	0.2565	ppm	0.0766	29.84	171.8000	0.2565 (ppm)
Li (670.783 nm)	0.0019	ppm	0.0000	2.23	155.7000	0.0019 (ppm)
Mg (279.078 nm)	0.2307	ppm	0.0058	2.52	549.7000	0.2307 (ppm)
Mn (259.372 nm)	0.0123	ppm	0.0003	2.44	1103.0000	0.0123 (ppm)
Mo (204.598 nm)	0.0154	ppm	0.0031	19.90	47.5900	0.0154 (ppm)
Na (589.592 nm)	0.8747	ppm	0.0021	0.24	5695.0000	0.8747 (ppm)
Ni (231.604 nm)	0.0044	ppm	0.0000	0.37	1.4070	0.0044 (ppm)
P (213.618 nm)	0.0359	ppm	0.0025	7.03	24.8300	0.0359 (ppm)
Pb (220.353 nm)	0.0003 u	ppm	0.0006	> 100.00	-10.7200	0.0003 u (ppm)
Sb (206.834 nm)	0.0114	ppm	0.0054	47.26	5.5060	0.0114 (ppm)
Se (196.026 nm)	0.0066	ppm	0.0056	85.51	3.0170	0.0066 (ppm)
Si (251.611 nm)	0.4159	ppm	0.0022	0.52	843.0000	0.4159 (ppm)
Sn (189.925 nm)	0.0112	ppm	0.0028	24.96	4.1200	0.0112 (ppm)
Sr (421.552 nm)	0.0213	ppm	0.0001	0.60	7130.0000	0.0213 (ppm)
Ti (336.122 nm)	0.0075	ppm	0.0006	8.47	572.1000	0.0075 (ppm)
Tl (190.794 nm)	0.0070	ppm	0.0038	55.06	10.6900	0.0070 (ppm)
V (292.401 nm)	0.0009	ppm	0.0002	21.70	118.6000	0.0009 (ppm)
W (207.912 nm)	0.0137	ppm	0.0040	29.08	18.6700	0.0137 (ppm)
Zn (202.548 nm)	0.3021	ppm	0.0016	0.54	3907.0000	0.3021 (ppm)
Zr (343.823 nm)	0.0045	ppm	0.0005	10.64	441.8000	0.0045 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9189	318100.0000	0.0045	0.49
Y_R 371.029	0.9126	44340.0000	0.0049	0.53

Sample Name: 440-256168-E-9-B

Date: 12/10/2019 4:16:06 PM Rack:Tube: 3:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0002	73.07	-80.2600	-0.0003 u (ppm)
Al (396.152 nm)	0.0041	ppm	0.0006	13.99	-221.4000	0.0041 (ppm)
As (188.980 nm)	0.0062	ppm	0.0013	20.57	4.9090	0.0062 (ppm)
B (249.678 nm)	0.0015	ppm	0.0003	18.14	-0.3430	0.0015 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	41.9800	0.0000 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	7.22	35.2300	0.0001 (ppm)
Ca (422.673 nm)	0.0087	ppm	0.0037	42.97	151.7000	0.0087 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0002	> 100.00	0.4068	0.0002 (ppm)
Co (228.615 nm)	0.0005	ppm	0.0001	26.39	-7.7060	0.0005 (ppm)
Cr (205.560 nm)	0.0013	ppm	0.0004	31.96	6.7540	0.0013 (ppm)
Cu (324.754 nm)	-0.0006 u	ppm	0.0001	13.73	19.6500	-0.0006 u (ppm)
Fe (238.204 nm)	0.0054	ppm	0.0047	86.72	-36.7500	0.0054 (ppm)
K (766.491 nm)	-0.0894 u	ppm	0.1091	> 100.00	-165.1000	-0.0894 u (ppm)
Li (670.783 nm)	0.0019	ppm	0.0020	> 100.00	157.9000	0.0019 (ppm)
Mg (279.078 nm)	0.0089	ppm	0.0006	6.38	31.5400	0.0089 (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0002	66.25	67.9700	0.0002 (ppm)
Mo (204.598 nm)	0.0040	ppm	0.0004	10.29	9.4370	0.0040 (ppm)
Na (589.592 nm)	-0.0092 u	ppm	0.0214	> 100.00	862.9000	-0.0092 u (ppm)
Ni (231.604 nm)	0.0016	ppm	0.0007	41.89	-9.3020	0.0016 (ppm)
P (213.618 nm)	-0.0007 u	ppm	0.0031	> 100.00	-0.2442	-0.0007 u (ppm)
Pb (220.353 nm)	-0.0021 u	ppm	0.0007	32.10	-15.1100	-0.0021 u (ppm)
Sb (206.834 nm)	0.0018 u	ppm	0.0062	> 100.00	-1.9760	0.0018 u (ppm)
Se (196.026 nm)	0.0000 u	ppm	0.0003	> 100.00	-0.6765	0.0000 u (ppm)
Si (251.611 nm)	0.0043	ppm	0.0038	88.64	19.8800	0.0043 (ppm)
Sn (189.925 nm)	-0.0009 u	ppm	0.0015	> 100.00	-1.9020	-0.0009 u (ppm)
Sr (421.552 nm)	-0.0001 u	ppm	0.0000	2.87	-44.4400	-0.0001 u (ppm)
Ti (336.122 nm)	0.0014	ppm	0.0004	28.01	-0.1404	0.0014 (ppm)
Tl (190.794 nm)	0.0034 u	ppm	0.0066	> 100.00	7.5790	0.0034 u (ppm)
V (292.401 nm)	0.0003	ppm	0.0002	66.21	94.0100	0.0003 (ppm)
W (207.912 nm)	0.0030	ppm	0.0025	84.31	-0.0298	0.0030 (ppm)
Zn (202.548 nm)	0.0024	ppm	0.0001	3.29	43.8200	0.0024 (ppm)
Zr (343.823 nm)	0.0003	ppm	0.0001	39.45	128.0000	0.0003 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9153	316800.0000	0.0037	0.40
Y_R 371.029	0.9032	43880.0000	0.0036	0.40

Sample Name: 440-255839-B-1-C

Date: 12/10/2019 4:17:56 PM Rack:Tube: 3:2

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0003	52.89	-92.7200	-0.0006 u (ppm)
Al (396.152 nm)	0.2242	ppm	0.0012	0.52	5236.0000	0.2242 (ppm)
As (188.980 nm)	-0.0005 u	ppm	0.0019	> 100.00	1.2670	-0.0005 u (ppm)
B (249.678 nm)	0.0330	ppm	0.0003	0.97	307.5000	0.0330 (ppm)
Ba (233.527 nm)	0.0094	ppm	0.0000	0.27	753.8000	0.0094 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	> 100.00	35.1100	0.0001 (ppm)
Ca (422.673 nm)	6.0130	ppm	0.0325	0.54	22710.0000	6.0130 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.5340	0.0000 u (ppm)
Co (228.615 nm)	0.0002	ppm	0.0000	17.47	-10.3500	0.0002 (ppm)
Cr (205.560 nm)	0.0021	ppm	0.0013	58.70	10.1800	0.0021 (ppm)
Cu (324.754 nm)	0.0187	ppm	0.0003	1.70	700.7000	0.0187 (ppm)
Fe (238.204 nm)	0.2466	ppm	0.0033	1.36	561.1000	0.2466 (ppm)
K (766.491 nm)	2.5540	ppm	0.0695	2.72	2407.0000	2.5540 (ppm)
Li (670.783 nm)	0.0012	ppm	0.0006	54.95	116.3000	0.0012 (ppm)
Mg (279.078 nm)	0.8748	ppm	0.0046	0.53	2055.0000	0.8748 (ppm)
Mn (259.372 nm)	0.0141	ppm	0.0000	0.15	1258.0000	0.0141 (ppm)
Mo (204.598 nm)	0.0029	ppm	0.0023	80.91	5.5900	0.0029 (ppm)
Na (589.592 nm)	6.5820	ppm	0.0057	0.09	36880.0000	6.5820 (ppm)
Ni (231.604 nm)	0.0029	ppm	0.0016	55.03	-4.5350	0.0029 (ppm)
P (213.618 nm)	0.2675	ppm	0.0020	0.75	189.0000	0.2675 (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0006	43.00	-13.4600	-0.0013 u (ppm)
Sb (206.834 nm)	0.0065	ppm	0.0024	37.29	1.8660	0.0065 (ppm)
Se (196.026 nm)	0.0002 u	ppm	0.0081	> 100.00	-0.6120	0.0002 u (ppm)
Si (251.611 nm)	1.0270	ppm	0.0036	0.35	2060.0000	1.0270 (ppm)
Sn (189.925 nm)	-0.0001 u	ppm	0.0021	> 100.00	-1.4980	-0.0001 u (ppm)
Sr (421.552 nm)	0.0267	ppm	0.0002	0.60	8872.0000	0.0267 (ppm)
Ti (336.122 nm)	0.0105	ppm	0.0002	2.06	859.6000	0.0105 (ppm)
Tl (190.794 nm)	0.0035	ppm	0.0015	44.24	7.5270	0.0035 (ppm)
V (292.401 nm)	0.0022	ppm	0.0001	4.50	151.0000	0.0022 (ppm)
W (207.912 nm)	0.0002	ppm	0.0002	98.77	-1.6310	0.0002 (ppm)
Zn (202.548 nm)	0.2132	ppm	0.0003	0.14	2762.0000	0.2132 (ppm)
Zr (343.823 nm)	0.0043	ppm	0.0007	16.33	423.3000	0.0043 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9166	317300.0000	0.0041	0.44
Y_R 371.029	0.9166	44530.0000	0.0031	0.33

Sample Name: 440-256848-D-1-A

Date: 12/10/2019 4:19:46 PM Rack:Tube: 3:3

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0006	> 100.00	-88.9200	-0.0006 u (ppm)
Al (396.152 nm)	0.0277	ppm	0.0007	2.39	363.2000	0.0277 (ppm)
As (188.980 nm)	-0.0035 u	ppm	0.0049	> 100.00	-0.3786	-0.0035 u (ppm)
B (249.678 nm)	0.0366	ppm	0.0008	2.23	341.2000	0.0366 (ppm)
Ba (233.527 nm)	0.0179	ppm	0.0005	2.70	1390.0000	0.0179 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0001	> 100.00	32.1200	0.0000 (ppm)
Ca (422.673 nm)	6.4940	ppm	0.0228	0.35	24510.0000	6.4940 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0002	92.80	1.9220	0.0003 (ppm)
Co (228.615 nm)	0.0009	ppm	0.0002	25.49	-2.5060	0.0009 (ppm)
Cr (205.560 nm)	0.0009	ppm	0.0000	1.82	5.7220	0.0009 (ppm)
Cu (324.754 nm)	0.0121	ppm	0.0001	0.96	467.8000	0.0121 (ppm)
Fe (238.204 nm)	0.1758	ppm	0.0050	2.84	386.3000	0.1758 (ppm)
K (766.491 nm)	1.8290	ppm	0.0078	0.43	1698.0000	1.8290 (ppm)
Li (670.783 nm)	0.0022	ppm	0.0002	8.08	86.5900	0.0022 (ppm)
Mg (279.078 nm)	1.0780	ppm	0.0023	0.21	2528.0000	1.0780 (ppm)
Mn (259.372 nm)	0.0212	ppm	0.0001	0.49	1845.0000	0.0212 (ppm)
Mo (204.598 nm)	0.0027	ppm	0.0001	2.51	5.4450	0.0027 (ppm)
Na (589.592 nm)	3.2480	ppm	0.0166	0.51	18660.0000	3.2480 (ppm)
Ni (231.604 nm)	0.0073	ppm	0.0004	5.35	13.1100	0.0073 (ppm)
P (213.618 nm)	0.1236	ppm	0.0060	4.83	87.1800	0.1236 (ppm)
Pb (220.353 nm)	-0.0008 u	ppm	0.0027	> 100.00	-12.6900	-0.0008 u (ppm)
Sb (206.834 nm)	0.0086	ppm	0.0008	9.38	3.6690	0.0086 (ppm)
Se (196.026 nm)	0.0003 u	ppm	0.0012	> 100.00	-0.5847	0.0003 u (ppm)
Si (251.611 nm)	0.4783	ppm	0.0015	0.31	972.5000	0.4783 (ppm)
Sn (189.925 nm)	-0.0006 u	ppm	0.0034	> 100.00	-1.6770	-0.0006 u (ppm)
Sr (421.552 nm)	0.0346	ppm	0.0000	0.04	11490.0000	0.0346 (ppm)
Ti (336.122 nm)	0.0013	ppm	0.0001	8.95	-11.3000	0.0013 (ppm)
Tl (190.794 nm)	0.0026 u	ppm	0.0067	> 100.00	6.7670	0.0026 u (ppm)
V (292.401 nm)	0.0004	ppm	0.0001	13.79	106.9000	0.0004 (ppm)
W (207.912 nm)	0.0011 u	ppm	0.0019	> 100.00	25.8300	0.0011 u (ppm)
Zn (202.548 nm)	2.4350	ppm	0.0119	0.49	31400.0000	2.4350 (ppm)
Zr (343.823 nm)	0.0017	ppm	0.0003	20.23	232.9000	0.0017 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9185	317900.0000	0.0060	0.65
Y_R 371.029	0.9087	44150.0000	0.0013	0.14

Sample Name: CCV 5993196

Date: 12/10/2019 4:21:36 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4993	ppm	0.0012	0.23	18270.0000	0.4993 (ppm)
Al (396.152 nm)	0.9912	ppm	0.0024	0.24	25150.0000	0.9912 (ppm)
As (188.980 nm)	0.9963	ppm	0.0022	0.22	525.4000	0.9963 (ppm)
B (249.678 nm)	0.9928	ppm	0.0049	0.49	9586.0000	0.9928 (ppm)
Ba (233.527 nm)	1.0120	ppm	0.0027	0.27	76490.0000	1.0120 (ppm)
Be (234.861 nm)	0.9939	ppm	0.0035	0.35	147600.0000	0.9939 (ppm)
Ca (422.673 nm)	5.0020	ppm	0.0227	0.45	18910.0000	5.0020 (ppm)
Cd (214.439 nm)	1.0100	ppm	0.0040	0.39	18870.0000	1.0100 (ppm)
Co (228.615 nm)	1.0150	ppm	0.0023	0.23	11430.0000	1.0150 (ppm)
Cr (205.560 nm)	1.0080	ppm	0.0025	0.25	3892.0000	1.0080 (ppm)
Cu (324.754 nm)	1.0050	ppm	0.0055	0.54	35610.0000	1.0050 (ppm)
Fe (238.204 nm)	1.0170	ppm	0.0001	0.01	2468.0000	1.0170 (ppm)
K (766.491 nm)	10.0900	ppm	0.2205	2.19	9746.0000	10.0900 (ppm)
Li (670.783 nm)	0.9952	ppm	0.0008	0.08	54840.0000	0.9952 (ppm)
Mg (279.078 nm)	5.1030	ppm	0.0080	0.16	11930.0000	5.1030 (ppm)
Mn (259.372 nm)	1.0030	ppm	0.0032	0.32	84720.0000	1.0030 (ppm)
Mo (204.598 nm)	1.0210	ppm	0.0039	0.38	3429.0000	1.0210 (ppm)
Na (589.592 nm)	9.9350	ppm	0.0216	0.22	55260.0000	9.9350 (ppm)
Ni (231.604 nm)	1.0100	ppm	0.0066	0.65	3916.0000	1.0100 (ppm)
P (213.618 nm)	0.9856	ppm	0.0079	0.80	656.1000	0.9856 (ppm)
Pb (220.353 nm)	1.0040	ppm	0.0044	0.44	1742.0000	1.0040 (ppm)
Sb (206.834 nm)	1.0100	ppm	0.0114	1.13	786.8000	1.0100 (ppm)
Se (196.026 nm)	0.9867	ppm	0.0101	1.02	557.2000	0.9867 (ppm)
Si (251.611 nm)	5.0310	ppm	0.0564	1.12	10200.0000	5.0310 (ppm)
Sn (189.925 nm)	1.0190	ppm	0.0017	0.16	502.5000	1.0190 (ppm)
Sr (421.552 nm)	0.9965	ppm	0.0013	0.13	329800.0000	0.9965 (ppm)
Ti (336.122 nm)	1.0120	ppm	0.0053	0.52	95780.0000	1.0120 (ppm)
Tl (190.794 nm)	1.0180	ppm	0.0037	0.37	901.0000	1.0180 (ppm)
V (292.401 nm)	1.0060	ppm	0.0021	0.20	26720.0000	1.0060 (ppm)
W (207.912 nm)	1.0140	ppm	0.0024	0.23	1461.0000	1.0140 (ppm)
Zn (202.548 nm)	1.0100	ppm	0.0032	0.31	13130.0000	1.0100 (ppm)
Zr (343.823 nm)	1.0090	ppm	0.0033	0.33	76550.0000	1.0090 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9071	314000.0000	0.0005	0.06
Y_R 371.029	0.8997	43710.0000	0.0041	0.46

Sample Name: CCB 5993195

Date: 12/10/2019 4:25:30 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002	ppm	0.0002	64.83	-60.4100	0.0002 (ppm)
Al (396.152 nm)	-0.0010 u	ppm	0.0005	47.19	-347.3000	-0.0010 u (ppm)
As (188.980 nm)	0.0050	ppm	0.0037	75.09	4.2270	0.0050 (ppm)
B (249.678 nm)	0.0013	ppm	0.0000	0.56	-1.1510	0.0013 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0000	26.20	37.2600	0.0000 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	60.14	40.8300	0.0001 (ppm)
Ca (422.673 nm)	-0.0008 u	ppm	0.0072	> 100.00	115.9000	-0.0008 u (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0001	82.78	-1.1620	0.0001 (ppm)
Co (228.615 nm)	-0.0008 u	ppm	0.0007	90.00	-21.7900	-0.0008 u (ppm)
Cr (205.560 nm)	-0.0001 u	ppm	0.0006	> 100.00	1.3360	-0.0001 u (ppm)
Cu (324.754 nm)	-0.0004 u	ppm	0.0001	15.02	27.3000	-0.0004 u (ppm)
Fe (238.204 nm)	-0.0030 u	ppm	0.0000	0.43	-57.5500	-0.0030 u (ppm)
K (766.491 nm)	-0.0329 u	ppm	0.1543	> 100.00	-110.2000	-0.0329 u (ppm)
Li (670.783 nm)	0.0042	ppm	0.0006	14.46	289.1000	0.0042 (ppm)
Mg (279.078 nm)	0.0023	ppm	0.0011	47.80	16.1200	0.0023 (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0001	24.58	67.5800	0.0002 (ppm)
Mo (204.598 nm)	0.0051	ppm	0.0011	21.16	13.1700	0.0051 (ppm)
Na (589.592 nm)	-0.0203 u	ppm	0.0003	1.68	802.3000	-0.0203 u (ppm)
Ni (231.604 nm)	0.0014	ppm	0.0005	37.39	-10.0900	0.0014 (ppm)
P (213.618 nm)	-0.0007 u	ppm	0.0004	62.11	-0.2237	-0.0007 u (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0008	63.40	-13.5800	-0.0013 u (ppm)
Sb (206.834 nm)	0.0039	ppm	0.0008	19.95	-0.3102	0.0039 (ppm)
Se (196.026 nm)	0.0030	ppm	0.0033	> 100.00	0.9745	0.0030 (ppm)
Si (251.611 nm)	0.0020	ppm	0.0013	64.58	14.6700	0.0020 (ppm)
Sn (189.925 nm)	0.0029	ppm	0.0005	18.03	-0.0334	0.0029 (ppm)
Sr (421.552 nm)	-0.0001 u	ppm	0.0001	58.96	-57.0900	-0.0001 u (ppm)
Ti (336.122 nm)	0.0011	ppm	0.0003	23.92	-33.1000	0.0011 (ppm)
Tl (190.794 nm)	0.0048	ppm	0.0008	16.98	8.8380	0.0048 (ppm)
V (292.401 nm)	0.0001 u	ppm	0.0005	> 100.00	90.1000	0.0001 u (ppm)
W (207.912 nm)	0.0024	ppm	0.0025	> 100.00	-0.9350	0.0024 (ppm)
Zn (202.548 nm)	0.0007	ppm	0.0002	26.52	21.4000	0.0007 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0002	> 100.00	93.1500	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029

Label	Internal Standard
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9182	317800.0000	0.0040	0.43
Y_R 371.029	0.9080	44110.0000	0.0005	0.05

Sample Name: 580-91250-C-2-A

Date: 12/10/2019 4:27:20 PM Rack:Tube: 3:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0007 u	ppm	0.0007	> 100.00	-93.4300	-0.0007 u (ppm)
Al (396.152 nm)	0.0334	ppm	0.0006	1.84	509.5000	0.0334 (ppm)
As (188.980 nm)	0.0026	ppm	0.0022	82.61	2.9560	0.0026 (ppm)
B (249.678 nm)	0.0135	ppm	0.0005	3.43	118.3000	0.0135 (ppm)
Ba (233.527 nm)	0.0062	ppm	0.0001	1.25	507.2000	0.0062 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	12.59	33.4600	0.0001 (ppm)
Ca (422.673 nm)	7.9490	ppm	0.0186	0.23	29980.0000	7.9490 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0003	> 100.00	-0.8973	0.0001 u (ppm)
Co (228.615 nm)	-0.0011 u	ppm	0.0004	31.08	-25.3900	-0.0011 u (ppm)
Cr (205.560 nm)	0.0009	ppm	0.0004	38.16	5.4940	0.0009 (ppm)
Cu (324.754 nm)	-0.0001 u	ppm	0.0003	> 100.00	34.6900	-0.0001 u (ppm)
Fe (238.204 nm)	0.0640	ppm	0.0061	9.47	108.7000	0.0640 (ppm)
K (766.491 nm)	1.1880	ppm	0.0832	7.00	1079.0000	1.1880 (ppm)
Li (670.783 nm)	0.0018	ppm	0.0011	58.00	171.8000	0.0018 (ppm)
Mg (279.078 nm)	2.5960	ppm	0.0118	0.45	6077.0000	2.5960 (ppm)
Mn (259.372 nm)	0.0127	ppm	0.0001	1.15	1125.0000	0.0127 (ppm)
Mo (204.598 nm)	0.0011	ppm	0.0015	> 100.00	-0.4223	0.0011 (ppm)
Na (589.592 nm)	6.6270	ppm	0.0026	0.04	37120.0000	6.6270 (ppm)
Ni (231.604 nm)	0.0026	ppm	0.0007	27.02	-5.6050	0.0026 (ppm)
P (213.618 nm)	0.0512	ppm	0.0098	19.13	36.4600	0.0512 (ppm)
Pb (220.353 nm)	-0.0009 u	ppm	0.0024	> 100.00	-12.7500	-0.0009 u (ppm)
Sb (206.834 nm)	0.0065	ppm	0.0021	32.83	1.8140	0.0065 (ppm)
Se (196.026 nm)	0.0010 u	ppm	0.0031	> 100.00	-0.1758	0.0010 u (ppm)
Si (251.611 nm)	8.0760	ppm	0.0777	0.96	16110.0000	8.0760 (ppm)
Sn (189.925 nm)	-0.0027 u	ppm	0.0013	49.65	-2.7710	-0.0027 u (ppm)
Sr (421.552 nm)	0.0451	ppm	0.0000	0.10	14970.0000	0.0451 (ppm)
Ti (336.122 nm)	0.0010	ppm	0.0001	8.84	-47.0700	0.0010 (ppm)
Tl (190.794 nm)	0.0022	ppm	0.0019	85.26	6.4430	0.0022 (ppm)
V (292.401 nm)	0.0019	ppm	0.0001	6.99	144.8000	0.0019 (ppm)
W (207.912 nm)	-0.0013 u	ppm	0.0049	> 100.00	-6.2480	-0.0013 u (ppm)
Zn (202.548 nm)	0.0077	ppm	0.0003	4.29	110.5000	0.0077 (ppm)
Zr (343.823 nm)	0.0001 u	ppm	0.0002	> 100.00	111.4000	0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9315	322400.0000	0.0012	0.13
Y_R 371.029	0.9203	44710.0000	0.0034	0.37

Sample Name: 580-91250-C-5-A

Date: 12/10/2019 4:29:10 PM Rack:Tube: 3:5

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0012 u	ppm	0.0005	43.60	-115.5000	-0.0012 u (ppm)
Al (396.152 nm)	0.0280	ppm	0.0003	0.99	403.5000	0.0280 (ppm)
As (188.980 nm)	0.0043	ppm	0.0012	28.14	3.7660	0.0043 (ppm)
B (249.678 nm)	0.1840	ppm	0.0003	0.17	1782.0000	0.1840 (ppm)
Ba (233.527 nm)	0.0409	ppm	0.0003	0.79	3131.0000	0.0409 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	21.8700	0.0000 u (ppm)
Ca (422.673 nm)	34.9000	ppm	0.0393	0.11	131200.0000	34.9000 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0002	> 100.00	-5.3350	-0.0001 u (ppm)
Co (228.615 nm)	-0.0003 u	ppm	0.0006	> 100.00	-15.4300	-0.0003 u (ppm)
Cr (205.560 nm)	0.0023	ppm	0.0000	0.65	10.8700	0.0023 (ppm)
Cu (324.754 nm)	-0.0011 u	ppm	0.0005	47.83	-19.0600	-0.0011 u (ppm)
Fe (238.204 nm)	0.0004 u	ppm	0.0013	> 100.00	-48.6600	0.0004 u (ppm)
K (766.491 nm)	1.8850	ppm	0.1488	7.90	1759.0000	1.8850 (ppm)
Li (670.783 nm)	-0.0005 u	ppm	0.0003	65.68	78.0700	-0.0005 u (ppm)
Mg (279.078 nm)	5.1950	ppm	0.0462	0.89	12150.0000	5.1950 (ppm)
Mn (259.372 nm)	0.0285	ppm	0.0000	0.05	2464.0000	0.0285 (ppm)
Mo (204.598 nm)	0.0295	ppm	0.0004	1.25	95.2500	0.0295 (ppm)
Na (589.592 nm)	349.4000	ppm	0.0858	0.02	1909000.0000	349.4000 (ppm)
Ni (231.604 nm)	0.0030	ppm	0.0015	48.97	-4.2210	0.0030 (ppm)
P (213.618 nm)	0.1535	ppm	0.0007	0.43	108.3000	0.1535 (ppm)
Pb (220.353 nm)	-0.0017 u	ppm	0.0035	> 100.00	-14.1200	-0.0017 u (ppm)
Sb (206.834 nm)	0.0004 u	ppm	0.0012	> 100.00	-3.3220	0.0004 u (ppm)
Se (196.026 nm)	-0.0021 u	ppm	0.0018	84.10	-2.0370	-0.0021 u (ppm)
Si (251.611 nm)	16.6900	ppm	0.0363	0.22	33300.0000	16.6900 (ppm)
Sn (189.925 nm)	-0.0014 u	ppm	0.0002	16.33	-2.1240	-0.0014 u (ppm)
Sr (421.552 nm)	0.1702	ppm	0.0001	0.06	56650.0000	0.1702 (ppm)
Ti (336.122 nm)	0.0000 u	ppm	0.0001	> 100.00	-159.2000	0.0000 u (ppm)
Tl (190.794 nm)	0.0010 u	ppm	0.0072	> 100.00	4.7680	0.0010 u (ppm)
V (292.401 nm)	0.0293	ppm	0.0001	0.25	896.8000	0.0293 (ppm)
W (207.912 nm)	-0.0050 u	ppm	0.0003	6.08	-11.9100	-0.0050 u (ppm)
Zn (202.548 nm)	0.0056	ppm	0.0000	0.07	77.6700	0.0056 (ppm)
Zr (343.823 nm)	0.0002	ppm	0.0001	33.52	121.3000	0.0002 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
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Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8854	306500.0000	0.0030	0.34
Y_R 371.029	0.9023	43840.0000	0.0050	0.55

Sample Name: xRINSE 5993206

Date: 12/10/2019 4:31:00 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0006	> 100.00	-76.8900	-0.0002 u (ppm)
Al (396.152 nm)	-0.0001 u	ppm	0.0005	> 100.00	-326.6000	-0.0001 u (ppm)
As (188.980 nm)	-0.0008 u	ppm	0.0013	> 100.00	1.1470	-0.0008 u (ppm)
B (249.678 nm)	0.0009	ppm	0.0005	55.80	-5.1070	0.0009 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0001	> 100.00	36.7400	-0.0001 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	3.03	31.7800	0.0001 (ppm)
Ca (422.673 nm)	0.0031	ppm	0.0010	30.55	130.7000	0.0031 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0002	> 100.00	-4.5080	-0.0001 u (ppm)
Co (228.615 nm)	-0.0004 u	ppm	0.0001	21.63	-17.6800	-0.0004 u (ppm)
Cr (205.560 nm)	0.0002	ppm	0.0001	62.71	2.4620	0.0002 (ppm)
Cu (324.754 nm)	-0.0010 u	ppm	0.0001	15.02	8.4420	-0.0010 u (ppm)
Fe (238.204 nm)	0.0078	ppm	0.0023	29.50	-30.8000	0.0078 (ppm)
K (766.491 nm)	0.0212 u	ppm	0.1116	> 100.00	-57.5600	0.0212 u (ppm)
Li (670.783 nm)	0.0036	ppm	0.0002	4.98	252.9000	0.0036 (ppm)
Mg (279.078 nm)	0.0078	ppm	0.0020	25.00	29.0900	0.0078 (ppm)
Mn (259.372 nm)	0.0000 u	ppm	0.0001	> 100.00	47.0700	0.0000 u (ppm)
Mo (204.598 nm)	0.0033	ppm	0.0009	28.33	6.9910	0.0033 (ppm)
Na (589.592 nm)	0.0737	ppm	0.0241	32.73	1316.0000	0.0737 (ppm)
Ni (231.604 nm)	-0.0002 u	ppm	0.0019	> 100.00	-16.2600	-0.0002 u (ppm)
P (213.618 nm)	-0.0020 u	ppm	0.0002	9.79	-1.1470	-0.0020 u (ppm)
Pb (220.353 nm)	-0.0014 u	ppm	0.0008	58.85	-13.7500	-0.0014 u (ppm)
Sb (206.834 nm)	0.0050	ppm	0.0002	3.06	0.5801	0.0050 (ppm)
Se (196.026 nm)	0.0023 u	ppm	0.0043	> 100.00	0.5749	0.0023 u (ppm)
Si (251.611 nm)	0.0094	ppm	0.0011	12.01	29.4900	0.0094 (ppm)
Sn (189.925 nm)	0.0031	ppm	0.0010	31.63	0.0847	0.0031 (ppm)
Sr (421.552 nm)	-0.0002 u	ppm	0.0001	37.53	-81.2200	-0.0002 u (ppm)
Ti (336.122 nm)	0.0002	ppm	0.0003	> 100.00	-114.4000	0.0002 (ppm)
Tl (190.794 nm)	0.0025 u	ppm	0.0042	> 100.00	6.7390	0.0025 u (ppm)
V (292.401 nm)	0.0003	ppm	0.0002	53.92	94.7500	0.0003 (ppm)
W (207.912 nm)	-0.0001 u	ppm	0.0020	> 100.00	-4.4220	-0.0001 u (ppm)
Zn (202.548 nm)	0.0008	ppm	0.0000	5.33	22.3600	0.0008 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	> 100.00	93.9300	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9292	321600.0000	0.0019	0.21
Y_R 371.029	0.9220	44790.0000	0.0074	0.81

Sample Name: MB 440-584733/1-A

Date: 12/10/2019 4:34:26 PM Rack:Tube: 3:6

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0001	23.95	-88.8000	-0.0005 u (ppm)
Al (396.152 nm)	0.0031	ppm	0.0001	2.57	-247.8000	0.0031 (ppm)
As (188.980 nm)	0.0067	ppm	0.0076	> 100.00	5.1280	0.0067 (ppm)
B (249.678 nm)	0.0014	ppm	0.0005	33.00	0.3306	0.0014 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	18.11	33.6000	-0.0001 u (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	71.15	29.2600	0.0000 (ppm)
Ca (422.673 nm)	0.0130	ppm	0.0054	41.57	167.8000	0.0130 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.7280	0.0000 u (ppm)
Co (228.615 nm)	0.0003 u	ppm	0.0010	> 100.00	-9.6570	0.0003 u (ppm)
Cr (205.560 nm)	0.0000 u	ppm	0.0013	> 100.00	1.9600	0.0000 u (ppm)
Cu (324.754 nm)	-0.0006 u	ppm	0.0002	31.88	20.6900	-0.0006 u (ppm)
Fe (238.204 nm)	0.0052	ppm	0.0008	15.44	-37.3600	0.0052 (ppm)
K (766.491 nm)	0.0590	ppm	0.0510	86.47	-20.8000	0.0590 (ppm)
Li (670.783 nm)	0.0046	ppm	0.0017	35.98	311.0000	0.0046 (ppm)
Mg (279.078 nm)	0.0099	ppm	0.0005	5.25	33.8600	0.0099 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0000	15.32	68.2000	0.0003 (ppm)
Mo (204.598 nm)	0.0015 u	ppm	0.0022	> 100.00	0.8925	0.0015 u (ppm)
Na (589.592 nm)	-0.0011 u	ppm	0.0057	> 100.00	907.0000	-0.0011 u (ppm)
Ni (231.604 nm)	0.0008	ppm	0.0003	41.10	-12.4600	0.0008 (ppm)
P (213.618 nm)	0.0018 u	ppm	0.0055	> 100.00	1.5920	0.0018 u (ppm)
Pb (220.353 nm)	-0.0006 u	ppm	0.0019	> 100.00	-12.4600	-0.0006 u (ppm)
Sb (206.834 nm)	-0.0005 u	ppm	0.0021	> 100.00	-3.7240	-0.0005 u (ppm)
Se (196.026 nm)	-0.0019 u	ppm	0.0042	> 100.00	-1.7690	-0.0019 u (ppm)
Si (251.611 nm)	0.0049	ppm	0.0033	67.29	20.1900	0.0049 (ppm)
Sn (189.925 nm)	-0.0009 u	ppm	0.0024	> 100.00	-1.8880	-0.0009 u (ppm)
Sr (421.552 nm)	-0.0001 u	ppm	0.0001	64.78	-51.0700	-0.0001 u (ppm)
Ti (336.122 nm)	-0.0002 u	ppm	0.0000	28.13	-150.5000	-0.0002 u (ppm)
Tl (190.794 nm)	0.0026	ppm	0.0004	14.15	6.8670	0.0026 (ppm)
V (292.401 nm)	0.0003 u	ppm	0.0009	> 100.00	95.1900	0.0003 u (ppm)
W (207.912 nm)	-0.0010 u	ppm	0.0031	> 100.00	-5.7780	-0.0010 u (ppm)
Zn (202.548 nm)	0.0021	ppm	0.0000	1.57	39.1400	0.0021 (ppm)
Zr (343.823 nm)	0.0002	ppm	0.0001	33.70	118.9000	0.0002 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9320	322600.0000	0.0152	1.63
Y_R 371.029	0.9287	45120.0000	0.0092	0.99

Sample Name: LCS 440-584733/2-A

Date: 12/10/2019 4:36:16 PM Rack:Tube: 3:7

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1974	ppm	0.0014	0.71	7179.0000	0.1974 (ppm)
Al (396.152 nm)	0.4719	ppm	0.0036	0.77	11760.0000	0.4719 (ppm)
As (188.980 nm)	0.4793	ppm	0.0104	2.16	253.5000	0.4793 (ppm)
B (249.678 nm)	0.4747	ppm	0.0037	0.78	4581.0000	0.4747 (ppm)
Ba (233.527 nm)	0.4868	ppm	0.0071	1.45	36800.0000	0.4868 (ppm)
Be (234.861 nm)	0.4809	ppm	0.0033	0.69	71450.0000	0.4809 (ppm)
Ca (422.673 nm)	2.4160	ppm	0.0145	0.60	9196.0000	2.4160 (ppm)
Cd (214.439 nm)	0.4922	ppm	0.0023	0.47	9196.0000	0.4922 (ppm)
Co (228.615 nm)	0.4932	ppm	0.0031	0.63	5547.0000	0.4932 (ppm)
Cr (205.560 nm)	0.4929	ppm	0.0010	0.21	1904.0000	0.4929 (ppm)
Cu (324.754 nm)	0.4810	ppm	0.0038	0.79	17070.0000	0.4810 (ppm)
Fe (238.204 nm)	0.4537	ppm	0.0080	1.77	1073.0000	0.4537 (ppm)
K (766.491 nm)	4.9100	ppm	0.0960	1.95	4702.0000	4.9100 (ppm)
Li (670.783 nm)	0.4738	ppm	0.0016	0.34	26140.0000	0.4738 (ppm)
Mg (279.078 nm)	2.4480	ppm	0.0360	1.47	5730.0000	2.4480 (ppm)
Mn (259.372 nm)	0.4883	ppm	0.0034	0.69	41250.0000	0.4883 (ppm)
Mo (204.598 nm)	0.4515	ppm	0.0028	0.61	1514.0000	0.4515 (ppm)
Na (589.592 nm)	4.7830	ppm	0.0400	0.84	27070.0000	4.7830 (ppm)
Ni (231.604 nm)	0.4950	ppm	0.0017	0.35	1911.0000	0.4950 (ppm)
P (213.618 nm)	0.4820	ppm	0.0092	1.91	322.0000	0.4820 (ppm)
Pb (220.353 nm)	0.4912	ppm	0.0040	0.82	846.6000	0.4912 (ppm)
Sb (206.834 nm)	0.5237	ppm	0.0034	0.65	407.3000	0.5237 (ppm)
Se (196.026 nm)	0.4819	ppm	0.0031	0.63	271.5000	0.4819 (ppm)
Si (251.611 nm)	2.4110	ppm	0.0183	0.76	4886.0000	2.4110 (ppm)
Sn (189.925 nm)	0.4193	ppm	0.0003	0.07	206.0000	0.4193 (ppm)
Sr (421.552 nm)	0.4807	ppm	0.0034	0.70	159100.0000	0.4807 (ppm)
Ti (336.122 nm)	0.4657	ppm	0.0075	1.60	43980.0000	0.4657 (ppm)
Tl (190.794 nm)	0.4330	ppm	0.0230	5.32	384.5000	0.4330 (ppm)
V (292.401 nm)	0.4856	ppm	0.0038	0.77	12950.0000	0.4856 (ppm)
W (207.912 nm)	0.4380	ppm	0.0042	0.95	628.8000	0.4380 (ppm)
Zn (202.548 nm)	0.4938	ppm	0.0032	0.64	6421.0000	0.4938 (ppm)
Zr (343.823 nm)	0.3772	ppm	0.0141	3.74	28680.0000	0.3772 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9311	322300.0000	0.0040	0.43
Y_R 371.029	0.9310	45230.0000	0.0112	1.21

Sample Name: 440-256570-A-1-B

Date: 12/10/2019 4:38:06 PM Rack:Tube: 3:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0002	30.69	-98.0900	-0.0006 u (ppm)
Al (396.152 nm)	12.6000	ppm	0.0543	0.43	312000.0000	12.6000 (ppm)
As (188.980 nm)	0.0094	ppm	0.0052	55.31	5.7300	0.0094 (ppm)
B (249.678 nm)	0.2732	ppm	0.0008	0.29	2635.0000	0.2732 (ppm)
Ba (233.527 nm)	0.1298	ppm	0.0006	0.46	9850.0000	0.1298 (ppm)
Be (234.861 nm)	0.0008	ppm	0.0004	51.73	337.3000	0.0008 (ppm)
Ca (422.673 nm)	35.4900	ppm	0.1440	0.41	133400.0000	35.4900 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0004	83.88	6.9300	0.0004 (ppm)
Co (228.615 nm)	0.0052	ppm	0.0001	1.25	72.4100	0.0052 (ppm)
Cr (205.560 nm)	0.0182	ppm	0.0002	0.89	72.9600	0.0182 (ppm)
Cu (324.754 nm)	0.0351	ppm	0.0003	0.78	1275.0000	0.0351 (ppm)
Fe (238.204 nm)	14.6200	ppm	0.0536	0.37	36170.0000	14.6200 (ppm)
K (766.491 nm)	8.1180	ppm	0.0397	0.49	7828.0000	8.1180 (ppm)
Li (670.783 nm)	0.0205	ppm	0.0009	4.32	1209.0000	0.0205 (ppm)
Mg (279.078 nm)	6.8790	ppm	0.0083	0.12	16080.0000	6.8790 (ppm)
Mn (259.372 nm)	0.2845	ppm	0.0012	0.43	25500.0000	0.2845 (ppm)
Mo (204.598 nm)	0.0185	ppm	0.0002	1.00	59.6700	0.0185 (ppm)
Na (589.592 nm)	32.3300	ppm	0.1093	0.34	177600.0000	32.3300 (ppm)
Ni (231.604 nm)	0.0101	ppm	0.0003	3.08	22.6500	0.0101 (ppm)
P (213.618 nm)	0.3382	ppm	0.0029	0.86	238.8000	0.3382 (ppm)
Pb (220.353 nm)	0.0063	ppm	0.0007	11.89	6.9190	0.0063 (ppm)
Sb (206.834 nm)	0.0073	ppm	0.0026	35.21	2.2900	0.0073 (ppm)
Se (196.026 nm)	0.0021 u	ppm	0.0078	> 100.00	-1.0150	0.0021 u (ppm)
Si (251.611 nm)	25.2500	ppm	0.0379	0.15	50380.0000	25.2500 (ppm)
Sn (189.925 nm)	0.0109	ppm	0.0073	67.23	3.8890	0.0109 (ppm)
Sr (421.552 nm)	0.0986	ppm	0.0007	0.66	32970.0000	0.0986 (ppm)
Ti (336.122 nm)	1.2480	ppm	0.0118	0.95	118100.0000	1.2480 (ppm)
Tl (190.794 nm)	0.0160	ppm	0.0000	0.18	6.6020	0.0160 (ppm)
V (292.401 nm)	0.0381	ppm	0.0009	2.40	1165.0000	0.0381 (ppm)
W (207.912 nm)	0.0133	ppm	0.0020	15.20	17.2000	0.0133 (ppm)
Zn (202.548 nm)	0.2668	ppm	0.0008	0.29	3445.0000	0.2668 (ppm)
Zr (343.823 nm)	0.0104	ppm	0.0008	7.60	574.9000	0.0104 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9319	322600.0000	0.0021	0.22
Y_R 371.029	0.9441	45870.0000	0.0021	0.22

Sample Name: 440-256570-A-1-C MS

Date: 12/10/2019 4:39:56 PM Rack:Tube: 3:9

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1753	ppm	0.0011	0.63	6370.0000	0.1753 (ppm)
Al (396.152 nm)	14.7700	ppm	0.1008	0.68	366100.0000	14.7700 (ppm)
As (188.980 nm)	0.4984	ppm	0.0107	2.15	262.8000	0.4984 (ppm)
B (249.678 nm)	0.7667	ppm	0.0066	0.86	7416.0000	0.7667 (ppm)
Ba (233.527 nm)	0.6253	ppm	0.0020	0.32	47270.0000	0.6253 (ppm)
Be (234.861 nm)	0.4963	ppm	0.0023	0.46	73930.0000	0.4963 (ppm)
Ca (422.673 nm)	38.5200	ppm	0.0464	0.12	144800.0000	38.5200 (ppm)
Cd (214.439 nm)	0.4895	ppm	0.0039	0.80	9148.0000	0.4895 (ppm)
Co (228.615 nm)	0.5021	ppm	0.0047	0.93	5676.0000	0.5021 (ppm)
Cr (205.560 nm)	0.5124	ppm	0.0021	0.41	1980.0000	0.5124 (ppm)
Cu (324.754 nm)	0.5494	ppm	0.0033	0.61	19480.0000	0.5494 (ppm)
Fe (238.204 nm)	14.7300	ppm	0.0106	0.07	36450.0000	14.7300 (ppm)
K (766.491 nm)	13.2600	ppm	0.0605	0.46	12830.0000	13.2600 (ppm)
Li (670.783 nm)	0.5101	ppm	0.0014	0.26	28170.0000	0.5101 (ppm)
Mg (279.078 nm)	9.2080	ppm	0.0412	0.45	21520.0000	9.2080 (ppm)
Mn (259.372 nm)	0.7717	ppm	0.0035	0.45	66580.0000	0.7717 (ppm)
Mo (204.598 nm)	0.4702	ppm	0.0018	0.39	1579.0000	0.4702 (ppm)
Na (589.592 nm)	37.7200	ppm	0.0445	0.12	207200.0000	37.7200 (ppm)
Ni (231.604 nm)	0.5007	ppm	0.0036	0.72	1933.0000	0.5007 (ppm)
P (213.618 nm)	0.8267	ppm	0.0067	0.81	564.2000	0.8267 (ppm)
Pb (220.353 nm)	0.5015	ppm	0.0031	0.62	871.6000	0.5015 (ppm)
Sb (206.834 nm)	0.4984	ppm	0.0039	0.78	387.2000	0.4984 (ppm)
Se (196.026 nm)	0.4839	ppm	0.0049	1.00	271.1000	0.4839 (ppm)
Si (251.611 nm)	33.2100	ppm	0.0007	0.00	66320.0000	33.2100 (ppm)
Sn (189.925 nm)	0.4629	ppm	0.0136	2.93	227.6000	0.4629 (ppm)
Sr (421.552 nm)	0.5946	ppm	0.0006	0.10	197100.0000	0.5946 (ppm)
Ti (336.122 nm)	1.7560	ppm	0.0163	0.93	166200.0000	1.7560 (ppm)
Tl (190.794 nm)	0.4496	ppm	0.0087	1.94	386.4000	0.4496 (ppm)
V (292.401 nm)	0.5374	ppm	0.0038	0.71	14400.0000	0.5374 (ppm)
W (207.912 nm)	0.4259	ppm	0.0015	0.36	613.9000	0.4259 (ppm)
Zn (202.548 nm)	0.7531	ppm	0.0053	0.70	9759.0000	0.7531 (ppm)
Zr (343.823 nm)	0.4426	ppm	0.0121	2.73	33330.0000	0.4426 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9340	323300.0000	0.0045	0.48
Y_R 371.029	0.9434	45840.0000	0.0029	0.31

Sample Name: 440-256570-A-1-D MSD

Date: 12/10/2019 4:41:46 PM Rack:Tube: 3:10

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1738	ppm	0.0014	0.79	6317.0000	0.1738 (ppm)
Al (396.152 nm)	14.7000	ppm	0.1000	0.68	364500.0000	14.7000 (ppm)
As (188.980 nm)	0.4891	ppm	0.0009	0.19	257.8000	0.4891 (ppm)
B (249.678 nm)	0.7381	ppm	0.0058	0.79	7137.0000	0.7381 (ppm)
Ba (233.527 nm)	0.6134	ppm	0.0042	0.69	46370.0000	0.6134 (ppm)
Be (234.861 nm)	0.4866	ppm	0.0031	0.63	72480.0000	0.4866 (ppm)
Ca (422.673 nm)	36.8100	ppm	0.1507	0.41	138400.0000	36.8100 (ppm)
Cd (214.439 nm)	0.4835	ppm	0.0031	0.64	9035.0000	0.4835 (ppm)
Co (228.615 nm)	0.4962	ppm	0.0075	1.51	5610.0000	0.4962 (ppm)
Cr (205.560 nm)	0.5065	ppm	0.0002	0.05	1957.0000	0.5065 (ppm)
Cu (324.754 nm)	0.5380	ppm	0.0028	0.51	19080.0000	0.5380 (ppm)
Fe (238.204 nm)	14.8500	ppm	0.0121	0.08	36760.0000	14.8500 (ppm)
K (766.491 nm)	13.0300	ppm	0.0341	0.26	12610.0000	13.0300 (ppm)
Li (670.783 nm)	0.4979	ppm	0.0014	0.28	27500.0000	0.4979 (ppm)
Mg (279.078 nm)	9.1320	ppm	0.0653	0.71	21340.0000	9.1320 (ppm)
Mn (259.372 nm)	0.7601	ppm	0.0038	0.49	65610.0000	0.7601 (ppm)
Mo (204.598 nm)	0.4760	ppm	0.0015	0.31	1598.0000	0.4760 (ppm)
Na (589.592 nm)	36.1000	ppm	0.1349	0.37	198300.0000	36.1000 (ppm)
Ni (231.604 nm)	0.4967	ppm	0.0008	0.16	1917.0000	0.4967 (ppm)
P (213.618 nm)	0.8171	ppm	0.0047	0.58	557.6000	0.8171 (ppm)
Pb (220.353 nm)	0.4907	ppm	0.0009	0.18	852.8000	0.4907 (ppm)
Sb (206.834 nm)	0.4868	ppm	0.0015	0.31	378.0000	0.4868 (ppm)
Se (196.026 nm)	0.4692	ppm	0.0004	0.09	262.8000	0.4692 (ppm)
Si (251.611 nm)	27.7100	ppm	0.1359	0.49	55350.0000	27.7100 (ppm)
Sn (189.925 nm)	0.4605	ppm	0.0023	0.51	226.4000	0.4605 (ppm)
Sr (421.552 nm)	0.5808	ppm	0.0017	0.29	192600.0000	0.5808 (ppm)
Ti (336.122 nm)	1.7710	ppm	0.0175	0.99	167700.0000	1.7710 (ppm)
Tl (190.794 nm)	0.4415	ppm	0.0110	2.49	379.1000	0.4415 (ppm)
V (292.401 nm)	0.5268	ppm	0.0035	0.66	14110.0000	0.5268 (ppm)
W (207.912 nm)	0.4264	ppm	0.0024	0.56	614.4000	0.4264 (ppm)
Zn (202.548 nm)	0.7371	ppm	0.0044	0.59	9552.0000	0.7371 (ppm)
Zr (343.823 nm)	0.4567	ppm	0.0127	2.77	34390.0000	0.4567 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9334	323100.0000	0.0036	0.38
Y_R 371.029	0.9437	45850.0000	0.0054	0.57

Sample Name: CCV 5993196

Date: 12/10/2019 4:43:34 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4948	ppm	0.0015	0.31	18110.0000	0.4948 (ppm)
Al (396.152 nm)	0.9864	ppm	0.0031	0.31	25040.0000	0.9864 (ppm)
As (188.980 nm)	0.9982	ppm	0.0031	0.31	526.5000	0.9982 (ppm)
B (249.678 nm)	0.9863	ppm	0.0053	0.54	9521.0000	0.9863 (ppm)
Ba (233.527 nm)	0.9964	ppm	0.0041	0.41	75280.0000	0.9964 (ppm)
Be (234.861 nm)	0.9848	ppm	0.0032	0.32	146300.0000	0.9848 (ppm)
Ca (422.673 nm)	4.9590	ppm	0.0302	0.61	18750.0000	4.9590 (ppm)
Cd (214.439 nm)	0.9976	ppm	0.0032	0.32	18640.0000	0.9976 (ppm)
Co (228.615 nm)	1.0040	ppm	0.0057	0.57	11310.0000	1.0040 (ppm)
Cr (205.560 nm)	0.9953	ppm	0.0024	0.24	3843.0000	0.9953 (ppm)
Cu (324.754 nm)	0.9943	ppm	0.0017	0.17	35240.0000	0.9943 (ppm)
Fe (238.204 nm)	1.0610	ppm	0.0070	0.66	2578.0000	1.0610 (ppm)
K (766.491 nm)	9.9840	ppm	0.0391	0.39	9641.0000	9.9840 (ppm)
Li (670.783 nm)	0.9845	ppm	0.0024	0.24	54250.0000	0.9845 (ppm)
Mg (279.078 nm)	5.0100	ppm	0.0210	0.42	11710.0000	5.0100 (ppm)
Mn (259.372 nm)	0.9925	ppm	0.0030	0.31	83870.0000	0.9925 (ppm)
Mo (204.598 nm)	1.0320	ppm	0.0026	0.25	3466.0000	1.0320 (ppm)
Na (589.592 nm)	9.8180	ppm	0.0588	0.60	54620.0000	9.8180 (ppm)
Ni (231.604 nm)	0.9953	ppm	0.0030	0.30	3859.0000	0.9953 (ppm)
P (213.618 nm)	0.9887	ppm	0.0036	0.37	658.4000	0.9887 (ppm)
Pb (220.353 nm)	0.9912	ppm	0.0058	0.58	1720.0000	0.9912 (ppm)
Sb (206.834 nm)	0.9933	ppm	0.0132	1.33	773.4000	0.9933 (ppm)
Se (196.026 nm)	0.9786	ppm	0.0051	0.52	552.8000	0.9786 (ppm)
Si (251.611 nm)	5.0490	ppm	0.0480	0.95	10240.0000	5.0490 (ppm)
Sn (189.925 nm)	1.0170	ppm	0.0007	0.07	501.9000	1.0170 (ppm)
Sr (421.552 nm)	0.9845	ppm	0.0031	0.31	325800.0000	0.9845 (ppm)
Ti (336.122 nm)	1.0240	ppm	0.0050	0.48	96830.0000	1.0240 (ppm)
Tl (190.794 nm)	1.0100	ppm	0.0123	1.21	893.8000	1.0100 (ppm)
V (292.401 nm)	0.9949	ppm	0.0053	0.53	26420.0000	0.9949 (ppm)
W (207.912 nm)	1.0320	ppm	0.0018	0.18	1485.0000	1.0320 (ppm)
Zn (202.548 nm)	0.9962	ppm	0.0030	0.30	12940.0000	0.9962 (ppm)
Zr (343.823 nm)	1.0260	ppm	0.0003	0.03	77790.0000	1.0260 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9309	322200.0000	0.0043	0.46
Y_R 371.029	0.9281	45090.0000	0.0023	0.25

Sample Name: CCB 5993195

Date: 12/10/2019 4:45:22 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001	ppm	0.0001	71.17	-64.7000	0.0001 (ppm)
Al (396.152 nm)	0.0011	ppm	0.0006	54.18	-283.6000	0.0011 (ppm)
As (188.980 nm)	0.0009 u	ppm	0.0022	> 100.00	2.0900	0.0009 u (ppm)
B (249.678 nm)	0.0029	ppm	0.0008	27.34	12.6900	0.0029 (ppm)
Ba (233.527 nm)	0.0006	ppm	0.0002	29.56	84.8100	0.0006 (ppm)
Be (234.861 nm)	0.0006	ppm	0.0002	34.70	108.6000	0.0006 (ppm)
Ca (422.673 nm)	0.0004 u	ppm	0.0039	> 100.00	120.3000	0.0004 u (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0003	64.74	5.5850	0.0005 (ppm)
Co (228.615 nm)	0.0007	ppm	0.0008	> 100.00	-5.3120	0.0007 (ppm)
Cr (205.560 nm)	-0.0001 u	ppm	0.0010	> 100.00	1.4420	-0.0001 u (ppm)
Cu (324.754 nm)	-0.0005 u	ppm	0.0002	46.04	25.8100	-0.0005 u (ppm)
Fe (238.204 nm)	0.0139	ppm	0.0061	44.06	-15.6000	0.0139 (ppm)
K (766.491 nm)	0.0159 u	ppm	0.1382	> 100.00	-62.6700	0.0159 u (ppm)
Li (670.783 nm)	0.0025	ppm	0.0008	31.40	190.7000	0.0025 (ppm)
Mg (279.078 nm)	0.0069	ppm	0.0009	12.67	26.9300	0.0069 (ppm)
Mn (259.372 nm)	0.0006	ppm	0.0000	0.08	105.6000	0.0006 (ppm)
Mo (204.598 nm)	0.0224 Z	ppm	0.0021	9.31	71.1100 Z	0.0224 Z (ppm)
Na (589.592 nm)	-0.0120 u	ppm	0.0049	40.47	848.4000	-0.0120 u (ppm)
Ni (231.604 nm)	0.0026	ppm	0.0001	3.48	-5.5210	0.0026 (ppm)
P (213.618 nm)	0.0059	ppm	0.0029	49.61	4.1880	0.0059 (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0012	94.37	-13.6600	-0.0013 u (ppm)
Sb (206.834 nm)	0.0156 Z	ppm	0.0048	30.76	8.7020 Z	0.0156 Z (ppm)
Se (196.026 nm)	0.0042	ppm	0.0007	17.68	1.7490	0.0042 (ppm)
Si (251.611 nm)	0.0184	ppm	0.0013	7.02	49.5300	0.0184 (ppm)
Sn (189.925 nm)	0.0123	ppm	0.0037	29.75	4.6210	0.0123 (ppm)
Sr (421.552 nm)	0.0003	ppm	0.0000	13.49	76.0900	0.0003 (ppm)
Ti (336.122 nm)	0.0060 Z	ppm	0.0006	10.82	430.8000 Z	0.0060 Z (ppm)
Tl (190.794 nm)	0.0036	ppm	0.0006	17.60	7.6760	0.0036 (ppm)
V (292.401 nm)	0.0008	ppm	0.0003	36.67	104.2000	0.0008 (ppm)
W (207.912 nm)	0.0147	ppm	0.0039	26.65	16.7500	0.0147 (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0006	> 100.00	19.3900	0.0005 (ppm)
Zr (343.823 nm)	0.0004	ppm	0.0001	19.04	137.4000	0.0004 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9299	321900.0000	0.0017	0.19
Y_R 371.029	0.9237	44880.0000	0.0038	0.41

Sample Name: 720-96385-B-1-B

Date: 12/10/2019 4:47:12 PM Rack:Tube: 3:11

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0009 u	ppm	0.0005	57.71	-103.7000	-0.0009 u (ppm)
Al (396.152 nm)	2.6150	ppm	0.0167	0.64	64520.0000	2.6150 (ppm)
As (188.980 nm)	0.0007 u	ppm	0.0022	> 100.00	1.6210	0.0007 u (ppm)
B (249.678 nm)	0.1480	ppm	0.0014	0.92	1429.0000	0.1480 (ppm)
Ba (233.527 nm)	0.1193	ppm	0.0001	0.09	9049.0000	0.1193 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0000	27.40	60.9200	0.0002 (ppm)
Ca (422.673 nm)	48.3500	ppm	0.0712	0.15	181800.0000	48.3500 (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0001	21.70	6.8370	0.0005 (ppm)
Co (228.615 nm)	0.0021	ppm	0.0000	0.25	12.6800	0.0021 (ppm)
Cr (205.560 nm)	0.0309	ppm	0.0006	1.89	121.5000	0.0309 (ppm)
Cu (324.754 nm)	0.0131	ppm	0.0002	1.31	472.8000	0.0131 (ppm)
Fe (238.204 nm)	0.8967	ppm	0.0012	0.14	2172.0000	0.8967 (ppm)
K (766.491 nm)	4.7950	ppm	0.1296	2.70	4591.0000	4.7950 (ppm)
Li (670.783 nm)	0.0051	ppm	0.0007	13.90	397.3000	0.0051 (ppm)
Mg (279.078 nm)	2.0280	ppm	0.0046	0.23	4749.0000	2.0280 (ppm)
Mn (259.372 nm)	0.0323	ppm	0.0001	0.17	2864.0000	0.0323 (ppm)
Mo (204.598 nm)	0.0188	ppm	0.0004	2.37	59.3300	0.0188 (ppm)
Na (589.592 nm)	27.2700	ppm	0.0229	0.08	149900.0000	27.2700 (ppm)
Ni (231.604 nm)	0.0057	ppm	0.0010	16.95	5.9220	0.0057 (ppm)
P (213.618 nm)	0.2844	ppm	0.0001	0.04	200.5000	0.2844 (ppm)
Pb (220.353 nm)	0.0052	ppm	0.0013	24.48	-1.7260	0.0052 (ppm)
Sb (206.834 nm)	0.0071	ppm	0.0052	72.31	2.4300	0.0071 (ppm)
Se (196.026 nm)	0.0006 u	ppm	0.0024	> 100.00	-0.6074	0.0006 u (ppm)
Si (251.611 nm)	9.6600	ppm	0.0436	0.45	19280.0000	9.6600 (ppm)
Sn (189.925 nm)	-0.0028 u	ppm	0.0062	> 100.00	-2.8150	-0.0028 u (ppm)
Sr (421.552 nm)	0.2927	ppm	0.0002	0.06	97340.0000	0.2927 (ppm)
Ti (336.122 nm)	0.0351	ppm	0.0006	1.85	3149.0000	0.0351 (ppm)
Tl (190.794 nm)	0.0038	ppm	0.0019	49.54	6.5740	0.0038 (ppm)
V (292.401 nm)	0.0443	ppm	0.0006	1.26	1314.0000	0.0443 (ppm)
W (207.912 nm)	0.0026	ppm	0.0011	40.44	-0.8160	0.0026 (ppm)
Zn (202.548 nm)	0.0336	ppm	0.0002	0.52	435.2000	0.0336 (ppm)
Zr (343.823 nm)	0.0022	ppm	0.0001	3.20	256.1000	0.0022 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9332	323000.0000	0.0034	0.36
Y_R 371.029	0.9336	45360.0000	0.0027	0.29

Sample Name: 720-96359-D-2-B

Date: 12/10/2019 4:49:02 PM Rack:Tube: 3:12

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0013 u	ppm	0.0001	4.29	-121.4000	-0.0013 u (ppm)
Al (396.152 nm)	1.0800	ppm	0.0047	0.44	26500.0000	1.0800 (ppm)
As (188.980 nm)	0.0112	ppm	0.0108	96.52	6.9410	0.0112 (ppm)
B (249.678 nm)	0.1400	ppm	0.0002	0.11	1352.0000	0.1400 (ppm)
Ba (233.527 nm)	0.1395	ppm	0.0006	0.46	10580.0000	0.1395 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	37.1700	0.0000 u (ppm)
Ca (422.673 nm)	91.2600	ppm	0.1317	0.14	343000.0000	91.2600 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	36.55	-0.0298	0.0002 (ppm)
Co (228.615 nm)	-0.0006 u	ppm	0.0001	14.08	-17.7700	-0.0006 u (ppm)
Cr (205.560 nm)	0.0486	ppm	0.0002	0.51	190.5000	0.0486 (ppm)
Cu (324.754 nm)	0.0070	ppm	0.0004	6.11	231.4000	0.0070 (ppm)
Fe (238.204 nm)	0.8674	ppm	0.0011	0.12	2100.0000	0.8674 (ppm)
K (766.491 nm)	9.7980	ppm	0.1100	1.12	9461.0000	9.7980 (ppm)
Li (670.783 nm)	0.0223	ppm	0.0023	10.47	1402.0000	0.0223 (ppm)
Mg (279.078 nm)	5.2110	ppm	0.0230	0.44	12190.0000	5.2110 (ppm)
Mn (259.372 nm)	0.0202	ppm	0.0001	0.62	1873.0000	0.0202 (ppm)
Mo (204.598 nm)	0.0370	ppm	0.0012	3.29	120.5000	0.0370 (ppm)
Na (589.592 nm)	79.0900	ppm	0.3000	0.38	433000.0000	79.0900 (ppm)
Ni (231.604 nm)	0.0062	ppm	0.0002	3.32	7.3880	0.0062 (ppm)
P (213.618 nm)	0.1147	ppm	0.0006	0.53	79.9700	0.1147 (ppm)
Pb (220.353 nm)	0.0044	ppm	0.0014	31.07	-2.6710	0.0044 (ppm)
Sb (206.834 nm)	0.0080	ppm	0.0030	37.68	3.0640	0.0080 (ppm)
Se (196.026 nm)	0.0119	ppm	0.0024	20.26	5.4920	0.0119 (ppm)
Si (251.611 nm)	16.2500	ppm	0.0779	0.48	32420.0000	16.2500 (ppm)
Sn (189.925 nm)	0.0001 u	ppm	0.0054	> 100.00	-1.3740	0.0001 u (ppm)
Sr (421.552 nm)	0.6600	ppm	0.0013	0.19	219300.0000	0.6600 (ppm)
Ti (336.122 nm)	0.0284	ppm	0.0003	1.11	2482.0000	0.0284 (ppm)
Tl (190.794 nm)	0.0045	ppm	0.0029	64.34	6.5730	0.0045 (ppm)
V (292.401 nm)	0.0725	ppm	0.0007	0.98	2104.0000	0.0725 (ppm)
W (207.912 nm)	0.0011	ppm	0.0003	29.76	-3.8160	0.0011 (ppm)
Zn (202.548 nm)	0.0174	ppm	0.0001	0.78	215.5000	0.0174 (ppm)
Zr (343.823 nm)	0.0017	ppm	0.0003	18.09	229.6000	0.0017 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9153	316800.0000	0.0055	0.60
Y_R 371.029	0.9201	44700.0000	0.0020	0.22

Sample Name: 720-96382-B-1-B

Date: 12/10/2019 4:50:52 PM Rack:Tube: 3:13

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0010 u	ppm	0.0004	38.25	-108.3000	-0.0010 u (ppm)
Al (396.152 nm)	5.1250	ppm	0.0171	0.33	126700.0000	5.1250 (ppm)
As (188.980 nm)	0.0047	ppm	0.0054	> 100.00	3.4850	0.0047 (ppm)
B (249.678 nm)	0.0571	ppm	0.0007	1.25	536.7000	0.0571 (ppm)
Ba (233.527 nm)	0.1061	ppm	0.0004	0.36	8058.0000	0.1061 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0000	24.19	135.7000	0.0002 (ppm)
Ca (422.673 nm)	34.4000	ppm	0.0740	0.22	129300.0000	34.4000 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0002	46.19	4.5390	0.0004 (ppm)
Co (228.615 nm)	0.0069	ppm	0.0005	7.91	68.8700	0.0069 (ppm)
Cr (205.560 nm)	0.0307	ppm	0.0010	3.10	120.9000	0.0307 (ppm)
Cu (324.754 nm)	0.0314	ppm	0.0001	0.42	1135.0000	0.0314 (ppm)
Fe (238.204 nm)	6.8660	ppm	0.0510	0.74	16970.0000	6.8660 (ppm)
K (766.491 nm)	3.2200	ppm	0.0106	0.33	3061.0000	3.2200 (ppm)
Li (670.783 nm)	0.0031	ppm	0.0009	28.77	265.3000	0.0031 (ppm)
Mg (279.078 nm)	10.7400	ppm	0.0460	0.43	25100.0000	10.7400 (ppm)
Mn (259.372 nm)	0.1684	ppm	0.0006	0.35	14940.0000	0.1684 (ppm)
Mo (204.598 nm)	0.0063	ppm	0.0006	9.49	17.6100	0.0063 (ppm)
Na (589.592 nm)	15.2700	ppm	0.0278	0.18	84420.0000	15.2700 (ppm)
Ni (231.604 nm)	0.0657	ppm	0.0000	0.01	239.7000	0.0657 (ppm)
P (213.618 nm)	0.2961	ppm	0.0003	0.11	208.9000	0.2961 (ppm)
Pb (220.353 nm)	0.0065	ppm	0.0025	37.81	4.1010	0.0065 (ppm)
Sb (206.834 nm)	0.0061	ppm	0.0025	41.24	1.6390	0.0061 (ppm)
Se (196.026 nm)	0.0066 u	ppm	0.0109	> 100.00	2.2560	0.0066 u (ppm)
Si (251.611 nm)	13.8500	ppm	0.0473	0.34	27630.0000	13.8500 (ppm)
Sn (189.925 nm)	-0.0042 u	ppm	0.0085	> 100.00	-3.4870	-0.0042 u (ppm)
Sr (421.552 nm)	0.1122	ppm	0.0003	0.31	37440.0000	0.1122 (ppm)
Ti (336.122 nm)	0.1350	ppm	0.0015	1.11	12630.0000	0.1350 (ppm)
Tl (190.794 nm)	0.0044	ppm	0.0014	31.26	7.1370	0.0044 (ppm)
V (292.401 nm)	0.0234	ppm	0.0001	0.45	748.2000	0.0234 (ppm)
W (207.912 nm)	-0.0007 u	ppm	0.0000	2.95	-4.4870	-0.0007 u (ppm)
Zn (202.548 nm)	0.1221	ppm	0.0001	0.07	1582.0000	0.1221 (ppm)
Zr (343.823 nm)	0.0051	ppm	0.0001	2.45	343.4000	0.0051 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9322	322600.0000	0.0030	0.32
Y_R 371.029	0.9342	45390.0000	0.0031	0.33

Sample Name: 720-96382-B-2-B

Date: 12/10/2019 4:52:42 PM Rack:Tube: 3:14

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0011 u	ppm	0.0002	21.47	-111.4000	-0.0011 u (ppm)
Al (396.152 nm)	5.1450	ppm	0.0181	0.35	127200.0000	5.1450 (ppm)
As (188.980 nm)	0.0074	ppm	0.0054	73.20	5.0180	0.0074 (ppm)
B (249.678 nm)	0.0611	ppm	0.0006	0.92	576.0000	0.0611 (ppm)
Ba (233.527 nm)	0.0889	ppm	0.0005	0.53	6760.0000	0.0889 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	14.10	123.1000	0.0001 (ppm)
Ca (422.673 nm)	31.0300	ppm	0.0084	0.03	116700.0000	31.0300 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0001	23.39	4.8640	0.0004 (ppm)
Co (228.615 nm)	0.0038	ppm	0.0007	17.18	34.4000	0.0038 (ppm)
Cr (205.560 nm)	0.0186	ppm	0.0005	2.55	74.0500	0.0186 (ppm)
Cu (324.754 nm)	0.0702	ppm	0.0001	0.15	2508.0000	0.0702 (ppm)
Fe (238.204 nm)	6.2710	ppm	0.0098	0.16	15490.0000	6.2710 (ppm)
K (766.491 nm)	3.2650	ppm	0.0127	0.39	3103.0000	3.2650 (ppm)
Li (670.783 nm)	0.0091	ppm	0.0011	11.87	581.7000	0.0091 (ppm)
Mg (279.078 nm)	6.1910	ppm	0.0187	0.30	14480.0000	6.1910 (ppm)
Mn (259.372 nm)	0.1384	ppm	0.0004	0.26	12350.0000	0.1384 (ppm)
Mo (204.598 nm)	0.0102	ppm	0.0003	2.91	30.8300	0.0102 (ppm)
Na (589.592 nm)	10.7200	ppm	0.0019	0.02	59520.0000	10.7200 (ppm)
Ni (231.604 nm)	0.0288	ppm	0.0007	2.27	96.0600	0.0288 (ppm)
P (213.618 nm)	0.4091	ppm	0.0041	1.01	287.8000	0.4091 (ppm)
Pb (220.353 nm)	0.0045	ppm	0.0015	32.20	0.1923	0.0045 (ppm)
Sb (206.834 nm)	0.0064	ppm	0.0052	82.40	1.6790	0.0064 (ppm)
Se (196.026 nm)	-0.0010 u	ppm	0.0016	> 100.00	-1.9680	-0.0010 u (ppm)
Si (251.611 nm)	12.8100	ppm	0.0575	0.45	25550.0000	12.8100 (ppm)
Sn (189.925 nm)	-0.0002 u	ppm	0.0067	> 100.00	-1.5530	-0.0002 u (ppm)
Sr (421.552 nm)	0.0911	ppm	0.0002	0.20	30430.0000	0.0911 (ppm)
Ti (336.122 nm)	0.1428	ppm	0.0015	1.04	13370.0000	0.1428 (ppm)
Tl (190.794 nm)	0.0048	ppm	0.0009	18.82	7.3220	0.0048 (ppm)
V (292.401 nm)	0.0238	ppm	0.0001	0.33	755.7000	0.0238 (ppm)
W (207.912 nm)	-0.0005 u	ppm	0.0008	> 100.00	-3.6560	-0.0005 u (ppm)
Zn (202.548 nm)	0.1630	ppm	0.0006	0.39	2113.0000	0.1630 (ppm)
Zr (343.823 nm)	0.0053	ppm	0.0004	8.13	370.4000	0.0053 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9347	323500.0000	0.0042	0.45
Y_R 371.029	0.9400	45670.0000	0.0041	0.44

Sample Name: 720-96359-D-1-B

Date: 12/10/2019 4:54:32 PM Rack:Tube: 3:15

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0007 u	ppm	0.0001	19.90	-95.1000	-0.0007 u (ppm)
Al (396.152 nm)	1.8820	ppm	0.0101	0.54	46310.0000	1.8820 (ppm)
As (188.980 nm)	0.0073	ppm	0.0018	24.91	5.1880	0.0073 (ppm)
B (249.678 nm)	0.0207	ppm	0.0001	0.44	183.7000	0.0207 (ppm)
Ba (233.527 nm)	0.0319	ppm	0.0001	0.29	2454.0000	0.0319 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	0.53	66.2900	0.0001 (ppm)
Ca (422.673 nm)	4.3630	ppm	0.0333	0.76	16510.0000	4.3630 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	1.98	1.3500	0.0002 (ppm)
Co (228.615 nm)	0.0014	ppm	0.0006	43.75	4.0410	0.0014 (ppm)
Cr (205.560 nm)	0.0045	ppm	0.0007	16.31	19.5600	0.0045 (ppm)
Cu (324.754 nm)	0.0080	ppm	0.0001	1.60	326.6000	0.0080 (ppm)
Fe (238.204 nm)	2.4680	ppm	0.0174	0.70	6067.0000	2.4680 (ppm)
K (766.491 nm)	0.9185	ppm	0.0728	7.92	812.6000	0.9185 (ppm)
Li (670.783 nm)	0.0033	ppm	0.0011	33.09	113.2000	0.0033 (ppm)
Mg (279.078 nm)	1.9040	ppm	0.0023	0.12	4457.0000	1.9040 (ppm)
Mn (259.372 nm)	0.0564	ppm	0.0002	0.43	5050.0000	0.0564 (ppm)
Mo (204.598 nm)	0.0028	ppm	0.0014	50.88	6.1680	0.0028 (ppm)
Na (589.592 nm)	6.2150	ppm	0.0170	0.27	34890.0000	6.2150 (ppm)
Ni (231.604 nm)	0.0076	ppm	0.0003	4.01	14.1300	0.0076 (ppm)
P (213.618 nm)	0.1513	ppm	0.0034	2.22	107.0000	0.1513 (ppm)
Pb (220.353 nm)	0.0067	ppm	0.0002	3.08	1.5480	0.0067 (ppm)
Sb (206.834 nm)	0.0036	ppm	0.0027	76.74	-0.2915	0.0036 (ppm)
Se (196.026 nm)	0.0020	ppm	0.0014	68.47	0.1660	0.0020 (ppm)
Si (251.611 nm)	4.3480	ppm	0.0131	0.30	8690.0000	4.3480 (ppm)
Sn (189.925 nm)	0.0018 u	ppm	0.0084	> 100.00	-0.4984	0.0018 u (ppm)
Sr (421.552 nm)	0.0193	ppm	0.0001	0.32	6397.0000	0.0193 (ppm)
Ti (336.122 nm)	0.0776	ppm	0.0007	0.94	7221.0000	0.0776 (ppm)
Tl (190.794 nm)	0.0034	ppm	0.0041	> 100.00	6.7790	0.0034 (ppm)
V (292.401 nm)	0.0059	ppm	0.0001	1.15	252.9000	0.0059 (ppm)
W (207.912 nm)	-0.0007 u	ppm	0.0007	95.26	30.9500	-0.0007 u (ppm)
Zn (202.548 nm)	3.0940	ppm	0.0197	0.64	39910.0000	3.0940 (ppm)
Zr (343.823 nm)	0.0014	ppm	0.0002	13.36	159.8000	0.0014 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9330	322900.0000	0.0061	0.65
Y_R 371.029	0.9245	44920.0000	0.0011	0.12

Sample Name: 440-256263-B-1-B

Date: 12/10/2019 4:56:22 PM Rack:Tube: 3:16

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0004 u	ppm	0.0005	> 100.00	-84.1100	-0.0004 u (ppm)
Al (396.152 nm)	0.0946	ppm	0.0011	1.17	2026.0000	0.0946 (ppm)
As (188.980 nm)	0.0046	ppm	0.0049	> 100.00	3.9800	0.0046 (ppm)
B (249.678 nm)	0.0580	ppm	0.0006	1.12	551.8000	0.0580 (ppm)
Ba (233.527 nm)	0.0324	ppm	0.0003	0.89	2484.0000	0.0324 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	9.36	18.7800	0.0000 u (ppm)
Ca (422.673 nm)	12.3200	ppm	0.0108	0.09	46380.0000	12.3200 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0001	76.14	-6.0800	-0.0002 u (ppm)
Co (228.615 nm)	0.0011	ppm	0.0008	73.19	-0.0318	0.0011 (ppm)
Cr (205.560 nm)	0.0005	ppm	0.0005	90.86	3.9260	0.0005 (ppm)
Cu (324.754 nm)	0.0195	ppm	0.0002	0.78	725.7000	0.0195 (ppm)
Fe (238.204 nm)	0.1985	ppm	0.0021	1.06	442.1000	0.1985 (ppm)
K (766.491 nm)	9.7390	ppm	0.0044	0.05	9395.0000	9.7390 (ppm)
Li (670.783 nm)	0.0007	ppm	0.0006	83.58	99.9000	0.0007 (ppm)
Mg (279.078 nm)	2.0080	ppm	0.0115	0.57	4702.0000	2.0080 (ppm)
Mn (259.372 nm)	0.0341	ppm	0.0002	0.45	2936.0000	0.0341 (ppm)
Mo (204.598 nm)	0.0013	ppm	0.0003	25.47	0.3092	0.0013 (ppm)
Na (589.592 nm)	4.7120	ppm	0.0266	0.57	26660.0000	4.7120 (ppm)
Ni (231.604 nm)	0.0134	ppm	0.0009	6.49	36.4000	0.0134 (ppm)
P (213.618 nm)	0.1170	ppm	0.0003	0.23	82.4500	0.1170 (ppm)
Pb (220.353 nm)	0.0032	ppm	0.0033	> 100.00	-5.6050	0.0032 (ppm)
Sb (206.834 nm)	0.0048	ppm	0.0020	42.43	0.5283	0.0048 (ppm)
Se (196.026 nm)	0.0067	ppm	0.0000	0.55	2.9890	0.0067 (ppm)
Si (251.611 nm)	0.4948	ppm	0.0031	0.63	998.4000	0.4948 (ppm)
Sn (189.925 nm)	-0.0004 u	ppm	0.0028	> 100.00	-1.6210	-0.0004 u (ppm)
Sr (421.552 nm)	0.0225	ppm	0.0001	0.66	7551.0000	0.0225 (ppm)
Ti (336.122 nm)	0.0024	ppm	0.0005	19.42	81.3000	0.0024 (ppm)
Tl (190.794 nm)	0.0012	ppm	0.0010	84.83	5.5740	0.0012 (ppm)
V (292.401 nm)	0.0015	ppm	0.0003	20.75	139.3000	0.0015 (ppm)
W (207.912 nm)	0.0003 u	ppm	0.0005	> 100.00	-1.7650	0.0003 u (ppm)
Zn (202.548 nm)	0.2005	ppm	0.0004	0.22	2597.0000	0.2005 (ppm)
Zr (343.823 nm)	0.0075	ppm	0.0015	20.27	666.6000	0.0075 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9349	323600.0000	0.0054	0.58
Y_R 371.029	0.9327	45310.0000	0.0042	0.45

Sample Name: 440-256330-E-11-D

Date: 12/10/2019 4:58:12 PM Rack:Tube: 3:17

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0004	> 100.00	-78.8600	-0.0003 u (ppm)
Al (396.152 nm)	0.0029	ppm	0.0022	78.07	-254.7000	0.0029 (ppm)
As (188.980 nm)	0.0020	ppm	0.0006	29.37	2.6360	0.0020 (ppm)
B (249.678 nm)	0.0008	ppm	0.0000	5.64	-6.2860	0.0008 (ppm)
Ba (233.527 nm)	0.0001	ppm	0.0001	> 100.00	50.3200	0.0001 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	20.3000	0.0000 u (ppm)
Ca (422.673 nm)	0.0111	ppm	0.0015	13.50	160.8000	0.0111 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0000	4.78	-5.1910	-0.0001 u (ppm)
Co (228.615 nm)	0.0003	ppm	0.0001	52.75	-9.7190	0.0003 (ppm)
Cr (205.560 nm)	0.0005	ppm	0.0007	> 100.00	3.8870	0.0005 (ppm)
Cu (324.754 nm)	-0.0003 u	ppm	0.0002	65.80	31.0400	-0.0003 u (ppm)
Fe (238.204 nm)	0.0116	ppm	0.0000	0.10	-21.2800	0.0116 (ppm)
K (766.491 nm)	-0.0321 u	ppm	0.0914	> 100.00	-109.4000	-0.0321 u (ppm)
Li (670.783 nm)	0.0028	ppm	0.0010	35.97	207.1000	0.0028 (ppm)
Mg (279.078 nm)	0.0079	ppm	0.0025	31.52	29.2700	0.0079 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0001	18.48	72.3900	0.0003 (ppm)
Mo (204.598 nm)	0.0008	ppm	0.0003	34.79	-1.4670	0.0008 (ppm)
Na (589.592 nm)	-0.0189 u	ppm	0.0128	67.72	809.8000	-0.0189 u (ppm)
Ni (231.604 nm)	0.0028	ppm	0.0004	14.28	-4.8690	0.0028 (ppm)
P (213.618 nm)	0.0050	ppm	0.0022	44.88	3.8380	0.0050 (ppm)
Pb (220.353 nm)	-0.0011 u	ppm	0.0005	44.42	-13.2500	-0.0011 u (ppm)
Sb (206.834 nm)	0.0017	ppm	0.0022	> 100.00	-1.9550	0.0017 (ppm)
Se (196.026 nm)	0.0038	ppm	0.0051	> 100.00	1.4390	0.0038 (ppm)
Si (251.611 nm)	0.0072	ppm	0.0012	17.20	25.0700	0.0072 (ppm)
Sn (189.925 nm)	0.0051	ppm	0.0010	18.72	1.0830	0.0051 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	8.89	20.1100	0.0001 (ppm)
Ti (336.122 nm)	0.0003	ppm	0.0001	16.46	-103.3000	0.0003 (ppm)
Tl (190.794 nm)	0.0036	ppm	0.0003	6.97	7.7660	0.0036 (ppm)
V (292.401 nm)	0.0005	ppm	0.0001	26.33	101.2000	0.0005 (ppm)
W (207.912 nm)	0.0002 u	ppm	0.0015	> 100.00	-4.0140	0.0002 u (ppm)
Zn (202.548 nm)	0.0024	ppm	0.0006	23.25	43.5100	0.0024 (ppm)
Zr (343.823 nm)	0.0003	ppm	0.0002	83.59	123.7000	0.0003 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9333	323000.0000	0.0066	0.71
Y_R 371.029	0.9236	44870.0000	0.0043	0.47

Sample Name: 440-256470-A-1-B

Date: 12/10/2019 5:00:02 PM Rack:Tube: 3:18

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	47.42	-78.5300	-0.0003 u (ppm)
Al (396.152 nm)	0.0497	ppm	0.0003	0.54	909.0000	0.0497 (ppm)
As (188.980 nm)	-0.0036 u	ppm	0.0002	6.03	-0.3290	-0.0036 u (ppm)
B (249.678 nm)	0.0200	ppm	0.0007	3.65	180.6000	0.0200 (ppm)
Ba (233.527 nm)	0.0040	ppm	0.0000	0.62	346.0000	0.0040 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	25.0600	0.0000 u (ppm)
Ca (422.673 nm)	6.0680	ppm	0.0103	0.17	22910.0000	6.0680 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-5.0160	-0.0001 u (ppm)
Co (228.615 nm)	0.0000 u	ppm	0.0001	> 100.00	-13.2800	0.0000 u (ppm)
Cr (205.560 nm)	0.0012	ppm	0.0002	16.41	6.3520	0.0012 (ppm)
Cu (324.754 nm)	0.0023	ppm	0.0001	2.27	120.5000	0.0023 (ppm)
Fe (238.204 nm)	0.0587	ppm	0.0043	7.36	95.2800	0.0587 (ppm)
K (766.491 nm)	1.1660	ppm	0.0451	3.87	1056.0000	1.1660 (ppm)
Li (670.783 nm)	0.0008	ppm	0.0003	32.82	104.4000	0.0008 (ppm)
Mg (279.078 nm)	0.3757	ppm	0.0022	0.60	888.8000	0.3757 (ppm)
Mn (259.372 nm)	0.0026	ppm	0.0000	0.25	270.7000	0.0026 (ppm)
Mo (204.598 nm)	0.0015	ppm	0.0011	72.06	1.0920	0.0015 (ppm)
Na (589.592 nm)	5.9900	ppm	0.0199	0.33	33640.0000	5.9900 (ppm)
Ni (231.604 nm)	0.0016 u	ppm	0.0026	> 100.00	-9.5880	0.0016 u (ppm)
P (213.618 nm)	0.0831	ppm	0.0019	2.29	58.9800	0.0831 (ppm)
Pb (220.353 nm)	0.0007 u	ppm	0.0015	> 100.00	-10.0000	0.0007 u (ppm)
Sb (206.834 nm)	0.0001 u	ppm	0.0039	> 100.00	-3.1790	0.0001 u (ppm)
Se (196.026 nm)	0.0014 u	ppm	0.0037	> 100.00	0.0455	0.0014 u (ppm)
Si (251.611 nm)	0.9878	ppm	0.0029	0.29	1981.0000	0.9878 (ppm)
Sn (189.925 nm)	-0.0018 u	ppm	0.0001	4.77	-2.3470	-0.0018 u (ppm)
Sr (421.552 nm)	0.0290	ppm	0.0001	0.22	9644.0000	0.0290 (ppm)
Ti (336.122 nm)	0.0021	ppm	0.0001	6.21	57.5900	0.0021 (ppm)
Tl (190.794 nm)	0.0034	ppm	0.0008	24.05	7.5740	0.0034 (ppm)
V (292.401 nm)	0.0008	ppm	0.0000	1.54	115.6000	0.0008 (ppm)
W (207.912 nm)	0.0009	ppm	0.0013	> 100.00	-3.0250	0.0009 (ppm)
Zn (202.548 nm)	0.0085	ppm	0.0002	2.68	121.7000	0.0085 (ppm)
Zr (343.823 nm)	0.0004	ppm	0.0002	47.84	131.4000	0.0004 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9313	322300.0000	0.0056	0.60
Y_R 371.029	0.9309	45230.0000	0.0030	0.33

Sample Name: 440-256470-A-2-B

Date: 12/10/2019 5:01:52 PM
Rack:Tube: 3:19

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0002	> 100.00	-73.2700	-0.0001 u (ppm)
Al (396.152 nm)	0.3959	ppm	0.0015	0.38	9487.0000	0.3959 (ppm)
As (188.980 nm)	0.0065	ppm	0.0042	64.96	5.0230	0.0065 (ppm)
B (249.678 nm)	0.0246	ppm	0.0009	3.78	225.6000	0.0246 (ppm)
Ba (233.527 nm)	0.0109	ppm	0.0003	2.32	863.6000	0.0109 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	40.83	36.2700	0.0001 (ppm)
Ca (422.673 nm)	3.6810	ppm	0.0177	0.48	13950.0000	3.6810 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0000	3.93	-0.4022	0.0001 (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0002	> 100.00	-13.4500	-0.0001 u (ppm)
Cr (205.560 nm)	0.0017	ppm	0.0012	68.77	8.4030	0.0017 (ppm)
Cu (324.754 nm)	0.0121	ppm	0.0002	1.79	466.3000	0.0121 (ppm)
Fe (238.204 nm)	0.1739	ppm	0.0033	1.88	380.9000	0.1739 (ppm)
K (766.491 nm)	0.8990	ppm	0.1071	11.91	796.4000	0.8990 (ppm)
Li (670.783 nm)	0.0008	ppm	0.0003	36.79	96.9700	0.0008 (ppm)
Mg (279.078 nm)	0.2783	ppm	0.0027	0.98	661.0000	0.2783 (ppm)
Mn (259.372 nm)	0.0132	ppm	0.0001	0.64	1173.0000	0.0132 (ppm)
Mo (204.598 nm)	0.0006	ppm	0.0003	49.62	-1.8940	0.0006 (ppm)
Na (589.592 nm)	3.2820	ppm	0.0374	1.14	18840.0000	3.2820 (ppm)
Ni (231.604 nm)	0.0026	ppm	0.0011	41.38	-5.3680	0.0026 (ppm)
P (213.618 nm)	0.0862	ppm	0.0018	2.06	60.9100	0.0862 (ppm)
Pb (220.353 nm)	0.0006 u	ppm	0.0021	> 100.00	-10.1300	0.0006 u (ppm)
Sb (206.834 nm)	0.0079	ppm	0.0001	0.91	2.9410	0.0079 (ppm)
Se (196.026 nm)	0.0044 u	ppm	0.0074	> 100.00	1.7270	0.0044 u (ppm)
Si (251.611 nm)	0.6670	ppm	0.0030	0.45	1341.0000	0.6670 (ppm)
Sn (189.925 nm)	0.0026 u	ppm	0.0107	> 100.00	-0.1580	0.0026 u (ppm)
Sr (421.552 nm)	0.0147	ppm	0.0002	1.04	4894.0000	0.0147 (ppm)
Ti (336.122 nm)	0.0039	ppm	0.0001	3.43	231.6000	0.0039 (ppm)
Tl (190.794 nm)	0.0041	ppm	0.0009	21.72	8.1890	0.0041 (ppm)
V (292.401 nm)	0.0008	ppm	0.0001	8.78	111.6000	0.0008 (ppm)
W (207.912 nm)	0.0003 u	ppm	0.0010	> 100.00	-2.1580	0.0003 u (ppm)
Zn (202.548 nm)	0.1487	ppm	0.0012	0.80	1930.0000	0.1487 (ppm)
Zr (343.823 nm)	0.0006	ppm	0.0001	15.73	143.9000	0.0006 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9351	323700.0000	0.0058	0.62
Y_R 371.029	0.9278	45080.0000	0.0013	0.14

Sample Name: CCV 5993196

Date: 12/10/2019 5:03:40 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4953	ppm	0.0015	0.31	18120.0000	0.4953 (ppm)
Al (396.152 nm)	0.9798	ppm	0.0020	0.20	24850.0000	0.9798 (ppm)
As (188.980 nm)	0.9972	ppm	0.0018	0.18	525.9000	0.9972 (ppm)
B (249.678 nm)	0.9844	ppm	0.0033	0.33	9505.0000	0.9844 (ppm)
Ba (233.527 nm)	0.9971	ppm	0.0035	0.35	75330.0000	0.9971 (ppm)
Be (234.861 nm)	0.9857	ppm	0.0018	0.19	146400.0000	0.9857 (ppm)
Ca (422.673 nm)	4.9530	ppm	0.0216	0.44	18720.0000	4.9530 (ppm)
Cd (214.439 nm)	0.9987	ppm	0.0031	0.31	18660.0000	0.9987 (ppm)
Co (228.615 nm)	1.0040	ppm	0.0023	0.23	11300.0000	1.0040 (ppm)
Cr (205.560 nm)	1.0000	ppm	0.0018	0.18	3861.0000	1.0000 (ppm)
Cu (324.754 nm)	0.9949	ppm	0.0006	0.06	35260.0000	0.9949 (ppm)
Fe (238.204 nm)	1.0150	ppm	0.0038	0.37	2465.0000	1.0150 (ppm)
K (766.491 nm)	9.9660	ppm	0.0636	0.64	9624.0000	9.9660 (ppm)
Li (670.783 nm)	0.9869	ppm	0.0039	0.39	54380.0000	0.9869 (ppm)
Mg (279.078 nm)	5.0190	ppm	0.0164	0.33	11730.0000	5.0190 (ppm)
Mn (259.372 nm)	0.9936	ppm	0.0025	0.25	83940.0000	0.9936 (ppm)
Mo (204.598 nm)	1.0080	ppm	0.0042	0.42	3386.0000	1.0080 (ppm)
Na (589.592 nm)	9.8390	ppm	0.0197	0.20	54730.0000	9.8390 (ppm)
Ni (231.604 nm)	0.9969	ppm	0.0036	0.36	3866.0000	0.9969 (ppm)
P (213.618 nm)	0.9810	ppm	0.0089	0.90	653.2000	0.9810 (ppm)
Pb (220.353 nm)	0.9919	ppm	0.0029	0.29	1721.0000	0.9919 (ppm)
Sb (206.834 nm)	0.9978	ppm	0.0169	1.70	777.4000	0.9978 (ppm)
Se (196.026 nm)	0.9739	ppm	0.0172	1.77	550.0000	0.9739 (ppm)
Si (251.611 nm)	4.9840	ppm	0.0485	0.97	10100.0000	4.9840 (ppm)
Sn (189.925 nm)	1.0070	ppm	0.0130	1.29	496.9000	1.0070 (ppm)
Sr (421.552 nm)	0.9853	ppm	0.0021	0.22	326100.0000	0.9853 (ppm)
Ti (336.122 nm)	1.0020	ppm	0.0058	0.58	94830.0000	1.0020 (ppm)
Tl (190.794 nm)	1.0070	ppm	0.0085	0.85	891.2000	1.0070 (ppm)
V (292.401 nm)	0.9965	ppm	0.0024	0.24	26470.0000	0.9965 (ppm)
W (207.912 nm)	0.9985	ppm	0.0003	0.03	1438.0000	0.9985 (ppm)
Zn (202.548 nm)	0.9995	ppm	0.0023	0.23	12990.0000	0.9995 (ppm)
Zr (343.823 nm)	0.9658	ppm	0.0059	0.61	73260.0000	0.9658 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9234	319600.0000	0.0032	0.34
Y_R 371.029	0.9205	44720.0000	0.0045	0.49

Sample Name: CCB 5993195

Date: 12/10/2019 5:05:28 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	24.17	-82.5300	-0.0004 u (ppm)
Al (396.152 nm)	-0.0008 u	ppm	0.0003	39.80	-332.8000	-0.0008 u (ppm)
As (188.980 nm)	0.0015	ppm	0.0002	13.22	2.3980	0.0015 (ppm)
B (249.678 nm)	0.0011	ppm	0.0000	4.45	-4.4960	0.0011 (ppm)
Ba (233.527 nm)	0.0004	ppm	0.0000	12.17	67.9800	0.0004 (ppm)
Be (234.861 nm)	0.0005	ppm	0.0001	27.74	93.1900	0.0005 (ppm)
Ca (422.673 nm)	-0.0058 u	ppm	0.0073	> 100.00	97.2700	-0.0058 u (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0002	49.44	6.0450	0.0005 (ppm)
Co (228.615 nm)	0.0006	ppm	0.0007	> 100.00	-6.5680	0.0006 (ppm)
Cr (205.560 nm)	0.0008 u	ppm	0.0011	> 100.00	4.7930	0.0008 u (ppm)
Cu (324.754 nm)	-0.0001 u	ppm	0.0004	> 100.00	39.8200	-0.0001 u (ppm)
Fe (238.204 nm)	0.0028 u	ppm	0.0048	> 100.00	-43.2600	0.0028 u (ppm)
K (766.491 nm)	0.0560	ppm	0.0777	> 100.00	-23.7800	0.0560 (ppm)
Li (670.783 nm)	0.0027	ppm	0.0016	57.09	204.4000	0.0027 (ppm)
Mg (279.078 nm)	0.0085	ppm	0.0015	18.15	30.6200	0.0085 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0001	20.52	93.8300	0.0005 (ppm)
Mo (204.598 nm)	0.0198	ppm	0.0019	9.38	62.6000	0.0198 (ppm)
Na (589.592 nm)	-0.0135 u	ppm	0.0086	63.74	839.9000	-0.0135 u (ppm)
Ni (231.604 nm)	0.0013	ppm	0.0015	> 100.00	-10.3500	0.0013 (ppm)
P (213.618 nm)	-0.0055 u	ppm	0.0037	66.81	-3.9220	-0.0055 u (ppm)
Pb (220.353 nm)	0.0024	ppm	0.0003	14.40	-7.2630	0.0024 (ppm)
Sb (206.834 nm)	0.0098	ppm	0.0041	41.91	4.1280	0.0098 (ppm)
Se (196.026 nm)	0.0068 u	ppm	0.0127	> 100.00	3.1710	0.0068 u (ppm)
Si (251.611 nm)	0.0065	ppm	0.0006	8.49	25.1000	0.0065 (ppm)
Sn (189.925 nm)	0.0056	ppm	0.0034	61.78	1.2980	0.0056 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0001	90.73	4.5280	0.0001 (ppm)
Ti (336.122 nm)	0.0050	ppm	0.0004	7.93	335.5000	0.0050 (ppm)
Tl (190.794 nm)	0.0078	ppm	0.0016	21.24	11.4700	0.0078 (ppm)
V (292.401 nm)	0.0011	ppm	0.0003	30.71	112.8000	0.0011 (ppm)
W (207.912 nm)	0.0112	ppm	0.0000	0.18	11.7500	0.0112 (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0002	52.79	18.8700	0.0005 (ppm)
Zr (343.823 nm)	0.0003	ppm	0.0003	> 100.00	124.5000	0.0003 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9256	320400.0000	0.0017	0.18
Y_R 371.029	0.9115	44280.0000	0.0005	0.06

Sample Name: CCB 5993195

Date: 12/10/2019 5:13:10 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0006	> 100.00	-76.0900	-0.0002 u (ppm)
Al (396.152 nm)	-0.0018 u	ppm	0.0003	17.39	-369.9000	-0.0018 u (ppm)
As (188.980 nm)	-0.0037 u	ppm	0.0019	50.21	-0.3666	-0.0037 u (ppm)
B (249.678 nm)	0.0001 u	ppm	0.0003	> 100.00	-12.5200	0.0001 u (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0001	> 100.00	36.8100	-0.0001 u (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	27.7900	0.0000 u (ppm)
Ca (422.673 nm)	-0.0172 u	ppm	0.0087	50.84	54.4300	-0.0172 u (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	> 100.00	-5.1850	-0.0001 u (ppm)
Co (228.615 nm)	-0.0007 u	ppm	0.0000	2.37	-20.8400	-0.0007 u (ppm)
Cr (205.560 nm)	-0.0006 u	ppm	0.0002	27.96	-0.5682	-0.0006 u (ppm)
Cu (324.754 nm)	-0.0002 u	ppm	0.0004	> 100.00	33.8900	-0.0002 u (ppm)
Fe (238.204 nm)	0.0027	ppm	0.0037	> 100.00	-43.4800	0.0027 (ppm)
K (766.491 nm)	-0.0824 u	ppm	0.0213	25.80	-158.3000	-0.0824 u (ppm)
Li (670.783 nm)	0.0027	ppm	0.0013	48.03	203.6000	0.0027 (ppm)
Mg (279.078 nm)	0.0027	ppm	0.0008	27.42	17.1700	0.0027 (ppm)
Mn (259.372 nm)	0.0000 u	ppm	0.0000	22.36	46.0800	0.0000 u (ppm)
Mo (204.598 nm)	0.0017	ppm	0.0022	> 100.00	1.7370	0.0017 (ppm)
Na (589.592 nm)	-0.0257 u	ppm	0.0016	6.03	772.6000	-0.0257 u (ppm)
Ni (231.604 nm)	0.0004 u	ppm	0.0006	> 100.00	-13.9900	0.0004 u (ppm)
P (213.618 nm)	-0.0023 u	ppm	0.0090	> 100.00	-1.3330	-0.0023 u (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0016	> 100.00	-13.5400	-0.0013 u (ppm)
Sb (206.834 nm)	0.0038	ppm	0.0048	> 100.00	-0.3478	0.0038 (ppm)
Se (196.026 nm)	0.0034 u	ppm	0.0064	> 100.00	1.1960	0.0034 u (ppm)
Si (251.611 nm)	0.0039	ppm	0.0049	> 100.00	18.3300	0.0039 (ppm)
Sn (189.925 nm)	0.0037	ppm	0.0013	35.87	0.3958	0.0037 (ppm)
Sr (421.552 nm)	0.0000 u	ppm	0.0000	> 100.00	-23.7700	0.0000 u (ppm)
Ti (336.122 nm)	0.0003	ppm	0.0003	90.23	-104.9000	0.0003 (ppm)
Tl (190.794 nm)	0.0049	ppm	0.0009	17.55	8.9960	0.0049 (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0001	60.57	80.1500	-0.0002 u (ppm)
W (207.912 nm)	0.0023	ppm	0.0026	> 100.00	-1.1020	0.0023 (ppm)
Zn (202.548 nm)	0.0002	ppm	0.0001	50.30	15.7000	0.0002 (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0000	24.64	100.4000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9284	321400.0000	0.0058	0.62
Y_R 371.029	0.9231	44850.0000	0.0053	0.58

Sample Name: MB 440-584937/1-A

Date: 12/10/2019 5:18:02 PM Rack:Tube: 3:20

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0005	> 100.00	-71.8400	-0.0001 u (ppm)
Al (396.152 nm)	0.0011	ppm	0.0007	65.88	-297.3000	0.0011 (ppm)
As (188.980 nm)	0.0036	ppm	0.0003	6.90	3.5200	0.0036 (ppm)
B (249.678 nm)	0.0012	ppm	0.0004	31.84	-2.6550	0.0012 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0001	> 100.00	35.7600	-0.0001 u (ppm)
Be (234.861 nm)	0.0001 u	ppm	0.0001	> 100.00	29.8500	0.0001 u (ppm)
Ca (422.673 nm)	0.0002 u	ppm	0.0126	> 100.00	119.6000	0.0002 u (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0000	2.11	-4.6380	-0.0001 u (ppm)
Co (228.615 nm)	0.0000 u	ppm	0.0001	> 100.00	-12.7100	0.0000 u (ppm)
Cr (205.560 nm)	0.0005	ppm	0.0001	27.29	3.6750	0.0005 (ppm)
Cu (324.754 nm)	-0.0007 u	ppm	0.0002	25.32	18.4500	-0.0007 u (ppm)
Fe (238.204 nm)	0.0031	ppm	0.0018	56.72	-42.4100	0.0031 (ppm)
K (766.491 nm)	0.0523	ppm	0.0121	23.07	-27.3100	0.0523 (ppm)
Li (670.783 nm)	0.0020	ppm	0.0004	19.23	166.1000	0.0020 (ppm)
Mg (279.078 nm)	0.0027	ppm	0.0014	52.65	17.1800	0.0027 (ppm)
Mn (259.372 nm)	0.0001 u	ppm	0.0001	> 100.00	51.7300	0.0001 u (ppm)
Mo (204.598 nm)	0.0006 u	ppm	0.0018	> 100.00	-1.9500	0.0006 u (ppm)
Na (589.592 nm)	-0.0364 u	ppm	0.0019	5.08	714.3000	-0.0364 u (ppm)
Ni (231.604 nm)	0.0017	ppm	0.0003	18.80	-8.8790	0.0017 (ppm)
P (213.618 nm)	-0.0017 u	ppm	0.0028	> 100.00	-0.9238	-0.0017 u (ppm)
Pb (220.353 nm)	-0.0007 u	ppm	0.0017	> 100.00	-12.6100	-0.0007 u (ppm)
Sb (206.834 nm)	0.0033	ppm	0.0008	22.89	-0.6702	0.0033 (ppm)
Se (196.026 nm)	-0.0001 u	ppm	0.0005	> 100.00	-0.7410	-0.0001 u (ppm)
Si (251.611 nm)	0.0049	ppm	0.0014	28.25	20.3500	0.0049 (ppm)
Sn (189.925 nm)	0.0022 u	ppm	0.0051	> 100.00	-0.3412	0.0022 u (ppm)
Sr (421.552 nm)	-0.0001 u	ppm	0.0001	> 100.00	-44.4300	-0.0001 u (ppm)
Ti (336.122 nm)	-0.0003 u	ppm	0.0002	59.55	-159.7000	-0.0003 u (ppm)
Tl (190.794 nm)	0.0004 u	ppm	0.0006	> 100.00	4.8760	0.0004 u (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0001	> 100.00	83.5800	-0.0001 u (ppm)
W (207.912 nm)	0.0006 u	ppm	0.0028	> 100.00	-3.3960	0.0006 u (ppm)
Zn (202.548 nm)	0.0007	ppm	0.0001	18.88	21.8100	0.0007 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0000	3.45	91.9300	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9393	325100.0000	0.0075	0.79
Y_R 371.029	0.9324	45300.0000	0.0098	1.05

Sample Name: xLCS 440-584937/2-A

Date: 12/10/2019 5:19:52 PM
Rack:Tube: 3:21

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2962	ppm	0.0025	0.86	10800.0000	0.2962 (ppm)
Al (396.152 nm)	0.5795	ppm	0.0026	0.45	14540.0000	0.5795 (ppm)
As (188.980 nm)	0.6016	ppm	0.0096	1.59	317.9000	0.6016 (ppm)
B (249.678 nm)	0.5842	ppm	0.0061	1.05	5638.0000	0.5842 (ppm)
Ba (233.527 nm)	0.5977	ppm	0.0010	0.17	45170.0000	0.5977 (ppm)
Be (234.861 nm)	0.5919	ppm	0.0026	0.44	87940.0000	0.5919 (ppm)
Ca (422.673 nm)	2.9930	ppm	0.0101	0.34	11360.0000	2.9930 (ppm)
Cd (214.439 nm)	0.6026	ppm	0.0029	0.49	11260.0000	0.6026 (ppm)
Co (228.615 nm)	0.6041	ppm	0.0016	0.27	6798.0000	0.6041 (ppm)
Cr (205.560 nm)	0.6026	ppm	0.0023	0.39	2327.0000	0.6026 (ppm)
Cu (324.754 nm)	0.5964	ppm	0.0020	0.34	21160.0000	0.5964 (ppm)
Fe (238.204 nm)	0.5830	ppm	0.0006	0.11	1394.0000	0.5830 (ppm)
K (766.491 nm)	5.8880	ppm	0.0835	1.42	5654.0000	5.8880 (ppm)
Li (670.783 nm)	0.5884	ppm	0.0002	0.04	32450.0000	0.5884 (ppm)
Mg (279.078 nm)	3.0050	ppm	0.0054	0.18	7030.0000	3.0050 (ppm)
Mn (259.372 nm)	0.6000	ppm	0.0026	0.43	50690.0000	0.6000 (ppm)
Mo (204.598 nm)	0.5806	ppm	0.0014	0.25	1948.0000	0.5806 (ppm)
Na (589.592 nm)	5.8940	ppm	0.0098	0.17	33150.0000	5.8940 (ppm)
Ni (231.604 nm)	0.6073	ppm	0.0028	0.46	2349.0000	0.6073 (ppm)
P (213.618 nm)	0.5881	ppm	0.0024	0.42	392.1000	0.5881 (ppm)
Pb (220.353 nm)	0.6005	ppm	0.0060	1.01	1037.0000	0.6005 (ppm)
Sb (206.834 nm)	0.6481	ppm	0.0048	0.74	504.5000	0.6481 (ppm)
Se (196.026 nm)	0.5836	ppm	0.0045	0.77	329.2000	0.5836 (ppm)
Si (251.611 nm)	2.9810	ppm	0.0130	0.43	6042.0000	2.9810 (ppm)
Sn (189.925 nm)	0.5536	ppm	0.0017	0.30	272.5000	0.5536 (ppm)
Sr (421.552 nm)	0.5904	ppm	0.0004	0.06	195400.0000	0.5904 (ppm)
Ti (336.122 nm)	0.5837	ppm	0.0074	1.26	55160.0000	0.5837 (ppm)
Tl (190.794 nm)	0.5637	ppm	0.0203	3.61	499.9000	0.5637 (ppm)
V (292.401 nm)	0.5981	ppm	0.0025	0.42	15930.0000	0.5981 (ppm)
W (207.912 nm)	0.5673	ppm	0.0027	0.47	815.3000	0.5673 (ppm)
Zn (202.548 nm)	0.6041	ppm	0.0020	0.32	7853.0000	0.6041 (ppm)
Zr (343.823 nm)	0.5106	ppm	0.0155	3.03	38780.0000	0.5106 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9345	323500.0000	0.0029	0.31
Y_R 371.029	0.9357	45460.0000	0.0023	0.25

Sample Name: 440-256891-A-1-A

Date: 12/10/2019 5:21:42 PM Rack:Tube: 3:22

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0010 u	ppm	0.0000	3.41	-108.2000	-0.0010 u (ppm)
Al (396.152 nm)	0.4032	ppm	0.0014	0.34	9703.0000	0.4032 (ppm)
As (188.980 nm)	0.0118	ppm	0.0014	12.23	7.7070	0.0118 (ppm)
B (249.678 nm)	0.3977	ppm	0.0005	0.12	3865.0000	0.3977 (ppm)
Ba (233.527 nm)	0.1499	ppm	0.0008	0.55	11360.0000	0.1499 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	22.58	69.3500	0.0003 (ppm)
Ca (422.673 nm)	37.3800	ppm	0.0589	0.16	140600.0000	37.3800 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0003	91.85	2.7290	0.0003 (ppm)
Co (228.615 nm)	0.0002	ppm	0.0002	> 100.00	-10.0200	0.0002 (ppm)
Cr (205.560 nm)	0.0032	ppm	0.0006	19.22	14.5300	0.0032 (ppm)
Cu (324.754 nm)	0.0023	ppm	0.0001	2.43	100.8000	0.0023 (ppm)
Fe (238.204 nm)	0.3744	ppm	0.0001	0.03	878.7000	0.3744 (ppm)
K (766.491 nm)	4.8460	ppm	0.0632	1.31	4642.0000	4.8460 (ppm)
Li (670.783 nm)	0.0230	ppm	0.0018	7.82	1403.0000	0.0230 (ppm)
Mg (279.078 nm)	12.5500	ppm	0.1139	0.91	29330.0000	12.5500 (ppm)
Mn (259.372 nm)	0.1512	ppm	0.0008	0.54	12810.0000	0.1512 (ppm)
Mo (204.598 nm)	0.0143	ppm	0.0001	0.84	44.0000	0.0143 (ppm)
Na (589.592 nm)	151.1000	ppm	0.7029	0.47	826600.0000	151.1000 (ppm)
Ni (231.604 nm)	0.0077	ppm	0.0006	8.01	13.6500	0.0077 (ppm)
P (213.618 nm)	2.2690	ppm	0.0122	0.54	1605.0000	2.2690 (ppm)
Pb (220.353 nm)	0.0010 u	ppm	0.0022	> 100.00	-9.0080	0.0010 u (ppm)
Sb (206.834 nm)	0.0088	ppm	0.0061	69.84	3.5100	0.0088 (ppm)
Se (196.026 nm)	0.1124	ppm	0.0013	1.15	62.2800	0.1124 (ppm)
Si (251.611 nm)	3.8020	ppm	0.0097	0.25	7596.0000	3.8020 (ppm)
Sn (189.925 nm)	0.0079	ppm	0.0008	10.08	2.5010	0.0079 (ppm)
Sr (421.552 nm)	0.7632	ppm	0.0014	0.19	252900.0000	0.7632 (ppm)
Ti (336.122 nm)	0.0059	ppm	0.0005	8.73	398.4000	0.0059 (ppm)
Tl (190.794 nm)	0.0095	ppm	0.0044	46.12	13.0500	0.0095 (ppm)
V (292.401 nm)	0.0020	ppm	0.0002	7.76	177.1000	0.0020 (ppm)
W (207.912 nm)	0.0086	ppm	0.0005	5.37	7.8420	0.0086 (ppm)
Zn (202.548 nm)	0.0328	ppm	0.0003	0.94	431.0000	0.0328 (ppm)
Zr (343.823 nm)	0.0051	ppm	0.0003	6.48	488.0000	0.0051 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9058	313500.0000	0.0042	0.46
Y_R 371.029	0.9184	44620.0000	0.0074	0.81

Sample Name: 440-256891-A-1-B MS

Date: 12/10/2019 5:30:34 PM Rack:Tube: 3:23

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2018	ppm	0.0010	0.48	7345.0000	0.2018 (ppm)
Al (396.152 nm)	0.9750	ppm	0.0032	0.33	24260.0000	0.9750 (ppm)
As (188.980 nm)	0.4492	ppm	0.0012	0.27	237.4000	0.4492 (ppm)
B (249.678 nm)	0.8925	ppm	0.0050	0.56	8655.0000	0.8925 (ppm)
Ba (233.527 nm)	0.6329	ppm	0.0040	0.63	47830.0000	0.6329 (ppm)
Be (234.861 nm)	0.4937	ppm	0.0026	0.53	73360.0000	0.4937 (ppm)
Ca (422.673 nm)	41.6100	ppm	0.0681	0.16	156400.0000	41.6100 (ppm)
Cd (214.439 nm)	0.4761	ppm	0.0022	0.47	8895.0000	0.4761 (ppm)
Co (228.615 nm)	0.4880	ppm	0.0001	0.02	5490.0000	0.4880 (ppm)
Cr (205.560 nm)	0.4838	ppm	0.0015	0.32	1869.0000	0.4838 (ppm)
Cu (324.754 nm)	0.5190	ppm	0.0013	0.24	18390.0000	0.5190 (ppm)
Fe (238.204 nm)	0.8542	ppm	0.0036	0.42	2067.0000	0.8542 (ppm)
K (766.491 nm)	9.8470	ppm	0.0169	0.17	9510.0000	9.8470 (ppm)
Li (670.783 nm)	0.5026	ppm	0.0030	0.59	27810.0000	0.5026 (ppm)
Mg (279.078 nm)	15.4300	ppm	0.0935	0.61	36060.0000	15.4300 (ppm)
Mn (259.372 nm)	0.6403	ppm	0.0021	0.33	54090.0000	0.6403 (ppm)
Mo (204.598 nm)	0.4324	ppm	0.0035	0.82	1450.0000	0.4324 (ppm)
Na (589.592 nm)	162.6000	ppm	0.0880	0.05	889500.0000	162.6000 (ppm)
Ni (231.604 nm)	0.4843	ppm	0.0023	0.47	1869.0000	0.4843 (ppm)
P (213.618 nm)	2.8420	ppm	0.0028	0.10	1991.0000	2.8420 (ppm)
Pb (220.353 nm)	0.4824	ppm	0.0036	0.75	831.9000	0.4824 (ppm)
Sb (206.834 nm)	0.4933	ppm	0.0005	0.10	383.6000	0.4933 (ppm)
Se (196.026 nm)	0.1795	ppm	0.0057	3.17	101.9000	0.1795 (ppm)
Si (251.611 nm)	6.1990	ppm	0.0216	0.35	12450.0000	6.1990 (ppm)
Sn (189.925 nm)	0.4072	ppm	0.0072	1.77	200.1000	0.4072 (ppm)
Sr (421.552 nm)	1.2820	ppm	0.0019	0.15	424800.0000	1.2820 (ppm)
Ti (336.122 nm)	0.4786	ppm	0.0051	1.07	45180.0000	0.4786 (ppm)
Tl (190.794 nm)	0.4502	ppm	0.0120	2.67	399.8000	0.4502 (ppm)
V (292.401 nm)	0.4973	ppm	0.0022	0.44	13310.0000	0.4973 (ppm)
W (207.912 nm)	0.4696	ppm	0.0031	0.65	673.9000	0.4696 (ppm)
Zn (202.548 nm)	0.5228	ppm	0.0026	0.50	6794.0000	0.5228 (ppm)
Zr (343.823 nm)	0.4507	ppm	0.0097	2.16	34240.0000	0.4507 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9063	313700.0000	0.0014	0.16
Y_R 371.029	0.9155	44480.0000	0.0070	0.77

Sample Name: LCS 440-584937/2-A

Date: 12/10/2019 5:41:08 PM Rack:Tube: 3:21

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2216	ppm	0.0005	0.23	8063.0000	0.2216 (ppm)
Al (396.152 nm)	0.4330	ppm	0.0006	0.13	10780.0000	0.4330 (ppm)
As (188.980 nm)	0.4418	ppm	0.0022	0.51	233.8000	0.4418 (ppm)
B (249.678 nm)	0.4355	ppm	0.0035	0.81	4200.0000	0.4355 (ppm)
Ba (233.527 nm)	0.4552	ppm	0.0008	0.18	34410.0000	0.4552 (ppm)
Be (234.861 nm)	0.4445	ppm	0.0012	0.28	66040.0000	0.4445 (ppm)
Ca (422.673 nm)	2.2620	ppm	0.0026	0.12	8618.0000	2.2620 (ppm)
Cd (214.439 nm)	0.4536	ppm	0.0028	0.62	8475.0000	0.4536 (ppm)
Co (228.615 nm)	0.4555	ppm	0.0009	0.19	5122.0000	0.4555 (ppm)
Cr (205.560 nm)	0.4533	ppm	0.0004	0.09	1751.0000	0.4533 (ppm)
Cu (324.754 nm)	0.4453	ppm	0.0021	0.48	15810.0000	0.4453 (ppm)
Fe (238.204 nm)	0.4169	ppm	0.0088	2.10	982.4000	0.4169 (ppm)
K (766.491 nm)	4.5880	ppm	0.0438	0.96	4388.0000	4.5880 (ppm)
Li (670.783 nm)	0.4423	ppm	0.0026	0.59	24410.0000	0.4423 (ppm)
Mg (279.078 nm)	2.2920	ppm	0.0065	0.29	5364.0000	2.2920 (ppm)
Mn (259.372 nm)	0.4499	ppm	0.0008	0.18	38020.0000	0.4499 (ppm)
Mo (204.598 nm)	0.4230	ppm	0.0027	0.64	1419.0000	0.4230 (ppm)
Na (589.592 nm)	4.4330	ppm	0.0044	0.10	25160.0000	4.4330 (ppm)
Ni (231.604 nm)	0.4548	ppm	0.0010	0.22	1755.0000	0.4548 (ppm)
P (213.618 nm)	0.4443	ppm	0.0018	0.40	296.7000	0.4443 (ppm)
Pb (220.353 nm)	0.4480	ppm	0.0035	0.77	771.2000	0.4480 (ppm)
Sb (206.834 nm)	0.4916	ppm	0.0010	0.21	382.0000	0.4916 (ppm)
Se (196.026 nm)	0.4395	ppm	0.0038	0.85	247.6000	0.4395 (ppm)
Si (251.611 nm)	2.2440	ppm	0.0098	0.44	4549.0000	2.2440 (ppm)
Sn (189.925 nm)	0.3837	ppm	0.0056	1.45	188.4000	0.3837 (ppm)
Sr (421.552 nm)	0.4456	ppm	0.0034	0.76	147500.0000	0.4456 (ppm)
Ti (336.122 nm)	0.4324	ppm	0.0040	0.92	40830.0000	0.4324 (ppm)
Tl (190.794 nm)	0.4116	ppm	0.0184	4.48	366.1000	0.4116 (ppm)
V (292.401 nm)	0.4468	ppm	0.0010	0.22	11920.0000	0.4468 (ppm)
W (207.912 nm)	0.4110	ppm	0.0001	0.03	589.7000	0.4110 (ppm)
Zn (202.548 nm)	0.4571	ppm	0.0003	0.06	5944.0000	0.4571 (ppm)
Zr (343.823 nm)	0.3849	ppm	0.0107	2.77	29260.0000	0.3849 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9350	323600.0000	0.0035	0.38
Y_R 371.029	0.9213	44760.0000	0.0034	0.36

Sample Name: 440-256891-A-1-B MSd

Date: 12/10/2019 5:52:02 PM Rack:Tube: 3:24

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2087	ppm	0.0005	0.22	7596.0000	0.2087 (ppm)
Al (396.152 nm)	0.9543	ppm	0.0023	0.25	23740.0000	0.9543 (ppm)
As (188.980 nm)	0.4598	ppm	0.0028	0.62	243.1000	0.4598 (ppm)
B (249.678 nm)	0.8733	ppm	0.0034	0.39	8468.0000	0.8733 (ppm)
Ba (233.527 nm)	0.6274	ppm	0.0030	0.48	47430.0000	0.6274 (ppm)
Be (234.861 nm)	0.4906	ppm	0.0019	0.39	72900.0000	0.4906 (ppm)
Ca (422.673 nm)	40.0200	ppm	0.0177	0.04	150400.0000	40.0200 (ppm)
Cd (214.439 nm)	0.4740	ppm	0.0021	0.44	8855.0000	0.4740 (ppm)
Co (228.615 nm)	0.4856	ppm	0.0031	0.65	5463.0000	0.4856 (ppm)
Cr (205.560 nm)	0.4826	ppm	0.0018	0.37	1865.0000	0.4826 (ppm)
Cu (324.754 nm)	0.5168	ppm	0.0022	0.42	18310.0000	0.5168 (ppm)
Fe (238.204 nm)	0.8523	ppm	0.0038	0.44	2062.0000	0.8523 (ppm)
K (766.491 nm)	9.6480	ppm	0.0979	1.02	9316.0000	9.6480 (ppm)
Li (670.783 nm)	0.4986	ppm	0.0008	0.15	27590.0000	0.4986 (ppm)
Mg (279.078 nm)	14.9400	ppm	0.0693	0.46	34910.0000	14.9400 (ppm)
Mn (259.372 nm)	0.6318	ppm	0.0020	0.32	53370.0000	0.6318 (ppm)
Mo (204.598 nm)	0.4324	ppm	0.0017	0.39	1450.0000	0.4324 (ppm)
Na (589.592 nm)	156.5000	ppm	0.5090	0.33	855900.0000	156.5000 (ppm)
Ni (231.604 nm)	0.4824	ppm	0.0030	0.63	1862.0000	0.4824 (ppm)
P (213.618 nm)	2.7450	ppm	0.0213	0.78	1923.0000	2.7450 (ppm)
Pb (220.353 nm)	0.4820	ppm	0.0031	0.65	831.1000	0.4820 (ppm)
Sb (206.834 nm)	0.5067	ppm	0.0011	0.21	394.2000	0.5067 (ppm)
Se (196.026 nm)	0.1941	ppm	0.0049	2.52	110.1000	0.1941 (ppm)
Si (251.611 nm)	6.0480	ppm	0.0376	0.62	12140.0000	6.0480 (ppm)
Sn (189.925 nm)	0.4235	ppm	0.0028	0.66	208.2000	0.4235 (ppm)
Sr (421.552 nm)	1.2470	ppm	0.0009	0.07	413200.0000	1.2470 (ppm)
Ti (336.122 nm)	0.4724	ppm	0.0056	1.18	44590.0000	0.4724 (ppm)
Tl (190.794 nm)	0.4384	ppm	0.0019	0.43	389.2000	0.4384 (ppm)
V (292.401 nm)	0.4949	ppm	0.0018	0.37	13240.0000	0.4949 (ppm)
W (207.912 nm)	0.4616	ppm	0.0005	0.10	662.4000	0.4616 (ppm)
Zn (202.548 nm)	0.5209	ppm	0.0007	0.14	6768.0000	0.5209 (ppm)
Zr (343.823 nm)	0.4620	ppm	0.0104	2.24	35100.0000	0.4620 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9120	315700.0000	0.0048	0.53
Y_R 371.029	0.9185	44620.0000	0.0026	0.28

Sample Name: 440-256892-A-1-A

Date: 12/10/2019 5:53:53 PM Rack:Tube: 3:25

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0007 u	ppm	0.0003	49.68	-94.4500	-0.0007 u (ppm)
Al (396.152 nm)	0.5257	ppm	0.0025	0.48	12730.0000	0.5257 (ppm)
As (188.980 nm)	0.0169	ppm	0.0074	43.85	10.4300	0.0169 (ppm)
B (249.678 nm)	0.4973	ppm	0.0031	0.63	4836.0000	0.4973 (ppm)
Ba (233.527 nm)	0.2335	ppm	0.0007	0.29	17670.0000	0.2335 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	16.06	88.2900	0.0003 (ppm)
Ca (422.673 nm)	23.5400	ppm	0.0159	0.07	88560.0000	23.5400 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0001	37.47	2.4000	0.0003 (ppm)
Co (228.615 nm)	0.0014	ppm	0.0003	22.38	2.9890	0.0014 (ppm)
Cr (205.560 nm)	0.0046	ppm	0.0001	2.92	19.6800	0.0046 (ppm)
Cu (324.754 nm)	0.0071	ppm	0.0000	0.08	279.0000	0.0071 (ppm)
Fe (238.204 nm)	1.1540	ppm	0.0097	0.84	2811.0000	1.1540 (ppm)
K (766.491 nm)	4.7930	ppm	0.0715	1.49	4587.0000	4.7930 (ppm)
Li (670.783 nm)	0.0379	ppm	0.0009	2.34	2188.0000	0.0379 (ppm)
Mg (279.078 nm)	5.9170	ppm	0.0166	0.28	13840.0000	5.9170 (ppm)
Mn (259.372 nm)	0.1009	ppm	0.0003	0.28	8663.0000	0.1009 (ppm)
Mo (204.598 nm)	0.0178	ppm	0.0010	5.58	55.6800	0.0178 (ppm)
Na (589.592 nm)	144.1000	ppm	0.0507	0.04	788100.0000	144.1000 (ppm)
Ni (231.604 nm)	0.0109	ppm	0.0017	15.46	26.4000	0.0109 (ppm)
P (213.618 nm)	1.0690	ppm	0.0018	0.17	755.8000	1.0690 (ppm)
Pb (220.353 nm)	0.0048	ppm	0.0022	45.88	-2.1120	0.0048 (ppm)
Sb (206.834 nm)	0.0045	ppm	0.0051	> 100.00	0.0174	0.0045 (ppm)
Se (196.026 nm)	0.7519	ppm	0.0092	1.22	421.0000	0.7519 (ppm)
Si (251.611 nm)	4.9190	ppm	0.0272	0.55	9823.0000	4.9190 (ppm)
Sn (189.925 nm)	0.0151	ppm	0.0036	24.15	6.0390	0.0151 (ppm)
Sr (421.552 nm)	0.7778	ppm	0.0003	0.03	257600.0000	0.7778 (ppm)
Ti (336.122 nm)	0.0058	ppm	0.0003	5.26	402.0000	0.0058 (ppm)
Tl (190.794 nm)	0.0092	ppm	0.0021	22.87	12.8000	0.0092 (ppm)
V (292.401 nm)	0.0038	ppm	0.0006	14.54	209.6000	0.0038 (ppm)
W (207.912 nm)	0.0084	ppm	0.0006	6.94	8.1020	0.0084 (ppm)
Zn (202.548 nm)	0.0671	ppm	0.0001	0.19	874.1000	0.0671 (ppm)
Zr (343.823 nm)	0.0110	ppm	0.0011	10.15	916.2000	0.0110 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9192	318200.0000	0.0041	0.44
Y_R 371.029	0.9259	44980.0000	0.0020	0.22

Sample Name: 440-256892-A-2-A

Date: 12/10/2019 5:55:43 PM Rack:Tube: 3:26

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0010 u	ppm	0.0003	31.29	-105.6000	-0.0010 u (ppm)
Al (396.152 nm)	0.5995	ppm	0.0018	0.30	14550.0000	0.5995 (ppm)
As (188.980 nm)	0.0114	ppm	0.0007	5.71	7.4660	0.0114 (ppm)
B (249.678 nm)	0.5182	ppm	0.0033	0.63	5040.0000	0.5182 (ppm)
Ba (233.527 nm)	0.2564	ppm	0.0010	0.40	19400.0000	0.2564 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	96.95	55.1000	0.0001 (ppm)
Ca (422.673 nm)	24.6100	ppm	0.0115	0.05	92560.0000	24.6100 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	45.62	0.4613	0.0002 (ppm)
Co (228.615 nm)	0.0024	ppm	0.0001	5.87	14.5900	0.0024 (ppm)
Cr (205.560 nm)	0.0062	ppm	0.0003	5.32	25.9400	0.0062 (ppm)
Cu (324.754 nm)	0.0097	ppm	0.0001	0.67	368.7000	0.0097 (ppm)
Fe (238.204 nm)	1.8840	ppm	0.0166	0.88	4620.0000	1.8840 (ppm)
K (766.491 nm)	4.9830	ppm	0.0453	0.91	4772.0000	4.9830 (ppm)
Li (670.783 nm)	0.0375	ppm	0.0029	7.73	2162.0000	0.0375 (ppm)
Mg (279.078 nm)	6.2900	ppm	0.0270	0.43	14710.0000	6.2900 (ppm)
Mn (259.372 nm)	0.1023	ppm	0.0005	0.46	8856.0000	0.1023 (ppm)
Mo (204.598 nm)	0.0112	ppm	0.0005	4.78	33.8100	0.0112 (ppm)
Na (589.592 nm)	150.8000	ppm	0.5098	0.34	824800.0000	150.8000 (ppm)
Ni (231.604 nm)	0.0127	ppm	0.0007	5.32	33.3200	0.0127 (ppm)
P (213.618 nm)	1.1170	ppm	0.0003	0.03	790.4000	1.1170 (ppm)
Pb (220.353 nm)	0.0021	ppm	0.0006	27.62	-6.2560	0.0021 (ppm)
Sb (206.834 nm)	0.0045	ppm	0.0007	16.27	0.1667	0.0045 (ppm)
Se (196.026 nm)	0.3749	ppm	0.0105	2.81	209.4000	0.3749 (ppm)
Si (251.611 nm)	5.3960	ppm	0.0488	0.90	10770.0000	5.3960 (ppm)
Sn (189.925 nm)	0.0001 u	ppm	0.0015	> 100.00	-1.3760	0.0001 u (ppm)
Sr (421.552 nm)	0.7970	ppm	0.0006	0.08	264000.0000	0.7970 (ppm)
Ti (336.122 nm)	0.0045	ppm	0.0004	8.01	277.9000	0.0045 (ppm)
Tl (190.794 nm)	0.0027	ppm	0.0004	15.12	6.9370	0.0027 (ppm)
V (292.401 nm)	0.0057	ppm	0.0001	1.58	262.8000	0.0057 (ppm)
W (207.912 nm)	0.0015	ppm	0.0000	3.03	-0.9938	0.0015 (ppm)
Zn (202.548 nm)	0.1248	ppm	0.0005	0.42	1618.0000	0.1248 (ppm)
Zr (343.823 nm)	0.0069	ppm	0.0009	13.79	588.2000	0.0069 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9163	317200.0000	0.0007	0.08
Y_R 371.029	0.9274	45060.0000	0.0000	0.00

Sample Name: 440-256892-A-3-A

Date: 12/10/2019 5:57:33 PM Rack:Tube: 3:27

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0017 u	ppm	0.0001	6.56	-137.1000	-0.0017 u (ppm)
Al (396.152 nm)	1.1620	ppm	0.0034	0.29	28550.0000	1.1620 (ppm)
As (188.980 nm)	0.0013 u	ppm	0.0077	> 100.00	1.6150	0.0013 u (ppm)
B (249.678 nm)	0.4034	ppm	0.0058	1.43	3918.0000	0.4034 (ppm)
Ba (233.527 nm)	0.1341	ppm	0.0005	0.34	10180.0000	0.1341 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	92.18	97.9100	0.0001 (ppm)
Ca (422.673 nm)	108.8000	ppm	0.1550	0.14	408700.0000	108.8000 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0003	> 100.00	3.4210	0.0003 (ppm)
Co (228.615 nm)	0.0015	ppm	0.0005	31.96	7.4940	0.0015 (ppm)
Cr (205.560 nm)	0.0119	ppm	0.0002	1.58	49.1700	0.0119 (ppm)
Cu (324.754 nm)	0.0192	ppm	0.0004	1.99	652.5000	0.0192 (ppm)
Fe (238.204 nm)	4.6340	ppm	0.0069	0.15	11440.0000	4.6340 (ppm)
K (766.491 nm)	9.5000	ppm	0.0771	0.81	9176.0000	9.5000 (ppm)
Li (670.783 nm)	0.0241	ppm	0.0007	3.02	1504.0000	0.0241 (ppm)
Mg (279.078 nm)	27.2700	ppm	0.1048	0.38	63730.0000	27.2700 (ppm)
Mn (259.372 nm)	0.0965	ppm	0.0007	0.72	8727.0000	0.0965 (ppm)
Mo (204.598 nm)	0.0078	ppm	0.0004	5.20	22.7000	0.0078 (ppm)
Na (589.592 nm)	634.0000 o	ppm	1.7890	0.28	3464000.0000	634.0000 o (ppm)
Ni (231.604 nm)	0.0102	ppm	0.0003	3.24	22.5400	0.0102 (ppm)
P (213.618 nm)	1.7050	ppm	0.0037	0.22	1206.0000	1.7050 (ppm)
Pb (220.353 nm)	0.0129	ppm	0.0037	28.70	14.9000	0.0129 (ppm)
Sb (206.834 nm)	0.0050	ppm	0.0028	55.51	0.8363	0.0050 (ppm)
Se (196.026 nm)	0.1713	ppm	0.0012	0.70	94.5500	0.1713 (ppm)
Si (251.611 nm)	13.4900	ppm	0.0507	0.38	26920.0000	13.4900 (ppm)
Sn (189.925 nm)	0.0011 u	ppm	0.0018	> 100.00	-0.8100	0.0011 u (ppm)
Sr (421.552 nm)	1.2010	ppm	0.0021	0.18	398700.0000	1.2010 (ppm)
Ti (336.122 nm)	0.0485	ppm	0.0008	1.58	4379.0000	0.0485 (ppm)
Tl (190.794 nm)	0.0064	ppm	0.0016	24.94	9.6490	0.0064 (ppm)
V (292.401 nm)	0.0058	ppm	0.0001	1.18	354.0000	0.0058 (ppm)
W (207.912 nm)	-0.0017 u	ppm	0.0040	> 100.00	11.6300	-0.0017 u (ppm)
Zn (202.548 nm)	1.6940	ppm	0.0119	0.70	21840.0000	1.6940 (ppm)
Zr (343.823 nm)	0.0085	ppm	0.0013	15.69	662.8000	0.0085 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8708	301400.0000	0.0074	0.85
Y_R 371.029	0.8947	43470.0000	0.0008	0.09

Sample Name: 440-256892-A-4-A

Date: 12/10/2019 5:59:22 PM Rack:Tube: 3:28

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0009 u	ppm	0.0004	44.17	-104.0000	-0.0009 u (ppm)
Al (396.152 nm)	0.5570	ppm	0.0021	0.38	13500.0000	0.5570 (ppm)
As (188.980 nm)	0.0216	ppm	0.0011	5.15	12.9300	0.0216 (ppm)
B (249.678 nm)	0.5252	ppm	0.0035	0.66	5110.0000	0.5252 (ppm)
Ba (233.527 nm)	0.2148	ppm	0.0004	0.16	16270.0000	0.2148 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	32.8400	0.0000 u (ppm)
Ca (422.673 nm)	24.7600	ppm	0.0133	0.05	93120.0000	24.7600 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.8750	0.0000 u (ppm)
Co (228.615 nm)	0.0005	ppm	0.0001	16.60	-6.1940	0.0005 (ppm)
Cr (205.560 nm)	0.0067	ppm	0.0001	1.80	27.8100	0.0067 (ppm)
Cu (324.754 nm)	0.0043	ppm	0.0007	15.04	179.6000	0.0043 (ppm)
Fe (238.204 nm)	0.5827	ppm	0.0019	0.32	1395.0000	0.5827 (ppm)
K (766.491 nm)	4.9670	ppm	0.0758	1.53	4756.0000	4.9670 (ppm)
Li (670.783 nm)	0.0419	ppm	0.0009	2.24	2416.0000	0.0419 (ppm)
Mg (279.078 nm)	6.1380	ppm	0.0123	0.20	14350.0000	6.1380 (ppm)
Mn (259.372 nm)	0.0954	ppm	0.0005	0.49	8135.0000	0.0954 (ppm)
Mo (204.598 nm)	0.0098	ppm	0.0000	0.08	29.0600	0.0098 (ppm)
Na (589.592 nm)	149.9000	ppm	0.1709	0.11	819600.0000	149.9000 (ppm)
Ni (231.604 nm)	0.0057	ppm	0.0005	8.59	6.0800	0.0057 (ppm)
P (213.618 nm)	1.0890	ppm	0.0025	0.23	770.2000	1.0890 (ppm)
Pb (220.353 nm)	-0.0030 u	ppm	0.0021	71.83	-15.9300	-0.0030 u (ppm)
Sb (206.834 nm)	0.0071	ppm	0.0021	29.05	2.2890	0.0071 (ppm)
Se (196.026 nm)	0.8962	ppm	0.0074	0.82	501.9000	0.8962 (ppm)
Si (251.611 nm)	5.3690	ppm	0.0384	0.72	10720.0000	5.3690 (ppm)
Sn (189.925 nm)	0.0027	ppm	0.0021	76.66	-0.1104	0.0027 (ppm)
Sr (421.552 nm)	0.8414	ppm	0.0000	0.00	278700.0000	0.8414 (ppm)
Ti (336.122 nm)	0.0012	ppm	0.0004	34.37	-36.6100	0.0012 (ppm)
Tl (190.794 nm)	0.0009 u	ppm	0.0045	> 100.00	5.3180	0.0009 u (ppm)
V (292.401 nm)	0.0017	ppm	0.0000	2.94	154.4000	0.0017 (ppm)
W (207.912 nm)	0.0001 u	ppm	0.0017	> 100.00	-4.1650	0.0001 u (ppm)
Zn (202.548 nm)	0.0339	ppm	0.0002	0.69	445.4000	0.0339 (ppm)
Zr (343.823 nm)	0.0019	ppm	0.0005	24.67	241.8000	0.0019 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9095	314800.0000	0.0031	0.34
Y_R 371.029	0.9148	44450.0000	0.0029	0.31

Sample Name: CCV 5993196

Date: 12/10/2019 6:01:11 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4960	ppm	0.0023	0.46	18150.0000	0.4960 (ppm)
Al (396.152 nm)	0.9761	ppm	0.0033	0.34	24770.0000	0.9761 (ppm)
As (188.980 nm)	0.9943	ppm	0.0060	0.60	524.4000	0.9943 (ppm)
B (249.678 nm)	0.9819	ppm	0.0090	0.92	9481.0000	0.9819 (ppm)
Ba (233.527 nm)	1.0020	ppm	0.0100	1.00	75680.0000	1.0020 (ppm)
Be (234.861 nm)	0.9871	ppm	0.0053	0.54	146600.0000	0.9871 (ppm)
Ca (422.673 nm)	4.9370	ppm	0.0084	0.17	18660.0000	4.9370 (ppm)
Cd (214.439 nm)	0.9969	ppm	0.0060	0.60	18630.0000	0.9969 (ppm)
Co (228.615 nm)	1.0000	ppm	0.0044	0.44	11260.0000	1.0000 (ppm)
Cr (205.560 nm)	0.9948	ppm	0.0012	0.12	3840.0000	0.9948 (ppm)
Cu (324.754 nm)	1.0020	ppm	0.0020	0.20	35500.0000	1.0020 (ppm)
Fe (238.204 nm)	1.0160	ppm	0.0100	0.99	2466.0000	1.0160 (ppm)
K (766.491 nm)	9.9530	ppm	0.0862	0.87	9612.0000	9.9530 (ppm)
Li (670.783 nm)	0.9874	ppm	0.0021	0.21	54400.0000	0.9874 (ppm)
Mg (279.078 nm)	5.0570	ppm	0.0567	1.12	11820.0000	5.0570 (ppm)
Mn (259.372 nm)	0.9922	ppm	0.0037	0.38	83820.0000	0.9922 (ppm)
Mo (204.598 nm)	1.0050	ppm	0.0010	0.10	3376.0000	1.0050 (ppm)
Na (589.592 nm)	10.0300	ppm	0.0364	0.36	55780.0000	10.0300 (ppm)
Ni (231.604 nm)	0.9945	ppm	0.0045	0.46	3856.0000	0.9945 (ppm)
P (213.618 nm)	0.9965	ppm	0.0029	0.30	664.0000	0.9965 (ppm)
Pb (220.353 nm)	0.9898	ppm	0.0093	0.94	1717.0000	0.9898 (ppm)
Sb (206.834 nm)	1.0030	ppm	0.0211	2.10	781.6000	1.0030 (ppm)
Se (196.026 nm)	0.9828	ppm	0.0010	0.10	555.0000	0.9828 (ppm)
Si (251.611 nm)	5.3510	ppm	0.0006	0.01	10840.0000	5.3510 (ppm)
Sn (189.925 nm)	0.9949	ppm	0.0074	0.74	490.9000	0.9949 (ppm)
Sr (421.552 nm)	0.9820	ppm	0.0013	0.14	325000.0000	0.9820 (ppm)
Ti (336.122 nm)	1.0020	ppm	0.0070	0.70	94800.0000	1.0020 (ppm)
Tl (190.794 nm)	0.9917	ppm	0.0107	1.08	877.2000	0.9917 (ppm)
V (292.401 nm)	0.9982	ppm	0.0033	0.33	26510.0000	0.9982 (ppm)
W (207.912 nm)	0.9945	ppm	0.0004	0.04	1432.0000	0.9945 (ppm)
Zn (202.548 nm)	0.9968	ppm	0.0042	0.42	12950.0000	0.9968 (ppm)
Zr (343.823 nm)	0.9995	ppm	0.0048	0.48	75820.0000	0.9995 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9150	316700.0000	0.0019	0.21
Y_R 371.029	0.9066	44040.0000	0.0069	0.76

Sample Name: CCB 5993195

Date: 12/10/2019 6:06:53 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000	ppm	0.0000	88.26	-68.0900	0.0000 (ppm)
Al (396.152 nm)	-0.0024 u	ppm	0.0003	12.61	-381.8000	-0.0024 u (ppm)
As (188.980 nm)	0.0026	ppm	0.0009	35.87	2.9830	0.0026 (ppm)
B (249.678 nm)	0.0017	ppm	0.0010	60.53	2.8140	0.0017 (ppm)
Ba (233.527 nm)	0.0001	ppm	0.0001	99.84	47.1000	0.0001 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	> 100.00	34.5000	0.0001 (ppm)
Ca (422.673 nm)	0.0022 u	ppm	0.0038	> 100.00	127.3000	0.0022 u (ppm)
Cd (214.439 nm)	0.0002 u	ppm	0.0002	> 100.00	-0.0521	0.0002 u (ppm)
Co (228.615 nm)	0.0002	ppm	0.0000	21.75	-11.0700	0.0002 (ppm)
Cr (205.560 nm)	0.0000 u	ppm	0.0003	> 100.00	1.8660	0.0000 u (ppm)
Cu (324.754 nm)	-0.0002 u	ppm	0.0004	> 100.00	34.0300	-0.0002 u (ppm)
Fe (238.204 nm)	-0.0024 u	ppm	0.0082	> 100.00	-56.1500	-0.0024 u (ppm)
K (766.491 nm)	0.0073 u	ppm	0.0124	> 100.00	-71.0700	0.0073 u (ppm)
Li (670.783 nm)	-0.0001 u	ppm	0.0005	> 100.00	46.1500	-0.0001 u (ppm)
Mg (279.078 nm)	0.0101	ppm	0.0010	10.40	34.2600	0.0101 (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0000	18.72	60.8300	0.0002 (ppm)
Mo (204.598 nm)	0.0028	ppm	0.0010	36.75	5.3830	0.0028 (ppm)
Na (589.592 nm)	0.0457	ppm	0.0050	11.06	1163.0000	0.0457 (ppm)
Ni (231.604 nm)	0.0011	ppm	0.0012	> 100.00	-11.3700	0.0011 (ppm)
P (213.618 nm)	-0.0011 u	ppm	0.0051	> 100.00	-0.5262	-0.0011 u (ppm)
Pb (220.353 nm)	-0.0028 u	ppm	0.0015	52.70	-16.2600	-0.0028 u (ppm)
Sb (206.834 nm)	0.0099	ppm	0.0020	20.24	4.4420	0.0099 (ppm)
Se (196.026 nm)	0.0096	ppm	0.0061	63.17	4.7210	0.0096 (ppm)
Si (251.611 nm)	0.0166	ppm	0.0004	2.51	43.7800	0.0166 (ppm)
Sn (189.925 nm)	-0.0008 u	ppm	0.0011	> 100.00	-1.8370	-0.0008 u (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0000	3.04	47.9100	0.0002 (ppm)
Ti (336.122 nm)	0.0005	ppm	0.0002	46.80	-90.5700	0.0005 (ppm)
Tl (190.794 nm)	0.0023	ppm	0.0009	41.63	6.5700	0.0023 (ppm)
V (292.401 nm)	0.0001 u	ppm	0.0002	> 100.00	88.0400	0.0001 u (ppm)
W (207.912 nm)	-0.0003 u	ppm	0.0043	> 100.00	-4.8160	-0.0003 u (ppm)
Zn (202.548 nm)	0.0001	ppm	0.0000	8.49	14.2000	0.0001 (ppm)
Zr (343.823 nm)	-0.0003 u	ppm	0.0000	2.08	83.1300	-0.0003 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9172	317500.0000	0.0066	0.71
Y_R 371.029	0.9078	44100.0000	0.0005	0.06

Sample Name: 440-256892-A-5-A

Date: 12/10/2019 6:08:43 PM Rack:Tube: 3:29

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0004 u	ppm	0.0002	36.83	-86.2400	-0.0004 u (ppm)
Al (396.152 nm)	0.4171	ppm	0.0019	0.46	10030.0000	0.4171 (ppm)
As (188.980 nm)	0.0163	ppm	0.0030	18.66	10.1300	0.0163 (ppm)
B (249.678 nm)	0.5043	ppm	0.0035	0.69	4906.0000	0.5043 (ppm)
Ba (233.527 nm)	0.2063	ppm	0.0004	0.21	15630.0000	0.2063 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	11.25	41.3800	0.0000 (ppm)
Ca (422.673 nm)	24.1300	ppm	0.1124	0.47	90750.0000	24.1300 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0002	> 100.00	-4.0670	-0.0001 u (ppm)
Co (228.615 nm)	0.0010	ppm	0.0008	79.49	-1.0090	0.0010 (ppm)
Cr (205.560 nm)	0.0025	ppm	0.0006	25.01	11.8600	0.0025 (ppm)
Cu (324.754 nm)	0.0031	ppm	0.0001	4.78	135.3000	0.0031 (ppm)
Fe (238.204 nm)	1.0550	ppm	0.0049	0.47	2564.0000	1.0550 (ppm)
K (766.491 nm)	4.7720	ppm	0.1108	2.32	4567.0000	4.7720 (ppm)
Li (670.783 nm)	0.0409	ppm	0.0009	2.15	2356.0000	0.0409 (ppm)
Mg (279.078 nm)	6.0790	ppm	0.0020	0.03	14220.0000	6.0790 (ppm)
Mn (259.372 nm)	0.0904	ppm	0.0001	0.15	7764.0000	0.0904 (ppm)
Mo (204.598 nm)	0.0075	ppm	0.0027	35.61	21.3200	0.0075 (ppm)
Na (589.592 nm)	145.3000	ppm	0.6884	0.47	794600.0000	145.3000 (ppm)
Ni (231.604 nm)	0.0088	ppm	0.0013	15.05	18.1100	0.0088 (ppm)
P (213.618 nm)	0.9813	ppm	0.0008	0.08	694.3000	0.9813 (ppm)
Pb (220.353 nm)	-0.0014 u	ppm	0.0014	97.04	-13.0100	-0.0014 u (ppm)
Sb (206.834 nm)	0.0035	ppm	0.0044	> 100.00	-0.5660	0.0035 (ppm)
Se (196.026 nm)	0.6529	ppm	0.0145	2.21	365.4000	0.6529 (ppm)
Si (251.611 nm)	5.1150	ppm	0.0482	0.94	10210.0000	5.1150 (ppm)
Sn (189.925 nm)	0.0055 u	ppm	0.0081	> 100.00	1.2710	0.0055 u (ppm)
Sr (421.552 nm)	0.8039	ppm	0.0050	0.63	266300.0000	0.8039 (ppm)
Ti (336.122 nm)	0.0015	ppm	0.0004	22.67	-6.2020	0.0015 (ppm)
Tl (190.794 nm)	0.0036	ppm	0.0015	41.82	7.7610	0.0036 (ppm)
V (292.401 nm)	0.0040	ppm	0.0004	9.21	217.0000	0.0040 (ppm)
W (207.912 nm)	0.0013	ppm	0.0015	> 100.00	-2.2880	0.0013 (ppm)
Zn (202.548 nm)	0.0457	ppm	0.0002	0.53	597.8000	0.0457 (ppm)
Zr (343.823 nm)	0.0039	ppm	0.0006	14.32	377.6000	0.0039 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9091	314700.0000	0.0051	0.56
Y_R 371.029	0.9165	44530.0000	0.0014	0.15

Sample Name: 440-255886-A-1-D

Date: 12/10/2019 6:10:33 PM Rack:Tube: 3:30

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0005	99.07	-88.1400	-0.0005 u (ppm)
Al (396.152 nm)	2.3150	ppm	0.0067	0.29	57050.0000	2.3150 (ppm)
As (188.980 nm)	0.0049	ppm	0.0061	> 100.00	3.7720	0.0049 (ppm)
B (249.678 nm)	0.0201	ppm	0.0009	4.64	175.3000	0.0201 (ppm)
Ba (233.527 nm)	0.1591	ppm	0.0010	0.64	12060.0000	0.1591 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	26.96	111.8000	0.0001 (ppm)
Ca (422.673 nm)	4.3290	ppm	0.0904	2.09	16380.0000	4.3290 (ppm)
Cd (214.439 nm)	0.0009	ppm	0.0002	16.96	14.8200	0.0009 (ppm)
Co (228.615 nm)	0.0031	ppm	0.0010	33.68	24.8500	0.0031 (ppm)
Cr (205.560 nm)	0.0117	ppm	0.0000	0.01	47.2800	0.0117 (ppm)
Cu (324.754 nm)	0.0591	ppm	0.0005	0.91	2133.0000	0.0591 (ppm)
Fe (238.204 nm)	6.0480	ppm	0.0444	0.73	14940.0000	6.0480 (ppm)
K (766.491 nm)	1.1540	ppm	0.0572	4.95	1045.0000	1.1540 (ppm)
Li (670.783 nm)	0.0038	ppm	0.0001	1.72	197.0000	0.0038 (ppm)
Mg (279.078 nm)	1.3810	ppm	0.0126	0.91	3234.0000	1.3810 (ppm)
Mn (259.372 nm)	0.0977	ppm	0.0001	0.12	8891.0000	0.0977 (ppm)
Mo (204.598 nm)	0.0039	ppm	0.0006	15.47	9.6730	0.0039 (ppm)
Na (589.592 nm)	1.2950	ppm	0.0088	0.68	8041.0000	1.2950 (ppm)
Ni (231.604 nm)	0.0129	ppm	0.0007	5.07	34.3100	0.0129 (ppm)
P (213.618 nm)	0.2658	ppm	0.0052	1.94	186.9000	0.2658 (ppm)
Pb (220.353 nm)	0.0240	ppm	0.0009	3.76	34.0700	0.0240 (ppm)
Sb (206.834 nm)	0.0035 u	ppm	0.0052	> 100.00	-0.5386	0.0035 u (ppm)
Se (196.026 nm)	0.0047	ppm	0.0060	> 100.00	1.3770	0.0047 (ppm)
Si (251.611 nm)	4.1070	ppm	0.0208	0.51	8205.0000	4.1070 (ppm)
Sn (189.925 nm)	0.0010 u	ppm	0.0074	> 100.00	-0.9433	0.0010 u (ppm)
Sr (421.552 nm)	0.0233	ppm	0.0001	0.41	7722.0000	0.0233 (ppm)
Ti (336.122 nm)	0.1326	ppm	0.0018	1.37	12430.0000	0.1326 (ppm)
Tl (190.794 nm)	0.0039	ppm	0.0032	83.09	6.8760	0.0039 (ppm)
V (292.401 nm)	0.0120	ppm	0.0005	4.42	412.8000	0.0120 (ppm)
W (207.912 nm)	0.0007 u	ppm	0.0032	> 100.00	9.4110	0.0007 u (ppm)
Zn (202.548 nm)	1.0900	ppm	0.0034	0.31	14070.0000	1.0900 (ppm)
Zr (343.823 nm)	0.0031	ppm	0.0003	8.68	210.2000	0.0031 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9312	322300.0000	0.0034	0.37
Y_R 371.029	0.9248	44930.0000	0.0049	0.54

Sample Name: 440-255886-A-2-B

Date: 12/10/2019 6:12:23 PM Rack:Tube: 3:31

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	59.01	-77.9000	-0.0002 u (ppm)
Al (396.152 nm)	0.1348	ppm	0.0010	0.76	3022.0000	0.1348 (ppm)
As (188.980 nm)	-0.0006 u	ppm	0.0042	> 100.00	1.2230	-0.0006 u (ppm)
B (249.678 nm)	0.0382	ppm	0.0009	2.48	358.3000	0.0382 (ppm)
Ba (233.527 nm)	0.0109	ppm	0.0001	0.78	866.9000	0.0109 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	39.63	31.5300	0.0000 (ppm)
Ca (422.673 nm)	2.1760	ppm	0.0136	0.63	8294.0000	2.1760 (ppm)
Cd (214.439 nm)	0.0006	ppm	0.0002	37.92	7.3650	0.0006 (ppm)
Co (228.615 nm)	0.0005 u	ppm	0.0008	> 100.00	-6.8960	0.0005 u (ppm)
Cr (205.560 nm)	0.0013	ppm	0.0005	42.78	6.7270	0.0013 (ppm)
Cu (324.754 nm)	0.0124	ppm	0.0007	5.71	481.1000	0.0124 (ppm)
Fe (238.204 nm)	0.3096	ppm	0.0027	0.88	717.3000	0.3096 (ppm)
K (766.491 nm)	0.6740	ppm	0.0884	13.11	577.1000	0.6740 (ppm)
Li (670.783 nm)	0.0007	ppm	0.0003	43.15	79.6800	0.0007 (ppm)
Mg (279.078 nm)	0.3589	ppm	0.0045	1.24	849.2000	0.3589 (ppm)
Mn (259.372 nm)	0.0233	ppm	0.0000	0.05	2042.0000	0.0233 (ppm)
Mo (204.598 nm)	0.0101	ppm	0.0015	14.44	30.0500	0.0101 (ppm)
Na (589.592 nm)	5.4600	ppm	0.0073	0.13	30740.0000	5.4600 (ppm)
Ni (231.604 nm)	0.0045	ppm	0.0017	38.13	1.8190	0.0045 (ppm)
P (213.618 nm)	0.0726	ppm	0.0015	2.00	51.1800	0.0726 (ppm)
Pb (220.353 nm)	0.0007	ppm	0.0009	> 100.00	-9.8780	0.0007 (ppm)
Sb (206.834 nm)	0.0011 u	ppm	0.0045	> 100.00	-2.4980	0.0011 u (ppm)
Se (196.026 nm)	0.0118	ppm	0.0067	56.88	5.8900	0.0118 (ppm)
Si (251.611 nm)	0.3455	ppm	0.0035	1.02	701.1000	0.3455 (ppm)
Sn (189.925 nm)	0.0001 u	ppm	0.0012	> 100.00	-1.3700	0.0001 u (ppm)
Sr (421.552 nm)	0.0085	ppm	0.0001	1.13	2823.0000	0.0085 (ppm)
Ti (336.122 nm)	0.0076	ppm	0.0000	0.52	580.2000	0.0076 (ppm)
Tl (190.794 nm)	0.0026	ppm	0.0004	16.21	6.7580	0.0026 (ppm)
V (292.401 nm)	0.0023	ppm	0.0002	7.26	149.6000	0.0023 (ppm)
W (207.912 nm)	0.0010 u	ppm	0.0017	> 100.00	1.8660	0.0010 u (ppm)
Zn (202.548 nm)	0.4070	ppm	0.0018	0.43	5260.0000	0.4070 (ppm)
Zr (343.823 nm)	0.0014	ppm	0.0002	15.19	205.4000	0.0014 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9259	320500.0000	0.0049	0.53
Y_R 371.029	0.9180	44600.0000	0.0012	0.13

Sample Name: 440-255886-A-3-B

Date: 12/10/2019 6:14:13 PM Rack:Tube: 3:32

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0003	84.68	-80.3400	-0.0003 u (ppm)
Al (396.152 nm)	0.1808	ppm	0.0015	0.85	4155.0000	0.1808 (ppm)
As (188.980 nm)	-0.0017 u	ppm	0.0042	> 100.00	0.6681	-0.0017 u (ppm)
B (249.678 nm)	0.0095	ppm	0.0005	4.96	78.4400	0.0095 (ppm)
Ba (233.527 nm)	0.0095	ppm	0.0000	0.18	760.2000	0.0095 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	17.09	32.4900	0.0000 (ppm)
Ca (422.673 nm)	1.4170	ppm	0.0010	0.07	5442.0000	1.4170 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	15.42	0.7447	0.0002 (ppm)
Co (228.615 nm)	0.0000 u	ppm	0.0002	> 100.00	-12.9700	0.0000 u (ppm)
Cr (205.560 nm)	0.0012	ppm	0.0008	69.73	6.4170	0.0012 (ppm)
Cu (324.754 nm)	0.0067	ppm	0.0007	10.55	280.3000	0.0067 (ppm)
Fe (238.204 nm)	0.3442	ppm	0.0076	2.20	802.9000	0.3442 (ppm)
K (766.491 nm)	0.4112	ppm	0.0133	3.24	321.8000	0.4112 (ppm)
Li (670.783 nm)	0.0000 u	ppm	0.0002	> 100.00	47.6900	0.0000 u (ppm)
Mg (279.078 nm)	0.2570	ppm	0.0061	2.38	611.1000	0.2570 (ppm)
Mn (259.372 nm)	0.0150	ppm	0.0001	0.39	1337.0000	0.0150 (ppm)
Mo (204.598 nm)	0.0015 u	ppm	0.0023	> 100.00	1.0990	0.0015 u (ppm)
Na (589.592 nm)	1.2480	ppm	0.0151	1.21	7733.0000	1.2480 (ppm)
Ni (231.604 nm)	0.0028	ppm	0.0004	14.75	-4.8200	0.0028 (ppm)
P (213.618 nm)	0.0408	ppm	0.0047	11.47	28.9700	0.0408 (ppm)
Pb (220.353 nm)	0.0019	ppm	0.0002	8.50	-7.8880	0.0019 (ppm)
Sb (206.834 nm)	0.0054	ppm	0.0002	4.04	0.9803	0.0054 (ppm)
Se (196.026 nm)	0.0070	ppm	0.0073	> 100.00	3.1750	0.0070 (ppm)
Si (251.611 nm)	0.3614	ppm	0.0027	0.75	731.5000	0.3614 (ppm)
Sn (189.925 nm)	-0.0028 u	ppm	0.0017	58.67	-2.8360	-0.0028 u (ppm)
Sr (421.552 nm)	0.0053	ppm	0.0000	0.24	1750.0000	0.0053 (ppm)
Ti (336.122 nm)	0.0100	ppm	0.0002	2.31	810.7000	0.0100 (ppm)
Tl (190.794 nm)	-0.0012 u	ppm	0.0040	> 100.00	3.2920	-0.0012 u (ppm)
V (292.401 nm)	0.0024	ppm	0.0002	6.65	153.9000	0.0024 (ppm)
W (207.912 nm)	-0.0023 u	ppm	0.0018	77.89	-5.9180	-0.0023 u (ppm)
Zn (202.548 nm)	0.1505	ppm	0.0014	0.90	1953.0000	0.1505 (ppm)
Zr (343.823 nm)	0.0006	ppm	0.0002	28.23	145.8000	0.0006 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9280	321200.0000	0.0030	0.32
Y_R 371.029	0.9188	44640.0000	0.0015	0.16

Sample Name: 440-255886-A-4-B

Date: 12/10/2019 6:16:03 PM Rack:Tube: 3:33

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0000	5.99	-86.1400	-0.0005 u (ppm)
Al (396.152 nm)	0.9920	ppm	0.0036	0.36	24260.0000	0.9920 (ppm)
As (188.980 nm)	-0.0006 u	ppm	0.0060	> 100.00	0.9693	-0.0006 u (ppm)
B (249.678 nm)	0.0503	ppm	0.0006	1.16	472.2000	0.0503 (ppm)
Ba (233.527 nm)	0.0741	ppm	0.0007	1.00	5641.0000	0.0741 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	54.1400	0.0000 u (ppm)
Ca (422.673 nm)	3.5180	ppm	0.0306	0.87	13330.0000	3.5180 (ppm)
Cd (214.439 nm)	0.0009	ppm	0.0001	12.84	13.5700	0.0009 (ppm)
Co (228.615 nm)	0.0005	ppm	0.0000	0.37	-6.4840	0.0005 (ppm)
Cr (205.560 nm)	0.0089	ppm	0.0013	14.12	36.6600	0.0089 (ppm)
Cu (324.754 nm)	0.0232	ppm	0.0000	0.10	864.1000	0.0232 (ppm)
Fe (238.204 nm)	2.5950	ppm	0.0134	0.52	6382.0000	2.5950 (ppm)
K (766.491 nm)	0.9145	ppm	0.0273	2.98	808.7000	0.9145 (ppm)
Li (670.783 nm)	0.0149	ppm	0.0000	0.22	756.5000	0.0149 (ppm)
Mg (279.078 nm)	1.0210	ppm	0.0034	0.34	2395.0000	1.0210 (ppm)
Mn (259.372 nm)	0.0638	ppm	0.0001	0.20	5677.0000	0.0638 (ppm)
Mo (204.598 nm)	0.0031	ppm	0.0015	47.61	6.8210	0.0031 (ppm)
Na (589.592 nm)	4.8120	ppm	0.0073	0.15	27220.0000	4.8120 (ppm)
Ni (231.604 nm)	0.0098	ppm	0.0009	9.25	22.8500	0.0098 (ppm)
P (213.618 nm)	0.1137	ppm	0.0020	1.75	80.0000	0.1137 (ppm)
Pb (220.353 nm)	0.0188	ppm	0.0012	6.45	22.8900	0.0188 (ppm)
Sb (206.834 nm)	0.0052	ppm	0.0019	36.70	0.9845	0.0052 (ppm)
Se (196.026 nm)	0.0023 u	ppm	0.0163	> 100.00	0.3003	0.0023 u (ppm)
Si (251.611 nm)	1.8330	ppm	0.0241	1.32	3675.0000	1.8330 (ppm)
Sn (189.925 nm)	0.0007 u	ppm	0.0027	> 100.00	-1.0130	0.0007 u (ppm)
Sr (421.552 nm)	0.0162	ppm	0.0001	0.31	5374.0000	0.0162 (ppm)
Ti (336.122 nm)	0.0576	ppm	0.0008	1.46	5325.0000	0.0576 (ppm)
Tl (190.794 nm)	-0.0002 u	ppm	0.0003	> 100.00	3.6630	-0.0002 u (ppm)
V (292.401 nm)	0.0144	ppm	0.0000	0.31	477.7000	0.0144 (ppm)
W (207.912 nm)	0.0003	ppm	0.0003	89.47	28.9700	0.0003 (ppm)
Zn (202.548 nm)	2.8000	ppm	0.0113	0.40	36110.0000	2.8000 (ppm)
Zr (343.823 nm)	0.0020	ppm	0.0004	20.36	200.2000	0.0020 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9288	321500.0000	0.0048	0.51
Y_R 371.029	0.9176	44580.0000	0.0059	0.64

Sample Name: x440-256572-A-1-D

Date: 12/10/2019 6:17:53 PM Rack:Tube: 3:34

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0044 u	ppm	0.0003	6.84	-257.1000	-0.0044 u (ppm)
Al (396.152 nm)	0.0178 b	ppm	0.0024	13.70	1370.0000	0.0178 b (ppm)
As (188.980 nm)	0.0025 bu	ppm	0.0078	> 100.00	1.3220	0.0025 bu (ppm)
B (249.678 nm)	5.3090 b	ppm	0.0006	0.01	51820.0000	5.3090 b (ppm)
Ba (233.527 nm)	0.0055 b	ppm	0.0003	5.40	607.3000	0.0055 b (ppm)
Be (234.861 nm)	0.0001 u	ppm	0.0001	> 100.00	31.5600	0.0001 u (ppm)
Ca (422.673 nm)	389.4000 b	ppm	0.8813	0.23	1463000.0000	389.4000 b (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0005	> 100.00	-0.5512	0.0001 u (ppm)
Co (228.615 nm)	0.0006 b	ppm	0.0003	42.53	20.5300	0.0006 b (ppm)
Cr (205.560 nm)	0.0013	ppm	0.0012	90.25	11.4300	0.0013 (ppm)
Cu (324.754 nm)	-0.0015 bu	ppm	0.0006	41.64	-202.8000	-0.0015 bu (ppm)
Fe (238.204 nm)	-0.0083 bu	ppm	0.0042	50.15	-10.1000	-0.0083 bu (ppm)
K (766.491 nm)	420.8000 b	ppm	1.0060	0.24	409500.0000	420.8000 b (ppm)
Li (670.783 nm)	0.1681 b	ppm	0.0004	0.21	12930.0000	0.1681 b (ppm)
Mg (279.078 nm)	986.2000 bo	ppm	3.5870	0.36	2304000.0000	986.2000 bo (ppm)
Mn (259.372 nm)	-0.0337 bu	ppm	0.0005	1.60	235.7000	-0.0337 bu (ppm)
Mo (204.598 nm)	0.0089	ppm	0.0010	11.21	25.9200	0.0089 (ppm)
Na (589.592 nm)	####	ppm	N/A	N/A	####	#### (ppm)
Ni (231.604 nm)	-0.0039 bu	ppm	0.0031	80.13	-42.8400	-0.0039 bu (ppm)
P (213.618 nm)	0.0455 b	ppm	0.0100	22.02	31.5700	0.0455 b (ppm)
Pb (220.353 nm)	-0.0245 bu	ppm	0.0047	19.07	-33.2100	-0.0245 bu (ppm)
Sb (206.834 nm)	0.0004 bu	ppm	0.0053	> 100.00	-3.6880	0.0004 bu (ppm)
Se (196.026 nm)	0.0154 b	ppm	0.0018	11.39	5.7830	0.0154 b (ppm)
Si (251.611 nm)	0.2870 b	ppm	0.0001	0.05	691.4000	0.2870 b (ppm)
Sn (189.925 nm)	-0.0280 bu	ppm	0.0060	21.53	-13.8100	-0.0280 bu (ppm)
Sr (421.552 nm)	7.0040	ppm	0.0113	0.16	2322000.0000	7.0040 (ppm)
Ti (336.122 nm)	-0.0015 u	ppm	0.0002	16.91	-567.4000	-0.0015 u (ppm)
Tl (190.794 nm)	0.0099 b	ppm	0.0108	> 100.00	16.0800	0.0099 b (ppm)
V (292.401 nm)	-0.0093 bu	ppm	0.0005	5.67	283.2000	-0.0093 bu (ppm)
W (207.912 nm)	-0.0149 bu	ppm	0.0020	13.74	-32.4900	-0.0149 bu (ppm)
Zn (202.548 nm)	-0.0765 bu	ppm	0.0004	0.57	-717.7000	-0.0765 bu (ppm)
Zr (343.823 nm)	0.0017	ppm	0.0001	4.78	288.8000	0.0017 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.6715	232400.0000	0.0073	1.09
Y_R 371.029	0.8073	39220.0000	0.0056	0.69

Sample Name: x440-256572-A-1-E MS

Date: 12/10/2019 6:19:43 PM Rack:Tube: 3:35

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2851	ppm	0.0006	0.21	10360.0000	0.2851 (ppm)
Al (396.152 nm)	0.8077 b	ppm	0.0055	0.68	21360.0000	0.8077 b (ppm)
As (188.980 nm)	0.5337 b	ppm	0.0032	0.61	281.1000	0.5337 b (ppm)
B (249.678 nm)	5.7780 b	ppm	0.0160	0.28	56350.0000	5.7780 b (ppm)
Ba (233.527 nm)	0.4012 b	ppm	0.0057	1.42	30490.0000	0.4012 b (ppm)
Be (234.861 nm)	0.5283	ppm	0.0005	0.09	78500.0000	0.5283 (ppm)
Ca (422.673 nm)	384.7000 b	ppm	1.0290	0.27	1446000.0000	384.7000 b (ppm)
Cd (214.439 nm)	0.4197	ppm	0.0031	0.74	7841.0000	0.4197 (ppm)
Co (228.615 nm)	0.4345 b	ppm	0.0048	1.10	4914.0000	0.4345 b (ppm)
Cr (205.560 nm)	0.4610	ppm	0.0010	0.21	1785.0000	0.4610 (ppm)
Cu (324.754 nm)	0.5832 b	ppm	0.0030	0.51	20500.0000	0.5832 b (ppm)
Fe (238.204 nm)	0.4428 b	ppm	0.0014	0.32	1108.0000	0.4428 b (ppm)
K (766.491 nm)	418.2000 b	ppm	1.7630	0.42	406900.0000	418.2000 b (ppm)
Li (670.783 nm)	0.7140 b	ppm	0.0023	0.32	43050.0000	0.7140 b (ppm)
Mg (279.078 nm)	1004.0000 bo	ppm	13.9900	1.39	2345000.0000	1004.0000 bo (ppm)
Mn (259.372 nm)	0.4287 b	ppm	0.0023	0.53	39310.0000	0.4287 b (ppm)
Mo (204.598 nm)	0.4588	ppm	0.0021	0.46	1539.0000	0.4588 (ppm)
Na (589.592 nm)	####	ppm	N/A	N/A	####	#### (ppm)
Ni (231.604 nm)	0.4251 b	ppm	0.0048	1.14	1627.0000	0.4251 b (ppm)
P (213.618 nm)	0.5760 b	ppm	0.0013	0.23	385.1000	0.5760 b (ppm)
Pb (220.353 nm)	0.4092 b	ppm	0.0033	0.80	724.5000	0.4092 b (ppm)
Sb (206.834 nm)	0.5535 b	ppm	0.0123	2.23	429.9000	0.5535 b (ppm)
Se (196.026 nm)	0.4602 b	ppm	0.0105	2.29	257.3000	0.4602 b (ppm)
Si (251.611 nm)	3.1050 b	ppm	0.0162	0.52	6381.0000	3.1050 b (ppm)
Sn (189.925 nm)	0.4052 b	ppm	0.0045	1.10	200.5000	0.4052 b (ppm)
Sr (421.552 nm)	7.3550	ppm	0.0218	0.30	2438000.0000	7.3550 (ppm)
Ti (336.122 nm)	0.4810	ppm	0.0042	0.87	45140.0000	0.4810 (ppm)
Tl (190.794 nm)	0.3426 b	ppm	0.0088	2.56	305.0000	0.3426 b (ppm)
V (292.401 nm)	0.4850 b	ppm	0.0019	0.38	13370.0000	0.4850 b (ppm)
W (207.912 nm)	0.4355 b	ppm	0.0000	0.00	617.5000	0.4355 b (ppm)
Zn (202.548 nm)	0.3295 b	ppm	0.0007	0.22	4576.0000	0.3295 b (ppm)
Zr (343.823 nm)	0.4098	ppm	0.0090	2.19	31200.0000	0.4098 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.6861	237500.0000	0.0014	0.20
Y_R 371.029	0.7970	38720.0000	0.0130	1.63

Sample Name: x440-256572-A-1-F MSD

Date: 12/10/2019 6:21:31 PM Rack:Tube: 3:36

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2882	ppm	0.0022	0.76	10480.0000	0.2882 (ppm)
Al (396.152 nm)	0.7124 b	ppm	0.0081	1.13	18970.0000	0.7124 b (ppm)
As (188.980 nm)	0.5099 b	ppm	0.0058	1.13	268.4000	0.5099 b (ppm)
B (249.678 nm)	5.8050 b	ppm	0.0698	1.20	56620.0000	5.8050 b (ppm)
Ba (233.527 nm)	0.3852 b	ppm	0.0013	0.34	29270.0000	0.3852 b (ppm)
Be (234.861 nm)	0.5387	ppm	0.0069	1.28	80040.0000	0.5387 (ppm)
Ca (422.673 nm)	382.8000 b	ppm	0.0513	0.01	1438000.0000	382.8000 b (ppm)
Cd (214.439 nm)	0.4249	ppm	0.0058	1.36	7939.0000	0.4249 (ppm)
Co (228.615 nm)	0.4411 b	ppm	0.0137	3.11	4987.0000	0.4411 b (ppm)
Cr (205.560 nm)	0.4683	ppm	0.0069	1.47	1813.0000	0.4683 (ppm)
Cu (324.754 nm)	0.5887 b	ppm	0.0060	1.01	20690.0000	0.5887 b (ppm)
Fe (238.204 nm)	0.4337 b	ppm	0.0021	0.49	1082.0000	0.4337 b (ppm)
K (766.491 nm)	414.5000 b	ppm	1.7250	0.42	403400.0000	414.5000 b (ppm)
Li (670.783 nm)	0.7214 b	ppm	0.0032	0.45	43290.0000	0.7214 b (ppm)
Mg (279.078 nm)	952.1000 bo	ppm	3.0750	0.32	2225000.0000	952.1000 bo (ppm)
Mn (259.372 nm)	0.4354 b	ppm	0.0023	0.54	39730.0000	0.4354 b (ppm)
Mo (204.598 nm)	0.4888	ppm	0.0011	0.22	1640.0000	0.4888 (ppm)
Na (589.592 nm)	####	ppm	N/A	N/A	####	#### (ppm)
Ni (231.604 nm)	0.4297 b	ppm	0.0009	0.20	1645.0000	0.4297 b (ppm)
P (213.618 nm)	0.5888 b	ppm	0.0048	0.81	393.4000	0.5888 b (ppm)
Pb (220.353 nm)	0.4100 b	ppm	0.0027	0.65	724.7000	0.4100 b (ppm)
Sb (206.834 nm)	0.5590 b	ppm	0.0043	0.76	433.9000	0.5590 b (ppm)
Se (196.026 nm)	0.4649 b	ppm	0.0041	0.89	260.1000	0.4649 b (ppm)
Si (251.611 nm)	3.1290 b	ppm	0.0383	1.22	6427.0000	3.1290 b (ppm)
Sn (189.925 nm)	0.4117 b	ppm	0.0001	0.04	203.7000	0.4117 b (ppm)
Sr (421.552 nm)	7.3400	ppm	0.0028	0.04	2433000.0000	7.3400 (ppm)
Ti (336.122 nm)	0.4944	ppm	0.0047	0.94	46410.0000	0.4944 (ppm)
Tl (190.794 nm)	0.3600 b	ppm	0.0152	4.21	320.3000	0.3600 b (ppm)
V (292.401 nm)	0.4900 b	ppm	0.0042	0.86	13500.0000	0.4900 b (ppm)
W (207.912 nm)	0.4587 b	ppm	0.0002	0.05	650.8000	0.4587 b (ppm)
Zn (202.548 nm)	0.3377 b	ppm	0.0020	0.59	4665.0000	0.3377 b (ppm)
Zr (343.823 nm)	0.4609	ppm	0.0060	1.30	35070.0000	0.4609 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.6852	237200.0000	0.0015	0.22
Y_R 371.029	0.8369	40660.0000	0.0084	1.01

Sample Name: x440-256572-A-2-B

Date: 12/10/2019 6:23:21 PM Rack:Tube: 3:37

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0034 u	ppm	0.0003	8.23	-221.2000	-0.0034 u (ppm)
Al (396.152 nm)	0.0207 b	ppm	0.0057	27.40	1444.0000	0.0207 b (ppm)
As (188.980 nm)	0.0012 bu	ppm	0.0048	> 100.00	0.6415	0.0012 bu (ppm)
B (249.678 nm)	5.1140 b	ppm	0.0899	1.76	49920.0000	5.1140 b (ppm)
Ba (233.527 nm)	0.0055 b	ppm	0.0002	4.02	606.5000	0.0055 b (ppm)
Be (234.861 nm)	0.0003	ppm	0.0000	6.41	72.8500	0.0003 (ppm)
Ca (422.673 nm)	394.2000 b	ppm	2.3940	0.61	1481000.0000	394.2000 b (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0000	0.38	6.0990	0.0005 (ppm)
Co (228.615 nm)	0.0001 bu	ppm	0.0005	> 100.00	15.0000	0.0001 bu (ppm)
Cr (205.560 nm)	0.0006 u	ppm	0.0021	> 100.00	8.5500	0.0006 u (ppm)
Cu (324.754 nm)	-0.0015 bu	ppm	0.0000	1.82	-205.5000	-0.0015 bu (ppm)
Fe (238.204 nm)	-0.0202 bu	ppm	0.0012	6.04	-40.1400	-0.0202 bu (ppm)
K (766.491 nm)	425.1000 b	ppm	1.6370	0.38	413700.0000	425.1000 b (ppm)
Li (670.783 nm)	0.1621 b	ppm	0.0015	0.94	12580.0000	0.1621 b (ppm)
Mg (279.078 nm)	978.3000 bo	ppm	23.3000	2.38	2286000.0000	978.3000 bo (ppm)
Mn (259.372 nm)	-0.0374 bu	ppm	0.0002	0.65	-91.6900	-0.0374 bu (ppm)
Mo (204.598 nm)	0.0219	ppm	0.0031	14.24	69.4500	0.0219 (ppm)
Na (589.592 nm)	####	ppm	N/A	N/A	####	#### (ppm)
Ni (231.604 nm)	-0.0005 bu	ppm	0.0003	65.06	-29.6700	-0.0005 bu (ppm)
P (213.618 nm)	0.0414 b	ppm	0.0090	21.74	28.4900	0.0414 b (ppm)
Pb (220.353 nm)	-0.0195 bu	ppm	0.0027	14.00	-24.5500	-0.0195 bu (ppm)
Sb (206.834 nm)	-0.0034 bu	ppm	0.0051	> 100.00	-6.9160	-0.0034 bu (ppm)
Se (196.026 nm)	0.0081 b	ppm	0.0004	5.49	1.7250	0.0081 b (ppm)
Si (251.611 nm)	0.2732 b	ppm	0.0003	0.12	664.5000	0.2732 b (ppm)
Sn (189.925 nm)	-0.0231 bu	ppm	0.0005	2.36	-11.4200	-0.0231 bu (ppm)
Sr (421.552 nm)	7.1070	ppm	0.0387	0.54	2356000.0000	7.1070 (ppm)
Ti (336.122 nm)	0.0015	ppm	0.0005	32.48	-291.1000	0.0015 (ppm)
Tl (190.794 nm)	0.0148 b	ppm	0.0038	25.85	20.4800	0.0148 b (ppm)
V (292.401 nm)	-0.0104 bu	ppm	0.0002	1.59	255.7000	-0.0104 bu (ppm)
W (207.912 nm)	0.0000 bu	ppm	0.0017	> 100.00	-11.2600	0.0000 bu (ppm)
Zn (202.548 nm)	-0.0802 bu	ppm	0.0002	0.20	-769.3000	-0.0802 bu (ppm)
Zr (343.823 nm)	0.0060	ppm	0.0005	7.90	617.4000	0.0060 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.6964	241000.0000	0.0008	0.11
Y_R 371.029	0.8505	41320.0000	0.0176	2.07

Sample Name: xRINSE 5993206

Date: 12/10/2019 6:29:37 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001	ppm	0.0000	17.37	-64.6200	0.0001 (ppm)
Al (396.152 nm)	-0.0001 u	ppm	0.0005	> 100.00	-326.2000	-0.0001 u (ppm)
As (188.980 nm)	0.0019 u	ppm	0.0064	> 100.00	2.6180	0.0019 u (ppm)
B (249.678 nm)	0.0046	ppm	0.0006	12.18	30.5200	0.0046 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	79.81	36.3600	-0.0001 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	8.20	33.6800	0.0001 (ppm)
Ca (422.673 nm)	0.1100 Z	ppm	0.0011	1.01	532.3000 Z	0.1100 Z (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	-3.5400	0.0000 u (ppm)
Co (228.615 nm)	0.0002 u	ppm	0.0006	> 100.00	-10.5400	0.0002 u (ppm)
Cr (205.560 nm)	0.0001	ppm	0.0000	48.03	1.9850	0.0001 (ppm)
Cu (324.754 nm)	-0.0001 u	ppm	0.0002	> 100.00	40.2200	-0.0001 u (ppm)
Fe (238.204 nm)	0.0010 u	ppm	0.0026	> 100.00	-47.5600	0.0010 u (ppm)
K (766.491 nm)	0.3172	ppm	0.0418	13.19	230.4000	0.3172 (ppm)
Li (670.783 nm)	0.0014 u	ppm	0.0022	> 100.00	131.1000	0.0014 u (ppm)
Mg (279.078 nm)	0.3893 Z	ppm	0.0124	3.18	920.3000 Z	0.3893 Z (ppm)
Mn (259.372 nm)	0.0001	ppm	0.0000	3.07	54.9400	0.0001 (ppm)
Mo (204.598 nm)	0.0030	ppm	0.0009	30.59	5.9860	0.0030 (ppm)
Na (589.592 nm)	3.5530 Z	ppm	0.0713	2.01	20320.0000 Z	3.5530 Z (ppm)
Ni (231.604 nm)	0.0016	ppm	0.0004	24.56	-9.4520	0.0016 (ppm)
P (213.618 nm)	-0.0008 u	ppm	0.0079	> 100.00	-0.2539	-0.0008 u (ppm)
Pb (220.353 nm)	0.0012	ppm	0.0012	94.59	-9.1720	0.0012 (ppm)
Sb (206.834 nm)	0.0023	ppm	0.0016	68.54	-1.4750	0.0023 (ppm)
Se (196.026 nm)	0.0001 u	ppm	0.0013	> 100.00	-0.6122	0.0001 u (ppm)
Si (251.611 nm)	0.0050	ppm	0.0015	30.40	20.7500	0.0050 (ppm)
Sn (189.925 nm)	-0.0062 u	ppm	0.0009	14.49	-4.4960	-0.0062 u (ppm)
Sr (421.552 nm)	0.0023	ppm	0.0000	0.21	752.7000	0.0023 (ppm)
Ti (336.122 nm)	0.0003	ppm	0.0002	54.66	-103.3000	0.0003 (ppm)
Tl (190.794 nm)	0.0030	ppm	0.0035	> 100.00	7.2560	0.0030 (ppm)
V (292.401 nm)	0.0000 u	ppm	0.0001	> 100.00	86.2100	0.0000 u (ppm)
W (207.912 nm)	0.0007	ppm	0.0009	> 100.00	-3.3130	0.0007 (ppm)
Zn (202.548 nm)	0.0010	ppm	0.0000	4.83	25.3300	0.0010 (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0000	> 100.00	104.6000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9934	343800.0000	0.0043	0.44
Y_R 371.029	0.9886	48030.0000	0.0009	0.09

Sample Name: CCV 5993196

Date: 12/10/2019 6:36:51 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4951	ppm	0.0021	0.43	18120.0000	0.4951 (ppm)
Al (396.152 nm)	0.9873	ppm	0.0060	0.61	25050.0000	0.9873 (ppm)
As (188.980 nm)	0.9828	ppm	0.0066	0.68	518.2000	0.9828 (ppm)
B (249.678 nm)	0.9855	ppm	0.0030	0.30	9515.0000	0.9855 (ppm)
Ba (233.527 nm)	0.9898	ppm	0.0044	0.45	74780.0000	0.9898 (ppm)
Be (234.861 nm)	0.9858	ppm	0.0028	0.29	146400.0000	0.9858 (ppm)
Ca (422.673 nm)	4.9770	ppm	0.0277	0.56	18810.0000	4.9770 (ppm)
Cd (214.439 nm)	0.9934	ppm	0.0035	0.35	18560.0000	0.9934 (ppm)
Co (228.615 nm)	0.9977	ppm	0.0044	0.44	11240.0000	0.9977 (ppm)
Cr (205.560 nm)	0.9944	ppm	0.0000	0.00	3839.0000	0.9944 (ppm)
Cu (324.754 nm)	0.9978	ppm	0.0005	0.05	35360.0000	0.9978 (ppm)
Fe (238.204 nm)	0.9916	ppm	0.0040	0.41	2406.0000	0.9916 (ppm)
K (766.491 nm)	10.1400	ppm	0.0500	0.49	9792.0000	10.1400 (ppm)
Li (670.783 nm)	0.9901	ppm	0.0064	0.65	54550.0000	0.9901 (ppm)
Mg (279.078 nm)	5.1290	ppm	0.0238	0.46	11990.0000	5.1290 (ppm)
Mn (259.372 nm)	0.9911	ppm	0.0028	0.29	83730.0000	0.9911 (ppm)
Mo (204.598 nm)	1.0100	ppm	0.0026	0.25	3391.0000	1.0100 (ppm)
Na (589.592 nm)	11.2400 Q	ppm	0.0506	0.45	62390.0000 Q	11.2400 Q (ppm)
Ni (231.604 nm)	0.9956	ppm	0.0028	0.28	3860.0000	0.9956 (ppm)
P (213.618 nm)	0.9964	ppm	0.0075	0.76	664.1000	0.9964 (ppm)
Pb (220.353 nm)	0.9908	ppm	0.0008	0.08	1719.0000	0.9908 (ppm)
Sb (206.834 nm)	0.9994	ppm	0.0211	2.11	778.5000	0.9994 (ppm)
Se (196.026 nm)	0.9775	ppm	0.0057	0.58	552.0000	0.9775 (ppm)
Si (251.611 nm)	5.0120	ppm	0.0450	0.90	10160.0000	5.0120 (ppm)
Sn (189.925 nm)	0.9924	ppm	0.0078	0.79	489.6000	0.9924 (ppm)
Sr (421.552 nm)	0.9901	ppm	0.0035	0.36	327700.0000	0.9901 (ppm)
Ti (336.122 nm)	0.9965	ppm	0.0080	0.81	94260.0000	0.9965 (ppm)
Tl (190.794 nm)	0.9963	ppm	0.0045	0.45	881.5000	0.9963 (ppm)
V (292.401 nm)	0.9944	ppm	0.0038	0.38	26410.0000	0.9944 (ppm)
W (207.912 nm)	0.9950	ppm	0.0034	0.34	1433.0000	0.9950 (ppm)
Zn (202.548 nm)	0.9919	ppm	0.0029	0.30	12890.0000	0.9919 (ppm)
Zr (343.823 nm)	0.9955	ppm	0.0075	0.76	75510.0000	0.9955 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9855	341100.0000	0.0022	0.22
Y_R 371.029	0.9876	47980.0000	0.0046	0.46

Sample Name: CCB 5993195

Date: 12/10/2019 6:40:09 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0000	11.43	-76.8000	-0.0002 u (ppm)
Al (396.152 nm)	-0.0010 u	ppm	0.0001	12.04	-348.7000	-0.0010 u (ppm)
As (188.980 nm)	-0.0013 u	ppm	0.0063	> 100.00	0.9212	-0.0013 u (ppm)
B (249.678 nm)	0.0020	ppm	0.0007	36.84	5.2840	0.0020 (ppm)
Ba (233.527 nm)	0.0001	ppm	0.0000	8.58	51.3800	0.0001 (ppm)
Be (234.861 nm)	0.0004	ppm	0.0001	18.49	74.7500	0.0004 (ppm)
Ca (422.673 nm)	0.0063	ppm	0.0015	24.55	142.5000	0.0063 (ppm)
Cd (214.439 nm)	0.0002 u	ppm	0.0005	> 100.00	0.5696	0.0002 u (ppm)
Co (228.615 nm)	0.0004 u	ppm	0.0010	> 100.00	-8.7890	0.0004 u (ppm)
Cr (205.560 nm)	0.0005	ppm	0.0002	33.29	3.8070	0.0005 (ppm)
Cu (324.754 nm)	0.0001 u	ppm	0.0003	> 100.00	47.0800	0.0001 u (ppm)
Fe (238.204 nm)	0.0029	ppm	0.0008	26.92	-42.8600	0.0029 (ppm)
K (766.491 nm)	0.1254	ppm	0.0099	7.90	43.8200	0.1254 (ppm)
Li (670.783 nm)	0.0013	ppm	0.0007	51.65	127.1000	0.0013 (ppm)
Mg (279.078 nm)	0.0608 Z	ppm	0.0032	5.28	152.8000 Z	0.0608 Z (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0002	60.78	68.6200	0.0003 (ppm)
Mo (204.598 nm)	0.0041	ppm	0.0021	51.32	9.6420	0.0041 (ppm)
Na (589.592 nm)	0.8784 Z	ppm	0.0032	0.37	5712.0000 Z	0.8784 Z (ppm)
Ni (231.604 nm)	0.0025	ppm	0.0001	4.34	-5.8000	0.0025 (ppm)
P (213.618 nm)	0.0018	ppm	0.0022	> 100.00	1.5300	0.0018 (ppm)
Pb (220.353 nm)	-0.0033 u	ppm	0.0009	27.56	-17.1200	-0.0033 u (ppm)
Sb (206.834 nm)	0.0101 Z	ppm	0.0006	5.91	4.6660 Z	0.0101 Z (ppm)
Se (196.026 nm)	0.0026 u	ppm	0.0056	> 100.00	0.7824	0.0026 u (ppm)
Si (251.611 nm)	0.0045	ppm	0.0005	11.60	19.8900	0.0045 (ppm)
Sn (189.925 nm)	0.0046	ppm	0.0003	6.87	0.8486	0.0046 (ppm)
Sr (421.552 nm)	0.0005	ppm	0.0001	20.53	128.8000	0.0005 (ppm)
Ti (336.122 nm)	0.0017	ppm	0.0004	22.99	22.4300	0.0017 (ppm)
Tl (190.794 nm)	0.0063	ppm	0.0028	44.22	10.1600	0.0063 (ppm)
V (292.401 nm)	0.0004	ppm	0.0002	45.38	96.1900	0.0004 (ppm)
W (207.912 nm)	0.0049	ppm	0.0028	56.31	2.7240	0.0049 (ppm)
Zn (202.548 nm)	0.0006	ppm	0.0002	27.44	20.8300	0.0006 (ppm)
Zr (343.823 nm)	0.0001 u	ppm	0.0002	> 100.00	113.7000	0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9854	341100.0000	0.0027	0.28
Y_R 371.029	0.9910	48150.0000	0.0002	0.02

Sample Name: 440-256572-A-1-D@2

Date: 12/10/2019 6:43:29 PM Rack:Tube: 3:34

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0031 u	ppm	0.0004	12.50	-195.3000	-0.0031 u (ppm)
Al (396.152 nm)	0.0091	ppm	0.0005	5.55	548.8000	0.0091 (ppm)
As (188.980 nm)	-0.0075 u	ppm	0.0103	> 100.00	-3.1890	-0.0075 u (ppm)
B (249.678 nm)	2.5630	ppm	0.0547	2.14	25010.0000	2.5630 (ppm)
Ba (233.527 nm)	0.0030	ppm	0.0005	15.81	345.3000	0.0030 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0000	5.57	46.4600	0.0002 (ppm)
Ca (422.673 nm)	185.0000	ppm	0.1399	0.08	695200.0000	185.0000 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0004	> 100.00	-2.6940	0.0000 u (ppm)
Co (228.615 nm)	0.0000	ppm	0.0000	> 100.00	0.8610	0.0000 (ppm)
Cr (205.560 nm)	-0.0015 u	ppm	0.0003	18.50	-1.8160	-0.0015 u (ppm)
Cu (324.754 nm)	-0.0006 u	ppm	0.0003	46.08	-68.6700	-0.0006 u (ppm)
Fe (238.204 nm)	-0.0129 u	ppm	0.0008	6.10	-50.7700	-0.0129 u (ppm)
K (766.491 nm)	194.0000	ppm	0.5620	0.29	188800.0000	194.0000 (ppm)
Li (670.783 nm)	0.0689	ppm	0.0017	2.48	5702.0000	0.0689 (ppm)
Mg (279.078 nm)	512.8000	ppm	7.2500	1.41	1198000.0000	512.8000 (ppm)
Mn (259.372 nm)	-0.0177 u	ppm	0.0002	1.08	124.6000	-0.0177 u (ppm)
Mo (204.598 nm)	0.0063	ppm	0.0021	32.78	17.1000	0.0063 (ppm)
Na (589.592 nm)	3425.0000 o	ppm	31.8000	0.93	18710000.0000	3425.0000 o (ppm)
Ni (231.604 nm)	-0.0015 u	ppm	0.0005	34.50	-27.7500	-0.0015 u (ppm)
P (213.618 nm)	0.0241	ppm	0.0041	17.12	17.0000	0.0241 (ppm)
Pb (220.353 nm)	-0.0096 u	ppm	0.0015	15.17	-17.3900	-0.0096 u (ppm)
Sb (206.834 nm)	0.0077	ppm	0.0021	27.34	2.3160	0.0077 (ppm)
Se (196.026 nm)	0.0157	ppm	0.0088	56.25	7.0330	0.0157 (ppm)
Si (251.611 nm)	0.1277	ppm	0.0028	2.22	320.5000	0.1277 (ppm)
Sn (189.925 nm)	-0.0136 u	ppm	0.0035	25.90	-7.4250	-0.0136 u (ppm)
Sr (421.552 nm)	3.3430	ppm	0.0069	0.21	1108000.0000	3.3430 (ppm)
Ti (336.122 nm)	-0.0006 u	ppm	0.0002	35.24	-331.9000	-0.0006 u (ppm)
Tl (190.794 nm)	0.0126	ppm	0.0032	25.20	17.3800	0.0126 (ppm)
V (292.401 nm)	-0.0037 u	ppm	0.0002	5.61	202.1000	-0.0037 u (ppm)
W (207.912 nm)	-0.0104 u	ppm	0.0024	22.95	-22.5000	-0.0104 u (ppm)
Zn (202.548 nm)	-0.0391 u	ppm	0.0008	2.13	-353.5000	-0.0391 u (ppm)
Zr (343.823 nm)	0.0011	ppm	0.0001	10.86	216.6000	0.0011 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7789	269600.0000	0.0047	0.60
Y_R 371.029	0.8965	43560.0000	0.0115	1.28

Sample Name: 440-256572-A-1-E MS@2

Date: 12/10/2019 6:46:49 PM Rack:Tube: 3:35

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1291	ppm	0.0006	0.50	4649.0000	0.1291 (ppm)
Al (396.152 nm)	0.3869	ppm	0.0011	0.29	10100.0000	0.3869 (ppm)
As (188.980 nm)	0.2525	ppm	0.0048	1.91	133.7000	0.2525 (ppm)
B (249.678 nm)	2.7700	ppm	0.0114	0.41	27010.0000	2.7700 (ppm)
Ba (233.527 nm)	0.2021	ppm	0.0029	1.42	15380.0000	0.2021 (ppm)
Be (234.861 nm)	0.2482	ppm	0.0027	1.07	36890.0000	0.2482 (ppm)
Ca (422.673 nm)	182.5000	ppm	0.3046	0.17	685800.0000	182.5000 (ppm)
Cd (214.439 nm)	0.2144	ppm	0.0019	0.87	4004.0000	0.2144 (ppm)
Co (228.615 nm)	0.2203	ppm	0.0000	0.00	2485.0000	0.2203 (ppm)
Cr (205.560 nm)	0.2283	ppm	0.0016	0.71	885.0000	0.2283 (ppm)
Cu (324.754 nm)	0.2726	ppm	0.0008	0.31	9605.0000	0.2726 (ppm)
Fe (238.204 nm)	0.2128	ppm	0.0003	0.14	508.0000	0.2128 (ppm)
K (766.491 nm)	193.3000	ppm	0.8862	0.46	188100.0000	193.3000 (ppm)
Li (670.783 nm)	0.3193	ppm	0.0010	0.33	19490.0000	0.3193 (ppm)
Mg (279.078 nm)	513.0000	ppm	8.7150	1.70	1199000.0000	513.0000 (ppm)
Mn (259.372 nm)	0.2085	ppm	0.0008	0.40	19220.0000	0.2085 (ppm)
Mo (204.598 nm)	0.2360	ppm	0.0021	0.90	789.6000	0.2360 (ppm)
Na (589.592 nm)	3391.0000 o	ppm	25.6600	0.76	18530000.0000	3391.0000 o (ppm)
Ni (231.604 nm)	0.2130	ppm	0.0007	0.31	807.3000	0.2130 (ppm)
P (213.618 nm)	0.2783	ppm	0.0033	1.19	186.3000	0.2783 (ppm)
Pb (220.353 nm)	0.2005	ppm	0.0059	2.96	349.5000	0.2005 (ppm)
Sb (206.834 nm)	0.2592	ppm	0.0061	2.35	199.2000	0.2592 (ppm)
Se (196.026 nm)	0.2273	ppm	0.0076	3.34	126.8000	0.2273 (ppm)
Si (251.611 nm)	1.4350	ppm	0.0151	1.06	2962.0000	1.4350 (ppm)
Sn (189.925 nm)	0.1931	ppm	0.0024	1.24	94.8400	0.1931 (ppm)
Sr (421.552 nm)	3.5010	ppm	0.0073	0.21	1160000.0000	3.5010 (ppm)
Ti (336.122 nm)	0.2322	ppm	0.0019	0.83	21730.0000	0.2322 (ppm)
Tl (190.794 nm)	0.1739	ppm	0.0130	7.47	157.4000	0.1739 (ppm)
V (292.401 nm)	0.2361	ppm	0.0015	0.61	6549.0000	0.2361 (ppm)
W (207.912 nm)	0.2099	ppm	0.0041	1.94	295.4000	0.2099 (ppm)
Zn (202.548 nm)	0.1681	ppm	0.0012	0.73	2342.0000	0.1681 (ppm)
Zr (343.823 nm)	0.1598	ppm	0.0017	1.04	12240.0000	0.1598 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7826	270900.0000	0.0029	0.38
Y_R 371.029	0.8859	43040.0000	0.0141	1.59

Sample Name: 440-256572-A-1-F MSD@2

Date: 12/10/2019 6:50:09 PM Rack:Tube: 3:36

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1311	ppm	0.0009	0.72	4729.0000	0.1311 (ppm)
Al (396.152 nm)	0.3420	ppm	0.0007	0.22	9015.0000	0.3420 (ppm)
As (188.980 nm)	0.2505	ppm	0.0083	3.30	132.6000	0.2505 (ppm)
B (249.678 nm)	2.7770	ppm	0.0129	0.46	27080.0000	2.7770 (ppm)
Ba (233.527 nm)	0.2099	ppm	0.0010	0.47	15970.0000	0.2099 (ppm)
Be (234.861 nm)	0.2511	ppm	0.0008	0.32	37320.0000	0.2511 (ppm)
Ca (422.673 nm)	182.9000	ppm	0.5518	0.30	687400.0000	182.9000 (ppm)
Cd (214.439 nm)	0.2113	ppm	0.0040	1.87	3946.0000	0.2113 (ppm)
Co (228.615 nm)	0.2167	ppm	0.0077	3.57	2445.0000	0.2167 (ppm)
Cr (205.560 nm)	0.2319	ppm	0.0038	1.63	898.8000	0.2319 (ppm)
Cu (324.754 nm)	0.2768	ppm	0.0007	0.27	9756.0000	0.2768 (ppm)
Fe (238.204 nm)	0.2079	ppm	0.0047	2.27	496.7000	0.2079 (ppm)
K (766.491 nm)	192.7000	ppm	0.5683	0.29	187500.0000	192.7000 (ppm)
Li (670.783 nm)	0.3200	ppm	0.0011	0.36	19570.0000	0.3200 (ppm)
Mg (279.078 nm)	525.3000	ppm	2.7140	0.52	1228000.0000	525.3000 (ppm)
Mn (259.372 nm)	0.2113	ppm	0.0008	0.40	19500.0000	0.2113 (ppm)
Mo (204.598 nm)	0.2437	ppm	0.0030	1.25	815.3000	0.2437 (ppm)
Na (589.592 nm)	3423.0000 o	ppm	7.2670	0.21	18700000.0000	3423.0000 o (ppm)
Ni (231.604 nm)	0.2168	ppm	0.0023	1.07	822.3000	0.2168 (ppm)
P (213.618 nm)	0.2920	ppm	0.0052	1.79	195.9000	0.2920 (ppm)
Pb (220.353 nm)	0.2089	ppm	0.0092	4.41	364.4000	0.2089 (ppm)
Sb (206.834 nm)	0.2559	ppm	0.0078	3.06	196.6000	0.2559 (ppm)
Se (196.026 nm)	0.2352	ppm	0.0079	3.35	131.2000	0.2352 (ppm)
Si (251.611 nm)	1.4470	ppm	0.0106	0.73	2987.0000	1.4470 (ppm)
Sn (189.925 nm)	0.1998	ppm	0.0063	3.14	98.2200	0.1998 (ppm)
Sr (421.552 nm)	3.5100	ppm	0.0113	0.32	1164000.0000	3.5100 (ppm)
Ti (336.122 nm)	0.2384	ppm	0.0020	0.84	22310.0000	0.2384 (ppm)
Tl (190.794 nm)	0.1778	ppm	0.0052	2.94	160.8000	0.1778 (ppm)
V (292.401 nm)	0.2394	ppm	0.0012	0.49	6636.0000	0.2394 (ppm)
W (207.912 nm)	0.2146	ppm	0.0056	2.59	302.2000	0.2146 (ppm)
Zn (202.548 nm)	0.1706	ppm	0.0011	0.63	2380.0000	0.1706 (ppm)
Zr (343.823 nm)	0.1989	ppm	0.0027	1.37	15200.0000	0.1989 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7841	271400.0000	0.0051	0.65
Y_R 371.029	0.8679	42170.0000	0.0045	0.52

Sample Name: 440-256572-A-2-B@2

Date: 12/10/2019 6:53:29 PM Rack:Tube: 3:37

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0030 u	ppm	0.0004	14.44	-192.0000	-0.0030 u (ppm)
Al (396.152 nm)	0.0135	ppm	0.0005	3.72	682.3000	0.0135 (ppm)
As (188.980 nm)	0.0057	ppm	0.0074	> 100.00	3.8420	0.0057 (ppm)
B (249.678 nm)	2.4410	ppm	0.0150	0.61	23820.0000	2.4410 (ppm)
Ba (233.527 nm)	0.0029	ppm	0.0004	14.19	341.3000	0.0029 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0002	71.74	59.4400	0.0003 (ppm)
Ca (422.673 nm)	187.7000	ppm	0.2604	0.14	705300.0000	187.7000 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0003	> 100.00	-6.4100	-0.0002 u (ppm)
Co (228.615 nm)	0.0002	ppm	0.0002	> 100.00	3.7540	0.0002 (ppm)
Cr (205.560 nm)	0.0001 u	ppm	0.0007	> 100.00	4.1950	0.0001 u (ppm)
Cu (324.754 nm)	-0.0010 u	ppm	0.0003	33.70	-81.6900	-0.0010 u (ppm)
Fe (238.204 nm)	-0.0163 u	ppm	0.0050	30.43	-57.8200	-0.0163 u (ppm)
K (766.491 nm)	197.3000	ppm	0.8464	0.43	192000.0000	197.3000 (ppm)
Li (670.783 nm)	0.0693	ppm	0.0010	1.48	5795.0000	0.0693 (ppm)
Mg (279.078 nm)	534.2000	ppm	4.2920	0.80	1248000.0000	534.2000 (ppm)
Mn (259.372 nm)	-0.0204 u	ppm	0.0001	0.29	-30.9200	-0.0204 u (ppm)
Mo (204.598 nm)	0.0066	ppm	0.0010	15.00	18.0900	0.0066 (ppm)
Na (589.592 nm)	3486.0000 o	ppm	13.7200	0.39	19050000.0000	3486.0000 o (ppm)
Ni (231.604 nm)	-0.0013 u	ppm	0.0017	> 100.00	-26.9700	-0.0013 u (ppm)
P (213.618 nm)	0.0085	ppm	0.0065	76.12	6.0500	0.0085 (ppm)
Pb (220.353 nm)	-0.0083 u	ppm	0.0009	10.49	-14.5900	-0.0083 u (ppm)
Sb (206.834 nm)	-0.0024 u	ppm	0.0040	> 100.00	-5.7040	-0.0024 u (ppm)
Se (196.026 nm)	0.0088	ppm	0.0074	84.08	3.1830	0.0088 (ppm)
Si (251.611 nm)	0.1302	ppm	0.0028	2.18	327.9000	0.1302 (ppm)
Sn (189.925 nm)	-0.0165 u	ppm	0.0023	14.15	-8.7990	-0.0165 u (ppm)
Sr (421.552 nm)	3.3880	ppm	0.0088	0.26	1123000.0000	3.3880 (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0001	> 100.00	-284.1000	-0.0001 u (ppm)
Tl (190.794 nm)	0.0115	ppm	0.0039	34.37	16.4100	0.0115 (ppm)
V (292.401 nm)	-0.0043 u	ppm	0.0001	1.85	190.1000	-0.0043 u (ppm)
W (207.912 nm)	-0.0101 u	ppm	0.0018	17.65	-22.1400	-0.0101 u (ppm)
Zn (202.548 nm)	-0.0404 u	ppm	0.0003	0.71	-363.6000	-0.0404 u (ppm)
Zr (343.823 nm)	0.0030	ppm	0.0002	6.70	359.6000	0.0030 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029

Label	Internal Standard
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7762	268700.0000	0.0057	0.73
Y_R 371.029	0.8684	42190.0000	0.0058	0.67

Sample Name: 440-256572-A-3-B@2

Date: 12/10/2019 6:56:49 PM Rack:Tube: 3:38

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0033 u	ppm	0.0002	7.33	-202.3000	-0.0033 u (ppm)
Al (396.152 nm)	0.0083	ppm	0.0009	10.58	550.7000	0.0083 (ppm)
As (188.980 nm)	-0.0084 u	ppm	0.0126	> 100.00	-3.9730	-0.0084 u (ppm)
B (249.678 nm)	2.2080	ppm	0.0105	0.47	21550.0000	2.2080 (ppm)
Ba (233.527 nm)	0.0059	ppm	0.0005	7.87	565.2000	0.0059 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	0.80	31.2700	0.0001 (ppm)
Ca (422.673 nm)	189.1000	ppm	0.2876	0.15	710600.0000	189.1000 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0005	> 100.00	-1.1650	0.0001 u (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0015	> 100.00	-0.5017	-0.0001 u (ppm)
Cr (205.560 nm)	0.0426	ppm	0.0014	3.23	168.5000	0.0426 (ppm)
Cu (324.754 nm)	-0.0021 u	ppm	0.0004	19.01	-122.0000	-0.0021 u (ppm)
Fe (238.204 nm)	-0.0192 u	ppm	0.0047	24.67	-65.3500	-0.0192 u (ppm)
K (766.491 nm)	197.9000	ppm	0.1830	0.09	192500.0000	197.9000 (ppm)
Li (670.783 nm)	0.0679	ppm	0.0008	1.22	5710.0000	0.0679 (ppm)
Mg (279.078 nm)	530.3000	ppm	4.1680	0.79	1239000.0000	530.3000 (ppm)
Mn (259.372 nm)	-0.0204 u	ppm	0.0001	0.67	-43.0100	-0.0204 u (ppm)
Mo (204.598 nm)	0.0071	ppm	0.0018	25.44	19.6800	0.0071 (ppm)
Na (589.592 nm)	3476.0000 o	ppm	20.9800	0.60	18990000.0000	3476.0000 o (ppm)
Ni (231.604 nm)	-0.0017 u	ppm	0.0013	73.64	-28.6500	-0.0017 u (ppm)
P (213.618 nm)	0.1167	ppm	0.0019	1.62	82.5700	0.1167 (ppm)
Pb (220.353 nm)	-0.0081 u	ppm	0.0044	54.48	-14.3300	-0.0081 u (ppm)
Sb (206.834 nm)	-0.0008 u	ppm	0.0099	> 100.00	-4.1020	-0.0008 u (ppm)
Se (196.026 nm)	0.0168	ppm	0.0017	10.32	7.5910	0.0168 (ppm)
Si (251.611 nm)	1.7380	ppm	0.0026	0.15	3534.0000	1.7380 (ppm)
Sn (189.925 nm)	-0.0175 u	ppm	0.0153	86.94	-9.3340	-0.0175 u (ppm)
Sr (421.552 nm)	3.4110	ppm	0.0034	0.10	1131000.0000	3.4110 (ppm)
Ti (336.122 nm)	-0.0007 u	ppm	0.0001	13.33	-343.4000	-0.0007 u (ppm)
Tl (190.794 nm)	0.0064	ppm	0.0068	> 100.00	11.7500	0.0064 (ppm)
V (292.401 nm)	-0.0031 u	ppm	0.0007	23.59	223.0000	-0.0031 u (ppm)
W (207.912 nm)	-0.0135 u	ppm	0.0043	32.00	-27.0900	-0.0135 u (ppm)
Zn (202.548 nm)	-0.0448 u	ppm	0.0000	0.00	-422.9000	-0.0448 u (ppm)
Zr (343.823 nm)	0.0034	ppm	0.0003	9.80	391.3000	0.0034 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7745	268100.0000	0.0002	0.02
Y_R 371.029	0.8773	42620.0000	0.0098	1.12

Sample Name: 440-256572-A-4-B@2

Date: 12/10/2019 7:00:09 PM Rack:Tube: 3:39

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0034 u	ppm	0.0000	1.35	-207.5000	-0.0034 u (ppm)
Al (396.152 nm)	0.0076	ppm	0.0001	0.81	621.5000	0.0076 (ppm)
As (188.980 nm)	0.0030 u	ppm	0.0083	> 100.00	2.0720	0.0030 u (ppm)
B (249.678 nm)	2.3540	ppm	0.0121	0.51	22970.0000	2.3540 (ppm)
Ba (233.527 nm)	0.0117	ppm	0.0004	3.77	1015.0000	0.0117 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	64.62	27.6300	0.0000 (ppm)
Ca (422.673 nm)	213.1000	ppm	0.0944	0.04	800700.0000	213.1000 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0000	35.04	-0.9718	0.0001 (ppm)
Co (228.615 nm)	0.0009	ppm	0.0002	24.58	13.2000	0.0009 (ppm)
Cr (205.560 nm)	0.0306	ppm	0.0002	0.61	122.4000	0.0306 (ppm)
Cu (324.754 nm)	-0.0024 u	ppm	0.0006	24.07	-144.6000	-0.0024 u (ppm)
Fe (238.204 nm)	-0.0173 u	ppm	0.0049	28.28	-56.3600	-0.0173 u (ppm)
K (766.491 nm)	223.4000	ppm	0.1207	0.05	217400.0000	223.4000 (ppm)
Li (670.783 nm)	0.0782	ppm	0.0004	0.55	6527.0000	0.0782 (ppm)
Mg (279.078 nm)	599.7000 o	ppm	7.2410	1.21	1401000.0000	599.7000 o (ppm)
Mn (259.372 nm)	-0.0232 u	ppm	0.0000	0.18	-70.1700	-0.0232 u (ppm)
Mo (204.598 nm)	0.0084	ppm	0.0023	27.11	24.1800	0.0084 (ppm)
Na (589.592 nm)	3774.0000 o	ppm	22.3500	0.59	20620000.0000	3774.0000 o (ppm)
Ni (231.604 nm)	-0.0024 u	ppm	0.0004	18.27	-32.1400	-0.0024 u (ppm)
P (213.618 nm)	0.0414	ppm	0.0034	8.26	29.2500	0.0414 (ppm)
Pb (220.353 nm)	-0.0084 u	ppm	0.0045	53.51	-13.4100	-0.0084 u (ppm)
Sb (206.834 nm)	-0.0027 u	ppm	0.0097	> 100.00	-5.7500	-0.0027 u (ppm)
Se (196.026 nm)	0.0068	ppm	0.0028	41.17	1.9150	0.0068 (ppm)
Si (251.611 nm)	1.7810	ppm	0.0023	0.13	3628.0000	1.7810 (ppm)
Sn (189.925 nm)	-0.0187 u	ppm	0.0022	11.77	-9.7870	-0.0187 u (ppm)
Sr (421.552 nm)	3.8410	ppm	0.0075	0.20	1273000.0000	3.8410 (ppm)
Ti (336.122 nm)	-0.0011 u	ppm	0.0003	31.37	-398.1000	-0.0011 u (ppm)
Tl (190.794 nm)	0.0089	ppm	0.0019	20.82	14.2700	0.0089 (ppm)
V (292.401 nm)	-0.0049 u	ppm	0.0002	3.39	202.8000	-0.0049 u (ppm)
W (207.912 nm)	-0.0066 u	ppm	0.0005	7.78	-17.7200	-0.0066 u (ppm)
Zn (202.548 nm)	-0.0513 u	ppm	0.0005	1.06	-488.0000	-0.0513 u (ppm)
Zr (343.823 nm)	0.0020	ppm	0.0002	11.07	289.4000	0.0020 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7669	265400.0000	0.0087	1.13
Y_R 371.029	0.8588	41720.0000	0.0155	1.81

Sample Name: 440-256572-A-5-B@2

Date: 12/10/2019 7:03:29 PM Rack:Tube: 3:40

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0029 u	ppm	0.0001	3.61	-189.5000	-0.0029 u (ppm)
Al (396.152 nm)	0.0062	ppm	0.0002	3.90	495.8000	0.0062 (ppm)
As (188.980 nm)	0.0035	ppm	0.0023	65.72	2.6880	0.0035 (ppm)
B (249.678 nm)	2.5790	ppm	0.0036	0.14	25170.0000	2.5790 (ppm)
Ba (233.527 nm)	0.0048	ppm	0.0003	7.06	484.0000	0.0048 (ppm)
Be (234.861 nm)	0.0001 u	ppm	0.0001	> 100.00	31.4700	0.0001 u (ppm)
Ca (422.673 nm)	186.4000	ppm	1.1700	0.63	700400.0000	186.4000 (ppm)
Cd (214.439 nm)	-0.0003 u	ppm	0.0000	8.30	-8.7360	-0.0003 u (ppm)
Co (228.615 nm)	0.0006	ppm	0.0000	5.62	7.4760	0.0006 (ppm)
Cr (205.560 nm)	-0.0004 u	ppm	0.0005	> 100.00	2.4550	-0.0004 u (ppm)
Cu (324.754 nm)	-0.0025 u	ppm	0.0003	13.81	-133.0000	-0.0025 u (ppm)
Fe (238.204 nm)	-0.0185 u	ppm	0.0036	19.67	-63.4900	-0.0185 u (ppm)
K (766.491 nm)	196.8000	ppm	0.8501	0.43	191500.0000	196.8000 (ppm)
Li (670.783 nm)	0.0679	ppm	0.0007	1.09	5705.0000	0.0679 (ppm)
Mg (279.078 nm)	530.5000	ppm	1.2780	0.24	1240000.0000	530.5000 (ppm)
Mn (259.372 nm)	-0.0206 u	ppm	0.0001	0.34	-62.9900	-0.0206 u (ppm)
Mo (204.598 nm)	0.0045	ppm	0.0000	0.44	11.2000	0.0045 (ppm)
Na (589.592 nm)	3468.0000 o	ppm	19.3300	0.56	18950000.0000	3468.0000 o (ppm)
Ni (231.604 nm)	-0.0034 u	ppm	0.0006	18.07	-35.1900	-0.0034 u (ppm)
P (213.618 nm)	0.2153	ppm	0.0100	4.66	152.4000	0.2153 (ppm)
Pb (220.353 nm)	-0.0116 u	ppm	0.0055	47.24	-20.4700	-0.0116 u (ppm)
Sb (206.834 nm)	-0.0006 u	ppm	0.0032	> 100.00	-4.2450	-0.0006 u (ppm)
Se (196.026 nm)	0.0137	ppm	0.0117	84.98	5.9230	0.0137 (ppm)
Si (251.611 nm)	-0.0008 u	ppm	0.0009	> 100.00	65.9700	-0.0008 u (ppm)
Sn (189.925 nm)	-0.0121 u	ppm	0.0063	52.52	-6.6220	-0.0121 u (ppm)
Sr (421.552 nm)	3.3780	ppm	0.0185	0.55	1120000.0000	3.3780 (ppm)
Ti (336.122 nm)	-0.0011 u	ppm	0.0002	19.80	-384.1000	-0.0011 u (ppm)
Tl (190.794 nm)	0.0065	ppm	0.0052	80.20	11.9100	0.0065 (ppm)
V (292.401 nm)	-0.0038 u	ppm	0.0002	4.85	202.5000	-0.0038 u (ppm)
W (207.912 nm)	-0.0134 u	ppm	0.0015	10.89	-26.9800	-0.0134 u (ppm)
Zn (202.548 nm)	-0.0425 u	ppm	0.0008	1.96	-391.6000	-0.0425 u (ppm)
Zr (343.823 nm)	0.0017	ppm	0.0002	13.66	264.1000	0.0017 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7720	267200.0000	0.0023	0.30
Y_R 371.029	0.8710	42320.0000	0.0076	0.87

Sample Name: xRINSE 5993206

Date: 12/10/2019 7:06:47 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0002	> 100.00	-69.5000	0.0000 u (ppm)
Al (396.152 nm)	-0.0021 u	ppm	0.0012	60.51	-376.5000	-0.0021 u (ppm)
As (188.980 nm)	0.0021 u	ppm	0.0070	> 100.00	2.7180	0.0021 u (ppm)
B (249.678 nm)	0.0032	ppm	0.0008	25.98	16.7500	0.0032 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	37.44	35.8200	-0.0001 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	17.19	35.7700	0.0001 (ppm)
Ca (422.673 nm)	0.0650	ppm	0.0030	4.57	363.2000	0.0650 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0000	45.11	-4.3030	-0.0001 u (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0007	> 100.00	-14.0500	-0.0001 u (ppm)
Cr (205.560 nm)	0.0006	ppm	0.0007	> 100.00	4.0680	0.0006 (ppm)
Cu (324.754 nm)	-0.0003 u	ppm	0.0002	97.67	33.3300	-0.0003 u (ppm)
Fe (238.204 nm)	-0.0007 u	ppm	0.0010	> 100.00	-51.8300	-0.0007 u (ppm)
K (766.491 nm)	0.3464	ppm	0.0665	19.21	258.8000	0.3464 (ppm)
Li (670.783 nm)	0.0007 u	ppm	0.0017	> 100.00	95.7600	0.0007 u (ppm)
Mg (279.078 nm)	0.3225 Z	ppm	0.0595	18.45	764.3000 Z	0.3225 Z (ppm)
Mn (259.372 nm)	0.0000 u	ppm	0.0001	> 100.00	45.6300	0.0000 u (ppm)
Mo (204.598 nm)	-0.0001 u	ppm	0.0009	> 100.00	-4.5580	-0.0001 u (ppm)
Na (589.592 nm)	3.3400 Z	ppm	0.0745	2.23	19160.0000 Z	3.3400 Z (ppm)
Ni (231.604 nm)	0.0027	ppm	0.0009	32.43	-5.1560	0.0027 (ppm)
P (213.618 nm)	0.0013	ppm	0.0001	4.80	1.2300	0.0013 (ppm)
Pb (220.353 nm)	-0.0016 u	ppm	0.0002	12.85	-14.1100	-0.0016 u (ppm)
Sb (206.834 nm)	0.0090	ppm	0.0013	14.84	3.7720	0.0090 (ppm)
Se (196.026 nm)	0.0059	ppm	0.0001	1.01	2.5950	0.0059 (ppm)
Si (251.611 nm)	0.0000 u	ppm	0.0006	> 100.00	10.7700	0.0000 u (ppm)
Sn (189.925 nm)	-0.0009 u	ppm	0.0015	> 100.00	-1.8950	-0.0009 u (ppm)
Sr (421.552 nm)	0.0014	ppm	0.0000	0.95	458.4000	0.0014 (ppm)
Ti (336.122 nm)	-0.0002 u	ppm	0.0001	53.92	-157.6000	-0.0002 u (ppm)
Tl (190.794 nm)	0.0032	ppm	0.0006	17.86	7.4270	0.0032 (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0004	> 100.00	81.8900	-0.0002 u (ppm)
W (207.912 nm)	0.0012 u	ppm	0.0022	> 100.00	-2.5840	0.0012 u (ppm)
Zn (202.548 nm)	0.0004	ppm	0.0000	9.98	18.2300	0.0004 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	4.10	99.2200	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9556	330800.0000	0.0123	1.28
Y_R 371.029	0.9421	45770.0000	0.0125	1.32

Sample Name: CCV 5993196

Date: 12/10/2019 7:10:05 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4927	ppm	0.0012	0.24	18030.0000	0.4927 (ppm)
Al (396.152 nm)	0.9768	ppm	0.0024	0.25	24780.0000	0.9768 (ppm)
As (188.980 nm)	0.9889	ppm	0.0004	0.04	521.5000	0.9889 (ppm)
B (249.678 nm)	0.9768	ppm	0.0063	0.65	9431.0000	0.9768 (ppm)
Ba (233.527 nm)	0.9915	ppm	0.0092	0.92	74910.0000	0.9915 (ppm)
Be (234.861 nm)	0.9806	ppm	0.0035	0.36	145700.0000	0.9806 (ppm)
Ca (422.673 nm)	4.9410	ppm	0.0081	0.16	18680.0000	4.9410 (ppm)
Cd (214.439 nm)	0.9889	ppm	0.0032	0.33	18480.0000	0.9889 (ppm)
Co (228.615 nm)	0.9932	ppm	0.0015	0.15	11180.0000	0.9932 (ppm)
Cr (205.560 nm)	0.9888	ppm	0.0008	0.08	3818.0000	0.9888 (ppm)
Cu (324.754 nm)	0.9914	ppm	0.0007	0.07	35140.0000	0.9914 (ppm)
Fe (238.204 nm)	0.9801	ppm	0.0079	0.80	2377.0000	0.9801 (ppm)
K (766.491 nm)	10.2500	ppm	0.0405	0.40	9900.0000	10.2500 (ppm)
Li (670.783 nm)	0.9842	ppm	0.0011	0.11	54230.0000	0.9842 (ppm)
Mg (279.078 nm)	5.0750	ppm	0.0351	0.69	11870.0000	5.0750 (ppm)
Mn (259.372 nm)	0.9849	ppm	0.0018	0.19	83210.0000	0.9849 (ppm)
Mo (204.598 nm)	1.0040	ppm	0.0017	0.17	3371.0000	1.0040 (ppm)
Na (589.592 nm)	11.4500 Q	ppm	0.0092	0.08	63530.0000 Q	11.4500 Q (ppm)
Ni (231.604 nm)	0.9875	ppm	0.0045	0.45	3829.0000	0.9875 (ppm)
P (213.618 nm)	0.9854	ppm	0.0015	0.15	656.5000	0.9854 (ppm)
Pb (220.353 nm)	0.9807	ppm	0.0005	0.05	1701.0000	0.9807 (ppm)
Sb (206.834 nm)	1.0060	ppm	0.0141	1.40	783.8000	1.0060 (ppm)
Se (196.026 nm)	0.9692	ppm	0.0035	0.36	547.4000	0.9692 (ppm)
Si (251.611 nm)	4.9370	ppm	0.0431	0.87	10010.0000	4.9370 (ppm)
Sn (189.925 nm)	0.9860	ppm	0.0061	0.62	486.4000	0.9860 (ppm)
Sr (421.552 nm)	0.9805	ppm	0.0010	0.10	324500.0000	0.9805 (ppm)
Ti (336.122 nm)	0.9868	ppm	0.0065	0.66	93350.0000	0.9868 (ppm)
Tl (190.794 nm)	1.0040	ppm	0.0103	1.03	888.8000	1.0040 (ppm)
V (292.401 nm)	0.9917	ppm	0.0024	0.24	26340.0000	0.9917 (ppm)
W (207.912 nm)	0.9925	ppm	0.0054	0.55	1429.0000	0.9925 (ppm)
Zn (202.548 nm)	0.9881	ppm	0.0029	0.29	12840.0000	0.9881 (ppm)
Zr (343.823 nm)	0.9918	ppm	0.0053	0.54	75240.0000	0.9918 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
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P (213.618 nm)	Y 371.029
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Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9470	327800.0000	0.0009	0.09
Y_R 371.029	0.9419	45760.0000	0.0068	0.72

Sample Name: CCB 5993195

Date: 12/10/2019 7:13:23 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0003	> 100.00	-65.7700	0.0001 u (ppm)
Al (396.152 nm)	-0.0013 u	ppm	0.0005	34.02	-355.5000	-0.0013 u (ppm)
As (188.980 nm)	0.0003 u	ppm	0.0048	> 100.00	1.7400	0.0003 u (ppm)
B (249.678 nm)	0.0025	ppm	0.0012	49.74	9.7400	0.0025 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0001	49.34	54.0600	0.0002 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	26.34	66.7000	0.0003 (ppm)
Ca (422.673 nm)	0.0135	ppm	0.0020	14.73	169.8000	0.0135 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	40.69	0.8184	0.0002 (ppm)
Co (228.615 nm)	0.0004	ppm	0.0000	4.75	-8.7890	0.0004 (ppm)
Cr (205.560 nm)	0.0002 u	ppm	0.0004	> 100.00	2.7180	0.0002 u (ppm)
Cu (324.754 nm)	0.0001 u	ppm	0.0004	> 100.00	44.2500	0.0001 u (ppm)
Fe (238.204 nm)	0.0027	ppm	0.0012	44.89	-43.4600	0.0027 (ppm)
K (766.491 nm)	0.1956	ppm	0.0111	5.66	112.1000	0.1956 (ppm)
Li (670.783 nm)	0.0006 u	ppm	0.0015	> 100.00	85.4000	0.0006 u (ppm)
Mg (279.078 nm)	0.0498 Z	ppm	0.0006	1.22	127.1000 Z	0.0498 Z (ppm)
Mn (259.372 nm)	0.0004	ppm	0.0002	61.31	78.4500	0.0004 (ppm)
Mo (204.598 nm)	0.0054	ppm	0.0019	34.85	14.0100	0.0054 (ppm)
Na (589.592 nm)	1.2220 Z	ppm	0.0307	2.51	7591.0000 Z	1.2220 Z (ppm)
Ni (231.604 nm)	0.0030	ppm	0.0015	50.00	-4.0210	0.0030 (ppm)
P (213.618 nm)	-0.0020 u	ppm	0.0023	> 100.00	-1.2110	-0.0020 u (ppm)
Pb (220.353 nm)	-0.0015 u	ppm	0.0026	> 100.00	-13.9100	-0.0015 u (ppm)
Sb (206.834 nm)	0.0046	ppm	0.0042	92.73	0.2305	0.0046 (ppm)
Se (196.026 nm)	0.0054	ppm	0.0014	25.27	2.3660	0.0054 (ppm)
Si (251.611 nm)	-0.0008 u	ppm	0.0008	96.80	9.5620	-0.0008 u (ppm)
Sn (189.925 nm)	0.0070	ppm	0.0020	28.05	2.0240	0.0070 (ppm)
Sr (421.552 nm)	0.0005	ppm	0.0003	63.03	148.7000	0.0005 (ppm)
Ti (336.122 nm)	0.0018	ppm	0.0004	24.81	36.0000	0.0018 (ppm)
Tl (190.794 nm)	0.0046	ppm	0.0006	13.83	8.6440	0.0046 (ppm)
V (292.401 nm)	0.0005	ppm	0.0003	65.24	100.1000	0.0005 (ppm)
W (207.912 nm)	0.0022	ppm	0.0004	17.12	-1.2420	0.0022 (ppm)
Zn (202.548 nm)	0.0008	ppm	0.0000	2.61	22.4400	0.0008 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	31.21	95.0600	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9543	330300.0000	0.0052	0.54
Y_R 371.029	0.9412	45730.0000	0.0024	0.26

Sample Name: xRINSE 5993206

Date: 12/10/2019 7:16:41 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0006	> 100.00	-74.4600	-0.0002 u (ppm)
Al (396.152 nm)	-0.0014 u	ppm	0.0000	2.78	-359.2000	-0.0014 u (ppm)
As (188.980 nm)	0.0025	ppm	0.0007	27.84	2.9220	0.0025 (ppm)
B (249.678 nm)	0.0008	ppm	0.0006	75.94	-6.1580	0.0008 (ppm)
Ba (233.527 nm)	0.0000	ppm	0.0000	18.12	42.5000	0.0000 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	36.45	35.6200	0.0001 (ppm)
Ca (422.673 nm)	-0.0079 u	ppm	0.0073	93.37	89.5000	-0.0079 u (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0000	17.46	-1.2260	0.0001 (ppm)
Co (228.615 nm)	-0.0006 u	ppm	0.0009	> 100.00	-20.1500	-0.0006 u (ppm)
Cr (205.560 nm)	-0.0001 u	ppm	0.0005	> 100.00	1.5690	-0.0001 u (ppm)
Cu (324.754 nm)	-0.0004 u	ppm	0.0000	1.39	29.3400	-0.0004 u (ppm)
Fe (238.204 nm)	0.0017 u	ppm	0.0042	> 100.00	-46.0000	0.0017 u (ppm)
K (766.491 nm)	0.2046	ppm	0.0378	18.46	120.9000	0.2046 (ppm)
Li (670.783 nm)	0.0000 u	ppm	0.0002	> 100.00	51.7100	0.0000 u (ppm)
Mg (279.078 nm)	0.0327 Z	ppm	0.0035	10.75	87.2600 Z	0.0327 Z (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0001	23.20	67.2300	0.0002 (ppm)
Mo (204.598 nm)	0.0023	ppm	0.0028	> 100.00	3.6170	0.0023 (ppm)
Na (589.592 nm)	1.0600 Z	ppm	0.0224	2.11	6702.0000 Z	1.0600 Z (ppm)
Ni (231.604 nm)	0.0024	ppm	0.0005	20.51	-6.1370	0.0024 (ppm)
P (213.618 nm)	-0.0007 u	ppm	0.0037	> 100.00	-0.1973	-0.0007 u (ppm)
Pb (220.353 nm)	-0.0023 u	ppm	0.0010	43.72	-15.4000	-0.0023 u (ppm)
Sb (206.834 nm)	0.0055	ppm	0.0004	7.49	1.0120	0.0055 (ppm)
Se (196.026 nm)	0.0034	ppm	0.0018	51.97	1.2460	0.0034 (ppm)
Si (251.611 nm)	0.0016 u	ppm	0.0028	> 100.00	14.0200	0.0016 u (ppm)
Sn (189.925 nm)	-0.0014 u	ppm	0.0040	> 100.00	-2.1350	-0.0014 u (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0000	20.35	55.8300	0.0002 (ppm)
Ti (336.122 nm)	0.0003	ppm	0.0002	91.39	-109.0000	0.0003 (ppm)
Tl (190.794 nm)	0.0014	ppm	0.0016	> 100.00	5.7760	0.0014 (ppm)
V (292.401 nm)	-0.0004 u	ppm	0.0002	48.47	77.1400	-0.0004 u (ppm)
W (207.912 nm)	0.0003	ppm	0.0001	53.52	-3.9540	0.0003 (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0002	34.68	19.4900	0.0005 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	11.79	99.0800	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9462	327500.0000	0.0030	0.32
Y_R 371.029	0.9332	45340.0000	0.0060	0.64

Sample Name: xRINSE 5993206

Date: 12/10/2019 7:19:59 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0001	> 100.00	-69.6400	0.0000 u (ppm)
Al (396.152 nm)	-0.0019 u	ppm	0.0003	14.19	-372.8000	-0.0019 u (ppm)
As (188.980 nm)	0.0014 u	ppm	0.0046	> 100.00	2.3180	0.0014 u (ppm)
B (249.678 nm)	0.0012	ppm	0.0003	24.99	-2.3190	0.0012 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	14.21	34.3000	-0.0001 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	10.44	30.5700	0.0001 (ppm)
Ca (422.673 nm)	0.0037	ppm	0.0014	37.88	133.0000	0.0037 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0000	32.03	-4.5020	-0.0001 u (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0003	> 100.00	-14.5300	-0.0001 u (ppm)
Cr (205.560 nm)	0.0000 u	ppm	0.0016	> 100.00	1.6780	0.0000 u (ppm)
Cu (324.754 nm)	-0.0002 u	ppm	0.0001	33.49	36.2800	-0.0002 u (ppm)
Fe (238.204 nm)	-0.0015 u	ppm	0.0032	> 100.00	-53.7500	-0.0015 u (ppm)
K (766.491 nm)	0.0881	ppm	0.0583	66.19	7.5400	0.0881 (ppm)
Li (670.783 nm)	0.0000 u	ppm	0.0008	> 100.00	53.1700	0.0000 u (ppm)
Mg (279.078 nm)	0.0196	ppm	0.0010	5.13	56.5100	0.0196 (ppm)
Mn (259.372 nm)	0.0000 u	ppm	0.0000	> 100.00	45.7100	0.0000 u (ppm)
Mo (204.598 nm)	0.0001 u	ppm	0.0004	> 100.00	-3.6610	0.0001 u (ppm)
Na (589.592 nm)	0.9236 Z	ppm	0.0213	2.31	5958.0000 Z	0.9236 Z (ppm)
Ni (231.604 nm)	0.0017	ppm	0.0002	13.80	-9.1280	0.0017 (ppm)
P (213.618 nm)	0.0018 u	ppm	0.0063	> 100.00	1.5760	0.0018 u (ppm)
Pb (220.353 nm)	-0.0011 u	ppm	0.0015	> 100.00	-13.3500	-0.0011 u (ppm)
Sb (206.834 nm)	0.0056	ppm	0.0027	47.65	1.1430	0.0056 (ppm)
Se (196.026 nm)	0.0003 u	ppm	0.0041	> 100.00	-0.5212	0.0003 u (ppm)
Si (251.611 nm)	-0.0004 u	ppm	0.0014	> 100.00	9.5840	-0.0004 u (ppm)
Sn (189.925 nm)	-0.0008 u	ppm	0.0001	8.24	-1.8360	-0.0008 u (ppm)
Sr (421.552 nm)	0.0001 u	ppm	0.0002	> 100.00	-0.4809	0.0001 u (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0001	> 100.00	-139.1000	-0.0001 u (ppm)
Tl (190.794 nm)	0.0024	ppm	0.0010	43.39	6.6560	0.0024 (ppm)
V (292.401 nm)	0.0001 u	ppm	0.0003	> 100.00	89.3000	0.0001 u (ppm)
W (207.912 nm)	-0.0041 u	ppm	0.0001	2.31	-10.1400	-0.0041 u (ppm)
Zn (202.548 nm)	0.0006	ppm	0.0002	41.83	20.1600	0.0006 (ppm)
Zr (343.823 nm)	0.0001	ppm	0.0001	98.78	112.9000	0.0001 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9452	327200.0000	0.0007	0.08
Y_R 371.029	0.9331	45330.0000	0.0021	0.22

Sample Name: xRINSE 5993206

Date: 12/10/2019 7:23:17 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002	ppm	0.0001	37.36	-61.7200	0.0002 (ppm)
Al (396.152 nm)	-0.0016 u	ppm	0.0002	13.72	-366.6000	-0.0016 u (ppm)
As (188.980 nm)	-0.0006 u	ppm	0.0044	> 100.00	1.2950	-0.0006 u (ppm)
B (249.678 nm)	0.0008	ppm	0.0004	46.18	-5.9180	0.0008 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	39.1200	0.0000 u (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	82.46	27.2700	0.0000 (ppm)
Ca (422.673 nm)	-0.0019 u	ppm	0.0027	> 100.00	111.8000	-0.0019 u (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0003	> 100.00	-2.7380	0.0000 u (ppm)
Co (228.615 nm)	0.0006 u	ppm	0.0015	> 100.00	-6.0950	0.0006 u (ppm)
Cr (205.560 nm)	0.0003	ppm	0.0004	> 100.00	3.0980	0.0003 (ppm)
Cu (324.754 nm)	-0.0006 u	ppm	0.0001	15.63	21.5700	-0.0006 u (ppm)
Fe (238.204 nm)	-0.0026 u	ppm	0.0019	71.71	-56.6000	-0.0026 u (ppm)
K (766.491 nm)	0.2117	ppm	0.0046	2.18	127.7000	0.2117 (ppm)
Li (670.783 nm)	-0.0005 u	ppm	0.0001	21.47	27.7600	-0.0005 u (ppm)
Mg (279.078 nm)	0.0155	ppm	0.0010	6.29	47.0500	0.0155 (ppm)
Mn (259.372 nm)	0.0000 u	ppm	0.0001	> 100.00	48.4600	0.0000 u (ppm)
Mo (204.598 nm)	-0.0006 u	ppm	0.0013	> 100.00	-6.0410	-0.0006 u (ppm)
Na (589.592 nm)	0.8417 Z	ppm	0.0005	0.06	5511.0000 Z	0.8417 Z (ppm)
Ni (231.604 nm)	0.0013	ppm	0.0006	45.94	-10.6300	0.0013 (ppm)
P (213.618 nm)	-0.0061 u	ppm	0.0040	64.59	-4.0250	-0.0061 u (ppm)
Pb (220.353 nm)	-0.0005 u	ppm	0.0013	> 100.00	-12.3000	-0.0005 u (ppm)
Sb (206.834 nm)	0.0019 u	ppm	0.0029	> 100.00	-1.7770	0.0019 u (ppm)
Se (196.026 nm)	0.0012	ppm	0.0013	> 100.00	-0.0538	0.0012 (ppm)
Si (251.611 nm)	0.0009 u	ppm	0.0020	> 100.00	12.1700	0.0009 u (ppm)
Sn (189.925 nm)	0.0022	ppm	0.0025	> 100.00	-0.3687	0.0022 (ppm)
Sr (421.552 nm)	0.0000 u	ppm	0.0000	> 100.00	-29.7200	0.0000 u (ppm)
Ti (336.122 nm)	-0.0003 u	ppm	0.0003	87.36	-163.1000	-0.0003 u (ppm)
Tl (190.794 nm)	0.0022	ppm	0.0015	67.76	6.4860	0.0022 (ppm)
V (292.401 nm)	0.0000 u	ppm	0.0001	> 100.00	88.2200	0.0000 u (ppm)
W (207.912 nm)	-0.0013 u	ppm	0.0010	78.83	-6.1870	-0.0013 u (ppm)
Zn (202.548 nm)	0.0006	ppm	0.0000	4.09	20.3900	0.0006 (ppm)
Zr (343.823 nm)	0.0000	ppm	0.0000	10.06	105.5000	0.0000 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9453	327200.0000	0.0053	0.56
Y_R 371.029	0.9324	45300.0000	0.0009	0.09

Sample Name: xRINSE 5993206

Date: 12/10/2019 7:26:35 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002 u	ppm	0.0003	> 100.00	-62.9500	0.0002 u (ppm)
Al (396.152 nm)	-0.0012 u	ppm	0.0005	41.59	-355.8000	-0.0012 u (ppm)
As (188.980 nm)	0.0035	ppm	0.0010	29.55	3.4700	0.0035 (ppm)
B (249.678 nm)	0.0013	ppm	0.0005	37.37	-1.2240	0.0013 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	41.4500	0.0000 u (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	21.6100	0.0000 u (ppm)
Ca (422.673 nm)	-0.0134 u	ppm	0.0037	27.58	68.6800	-0.0134 u (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0000	56.08	-4.4790	-0.0001 u (ppm)
Co (228.615 nm)	-0.0005 u	ppm	0.0005	> 100.00	-18.1600	-0.0005 u (ppm)
Cr (205.560 nm)	0.0002 u	ppm	0.0004	> 100.00	2.5210	0.0002 u (ppm)
Cu (324.754 nm)	-0.0005 u	ppm	0.0002	34.31	23.3300	-0.0005 u (ppm)
Fe (238.204 nm)	0.0024 u	ppm	0.0049	> 100.00	-44.1200	0.0024 u (ppm)
K (766.491 nm)	0.1810	ppm	0.0926	51.19	97.8000	0.1810 (ppm)
Li (670.783 nm)	-0.0001 u	ppm	0.0010	> 100.00	51.0800	-0.0001 u (ppm)
Mg (279.078 nm)	0.0131	ppm	0.0043	32.84	41.3000	0.0131 (ppm)
Mn (259.372 nm)	-0.0001 u	ppm	0.0001	84.25	38.6900	-0.0001 u (ppm)
Mo (204.598 nm)	0.0010	ppm	0.0003	33.20	-0.7088	0.0010 (ppm)
Na (589.592 nm)	0.7509 Z	ppm	0.0035	0.47	5015.0000 Z	0.7509 Z (ppm)
Ni (231.604 nm)	0.0012	ppm	0.0006	51.03	-10.8600	0.0012 (ppm)
P (213.618 nm)	0.0005 u	ppm	0.0018	> 100.00	0.6711	0.0005 u (ppm)
Pb (220.353 nm)	-0.0010 u	ppm	0.0024	> 100.00	-13.0400	-0.0010 u (ppm)
Sb (206.834 nm)	0.0025	ppm	0.0023	91.67	-1.3070	0.0025 (ppm)
Se (196.026 nm)	0.0023	ppm	0.0022	98.24	0.5710	0.0023 (ppm)
Si (251.611 nm)	0.0005	ppm	0.0002	46.15	11.4700	0.0005 (ppm)
Sn (189.925 nm)	-0.0053 u	ppm	0.0063	> 100.00	-4.0730	-0.0053 u (ppm)
Sr (421.552 nm)	-0.0001 u	ppm	0.0001	> 100.00	-40.3400	-0.0001 u (ppm)
Ti (336.122 nm)	-0.0004 u	ppm	0.0001	19.28	-174.3000	-0.0004 u (ppm)
Tl (190.794 nm)	0.0046	ppm	0.0007	16.19	8.6530	0.0046 (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0003	> 100.00	82.7400	-0.0002 u (ppm)
W (207.912 nm)	-0.0001 u	ppm	0.0013	> 100.00	-4.4220	-0.0001 u (ppm)
Zn (202.548 nm)	0.0004	ppm	0.0003	83.58	17.5300	0.0004 (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0002	> 100.00	101.9000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9458	327400.0000	0.0043	0.45
Y_R 371.029	0.9382	45580.0000	0.0006	0.06

Sample Name: CCV 5993196

Date: 12/10/2019 7:29:53 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4919	ppm	0.0011	0.23	18000.0000	0.4919 (ppm)
Al (396.152 nm)	0.9755	ppm	0.0031	0.32	24740.0000	0.9755 (ppm)
As (188.980 nm)	0.9861	ppm	0.0056	0.57	520.0000	0.9861 (ppm)
B (249.678 nm)	0.9789	ppm	0.0050	0.51	9452.0000	0.9789 (ppm)
Ba (233.527 nm)	0.9938	ppm	0.0020	0.20	75090.0000	0.9938 (ppm)
Be (234.861 nm)	0.9804	ppm	0.0026	0.27	145700.0000	0.9804 (ppm)
Ca (422.673 nm)	4.9200	ppm	0.0120	0.24	18600.0000	4.9200 (ppm)
Cd (214.439 nm)	0.9913	ppm	0.0044	0.44	18520.0000	0.9913 (ppm)
Co (228.615 nm)	0.9945	ppm	0.0024	0.24	11200.0000	0.9945 (ppm)
Cr (205.560 nm)	0.9917	ppm	0.0044	0.45	3829.0000	0.9917 (ppm)
Cu (324.754 nm)	0.9880	ppm	0.0014	0.14	35020.0000	0.9880 (ppm)
Fe (238.204 nm)	0.9828	ppm	0.0010	0.10	2384.0000	0.9828 (ppm)
K (766.491 nm)	9.9380	ppm	0.0511	0.51	9597.0000	9.9380 (ppm)
Li (670.783 nm)	0.9833	ppm	0.0005	0.05	54190.0000	0.9833 (ppm)
Mg (279.078 nm)	4.9990	ppm	0.0111	0.22	11690.0000	4.9990 (ppm)
Mn (259.372 nm)	0.9876	ppm	0.0026	0.26	83430.0000	0.9876 (ppm)
Mo (204.598 nm)	1.0050	ppm	0.0043	0.42	3375.0000	1.0050 (ppm)
Na (589.592 nm)	10.4900	ppm	0.0004	0.00	58310.0000	10.4900 (ppm)
Ni (231.604 nm)	0.9891	ppm	0.0011	0.11	3835.0000	0.9891 (ppm)
P (213.618 nm)	0.9767	ppm	0.0045	0.46	650.4000	0.9767 (ppm)
Pb (220.353 nm)	0.9862	ppm	0.0015	0.15	1711.0000	0.9862 (ppm)
Sb (206.834 nm)	1.0000	ppm	0.0174	1.74	779.3000	1.0000 (ppm)
Se (196.026 nm)	0.9671	ppm	0.0092	0.95	546.1000	0.9671 (ppm)
Si (251.611 nm)	4.9420	ppm	0.0409	0.83	10020.0000	4.9420 (ppm)
Sn (189.925 nm)	0.9791	ppm	0.0129	1.32	483.0000	0.9791 (ppm)
Sr (421.552 nm)	0.9797	ppm	0.0006	0.06	324300.0000	0.9797 (ppm)
Ti (336.122 nm)	0.9868	ppm	0.0080	0.81	93350.0000	0.9868 (ppm)
Tl (190.794 nm)	0.9987	ppm	0.0034	0.34	883.8000	0.9987 (ppm)
V (292.401 nm)	0.9891	ppm	0.0034	0.34	26270.0000	0.9891 (ppm)
W (207.912 nm)	0.9911	ppm	0.0040	0.41	1427.0000	0.9911 (ppm)
Zn (202.548 nm)	0.9912	ppm	0.0034	0.34	12880.0000	0.9912 (ppm)
Zr (343.823 nm)	0.9678	ppm	0.0078	0.81	73420.0000	0.9678 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9430	326400.0000	0.0037	0.40
Y_R 371.029	0.9376	45550.0000	0.0012	0.13

Sample Name: CCB 5993195

Date: 12/10/2019 7:33:12 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0004 u	ppm	0.0007	> 100.00	-55.6500	0.0004 u (ppm)
Al (396.152 nm)	-0.0019 u	ppm	0.0006	31.30	-369.0000	-0.0019 u (ppm)
As (188.980 nm)	0.0025	ppm	0.0005	20.33	2.9160	0.0025 (ppm)
B (249.678 nm)	0.0018	ppm	0.0004	23.32	3.2630	0.0018 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0000	12.17	54.3000	0.0002 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	31.16	70.4900	0.0003 (ppm)
Ca (422.673 nm)	-0.0025 u	ppm	0.0148	> 100.00	109.6000	-0.0025 u (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0002	52.81	2.8100	0.0003 (ppm)
Co (228.615 nm)	-0.0009 u	ppm	0.0002	27.28	-22.4100	-0.0009 u (ppm)
Cr (205.560 nm)	-0.0006 u	ppm	0.0001	9.94	-0.6029	-0.0006 u (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0002	> 100.00	41.6400	0.0000 u (ppm)
Fe (238.204 nm)	0.0023 u	ppm	0.0047	> 100.00	-44.5300	0.0023 u (ppm)
K (766.491 nm)	0.0344	ppm	0.0194	56.39	-44.7500	0.0344 (ppm)
Li (670.783 nm)	0.0000 u	ppm	0.0001	> 100.00	52.8300	0.0000 u (ppm)
Mg (279.078 nm)	0.0119	ppm	0.0029	24.30	38.6100	0.0119 (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0000	8.21	68.5300	0.0002 (ppm)
Mo (204.598 nm)	0.0051	ppm	0.0000	0.09	13.1800	0.0051 (ppm)
Na (589.592 nm)	0.6399 Z	ppm	0.0252	3.94	4409.0000 Z	0.6399 Z (ppm)
Ni (231.604 nm)	0.0012	ppm	0.0011	93.80	-11.0000	0.0012 (ppm)
P (213.618 nm)	-0.0020 u	ppm	0.0000	0.32	-1.1800	-0.0020 u (ppm)
Pb (220.353 nm)	-0.0017 u	ppm	0.0023	> 100.00	-14.3600	-0.0017 u (ppm)
Sb (206.834 nm)	0.0075	ppm	0.0057	74.89	2.5840	0.0075 (ppm)
Se (196.026 nm)	0.0004 u	ppm	0.0037	> 100.00	-0.4660	0.0004 u (ppm)
Si (251.611 nm)	0.0018	ppm	0.0003	18.01	14.3500	0.0018 (ppm)
Sn (189.925 nm)	0.0039 u	ppm	0.0066	> 100.00	0.4970	0.0039 u (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0000	8.69	58.7700	0.0002 (ppm)
Ti (336.122 nm)	0.0019	ppm	0.0003	17.95	41.6700	0.0019 (ppm)
Tl (190.794 nm)	0.0032	ppm	0.0043	> 100.00	7.4130	0.0032 (ppm)
V (292.401 nm)	0.0004 u	ppm	0.0006	> 100.00	96.9300	0.0004 u (ppm)
W (207.912 nm)	0.0025 u	ppm	0.0048	> 100.00	-0.7590	0.0025 u (ppm)
Zn (202.548 nm)	0.0007	ppm	0.0000	5.54	21.4500	0.0007 (ppm)
Zr (343.823 nm)	0.0001	ppm	0.0000	72.36	109.1000	0.0001 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9415	325900.0000	0.0015	0.16
Y_R 371.029	0.9321	45290.0000	0.0007	0.07

Sample Name: MB 440-584953/1-A

Date: 12/10/2019 7:36:32 PM Rack:Tube: 3:41

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0000	2.42	-71.0000	-0.0001 u (ppm)
Al (396.152 nm)	0.0042	ppm	0.0013	31.16	-220.8000	0.0042 (ppm)
As (188.980 nm)	0.0072	ppm	0.0013	17.45	5.4420	0.0072 (ppm)
B (249.678 nm)	0.0015	ppm	0.0000	0.99	0.8590	0.0015 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	40.6000	0.0000 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	10.45	38.1700	0.0001 (ppm)
Ca (422.673 nm)	0.0021 u	ppm	0.0078	> 100.00	126.9000	0.0021 u (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-1.4030	0.0001 u (ppm)
Co (228.615 nm)	0.0003	ppm	0.0001	43.97	-9.0540	0.0003 (ppm)
Cr (205.560 nm)	0.0006	ppm	0.0006	> 100.00	4.1830	0.0006 (ppm)
Cu (324.754 nm)	-0.0003 u	ppm	0.0003	95.20	30.0000	-0.0003 u (ppm)
Fe (238.204 nm)	0.0000 u	ppm	0.0027	> 100.00	-50.0200	0.0000 u (ppm)
K (766.491 nm)	0.0268	ppm	0.0239	89.21	-52.1500	0.0268 (ppm)
Li (670.783 nm)	0.0004 u	ppm	0.0009	> 100.00	74.3700	0.0004 u (ppm)
Mg (279.078 nm)	0.0121	ppm	0.0029	23.56	39.0600	0.0121 (ppm)
Mn (259.372 nm)	0.0004	ppm	0.0002	39.78	78.8200	0.0004 (ppm)
Mo (204.598 nm)	0.0023	ppm	0.0004	16.94	3.7230	0.0023 (ppm)
Na (589.592 nm)	0.6415	ppm	0.0001	0.02	4417.0000	0.6415 (ppm)
Ni (231.604 nm)	0.0013	ppm	0.0004	28.24	-10.4500	0.0013 (ppm)
P (213.618 nm)	-0.0024 u	ppm	0.0032	> 100.00	-1.4210	-0.0024 u (ppm)
Pb (220.353 nm)	-0.0006 u	ppm	0.0006	> 100.00	-12.3300	-0.0006 u (ppm)
Sb (206.834 nm)	0.0022	ppm	0.0028	> 100.00	-1.5470	0.0022 (ppm)
Se (196.026 nm)	0.0085	ppm	0.0040	46.91	4.0380	0.0085 (ppm)
Si (251.611 nm)	0.0023	ppm	0.0010	43.96	15.0300	0.0023 (ppm)
Sn (189.925 nm)	0.0061	ppm	0.0008	13.34	1.5710	0.0061 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	57.11	2.8280	0.0001 (ppm)
Ti (336.122 nm)	0.0001	ppm	0.0000	33.92	-124.9000	0.0001 (ppm)
Tl (190.794 nm)	0.0041	ppm	0.0017	41.67	8.2310	0.0041 (ppm)
V (292.401 nm)	0.0003	ppm	0.0001	26.28	95.2000	0.0003 (ppm)
W (207.912 nm)	0.0004 u	ppm	0.0024	> 100.00	-3.6780	0.0004 u (ppm)
Zn (202.548 nm)	0.0036	ppm	0.0004	10.05	58.5900	0.0036 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0000	19.02	87.0000	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9553	330600.0000	0.0035	0.37
Y_R 371.029	0.9464	45980.0000	0.0032	0.33

Sample Name: LCS 440-584953/2-A

Date: 12/10/2019 7:39:51 PM Rack:Tube: 3:42

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2381	ppm	0.0011	0.46	8668.0000	0.2381 (ppm)
Al (396.152 nm)	0.4682	ppm	0.0005	0.11	11670.0000	0.4682 (ppm)
As (188.980 nm)	0.4780	ppm	0.0114	2.39	252.8000	0.4780 (ppm)
B (249.678 nm)	0.4674	ppm	0.0016	0.34	4509.0000	0.4674 (ppm)
Ba (233.527 nm)	0.4890	ppm	0.0032	0.65	36970.0000	0.4890 (ppm)
Be (234.861 nm)	0.4764	ppm	0.0008	0.17	70790.0000	0.4764 (ppm)
Ca (422.673 nm)	2.4280	ppm	0.0099	0.41	9239.0000	2.4280 (ppm)
Cd (214.439 nm)	0.4854	ppm	0.0018	0.36	9068.0000	0.4854 (ppm)
Co (228.615 nm)	0.4819	ppm	0.0019	0.40	5420.0000	0.4819 (ppm)
Cr (205.560 nm)	0.4863	ppm	0.0033	0.68	1878.0000	0.4863 (ppm)
Cu (324.754 nm)	0.4774	ppm	0.0011	0.24	16940.0000	0.4774 (ppm)
Fe (238.204 nm)	0.4543	ppm	0.0020	0.45	1075.0000	0.4543 (ppm)
K (766.491 nm)	4.9890	ppm	0.0224	0.45	4778.0000	4.9890 (ppm)
Li (670.783 nm)	0.4774	ppm	0.0004	0.08	26340.0000	0.4774 (ppm)
Mg (279.078 nm)	2.4600	ppm	0.0132	0.54	5757.0000	2.4600 (ppm)
Mn (259.372 nm)	0.4833	ppm	0.0003	0.05	40830.0000	0.4833 (ppm)
Mo (204.598 nm)	0.4503	ppm	0.0009	0.21	1510.0000	0.4503 (ppm)
Na (589.592 nm)	5.3940	ppm	0.0120	0.22	30410.0000	5.3940 (ppm)
Ni (231.604 nm)	0.4906	ppm	0.0003	0.06	1895.0000	0.4906 (ppm)
P (213.618 nm)	0.4754	ppm	0.0001	0.03	317.4000	0.4754 (ppm)
Pb (220.353 nm)	0.4816	ppm	0.0019	0.40	829.9000	0.4816 (ppm)
Sb (206.834 nm)	0.5235	ppm	0.0042	0.81	407.2000	0.5235 (ppm)
Se (196.026 nm)	0.4691	ppm	0.0033	0.70	264.3000	0.4691 (ppm)
Si (251.611 nm)	2.3940	ppm	0.0041	0.17	4852.0000	2.3940 (ppm)
Sn (189.925 nm)	0.4086	ppm	0.0028	0.69	200.8000	0.4086 (ppm)
Sr (421.552 nm)	0.4752	ppm	0.0011	0.24	157300.0000	0.4752 (ppm)
Ti (336.122 nm)	0.4608	ppm	0.0060	1.30	43510.0000	0.4608 (ppm)
Tl (190.794 nm)	0.4358	ppm	0.0146	3.35	387.1000	0.4358 (ppm)
V (292.401 nm)	0.4802	ppm	0.0008	0.17	12810.0000	0.4802 (ppm)
W (207.912 nm)	0.4377	ppm	0.0029	0.67	628.3000	0.4377 (ppm)
Zn (202.548 nm)	0.4887	ppm	0.0005	0.11	6354.0000	0.4887 (ppm)
Zr (343.823 nm)	0.3794	ppm	0.0124	3.28	28840.0000	0.3794 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
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Mn (259.372 nm)	Y 371.029
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Pb (220.353 nm)	Y 371.029
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Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9559	330900.0000	0.0036	0.38
Y_R 371.029	0.9402	45680.0000	0.0034	0.36

Sample Name: 440-255886-B-1-B

Date: 12/10/2019 7:43:12 PM Rack:Tube: 3:43

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0004	> 100.00	-68.7400	0.0000 u (ppm)
Al (396.152 nm)	0.0079	ppm	0.0006	6.97	-126.2000	0.0079 (ppm)
As (188.980 nm)	-0.0018 u	ppm	0.0108	> 100.00	0.6298	-0.0018 u (ppm)
B (249.678 nm)	0.0117	ppm	0.0008	6.63	100.0000	0.0117 (ppm)
Ba (233.527 nm)	0.0032	ppm	0.0001	2.64	280.8000	0.0032 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	4.54	39.1700	0.0001 (ppm)
Ca (422.673 nm)	1.3830	ppm	0.0006	0.04	5313.0000	1.3830 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0000	16.48	-0.3672	0.0001 (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0000	33.69	-13.9500	-0.0001 u (ppm)
Cr (205.560 nm)	0.0011	ppm	0.0007	65.17	5.9070	0.0011 (ppm)
Cu (324.754 nm)	0.0018	ppm	0.0003	17.34	104.8000	0.0018 (ppm)
Fe (238.204 nm)	0.0105	ppm	0.0017	16.50	-24.1200	0.0105 (ppm)
K (766.491 nm)	0.4379	ppm	0.0482	11.01	347.8000	0.4379 (ppm)
Li (670.783 nm)	-0.0008 u	ppm	0.0001	14.64	7.7830	-0.0008 u (ppm)
Mg (279.078 nm)	0.3791	ppm	0.0024	0.64	896.7000	0.3791 (ppm)
Mn (259.372 nm)	0.0050	ppm	0.0000	0.24	468.9000	0.0050 (ppm)
Mo (204.598 nm)	0.0039	ppm	0.0011	29.12	9.2040	0.0039 (ppm)
Na (589.592 nm)	1.5710	ppm	0.0055	0.35	9498.0000	1.5710 (ppm)
Ni (231.604 nm)	0.0024	ppm	0.0006	25.75	-6.2640	0.0024 (ppm)
P (213.618 nm)	0.0275	ppm	0.0018	6.50	19.6100	0.0275 (ppm)
Pb (220.353 nm)	0.0007	ppm	0.0008	> 100.00	-10.1400	0.0007 (ppm)
Sb (206.834 nm)	0.0038	ppm	0.0008	20.60	-0.2944	0.0038 (ppm)
Se (196.026 nm)	0.0039	ppm	0.0021	53.41	1.4890	0.0039 (ppm)
Si (251.611 nm)	0.7009	ppm	0.0065	0.92	1409.0000	0.7009 (ppm)
Sn (189.925 nm)	0.0044	ppm	0.0012	26.20	0.7503	0.0044 (ppm)
Sr (421.552 nm)	0.0085	ppm	0.0000	0.05	2817.0000	0.0085 (ppm)
Ti (336.122 nm)	0.0013	ppm	0.0003	22.68	-11.4400	0.0013 (ppm)
Tl (190.794 nm)	-0.0003 u	ppm	0.0046	> 100.00	4.2200	-0.0003 u (ppm)
V (292.401 nm)	0.0021	ppm	0.0005	22.45	144.6000	0.0021 (ppm)
W (207.912 nm)	0.0019	ppm	0.0007	38.54	-0.3448	0.0019 (ppm)
Zn (202.548 nm)	0.1080	ppm	0.0008	0.77	1404.0000	0.1080 (ppm)
Zr (343.823 nm)	0.0011	ppm	0.0000	1.70	187.6000	0.0011 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9561	330900.0000	0.0059	0.62
Y_R 371.029	0.9440	45860.0000	0.0005	0.05

Sample Name: 440-255886-B-1-C MS

Date: 12/10/2019 7:46:31 PM Rack:Tube: 3:44

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2407	ppm	0.0005	0.19	8767.0000	0.2407 (ppm)
Al (396.152 nm)	0.4851	ppm	0.0024	0.49	12110.0000	0.4851 (ppm)
As (188.980 nm)	0.4831	ppm	0.0051	1.05	255.5000	0.4831 (ppm)
B (249.678 nm)	0.4810	ppm	0.0030	0.61	4641.0000	0.4810 (ppm)
Ba (233.527 nm)	0.4913	ppm	0.0027	0.54	37140.0000	0.4913 (ppm)
Be (234.861 nm)	0.4807	ppm	0.0024	0.50	71430.0000	0.4807 (ppm)
Ca (422.673 nm)	3.8370	ppm	0.0294	0.77	14530.0000	3.8370 (ppm)
Cd (214.439 nm)	0.4880	ppm	0.0027	0.55	9118.0000	0.4880 (ppm)
Co (228.615 nm)	0.4902	ppm	0.0088	1.79	5513.0000	0.4902 (ppm)
Cr (205.560 nm)	0.4889	ppm	0.0011	0.22	1889.0000	0.4889 (ppm)
Cu (324.754 nm)	0.4862	ppm	0.0015	0.32	17250.0000	0.4862 (ppm)
Fe (238.204 nm)	0.4714	ppm	0.0052	1.09	1117.0000	0.4714 (ppm)
K (766.491 nm)	5.3270	ppm	0.1161	2.18	5107.0000	5.3270 (ppm)
Li (670.783 nm)	0.4822	ppm	0.0005	0.11	26600.0000	0.4822 (ppm)
Mg (279.078 nm)	2.8260	ppm	0.0205	0.72	6612.0000	2.8260 (ppm)
Mn (259.372 nm)	0.4909	ppm	0.0020	0.40	41480.0000	0.4909 (ppm)
Mo (204.598 nm)	0.4667	ppm	0.0024	0.52	1565.0000	0.4667 (ppm)
Na (589.592 nm)	6.3660	ppm	0.0169	0.27	35720.0000	6.3660 (ppm)
Ni (231.604 nm)	0.4952	ppm	0.0003	0.07	1912.0000	0.4952 (ppm)
P (213.618 nm)	0.5119	ppm	0.0044	0.86	342.7000	0.5119 (ppm)
Pb (220.353 nm)	0.4815	ppm	0.0022	0.45	829.6000	0.4815 (ppm)
Sb (206.834 nm)	0.5242	ppm	0.0036	0.68	407.4000	0.5242 (ppm)
Se (196.026 nm)	0.4723	ppm	0.0050	1.05	266.2000	0.4723 (ppm)
Si (251.611 nm)	3.0820	ppm	0.0209	0.68	6226.0000	3.0820 (ppm)
Sn (189.925 nm)	0.4227	ppm	0.0000	0.01	207.7000	0.4227 (ppm)
Sr (421.552 nm)	0.4870	ppm	0.0007	0.15	161200.0000	0.4870 (ppm)
Ti (336.122 nm)	0.4654	ppm	0.0058	1.25	43950.0000	0.4654 (ppm)
Tl (190.794 nm)	0.4554	ppm	0.0053	1.17	404.8000	0.4554 (ppm)
V (292.401 nm)	0.4857	ppm	0.0023	0.48	12950.0000	0.4857 (ppm)
W (207.912 nm)	0.4499	ppm	0.0034	0.75	647.2000	0.4499 (ppm)
Zn (202.548 nm)	0.6028	ppm	0.0029	0.48	7827.0000	0.6028 (ppm)
Zr (343.823 nm)	0.4418	ppm	0.0104	2.36	33570.0000	0.4418 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9536	330100.0000	0.0044	0.46
Y_R 371.029	0.9469	46000.0000	0.0054	0.57

Sample Name: 440-255886-B-1-D MSD

Date: 12/10/2019 7:49:50 PM Rack:Tube: 3:45

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2419	ppm	0.0015	0.62	8813.0000	0.2419 (ppm)
Al (396.152 nm)	0.4884	ppm	0.0030	0.61	12210.0000	0.4884 (ppm)
As (188.980 nm)	0.4998	ppm	0.0009	0.17	264.4000	0.4998 (ppm)
B (249.678 nm)	0.4905	ppm	0.0035	0.72	4732.0000	0.4905 (ppm)
Ba (233.527 nm)	0.5013	ppm	0.0010	0.20	37890.0000	0.5013 (ppm)
Be (234.861 nm)	0.4895	ppm	0.0021	0.44	72740.0000	0.4895 (ppm)
Ca (422.673 nm)	3.8600	ppm	0.0243	0.63	14620.0000	3.8600 (ppm)
Cd (214.439 nm)	0.4969	ppm	0.0025	0.50	9284.0000	0.4969 (ppm)
Co (228.615 nm)	0.5020	ppm	0.0088	1.75	5647.0000	0.5020 (ppm)
Cr (205.560 nm)	0.4985	ppm	0.0031	0.62	1926.0000	0.4985 (ppm)
Cu (324.754 nm)	0.4950	ppm	0.0026	0.52	17570.0000	0.4950 (ppm)
Fe (238.204 nm)	0.4810	ppm	0.0008	0.16	1141.0000	0.4810 (ppm)
K (766.491 nm)	5.4600	ppm	0.0965	1.77	5237.0000	5.4600 (ppm)
Li (670.783 nm)	0.4922	ppm	0.0005	0.10	27150.0000	0.4922 (ppm)
Mg (279.078 nm)	2.8680	ppm	0.0046	0.16	6711.0000	2.8680 (ppm)
Mn (259.372 nm)	0.4995	ppm	0.0024	0.47	42210.0000	0.4995 (ppm)
Mo (204.598 nm)	0.4780	ppm	0.0023	0.49	1603.0000	0.4780 (ppm)
Na (589.592 nm)	6.4110	ppm	0.0365	0.57	35970.0000	6.4110 (ppm)
Ni (231.604 nm)	0.5076	ppm	0.0019	0.37	1961.0000	0.5076 (ppm)
P (213.618 nm)	0.5234	ppm	0.0096	1.83	350.5000	0.5234 (ppm)
Pb (220.353 nm)	0.4947	ppm	0.0020	0.41	852.7000	0.4947 (ppm)
Sb (206.834 nm)	0.5353	ppm	0.0016	0.30	416.2000	0.5353 (ppm)
Se (196.026 nm)	0.4828	ppm	0.0046	0.96	272.1000	0.4828 (ppm)
Si (251.611 nm)	3.1330	ppm	0.0163	0.52	6331.0000	3.1330 (ppm)
Sn (189.925 nm)	0.4348	ppm	0.0013	0.29	213.7000	0.4348 (ppm)
Sr (421.552 nm)	0.4943	ppm	0.0026	0.54	163600.0000	0.4943 (ppm)
Ti (336.122 nm)	0.4808	ppm	0.0062	1.29	45420.0000	0.4808 (ppm)
Tl (190.794 nm)	0.4845	ppm	0.0040	0.82	430.8000	0.4845 (ppm)
V (292.401 nm)	0.4947	ppm	0.0038	0.77	13190.0000	0.4947 (ppm)
W (207.912 nm)	0.4611	ppm	0.0048	1.03	663.2000	0.4611 (ppm)
Zn (202.548 nm)	0.6070	ppm	0.0036	0.59	7881.0000	0.6070 (ppm)
Zr (343.823 nm)	0.4656	ppm	0.0092	1.98	35380.0000	0.4656 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9550	330500.0000	0.0074	0.77
Y_R 371.029	0.9453	45930.0000	0.0000	0.00

Sample Name: 440-255886-B-2-B

Date: 12/10/2019 7:53:10 PM Rack:Tube: 3:46

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001	ppm	0.0001	50.57	-64.7500	0.0001 (ppm)
Al (396.152 nm)	0.0124	ppm	0.0002	1.61	-9.5560	0.0124 (ppm)
As (188.980 nm)	0.0036	ppm	0.0041	> 100.00	3.4710	0.0036 (ppm)
B (249.678 nm)	0.0346	ppm	0.0000	0.11	323.3000	0.0346 (ppm)
Ba (233.527 nm)	0.0049	ppm	0.0001	2.68	407.3000	0.0049 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0000	11.36	45.1700	0.0002 (ppm)
Ca (422.673 nm)	1.8860	ppm	0.0069	0.37	7205.0000	1.8860 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0003	64.26	4.9650	0.0004 (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0003	> 100.00	-11.9800	0.0001 u (ppm)
Cr (205.560 nm)	0.0014	ppm	0.0001	5.91	7.3210	0.0014 (ppm)
Cu (324.754 nm)	0.0088	ppm	0.0002	1.80	353.6000	0.0088 (ppm)
Fe (238.204 nm)	0.0272	ppm	0.0003	1.24	17.4200	0.0272 (ppm)
K (766.491 nm)	0.6489	ppm	0.0310	4.78	552.6000	0.6489 (ppm)
Li (670.783 nm)	0.0004 u	ppm	0.0005	> 100.00	57.6500	0.0004 u (ppm)
Mg (279.078 nm)	0.2888	ppm	0.0003	0.11	685.4000	0.2888 (ppm)
Mn (259.372 nm)	0.0171	ppm	0.0001	0.33	1490.0000	0.0171 (ppm)
Mo (204.598 nm)	0.0111	ppm	0.0003	2.29	33.2100	0.0111 (ppm)
Na (589.592 nm)	4.5280	ppm	0.0032	0.07	25650.0000	4.5280 (ppm)
Ni (231.604 nm)	0.0021	ppm	0.0005	23.28	-7.3310	0.0021 (ppm)
P (213.618 nm)	0.0619	ppm	0.0006	0.95	43.6500	0.0619 (ppm)
Pb (220.353 nm)	-0.0007 u	ppm	0.0016	> 100.00	-12.5100	-0.0007 u (ppm)
Sb (206.834 nm)	0.0020	ppm	0.0024	> 100.00	-1.7980	0.0020 (ppm)
Se (196.026 nm)	0.0088	ppm	0.0021	23.58	4.2610	0.0088 (ppm)
Si (251.611 nm)	0.1166	ppm	0.0055	4.76	245.2000	0.1166 (ppm)
Sn (189.925 nm)	0.0067	ppm	0.0055	83.22	1.8550	0.0067 (ppm)
Sr (421.552 nm)	0.0082	ppm	0.0001	0.90	2717.0000	0.0082 (ppm)
Ti (336.122 nm)	0.0015	ppm	0.0004	24.69	10.2300	0.0015 (ppm)
Tl (190.794 nm)	0.0039	ppm	0.0013	33.54	7.9730	0.0039 (ppm)
V (292.401 nm)	0.0020	ppm	0.0000	2.20	140.7000	0.0020 (ppm)
W (207.912 nm)	0.0048	ppm	0.0047	97.09	7.6240	0.0048 (ppm)
Zn (202.548 nm)	0.4292	ppm	0.0021	0.48	5546.0000	0.4292 (ppm)
Zr (343.823 nm)	0.0032	ppm	0.0003	10.27	343.3000	0.0032 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9561	330900.0000	0.0056	0.58
Y_R 371.029	0.9444	45880.0000	0.0036	0.38

Sample Name: 440-255886-B-3-B

Date: 12/10/2019 7:56:30 PM Rack:Tube: 3:47

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0001	45.65	-75.4400	-0.0002 u (ppm)
Al (396.152 nm)	0.0073	ppm	0.0005	6.78	-142.5000	0.0073 (ppm)
As (188.980 nm)	0.0028	ppm	0.0022	76.16	3.0810	0.0028 (ppm)
B (249.678 nm)	0.0079	ppm	0.0001	0.70	63.6300	0.0079 (ppm)
Ba (233.527 nm)	0.0017	ppm	0.0000	0.53	169.1000	0.0017 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	91.05	29.7000	0.0000 (ppm)
Ca (422.673 nm)	1.1770	ppm	0.0286	2.43	4541.0000	1.1770 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0000	1.81	3.5410	0.0004 (ppm)
Co (228.615 nm)	-0.0003 u	ppm	0.0002	68.09	-16.1000	-0.0003 u (ppm)
Cr (205.560 nm)	0.0009 u	ppm	0.0013	> 100.00	5.3720	0.0009 u (ppm)
Cu (324.754 nm)	0.0027	ppm	0.0002	8.85	136.6000	0.0027 (ppm)
Fe (238.204 nm)	0.0146	ppm	0.0062	42.12	-13.8400	0.0146 (ppm)
K (766.491 nm)	0.2517	ppm	0.0922	36.64	166.7000	0.2517 (ppm)
Li (670.783 nm)	0.0001	ppm	0.0001	78.32	57.3000	0.0001 (ppm)
Mg (279.078 nm)	0.1490	ppm	0.0005	0.31	359.0000	0.1490 (ppm)
Mn (259.372 nm)	0.0099	ppm	0.0000	0.28	876.8000	0.0099 (ppm)
Mo (204.598 nm)	0.0012	ppm	0.0005	41.76	-0.0261	0.0012 (ppm)
Na (589.592 nm)	1.3650	ppm	0.0228	1.67	8372.0000	1.3650 (ppm)
Ni (231.604 nm)	0.0036	ppm	0.0003	8.04	-1.5370	0.0036 (ppm)
P (213.618 nm)	0.0127	ppm	0.0005	3.82	9.1810	0.0127 (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0009	65.44	-13.6200	-0.0013 u (ppm)
Sb (206.834 nm)	0.0047	ppm	0.0004	7.67	0.3761	0.0047 (ppm)
Se (196.026 nm)	0.0111	ppm	0.0026	23.55	5.4990	0.0111 (ppm)
Si (251.611 nm)	0.0376	ppm	0.0006	1.63	85.6300	0.0376 (ppm)
Sn (189.925 nm)	0.0022 u	ppm	0.0060	> 100.00	-0.3744	0.0022 u (ppm)
Sr (421.552 nm)	0.0045	ppm	0.0001	2.65	1474.0000	0.0045 (ppm)
Ti (336.122 nm)	0.0004	ppm	0.0002	49.89	-101.6000	0.0004 (ppm)
Tl (190.794 nm)	0.0023	ppm	0.0003	12.86	6.6170	0.0023 (ppm)
V (292.401 nm)	0.0009	ppm	0.0000	3.29	111.7000	0.0009 (ppm)
W (207.912 nm)	0.0001 u	ppm	0.0019	> 100.00	-3.1790	0.0001 u (ppm)
Zn (202.548 nm)	0.0841	ppm	0.0005	0.65	1096.0000	0.0841 (ppm)
Zr (343.823 nm)	0.0017	ppm	0.0002	9.27	236.2000	0.0017 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9544	330300.0000	0.0060	0.63
Y_R 371.029	0.9421	45770.0000	0.0066	0.70

Sample Name: CCV 5993196

Date: 12/10/2019 7:59:48 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4924	ppm	0.0021	0.43	18020.0000	0.4924 (ppm)
Al (396.152 nm)	0.9756	ppm	0.0003	0.03	24750.0000	0.9756 (ppm)
As (188.980 nm)	0.9814	ppm	0.0073	0.75	517.5000	0.9814 (ppm)
B (249.678 nm)	0.9774	ppm	0.0055	0.57	9437.0000	0.9774 (ppm)
Ba (233.527 nm)	0.9956	ppm	0.0048	0.48	75220.0000	0.9956 (ppm)
Be (234.861 nm)	0.9803	ppm	0.0024	0.24	145600.0000	0.9803 (ppm)
Ca (422.673 nm)	4.9270	ppm	0.0129	0.26	18630.0000	4.9270 (ppm)
Cd (214.439 nm)	0.9895	ppm	0.0021	0.21	18490.0000	0.9895 (ppm)
Co (228.615 nm)	0.9932	ppm	0.0010	0.10	11190.0000	0.9932 (ppm)
Cr (205.560 nm)	0.9943	ppm	0.0025	0.25	3839.0000	0.9943 (ppm)
Cu (324.754 nm)	0.9919	ppm	0.0043	0.44	35160.0000	0.9919 (ppm)
Fe (238.204 nm)	0.9859	ppm	0.0039	0.40	2392.0000	0.9859 (ppm)
K (766.491 nm)	10.0200	ppm	0.1164	1.16	9676.0000	10.0200 (ppm)
Li (670.783 nm)	0.9878	ppm	0.0001	0.01	54430.0000	0.9878 (ppm)
Mg (279.078 nm)	5.0020	ppm	0.0255	0.51	11690.0000	5.0020 (ppm)
Mn (259.372 nm)	0.9865	ppm	0.0019	0.19	83340.0000	0.9865 (ppm)
Mo (204.598 nm)	0.9981	ppm	0.0024	0.24	3353.0000	0.9981 (ppm)
Na (589.592 nm)	10.2700	ppm	0.0085	0.08	57070.0000	10.2700 (ppm)
Ni (231.604 nm)	0.9874	ppm	0.0049	0.49	3829.0000	0.9874 (ppm)
P (213.618 nm)	0.9832	ppm	0.0111	1.12	655.0000	0.9832 (ppm)
Pb (220.353 nm)	0.9870	ppm	0.0015	0.15	1712.0000	0.9870 (ppm)
Sb (206.834 nm)	0.9923	ppm	0.0144	1.45	773.1000	0.9923 (ppm)
Se (196.026 nm)	0.9618	ppm	0.0065	0.68	543.2000	0.9618 (ppm)
Si (251.611 nm)	4.9360	ppm	0.0368	0.75	10010.0000	4.9360 (ppm)
Sn (189.925 nm)	0.9854	ppm	0.0034	0.34	486.2000	0.9854 (ppm)
Sr (421.552 nm)	0.9807	ppm	0.0007	0.07	324600.0000	0.9807 (ppm)
Ti (336.122 nm)	0.9909	ppm	0.0074	0.74	93740.0000	0.9909 (ppm)
Tl (190.794 nm)	0.9949	ppm	0.0106	1.06	880.2000	0.9949 (ppm)
V (292.401 nm)	0.9904	ppm	0.0008	0.08	26310.0000	0.9904 (ppm)
W (207.912 nm)	0.9923	ppm	0.0088	0.88	1429.0000	0.9923 (ppm)
Zn (202.548 nm)	0.9891	ppm	0.0032	0.32	12850.0000	0.9891 (ppm)
Zr (343.823 nm)	0.9997	ppm	0.0030	0.30	75840.0000	0.9997 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9428	326300.0000	0.0040	0.43
Y_R 371.029	0.9350	45430.0000	0.0025	0.27

Sample Name: CCB 5993195

Date: 12/10/2019 8:03:06 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0000	17.32	-70.3500	0.0000 u (ppm)
Al (396.152 nm)	-0.0013 u	ppm	0.0018	> 100.00	-355.0000	-0.0013 u (ppm)
As (188.980 nm)	0.0035 u	ppm	0.0078	> 100.00	3.4490	0.0035 u (ppm)
B (249.678 nm)	0.0013	ppm	0.0003	21.10	-1.6060	0.0013 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0002	90.48	54.6700	0.0002 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	19.65	71.6500	0.0003 (ppm)
Ca (422.673 nm)	0.0003 u	ppm	0.0061	> 100.00	120.3000	0.0003 u (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0001	28.11	4.8560	0.0004 (ppm)
Co (228.615 nm)	-0.0002 u	ppm	0.0014	> 100.00	-15.0900	-0.0002 u (ppm)
Cr (205.560 nm)	0.0013	ppm	0.0005	34.06	6.9860	0.0013 (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0003	> 100.00	41.9200	0.0000 u (ppm)
Fe (238.204 nm)	-0.0031 u	ppm	0.0029	92.14	-57.9400	-0.0031 u (ppm)
K (766.491 nm)	0.0293	ppm	0.0060	20.51	-49.6500	0.0293 (ppm)
Li (670.783 nm)	-0.0005 u	ppm	0.0004	79.75	23.4200	-0.0005 u (ppm)
Mg (279.078 nm)	0.0078	ppm	0.0001	0.94	28.9600	0.0078 (ppm)
Mn (259.372 nm)	0.0004	ppm	0.0002	57.29	81.1400	0.0004 (ppm)
Mo (204.598 nm)	0.0066	ppm	0.0002	2.75	18.1100	0.0066 (ppm)
Na (589.592 nm)	0.3995	ppm	0.0040	1.00	3096.0000	0.3995 (ppm)
Ni (231.604 nm)	0.0030	ppm	0.0006	18.90	-4.0540	0.0030 (ppm)
P (213.618 nm)	0.0077	ppm	0.0008	9.88	5.6810	0.0077 (ppm)
Pb (220.353 nm)	-0.0011 u	ppm	0.0029	> 100.00	-13.2600	-0.0011 u (ppm)
Sb (206.834 nm)	0.0040	ppm	0.0015	37.27	-0.2429	0.0040 (ppm)
Se (196.026 nm)	0.0018 u	ppm	0.0048	> 100.00	0.3386	0.0018 u (ppm)
Si (251.611 nm)	0.0012 u	ppm	0.0027	> 100.00	13.4600	0.0012 u (ppm)
Sn (189.925 nm)	0.0021	ppm	0.0015	70.29	-0.4004	0.0021 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	9.49	14.8600	0.0001 (ppm)
Ti (336.122 nm)	0.0018	ppm	0.0003	18.43	35.0700	0.0018 (ppm)
Tl (190.794 nm)	0.0005 u	ppm	0.0015	> 100.00	4.9050	0.0005 u (ppm)
V (292.401 nm)	0.0003	ppm	0.0002	81.02	92.9700	0.0003 (ppm)
W (207.912 nm)	0.0031	ppm	0.0018	57.81	0.0785	0.0031 (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0004	78.47	19.5500	0.0005 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0001	54.74	88.9500	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9454	327200.0000	0.0062	0.66
Y_R 371.029	0.9363	45490.0000	0.0023	0.25

Sample Name: 440-255886-B-4-B

Date: 12/10/2019 8:06:26 PM Rack:Tube: 3:48

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0004	> 100.00	-65.2200	0.0001 u (ppm)
Al (396.152 nm)	0.0135	ppm	0.0004	2.90	10.6000	0.0135 (ppm)
As (188.980 nm)	0.0016 u	ppm	0.0048	> 100.00	2.3210	0.0016 u (ppm)
B (249.678 nm)	0.0439	ppm	0.0008	1.87	413.2000	0.0439 (ppm)
Ba (233.527 nm)	0.0180	ppm	0.0001	0.41	1401.0000	0.0180 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	> 100.00	32.8900	0.0001 (ppm)
Ca (422.673 nm)	2.6380	ppm	0.0062	0.24	10030.0000	2.6380 (ppm)
Cd (214.439 nm)	0.0010	ppm	0.0001	11.85	15.2900	0.0010 (ppm)
Co (228.615 nm)	0.0003 u	ppm	0.0004	> 100.00	-10.2500	0.0003 u (ppm)
Cr (205.560 nm)	0.0008	ppm	0.0002	20.95	5.3110	0.0008 (ppm)
Cu (324.754 nm)	0.0082	ppm	0.0001	1.39	330.7000	0.0082 (ppm)
Fe (238.204 nm)	0.0499	ppm	0.0009	1.86	74.2300	0.0499 (ppm)
K (766.491 nm)	0.6482	ppm	0.0059	0.91	549.5000	0.6482 (ppm)
Li (670.783 nm)	0.0183	ppm	0.0013	6.85	974.6000	0.0183 (ppm)
Mg (279.078 nm)	0.5218	ppm	0.0012	0.24	1229.0000	0.5218 (ppm)
Mn (259.372 nm)	0.0325	ppm	0.0002	0.73	2778.0000	0.0325 (ppm)
Mo (204.598 nm)	0.0034	ppm	0.0004	12.86	7.6170	0.0034 (ppm)
Na (589.592 nm)	4.9500	ppm	0.0111	0.22	27960.0000	4.9500 (ppm)
Ni (231.604 nm)	0.0052	ppm	0.0003	6.70	4.7830	0.0052 (ppm)
P (213.618 nm)	0.0338	ppm	0.0011	3.35	23.7600	0.0338 (ppm)
Pb (220.353 nm)	0.0052	ppm	0.0008	15.42	-2.2600	0.0052 (ppm)
Sb (206.834 nm)	0.0035 u	ppm	0.0056	> 100.00	-0.4011	0.0035 u (ppm)
Se (196.026 nm)	0.0043	ppm	0.0041	94.16	1.6950	0.0043 (ppm)
Si (251.611 nm)	0.1234	ppm	0.0008	0.65	263.8000	0.1234 (ppm)
Sn (189.925 nm)	-0.0021 u	ppm	0.0029	> 100.00	-2.4220	-0.0021 u (ppm)
Sr (421.552 nm)	0.0113	ppm	0.0001	0.87	3742.0000	0.0113 (ppm)
Ti (336.122 nm)	0.0004	ppm	0.0003	78.38	-93.5100	0.0004 (ppm)
Tl (190.794 nm)	0.0028	ppm	0.0020	72.13	6.9560	0.0028 (ppm)
V (292.401 nm)	0.0032	ppm	0.0003	10.72	177.2000	0.0032 (ppm)
W (207.912 nm)	-0.0003 u	ppm	0.0031	> 100.00	22.3600	-0.0003 u (ppm)
Zn (202.548 nm)	2.3080	ppm	0.0019	0.08	29770.0000	2.3080 (ppm)
Zr (343.823 nm)	0.0010	ppm	0.0002	20.49	183.3000	0.0010 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9537	330100.0000	0.0021	0.22
Y_R 371.029	0.9426	45790.0000	0.0013	0.14

Sample Name: 440-256622-H-1-A

Date: 12/10/2019 8:09:46 PM Rack:Tube: 3:49

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0003	> 100.00	-64.9600	0.0001 u (ppm)
Al (396.152 nm)	0.0433	ppm	0.0001	0.30	747.3000	0.0433 (ppm)
As (188.980 nm)	0.0026	ppm	0.0019	73.07	2.9990	0.0026 (ppm)
B (249.678 nm)	0.0011	ppm	0.0002	14.37	-3.2050	0.0011 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0001	98.03	31.9000	-0.0001 u (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	64.99	24.6800	0.0000 (ppm)
Ca (422.673 nm)	0.0333	ppm	0.0040	11.91	244.1000	0.0333 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.2130	0.0000 u (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0001	61.36	-14.0000	-0.0001 u (ppm)
Cr (205.560 nm)	-0.0003 u	ppm	0.0008	> 100.00	0.6569	-0.0003 u (ppm)
Cu (324.754 nm)	-0.0001 u	ppm	0.0005	> 100.00	39.7800	-0.0001 u (ppm)
Fe (238.204 nm)	-0.0019 u	ppm	0.0019	97.77	-54.9100	-0.0019 u (ppm)
K (766.491 nm)	-0.0282 u	ppm	0.1217	> 100.00	-105.6000	-0.0282 u (ppm)
Li (670.783 nm)	0.0008 u	ppm	0.0013	> 100.00	98.6800	0.0008 u (ppm)
Mg (279.078 nm)	0.0789	ppm	0.0009	1.18	195.2000	0.0789 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0001	47.41	66.3300	0.0003 (ppm)
Mo (204.598 nm)	0.0008 u	ppm	0.0030	> 100.00	-1.4140	0.0008 u (ppm)
Na (589.592 nm)	0.9457	ppm	0.0162	1.72	6079.0000	0.9457 (ppm)
Ni (231.604 nm)	0.0029	ppm	0.0012	39.67	-4.1640	0.0029 (ppm)
P (213.618 nm)	0.0030	ppm	0.0003	10.23	2.4060	0.0030 (ppm)
Pb (220.353 nm)	0.0001 u	ppm	0.0016	> 100.00	-11.2000	0.0001 u (ppm)
Sb (206.834 nm)	0.0026	ppm	0.0002	8.06	-1.2770	0.0026 (ppm)
Se (196.026 nm)	0.0036	ppm	0.0028	78.01	1.3100	0.0036 (ppm)
Si (251.611 nm)	0.0055	ppm	0.0021	37.56	21.5700	0.0055 (ppm)
Sn (189.925 nm)	-0.0013 u	ppm	0.0029	> 100.00	-2.0660	-0.0013 u (ppm)
Sr (421.552 nm)	0.0005	ppm	0.0003	55.49	155.4000	0.0005 (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0003	> 100.00	-146.7000	-0.0001 u (ppm)
Tl (190.794 nm)	-0.0025 u	ppm	0.0035	> 100.00	2.2120	-0.0025 u (ppm)
V (292.401 nm)	0.0000 u	ppm	0.0002	> 100.00	86.7900	0.0000 u (ppm)
W (207.912 nm)	-0.0003 u	ppm	0.0004	> 100.00	-4.7540	-0.0003 u (ppm)
Zn (202.548 nm)	0.0026	ppm	0.0004	13.46	46.2200	0.0026 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0001	74.42	92.2800	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9545	330400.0000	0.0037	0.38
Y_R 371.029	0.9434	45830.0000	0.0027	0.28

Sample Name: 440-256622-H-2-A

Date: 12/10/2019 8:13:06 PM Rack:Tube: 3:50

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0033 u	ppm	0.0003	9.77	-202.3000	-0.0033 u (ppm)
Al (396.152 nm)	0.0068	ppm	0.0005	7.86	525.9000	0.0068 (ppm)
As (188.980 nm)	0.0014	ppm	0.0014	> 100.00	1.4960	0.0014 (ppm)
B (249.678 nm)	2.1870	ppm	0.0100	0.46	21340.0000	2.1870 (ppm)
Ba (233.527 nm)	0.0260	ppm	0.0011	4.10	2089.0000	0.0260 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0001	87.89	11.4700	-0.0001 u (ppm)
Ca (422.673 nm)	196.6000	ppm	0.9837	0.50	738800.0000	196.6000 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0001	83.25	-1.7280	0.0001 (ppm)
Co (228.615 nm)	0.0006 u	ppm	0.0008	> 100.00	7.7520	0.0006 u (ppm)
Cr (205.560 nm)	0.0005	ppm	0.0002	31.23	5.9820	0.0005 (ppm)
Cu (324.754 nm)	0.0003	ppm	0.0004	> 100.00	-39.9900	0.0003 (ppm)
Fe (238.204 nm)	-0.0102 u	ppm	0.0003	3.36	-42.2100	-0.0102 u (ppm)
K (766.491 nm)	198.6000	ppm	0.9582	0.48	193200.0000	198.6000 (ppm)
Li (670.783 nm)	0.0693	ppm	0.0005	0.77	5830.0000	0.0693 (ppm)
Mg (279.078 nm)	541.6000 o	ppm	2.6340	0.49	1265000.0000	541.6000 o (ppm)
Mn (259.372 nm)	-0.0100 u	ppm	0.0003	2.85	865.8000	-0.0100 u (ppm)
Mo (204.598 nm)	0.0047	ppm	0.0017	35.71	11.7700	0.0047 (ppm)
Na (589.592 nm)	3587.0000 o	ppm	37.6900	1.05	19600000.0000	3587.0000 o (ppm)
Ni (231.604 nm)	-0.0012 u	ppm	0.0020	> 100.00	-26.7100	-0.0012 u (ppm)
P (213.618 nm)	0.0771	ppm	0.0058	7.52	54.4700	0.0771 (ppm)
Pb (220.353 nm)	-0.0092 u	ppm	0.0011	11.96	-15.9900	-0.0092 u (ppm)
Sb (206.834 nm)	0.0016 u	ppm	0.0026	> 100.00	-2.4700	0.0016 u (ppm)
Se (196.026 nm)	0.0059 u	ppm	0.0088	> 100.00	1.5250	0.0059 u (ppm)
Si (251.611 nm)	4.1050	ppm	0.0077	0.19	8255.0000	4.1050 (ppm)
Sn (189.925 nm)	-0.0180 u	ppm	0.0029	16.05	-9.5470	-0.0180 u (ppm)
Sr (421.552 nm)	3.4840	ppm	0.0161	0.46	1155000.0000	3.4840 (ppm)
Ti (336.122 nm)	-0.0008 u	ppm	0.0002	18.99	-363.4000	-0.0008 u (ppm)
Tl (190.794 nm)	0.0063	ppm	0.0018	28.70	11.7400	0.0063 (ppm)
V (292.401 nm)	-0.0032 u	ppm	0.0004	12.05	229.2000	-0.0032 u (ppm)
W (207.912 nm)	-0.0140 u	ppm	0.0020	14.54	-27.8700	-0.0140 u (ppm)
Zn (202.548 nm)	-0.0400 u	ppm	0.0005	1.30	-357.6000	-0.0400 u (ppm)
Zr (343.823 nm)	0.0008	ppm	0.0000	5.12	194.7000	0.0008 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7716	267100.0000	0.0019	0.24
Y_R 371.029	0.8577	41670.0000	0.0098	1.15

Sample Name: 440-256622-H-3-A

Date: 12/10/2019 8:16:26 PM Rack:Tube: 3:51

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0022 u	ppm	0.0002	10.56	-157.1000	-0.0022 u (ppm)
Al (396.152 nm)	0.0124	ppm	0.0000	0.01	340.2000	0.0124 (ppm)
As (188.980 nm)	-0.0003 u	ppm	0.0041	> 100.00	0.9683	-0.0003 u (ppm)
B (249.678 nm)	1.1200	ppm	0.0053	0.47	10920.0000	1.1200 (ppm)
Ba (233.527 nm)	0.0340	ppm	0.0001	0.23	2649.0000	0.0340 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	41.46	29.9600	0.0001 (ppm)
Ca (422.673 nm)	106.0000	ppm	0.3237	0.31	398500.0000	106.0000 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.4550	0.0000 u (ppm)
Co (228.615 nm)	0.0000 u	ppm	0.0010	> 100.00	-5.8670	0.0000 u (ppm)
Cr (205.560 nm)	0.0012	ppm	0.0002	17.72	7.6650	0.0012 (ppm)
Cu (324.754 nm)	0.0008	ppm	0.0004	45.66	20.1400	0.0008 (ppm)
Fe (238.204 nm)	-0.0053 u	ppm	0.0015	29.01	-45.7900	-0.0053 u (ppm)
K (766.491 nm)	98.0700	ppm	0.0174	0.02	95380.0000	98.0700 (ppm)
Li (670.783 nm)	0.0340	ppm	0.0006	1.84	2958.0000	0.0340 (ppm)
Mg (279.078 nm)	283.5000	ppm	1.9190	0.68	662300.0000	283.5000 (ppm)
Mn (259.372 nm)	-0.0011 u	ppm	0.0001	12.11	818.5000	-0.0011 u (ppm)
Mo (204.598 nm)	0.0026	ppm	0.0002	5.74	4.7730	0.0026 (ppm)
Na (589.592 nm)	2080.0000 o	ppm	6.7410	0.32	11370000.0000	2080.0000 o (ppm)
Ni (231.604 nm)	-0.0009 u	ppm	0.0020	> 100.00	-22.4800	-0.0009 u (ppm)
P (213.618 nm)	0.0718	ppm	0.0123	17.11	50.8700	0.0718 (ppm)
Pb (220.353 nm)	-0.0045 u	ppm	0.0015	32.55	-13.2500	-0.0045 u (ppm)
Sb (206.834 nm)	0.0097	ppm	0.0045	46.32	4.1330	0.0097 (ppm)
Se (196.026 nm)	0.0091	ppm	0.0004	4.72	3.8250	0.0091 (ppm)
Si (251.611 nm)	5.5460	ppm	0.0152	0.27	11100.0000	5.5460 (ppm)
Sn (189.925 nm)	-0.0139 u	ppm	0.0102	73.20	-7.8880	-0.0139 u (ppm)
Sr (421.552 nm)	1.8040	ppm	0.0029	0.16	597900.0000	1.8040 (ppm)
Ti (336.122 nm)	-0.0005 u	ppm	0.0000	9.40	-259.7000	-0.0005 u (ppm)
Tl (190.794 nm)	0.0061	ppm	0.0019	30.98	10.7600	0.0061 (ppm)
V (292.401 nm)	0.0000 u	ppm	0.0000	62.47	208.1000	0.0000 u (ppm)
W (207.912 nm)	-0.0096 u	ppm	0.0009	9.12	-19.9800	-0.0096 u (ppm)
Zn (202.548 nm)	-0.0210 u	ppm	0.0005	2.55	-182.6000	-0.0210 u (ppm)
Zr (343.823 nm)	0.0006	ppm	0.0000	3.58	168.9000	0.0006 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8419	291400.0000	0.0052	0.62
Y_R 371.029	0.9172	44560.0000	0.0038	0.41

Sample Name: 440-256622-H-4-A

Date: 12/10/2019 8:19:46 PM Rack:Tube: 3:52

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0017 u	ppm	0.0001	3.66	-138.0000	-0.0017 u (ppm)
Al (396.152 nm)	0.0161	ppm	0.0002	1.25	371.6000	0.0161 (ppm)
As (188.980 nm)	0.0041 u	ppm	0.0069	> 100.00	3.3790	0.0041 u (ppm)
B (249.678 nm)	0.9042	ppm	0.0050	0.55	8817.0000	0.9042 (ppm)
Ba (233.527 nm)	0.0364	ppm	0.0005	1.38	2825.0000	0.0364 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	21.93	37.7900	0.0001 (ppm)
Ca (422.673 nm)	87.1500	ppm	0.0635	0.07	327500.0000	87.1500 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0004	> 100.00	-2.9150	0.0000 u (ppm)
Co (228.615 nm)	0.0003 u	ppm	0.0006	> 100.00	-3.3190	0.0003 u (ppm)
Cr (205.560 nm)	0.0017	ppm	0.0010	60.94	9.4040	0.0017 (ppm)
Cu (324.754 nm)	0.0014	ppm	0.0003	23.01	50.2000	0.0014 (ppm)
Fe (238.204 nm)	-0.0049 u	ppm	0.0009	17.83	-47.9600	-0.0049 u (ppm)
K (766.491 nm)	78.3700	ppm	0.3581	0.46	76210.0000	78.3700 (ppm)
Li (670.783 nm)	0.0268	ppm	0.0014	5.25	2379.0000	0.0268 (ppm)
Mg (279.078 nm)	235.0000	ppm	0.3917	0.17	549200.0000	235.0000 (ppm)
Mn (259.372 nm)	0.0017	ppm	0.0003	15.19	908.7000	0.0017 (ppm)
Mo (204.598 nm)	0.0033	ppm	0.0010	29.05	6.9490	0.0033 (ppm)
Na (589.592 nm)	1714.0000 o	ppm	0.5363	0.03	9362000.0000	1714.0000 o (ppm)
Ni (231.604 nm)	0.0007	ppm	0.0002	26.23	-15.9200	0.0007 (ppm)
P (213.618 nm)	0.0734	ppm	0.0052	7.09	52.0300	0.0734 (ppm)
Pb (220.353 nm)	-0.0069 u	ppm	0.0026	38.21	-18.4100	-0.0069 u (ppm)
Sb (206.834 nm)	-0.0006 u	ppm	0.0027	> 100.00	-3.9960	-0.0006 u (ppm)
Se (196.026 nm)	0.0059	ppm	0.0016	27.31	2.1040	0.0059 (ppm)
Si (251.611 nm)	5.9510	ppm	0.0090	0.15	11900.0000	5.9510 (ppm)
Sn (189.925 nm)	-0.0144 u	ppm	0.0015	10.46	-8.2400	-0.0144 u (ppm)
Sr (421.552 nm)	1.4740	ppm	0.0029	0.20	488600.0000	1.4740 (ppm)
Ti (336.122 nm)	-0.0003 u	ppm	0.0000	6.63	-233.5000	-0.0003 u (ppm)
Tl (190.794 nm)	0.0057	ppm	0.0030	52.16	10.3100	0.0057 (ppm)
V (292.401 nm)	0.0005	ppm	0.0005	89.44	201.2000	0.0005 (ppm)
W (207.912 nm)	-0.0081 u	ppm	0.0018	22.04	-17.4400	-0.0081 u (ppm)
Zn (202.548 nm)	-0.0165 u	ppm	0.0004	2.41	-137.7000	-0.0165 u (ppm)
Zr (343.823 nm)	0.0001	ppm	0.0001	45.18	128.0000	0.0001 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8859	306600.0000	0.0064	0.73
Y_R 371.029	0.9359	45470.0000	0.0053	0.56

Sample Name: 440-256622-H-5-A

Date: 12/10/2019 8:23:06 PM Rack:Tube: 3:53

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0027 u	ppm	0.0001	3.69	-175.0000	-0.0027 u (ppm)
Al (396.152 nm)	0.0131	ppm	0.0007	5.49	357.1000	0.0131 (ppm)
As (188.980 nm)	0.0045	ppm	0.0024	53.88	3.5570	0.0045 (ppm)
B (249.678 nm)	1.1170	ppm	0.0095	0.85	10900.0000	1.1170 (ppm)
Ba (233.527 nm)	0.0348	ppm	0.0008	2.36	2712.0000	0.0348 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	23.5900	0.0000 u (ppm)
Ca (422.673 nm)	105.5000	ppm	0.2548	0.24	396700.0000	105.5000 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0001	43.01	-7.7570	-0.0002 u (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0005	> 100.00	-4.0260	0.0001 u (ppm)
Cr (205.560 nm)	0.0018	ppm	0.0007	37.19	10.0400	0.0018 (ppm)
Cu (324.754 nm)	0.0011	ppm	0.0001	6.56	29.5600	0.0011 (ppm)
Fe (238.204 nm)	-0.0044 u	ppm	0.0048	> 100.00	-43.5900	-0.0044 u (ppm)
K (766.491 nm)	97.6500	ppm	0.1348	0.14	94980.0000	97.6500 (ppm)
Li (670.783 nm)	0.0335	ppm	0.0006	1.81	2926.0000	0.0335 (ppm)
Mg (279.078 nm)	284.2000	ppm	0.0268	0.01	664200.0000	284.2000 (ppm)
Mn (259.372 nm)	-0.0011 u	ppm	0.0002	15.51	823.0000	-0.0011 u (ppm)
Mo (204.598 nm)	0.0033	ppm	0.0013	39.14	6.9590	0.0033 (ppm)
Na (589.592 nm)	2071.0000 o	ppm	8.9820	0.43	11310000.0000	2071.0000 o (ppm)
Ni (231.604 nm)	-0.0006 u	ppm	0.0002	28.90	-21.2900	-0.0006 u (ppm)
P (213.618 nm)	0.0696	ppm	0.0005	0.73	49.3000	0.0696 (ppm)
Pb (220.353 nm)	-0.0051 u	ppm	0.0003	6.18	-14.1600	-0.0051 u (ppm)
Sb (206.834 nm)	-0.0045 u	ppm	0.0032	71.97	-7.0400	-0.0045 u (ppm)
Se (196.026 nm)	0.0102	ppm	0.0036	35.91	4.3910	0.0102 (ppm)
Si (251.611 nm)	5.6620	ppm	0.0220	0.39	11330.0000	5.6620 (ppm)
Sn (189.925 nm)	-0.0107 u	ppm	0.0013	12.06	-6.3210	-0.0107 u (ppm)
Sr (421.552 nm)	1.7890	ppm	0.0112	0.62	593100.0000	1.7890 (ppm)
Ti (336.122 nm)	-0.0006 u	ppm	0.0001	10.58	-268.0000	-0.0006 u (ppm)
Tl (190.794 nm)	0.0130	ppm	0.0033	25.40	17.0000	0.0130 (ppm)
V (292.401 nm)	0.0003	ppm	0.0003	> 100.00	216.5000	0.0003 (ppm)
W (207.912 nm)	-0.0126 u	ppm	0.0056	44.09	-24.2900	-0.0126 u (ppm)
Zn (202.548 nm)	-0.0202 u	ppm	0.0005	2.23	-172.5000	-0.0202 u (ppm)
Zr (343.823 nm)	0.0002 u	ppm	0.0004	> 100.00	138.7000	0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8557	296200.0000	0.0073	0.86
Y_R 371.029	0.9259	44990.0000	0.0041	0.44

Sample Name: xRINSE 5993206

Date: 12/10/2019 8:26:26 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0004 u	ppm	0.0001	16.31	-83.4000	-0.0004 u (ppm)
Al (396.152 nm)	-0.0012 u	ppm	0.0004	30.19	-355.1000	-0.0012 u (ppm)
As (188.980 nm)	0.0010 u	ppm	0.0014	> 100.00	2.1060	0.0010 u (ppm)
B (249.678 nm)	0.0018	ppm	0.0004	24.44	3.4870	0.0018 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	43.0100	0.0000 u (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	24.7100	0.0000 u (ppm)
Ca (422.673 nm)	0.0277	ppm	0.0003	1.25	223.1000	0.0277 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	-2.6240	0.0000 u (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0013	> 100.00	-11.4000	0.0001 u (ppm)
Cr (205.560 nm)	0.0007	ppm	0.0008	> 100.00	4.4890	0.0007 (ppm)
Cu (324.754 nm)	-0.0001 u	ppm	0.0007	> 100.00	39.2700	-0.0001 u (ppm)
Fe (238.204 nm)	0.0016 u	ppm	0.0038	> 100.00	-46.2400	0.0016 u (ppm)
K (766.491 nm)	0.0949	ppm	0.0131	13.81	14.1300	0.0949 (ppm)
Li (670.783 nm)	0.0016	ppm	0.0011	68.38	144.7000	0.0016 (ppm)
Mg (279.078 nm)	0.1373 Z	ppm	0.0414	30.16	331.5000 Z	0.1373 Z (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0002	> 100.00	60.3400	0.0002 (ppm)
Mo (204.598 nm)	0.0006	ppm	0.0006	96.88	-1.9300	0.0006 (ppm)
Na (589.592 nm)	1.3340 Z	ppm	0.0234	1.75	8199.0000 Z	1.3340 Z (ppm)
Ni (231.604 nm)	0.0029	ppm	0.0011	38.84	-4.4580	0.0029 (ppm)
P (213.618 nm)	-0.0008 u	ppm	0.0019	> 100.00	-0.2780	-0.0008 u (ppm)
Pb (220.353 nm)	-0.0044 u	ppm	0.0011	25.72	-19.0400	-0.0044 u (ppm)
Sb (206.834 nm)	0.0079	ppm	0.0017	21.60	2.9400	0.0079 (ppm)
Se (196.026 nm)	0.0074	ppm	0.0001	2.00	3.4530	0.0074 (ppm)
Si (251.611 nm)	0.0020	ppm	0.0025	> 100.00	14.4400	0.0020 (ppm)
Sn (189.925 nm)	0.0018 u	ppm	0.0043	> 100.00	-0.5496	0.0018 u (ppm)
Sr (421.552 nm)	0.0005	ppm	0.0001	12.28	131.4000	0.0005 (ppm)
Ti (336.122 nm)	-0.0004 u	ppm	0.0002	58.37	-172.5000	-0.0004 u (ppm)
Tl (190.794 nm)	0.0024 u	ppm	0.0058	> 100.00	6.7120	0.0024 u (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0002	> 100.00	83.6300	-0.0001 u (ppm)
W (207.912 nm)	-0.0015 u	ppm	0.0004	26.94	-6.5360	-0.0015 u (ppm)
Zn (202.548 nm)	0.0007	ppm	0.0002	26.74	21.4600	0.0007 (ppm)
Zr (343.823 nm)	-0.0003 u	ppm	0.0002	74.81	80.3000	-0.0003 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9823	340000.0000	0.0096	0.98
Y_R 371.029	0.9624	46760.0000	0.0037	0.39

Sample Name: CCV 5993196

Date: 12/10/2019 8:29:46 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4923	ppm	0.0022	0.45	18010.0000	0.4923 (ppm)
Al (396.152 nm)	0.9780	ppm	0.0040	0.41	24800.0000	0.9780 (ppm)
As (188.980 nm)	0.9803	ppm	0.0037	0.38	517.0000	0.9803 (ppm)
B (249.678 nm)	0.9768	ppm	0.0072	0.73	9432.0000	0.9768 (ppm)
Ba (233.527 nm)	0.9945	ppm	0.0041	0.41	75140.0000	0.9945 (ppm)
Be (234.861 nm)	0.9791	ppm	0.0052	0.53	145500.0000	0.9791 (ppm)
Ca (422.673 nm)	4.9440	ppm	0.0026	0.05	18690.0000	4.9440 (ppm)
Cd (214.439 nm)	0.9844	ppm	0.0050	0.50	18400.0000	0.9844 (ppm)
Co (228.615 nm)	0.9879	ppm	0.0041	0.41	11130.0000	0.9879 (ppm)
Cr (205.560 nm)	0.9880	ppm	0.0042	0.43	3814.0000	0.9880 (ppm)
Cu (324.754 nm)	0.9882	ppm	0.0019	0.19	35030.0000	0.9882 (ppm)
Fe (238.204 nm)	0.9837	ppm	0.0057	0.58	2386.0000	0.9837 (ppm)
K (766.491 nm)	10.0000	ppm	0.0870	0.87	9657.0000	10.0000 (ppm)
Li (670.783 nm)	0.9917	ppm	0.0024	0.25	54650.0000	0.9917 (ppm)
Mg (279.078 nm)	5.0230	ppm	0.0246	0.49	11740.0000	5.0230 (ppm)
Mn (259.372 nm)	0.9841	ppm	0.0032	0.32	83140.0000	0.9841 (ppm)
Mo (204.598 nm)	0.9961	ppm	0.0039	0.40	3346.0000	0.9961 (ppm)
Na (589.592 nm)	10.6300	ppm	0.0553	0.52	59040.0000	10.6300 (ppm)
Ni (231.604 nm)	0.9856	ppm	0.0006	0.07	3822.0000	0.9856 (ppm)
P (213.618 nm)	0.9812	ppm	0.0032	0.33	653.7000	0.9812 (ppm)
Pb (220.353 nm)	0.9822	ppm	0.0068	0.69	1704.0000	0.9822 (ppm)
Sb (206.834 nm)	0.9948	ppm	0.0269	2.70	775.1000	0.9948 (ppm)
Se (196.026 nm)	0.9746	ppm	0.0099	1.01	550.3000	0.9746 (ppm)
Si (251.611 nm)	4.9300	ppm	0.0498	1.01	9995.0000	4.9300 (ppm)
Sn (189.925 nm)	0.9833	ppm	0.0028	0.28	485.1000	0.9833 (ppm)
Sr (421.552 nm)	0.9829	ppm	0.0009	0.09	325300.0000	0.9829 (ppm)
Ti (336.122 nm)	0.9852	ppm	0.0080	0.81	93200.0000	0.9852 (ppm)
Tl (190.794 nm)	0.9960	ppm	0.0110	1.10	881.4000	0.9960 (ppm)
V (292.401 nm)	0.9890	ppm	0.0031	0.31	26270.0000	0.9890 (ppm)
W (207.912 nm)	0.9842	ppm	0.0004	0.04	1417.0000	0.9842 (ppm)
Zn (202.548 nm)	0.9833	ppm	0.0043	0.44	12780.0000	0.9833 (ppm)
Zr (343.823 nm)	0.9653	ppm	0.0087	0.90	73230.0000	0.9653 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9698	335700.0000	0.0005	0.05
Y_R 371.029	0.9606	46670.0000	0.0080	0.83

Sample Name: CCB 5993195

Date: 12/10/2019 8:33:04 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0003	ppm	0.0003	> 100.00	-59.1100	0.0003 (ppm)
Al (396.152 nm)	-0.0003 u	ppm	0.0001	20.58	-329.8000	-0.0003 u (ppm)
As (188.980 nm)	0.0013 u	ppm	0.0044	> 100.00	2.2760	0.0013 u (ppm)
B (249.678 nm)	0.0012	ppm	0.0004	36.83	-2.6040	0.0012 (ppm)
Ba (233.527 nm)	0.0001	ppm	0.0000	4.19	52.2300	0.0001 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	48.05	65.4800	0.0003 (ppm)
Ca (422.673 nm)	0.0063	ppm	0.0029	46.00	142.7000	0.0063 (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0002	48.09	5.2540	0.0005 (ppm)
Co (228.615 nm)	0.0003	ppm	0.0003	82.02	-9.2790	0.0003 (ppm)
Cr (205.560 nm)	0.0016 u	ppm	0.0026	> 100.00	8.0140	0.0016 u (ppm)
Cu (324.754 nm)	0.0001	ppm	0.0002	> 100.00	47.4600	0.0001 (ppm)
Fe (238.204 nm)	0.0020 u	ppm	0.0063	> 100.00	-45.2200	0.0020 u (ppm)
K (766.491 nm)	0.0968	ppm	0.0173	17.83	15.9700	0.0968 (ppm)
Li (670.783 nm)	0.0018	ppm	0.0007	36.67	154.9000	0.0018 (ppm)
Mg (279.078 nm)	0.0163	ppm	0.0030	18.09	48.9200	0.0163 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0003	65.03	87.8700	0.0005 (ppm)
Mo (204.598 nm)	0.0060	ppm	0.0009	14.58	15.9900	0.0060 (ppm)
Na (589.592 nm)	0.5826 Z	ppm	0.0073	1.26	4096.0000 Z	0.5826 Z (ppm)
Ni (231.604 nm)	0.0026	ppm	0.0014	54.28	-5.4420	0.0026 (ppm)
P (213.618 nm)	-0.0020 u	ppm	0.0004	17.97	-1.1650	-0.0020 u (ppm)
Pb (220.353 nm)	-0.0024 u	ppm	0.0008	32.09	-15.5800	-0.0024 u (ppm)
Sb (206.834 nm)	0.0078	ppm	0.0076	98.07	2.7860	0.0078 (ppm)
Se (196.026 nm)	0.0092	ppm	0.0075	81.38	4.5120	0.0092 (ppm)
Si (251.611 nm)	0.0030	ppm	0.0019	61.67	17.2300	0.0030 (ppm)
Sn (189.925 nm)	0.0024 u	ppm	0.0040	> 100.00	-0.2748	0.0024 u (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0001	82.51	1.2280	0.0001 (ppm)
Ti (336.122 nm)	0.0019	ppm	0.0002	11.76	49.1300	0.0019 (ppm)
Tl (190.794 nm)	0.0004 u	ppm	0.0053	> 100.00	4.8830	0.0004 u (ppm)
V (292.401 nm)	0.0003	ppm	0.0001	24.62	92.5700	0.0003 (ppm)
W (207.912 nm)	0.0025	ppm	0.0012	47.21	-0.7478	0.0025 (ppm)
Zn (202.548 nm)	0.0008	ppm	0.0002	23.77	23.1800	0.0008 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	43.73	92.8900	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9878	341900.0000	0.0042	0.42
Y_R 371.029	0.9742	47330.0000	0.0050	0.51

Sample Name: MB 440-584948/1-A

Date: 12/10/2019 8:36:24 PM Rack:Tube: 3:54

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001	ppm	0.0000	17.30	-64.1300	0.0001 (ppm)
Al (396.152 nm)	0.0106	ppm	0.0007	6.91	-62.5900	0.0106 (ppm)
As (188.980 nm)	0.0072	ppm	0.0034	47.63	5.3730	0.0072 (ppm)
B (249.678 nm)	0.0025	ppm	0.0000	0.77	10.3600	0.0025 (ppm)
Ba (233.527 nm)	0.0000	ppm	0.0000	> 100.00	43.1300	0.0000 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	24.4200	0.0000 u (ppm)
Ca (422.673 nm)	0.0201	ppm	0.0028	13.78	194.6000	0.0201 (ppm)
Cd (214.439 nm)	0.0002 u	ppm	0.0004	> 100.00	0.1965	0.0002 u (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0007	> 100.00	-11.4800	0.0001 u (ppm)
Cr (205.560 nm)	0.0034	ppm	0.0011	31.84	14.7800	0.0034 (ppm)
Cu (324.754 nm)	0.0005	ppm	0.0001	19.74	59.7600	0.0005 (ppm)
Fe (238.204 nm)	0.0250	ppm	0.0048	19.17	11.8600	0.0250 (ppm)
K (766.491 nm)	0.0929	ppm	0.0937	> 100.00	12.1500	0.0929 (ppm)
Li (670.783 nm)	0.0020	ppm	0.0017	83.83	162.6000	0.0020 (ppm)
Mg (279.078 nm)	0.0094	ppm	0.0008	8.62	32.7300	0.0094 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0002	42.23	89.0000	0.0005 (ppm)
Mo (204.598 nm)	0.0030	ppm	0.0009	29.43	6.0370	0.0030 (ppm)
Na (589.592 nm)	0.5741	ppm	0.0159	2.76	4050.0000	0.5741 (ppm)
Ni (231.604 nm)	0.0042	ppm	0.0002	5.69	0.6617	0.0042 (ppm)
P (213.618 nm)	-0.0015 u	ppm	0.0061	> 100.00	-0.8177	-0.0015 u (ppm)
Pb (220.353 nm)	0.0003 u	ppm	0.0051	> 100.00	-10.8000	0.0003 u (ppm)
Sb (206.834 nm)	0.0103	ppm	0.0004	3.97	4.8000	0.0103 (ppm)
Se (196.026 nm)	0.0069	ppm	0.0036	52.58	3.1680	0.0069 (ppm)
Si (251.611 nm)	0.0029	ppm	0.0021	73.45	16.3200	0.0029 (ppm)
Sn (189.925 nm)	0.0003	ppm	0.0000	5.12	-1.3110	0.0003 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	20.36	20.9600	0.0001 (ppm)
Ti (336.122 nm)	0.0005	ppm	0.0004	85.58	-91.1000	0.0005 (ppm)
Tl (190.794 nm)	0.0044	ppm	0.0027	61.22	8.5330	0.0044 (ppm)
V (292.401 nm)	0.0000 u	ppm	0.0001	> 100.00	86.5900	0.0000 u (ppm)
W (207.912 nm)	-0.0005 u	ppm	0.0016	> 100.00	-4.9550	-0.0005 u (ppm)
Zn (202.548 nm)	0.0049	ppm	0.0002	4.16	75.2100	0.0049 (ppm)
Zr (343.823 nm)	0.0001 u	ppm	0.0002	> 100.00	113.3000	0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9808	339500.0000	0.0009	0.09
Y_R 371.029	0.9746	47350.0000	0.0022	0.22

Sample Name: LCS 440-584948/2-A

Date: 12/10/2019 8:39:44 PM Rack:Tube: 3:55

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4884	ppm	0.0022	0.44	17870.0000	0.4884 (ppm)
Al (396.152 nm)	0.9820	ppm	0.0075	0.76	24930.0000	0.9820 (ppm)
As (188.980 nm)	0.9609	ppm	0.0021	0.22	506.7000	0.9609 (ppm)
B (249.678 nm)	0.9663	ppm	0.0057	0.59	9327.0000	0.9663 (ppm)
Ba (233.527 nm)	0.9772	ppm	0.0043	0.44	73830.0000	0.9772 (ppm)
Be (234.861 nm)	0.9644	ppm	0.0053	0.54	143300.0000	0.9644 (ppm)
Ca (422.673 nm)	4.9230	ppm	0.0163	0.33	18610.0000	4.9230 (ppm)
Cd (214.439 nm)	0.9711	ppm	0.0047	0.48	18150.0000	0.9711 (ppm)
Co (228.615 nm)	0.9793	ppm	0.0050	0.51	11030.0000	0.9793 (ppm)
Cr (205.560 nm)	0.9791	ppm	0.0059	0.61	3780.0000	0.9791 (ppm)
Cu (324.754 nm)	0.9971	ppm	0.0021	0.21	35340.0000	0.9971 (ppm)
Fe (238.204 nm)	1.0240	ppm	0.0015	0.15	2487.0000	1.0240 (ppm)
K (766.491 nm)	9.9390	ppm	0.0140	0.14	9597.0000	9.9390 (ppm)
Li (670.783 nm)	0.9938	ppm	0.0003	0.03	54770.0000	0.9938 (ppm)
Mg (279.078 nm)	4.8940	ppm	0.0125	0.26	11440.0000	4.8940 (ppm)
Mn (259.372 nm)	0.9752	ppm	0.0044	0.45	82420.0000	0.9752 (ppm)
Mo (204.598 nm)	1.0460	ppm	0.0072	0.68	3513.0000	1.0460 (ppm)
Na (589.592 nm)	10.3500	ppm	0.0003	0.00	57530.0000	10.3500 (ppm)
Ni (231.604 nm)	0.9780	ppm	0.0049	0.50	3792.0000	0.9780 (ppm)
P (213.618 nm)	0.9660	ppm	0.0094	0.97	641.9000	0.9660 (ppm)
Pb (220.353 nm)	0.9740	ppm	0.0035	0.36	1690.0000	0.9740 (ppm)
Sb (206.834 nm)	1.0550	ppm	0.0101	0.95	821.8000	1.0550 (ppm)
Se (196.026 nm)	0.9291	ppm	0.0067	0.72	524.9000	0.9291 (ppm)
Si (251.611 nm)	4.8680	ppm	0.0340	0.70	9874.0000	4.8680 (ppm)
Sn (189.925 nm)	0.9748	ppm	0.0076	0.78	480.9000	0.9748 (ppm)
Sr (421.552 nm)	0.9776	ppm	0.0007	0.07	323600.0000	0.9776 (ppm)
Ti (336.122 nm)	0.9944	ppm	0.0065	0.66	94060.0000	0.9944 (ppm)
Tl (190.794 nm)	0.9166	ppm	0.0325	3.55	809.6000	0.9166 (ppm)
V (292.401 nm)	0.9808	ppm	0.0066	0.67	26040.0000	0.9808 (ppm)
W (207.912 nm)	1.0050	ppm	0.0014	0.14	1446.0000	1.0050 (ppm)
Zn (202.548 nm)	0.9623	ppm	0.0040	0.42	12510.0000	0.9623 (ppm)
Zr (343.823 nm)	0.9444	ppm	0.0070	0.74	71640.0000	0.9444 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9729	336700.0000	0.0018	0.19
Y_R 371.029	0.9732	47280.0000	0.0008	0.08

Sample Name: 440-256855-U-1-A

Date: 12/10/2019 8:43:04 PM Rack:Tube: 3:56

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	42.27	-79.5200	-0.0003 u (ppm)
Al (396.152 nm)	0.0111	ppm	0.0010	9.27	-33.8700	0.0111 (ppm)
As (188.980 nm)	0.0043	ppm	0.0021	48.68	3.8110	0.0043 (ppm)
B (249.678 nm)	0.0305	ppm	0.0010	3.22	284.3000	0.0305 (ppm)
Ba (233.527 nm)	0.0143	ppm	0.0005	3.23	1118.0000	0.0143 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0002	50.17	74.0000	0.0003 (ppm)
Ca (422.673 nm)	19.8200	ppm	0.0005	0.00	74590.0000	19.8200 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0005	> 100.00	-1.0210	0.0001 u (ppm)
Co (228.615 nm)	0.0005 u	ppm	0.0008	> 100.00	-6.9240	0.0005 u (ppm)
Cr (205.560 nm)	0.0018	ppm	0.0019	> 100.00	9.0570	0.0018 (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0006	> 100.00	30.6100	0.0000 u (ppm)
Fe (238.204 nm)	0.0220	ppm	0.0040	18.17	4.7980	0.0220 (ppm)
K (766.491 nm)	1.2000	ppm	0.0021	0.18	1093.0000	1.2000 (ppm)
Li (670.783 nm)	0.0030	ppm	0.0012	38.52	261.9000	0.0030 (ppm)
Mg (279.078 nm)	5.7620	ppm	0.0170	0.29	13480.0000	5.7620 (ppm)
Mn (259.372 nm)	0.0407	ppm	0.0003	0.78	3482.0000	0.0407 (ppm)
Mo (204.598 nm)	0.0049	ppm	0.0009	19.25	12.2700	0.0049 (ppm)
Na (589.592 nm)	14.8400	ppm	0.0186	0.13	81970.0000	14.8400 (ppm)
Ni (231.604 nm)	0.0011	ppm	0.0006	55.59	-11.4700	0.0011 (ppm)
P (213.618 nm)	-0.0005 u	ppm	0.0051	> 100.00	-0.2751	-0.0005 u (ppm)
Pb (220.353 nm)	-0.0014 u	ppm	0.0028	> 100.00	-13.5000	-0.0014 u (ppm)
Sb (206.834 nm)	0.0093	ppm	0.0013	13.56	4.0160	0.0093 (ppm)
Se (196.026 nm)	0.0043	ppm	0.0007	17.30	1.6350	0.0043 (ppm)
Si (251.611 nm)	2.4800	ppm	0.0279	1.13	4956.0000	2.4800 (ppm)
Sn (189.925 nm)	-0.0060 u	ppm	0.0041	67.07	-4.4270	-0.0060 u (ppm)
Sr (421.552 nm)	0.2450	ppm	0.0001	0.03	81270.0000	0.2450 (ppm)
Ti (336.122 nm)	0.0012	ppm	0.0001	10.58	-34.0400	0.0012 (ppm)
Tl (190.794 nm)	0.0020	ppm	0.0003	16.15	6.2510	0.0020 (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0003	> 100.00	102.2000	-0.0002 u (ppm)
W (207.912 nm)	-0.0006 u	ppm	0.0032	> 100.00	-5.4890	-0.0006 u (ppm)
Zn (202.548 nm)	0.0032	ppm	0.0003	8.17	50.6200	0.0032 (ppm)
Zr (343.823 nm)	0.0001	ppm	0.0001	87.07	114.0000	0.0001 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9843	340700.0000	0.0045	0.46
Y_R 371.029	0.9773	47480.0000	0.0012	0.12

Sample Name: 440-256855-U-1-A

Date: 12/10/2019 8:46:24 PM Rack:Tube: 3:57

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0005	88.33	-96.6100	-0.0006 u (ppm)
Al (396.152 nm)	0.0301	ppm	0.0005	1.59	489.0000	0.0301 (ppm)
As (188.980 nm)	0.0053	ppm	0.0019	35.11	4.0950	0.0053 (ppm)
B (249.678 nm)	0.1306	ppm	0.0013	1.00	1263.0000	0.1306 (ppm)
Ba (233.527 nm)	0.0697	ppm	0.0003	0.40	5309.0000	0.0697 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	23.8400	0.0000 u (ppm)
Ca (422.673 nm)	101.7000	ppm	0.4163	0.41	382300.0000	101.7000 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.2760	0.0000 u (ppm)
Co (228.615 nm)	0.0010	ppm	0.0008	79.22	0.5882	0.0010 (ppm)
Cr (205.560 nm)	0.0032	ppm	0.0016	50.69	15.1900	0.0032 (ppm)
Cu (324.754 nm)	-0.0008 u	ppm	0.0002	19.06	-53.0800	-0.0008 u (ppm)
Fe (238.204 nm)	0.1190	ppm	0.0036	3.06	247.0000	0.1190 (ppm)
K (766.491 nm)	5.7060	ppm	0.0334	0.58	5488.0000	5.7060 (ppm)
Li (670.783 nm)	0.0073	ppm	0.0002	2.72	660.3000	0.0073 (ppm)
Mg (279.078 nm)	28.7800	ppm	0.0174	0.06	67270.0000	28.7800 (ppm)
Mn (259.372 nm)	0.2037	ppm	0.0005	0.25	17240.0000	0.2037 (ppm)
Mo (204.598 nm)	0.0057	ppm	0.0014	24.14	14.9500	0.0057 (ppm)
Na (589.592 nm)	72.4300	ppm	0.4013	0.55	396600.0000	72.4300 (ppm)
Ni (231.604 nm)	0.0001 u	ppm	0.0003	> 100.00	-16.5900	0.0001 u (ppm)
P (213.618 nm)	0.0125	ppm	0.0090	71.73	8.3040	0.0125 (ppm)
Pb (220.353 nm)	-0.0024 u	ppm	0.0054	> 100.00	-14.3700	-0.0024 u (ppm)
Sb (206.834 nm)	0.0079	ppm	0.0057	72.31	3.0740	0.0079 (ppm)
Se (196.026 nm)	0.0024	ppm	0.0032	> 100.00	0.2676	0.0024 (ppm)
Si (251.611 nm)	12.8700	ppm	0.0504	0.39	25680.0000	12.8700 (ppm)
Sn (189.925 nm)	-0.0077 u	ppm	0.0059	76.49	-5.1860	-0.0077 u (ppm)
Sr (421.552 nm)	1.2530	ppm	0.0070	0.56	415800.0000	1.2530 (ppm)
Ti (336.122 nm)	0.0000 u	ppm	0.0003	> 100.00	-213.5000	0.0000 u (ppm)
Tl (190.794 nm)	0.0060	ppm	0.0037	62.07	9.8270	0.0060 (ppm)
V (292.401 nm)	-0.0028 u	ppm	0.0000	0.31	117.2000	-0.0028 u (ppm)
W (207.912 nm)	-0.0003 u	ppm	0.0004	> 100.00	-5.9880	-0.0003 u (ppm)
Zn (202.548 nm)	0.0112	ppm	0.0001	1.11	140.6000	0.0112 (ppm)
Zr (343.823 nm)	0.0012	ppm	0.0002	13.40	205.4000	0.0012 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9546	330400.0000	0.0010	0.11
Y_R 371.029	0.9645	46860.0000	0.0051	0.53

Sample Name: 440-256855-U-1-B MS

Date: 12/10/2019 8:49:44 PM Rack:Tube: 3:58

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4851	ppm	0.0021	0.44	17740.0000	0.4851 (ppm)
Al (396.152 nm)	1.0740	ppm	0.0033	0.31	27280.0000	1.0740 (ppm)
As (188.980 nm)	0.9831	ppm	0.0052	0.53	518.4000	0.9831 (ppm)
B (249.678 nm)	1.1160	ppm	0.0091	0.81	10790.0000	1.1160 (ppm)
Ba (233.527 nm)	1.0100	ppm	0.0067	0.67	76310.0000	1.0100 (ppm)
Be (234.861 nm)	0.9669	ppm	0.0058	0.60	143600.0000	0.9669 (ppm)
Ca (422.673 nm)	107.9000	ppm	0.1919	0.18	405600.0000	107.9000 (ppm)
Cd (214.439 nm)	0.9248	ppm	0.0054	0.59	17280.0000	0.9248 (ppm)
Co (228.615 nm)	0.9264	ppm	0.0030	0.32	10440.0000	0.9264 (ppm)
Cr (205.560 nm)	0.9557	ppm	0.0031	0.33	3691.0000	0.9557 (ppm)
Cu (324.754 nm)	1.0030	ppm	0.0083	0.83	35470.0000	1.0030 (ppm)
Fe (238.204 nm)	1.1060	ppm	0.0056	0.51	2690.0000	1.1060 (ppm)
K (766.491 nm)	15.4100	ppm	0.0430	0.28	14940.0000	15.4100 (ppm)
Li (670.783 nm)	0.9650	ppm	0.0052	0.54	53380.0000	0.9650 (ppm)
Mg (279.078 nm)	34.0000	ppm	0.2968	0.87	79460.0000	34.0000 (ppm)
Mn (259.372 nm)	1.1490	ppm	0.0048	0.42	97090.0000	1.1490 (ppm)
Mo (204.598 nm)	1.0400	ppm	0.0023	0.22	3492.0000	1.0400 (ppm)
Na (589.592 nm)	82.6600	ppm	0.4095	0.50	452600.0000	82.6600 (ppm)
Ni (231.604 nm)	0.9130	ppm	0.0025	0.27	3537.0000	0.9130 (ppm)
P (213.618 nm)	1.0030	ppm	0.0034	0.34	667.3000	1.0030 (ppm)
Pb (220.353 nm)	0.9283	ppm	0.0038	0.40	1611.0000	0.9283 (ppm)
Sb (206.834 nm)	1.0450	ppm	0.0090	0.87	813.7000	1.0450 (ppm)
Se (196.026 nm)	0.9121	ppm	0.0062	0.68	515.0000	0.9121 (ppm)
Si (251.611 nm)	17.4700	ppm	0.1486	0.85	35020.0000	17.4700 (ppm)
Sn (189.925 nm)	0.9510	ppm	0.0066	0.69	469.2000	0.9510 (ppm)
Sr (421.552 nm)	2.2040	ppm	0.0123	0.56	730500.0000	2.2040 (ppm)
Ti (336.122 nm)	0.9846	ppm	0.0064	0.65	93060.0000	0.9846 (ppm)
Tl (190.794 nm)	0.8884	ppm	0.0271	3.05	784.0000	0.8884 (ppm)
V (292.401 nm)	0.9751	ppm	0.0019	0.20	25990.0000	0.9751 (ppm)
W (207.912 nm)	0.9979	ppm	0.0039	0.39	1434.0000	0.9979 (ppm)
Zn (202.548 nm)	0.9158	ppm	0.0043	0.47	11890.0000	0.9158 (ppm)
Zr (343.823 nm)	0.9276	ppm	0.0064	0.69	70390.0000	0.9276 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9492	328500.0000	0.0000	0.00
Y_R 371.029	0.9574	46510.0000	0.0032	0.33

Sample Name: 440-256855-U-1-C MSD

Date: 12/10/2019 8:53:04 PM Rack:Tube: 3:59

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4846	ppm	0.0017	0.34	17720.0000	0.4846 (ppm)
Al (396.152 nm)	1.0790	ppm	0.0033	0.31	27410.0000	1.0790 (ppm)
As (188.980 nm)	0.9831	ppm	0.0086	0.87	518.3000	0.9831 (ppm)
B (249.678 nm)	1.1100	ppm	0.0070	0.63	10730.0000	1.1100 (ppm)
Ba (233.527 nm)	1.0060	ppm	0.0038	0.37	76040.0000	1.0060 (ppm)
Be (234.861 nm)	0.9664	ppm	0.0031	0.32	143600.0000	0.9664 (ppm)
Ca (422.673 nm)	105.9000	ppm	0.6292	0.59	398000.0000	105.9000 (ppm)
Cd (214.439 nm)	0.9250	ppm	0.0028	0.31	17280.0000	0.9250 (ppm)
Co (228.615 nm)	0.9272	ppm	0.0049	0.53	10450.0000	0.9272 (ppm)
Cr (205.560 nm)	0.9563	ppm	0.0044	0.46	3693.0000	0.9563 (ppm)
Cu (324.754 nm)	1.0080	ppm	0.0024	0.24	35650.0000	1.0080 (ppm)
Fe (238.204 nm)	1.1030	ppm	0.0051	0.46	2683.0000	1.1030 (ppm)
K (766.491 nm)	15.3700	ppm	0.1015	0.66	14890.0000	15.3700 (ppm)
Li (670.783 nm)	0.9636	ppm	0.0017	0.18	53300.0000	0.9636 (ppm)
Mg (279.078 nm)	33.2500	ppm	0.1068	0.32	77690.0000	33.2500 (ppm)
Mn (259.372 nm)	1.1440	ppm	0.0042	0.37	96720.0000	1.1440 (ppm)
Mo (204.598 nm)	1.0590	ppm	0.0035	0.33	3557.0000	1.0590 (ppm)
Na (589.592 nm)	81.2200	ppm	0.5109	0.63	444700.0000	81.2200 (ppm)
Ni (231.604 nm)	0.9141	ppm	0.0009	0.10	3542.0000	0.9141 (ppm)
P (213.618 nm)	0.9995	ppm	0.0016	0.16	664.4000	0.9995 (ppm)
Pb (220.353 nm)	0.9243	ppm	0.0002	0.02	1604.0000	0.9243 (ppm)
Sb (206.834 nm)	1.0600	ppm	0.0077	0.73	825.6000	1.0600 (ppm)
Se (196.026 nm)	0.9094	ppm	0.0035	0.39	513.6000	0.9094 (ppm)
Si (251.611 nm)	17.2700	ppm	0.0576	0.33	34620.0000	17.2700 (ppm)
Sn (189.925 nm)	0.9673	ppm	0.0016	0.17	477.2000	0.9673 (ppm)
Sr (421.552 nm)	2.1880	ppm	0.0050	0.23	725200.0000	2.1880 (ppm)
Ti (336.122 nm)	1.0000	ppm	0.0059	0.59	94560.0000	1.0000 (ppm)
Tl (190.794 nm)	0.8915	ppm	0.0214	2.40	786.6000	0.8915 (ppm)
V (292.401 nm)	0.9759	ppm	0.0029	0.29	26010.0000	0.9759 (ppm)
W (207.912 nm)	1.0140	ppm	0.0024	0.23	1458.0000	1.0140 (ppm)
Zn (202.548 nm)	0.9537	ppm	0.0024	0.25	12380.0000	0.9537 (ppm)
Zr (343.823 nm)	0.9414	ppm	0.0035	0.37	71430.0000	0.9414 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9492	328500.0000	0.0019	0.20
Y_R 371.029	0.9604	46660.0000	0.0050	0.53

Sample Name: 440-256855-U-1-D PDS

Date: 12/10/2019 8:56:24 PM Rack:Tube: 4:17

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0011 u	ppm	0.0000	2.66	-130.8000	-0.0011 u (ppm)
Al (396.152 nm)	0.0506	ppm	0.0004	0.73	1284.0000	0.0506 (ppm)
As (188.980 nm)	0.0042 u	ppm	0.0080	> 100.00	2.4860	0.0042 u (ppm)
B (249.678 nm)	0.3776	ppm	0.0033	0.88	3677.0000	0.3776 (ppm)
Ba (233.527 nm)	0.0177	ppm	0.0002	1.03	1408.0000	0.0177 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0002	> 100.00	50.0100	0.0002 (ppm)
Ca (422.673 nm)	430.5000	ppm	0.3778	0.09	1618000.0000	430.5000 (ppm)
Cd (214.439 nm)	0.0020	ppm	0.0001	6.18	34.0500	0.0020 (ppm)
Co (228.615 nm)	0.0030	ppm	0.0004	12.79	30.0400	0.0030 (ppm)
Cr (205.560 nm)	0.0030	ppm	0.0007	24.28	18.9000	0.0030 (ppm)
Cu (324.754 nm)	-0.0006 u	ppm	0.0006	> 100.00	-254.3000	-0.0006 u (ppm)
Fe (238.204 nm)	0.1278	ppm	0.0053	4.15	279.3000	0.1278 (ppm)
K (766.491 nm)	8.0820	ppm	0.0264	0.33	7865.0000	8.0820 (ppm)
Li (670.783 nm)	0.2919	ppm	0.0015	0.50	17150.0000	0.2919 (ppm)
Mg (279.078 nm)	178.8000	ppm	2.7660	1.55	417800.0000	178.8000 (ppm)
Mn (259.372 nm)	4.7730	ppm	0.0293	0.61	401100.0000	4.7730 (ppm)
Mo (204.598 nm)	0.0177	ppm	0.0025	14.19	55.7200	0.0177 (ppm)
Na (589.592 nm)	253.8000	ppm	0.9540	0.38	1387000.0000	253.8000 (ppm)
Ni (231.604 nm)	0.0159	ppm	0.0010	6.40	38.9000	0.0159 (ppm)
P (213.618 nm)	0.1278	ppm	0.0071	5.58	86.6600	0.1278 (ppm)
Pb (220.353 nm)	0.0012 u	ppm	0.0060	> 100.00	-1.7270	0.0012 u (ppm)
Sb (206.834 nm)	-0.0018 u	ppm	0.0058	> 100.00	-4.5080	-0.0018 u (ppm)
Se (196.026 nm)	0.0134	ppm	0.0016	11.60	6.5260	0.0134 (ppm)
Si (251.611 nm)	14.0400	ppm	0.0776	0.55	28030.0000	14.0400 (ppm)
Sn (189.925 nm)	-0.0102 u	ppm	0.0007	6.79	-6.1110	-0.0102 u (ppm)
Sr (421.552 nm)	2.2130	ppm	0.0027	0.12	736700.0000	2.2130 (ppm)
Ti (336.122 nm)	0.0011	ppm	0.0002	18.54	-354.2000	0.0011 (ppm)
Tl (190.794 nm)	0.0040	ppm	0.0009	21.54	12.9100	0.0040 (ppm)
V (292.401 nm)	-0.0142 u	ppm	0.0001	0.41	151.4000	-0.0142 u (ppm)
W (207.912 nm)	0.0005 u	ppm	0.0025	> 100.00	-9.5890	0.0005 u (ppm)
Zn (202.548 nm)	-0.0049 u	ppm	0.0007	14.27	-94.4400	-0.0049 u (ppm)
Zr (343.823 nm)	0.0101	ppm	0.0005	4.80	920.6000	0.0101 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9213	318900.0000	0.0049	0.53
Y_R 371.029	0.9629	46780.0000	0.0033	0.35

Sample Name: 440-256855-U-2-A

Date: 12/10/2019 8:59:44 PM Rack:Tube: 4:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0004	76.75	-94.1200	-0.0005 u (ppm)
Al (396.152 nm)	0.0381	ppm	0.0005	1.29	690.2000	0.0381 (ppm)
As (188.980 nm)	-0.0011 u	ppm	0.0058	> 100.00	0.6445	-0.0011 u (ppm)
B (249.678 nm)	0.1170	ppm	0.0009	0.73	1130.0000	0.1170 (ppm)
Ba (233.527 nm)	0.0648	ppm	0.0010	1.58	4939.0000	0.0648 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	3.62	16.3900	0.0000 u (ppm)
Ca (422.673 nm)	107.1000	ppm	0.2035	0.19	402300.0000	107.1000 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-1.4890	0.0001 (ppm)
Co (228.615 nm)	0.0009	ppm	0.0003	31.64	-1.1950	0.0009 (ppm)
Cr (205.560 nm)	0.0036	ppm	0.0016	44.76	16.9500	0.0036 (ppm)
Cu (324.754 nm)	-0.0008 u	ppm	0.0001	9.72	-54.2400	-0.0008 u (ppm)
Fe (238.204 nm)	0.0825	ppm	0.0025	3.02	156.7000	0.0825 (ppm)
K (766.491 nm)	5.8020	ppm	0.0629	1.08	5582.0000	5.8020 (ppm)
Li (670.783 nm)	0.0090	ppm	0.0004	4.94	763.0000	0.0090 (ppm)
Mg (279.078 nm)	30.6500	ppm	0.0383	0.13	71640.0000	30.6500 (ppm)
Mn (259.372 nm)	0.2213	ppm	0.0004	0.19	18730.0000	0.2213 (ppm)
Mo (204.598 nm)	0.0033	ppm	0.0009	26.82	7.1190	0.0033 (ppm)
Na (589.592 nm)	82.4500	ppm	0.1647	0.20	451400.0000	82.4500 (ppm)
Ni (231.604 nm)	0.0022	ppm	0.0011	51.44	-8.7010	0.0022 (ppm)
P (213.618 nm)	0.0108	ppm	0.0000	0.19	7.0080	0.0108 (ppm)
Pb (220.353 nm)	-0.0001 u	ppm	0.0004	> 100.00	-10.3200	-0.0001 u (ppm)
Sb (206.834 nm)	0.0008 u	ppm	0.0065	> 100.00	-2.4350	0.0008 u (ppm)
Se (196.026 nm)	0.0085	ppm	0.0046	53.84	3.6890	0.0085 (ppm)
Si (251.611 nm)	12.5400	ppm	0.0638	0.51	25030.0000	12.5400 (ppm)
Sn (189.925 nm)	0.0027	ppm	0.0002	8.24	-0.0388	0.0027 (ppm)
Sr (421.552 nm)	1.2920	ppm	0.0010	0.08	428700.0000	1.2920 (ppm)
Ti (336.122 nm)	0.0002	ppm	0.0002	82.03	-198.3000	0.0002 (ppm)
Tl (190.794 nm)	0.0023 u	ppm	0.0037	> 100.00	6.4950	0.0023 u (ppm)
V (292.401 nm)	-0.0027 u	ppm	0.0001	2.31	124.0000	-0.0027 u (ppm)
W (207.912 nm)	-0.0038 u	ppm	0.0016	42.28	-10.7800	-0.0038 u (ppm)
Zn (202.548 nm)	0.0409	ppm	0.0004	0.94	523.5000	0.0409 (ppm)
Zr (343.823 nm)	0.0015	ppm	0.0001	8.78	231.8000	0.0015 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9487	328400.0000	0.0042	0.44
Y_R 371.029	0.9531	46310.0000	0.0017	0.18

Sample Name: 40-256855-U-3-A

Date: 12/10/2019 9:03:04 PM Rack:Tube: 4:2

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0009 u	ppm	0.0005	56.70	-109.6000	-0.0009 u (ppm)
Al (396.152 nm)	0.0382	ppm	0.0004	0.93	692.1000	0.0382 (ppm)
As (188.980 nm)	0.0044	ppm	0.0061	> 100.00	3.6100	0.0044 (ppm)
B (249.678 nm)	0.1213	ppm	0.0001	0.09	1172.0000	0.1213 (ppm)
Ba (233.527 nm)	0.0654	ppm	0.0003	0.41	4987.0000	0.0654 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	22.2100	0.0000 u (ppm)
Ca (422.673 nm)	110.2000	ppm	0.1934	0.18	414100.0000	110.2000 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-1.7440	0.0001 u (ppm)
Co (228.615 nm)	0.0002 u	ppm	0.0005	> 100.00	-9.0280	0.0002 u (ppm)
Cr (205.560 nm)	0.0043	ppm	0.0003	6.73	19.8300	0.0043 (ppm)
Cu (324.754 nm)	0.0000 u	ppm	0.0002	> 100.00	-31.0500	0.0000 u (ppm)
Fe (238.204 nm)	0.0787	ppm	0.0059	7.55	147.3000	0.0787 (ppm)
K (766.491 nm)	6.0160	ppm	0.1677	2.79	5791.0000	6.0160 (ppm)
Li (670.783 nm)	0.0087	ppm	0.0002	2.34	752.8000	0.0087 (ppm)
Mg (279.078 nm)	31.1100	ppm	0.0987	0.32	72710.0000	31.1100 (ppm)
Mn (259.372 nm)	0.2260	ppm	0.0005	0.21	19120.0000	0.2260 (ppm)
Mo (204.598 nm)	0.0027	ppm	0.0005	16.88	5.1250	0.0027 (ppm)
Na (589.592 nm)	84.7100	ppm	0.4082	0.48	463700.0000	84.7100 (ppm)
Ni (231.604 nm)	0.0010	ppm	0.0006	64.29	-13.4100	0.0010 (ppm)
P (213.618 nm)	0.0071	ppm	0.0004	5.82	4.3790	0.0071 (ppm)
Pb (220.353 nm)	-0.0008 u	ppm	0.0078	> 100.00	-11.4500	-0.0008 u (ppm)
Sb (206.834 nm)	0.0072 u	ppm	0.0138	> 100.00	2.5860	0.0072 u (ppm)
Se (196.026 nm)	-0.0006 u	ppm	0.0041	> 100.00	-1.4330	-0.0006 u (ppm)
Si (251.611 nm)	12.9600	ppm	0.0608	0.47	25870.0000	12.9600 (ppm)
Sn (189.925 nm)	0.0011	ppm	0.0003	25.93	-0.8361	0.0011 (ppm)
Sr (421.552 nm)	1.3300	ppm	0.0027	0.21	441300.0000	1.3300 (ppm)
Ti (336.122 nm)	0.0000 u	ppm	0.0002	> 100.00	-217.2000	0.0000 u (ppm)
Tl (190.794 nm)	0.0019 u	ppm	0.0051	> 100.00	6.1350	0.0019 u (ppm)
V (292.401 nm)	-0.0031 u	ppm	0.0006	19.56	118.2000	-0.0031 u (ppm)
W (207.912 nm)	-0.0027 u	ppm	0.0029	> 100.00	-9.6160	-0.0027 u (ppm)
Zn (202.548 nm)	0.0079	ppm	0.0005	6.26	97.7900	0.0079 (ppm)
Zr (343.823 nm)	0.0015	ppm	0.0002	11.39	232.3000	0.0015 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9526	329700.0000	0.0017	0.18
Y_R 371.029	0.9726	47250.0000	0.0006	0.06

Sample Name: CCV 5993196

Date: 12/10/2019 9:06:22 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4887	ppm	0.0021	0.43	17880.0000	0.4887 (ppm)
Al (396.152 nm)	0.9712	ppm	0.0048	0.50	24630.0000	0.9712 (ppm)
As (188.980 nm)	0.9769	ppm	0.0212	2.17	515.2000	0.9769 (ppm)
B (249.678 nm)	0.9719	ppm	0.0058	0.60	9384.0000	0.9719 (ppm)
Ba (233.527 nm)	0.9843	ppm	0.0026	0.26	74370.0000	0.9843 (ppm)
Be (234.861 nm)	0.9742	ppm	0.0047	0.49	144700.0000	0.9742 (ppm)
Ca (422.673 nm)	4.9400	ppm	0.0177	0.36	18670.0000	4.9400 (ppm)
Cd (214.439 nm)	0.9755	ppm	0.0051	0.52	18230.0000	0.9755 (ppm)
Co (228.615 nm)	0.9771	ppm	0.0058	0.60	11000.0000	0.9771 (ppm)
Cr (205.560 nm)	0.9790	ppm	0.0057	0.59	3780.0000	0.9790 (ppm)
Cu (324.754 nm)	0.9834	ppm	0.0097	0.98	34860.0000	0.9834 (ppm)
Fe (238.204 nm)	0.9759	ppm	0.0008	0.09	2367.0000	0.9759 (ppm)
K (766.491 nm)	9.9860	ppm	0.1075	1.08	9643.0000	9.9860 (ppm)
Li (670.783 nm)	0.9893	ppm	0.0033	0.33	54520.0000	0.9893 (ppm)
Mg (279.078 nm)	4.9650	ppm	0.0020	0.04	11610.0000	4.9650 (ppm)
Mn (259.372 nm)	0.9766	ppm	0.0049	0.50	82500.0000	0.9766 (ppm)
Mo (204.598 nm)	0.9890	ppm	0.0031	0.31	3322.0000	0.9890 (ppm)
Na (589.592 nm)	10.2100	ppm	0.0527	0.52	56760.0000	10.2100 (ppm)
Ni (231.604 nm)	0.9781	ppm	0.0024	0.24	3792.0000	0.9781 (ppm)
P (213.618 nm)	0.9813	ppm	0.0156	1.59	654.0000	0.9813 (ppm)
Pb (220.353 nm)	0.9728	ppm	0.0070	0.72	1687.0000	0.9728 (ppm)
Sb (206.834 nm)	0.9840	ppm	0.0174	1.77	766.5000	0.9840 (ppm)
Se (196.026 nm)	0.9635	ppm	0.0149	1.55	544.1000	0.9635 (ppm)
Si (251.611 nm)	4.9530	ppm	0.0622	1.25	10040.0000	4.9530 (ppm)
Sn (189.925 nm)	0.9772	ppm	0.0030	0.31	482.1000	0.9772 (ppm)
Sr (421.552 nm)	0.9790	ppm	0.0031	0.32	324000.0000	0.9790 (ppm)
Ti (336.122 nm)	0.9790	ppm	0.0099	1.01	92610.0000	0.9790 (ppm)
Tl (190.794 nm)	0.9893	ppm	0.0107	1.09	875.6000	0.9893 (ppm)
V (292.401 nm)	0.9787	ppm	0.0060	0.62	25990.0000	0.9787 (ppm)
W (207.912 nm)	0.9801	ppm	0.0079	0.81	1411.0000	0.9801 (ppm)
Zn (202.548 nm)	0.9727	ppm	0.0050	0.52	12640.0000	0.9727 (ppm)
Zr (343.823 nm)	0.9552	ppm	0.0108	1.13	72460.0000	0.9552 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0100	349600.0000	0.0046	0.46
Y_R 371.029	1.0020	48690.0000	0.0016	0.16

Sample Name: CCB 5993195

Date: 12/10/2019 9:09:40 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0003	ppm	0.0002	81.73	-59.4400	0.0003 (ppm)
Al (396.152 nm)	0.0002 u	ppm	0.0009	> 100.00	-316.3000	0.0002 u (ppm)
As (188.980 nm)	-0.0012 u	ppm	0.0001	7.55	0.9340	-0.0012 u (ppm)
B (249.678 nm)	0.0009	ppm	0.0005	50.14	-5.0110	0.0009 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0001	69.37	52.7500	0.0002 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0002	66.93	60.2400	0.0003 (ppm)
Ca (422.673 nm)	-0.0020 u	ppm	0.0008	39.57	111.3000	-0.0020 u (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0002	99.18	1.1220	0.0002 (ppm)
Co (228.615 nm)	0.0003	ppm	0.0004	> 100.00	-9.3290	0.0003 (ppm)
Cr (205.560 nm)	0.0008	ppm	0.0009	> 100.00	4.8620	0.0008 (ppm)
Cu (324.754 nm)	0.0014	ppm	0.0002	17.00	91.4700	0.0014 (ppm)
Fe (238.204 nm)	0.0010	ppm	0.0014	> 100.00	-47.5800	0.0010 (ppm)
K (766.491 nm)	0.0596	ppm	0.0247	41.54	-20.2500	0.0596 (ppm)
Li (670.783 nm)	0.0025	ppm	0.0001	3.04	194.6000	0.0025 (ppm)
Mg (279.078 nm)	0.0099	ppm	0.0022	22.43	33.8500	0.0099 (ppm)
Mn (259.372 nm)	0.0004	ppm	0.0002	52.71	85.2100	0.0004 (ppm)
Mo (204.598 nm)	0.0062	ppm	0.0025	40.52	16.7600	0.0062 (ppm)
Na (589.592 nm)	0.3205	ppm	0.0050	1.56	2664.0000	0.3205 (ppm)
Ni (231.604 nm)	0.0008 u	ppm	0.0022	> 100.00	-12.3100	0.0008 u (ppm)
P (213.618 nm)	-0.0002 u	ppm	0.0084	> 100.00	0.0364	-0.0002 u (ppm)
Pb (220.353 nm)	-0.0012 u	ppm	0.0011	90.87	-13.3900	-0.0012 u (ppm)
Sb (206.834 nm)	0.0039	ppm	0.0039	> 100.00	-0.3081	0.0039 (ppm)
Se (196.026 nm)	0.0005	ppm	0.0005	> 100.00	-0.4185	0.0005 (ppm)
Si (251.611 nm)	0.0026	ppm	0.0011	43.41	16.3100	0.0026 (ppm)
Sn (189.925 nm)	-0.0029 u	ppm	0.0049	> 100.00	-2.9050	-0.0029 u (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0000	11.24	29.2900	0.0002 (ppm)
Ti (336.122 nm)	0.0021	ppm	0.0005	22.33	60.7200	0.0021 (ppm)
Tl (190.794 nm)	0.0011	ppm	0.0007	63.54	5.4780	0.0011 (ppm)
V (292.401 nm)	-0.0003 u	ppm	0.0003	92.94	78.0400	-0.0003 u (ppm)
W (207.912 nm)	0.0060	ppm	0.0032	53.76	4.3140	0.0060 (ppm)
Zn (202.548 nm)	0.0006	ppm	0.0002	38.59	20.8900	0.0006 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0000	3.73	87.1200	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	1.0120	350300.0000	0.0030	0.29
Y_R 371.029	1.0000	48600.0000	0.0027	0.27

Sample Name: 440-256855-U-4-A

Date: 12/10/2019 9:13:00 PM Rack:Tube: 4:3

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0009 u	ppm	0.0001	9.86	-108.6000	-0.0009 u (ppm)
Al (396.152 nm)	0.0393	ppm	0.0006	1.47	719.7000	0.0393 (ppm)
As (188.980 nm)	-0.0011 u	ppm	0.0016	> 100.00	0.6639	-0.0011 u (ppm)
B (249.678 nm)	0.1130	ppm	0.0021	1.90	1090.0000	0.1130 (ppm)
Ba (233.527 nm)	0.0629	ppm	0.0003	0.55	4792.0000	0.0629 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	25.4800	0.0000 u (ppm)
Ca (422.673 nm)	104.9000	ppm	0.3212	0.31	394100.0000	104.9000 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0001	21.40	2.8230	0.0003 (ppm)
Co (228.615 nm)	0.0002 u	ppm	0.0011	> 100.00	-8.4830	0.0002 u (ppm)
Cr (205.560 nm)	0.0027	ppm	0.0002	8.29	13.2800	0.0027 (ppm)
Cu (324.754 nm)	0.0001	ppm	0.0001	98.91	-21.9900	0.0001 (ppm)
Fe (238.204 nm)	0.0926	ppm	0.0011	1.21	181.8000	0.0926 (ppm)
K (766.491 nm)	5.5410	ppm	0.0195	0.35	5328.0000	5.5410 (ppm)
Li (670.783 nm)	0.0070	ppm	0.0027	38.38	652.4000	0.0070 (ppm)
Mg (279.078 nm)	29.9800	ppm	0.1306	0.44	70080.0000	29.9800 (ppm)
Mn (259.372 nm)	0.2219	ppm	0.0012	0.56	18780.0000	0.2219 (ppm)
Mo (204.598 nm)	0.0049	ppm	0.0000	0.73	12.5500	0.0049 (ppm)
Na (589.592 nm)	80.6600	ppm	0.3360	0.42	441600.0000	80.6600 (ppm)
Ni (231.604 nm)	0.0045	ppm	0.0014	31.40	0.4327	0.0045 (ppm)
P (213.618 nm)	0.0082	ppm	0.0076	92.32	5.2090	0.0082 (ppm)
Pb (220.353 nm)	0.0004 u	ppm	0.0027	> 100.00	-9.3670	0.0004 u (ppm)
Sb (206.834 nm)	0.0081	ppm	0.0018	22.46	3.2410	0.0081 (ppm)
Se (196.026 nm)	0.0027 u	ppm	0.0040	> 100.00	0.4232	0.0027 u (ppm)
Si (251.611 nm)	12.2900	ppm	0.0778	0.63	24510.0000	12.2900 (ppm)
Sn (189.925 nm)	0.0006 u	ppm	0.0019	> 100.00	-1.0750	0.0006 u (ppm)
Sr (421.552 nm)	1.2680	ppm	0.0030	0.24	420600.0000	1.2680 (ppm)
Ti (336.122 nm)	0.0007	ppm	0.0005	70.83	-147.1000	0.0007 (ppm)
Tl (190.794 nm)	0.0050	ppm	0.0031	60.88	8.9910	0.0050 (ppm)
V (292.401 nm)	-0.0028 u	ppm	0.0002	5.74	120.4000	-0.0028 u (ppm)
W (207.912 nm)	-0.0022 u	ppm	0.0006	28.19	-8.6140	-0.0022 u (ppm)
Zn (202.548 nm)	0.0244	ppm	0.0003	1.11	310.9000	0.0244 (ppm)
Zr (343.823 nm)	0.0039	ppm	0.0003	6.49	416.0000	0.0039 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9683	335100.0000	0.0024	0.25
Y_R 371.029	0.9735	47300.0000	0.0006	0.06

Sample Name: 440-256855-U-5-A

Date: 12/10/2019 9:16:21 PM Rack:Tube: 4:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002	ppm	0.0000	4.81	-68.1800	0.0002 (ppm)
Al (396.152 nm)	0.0503	ppm	0.0002	0.42	995.8000	0.0503 (ppm)
As (188.980 nm)	-0.0027 u	ppm	0.0033	> 100.00	-0.2192	-0.0027 u (ppm)
B (249.678 nm)	0.0989	ppm	0.0002	0.22	953.2000	0.0989 (ppm)
Ba (233.527 nm)	0.0587	ppm	0.0008	1.32	4481.0000	0.0587 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	19.0900	0.0000 u (ppm)
Ca (422.673 nm)	110.1000	ppm	0.5075	0.46	413800.0000	110.1000 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.6820	0.0000 u (ppm)
Co (228.615 nm)	0.0013	ppm	0.0001	9.02	3.2380	0.0013 (ppm)
Cr (205.560 nm)	0.0083	ppm	0.0003	3.35	34.9800	0.0083 (ppm)
Cu (324.754 nm)	0.0007	ppm	0.0001	14.45	-4.6740	0.0007 (ppm)
Fe (238.204 nm)	0.0486	ppm	0.0029	5.98	72.6400	0.0486 (ppm)
K (766.491 nm)	5.9080	ppm	0.0136	0.23	5685.0000	5.9080 (ppm)
Li (670.783 nm)	0.0094	ppm	0.0001	1.44	799.7000	0.0094 (ppm)
Mg (279.078 nm)	31.1100	ppm	0.0590	0.19	72710.0000	31.1100 (ppm)
Mn (259.372 nm)	0.0760	ppm	0.0003	0.33	6532.0000	0.0760 (ppm)
Mo (204.598 nm)	0.0042	ppm	0.0016	38.51	10.1400	0.0042 (ppm)
Na (589.592 nm)	85.0100	ppm	0.5479	0.64	465300.0000	85.0100 (ppm)
Ni (231.604 nm)	0.0044	ppm	0.0008	18.97	0.1499	0.0044 (ppm)
P (213.618 nm)	0.0084	ppm	0.0031	37.34	5.2540	0.0084 (ppm)
Pb (220.353 nm)	0.0020 u	ppm	0.0032	> 100.00	-6.6230	0.0020 u (ppm)
Sb (206.834 nm)	0.0089	ppm	0.0021	23.12	3.9690	0.0089 (ppm)
Se (196.026 nm)	0.0012 u	ppm	0.0067	> 100.00	-0.4556	0.0012 u (ppm)
Si (251.611 nm)	12.9300	ppm	0.0975	0.75	25810.0000	12.9300 (ppm)
Sn (189.925 nm)	-0.0041 u	ppm	0.0020	49.15	-3.4110	-0.0041 u (ppm)
Sr (421.552 nm)	1.3290	ppm	0.0061	0.46	440900.0000	1.3290 (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0003	> 100.00	-230.4000	-0.0001 u (ppm)
Tl (190.794 nm)	0.0054	ppm	0.0001	2.40	9.1300	0.0054 (ppm)
V (292.401 nm)	-0.0026 u	ppm	0.0005	19.63	130.5000	-0.0026 u (ppm)
W (207.912 nm)	-0.0026 u	ppm	0.0035	> 100.00	-9.2270	-0.0026 u (ppm)
Zn (202.548 nm)	0.0263	ppm	0.0001	0.39	334.4000	0.0263 (ppm)
Zr (343.823 nm)	0.0015	ppm	0.0002	12.61	231.2000	0.0015 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9573	331400.0000	0.0047	0.49
Y_R 371.029	0.9759	47410.0000	0.0010	0.10

Sample Name: 440-256855-U-6-A

Date: 12/10/2019 9:19:41 PM Rack:Tube: 4:5

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0009 u	ppm	0.0005	52.92	-107.7000	-0.0009 u (ppm)
Al (396.152 nm)	0.0591	ppm	0.0002	0.30	1213.0000	0.0591 (ppm)
As (188.980 nm)	0.0057	ppm	0.0024	41.79	4.2700	0.0057 (ppm)
B (249.678 nm)	0.0872	ppm	0.0002	0.19	839.2000	0.0872 (ppm)
Ba (233.527 nm)	0.0564	ppm	0.0010	1.73	4303.0000	0.0564 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0001	97.55	10.1200	-0.0001 u (ppm)
Ca (422.673 nm)	107.5000	ppm	0.0044	0.00	403800.0000	107.5000 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0002	63.38	1.6030	0.0003 (ppm)
Co (228.615 nm)	0.0005 u	ppm	0.0014	> 100.00	-4.8360	0.0005 u (ppm)
Cr (205.560 nm)	0.0038	ppm	0.0017	44.13	17.6700	0.0038 (ppm)
Cu (324.754 nm)	-0.0001 u	ppm	0.0003	> 100.00	-29.8800	-0.0001 u (ppm)
Fe (238.204 nm)	0.0271	ppm	0.0037	13.52	19.4500	0.0271 (ppm)
K (766.491 nm)	5.9850	ppm	0.0659	1.10	5760.0000	5.9850 (ppm)
Li (670.783 nm)	0.0085	ppm	0.0014	16.18	742.1000	0.0085 (ppm)
Mg (279.078 nm)	30.8800	ppm	0.0464	0.15	72160.0000	30.8800 (ppm)
Mn (259.372 nm)	0.1010	ppm	0.0002	0.24	8629.0000	0.1010 (ppm)
Mo (204.598 nm)	0.0061	ppm	0.0003	5.57	16.4000	0.0061 (ppm)
Na (589.592 nm)	83.3300	ppm	0.0522	0.06	456200.0000	83.3300 (ppm)
Ni (231.604 nm)	0.0022	ppm	0.0031	> 100.00	-8.3710	0.0022 (ppm)
P (213.618 nm)	0.0113	ppm	0.0070	61.95	7.3720	0.0113 (ppm)
Pb (220.353 nm)	0.0017	ppm	0.0011	66.32	-7.1550	0.0017 (ppm)
Sb (206.834 nm)	0.0033	ppm	0.0003	8.49	-0.4952	0.0033 (ppm)
Se (196.026 nm)	0.0051	ppm	0.0061	> 100.00	1.7370	0.0051 (ppm)
Si (251.611 nm)	12.5900	ppm	0.0526	0.42	25130.0000	12.5900 (ppm)
Sn (189.925 nm)	-0.0069 u	ppm	0.0087	> 100.00	-4.8060	-0.0069 u (ppm)
Sr (421.552 nm)	1.2940	ppm	0.0005	0.04	429300.0000	1.2940 (ppm)
Ti (336.122 nm)	-0.0004 u	ppm	0.0002	53.07	-251.3000	-0.0004 u (ppm)
Tl (190.794 nm)	0.0064	ppm	0.0036	57.22	10.0300	0.0064 (ppm)
V (292.401 nm)	-0.0022 u	ppm	0.0002	11.32	138.5000	-0.0022 u (ppm)
W (207.912 nm)	-0.0014 u	ppm	0.0049	> 100.00	-7.4920	-0.0014 u (ppm)
Zn (202.548 nm)	0.0214	ppm	0.0005	2.42	271.2000	0.0214 (ppm)
Zr (343.823 nm)	0.0009	ppm	0.0001	14.80	187.6000	0.0009 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9511	329200.0000	0.0026	0.27
Y_R 371.029	0.9523	46270.0000	0.0000	0.00

Sample Name: 440-256855-U-7-A

Date: 12/10/2019 9:23:01 PM Rack:Tube: 4:6

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0010 u	ppm	0.0004	40.43	-113.2000	-0.0010 u (ppm)
Al (396.152 nm)	0.0554	ppm	0.0006	1.12	1122.0000	0.0554 (ppm)
As (188.980 nm)	0.0072	ppm	0.0016	21.87	5.0920	0.0072 (ppm)
B (249.678 nm)	0.0878	ppm	0.0010	1.15	844.0000	0.0878 (ppm)
Ba (233.527 nm)	0.0564	ppm	0.0001	0.22	4302.0000	0.0564 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	84.13	33.5300	0.0001 (ppm)
Ca (422.673 nm)	107.4000	ppm	0.1043	0.10	403800.0000	107.4000 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-1.9630	0.0001 u (ppm)
Co (228.615 nm)	0.0002	ppm	0.0003	> 100.00	-8.6390	0.0002 (ppm)
Cr (205.560 nm)	0.0040	ppm	0.0003	7.57	18.5100	0.0040 (ppm)
Cu (324.754 nm)	-0.0003 u	ppm	0.0002	80.34	-37.2600	-0.0003 u (ppm)
Fe (238.204 nm)	0.2757	ppm	0.0060	2.16	635.4000	0.2757 (ppm)
K (766.491 nm)	5.9250	ppm	0.0779	1.32	5702.0000	5.9250 (ppm)
Li (670.783 nm)	0.0086	ppm	0.0001	1.60	747.7000	0.0086 (ppm)
Mg (279.078 nm)	30.9000	ppm	0.0792	0.26	72220.0000	30.9000 (ppm)
Mn (259.372 nm)	0.1025	ppm	0.0003	0.30	8776.0000	0.1025 (ppm)
Mo (204.598 nm)	0.0054	ppm	0.0005	9.29	14.2600	0.0054 (ppm)
Na (589.592 nm)	83.2300	ppm	0.2190	0.26	455600.0000	83.2300 (ppm)
Ni (231.604 nm)	0.0011	ppm	0.0005	40.41	-12.7600	0.0011 (ppm)
P (213.618 nm)	0.0101	ppm	0.0034	33.13	6.5250	0.0101 (ppm)
Pb (220.353 nm)	0.0039	ppm	0.0036	94.00	-3.2540	0.0039 (ppm)
Sb (206.834 nm)	0.0048 u	ppm	0.0080	> 100.00	0.6496	0.0048 u (ppm)
Se (196.026 nm)	0.0008 u	ppm	0.0043	> 100.00	-0.7025	0.0008 u (ppm)
Si (251.611 nm)	12.6200	ppm	0.0647	0.51	25190.0000	12.6200 (ppm)
Sn (189.925 nm)	0.0011	ppm	0.0014	> 100.00	-0.8639	0.0011 (ppm)
Sr (421.552 nm)	1.2950	ppm	0.0010	0.07	429500.0000	1.2950 (ppm)
Ti (336.122 nm)	-0.0005 u	ppm	0.0000	5.26	-263.3000	-0.0005 u (ppm)
Tl (190.794 nm)	-0.0002 u	ppm	0.0070	> 100.00	4.1220	-0.0002 u (ppm)
V (292.401 nm)	-0.0021 u	ppm	0.0003	11.86	139.2000	-0.0021 u (ppm)
W (207.912 nm)	-0.0029 u	ppm	0.0019	67.26	-9.8340	-0.0029 u (ppm)
Zn (202.548 nm)	0.0030	ppm	0.0000	1.01	34.7900	0.0030 (ppm)
Zr (343.823 nm)	0.0011	ppm	0.0001	10.83	200.3000	0.0011 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
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Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
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Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9506	329000.0000	0.0057	0.60
Y_R 371.029	0.9531	46300.0000	0.0017	0.17

Sample Name: 440-256855-C-8-A

Date: 12/10/2019 9:26:21 PM Rack:Tube: 4:7

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0012 u	ppm	0.0004	33.62	-119.3000	-0.0012 u (ppm)
Al (396.152 nm)	0.0396	ppm	0.0011	2.68	726.9000	0.0396 (ppm)
As (188.980 nm)	-0.0001 u	ppm	0.0000	28.32	1.1920	-0.0001 u (ppm)
B (249.678 nm)	0.0868	ppm	0.0003	0.35	834.5000	0.0868 (ppm)
Ba (233.527 nm)	0.0558	ppm	0.0004	0.79	4262.0000	0.0558 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0000	2.23	7.3510	-0.0001 u (ppm)
Ca (422.673 nm)	106.4000	ppm	0.0848	0.08	399700.0000	106.4000 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0004	> 100.00	-5.7110	-0.0001 u (ppm)
Co (228.615 nm)	0.0000 u	ppm	0.0004	> 100.00	-10.9400	0.0000 u (ppm)
Cr (205.560 nm)	0.0025	ppm	0.0007	29.55	12.4900	0.0025 (ppm)
Cu (324.754 nm)	-0.0004 u	ppm	0.0005	> 100.00	-42.7200	-0.0004 u (ppm)
Fe (238.204 nm)	0.0567	ppm	0.0005	0.83	92.6700	0.0567 (ppm)
K (766.491 nm)	5.7430	ppm	0.0366	0.64	5525.0000	5.7430 (ppm)
Li (670.783 nm)	0.0077	ppm	0.0010	12.69	697.1000	0.0077 (ppm)
Mg (279.078 nm)	30.6100	ppm	0.1074	0.35	71530.0000	30.6100 (ppm)
Mn (259.372 nm)	0.0995	ppm	0.0004	0.36	8501.0000	0.0995 (ppm)
Mo (204.598 nm)	0.0057	ppm	0.0004	6.26	15.1700	0.0057 (ppm)
Na (589.592 nm)	82.6400	ppm	0.0076	0.01	452400.0000	82.6400 (ppm)
Ni (231.604 nm)	0.0008 u	ppm	0.0021	> 100.00	-14.1300	0.0008 u (ppm)
P (213.618 nm)	0.0042	ppm	0.0024	57.24	2.3490	0.0042 (ppm)
Pb (220.353 nm)	-0.0001 u	ppm	0.0024	> 100.00	-10.2900	-0.0001 u (ppm)
Sb (206.834 nm)	0.0064	ppm	0.0016	24.66	1.9440	0.0064 (ppm)
Se (196.026 nm)	0.0077	ppm	0.0079	> 100.00	3.2120	0.0077 (ppm)
Si (251.611 nm)	12.4700	ppm	0.0416	0.33	24880.0000	12.4700 (ppm)
Sn (189.925 nm)	-0.0025 u	ppm	0.0005	20.70	-2.6420	-0.0025 u (ppm)
Sr (421.552 nm)	1.2810	ppm	0.0006	0.05	424900.0000	1.2810 (ppm)
Ti (336.122 nm)	-0.0006 u	ppm	0.0000	2.57	-275.8000	-0.0006 u (ppm)
Tl (190.794 nm)	0.0018 u	ppm	0.0029	> 100.00	5.9480	0.0018 u (ppm)
V (292.401 nm)	-0.0030 u	ppm	0.0003	10.66	116.6000	-0.0030 u (ppm)
W (207.912 nm)	-0.0021 u	ppm	0.0003	14.65	-8.7840	-0.0021 u (ppm)
Zn (202.548 nm)	0.0025	ppm	0.0001	3.27	28.9900	0.0025 (ppm)
Zr (343.823 nm)	0.0009	ppm	0.0001	6.44	184.6000	0.0009 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9463	327500.0000	0.0055	0.59
Y_R 371.029	0.9472	46020.0000	0.0007	0.08

Sample Name: 440-256855-C-9-A

Date: 12/10/2019 9:29:41 PM Rack:Tube: 4:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0008 u	ppm	0.0001	10.88	-104.6000	-0.0008 u (ppm)
Al (396.152 nm)	0.0275	ppm	0.0001	0.44	425.7000	0.0275 (ppm)
As (188.980 nm)	-0.0007 u	ppm	0.0041	> 100.00	0.8722	-0.0007 u (ppm)
B (249.678 nm)	0.0826	ppm	0.0003	0.40	793.9000	0.0826 (ppm)
Ba (233.527 nm)	0.0447	ppm	0.0002	0.45	3423.0000	0.0447 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0000	48.63	12.7300	-0.0001 u (ppm)
Ca (422.673 nm)	109.0000	ppm	0.3380	0.31	409700.0000	109.0000 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0005	> 100.00	-1.6010	0.0001 u (ppm)
Co (228.615 nm)	0.0003 u	ppm	0.0008	> 100.00	-7.7770	0.0003 u (ppm)
Cr (205.560 nm)	0.0043	ppm	0.0022	51.09	19.8500	0.0043 (ppm)
Cu (324.754 nm)	0.0001 u	ppm	0.0002	> 100.00	-25.4700	0.0001 u (ppm)
Fe (238.204 nm)	0.0243	ppm	0.0008	3.24	12.3900	0.0243 (ppm)
K (766.491 nm)	5.8710	ppm	0.0565	0.96	5649.0000	5.8710 (ppm)
Li (670.783 nm)	0.0084	ppm	0.0019	22.58	741.1000	0.0084 (ppm)
Mg (279.078 nm)	31.2600	ppm	0.1757	0.56	73070.0000	31.2600 (ppm)
Mn (259.372 nm)	0.0781	ppm	0.0003	0.42	6708.0000	0.0781 (ppm)
Mo (204.598 nm)	0.0004 u	ppm	0.0024	> 100.00	-2.8050	0.0004 u (ppm)
Na (589.592 nm)	83.3700	ppm	0.1977	0.24	456400.0000	83.3700 (ppm)
Ni (231.604 nm)	0.0033	ppm	0.0010	28.76	-4.2210	0.0033 (ppm)
P (213.618 nm)	-0.0072 u	ppm	0.0020	27.94	-5.7160	-0.0072 u (ppm)
Pb (220.353 nm)	-0.0018 u	ppm	0.0020	> 100.00	-13.2900	-0.0018 u (ppm)
Sb (206.834 nm)	0.0003 u	ppm	0.0010	> 100.00	-2.8250	0.0003 u (ppm)
Se (196.026 nm)	-0.0004 u	ppm	0.0053	> 100.00	-1.3790	-0.0004 u (ppm)
Si (251.611 nm)	10.7900	ppm	0.0712	0.66	21530.0000	10.7900 (ppm)
Sn (189.925 nm)	-0.0072 u	ppm	0.0060	83.04	-4.9480	-0.0072 u (ppm)
Sr (421.552 nm)	1.3310	ppm	0.0034	0.26	441400.0000	1.3310 (ppm)
Ti (336.122 nm)	-0.0007 u	ppm	0.0001	19.86	-279.5000	-0.0007 u (ppm)
Tl (190.794 nm)	0.0024	ppm	0.0004	16.88	6.3980	0.0024 (ppm)
V (292.401 nm)	-0.0027 u	ppm	0.0004	15.08	126.1000	-0.0027 u (ppm)
W (207.912 nm)	-0.0027 u	ppm	0.0005	19.01	-9.4310	-0.0027 u (ppm)
Zn (202.548 nm)	0.0152	ppm	0.0002	1.35	191.8000	0.0152 (ppm)
Zr (343.823 nm)	0.0009	ppm	0.0000	4.26	189.5000	0.0009 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9460	327400.0000	0.0041	0.43
Y_R 371.029	0.9447	45900.0000	0.0064	0.67

Sample Name: 440-256855-C-10-A

Date: 12/10/2019 9:33:01 PM Rack:Tube: 4:9

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0011 u	ppm	0.0005	48.96	-115.6000	-0.0011 u (ppm)
Al (396.152 nm)	0.0267	ppm	0.0013	4.88	405.7000	0.0267 (ppm)
As (188.980 nm)	-0.0034 u	ppm	0.0021	63.34	-0.5428	-0.0034 u (ppm)
B (249.678 nm)	0.0807	ppm	0.0001	0.12	775.7000	0.0807 (ppm)
Ba (233.527 nm)	0.0491	ppm	0.0005	0.94	3754.0000	0.0491 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0000	20.22	12.7000	-0.0001 u (ppm)
Ca (422.673 nm)	111.3000	ppm	0.3796	0.34	418400.0000	111.3000 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-2.4620	0.0000 u (ppm)
Co (228.615 nm)	0.0012	ppm	0.0008	67.41	2.4970	0.0012 (ppm)
Cr (205.560 nm)	0.0022	ppm	0.0026	> 100.00	11.7500	0.0022 (ppm)
Cu (324.754 nm)	0.0136	ppm	0.0002	1.64	451.7000	0.0136 (ppm)
Fe (238.204 nm)	0.1137	ppm	0.0008	0.70	234.0000	0.1137 (ppm)
K (766.491 nm)	5.8600	ppm	0.0254	0.43	5639.0000	5.8600 (ppm)
Li (670.783 nm)	0.0091	ppm	0.0011	12.39	779.6000	0.0091 (ppm)
Mg (279.078 nm)	31.1200	ppm	0.2149	0.69	72720.0000	31.1200 (ppm)
Mn (259.372 nm)	0.1022	ppm	0.0002	0.23	8740.0000	0.1022 (ppm)
Mo (204.598 nm)	-0.0007 u	ppm	0.0001	19.10	-6.3080	-0.0007 u (ppm)
Na (589.592 nm)	83.5600	ppm	0.0119	0.01	457400.0000	83.5600 (ppm)
Ni (231.604 nm)	0.0019	ppm	0.0007	37.66	-9.8270	0.0019 (ppm)
P (213.618 nm)	-0.0111 u	ppm	0.0026	23.24	-8.8420	-0.0111 u (ppm)
Pb (220.353 nm)	0.0066	ppm	0.0021	32.24	1.5340	0.0066 (ppm)
Sb (206.834 nm)	0.0095	ppm	0.0040	41.84	4.4740	0.0095 (ppm)
Se (196.026 nm)	0.0063	ppm	0.0004	6.51	2.3580	0.0063 (ppm)
Si (251.611 nm)	12.2100	ppm	0.0402	0.33	24370.0000	12.2100 (ppm)
Sn (189.925 nm)	-0.0042 u	ppm	0.0034	78.89	-3.4960	-0.0042 u (ppm)
Sr (421.552 nm)	1.3100	ppm	0.0036	0.27	434800.0000	1.3100 (ppm)
Ti (336.122 nm)	-0.0008 u	ppm	0.0001	8.46	-295.7000	-0.0008 u (ppm)
Tl (190.794 nm)	-0.0002 u	ppm	0.0013	> 100.00	4.0970	-0.0002 u (ppm)
V (292.401 nm)	-0.0036 u	ppm	0.0007	20.08	106.3000	-0.0036 u (ppm)
W (207.912 nm)	-0.0053 u	ppm	0.0016	29.93	-12.6800	-0.0053 u (ppm)
Zn (202.548 nm)	0.0646	ppm	0.0005	0.79	829.0000	0.0646 (ppm)
Zr (343.823 nm)	0.0008	ppm	0.0002	26.94	180.8000	0.0008 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9160	317100.0000	0.0054	0.59
Y_R 371.029	0.9210	44750.0000	0.0042	0.45

Sample Name: 440-256855-U-11-A

Date: 12/10/2019 9:36:21 PM Rack:Tube: 4:10

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0011 u	ppm	0.0003	25.65	-115.1000	-0.0011 u (ppm)
Al (396.152 nm)	0.0438	ppm	0.0011	2.46	832.8000	0.0438 (ppm)
As (188.980 nm)	0.0008 u	ppm	0.0023	> 100.00	1.6940	0.0008 u (ppm)
B (249.678 nm)	0.0878	ppm	0.0016	1.81	845.4000	0.0878 (ppm)
Ba (233.527 nm)	0.0562	ppm	0.0000	0.04	4290.0000	0.0562 (ppm)
Be (234.861 nm)	0.0001 u	ppm	0.0001	> 100.00	31.3400	0.0001 u (ppm)
Ca (422.673 nm)	107.7000	ppm	0.2518	0.23	404600.0000	107.7000 (ppm)
Cd (214.439 nm)	0.0001	ppm	0.0001	> 100.00	-1.2860	0.0001 (ppm)
Co (228.615 nm)	0.0006	ppm	0.0002	26.40	-3.9790	0.0006 (ppm)
Cr (205.560 nm)	0.0032	ppm	0.0000	0.26	15.3200	0.0032 (ppm)
Cu (324.754 nm)	-0.0002 u	ppm	0.0006	> 100.00	-34.0800	-0.0002 u (ppm)
Fe (238.204 nm)	0.0634	ppm	0.0001	0.19	109.3000	0.0634 (ppm)
K (766.491 nm)	5.8310	ppm	0.0141	0.24	5610.0000	5.8310 (ppm)
Li (670.783 nm)	0.0096	ppm	0.0017	18.06	805.5000	0.0096 (ppm)
Mg (279.078 nm)	30.6200	ppm	0.2262	0.74	71550.0000	30.6200 (ppm)
Mn (259.372 nm)	0.1022	ppm	0.0006	0.61	8731.0000	0.1022 (ppm)
Mo (204.598 nm)	0.0051	ppm	0.0019	37.33	12.9500	0.0051 (ppm)
Na (589.592 nm)	83.6500	ppm	0.0956	0.11	457900.0000	83.6500 (ppm)
Ni (231.604 nm)	0.0020	ppm	0.0001	3.93	-9.5010	0.0020 (ppm)
P (213.618 nm)	0.0016 u	ppm	0.0132	> 100.00	0.5223	0.0016 u (ppm)
Pb (220.353 nm)	0.0016	ppm	0.0000	0.58	-7.3890	0.0016 (ppm)
Sb (206.834 nm)	0.0071	ppm	0.0020	27.81	2.4880	0.0071 (ppm)
Se (196.026 nm)	-0.0021 u	ppm	0.0023	> 100.00	-2.3360	-0.0021 u (ppm)
Si (251.611 nm)	12.6100	ppm	0.0569	0.45	25150.0000	12.6100 (ppm)
Sn (189.925 nm)	-0.0031 u	ppm	0.0014	43.79	-2.9400	-0.0031 u (ppm)
Sr (421.552 nm)	1.2950	ppm	0.0017	0.13	429500.0000	1.2950 (ppm)
Ti (336.122 nm)	-0.0008 u	ppm	0.0002	29.93	-287.9000	-0.0008 u (ppm)
Tl (190.794 nm)	0.0051	ppm	0.0059	> 100.00	8.9360	0.0051 (ppm)
V (292.401 nm)	-0.0024 u	ppm	0.0000	0.40	131.7000	-0.0024 u (ppm)
W (207.912 nm)	-0.0050 u	ppm	0.0038	76.45	-12.8800	-0.0050 u (ppm)
Zn (202.548 nm)	0.0028	ppm	0.0002	5.96	32.3300	0.0028 (ppm)
Zr (343.823 nm)	0.0007	ppm	0.0002	28.15	174.1000	0.0007 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9362	324000.0000	0.0012	0.13
Y_R 371.029	0.9473	46030.0000	0.0034	0.36

Sample Name: 440-256855-U-12-A

Date: 12/10/2019 9:39:41 PM Rack:Tube: 4:11

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0008 u	ppm	0.0002	23.25	-106.5000	-0.0008 u (ppm)
Al (396.152 nm)	0.0484	ppm	0.0013	2.69	947.0000	0.0484 (ppm)
As (188.980 nm)	0.0001 u	ppm	0.0016	> 100.00	1.3100	0.0001 u (ppm)
B (249.678 nm)	0.0876	ppm	0.0013	1.45	843.4000	0.0876 (ppm)
Ba (233.527 nm)	0.0556	ppm	0.0002	0.43	4247.0000	0.0556 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	81.20	26.7300	0.0000 (ppm)
Ca (422.673 nm)	107.9000	ppm	0.0565	0.05	405400.0000	107.9000 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0001	> 100.00	-1.3630	0.0001 u (ppm)
Co (228.615 nm)	0.0003 u	ppm	0.0012	> 100.00	-8.1530	0.0003 u (ppm)
Cr (205.560 nm)	0.0032	ppm	0.0005	15.36	15.2300	0.0032 (ppm)
Cu (324.754 nm)	-0.0005 u	ppm	0.0009	> 100.00	-46.6100	-0.0005 u (ppm)
Fe (238.204 nm)	0.0351	ppm	0.0010	2.90	39.2100	0.0351 (ppm)
K (766.491 nm)	5.9410	ppm	0.2157	3.63	5718.0000	5.9410 (ppm)
Li (670.783 nm)	0.0087	ppm	0.0022	25.34	756.7000	0.0087 (ppm)
Mg (279.078 nm)	31.0900	ppm	0.1824	0.59	72650.0000	31.0900 (ppm)
Mn (259.372 nm)	0.1140	ppm	0.0006	0.50	9719.0000	0.1140 (ppm)
Mo (204.598 nm)	0.0060	ppm	0.0002	2.65	15.9900	0.0060 (ppm)
Na (589.592 nm)	83.7900	ppm	0.0020	0.00	458700.0000	83.7900 (ppm)
Ni (231.604 nm)	0.0010 u	ppm	0.0034	> 100.00	-13.0600	0.0010 u (ppm)
P (213.618 nm)	0.0085	ppm	0.0081	94.93	5.3800	0.0085 (ppm)
Pb (220.353 nm)	-0.0009 u	ppm	0.0041	> 100.00	-11.6600	-0.0009 u (ppm)
Sb (206.834 nm)	0.0049	ppm	0.0034	69.02	0.7448	0.0049 (ppm)
Se (196.026 nm)	0.0115	ppm	0.0054	46.79	5.3080	0.0115 (ppm)
Si (251.611 nm)	12.6500	ppm	0.0679	0.54	25240.0000	12.6500 (ppm)
Sn (189.925 nm)	-0.0021 u	ppm	0.0023	> 100.00	-2.4260	-0.0021 u (ppm)
Sr (421.552 nm)	1.2980	ppm	0.0011	0.08	430600.0000	1.2980 (ppm)
Ti (336.122 nm)	-0.0008 u	ppm	0.0003	33.01	-290.1000	-0.0008 u (ppm)
Tl (190.794 nm)	0.0000 u	ppm	0.0013	> 100.00	4.3220	0.0000 u (ppm)
V (292.401 nm)	-0.0026 u	ppm	0.0003	9.92	126.4000	-0.0026 u (ppm)
W (207.912 nm)	-0.0040 u	ppm	0.0020	50.36	-11.3900	-0.0040 u (ppm)
Zn (202.548 nm)	0.0091	ppm	0.0002	1.99	113.5000	0.0091 (ppm)
Zr (343.823 nm)	0.0009	ppm	0.0000	5.58	185.5000	0.0009 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029

Label	Internal Standard
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9357	323900.0000	0.0079	0.84
Y_R 371.029	0.9357	45460.0000	0.0072	0.77

Sample Name: CCV 5993196

Date: 12/10/2019 9:42:59 PM
Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4819	ppm	0.0026	0.53	17630.0000	0.4819 (ppm)
Al (396.152 nm)	0.9552	ppm	0.0051	0.53	24210.0000	0.9552 (ppm)
As (188.980 nm)	0.9663	ppm	0.0038	0.39	509.6000	0.9663 (ppm)
B (249.678 nm)	0.9574	ppm	0.0069	0.72	9244.0000	0.9574 (ppm)
Ba (233.527 nm)	0.9757	ppm	0.0002	0.02	73720.0000	0.9757 (ppm)
Be (234.861 nm)	0.9622	ppm	0.0052	0.54	142900.0000	0.9622 (ppm)
Ca (422.673 nm)	4.8840	ppm	0.0291	0.60	18470.0000	4.8840 (ppm)
Cd (214.439 nm)	0.9644	ppm	0.0064	0.66	18020.0000	0.9644 (ppm)
Co (228.615 nm)	0.9643	ppm	0.0083	0.86	10860.0000	0.9643 (ppm)
Cr (205.560 nm)	0.9613	ppm	0.0056	0.59	3711.0000	0.9613 (ppm)
Cu (324.754 nm)	0.9698	ppm	0.0077	0.79	34370.0000	0.9698 (ppm)
Fe (238.204 nm)	0.9685	ppm	0.0032	0.33	2349.0000	0.9685 (ppm)
K (766.491 nm)	9.7560	ppm	0.0187	0.19	9420.0000	9.7560 (ppm)
Li (670.783 nm)	0.9766	ppm	0.0038	0.38	53820.0000	0.9766 (ppm)
Mg (279.078 nm)	4.9160	ppm	0.0012	0.02	11490.0000	4.9160 (ppm)
Mn (259.372 nm)	0.9639	ppm	0.0048	0.49	81430.0000	0.9639 (ppm)
Mo (204.598 nm)	0.9639	ppm	0.0047	0.49	3237.0000	0.9639 (ppm)
Na (589.592 nm)	10.0500	ppm	0.0131	0.13	55860.0000	10.0500 (ppm)
Ni (231.604 nm)	0.9639	ppm	0.0048	0.50	3737.0000	0.9639 (ppm)
P (213.618 nm)	0.9623	ppm	0.0006	0.06	641.2000	0.9623 (ppm)
Pb (220.353 nm)	0.9569	ppm	0.0087	0.91	1660.0000	0.9569 (ppm)
Sb (206.834 nm)	0.9670	ppm	0.0139	1.44	753.3000	0.9670 (ppm)
Se (196.026 nm)	0.9510	ppm	0.0081	0.85	537.0000	0.9510 (ppm)
Si (251.611 nm)	4.8600	ppm	0.0478	0.98	9850.0000	4.8600 (ppm)
Sn (189.925 nm)	0.9573	ppm	0.0052	0.54	472.3000	0.9573 (ppm)
Sr (421.552 nm)	0.9618	ppm	0.0032	0.33	318300.0000	0.9618 (ppm)
Ti (336.122 nm)	0.9599	ppm	0.0110	1.15	90800.0000	0.9599 (ppm)
Tl (190.794 nm)	0.9630	ppm	0.0078	0.81	852.1000	0.9630 (ppm)
V (292.401 nm)	0.9683	ppm	0.0061	0.63	25720.0000	0.9683 (ppm)
W (207.912 nm)	0.9577	ppm	0.0059	0.62	1379.0000	0.9577 (ppm)
Zn (202.548 nm)	0.9619	ppm	0.0061	0.63	12500.0000	0.9619 (ppm)
Zr (343.823 nm)	0.9367	ppm	0.0141	1.51	71060.0000	0.9367 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9745	337300.0000	0.0064	0.65
Y_R 371.029	0.9621	46740.0000	0.0015	0.15

Sample Name: CCB 5993195

Date: 12/10/2019 9:46:17 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0001	73.82	-72.7900	-0.0001 u (ppm)
Al (396.152 nm)	-0.0016 u	ppm	0.0003	18.63	-361.9000	-0.0016 u (ppm)
As (188.980 nm)	0.0004 u	ppm	0.0032	> 100.00	1.8140	0.0004 u (ppm)
B (249.678 nm)	0.0008	ppm	0.0006	82.25	-6.7840	0.0008 (ppm)
Ba (233.527 nm)	0.0003	ppm	0.0002	63.14	60.8700	0.0003 (ppm)
Be (234.861 nm)	0.0004	ppm	0.0001	23.72	75.7900	0.0004 (ppm)
Ca (422.673 nm)	-0.0016 u	ppm	0.0064	> 100.00	113.0000	-0.0016 u (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0001	37.55	1.5340	0.0003 (ppm)
Co (228.615 nm)	-0.0002 u	ppm	0.0001	46.61	-15.3200	-0.0002 u (ppm)
Cr (205.560 nm)	0.0007	ppm	0.0003	49.68	4.3600	0.0007 (ppm)
Cu (324.754 nm)	0.0007	ppm	0.0003	49.93	65.4000	0.0007 (ppm)
Fe (238.204 nm)	-0.0005 u	ppm	0.0021	> 100.00	-51.3400	-0.0005 u (ppm)
K (766.491 nm)	0.0768	ppm	0.0553	71.98	-3.5320	0.0768 (ppm)
Li (670.783 nm)	0.0044	ppm	0.0005	11.03	299.5000	0.0044 (ppm)
Mg (279.078 nm)	0.0082	ppm	0.0019	23.20	29.8200	0.0082 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0004	78.54	87.0400	0.0005 (ppm)
Mo (204.598 nm)	0.0062	ppm	0.0018	28.87	16.6600	0.0062 (ppm)
Na (589.592 nm)	0.2988	ppm	0.0037	1.24	2546.0000	0.2988 (ppm)
Ni (231.604 nm)	0.0018	ppm	0.0004	21.35	-8.7580	0.0018 (ppm)
P (213.618 nm)	-0.0049 u	ppm	0.0011	22.34	-3.2210	-0.0049 u (ppm)
Pb (220.353 nm)	-0.0002 u	ppm	0.0027	> 100.00	-11.6300	-0.0002 u (ppm)
Sb (206.834 nm)	0.0121 Z	ppm	0.0029	24.29	6.1320 Z	0.0121 Z (ppm)
Se (196.026 nm)	0.0069	ppm	0.0002	2.91	3.2150	0.0069 (ppm)
Si (251.611 nm)	0.0045	ppm	0.0012	27.43	19.9000	0.0045 (ppm)
Sn (189.925 nm)	0.0065	ppm	0.0027	41.19	1.7570	0.0065 (ppm)
Sr (421.552 nm)	0.0003	ppm	0.0002	50.15	91.1700	0.0003 (ppm)
Ti (336.122 nm)	0.0020	ppm	0.0004	19.55	56.8300	0.0020 (ppm)
Tl (190.794 nm)	0.0017 u	ppm	0.0040	> 100.00	6.0450	0.0017 u (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0003	> 100.00	79.4400	-0.0002 u (ppm)
W (207.912 nm)	0.0041	ppm	0.0032	76.90	1.5610	0.0041 (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0003	65.36	19.3100	0.0005 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0001	> 100.00	98.3100	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9740	337100.0000	0.0048	0.49
Y_R 371.029	0.9577	46530.0000	0.0021	0.22

Sample Name: 720-96305-C-1-B

Date: 12/10/2019 9:49:37 PM Rack:Tube: 4:12

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0000	18.36	-77.6100	-0.0002 u (ppm)
Al (396.152 nm)	2.1180	ppm	0.0036	0.17	52170.0000	2.1180 (ppm)
As (188.980 nm)	0.0037 u	ppm	0.0086	> 100.00	3.2190	0.0037 u (ppm)
B (249.678 nm)	0.1386	ppm	0.0011	0.81	1333.0000	0.1386 (ppm)
Ba (233.527 nm)	0.0743	ppm	0.0002	0.33	5650.0000	0.0743 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	13.22	98.9600	0.0001 (ppm)
Ca (422.673 nm)	9.8960	ppm	0.0456	0.46	37290.0000	9.8960 (ppm)
Cd (214.439 nm)	0.0010	ppm	0.0002	23.16	15.4700	0.0010 (ppm)
Co (228.615 nm)	0.0018	ppm	0.0004	23.07	10.0300	0.0018 (ppm)
Cr (205.560 nm)	0.0140	ppm	0.0006	4.13	56.0900	0.0140 (ppm)
Cu (324.754 nm)	0.0448	ppm	0.0004	0.88	1624.0000	0.0448 (ppm)
Fe (238.204 nm)	5.0390	ppm	0.0266	0.53	12440.0000	5.0390 (ppm)
K (766.491 nm)	1.6530	ppm	0.1028	6.22	1532.0000	1.6530 (ppm)
Li (670.783 nm)	0.0091	ppm	0.0001	1.15	532.4000	0.0091 (ppm)
Mg (279.078 nm)	2.5010	ppm	0.0005	0.02	5852.0000	2.5010 (ppm)
Mn (259.372 nm)	0.1280	ppm	0.0003	0.26	11340.0000	0.1280 (ppm)
Mo (204.598 nm)	0.0079	ppm	0.0022	28.49	22.7300	0.0079 (ppm)
Na (589.592 nm)	13.7200	ppm	0.0055	0.04	75920.0000	13.7200 (ppm)
Ni (231.604 nm)	0.0156	ppm	0.0022	13.94	44.6900	0.0156 (ppm)
P (213.618 nm)	0.2240	ppm	0.0040	1.80	157.6000	0.2240 (ppm)
Pb (220.353 nm)	0.0044	ppm	0.0002	4.86	-0.7784	0.0044 (ppm)
Sb (206.834 nm)	0.0176	ppm	0.0043	24.46	10.4800	0.0176 (ppm)
Se (196.026 nm)	0.0084	ppm	0.0028	33.27	3.5230	0.0084 (ppm)
Si (251.611 nm)	4.8540	ppm	0.0074	0.15	9693.0000	4.8540 (ppm)
Sn (189.925 nm)	0.0027 u	ppm	0.0065	> 100.00	-0.1111	0.0027 u (ppm)
Sr (421.552 nm)	0.0562	ppm	0.0001	0.25	18690.0000	0.0562 (ppm)
Ti (336.122 nm)	0.1003	ppm	0.0011	1.14	9362.0000	0.1003 (ppm)
Tl (190.794 nm)	0.0015	ppm	0.0004	30.07	5.0330	0.0015 (ppm)
V (292.401 nm)	0.0111	ppm	0.0001	0.70	393.7000	0.0111 (ppm)
W (207.912 nm)	-0.0014 u	ppm	0.0005	38.97	-1.8310	-0.0014 u (ppm)
Zn (202.548 nm)	0.3982	ppm	0.0006	0.15	5148.0000	0.3982 (ppm)
Zr (343.823 nm)	0.0085	ppm	0.0006	6.90	638.1000	0.0085 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9606	332500.0000	0.0013	0.14
Y_R 371.029	0.9537	46340.0000	0.0021	0.22

Sample Name: 440-256127-G-1-B

Date: 12/10/2019 9:52:57 PM Rack:Tube: 4:13

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0014 u	ppm	0.0002	14.97	-134.2000	-0.0014 u (ppm)
Al (396.152 nm)	0.0289	ppm	0.0015	5.16	589.9000	0.0289 (ppm)
As (188.980 nm)	-0.0014 u	ppm	0.0114	> 100.00	0.2164	-0.0014 u (ppm)
B (249.678 nm)	0.5807	ppm	0.0043	0.74	5656.0000	0.5807 (ppm)
Ba (233.527 nm)	0.0068	ppm	0.0001	1.39	573.0000	0.0068 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	66.99	46.5100	0.0000 (ppm)
Ca (422.673 nm)	176.9000	ppm	0.2155	0.12	664600.0000	176.9000 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0005	> 100.00	-1.8250	0.0001 u (ppm)
Co (228.615 nm)	0.0003 u	ppm	0.0008	> 100.00	-4.5460	0.0003 u (ppm)
Cr (205.560 nm)	0.0024	ppm	0.0004	18.37	13.0100	0.0024 (ppm)
Cu (324.754 nm)	-0.0007 u	ppm	0.0005	62.72	-92.9700	-0.0007 u (ppm)
Fe (238.204 nm)	1.5100	ppm	0.0056	0.37	3701.0000	1.5100 (ppm)
K (766.491 nm)	4.0440	ppm	0.0463	1.15	3904.0000	4.0440 (ppm)
Li (670.783 nm)	0.3629	ppm	0.0018	0.49	20740.0000	0.3629 (ppm)
Mg (279.078 nm)	125.9000	ppm	1.7610	1.40	294100.0000	125.9000 (ppm)
Mn (259.372 nm)	0.1078	ppm	0.0005	0.43	9653.0000	0.1078 (ppm)
Mo (204.598 nm)	0.0015	ppm	0.0009	62.75	0.8788	0.0015 (ppm)
Na (589.592 nm)	454.9000 o	ppm	0.5606	0.12	2486000.0000	454.9000 o (ppm)
Ni (231.604 nm)	-0.0005 u	ppm	0.0012	> 100.00	-20.8200	-0.0005 u (ppm)
P (213.618 nm)	0.0200	ppm	0.0019	9.41	13.3000	0.0200 (ppm)
Pb (220.353 nm)	-0.0006 u	ppm	0.0017	> 100.00	-8.1310	-0.0006 u (ppm)
Sb (206.834 nm)	0.0060	ppm	0.0033	54.94	1.6560	0.0060 (ppm)
Se (196.026 nm)	0.0068	ppm	0.0053	78.10	2.2370	0.0068 (ppm)
Si (251.611 nm)	10.8700	ppm	0.0593	0.55	21710.0000	10.8700 (ppm)
Sn (189.925 nm)	-0.0098 u	ppm	0.0038	39.37	-6.0890	-0.0098 u (ppm)
Sr (421.552 nm)	3.1930	ppm	0.0016	0.05	1059000.0000	3.1930 (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0003	> 100.00	-277.1000	-0.0001 u (ppm)
Tl (190.794 nm)	0.0087	ppm	0.0045	51.63	12.3600	0.0087 (ppm)
V (292.401 nm)	-0.0043 u	ppm	0.0004	8.23	157.7000	-0.0043 u (ppm)
W (207.912 nm)	-0.0064 u	ppm	0.0013	20.08	-16.0700	-0.0064 u (ppm)
Zn (202.548 nm)	-0.0057 u	ppm	0.0002	2.86	-61.3600	-0.0057 u (ppm)
Zr (343.823 nm)	0.0033	ppm	0.0002	5.31	345.4000	0.0033 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9167	317300.0000	0.0022	0.24
Y_R 371.029	0.9362	45480.0000	0.0093	0.99

Sample Name: 440-256127-G-3-B

Date: 12/10/2019 9:56:17 PM Rack:Tube: 4:14

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0014 u	ppm	0.0002	17.05	-130.9000	-0.0014 u (ppm)
Al (396.152 nm)	0.0287	ppm	0.0000	0.15	567.2000	0.0287 (ppm)
As (188.980 nm)	0.0003 u	ppm	0.0010	> 100.00	1.0730	0.0003 u (ppm)
B (249.678 nm)	0.5673	ppm	0.0040	0.70	5525.0000	0.5673 (ppm)
Ba (233.527 nm)	0.0120	ppm	0.0001	1.05	965.9000	0.0120 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	51.2100	0.0000 u (ppm)
Ca (422.673 nm)	179.7000	ppm	0.1224	0.07	675200.0000	179.7000 (ppm)
Cd (214.439 nm)	0.0000	ppm	0.0000	6.51	-1.9630	0.0000 (ppm)
Co (228.615 nm)	0.0004	ppm	0.0002	57.23	-3.7120	0.0004 (ppm)
Cr (205.560 nm)	0.0028	ppm	0.0005	16.77	14.7200	0.0028 (ppm)
Cu (324.754 nm)	-0.0010 u	ppm	0.0006	61.12	-104.0000	-0.0010 u (ppm)
Fe (238.204 nm)	2.0740	ppm	0.0041	0.20	5097.0000	2.0740 (ppm)
K (766.491 nm)	4.1230	ppm	0.0522	1.26	3977.0000	4.1230 (ppm)
Li (670.783 nm)	0.3455	ppm	0.0018	0.52	19730.0000	0.3455 (ppm)
Mg (279.078 nm)	109.0000	ppm	0.6543	0.60	254800.0000	109.0000 (ppm)
Mn (259.372 nm)	0.1268	ppm	0.0001	0.10	11250.0000	0.1268 (ppm)
Mo (204.598 nm)	0.0020	ppm	0.0021	> 100.00	2.6760	0.0020 (ppm)
Na (589.592 nm)	426.0000	ppm	0.6042	0.14	2328000.0000	426.0000 (ppm)
Ni (231.604 nm)	0.0003 u	ppm	0.0019	> 100.00	-17.4600	0.0003 u (ppm)
P (213.618 nm)	0.0436	ppm	0.0044	10.02	29.9400	0.0436 (ppm)
Pb (220.353 nm)	0.0039	ppm	0.0012	31.37	-0.1412	0.0039 (ppm)
Sb (206.834 nm)	-0.0050 u	ppm	0.0017	33.66	-7.0850	-0.0050 u (ppm)
Se (196.026 nm)	0.0032 u	ppm	0.0104	> 100.00	0.1042	0.0032 u (ppm)
Si (251.611 nm)	14.2200	ppm	0.0523	0.37	28390.0000	14.2200 (ppm)
Sn (189.925 nm)	-0.0051 u	ppm	0.0008	15.16	-3.8150	-0.0051 u (ppm)
Sr (421.552 nm)	1.9540	ppm	0.0009	0.05	648600.0000	1.9540 (ppm)
Ti (336.122 nm)	-0.0007 u	ppm	0.0003	37.91	-335.6000	-0.0007 u (ppm)
Tl (190.794 nm)	0.0042	ppm	0.0059	> 100.00	8.2430	0.0042 (ppm)
V (292.401 nm)	-0.0050 u	ppm	0.0001	2.28	141.4000	-0.0050 u (ppm)
W (207.912 nm)	-0.0084 u	ppm	0.0002	1.84	-18.8200	-0.0084 u (ppm)
Zn (202.548 nm)	-0.0028 u	ppm	0.0008	26.53	-31.9600	-0.0028 u (ppm)
Zr (343.823 nm)	0.0047	ppm	0.0005	10.47	444.1000	0.0047 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9036	312800.0000	0.0009	0.10
Y_R 371.029	0.9229	44840.0000	0.0023	0.25

Sample Name: 440-256127-G-4-B

Date: 12/10/2019 9:59:37 PM Rack:Tube: 4:15

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0014 u	ppm	0.0001	10.34	-145.5000	-0.0014 u (ppm)
Al (396.152 nm)	0.0439	ppm	0.0001	0.34	1102.0000	0.0439 (ppm)
As (188.980 nm)	0.0009 u	ppm	0.0019	> 100.00	0.9373	0.0009 u (ppm)
B (249.678 nm)	0.7005	ppm	0.0059	0.84	6829.0000	0.7005 (ppm)
Ba (233.527 nm)	0.0170	ppm	0.0003	1.78	1355.0000	0.0170 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	42.64	32.5900	0.0000 u (ppm)
Ca (422.673 nm)	362.7000	ppm	0.8196	0.23	1363000.0000	362.7000 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.0760	0.0000 u (ppm)
Co (228.615 nm)	0.0012	ppm	0.0009	74.27	9.4000	0.0012 (ppm)
Cr (205.560 nm)	0.0030	ppm	0.0006	18.66	17.6500	0.0030 (ppm)
Cu (324.754 nm)	-0.0012 u	ppm	0.0006	50.92	-231.2000	-0.0012 u (ppm)
Fe (238.204 nm)	1.0510	ppm	0.0033	0.31	2567.0000	1.0510 (ppm)
K (766.491 nm)	5.8850	ppm	0.0356	0.60	5728.0000	5.8850 (ppm)
Li (670.783 nm)	0.2767	ppm	0.0022	0.78	16370.0000	0.2767 (ppm)
Mg (279.078 nm)	191.9000	ppm	3.0240	1.58	448500.0000	191.9000 (ppm)
Mn (259.372 nm)	1.0980	ppm	0.0063	0.57	92900.0000	1.0980 (ppm)
Mo (204.598 nm)	0.0044	ppm	0.0010	23.38	10.9900	0.0044 (ppm)
Na (589.592 nm)	302.1000	ppm	0.1771	0.06	1652000.0000	302.1000 (ppm)
Ni (231.604 nm)	0.0002 u	ppm	0.0018	> 100.00	-20.6600	0.0002 u (ppm)
P (213.618 nm)	0.1787	ppm	0.0046	2.57	123.9000	0.1787 (ppm)
Pb (220.353 nm)	-0.0020 u	ppm	0.0032	> 100.00	-8.2400	-0.0020 u (ppm)
Sb (206.834 nm)	-0.0010 u	ppm	0.0047	> 100.00	-3.6860	-0.0010 u (ppm)
Se (196.026 nm)	0.0169	ppm	0.0078	46.20	7.4400	0.0169 (ppm)
Si (251.611 nm)	13.8800	ppm	0.0922	0.66	27720.0000	13.8800 (ppm)
Sn (189.925 nm)	-0.0169 u	ppm	0.0047	27.55	-9.4960	-0.0169 u (ppm)
Sr (421.552 nm)	2.8060	ppm	0.0081	0.29	932100.0000	2.8060 (ppm)
Ti (336.122 nm)	-0.0009 u	ppm	0.0001	14.45	-494.3000	-0.0009 u (ppm)
Tl (190.794 nm)	0.0038	ppm	0.0017	44.23	8.5710	0.0038 (ppm)
V (292.401 nm)	-0.0114 u	ppm	0.0004	3.62	161.3000	-0.0114 u (ppm)
W (207.912 nm)	-0.0063 u	ppm	0.0029	46.02	-18.4700	-0.0063 u (ppm)
Zn (202.548 nm)	-0.0090 u	ppm	0.0004	4.64	-127.6000	-0.0090 u (ppm)
Zr (343.823 nm)	0.0074	ppm	0.0007	9.12	692.1000	0.0074 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9039	312900.0000	0.0093	1.03
Y_R 371.029	0.9517	46240.0000	0.0010	0.10

Sample Name: 440-256127-G-5-B

Date: 12/10/2019 10:02:57 PM Rack:Tube: 4:16

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0011 u	ppm	0.0003	26.05	-113.9000	-0.0011 u (ppm)
Al (396.152 nm)	0.0646	ppm	0.0011	1.71	1418.0000	0.0646 (ppm)
As (188.980 nm)	0.0063	ppm	0.0006	9.05	4.6630	0.0063 (ppm)
B (249.678 nm)	0.9152	ppm	0.0057	0.63	8919.0000	0.9152 (ppm)
Ba (233.527 nm)	0.0146	ppm	0.0001	0.55	1158.0000	0.0146 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	80.83	21.7900	0.0000 u (ppm)
Ca (422.673 nm)	64.1100	ppm	0.1488	0.23	241000.0000	64.1100 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0001	> 100.00	-3.9340	0.0000 u (ppm)
Co (228.615 nm)	0.0014	ppm	0.0009	61.67	5.9960	0.0014 (ppm)
Cr (205.560 nm)	0.0042	ppm	0.0001	1.85	18.6100	0.0042 (ppm)
Cu (324.754 nm)	-0.0005 u	ppm	0.0003	51.75	-12.7700	-0.0005 u (ppm)
Fe (238.204 nm)	0.2274	ppm	0.0033	1.46	520.2000	0.2274 (ppm)
K (766.491 nm)	24.9600	ppm	0.1012	0.41	24240.0000	24.9600 (ppm)
Li (670.783 nm)	0.1643	ppm	0.0016	0.98	9559.0000	0.1643 (ppm)
Mg (279.078 nm)	106.4000	ppm	0.0886	0.08	248600.0000	106.4000 (ppm)
Mn (259.372 nm)	0.0368	ppm	0.0001	0.27	3487.0000	0.0368 (ppm)
Mo (204.598 nm)	0.0023	ppm	0.0022	94.83	3.6200	0.0023 (ppm)
Na (589.592 nm)	138.0000	ppm	0.4138	0.30	754800.0000	138.0000 (ppm)
Ni (231.604 nm)	0.0024	ppm	0.0012	47.97	-7.6620	0.0024 (ppm)
P (213.618 nm)	0.1618	ppm	0.0038	2.33	114.5000	0.1618 (ppm)
Pb (220.353 nm)	-0.0030 u	ppm	0.0011	35.42	-14.0900	-0.0030 u (ppm)
Sb (206.834 nm)	0.0011 u	ppm	0.0038	> 100.00	-2.3880	0.0011 u (ppm)
Se (196.026 nm)	0.0051 u	ppm	0.0119	> 100.00	1.8420	0.0051 u (ppm)
Si (251.611 nm)	22.6600	ppm	0.1106	0.49	45210.0000	22.6600 (ppm)
Sn (189.925 nm)	-0.0080 u	ppm	0.0016	19.60	-5.2190	-0.0080 u (ppm)
Sr (421.552 nm)	1.1310	ppm	0.0025	0.22	375000.0000	1.1310 (ppm)
Ti (336.122 nm)	0.0004	ppm	0.0001	16.89	-147.4000	0.0004 (ppm)
Tl (190.794 nm)	0.0061	ppm	0.0042	69.15	10.1800	0.0061 (ppm)
V (292.401 nm)	0.0038	ppm	0.0000	0.14	258.1000	0.0038 (ppm)
W (207.912 nm)	-0.0057 u	ppm	0.0005	9.50	-13.3800	-0.0057 u (ppm)
Zn (202.548 nm)	0.0008	ppm	0.0001	15.29	44.9500	0.0008 (ppm)
Zr (343.823 nm)	0.0052	ppm	0.0011	21.17	505.1000	0.0052 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8956	310000.0000	0.0029	0.32
Y_R 371.029	0.8949	43480.0000	0.0003	0.04

Sample Name: 440-256127-G-6-B

Date: 12/10/2019 10:06:17 PM Rack:Tube: 4:17

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0012 u	ppm	0.0002	13.86	-133.6000	-0.0012 u (ppm)
Al (396.152 nm)	0.0487	ppm	0.0003	0.67	1237.0000	0.0487 (ppm)
As (188.980 nm)	0.0030 u	ppm	0.0097	> 100.00	1.9000	0.0030 u (ppm)
B (249.678 nm)	0.3689	ppm	0.0016	0.43	3592.0000	0.3689 (ppm)
Ba (233.527 nm)	0.0179	ppm	0.0001	0.41	1416.0000	0.0179 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0001	57.15	5.3550	-0.0001 u (ppm)
Ca (422.673 nm)	428.6000	ppm	0.1934	0.05	1610000.0000	428.6000 (ppm)
Cd (214.439 nm)	0.0020	ppm	0.0002	8.61	34.7300	0.0020 (ppm)
Co (228.615 nm)	0.0021	ppm	0.0005	26.13	19.1100	0.0021 (ppm)
Cr (205.560 nm)	0.0025	ppm	0.0012	48.00	16.6600	0.0025 (ppm)
Cu (324.754 nm)	-0.0002 u	ppm	0.0005	> 100.00	-240.1000	-0.0002 u (ppm)
Fe (238.204 nm)	0.1206	ppm	0.0021	1.75	261.8000	0.1206 (ppm)
K (766.491 nm)	7.9100	ppm	0.1039	1.31	7699.0000	7.9100 (ppm)
Li (670.783 nm)	0.2877	ppm	0.0000	0.01	16920.0000	0.2877 (ppm)
Mg (279.078 nm)	181.2000	ppm	0.0577	0.03	423500.0000	181.2000 (ppm)
Mn (259.372 nm)	4.6990	ppm	0.0291	0.62	395000.0000	4.6990 (ppm)
Mo (204.598 nm)	0.0128	ppm	0.0001	0.68	39.2400	0.0128 (ppm)
Na (589.592 nm)	252.1000	ppm	0.5492	0.22	1378000.0000	252.1000 (ppm)
Ni (231.604 nm)	0.0121	ppm	0.0012	9.83	24.1800	0.0121 (ppm)
P (213.618 nm)	0.1272	ppm	0.0065	5.11	86.3400	0.1272 (ppm)
Pb (220.353 nm)	0.0015 u	ppm	0.0022	> 100.00	-1.1960	0.0015 u (ppm)
Sb (206.834 nm)	-0.0006 u	ppm	0.0029	> 100.00	-3.4750	-0.0006 u (ppm)
Se (196.026 nm)	0.0054	ppm	0.0013	23.39	1.9830	0.0054 (ppm)
Si (251.611 nm)	13.8000	ppm	0.0670	0.49	27570.0000	13.8000 (ppm)
Sn (189.925 nm)	-0.0093 u	ppm	0.0095	> 100.00	-5.6870	-0.0093 u (ppm)
Sr (421.552 nm)	2.1880	ppm	0.0001	0.01	728500.0000	2.1880 (ppm)
Ti (336.122 nm)	-0.0012 u	ppm	0.0000	3.59	-574.1000	-0.0012 u (ppm)
Tl (190.794 nm)	0.0016 u	ppm	0.0053	> 100.00	10.7600	0.0016 u (ppm)
V (292.401 nm)	-0.0144 u	ppm	0.0005	3.31	146.0000	-0.0144 u (ppm)
W (207.912 nm)	-0.0056 u	ppm	0.0017	31.16	-18.2900	-0.0056 u (ppm)
Zn (202.548 nm)	-0.0057 u	ppm	0.0001	2.52	-104.3000	-0.0057 u (ppm)
Zr (343.823 nm)	0.0037	ppm	0.0004	11.75	440.0000	0.0037 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8761	303200.0000	0.0041	0.46
Y_R 371.029	0.8891	43200.0000	0.0013	0.15

Sample Name: xRINSE 5993206

Date: 12/10/2019 10:09:35 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0001	27.64	-79.1200	-0.0003 u (ppm)
Al (396.152 nm)	-0.0014 u	ppm	0.0011	76.57	-360.1000	-0.0014 u (ppm)
As (188.980 nm)	0.0063	ppm	0.0024	37.69	4.9550	0.0063 (ppm)
B (249.678 nm)	0.0009	ppm	0.0003	26.59	-4.6660	0.0009 (ppm)
Ba (233.527 nm)	0.0001 u	ppm	0.0001	> 100.00	45.2500	0.0001 u (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	11.42	26.5700	0.0000 (ppm)
Ca (422.673 nm)	0.0861	ppm	0.0309	35.87	442.4000	0.0861 (ppm)
Cd (214.439 nm)	0.0002 u	ppm	0.0004	> 100.00	0.6242	0.0002 u (ppm)
Co (228.615 nm)	-0.0002 u	ppm	0.0003	> 100.00	-14.6400	-0.0002 u (ppm)
Cr (205.560 nm)	0.0004	ppm	0.0001	14.10	3.3960	0.0004 (ppm)
Cu (324.754 nm)	0.0004	ppm	0.0001	20.84	57.0600	0.0004 (ppm)
Fe (238.204 nm)	0.0012	ppm	0.0002	17.95	-47.1900	0.0012 (ppm)
K (766.491 nm)	0.1387	ppm	0.0500	36.01	56.7500	0.1387 (ppm)
Li (670.783 nm)	0.0018	ppm	0.0005	27.52	156.0000	0.0018 (ppm)
Mg (279.078 nm)	0.0966 Z	ppm	0.0407	42.18	236.4000 Z	0.0966 Z (ppm)
Mn (259.372 nm)	0.0022	ppm	0.0011	51.44	229.0000	0.0022 (ppm)
Mo (204.598 nm)	0.0004 u	ppm	0.0008	> 100.00	-2.6410	0.0004 u (ppm)
Na (589.592 nm)	0.3748	ppm	0.0069	1.83	2961.0000	0.3748 (ppm)
Ni (231.604 nm)	0.0018	ppm	0.0013	71.16	-8.4510	0.0018 (ppm)
P (213.618 nm)	0.0011 u	ppm	0.0035	> 100.00	1.0720	0.0011 u (ppm)
Pb (220.353 nm)	-0.0033 u	ppm	0.0006	19.55	-17.0400	-0.0033 u (ppm)
Sb (206.834 nm)	0.0015 u	ppm	0.0027	> 100.00	-2.1410	0.0015 u (ppm)
Se (196.026 nm)	0.0030 u	ppm	0.0045	> 100.00	0.9718	0.0030 u (ppm)
Si (251.611 nm)	0.0094	ppm	0.0030	32.02	29.4200	0.0094 (ppm)
Sn (189.925 nm)	0.0009 u	ppm	0.0027	> 100.00	-1.0230	0.0009 u (ppm)
Sr (421.552 nm)	0.0005	ppm	0.0000	7.80	158.0000	0.0005 (ppm)
Ti (336.122 nm)	-0.0006 u	ppm	0.0002	27.38	-189.7000	-0.0006 u (ppm)
Tl (190.794 nm)	0.0069	ppm	0.0018	25.93	10.7600	0.0069 (ppm)
V (292.401 nm)	0.0005 u	ppm	0.0008	> 100.00	100.5000	0.0005 u (ppm)
W (207.912 nm)	0.0001 u	ppm	0.0009	> 100.00	-4.1800	0.0001 u (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0000	4.19	19.0600	0.0005 (ppm)
Zr (343.823 nm)	-0.0003 u	ppm	0.0001	45.57	82.4100	-0.0003 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9275	321000.0000	0.0070	0.75
Y_R 371.029	0.9252	44950.0000	0.0043	0.47

Sample Name: CCV 5993196

Date: 12/10/2019 10:12:53 PM
Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4796	ppm	0.0026	0.54	17540.0000	0.4796 (ppm)
Al (396.152 nm)	0.9478	ppm	0.0026	0.27	24020.0000	0.9478 (ppm)
As (188.980 nm)	0.9551	ppm	0.0052	0.54	503.7000	0.9551 (ppm)
B (249.678 nm)	0.9524	ppm	0.0049	0.51	9195.0000	0.9524 (ppm)
Ba (233.527 nm)	0.9729	ppm	0.0003	0.03	73500.0000	0.9729 (ppm)
Be (234.861 nm)	0.9561	ppm	0.0049	0.51	142000.0000	0.9561 (ppm)
Ca (422.673 nm)	4.8340	ppm	0.0025	0.05	18280.0000	4.8340 (ppm)
Cd (214.439 nm)	0.9591	ppm	0.0042	0.43	17920.0000	0.9591 (ppm)
Co (228.615 nm)	0.9553	ppm	0.0048	0.50	10760.0000	0.9553 (ppm)
Cr (205.560 nm)	0.9549	ppm	0.0015	0.16	3686.0000	0.9549 (ppm)
Cu (324.754 nm)	0.9616	ppm	0.0032	0.33	34080.0000	0.9616 (ppm)
Fe (238.204 nm)	0.9562	ppm	0.0005	0.05	2318.0000	0.9562 (ppm)
K (766.491 nm)	9.7800	ppm	0.0053	0.05	9443.0000	9.7800 (ppm)
Li (670.783 nm)	0.9754	ppm	0.0008	0.08	53760.0000	0.9754 (ppm)
Mg (279.078 nm)	4.9040	ppm	0.0007	0.01	11470.0000	4.9040 (ppm)
Mn (259.372 nm)	0.9576	ppm	0.0043	0.45	80900.0000	0.9576 (ppm)
Mo (204.598 nm)	0.9602	ppm	0.0027	0.28	3225.0000	0.9602 (ppm)
Na (589.592 nm)	9.9660	ppm	0.0142	0.14	55420.0000	9.9660 (ppm)
Ni (231.604 nm)	0.9587	ppm	0.0002	0.02	3717.0000	0.9587 (ppm)
P (213.618 nm)	0.9623	ppm	0.0018	0.18	641.5000	0.9623 (ppm)
Pb (220.353 nm)	0.9561	ppm	0.0042	0.44	1658.0000	0.9561 (ppm)
Sb (206.834 nm)	0.9552	ppm	0.0269	2.82	744.0000	0.9552 (ppm)
Se (196.026 nm)	0.9432	ppm	0.0073	0.77	532.6000	0.9432 (ppm)
Si (251.611 nm)	4.8080	ppm	0.0535	1.11	9747.0000	4.8080 (ppm)
Sn (189.925 nm)	0.9573	ppm	0.0002	0.02	472.3000	0.9573 (ppm)
Sr (421.552 nm)	0.9578	ppm	0.0007	0.08	317000.0000	0.9578 (ppm)
Ti (336.122 nm)	0.9564	ppm	0.0086	0.90	90470.0000	0.9564 (ppm)
Tl (190.794 nm)	0.9611	ppm	0.0047	0.49	850.5000	0.9611 (ppm)
V (292.401 nm)	0.9621	ppm	0.0022	0.23	25560.0000	0.9621 (ppm)
W (207.912 nm)	0.9488	ppm	0.0030	0.31	1366.0000	0.9488 (ppm)
Zn (202.548 nm)	0.9560	ppm	0.0048	0.50	12420.0000	0.9560 (ppm)
Zr (343.823 nm)	0.9242	ppm	0.0130	1.41	70120.0000	0.9242 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9622	333000.0000	0.0041	0.42
Y_R 371.029	0.9460	45960.0000	0.0005	0.05

Sample Name: CCB 5993195

Date: 12/10/2019 10:16:11 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0003	> 100.00	-73.3600	-0.0001 u (ppm)
Al (396.152 nm)	-0.0012 u	ppm	0.0000	2.51	-352.2000	-0.0012 u (ppm)
As (188.980 nm)	-0.0020 u	ppm	0.0050	> 100.00	0.5134	-0.0020 u (ppm)
B (249.678 nm)	0.0014	ppm	0.0001	4.54	-0.5036	0.0014 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0001	93.53	52.8300	0.0002 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0000	14.32	61.6500	0.0003 (ppm)
Ca (422.673 nm)	-0.0084 u	ppm	0.0232	> 100.00	87.3600	-0.0084 u (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0003	90.42	2.7230	0.0003 (ppm)
Co (228.615 nm)	-0.0006 u	ppm	0.0003	52.42	-19.3500	-0.0006 u (ppm)
Cr (205.560 nm)	0.0008	ppm	0.0006	73.59	4.8880	0.0008 (ppm)
Cu (324.754 nm)	0.0008	ppm	0.0003	38.25	70.0700	0.0008 (ppm)
Fe (238.204 nm)	0.0044	ppm	0.0026	59.54	-39.2800	0.0044 (ppm)
K (766.491 nm)	0.0085 u	ppm	0.0219	> 100.00	-69.9600	0.0085 u (ppm)
Li (670.783 nm)	0.0042	ppm	0.0009	20.78	284.7000	0.0042 (ppm)
Mg (279.078 nm)	0.0096	ppm	0.0003	3.07	33.1300	0.0096 (ppm)
Mn (259.372 nm)	0.0004	ppm	0.0003	65.70	83.6400	0.0004 (ppm)
Mo (204.598 nm)	0.0061	ppm	0.0011	17.34	16.3900	0.0061 (ppm)
Na (589.592 nm)	0.2680	ppm	0.0110	4.10	2377.0000	0.2680 (ppm)
Ni (231.604 nm)	0.0013	ppm	0.0013	94.73	-10.3500	0.0013 (ppm)
P (213.618 nm)	-0.0038 u	ppm	0.0089	> 100.00	-2.4670	-0.0038 u (ppm)
Pb (220.353 nm)	-0.0022 u	ppm	0.0050	> 100.00	-15.1200	-0.0022 u (ppm)
Sb (206.834 nm)	0.0097	ppm	0.0078	80.19	4.2490	0.0097 (ppm)
Se (196.026 nm)	0.0016 u	ppm	0.0050	> 100.00	0.2075	0.0016 u (ppm)
Si (251.611 nm)	0.0009	ppm	0.0004	38.77	12.8300	0.0009 (ppm)
Sn (189.925 nm)	0.0003 u	ppm	0.0020	> 100.00	-1.3130	0.0003 u (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0001	36.13	24.7800	0.0001 (ppm)
Ti (336.122 nm)	0.0020	ppm	0.0005	25.56	55.8800	0.0020 (ppm)
Tl (190.794 nm)	0.0037	ppm	0.0041	> 100.00	7.8520	0.0037 (ppm)
V (292.401 nm)	0.0005	ppm	0.0000	3.76	98.7700	0.0005 (ppm)
W (207.912 nm)	0.0031	ppm	0.0025	81.46	0.1266	0.0031 (ppm)
Zn (202.548 nm)	0.0004	ppm	0.0001	26.26	17.2800	0.0004 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0003	> 100.00	87.5000	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9684	335200.0000	0.0051	0.53
Y_R 371.029	0.9499	46150.0000	0.0001	0.01

Sample Name: MB 440-585065/1-A

Date: 12/10/2019 10:19:31 PM Rack:Tube: 4:18

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001	ppm	0.0001	89.38	-64.6100	0.0001 (ppm)
Al (396.152 nm)	0.0006 u	ppm	0.0008	> 100.00	-310.8000	0.0006 u (ppm)
As (188.980 nm)	0.0016 u	ppm	0.0054	> 100.00	2.4410	0.0016 u (ppm)
B (249.678 nm)	0.0002 u	ppm	0.0010	> 100.00	-12.2100	0.0002 u (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	37.5800	0.0000 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	14.76	36.1900	0.0001 (ppm)
Ca (422.673 nm)	0.0090	ppm	0.0007	8.22	152.7000	0.0090 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0000	13.55	-5.3970	-0.0001 u (ppm)
Co (228.615 nm)	0.0000 u	ppm	0.0001	> 100.00	-13.1500	0.0000 u (ppm)
Cr (205.560 nm)	0.0009	ppm	0.0010	> 100.00	5.2380	0.0009 (ppm)
Cu (324.754 nm)	0.0005	ppm	0.0002	37.41	61.0500	0.0005 (ppm)
Fe (238.204 nm)	-0.0020 u	ppm	0.0043	> 100.00	-55.1100	-0.0020 u (ppm)
K (766.491 nm)	0.1065	ppm	0.1454	> 100.00	25.3600	0.1065 (ppm)
Li (670.783 nm)	0.0016	ppm	0.0008	47.70	144.0000	0.0016 (ppm)
Mg (279.078 nm)	0.0081	ppm	0.0011	13.84	29.7200	0.0081 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0002	53.22	70.3800	0.0003 (ppm)
Mo (204.598 nm)	0.0026	ppm	0.0009	34.05	4.5730	0.0026 (ppm)
Na (589.592 nm)	0.2455	ppm	0.0040	1.61	2254.0000	0.2455 (ppm)
Ni (231.604 nm)	0.0030	ppm	0.0003	9.76	-3.7950	0.0030 (ppm)
P (213.618 nm)	0.0022	ppm	0.0028	> 100.00	1.8120	0.0022 (ppm)
Pb (220.353 nm)	-0.0023 u	ppm	0.0016	71.59	-15.2900	-0.0023 u (ppm)
Sb (206.834 nm)	0.0045	ppm	0.0057	> 100.00	0.2434	0.0045 (ppm)
Se (196.026 nm)	0.0051	ppm	0.0036	70.24	2.1880	0.0051 (ppm)
Si (251.611 nm)	0.0014 u	ppm	0.0025	> 100.00	13.4000	0.0014 u (ppm)
Sn (189.925 nm)	0.0015	ppm	0.0009	56.71	-0.7034	0.0015 (ppm)
Sr (421.552 nm)	0.0000 u	ppm	0.0001	> 100.00	-15.5100	0.0000 u (ppm)
Ti (336.122 nm)	0.0001 u	ppm	0.0003	> 100.00	-124.3000	0.0001 u (ppm)
Tl (190.794 nm)	-0.0030 u	ppm	0.0043	> 100.00	1.7680	-0.0030 u (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0006	> 100.00	80.6200	-0.0002 u (ppm)
W (207.912 nm)	0.0008	ppm	0.0008	99.37	-3.1670	0.0008 (ppm)
Zn (202.548 nm)	0.0003	ppm	0.0002	63.27	15.9100	0.0003 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0000	4.22	88.3100	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9724	336600.0000	0.0009	0.09
Y_R 371.029	0.9518	46240.0000	0.0004	0.04

Sample Name: LCS 440-585065/2-A

Date: 12/10/2019 10:22:52 PM Rack:Tube: 4:19

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.2219	ppm	0.0020	0.91	8076.0000	0.2219 (ppm)
Al (396.152 nm)	0.4344	ppm	0.0029	0.66	10810.0000	0.4344 (ppm)
As (188.980 nm)	0.4518	ppm	0.0065	1.45	239.1000	0.4518 (ppm)
B (249.678 nm)	0.4422	ppm	0.0028	0.64	4265.0000	0.4422 (ppm)
Ba (233.527 nm)	0.4608	ppm	0.0014	0.30	34840.0000	0.4608 (ppm)
Be (234.861 nm)	0.4462	ppm	0.0025	0.57	66300.0000	0.4462 (ppm)
Ca (422.673 nm)	2.2840	ppm	0.0020	0.09	8699.0000	2.2840 (ppm)
Cd (214.439 nm)	0.4519	ppm	0.0026	0.56	8442.0000	0.4519 (ppm)
Co (228.615 nm)	0.4446	ppm	0.0035	0.78	5000.0000	0.4446 (ppm)
Cr (205.560 nm)	0.4532	ppm	0.0016	0.34	1751.0000	0.4532 (ppm)
Cu (324.754 nm)	0.4427	ppm	0.0027	0.61	15710.0000	0.4427 (ppm)
Fe (238.204 nm)	0.4207	ppm	0.0006	0.15	991.7000	0.4207 (ppm)
K (766.491 nm)	4.7270	ppm	0.0715	1.51	4524.0000	4.7270 (ppm)
Li (670.783 nm)	0.4547	ppm	0.0004	0.08	25090.0000	0.4547 (ppm)
Mg (279.078 nm)	2.3180	ppm	0.0049	0.21	5426.0000	2.3180 (ppm)
Mn (259.372 nm)	0.4498	ppm	0.0023	0.52	38000.0000	0.4498 (ppm)
Mo (204.598 nm)	0.4193	ppm	0.0029	0.69	1406.0000	0.4193 (ppm)
Na (589.592 nm)	4.8000	ppm	0.0311	0.65	27160.0000	4.8000 (ppm)
Ni (231.604 nm)	0.4520	ppm	0.0016	0.35	1744.0000	0.4520 (ppm)
P (213.618 nm)	0.4465	ppm	0.0072	1.61	298.3000	0.4465 (ppm)
Pb (220.353 nm)	0.4463	ppm	0.0036	0.80	768.1000	0.4463 (ppm)
Sb (206.834 nm)	0.4038	ppm	0.0163	4.03	312.9000	0.4038 (ppm)
Se (196.026 nm)	0.4398	ppm	0.0032	0.72	247.8000	0.4398 (ppm)
Si (251.611 nm)	2.2640	ppm	0.0144	0.64	4590.0000	2.2640 (ppm)
Sn (189.925 nm)	0.3972	ppm	0.0055	1.40	195.1000	0.3972 (ppm)
Sr (421.552 nm)	0.4470	ppm	0.0015	0.34	147900.0000	0.4470 (ppm)
Ti (336.122 nm)	0.4350	ppm	0.0066	1.52	41080.0000	0.4350 (ppm)
Tl (190.794 nm)	0.4490	ppm	0.0006	0.14	399.9000	0.4490 (ppm)
V (292.401 nm)	0.4473	ppm	0.0029	0.66	11940.0000	0.4473 (ppm)
W (207.912 nm)	0.4186	ppm	0.0052	1.25	600.5000	0.4186 (ppm)
Zn (202.548 nm)	0.4520	ppm	0.0022	0.49	5878.0000	0.4520 (ppm)
Zr (343.823 nm)	0.3927	ppm	0.0126	3.21	29850.0000	0.3927 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9739	337100.0000	0.0057	0.59
Y_R 371.029	0.9460	45960.0000	0.0029	0.31

Sample Name: 440-256944-H-1-A

Date: 12/10/2019 10:26:12 PM Rack:Tube: 4:20

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001	ppm	0.0000	56.64	-66.1400	0.0001 (ppm)
Al (396.152 nm)	0.0013	ppm	0.0003	20.19	-290.4000	0.0013 (ppm)
As (188.980 nm)	0.0014	ppm	0.0008	60.29	2.3170	0.0014 (ppm)
B (249.678 nm)	0.0006	ppm	0.0004	65.54	-7.8460	0.0006 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	42.5400	0.0000 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	78.62	41.9800	0.0001 (ppm)
Ca (422.673 nm)	0.0013 u	ppm	0.0020	> 100.00	124.1000	0.0013 u (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	14.67	1.0820	0.0002 (ppm)
Co (228.615 nm)	-0.0007 u	ppm	0.0004	51.83	-20.6000	-0.0007 u (ppm)
Cr (205.560 nm)	0.0017	ppm	0.0004	21.47	8.1580	0.0017 (ppm)
Cu (324.754 nm)	0.0001 u	ppm	0.0010	> 100.00	45.4800	0.0001 u (ppm)
Fe (238.204 nm)	0.0053	ppm	0.0009	16.24	-36.9100	0.0053 (ppm)
K (766.491 nm)	0.0101 u	ppm	0.0290	> 100.00	-68.3500	0.0101 u (ppm)
Li (670.783 nm)	0.0017	ppm	0.0022	> 100.00	148.7000	0.0017 (ppm)
Mg (279.078 nm)	0.0127	ppm	0.0011	8.60	40.4500	0.0127 (ppm)
Mn (259.372 nm)	0.0006	ppm	0.0003	40.37	99.1900	0.0006 (ppm)
Mo (204.598 nm)	0.0036	ppm	0.0006	17.74	7.9440	0.0036 (ppm)
Na (589.592 nm)	0.2773	ppm	0.0117	4.23	2428.0000	0.2773 (ppm)
Ni (231.604 nm)	0.0038	ppm	0.0010	25.30	-0.7740	0.0038 (ppm)
P (213.618 nm)	-0.0006 u	ppm	0.0118	> 100.00	-0.1858	-0.0006 u (ppm)
Pb (220.353 nm)	-0.0013 u	ppm	0.0003	19.60	-13.6600	-0.0013 u (ppm)
Sb (206.834 nm)	0.0083	ppm	0.0003	3.03	3.2180	0.0083 (ppm)
Se (196.026 nm)	0.0092	ppm	0.0021	22.80	4.4910	0.0092 (ppm)
Si (251.611 nm)	0.0017	ppm	0.0007	39.17	14.1500	0.0017 (ppm)
Sn (189.925 nm)	0.0015	ppm	0.0006	42.40	-0.6900	0.0015 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0001	> 100.00	13.5000	0.0001 (ppm)
Ti (336.122 nm)	0.0014	ppm	0.0004	30.83	-3.1230	0.0014 (ppm)
Tl (190.794 nm)	-0.0024 u	ppm	0.0015	61.86	2.3330	-0.0024 u (ppm)
V (292.401 nm)	0.0002	ppm	0.0001	44.28	91.4000	0.0002 (ppm)
W (207.912 nm)	0.0016	ppm	0.0000	1.95	-2.0190	0.0016 (ppm)
Zn (202.548 nm)	0.0006	ppm	0.0003	57.26	19.8300	0.0006 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	13.40	93.1200	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9664	334500.0000	0.0067	0.69
Y_R 371.029	0.9464	45980.0000	0.0016	0.17

Sample Name: 440-256944-H-1-B MS

Date: 12/10/2019 10:29:32 PM Rack:Tube: 4:21

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1839	ppm	0.0001	0.07	6688.0000	0.1839 (ppm)
Al (396.152 nm)	0.3628	ppm	0.0005	0.15	9020.0000	0.3628 (ppm)
As (188.980 nm)	0.3769	ppm	0.0002	0.04	199.7000	0.3769 (ppm)
B (249.678 nm)	0.3753	ppm	0.0018	0.48	3613.0000	0.3753 (ppm)
Ba (233.527 nm)	0.3895	ppm	0.0047	1.21	29450.0000	0.3895 (ppm)
Be (234.861 nm)	0.3775	ppm	0.0038	1.02	56100.0000	0.3775 (ppm)
Ca (422.673 nm)	1.9200	ppm	0.0116	0.60	7331.0000	1.9200 (ppm)
Cd (214.439 nm)	0.3837	ppm	0.0005	0.14	7168.0000	0.3837 (ppm)
Co (228.615 nm)	0.3798	ppm	0.0018	0.47	4270.0000	0.3798 (ppm)
Cr (205.560 nm)	0.3814	ppm	0.0004	0.11	1474.0000	0.3814 (ppm)
Cu (324.754 nm)	0.3718	ppm	0.0002	0.06	13200.0000	0.3718 (ppm)
Fe (238.204 nm)	0.3409	ppm	0.0022	0.64	794.0000	0.3409 (ppm)
K (766.491 nm)	3.8310	ppm	0.0290	0.76	3651.0000	3.8310 (ppm)
Li (670.783 nm)	0.3832	ppm	0.0020	0.52	21150.0000	0.3832 (ppm)
Mg (279.078 nm)	1.9470	ppm	0.0205	1.05	4560.0000	1.9470 (ppm)
Mn (259.372 nm)	0.3811	ppm	0.0008	0.20	32230.0000	0.3811 (ppm)
Mo (204.598 nm)	0.3892	ppm	0.0005	0.12	1305.0000	0.3892 (ppm)
Na (589.592 nm)	4.1290	ppm	0.0175	0.42	23500.0000	4.1290 (ppm)
Ni (231.604 nm)	0.3831	ppm	0.0013	0.34	1476.0000	0.3831 (ppm)
P (213.618 nm)	0.3767	ppm	0.0014	0.36	251.2000	0.3767 (ppm)
Pb (220.353 nm)	0.3789	ppm	0.0024	0.63	650.3000	0.3789 (ppm)
Sb (206.834 nm)	0.3874	ppm	0.0030	0.77	299.8000	0.3874 (ppm)
Se (196.026 nm)	0.3808	ppm	0.0094	2.47	214.7000	0.3808 (ppm)
Si (251.611 nm)	2.2110	ppm	0.0157	0.71	4482.0000	2.2110 (ppm)
Sn (189.925 nm)	0.3900	ppm	0.0059	1.51	191.6000	0.3900 (ppm)
Sr (421.552 nm)	0.3757	ppm	0.0024	0.65	124300.0000	0.3757 (ppm)
Ti (336.122 nm)	0.4218	ppm	0.0060	1.43	39830.0000	0.4218 (ppm)
Tl (190.794 nm)	0.3834	ppm	0.0001	0.02	341.7000	0.3834 (ppm)
V (292.401 nm)	0.3766	ppm	0.0011	0.30	10060.0000	0.3766 (ppm)
W (207.912 nm)	0.3953	ppm	0.0044	1.11	566.4000	0.3953 (ppm)
Zn (202.548 nm)	0.3819	ppm	0.0008	0.22	4968.0000	0.3819 (ppm)
Zr (343.823 nm)	0.4067	ppm	0.0102	2.51	30910.0000	0.4067 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9689	335300.0000	0.0031	0.32
Y_R 371.029	0.9457	45950.0000	0.0086	0.91

Sample Name: 440-256944-H-1-C MSD

Date: 12/10/2019 10:32:52 PM
Rack:Tube: 4:22

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.1837	ppm	0.0000	0.02	6684.0000	0.1837 (ppm)
Al (396.152 nm)	0.3628	ppm	0.0002	0.06	9038.0000	0.3628 (ppm)
As (188.980 nm)	0.3793	ppm	0.0087	2.29	201.0000	0.3793 (ppm)
B (249.678 nm)	0.3765	ppm	0.0008	0.22	3623.0000	0.3765 (ppm)
Ba (233.527 nm)	0.3882	ppm	0.0031	0.80	29350.0000	0.3882 (ppm)
Be (234.861 nm)	0.3780	ppm	0.0020	0.52	56170.0000	0.3780 (ppm)
Ca (422.673 nm)	1.9140	ppm	0.0129	0.67	7307.0000	1.9140 (ppm)
Cd (214.439 nm)	0.3820	ppm	0.0006	0.16	7136.0000	0.3820 (ppm)
Co (228.615 nm)	0.3787	ppm	0.0003	0.08	4258.0000	0.3787 (ppm)
Cr (205.560 nm)	0.3819	ppm	0.0007	0.18	1476.0000	0.3819 (ppm)
Cu (324.754 nm)	0.3724	ppm	0.0004	0.12	13230.0000	0.3724 (ppm)
Fe (238.204 nm)	0.3470	ppm	0.0002	0.05	809.3000	0.3470 (ppm)
K (766.491 nm)	3.8860	ppm	0.0220	0.57	3705.0000	3.8860 (ppm)
Li (670.783 nm)	0.3810	ppm	0.0023	0.61	21030.0000	0.3810 (ppm)
Mg (279.078 nm)	1.9450	ppm	0.0137	0.70	4554.0000	1.9450 (ppm)
Mn (259.372 nm)	0.3812	ppm	0.0017	0.46	32240.0000	0.3812 (ppm)
Mo (204.598 nm)	0.4090	ppm	0.0002	0.04	1371.0000	0.4090 (ppm)
Na (589.592 nm)	4.1340	ppm	0.0442	1.07	23520.0000	4.1340 (ppm)
Ni (231.604 nm)	0.3849	ppm	0.0052	1.36	1483.0000	0.3849 (ppm)
P (213.618 nm)	0.3724	ppm	0.0059	1.60	247.9000	0.3724 (ppm)
Pb (220.353 nm)	0.3786	ppm	0.0056	1.48	649.8000	0.3786 (ppm)
Sb (206.834 nm)	0.4076	ppm	0.0153	3.74	315.5000	0.4076 (ppm)
Se (196.026 nm)	0.3769	ppm	0.0008	0.21	212.6000	0.3769 (ppm)
Si (251.611 nm)	2.2460	ppm	0.0077	0.34	4554.0000	2.2460 (ppm)
Sn (189.925 nm)	0.4098	ppm	0.0027	0.66	201.3000	0.4098 (ppm)
Sr (421.552 nm)	0.3756	ppm	0.0021	0.56	124300.0000	0.3756 (ppm)
Ti (336.122 nm)	0.4369	ppm	0.0052	1.18	41250.0000	0.4369 (ppm)
Tl (190.794 nm)	0.3840	ppm	0.0060	1.55	342.1000	0.3840 (ppm)
V (292.401 nm)	0.3771	ppm	0.0012	0.31	10060.0000	0.3771 (ppm)
W (207.912 nm)	0.4109	ppm	0.0026	0.62	588.8000	0.4109 (ppm)
Zn (202.548 nm)	0.3826	ppm	0.0002	0.06	4977.0000	0.3826 (ppm)
Zr (343.823 nm)	0.4277	ppm	0.0079	1.84	32500.0000	0.4277 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9661	334400.0000	0.0045	0.47
Y_R 371.029	0.9455	45930.0000	0.0032	0.34

Sample Name: 440-256944-H-2-A

Date: 12/10/2019 10:36:12 PM Rack:Tube: 4:23

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0023 u	ppm	0.0005	22.31	-161.4000	-0.0023 u (ppm)
Al (396.152 nm)	0.0071	ppm	0.0000	0.42	312.2000	0.0071 (ppm)
As (188.980 nm)	0.0060	ppm	0.0055	92.11	4.2230	0.0060 (ppm)
B (249.678 nm)	1.4120	ppm	0.0149	1.05	13770.0000	1.4120 (ppm)
Ba (233.527 nm)	0.0330	ppm	0.0008	2.40	2587.0000	0.0330 (ppm)
Be (234.861 nm)	0.0002	ppm	0.0001	30.04	57.5100	0.0002 (ppm)
Ca (422.673 nm)	130.7000	ppm	0.0768	0.06	491000.0000	130.7000 (ppm)
Cd (214.439 nm)	0.0002 u	ppm	0.0004	> 100.00	-0.0340	0.0002 u (ppm)
Co (228.615 nm)	-0.0005 u	ppm	0.0009	> 100.00	-8.3830	-0.0005 u (ppm)
Cr (205.560 nm)	0.0005	ppm	0.0003	61.52	5.3560	0.0005 (ppm)
Cu (324.754 nm)	0.0014	ppm	0.0001	3.92	29.4000	0.0014 (ppm)
Fe (238.204 nm)	-0.0140 u	ppm	0.0002	1.47	-62.7400	-0.0140 u (ppm)
K (766.491 nm)	124.6000	ppm	0.1057	0.08	121200.0000	124.6000 (ppm)
Li (670.783 nm)	0.0450	ppm	0.0016	3.55	3842.0000	0.0450 (ppm)
Mg (279.078 nm)	361.4000	ppm	3.4560	0.96	844600.0000	361.4000 (ppm)
Mn (259.372 nm)	-0.0012 u	ppm	0.0000	1.28	1054.0000	-0.0012 u (ppm)
Mo (204.598 nm)	0.0076	ppm	0.0018	23.11	21.4000	0.0076 (ppm)
Na (589.592 nm)	2583.0000 o	ppm	14.3700	0.56	14110000.0000	2583.0000 o (ppm)
Ni (231.604 nm)	0.0013	ppm	0.0007	54.69	-14.7000	0.0013 (ppm)
P (213.618 nm)	0.0777	ppm	0.0057	7.31	54.9500	0.0777 (ppm)
Pb (220.353 nm)	-0.0078 u	ppm	0.0050	63.87	-17.3600	-0.0078 u (ppm)
Sb (206.834 nm)	-0.0002 u	ppm	0.0010	> 100.00	-3.8360	-0.0002 u (ppm)
Se (196.026 nm)	0.0158	ppm	0.0039	24.58	7.4610	0.0158 (ppm)
Si (251.611 nm)	4.9650	ppm	0.0329	0.66	9951.0000	4.9650 (ppm)
Sn (189.925 nm)	-0.0105 u	ppm	0.0015	14.71	-6.1030	-0.0105 u (ppm)
Sr (421.552 nm)	2.2450	ppm	0.0142	0.63	744100.0000	2.2450 (ppm)
Ti (336.122 nm)	0.0011	ppm	0.0005	49.04	-132.7000	0.0011 (ppm)
Tl (190.794 nm)	0.0069	ppm	0.0054	77.73	11.7800	0.0069 (ppm)
V (292.401 nm)	-0.0014 u	ppm	0.0002	17.28	199.6000	-0.0014 u (ppm)
W (207.912 nm)	-0.0071 u	ppm	0.0007	10.29	-16.8500	-0.0071 u (ppm)
Zn (202.548 nm)	-0.0269 u	ppm	0.0002	0.89	-236.3000	-0.0269 u (ppm)
Zr (343.823 nm)	0.0011	ppm	0.0003	24.12	206.3000	0.0011 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
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Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7967	275800.0000	0.0056	0.70
Y_R 371.029	0.8538	41480.0000	0.0094	1.10

Sample Name: 440-256944-H-3-A

Date: 12/10/2019 10:39:32 PM Rack:Tube: 4:24

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0019 u	ppm	0.0001	4.19	-143.8000	-0.0019 u (ppm)
Al (396.152 nm)	0.0088	ppm	0.0013	15.08	169.6000	0.0088 (ppm)
As (188.980 nm)	0.0070	ppm	0.0002	2.98	4.9470	0.0070 (ppm)
B (249.678 nm)	0.9299	ppm	0.0067	0.72	9067.0000	0.9299 (ppm)
Ba (233.527 nm)	0.0412	ppm	0.0004	1.09	3184.0000	0.0412 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	32.24	38.9000	0.0001 (ppm)
Ca (422.673 nm)	86.9400	ppm	0.4187	0.48	326700.0000	86.9400 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-1.7460	0.0001 u (ppm)
Co (228.615 nm)	0.0008	ppm	0.0008	> 100.00	1.4580	0.0008 (ppm)
Cr (205.560 nm)	0.0008	ppm	0.0009	> 100.00	5.7330	0.0008 (ppm)
Cu (324.754 nm)	0.0028	ppm	0.0001	5.14	98.3600	0.0028 (ppm)
Fe (238.204 nm)	0.0183	ppm	0.0029	15.73	8.6360	0.0183 (ppm)
K (766.491 nm)	74.4900	ppm	0.1361	0.18	72440.0000	74.4900 (ppm)
Li (670.783 nm)	0.0262	ppm	0.0006	2.36	2284.0000	0.0262 (ppm)
Mg (279.078 nm)	216.4000	ppm	2.7410	1.27	505500.0000	216.4000 (ppm)
Mn (259.372 nm)	0.1246	ppm	0.0009	0.75	11160.0000	0.1246 (ppm)
Mo (204.598 nm)	0.0022	ppm	0.0003	11.90	3.2070	0.0022 (ppm)
Na (589.592 nm)	1642.0000 o	ppm	8.6450	0.53	8974000.0000	1642.0000 o (ppm)
Ni (231.604 nm)	0.0021	ppm	0.0000	0.03	-10.1700	0.0021 (ppm)
P (213.618 nm)	0.1081	ppm	0.0013	1.18	76.4800	0.1081 (ppm)
Pb (220.353 nm)	-0.0074 u	ppm	0.0065	87.89	-19.5600	-0.0074 u (ppm)
Sb (206.834 nm)	-0.0034 u	ppm	0.0110	> 100.00	-6.1310	-0.0034 u (ppm)
Se (196.026 nm)	0.0142	ppm	0.0111	78.35	6.7800	0.0142 (ppm)
Si (251.611 nm)	5.3520	ppm	0.0436	0.81	10710.0000	5.3520 (ppm)
Sn (189.925 nm)	-0.0116 u	ppm	0.0027	23.60	-6.8410	-0.0116 u (ppm)
Sr (421.552 nm)	1.4180	ppm	0.0038	0.27	470000.0000	1.4180 (ppm)
Ti (336.122 nm)	0.0001 u	ppm	0.0002	> 100.00	-194.0000	0.0001 u (ppm)
Tl (190.794 nm)	0.0086	ppm	0.0081	94.75	12.9600	0.0086 (ppm)
V (292.401 nm)	0.0001	ppm	0.0001	77.81	188.2000	0.0001 (ppm)
W (207.912 nm)	-0.0104 u	ppm	0.0014	13.75	-20.7200	-0.0104 u (ppm)
Zn (202.548 nm)	-0.0151 u	ppm	0.0004	2.56	-125.6000	-0.0151 u (ppm)
Zr (343.823 nm)	0.0006	ppm	0.0002	35.63	163.4000	0.0006 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8479	293500.0000	0.0090	1.06
Y_R 371.029	0.9272	45050.0000	0.0043	0.46

Sample Name: 440-256944-H-4-A

Date: 12/10/2019 10:42:52 PM Rack:Tube: 4:25

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0023 u	ppm	0.0001	3.23	-159.6000	-0.0023 u (ppm)
Al (396.152 nm)	0.0085	ppm	0.0002	1.97	231.1000	0.0085 (ppm)
As (188.980 nm)	0.0079	ppm	0.0002	2.46	5.3800	0.0079 (ppm)
B (249.678 nm)	1.0760	ppm	0.0062	0.57	10490.0000	1.0760 (ppm)
Ba (233.527 nm)	0.0380	ppm	0.0003	0.72	2953.0000	0.0380 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	27.8700	0.0000 u (ppm)
Ca (422.673 nm)	101.9000	ppm	0.4147	0.41	383100.0000	101.9000 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0003	> 100.00	-4.2700	-0.0001 u (ppm)
Co (228.615 nm)	0.0005	ppm	0.0002	42.12	0.0544	0.0005 (ppm)
Cr (205.560 nm)	0.0010	ppm	0.0013	> 100.00	6.6790	0.0010 (ppm)
Cu (324.754 nm)	0.0019	ppm	0.0004	22.02	59.2700	0.0019 (ppm)
Fe (238.204 nm)	-0.0066 u	ppm	0.0034	51.03	-49.7700	-0.0066 u (ppm)
K (766.491 nm)	92.9900	ppm	0.5886	0.63	90450.0000	92.9900 (ppm)
Li (670.783 nm)	0.0332	ppm	0.0008	2.37	2871.0000	0.0332 (ppm)
Mg (279.078 nm)	271.5000	ppm	2.7420	1.01	634300.0000	271.5000 (ppm)
Mn (259.372 nm)	0.0459	ppm	0.0004	0.81	4730.0000	0.0459 (ppm)
Mo (204.598 nm)	0.0022	ppm	0.0015	70.40	3.2580	0.0022 (ppm)
Na (589.592 nm)	2010.0000 o	ppm	6.2560	0.31	10980000.0000	2010.0000 o (ppm)
Ni (231.604 nm)	-0.0003 u	ppm	0.0004	> 100.00	-20.1400	-0.0003 u (ppm)
P (213.618 nm)	0.0831	ppm	0.0028	3.33	58.8600	0.0831 (ppm)
Pb (220.353 nm)	-0.0078 u	ppm	0.0005	6.26	-19.2400	-0.0078 u (ppm)
Sb (206.834 nm)	0.0049	ppm	0.0017	34.23	0.3261	0.0049 (ppm)
Se (196.026 nm)	0.0032	ppm	0.0037	> 100.00	0.5186	0.0032 (ppm)
Si (251.611 nm)	5.2560	ppm	0.0196	0.37	10520.0000	5.2560 (ppm)
Sn (189.925 nm)	-0.0111 u	ppm	0.0069	61.64	-6.5390	-0.0111 u (ppm)
Sr (421.552 nm)	1.7120	ppm	0.0030	0.18	567800.0000	1.7120 (ppm)
Ti (336.122 nm)	-0.0002 u	ppm	0.0002	91.32	-234.4000	-0.0002 u (ppm)
Tl (190.794 nm)	0.0006 u	ppm	0.0017	> 100.00	5.8550	0.0006 u (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0001	30.83	199.7000	-0.0002 u (ppm)
W (207.912 nm)	-0.0074 u	ppm	0.0003	3.78	-16.7000	-0.0074 u (ppm)
Zn (202.548 nm)	-0.0198 u	ppm	0.0003	1.58	-170.9000	-0.0198 u (ppm)
Zr (343.823 nm)	0.0008	ppm	0.0002	19.44	183.8000	0.0008 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8223	284600.0000	0.0013	0.16
Y_R 371.029	0.8806	42780.0000	0.0040	0.46

Sample Name: 440-256944-H-5-A

Date: 12/10/2019 10:46:12 PM Rack:Tube: 4:26

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0023 u	ppm	0.0000	1.66	-162.4000	-0.0023 u (ppm)
Al (396.152 nm)	0.0072	ppm	0.0026	35.85	312.0000	0.0072 (ppm)
As (188.980 nm)	-0.0012 u	ppm	0.0069	> 100.00	0.4122	-0.0012 u (ppm)
B (249.678 nm)	1.4020	ppm	0.0097	0.69	13680.0000	1.4020 (ppm)
Ba (233.527 nm)	0.0335	ppm	0.0008	2.33	2629.0000	0.0335 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	19.1900	0.0000 u (ppm)
Ca (422.673 nm)	129.6000	ppm	0.3472	0.27	486900.0000	129.6000 (ppm)
Cd (214.439 nm)	-0.0004 u	ppm	0.0003	68.10	-11.3300	-0.0004 u (ppm)
Co (228.615 nm)	0.0002 u	ppm	0.0004	> 100.00	-0.7832	0.0002 u (ppm)
Cr (205.560 nm)	0.0007	ppm	0.0005	75.74	5.8640	0.0007 (ppm)
Cu (324.754 nm)	0.0011	ppm	0.0010	89.13	20.0900	0.0011 (ppm)
Fe (238.204 nm)	-0.0111 u	ppm	0.0039	34.82	-55.3500	-0.0111 u (ppm)
K (766.491 nm)	125.0000	ppm	0.5051	0.40	121600.0000	125.0000 (ppm)
Li (670.783 nm)	0.0435	ppm	0.0012	2.85	3760.0000	0.0435 (ppm)
Mg (279.078 nm)	363.1000	ppm	10.5600	2.91	848500.0000	363.1000 (ppm)
Mn (259.372 nm)	-0.0014 u	ppm	0.0002	13.11	1044.0000	-0.0014 u (ppm)
Mo (204.598 nm)	0.0035	ppm	0.0011	32.15	7.7900	0.0035 (ppm)
Na (589.592 nm)	2552.0000 o	ppm	18.2800	0.72	13940000.0000	2552.0000 o (ppm)
Ni (231.604 nm)	0.0015 u	ppm	0.0030	> 100.00	-14.1700	0.0015 u (ppm)
P (213.618 nm)	0.0741	ppm	0.0021	2.87	52.5100	0.0741 (ppm)
Pb (220.353 nm)	-0.0014 u	ppm	0.0027	> 100.00	-6.0920	-0.0014 u (ppm)
Sb (206.834 nm)	-0.0037 u	ppm	0.0061	> 100.00	-6.5050	-0.0037 u (ppm)
Se (196.026 nm)	0.0146	ppm	0.0006	4.36	6.7320	0.0146 (ppm)
Si (251.611 nm)	5.0070	ppm	0.0427	0.85	10030.0000	5.0070 (ppm)
Sn (189.925 nm)	-0.0091 u	ppm	0.0098	> 100.00	-5.4070	-0.0091 u (ppm)
Sr (421.552 nm)	2.2420	ppm	0.0075	0.33	743300.0000	2.2420 (ppm)
Ti (336.122 nm)	-0.0005 u	ppm	0.0001	16.17	-284.3000	-0.0005 u (ppm)
Tl (190.794 nm)	-0.0008 u	ppm	0.0030	> 100.00	4.8320	-0.0008 u (ppm)
V (292.401 nm)	-0.0008 u	ppm	0.0004	51.57	217.1000	-0.0008 u (ppm)
W (207.912 nm)	-0.0097 u	ppm	0.0024	24.41	-20.5100	-0.0097 u (ppm)
Zn (202.548 nm)	-0.0233 u	ppm	0.0000	0.10	-189.5000	-0.0233 u (ppm)
Zr (343.823 nm)	0.0006	ppm	0.0001	16.64	168.7000	0.0006 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.8323	288100.0000	0.0058	0.70
Y_R 371.029	0.8812	42810.0000	0.0137	1.55

Sample Name: xRINSE 5993206

Date: 12/10/2019 10:49:30 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002 u	ppm	0.0004	> 100.00	-61.4300	0.0002 u (ppm)
Al (396.152 nm)	-0.0009 u	ppm	0.0002	16.00	-348.8000	-0.0009 u (ppm)
As (188.980 nm)	0.0004	ppm	0.0004	> 100.00	1.7810	0.0004 (ppm)
B (249.678 nm)	0.0015	ppm	0.0001	7.50	0.3949	0.0015 (ppm)
Ba (233.527 nm)	-0.0001 u	ppm	0.0000	5.60	34.5200	-0.0001 u (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	73.01	25.3900	0.0000 (ppm)
Ca (422.673 nm)	0.0246	ppm	0.0186	75.71	211.3000	0.0246 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0000	4.11	-5.4000	-0.0001 u (ppm)
Co (228.615 nm)	0.0004	ppm	0.0004	96.16	-8.2410	0.0004 (ppm)
Cr (205.560 nm)	0.0003 u	ppm	0.0018	> 100.00	3.0200	0.0003 u (ppm)
Cu (324.754 nm)	0.0002 u	ppm	0.0005	> 100.00	48.8600	0.0002 u (ppm)
Fe (238.204 nm)	0.0026	ppm	0.0025	94.42	-43.6200	0.0026 (ppm)
K (766.491 nm)	0.1891	ppm	0.0552	29.20	105.8000	0.1891 (ppm)
Li (670.783 nm)	0.0018	ppm	0.0006	32.29	152.4000	0.0018 (ppm)
Mg (279.078 nm)	0.1551 Z	ppm	0.0487	31.37	373.2000 Z	0.1551 Z (ppm)
Mn (259.372 nm)	0.0002	ppm	0.0001	52.87	65.1200	0.0002 (ppm)
Mo (204.598 nm)	0.0007	ppm	0.0008	> 100.00	-1.5900	0.0007 (ppm)
Na (589.592 nm)	1.3600 Z	ppm	0.0321	2.36	8343.0000 Z	1.3600 Z (ppm)
Ni (231.604 nm)	0.0025	ppm	0.0006	23.05	-5.8190	0.0025 (ppm)
P (213.618 nm)	0.0015 u	ppm	0.0073	> 100.00	1.3630	0.0015 u (ppm)
Pb (220.353 nm)	-0.0011 u	ppm	0.0022	> 100.00	-13.2600	-0.0011 u (ppm)
Sb (206.834 nm)	0.0048	ppm	0.0039	81.57	0.4513	0.0048 (ppm)
Se (196.026 nm)	0.0010	ppm	0.0011	> 100.00	-0.1209	0.0010 (ppm)
Si (251.611 nm)	0.0023 u	ppm	0.0034	> 100.00	15.0700	0.0023 u (ppm)
Sn (189.925 nm)	0.0008 u	ppm	0.0018	> 100.00	-1.0430	0.0008 u (ppm)
Sr (421.552 nm)	0.0005	ppm	0.0001	11.99	142.7000	0.0005 (ppm)
Ti (336.122 nm)	-0.0002 u	ppm	0.0001	43.76	-155.8000	-0.0002 u (ppm)
Tl (190.794 nm)	-0.0020 u	ppm	0.0012	58.06	2.7150	-0.0020 u (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0001	56.13	82.7000	-0.0002 u (ppm)
W (207.912 nm)	-0.0002 u	ppm	0.0017	> 100.00	-4.6690	-0.0002 u (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0001	22.21	18.8100	0.0005 (ppm)
Zr (343.823 nm)	-0.0003 u	ppm	0.0001	25.55	79.4100	-0.0003 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9822	340000.0000	0.0032	0.32
Y_R 371.029	0.9817	47700.0000	0.0023	0.23

Sample Name: CCV 5993196

Date: 12/10/2019 10:52:50 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4761	ppm	0.0025	0.52	17420.0000	0.4761 (ppm)
Al (396.152 nm)	0.9391	ppm	0.0065	0.69	23810.0000	0.9391 (ppm)
As (188.980 nm)	0.9486	ppm	0.0043	0.46	500.3000	0.9486 (ppm)
B (249.678 nm)	0.9459	ppm	0.0071	0.75	9132.0000	0.9459 (ppm)
Ba (233.527 nm)	0.9672	ppm	0.0038	0.39	73080.0000	0.9672 (ppm)
Be (234.861 nm)	0.9482	ppm	0.0056	0.59	140900.0000	0.9482 (ppm)
Ca (422.673 nm)	4.7820	ppm	0.0265	0.55	18080.0000	4.7820 (ppm)
Cd (214.439 nm)	0.9502	ppm	0.0049	0.51	17760.0000	0.9502 (ppm)
Co (228.615 nm)	0.9469	ppm	0.0030	0.31	10660.0000	0.9469 (ppm)
Cr (205.560 nm)	0.9513	ppm	0.0066	0.69	3673.0000	0.9513 (ppm)
Cu (324.754 nm)	0.9498	ppm	0.0071	0.75	33670.0000	0.9498 (ppm)
Fe (238.204 nm)	0.9577	ppm	0.0002	0.02	2322.0000	0.9577 (ppm)
K (766.491 nm)	9.7250	ppm	0.0909	0.93	9389.0000	9.7250 (ppm)
Li (670.783 nm)	0.9655	ppm	0.0026	0.27	53210.0000	0.9655 (ppm)
Mg (279.078 nm)	4.8820	ppm	0.0103	0.21	11410.0000	4.8820 (ppm)
Mn (259.372 nm)	0.9492	ppm	0.0055	0.58	80190.0000	0.9492 (ppm)
Mo (204.598 nm)	0.9483	ppm	0.0017	0.18	3185.0000	0.9483 (ppm)
Na (589.592 nm)	10.2800	ppm	0.0142	0.14	57130.0000	10.2800 (ppm)
Ni (231.604 nm)	0.9491	ppm	0.0060	0.64	3680.0000	0.9491 (ppm)
P (213.618 nm)	0.9455	ppm	0.0091	0.96	630.0000	0.9455 (ppm)
Pb (220.353 nm)	0.9428	ppm	0.0002	0.03	1635.0000	0.9428 (ppm)
Sb (206.834 nm)	0.9482	ppm	0.0238	2.51	738.7000	0.9482 (ppm)
Se (196.026 nm)	0.9361	ppm	0.0041	0.44	528.6000	0.9361 (ppm)
Si (251.611 nm)	4.7650	ppm	0.0527	1.11	9660.0000	4.7650 (ppm)
Sn (189.925 nm)	0.9436	ppm	0.0090	0.96	465.5000	0.9436 (ppm)
Sr (421.552 nm)	0.9479	ppm	0.0016	0.17	313700.0000	0.9479 (ppm)
Ti (336.122 nm)	0.9512	ppm	0.0109	1.14	89970.0000	0.9512 (ppm)
Tl (190.794 nm)	0.9492	ppm	0.0113	1.19	839.9000	0.9492 (ppm)
V (292.401 nm)	0.9520	ppm	0.0046	0.49	25290.0000	0.9520 (ppm)
W (207.912 nm)	0.9477	ppm	0.0059	0.62	1364.0000	0.9477 (ppm)
Zn (202.548 nm)	0.9480	ppm	0.0042	0.44	12320.0000	0.9480 (ppm)
Zr (343.823 nm)	0.9519	ppm	0.0081	0.85	72220.0000	0.9519 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9784	338600.0000	0.0009	0.09
Y_R 371.029	0.9593	46600.0000	0.0007	0.07

Sample Name: CCB 5993195

Date: 12/10/2019 10:56:08 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0003	ppm	0.0000	16.49	-59.4200	0.0003 (ppm)
Al (396.152 nm)	-0.0002 u	ppm	0.0008	> 100.00	-326.5000	-0.0002 u (ppm)
As (188.980 nm)	0.0013 u	ppm	0.0069	> 100.00	2.2580	0.0013 u (ppm)
B (249.678 nm)	0.0006	ppm	0.0007	> 100.00	-8.3990	0.0006 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0001	70.50	53.5300	0.0002 (ppm)
Be (234.861 nm)	0.0004	ppm	0.0001	34.91	76.6200	0.0004 (ppm)
Ca (422.673 nm)	0.0000 u	ppm	0.0017	> 100.00	119.0000	0.0000 u (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0002	59.73	3.6120	0.0004 (ppm)
Co (228.615 nm)	0.0011	ppm	0.0003	23.89	-0.5266	0.0011 (ppm)
Cr (205.560 nm)	0.0002 u	ppm	0.0004	> 100.00	2.6970	0.0002 u (ppm)
Cu (324.754 nm)	0.0012	ppm	0.0005	39.59	83.7900	0.0012 (ppm)
Fe (238.204 nm)	0.0028	ppm	0.0008	28.67	-43.2400	0.0028 (ppm)
K (766.491 nm)	0.0233	ppm	0.0041	17.72	-55.5300	0.0233 (ppm)
Li (670.783 nm)	0.0032	ppm	0.0003	8.82	230.8000	0.0032 (ppm)
Mg (279.078 nm)	0.0173	ppm	0.0063	36.60	51.1900	0.0173 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0004	80.73	89.1500	0.0005 (ppm)
Mo (204.598 nm)	0.0052	ppm	0.0012	23.55	13.3300	0.0052 (ppm)
Na (589.592 nm)	0.5060 Z	ppm	0.0041	0.82	3678.0000 Z	0.5060 Z (ppm)
Ni (231.604 nm)	0.0032	ppm	0.0007	23.31	-3.2270	0.0032 (ppm)
P (213.618 nm)	0.0008 u	ppm	0.0040	> 100.00	0.8219	0.0008 u (ppm)
Pb (220.353 nm)	0.0011	ppm	0.0004	37.75	-9.4640	0.0011 (ppm)
Sb (206.834 nm)	0.0100 Z	ppm	0.0056	55.52	4.5370 Z	0.0100 Z (ppm)
Se (196.026 nm)	0.0068	ppm	0.0035	52.12	3.1190	0.0068 (ppm)
Si (251.611 nm)	0.0014	ppm	0.0001	7.61	13.8000	0.0014 (ppm)
Sn (189.925 nm)	0.0011	ppm	0.0012	> 100.00	-0.9192	0.0011 (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0001	60.65	41.9000	0.0002 (ppm)
Ti (336.122 nm)	0.0018	ppm	0.0005	26.05	35.4800	0.0018 (ppm)
Tl (190.794 nm)	0.0038	ppm	0.0013	34.60	7.9450	0.0038 (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0004	> 100.00	80.9800	-0.0002 u (ppm)
W (207.912 nm)	0.0048	ppm	0.0004	7.35	2.5730	0.0048 (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0002	47.91	18.9100	0.0005 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0002	> 100.00	95.3100	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9874	341800.0000	0.0032	0.33
Y_R 371.029	0.9653	46900.0000	0.0071	0.74

Sample Name: MB 440-584756/1-B

Date: 12/10/2019 10:59:28 PM Rack:Tube: 4:27

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002	ppm	0.0002	95.37	-61.7300	0.0002 (ppm)
Al (396.152 nm)	0.0201	ppm	0.0005	2.49	173.4000	0.0201 (ppm)
As (188.980 nm)	0.0039	ppm	0.0010	24.39	3.6440	0.0039 (ppm)
B (249.678 nm)	0.0015	ppm	0.0004	26.75	0.3385	0.0015 (ppm)
Ba (233.527 nm)	0.0001	ppm	0.0000	28.41	47.9600	0.0001 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	75.33	26.7500	0.0000 (ppm)
Ca (422.673 nm)	0.0215	ppm	0.0065	30.44	199.7000	0.0215 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0003	> 100.00	-6.4240	-0.0002 u (ppm)
Co (228.615 nm)	-0.0002 u	ppm	0.0002	> 100.00	-15.1900	-0.0002 u (ppm)
Cr (205.560 nm)	0.0036	ppm	0.0010	27.98	15.5900	0.0036 (ppm)
Cu (324.754 nm)	0.0005	ppm	0.0004	71.05	60.8700	0.0005 (ppm)
Fe (238.204 nm)	0.0279	ppm	0.0006	2.07	19.1100	0.0279 (ppm)
K (766.491 nm)	0.0772	ppm	0.0229	29.73	-3.1420	0.0772 (ppm)
Li (670.783 nm)	0.0023	ppm	0.0002	10.25	183.7000	0.0023 (ppm)
Mg (279.078 nm)	0.0164	ppm	0.0028	17.06	49.0100	0.0164 (ppm)
Mn (259.372 nm)	0.0008	ppm	0.0002	24.89	117.9000	0.0008 (ppm)
Mo (204.598 nm)	0.0030	ppm	0.0000	1.42	6.0750	0.0030 (ppm)
Na (589.592 nm)	0.4662	ppm	0.0056	1.20	3460.0000	0.4662 (ppm)
Ni (231.604 nm)	0.0046	ppm	0.0002	3.39	2.1650	0.0046 (ppm)
P (213.618 nm)	0.0030	ppm	0.0028	93.34	2.3860	0.0030 (ppm)
Pb (220.353 nm)	-0.0016 u	ppm	0.0008	50.03	-14.0800	-0.0016 u (ppm)
Sb (206.834 nm)	0.0065	ppm	0.0014	21.03	1.8660	0.0065 (ppm)
Se (196.026 nm)	0.0082	ppm	0.0047	56.67	3.9240	0.0082 (ppm)
Si (251.611 nm)	0.0379	ppm	0.0023	5.99	86.2100	0.0379 (ppm)
Sn (189.925 nm)	-0.0013 u	ppm	0.0010	76.52	-2.1020	-0.0013 u (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0001	28.14	55.5500	0.0002 (ppm)
Ti (336.122 nm)	0.0011	ppm	0.0003	24.85	-29.7800	0.0011 (ppm)
Tl (190.794 nm)	0.0022	ppm	0.0020	93.50	6.4880	0.0022 (ppm)
V (292.401 nm)	-0.0002 u	ppm	0.0000	19.15	81.2000	-0.0002 u (ppm)
W (207.912 nm)	0.0032	ppm	0.0008	25.69	0.1907	0.0032 (ppm)
Zn (202.548 nm)	0.0002	ppm	0.0000	28.18	14.6300	0.0002 (ppm)
Zr (343.823 nm)	0.0001 u	ppm	0.0001	> 100.00	108.1000	0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9740	337100.0000	0.0059	0.61
Y_R 371.029	0.9588	46580.0000	0.0037	0.39

Sample Name: LCS 440-584756/2-B

Date: 12/10/2019 11:02:48 PM Rack:Tube: 4:28

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4412	ppm	0.0029	0.65	16130.0000	0.4412 (ppm)
Al (396.152 nm)	0.8922	ppm	0.0065	0.73	22620.0000	0.8922 (ppm)
As (188.980 nm)	0.8669	ppm	0.0114	1.31	457.2000	0.8669 (ppm)
B (249.678 nm)	0.8755	ppm	0.0045	0.52	8448.0000	0.8755 (ppm)
Ba (233.527 nm)	0.8943	ppm	0.0077	0.86	67570.0000	0.8943 (ppm)
Be (234.861 nm)	0.8734	ppm	0.0043	0.49	129800.0000	0.8734 (ppm)
Ca (422.673 nm)	4.4810	ppm	0.0097	0.22	16950.0000	4.4810 (ppm)
Cd (214.439 nm)	0.8760	ppm	0.0043	0.49	16370.0000	0.8760 (ppm)
Co (228.615 nm)	0.8785	ppm	0.0058	0.66	9893.0000	0.8785 (ppm)
Cr (205.560 nm)	0.8859	ppm	0.0047	0.53	3420.0000	0.8859 (ppm)
Cu (324.754 nm)	0.8927	ppm	0.0040	0.44	31650.0000	0.8927 (ppm)
Fe (238.204 nm)	0.9365	ppm	0.0078	0.83	2269.0000	0.9365 (ppm)
K (766.491 nm)	9.0650	ppm	0.1478	1.63	8746.0000	9.0650 (ppm)
Li (670.783 nm)	0.9034	ppm	0.0022	0.24	49790.0000	0.9034 (ppm)
Mg (279.078 nm)	4.4810	ppm	0.0383	0.85	10480.0000	4.4810 (ppm)
Mn (259.372 nm)	0.8831	ppm	0.0029	0.32	74640.0000	0.8831 (ppm)
Mo (204.598 nm)	0.9456	ppm	0.0046	0.48	3176.0000	0.9456 (ppm)
Na (589.592 nm)	9.3710	ppm	0.0481	0.51	52170.0000	9.3710 (ppm)
Ni (231.604 nm)	0.8813	ppm	0.0039	0.44	3415.0000	0.8813 (ppm)
P (213.618 nm)	0.8758	ppm	0.0147	1.68	582.3000	0.8758 (ppm)
Pb (220.353 nm)	0.8739	ppm	0.0028	0.33	1515.0000	0.8739 (ppm)
Sb (206.834 nm)	0.9168	ppm	0.0113	1.24	713.4000	0.9168 (ppm)
Se (196.026 nm)	0.8304	ppm	0.0011	0.13	469.2000	0.8304 (ppm)
Si (251.611 nm)	4.4610	ppm	0.0466	1.05	9049.0000	4.4610 (ppm)
Sn (189.925 nm)	0.8899	ppm	0.0016	0.18	438.9000	0.8899 (ppm)
Sr (421.552 nm)	0.8848	ppm	0.0027	0.31	292900.0000	0.8848 (ppm)
Ti (336.122 nm)	0.8985	ppm	0.0065	0.72	84980.0000	0.8985 (ppm)
Tl (190.794 nm)	0.8972	ppm	0.0125	1.39	794.4000	0.8972 (ppm)
V (292.401 nm)	0.8871	ppm	0.0051	0.58	23560.0000	0.8871 (ppm)
W (207.912 nm)	0.9106	ppm	0.0050	0.55	1310.0000	0.9106 (ppm)
Zn (202.548 nm)	0.8681	ppm	0.0037	0.43	11280.0000	0.8681 (ppm)
Zr (343.823 nm)	0.8704	ppm	0.0037	0.42	66040.0000	0.8704 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9693	335500.0000	0.0038	0.40
Y_R 371.029	0.9563	46460.0000	0.0088	0.92

Sample Name: 440-256298-E-1-B sd@5

Date: 12/10/2019 11:06:08 PM Rack:Tube: 4:29

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0002	> 100.00	-67.0400	0.0001 u (ppm)
Al (396.152 nm)	0.0340	ppm	0.0004	1.13	519.6000	0.0340 (ppm)
As (188.980 nm)	0.0018	ppm	0.0000	2.21	2.5140	0.0018 (ppm)
B (249.678 nm)	0.0060	ppm	0.0002	2.81	44.4200	0.0060 (ppm)
Ba (233.527 nm)	0.0033	ppm	0.0002	4.97	293.9000	0.0033 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	48.85	64.4800	0.0003 (ppm)
Ca (422.673 nm)	1.7340	ppm	0.0003	0.02	6633.0000	1.7340 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0000	14.71	1.7970	0.0003 (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0007	> 100.00	-12.0500	0.0001 u (ppm)
Cr (205.560 nm)	0.0009	ppm	0.0002	20.94	5.2290	0.0009 (ppm)
Cu (324.754 nm)	0.0012	ppm	0.0004	36.54	82.9000	0.0012 (ppm)
Fe (238.204 nm)	0.0334	ppm	0.0069	20.59	32.6100	0.0334 (ppm)
K (766.491 nm)	0.6427	ppm	0.0508	7.90	547.1000	0.6427 (ppm)
Li (670.783 nm)	0.0041	ppm	0.0011	25.77	284.7000	0.0041 (ppm)
Mg (279.078 nm)	0.3306	ppm	0.0066	1.98	783.3000	0.3306 (ppm)
Mn (259.372 nm)	0.0011	ppm	0.0004	35.35	146.2000	0.0011 (ppm)
Mo (204.598 nm)	0.0035	ppm	0.0007	20.24	7.7940	0.0035 (ppm)
Na (589.592 nm)	0.9536	ppm	0.0033	0.34	6123.0000	0.9536 (ppm)
Ni (231.604 nm)	0.0042	ppm	0.0015	36.66	0.6180	0.0042 (ppm)
P (213.618 nm)	0.0394	ppm	0.0048	12.15	28.1000	0.0394 (ppm)
Pb (220.353 nm)	-0.0024 u	ppm	0.0008	33.86	-15.5600	-0.0024 u (ppm)
Sb (206.834 nm)	0.0070	ppm	0.0011	14.96	2.2270	0.0070 (ppm)
Se (196.026 nm)	0.0045	ppm	0.0006	13.20	1.8590	0.0045 (ppm)
Si (251.611 nm)	0.3118	ppm	0.0013	0.42	632.9000	0.3118 (ppm)
Sn (189.925 nm)	0.0006 u	ppm	0.0056	> 100.00	-1.1640	0.0006 u (ppm)
Sr (421.552 nm)	0.0068	ppm	0.0000	0.04	2247.0000	0.0068 (ppm)
Ti (336.122 nm)	0.0027	ppm	0.0001	4.73	121.5000	0.0027 (ppm)
Tl (190.794 nm)	0.0056	ppm	0.0018	32.39	9.5160	0.0056 (ppm)
V (292.401 nm)	0.0007	ppm	0.0000	4.40	107.6000	0.0007 (ppm)
W (207.912 nm)	0.0029 u	ppm	0.0055	> 100.00	-0.1546	0.0029 u (ppm)
Zn (202.548 nm)	0.0015	ppm	0.0002	10.86	31.8400	0.0015 (ppm)
Zr (343.823 nm)	0.0002	ppm	0.0001	27.94	117.4000	0.0002 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9857	341200.0000	0.0051	0.52
Y_R 371.029	0.9612	46700.0000	0.0069	0.72

Sample Name: 440-256298-E-1-B

Date: 12/10/2019 11:09:28 PM Rack:Tube: 4:30

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002	ppm	0.0001	30.99	-62.6100	0.0002 (ppm)
Al (396.152 nm)	0.1836	ppm	0.0022	1.17	4230.0000	0.1836 (ppm)
As (188.980 nm)	0.0051	ppm	0.0012	22.88	4.2440	0.0051 (ppm)
B (249.678 nm)	0.0229	ppm	0.0000	0.01	209.4000	0.0229 (ppm)
Ba (233.527 nm)	0.0162	ppm	0.0000	0.19	1264.0000	0.0162 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	20.7700	0.0000 u (ppm)
Ca (422.673 nm)	8.9520	ppm	0.0096	0.11	33750.0000	8.9520 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0003	> 100.00	-3.5670	0.0000 u (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0006	> 100.00	-14.1200	-0.0001 u (ppm)
Cr (205.560 nm)	0.0042	ppm	0.0014	32.33	18.1300	0.0042 (ppm)
Cu (324.754 nm)	0.0042	ppm	0.0001	1.58	185.2000	0.0042 (ppm)
Fe (238.204 nm)	0.1690	ppm	0.0058	3.41	368.7000	0.1690 (ppm)
K (766.491 nm)	3.3230	ppm	0.0794	2.39	3155.0000	3.3230 (ppm)
Li (670.783 nm)	0.0062	ppm	0.0010	16.26	412.1000	0.0062 (ppm)
Mg (279.078 nm)	1.6320	ppm	0.0073	0.45	3825.0000	1.6320 (ppm)
Mn (259.372 nm)	0.0029	ppm	0.0002	5.75	316.1000	0.0029 (ppm)
Mo (204.598 nm)	0.0022	ppm	0.0004	18.95	3.3220	0.0022 (ppm)
Na (589.592 nm)	3.3640	ppm	0.0483	1.44	19290.0000	3.3640 (ppm)
Ni (231.604 nm)	0.0036	ppm	0.0004	10.23	-1.5420	0.0036 (ppm)
P (213.618 nm)	0.1967	ppm	0.0023	1.18	139.3000	0.1967 (ppm)
Pb (220.353 nm)	-0.0019 u	ppm	0.0027	> 100.00	-14.4400	-0.0019 u (ppm)
Sb (206.834 nm)	0.0044	ppm	0.0025	57.51	0.2055	0.0044 (ppm)
Se (196.026 nm)	0.0015 u	ppm	0.0025	> 100.00	0.1025	0.0015 u (ppm)
Si (251.611 nm)	1.5760	ppm	0.0123	0.78	3154.0000	1.5760 (ppm)
Sn (189.925 nm)	0.0003 u	ppm	0.0048	> 100.00	-1.3080	0.0003 u (ppm)
Sr (421.552 nm)	0.0344	ppm	0.0001	0.28	11450.0000	0.0344 (ppm)
Ti (336.122 nm)	0.0079	ppm	0.0002	3.07	611.7000	0.0079 (ppm)
Tl (190.794 nm)	0.0010	ppm	0.0005	57.19	5.2320	0.0010 (ppm)
V (292.401 nm)	0.0025	ppm	0.0002	9.06	162.0000	0.0025 (ppm)
W (207.912 nm)	-0.0005 u	ppm	0.0045	> 100.00	-5.0770	-0.0005 u (ppm)
Zn (202.548 nm)	0.0075	ppm	0.0002	2.24	108.3000	0.0075 (ppm)
Zr (343.823 nm)	0.0010	ppm	0.0002	19.58	177.2000	0.0010 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9708	336000.0000	0.0026	0.26
Y_R 371.029	0.9588	46580.0000	0.0076	0.79

Sample Name: 440-256298-E-1-C MS

Date: 12/10/2019 11:12:48 PM Rack:Tube: 4:31

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4510	ppm	0.0026	0.57	16490.0000	0.4510 (ppm)
Al (396.152 nm)	1.0870	ppm	0.0102	0.94	27470.0000	1.0870 (ppm)
As (188.980 nm)	0.8864	ppm	0.0061	0.68	467.4000	0.8864 (ppm)
B (249.678 nm)	0.9192	ppm	0.0089	0.97	8873.0000	0.9192 (ppm)
Ba (233.527 nm)	0.9221	ppm	0.0051	0.55	69670.0000	0.9221 (ppm)
Be (234.861 nm)	0.8936	ppm	0.0063	0.70	132800.0000	0.8936 (ppm)
Ca (422.673 nm)	13.2800	ppm	0.0362	0.27	50010.0000	13.2800 (ppm)
Cd (214.439 nm)	0.8882	ppm	0.0062	0.70	16600.0000	0.8882 (ppm)
Co (228.615 nm)	0.8947	ppm	0.0092	1.02	10080.0000	0.8947 (ppm)
Cr (205.560 nm)	0.9038	ppm	0.0069	0.76	3489.0000	0.9038 (ppm)
Cu (324.754 nm)	0.9256	ppm	0.0063	0.68	32800.0000	0.9256 (ppm)
Fe (238.204 nm)	1.0790	ppm	0.0115	1.07	2622.0000	1.0790 (ppm)
K (766.491 nm)	12.3200	ppm	0.1252	1.02	11910.0000	12.3200 (ppm)
Li (670.783 nm)	0.9190	ppm	0.0072	0.78	50660.0000	0.9190 (ppm)
Mg (279.078 nm)	6.1310	ppm	0.0494	0.81	14330.0000	6.1310 (ppm)
Mn (259.372 nm)	0.8977	ppm	0.0052	0.58	75890.0000	0.8977 (ppm)
Mo (204.598 nm)	0.9668	ppm	0.0076	0.78	3247.0000	0.9668 (ppm)
Na (589.592 nm)	12.3900	ppm	0.0606	0.49	68650.0000	12.3900 (ppm)
Ni (231.604 nm)	0.8862	ppm	0.0056	0.63	3434.0000	0.8862 (ppm)
P (213.618 nm)	1.0890	ppm	0.0228	2.10	732.1000	1.0890 (ppm)
Pb (220.353 nm)	0.8885	ppm	0.0086	0.96	1540.0000	0.8885 (ppm)
Sb (206.834 nm)	0.9260	ppm	0.0150	1.62	720.5000	0.9260 (ppm)
Se (196.026 nm)	0.8520	ppm	0.0014	0.17	481.3000	0.8520 (ppm)
Si (251.611 nm)	6.0680	ppm	0.0634	1.04	12260.0000	6.0680 (ppm)
Sn (189.925 nm)	0.8954	ppm	0.0061	0.68	441.6000	0.8954 (ppm)
Sr (421.552 nm)	0.9324	ppm	0.0044	0.47	308700.0000	0.9324 (ppm)
Ti (336.122 nm)	0.9237	ppm	0.0076	0.82	87360.0000	0.9237 (ppm)
Tl (190.794 nm)	0.9182	ppm	0.0053	0.57	812.7000	0.9182 (ppm)
V (292.401 nm)	0.9094	ppm	0.0066	0.73	24160.0000	0.9094 (ppm)
W (207.912 nm)	0.9310	ppm	0.0106	1.14	1340.0000	0.9310 (ppm)
Zn (202.548 nm)	0.8858	ppm	0.0062	0.70	11510.0000	0.8858 (ppm)
Zr (343.823 nm)	0.8738	ppm	0.0057	0.65	66290.0000	0.8738 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9657	334300.0000	0.0033	0.34
Y_R 371.029	0.9562	46450.0000	0.0092	0.96

Sample Name: 440-256298-E-1-D MSD

Date: 12/10/2019 11:16:08 PM Rack:Tube: 4:32

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4449	ppm	0.0018	0.41	16270.0000	0.4449 (ppm)
Al (396.152 nm)	1.0770	ppm	0.0069	0.64	27210.0000	1.0770 (ppm)
As (188.980 nm)	0.8833	ppm	0.0034	0.38	465.9000	0.8833 (ppm)
B (249.678 nm)	0.9074	ppm	0.0047	0.52	8759.0000	0.9074 (ppm)
Ba (233.527 nm)	0.9121	ppm	0.0022	0.24	68910.0000	0.9121 (ppm)
Be (234.861 nm)	0.8830	ppm	0.0045	0.51	131200.0000	0.8830 (ppm)
Ca (422.673 nm)	13.2700	ppm	0.0635	0.48	49970.0000	13.2700 (ppm)
Cd (214.439 nm)	0.8774	ppm	0.0040	0.45	16400.0000	0.8774 (ppm)
Co (228.615 nm)	0.8824	ppm	0.0058	0.65	9937.0000	0.8824 (ppm)
Cr (205.560 nm)	0.8887	ppm	0.0014	0.16	3431.0000	0.8887 (ppm)
Cu (324.754 nm)	0.9098	ppm	0.0073	0.80	32250.0000	0.9098 (ppm)
Fe (238.204 nm)	1.0720	ppm	0.0058	0.54	2606.0000	1.0720 (ppm)
K (766.491 nm)	12.3600	ppm	0.1043	0.84	11950.0000	12.3600 (ppm)
Li (670.783 nm)	0.9119	ppm	0.0000	0.00	50270.0000	0.9119 (ppm)
Mg (279.078 nm)	6.0860	ppm	0.0175	0.29	14230.0000	6.0860 (ppm)
Mn (259.372 nm)	0.8874	ppm	0.0044	0.50	75020.0000	0.8874 (ppm)
Mo (204.598 nm)	0.9543	ppm	0.0071	0.75	3205.0000	0.9543 (ppm)
Na (589.592 nm)	12.2900	ppm	0.0953	0.78	68140.0000	12.2900 (ppm)
Ni (231.604 nm)	0.8773	ppm	0.0072	0.82	3400.0000	0.8773 (ppm)
P (213.618 nm)	1.0680	ppm	0.0108	1.01	718.0000	1.0680 (ppm)
Pb (220.353 nm)	0.8730	ppm	0.0102	1.17	1513.0000	0.8730 (ppm)
Sb (206.834 nm)	0.9183	ppm	0.0109	1.19	714.5000	0.9183 (ppm)
Se (196.026 nm)	0.8454	ppm	0.0075	0.89	477.6000	0.8454 (ppm)
Si (251.611 nm)	6.0130	ppm	0.0806	1.34	12140.0000	6.0130 (ppm)
Sn (189.925 nm)	0.8809	ppm	0.0058	0.66	434.5000	0.8809 (ppm)
Sr (421.552 nm)	0.9223	ppm	0.0038	0.42	305300.0000	0.9223 (ppm)
Ti (336.122 nm)	0.9161	ppm	0.0073	0.79	86640.0000	0.9161 (ppm)
Tl (190.794 nm)	0.9048	ppm	0.0039	0.43	800.9000	0.9048 (ppm)
V (292.401 nm)	0.8970	ppm	0.0051	0.57	23830.0000	0.8970 (ppm)
W (207.912 nm)	0.9236	ppm	0.0055	0.60	1329.0000	0.9236 (ppm)
Zn (202.548 nm)	0.8742	ppm	0.0054	0.62	11360.0000	0.8742 (ppm)
Zr (343.823 nm)	0.8613	ppm	0.0040	0.47	65350.0000	0.8613 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9660	334400.0000	0.0041	0.42
Y_R 371.029	0.9549	46390.0000	0.0029	0.30

Sample Name: 440-256298-E-2-B

Date: 12/10/2019 11:19:28 PM Rack:Tube: 4:33

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002 u	ppm	0.0003	> 100.00	-63.9500	0.0002 u (ppm)
Al (396.152 nm)	0.1334	ppm	0.0002	0.12	2993.0000	0.1334 (ppm)
As (188.980 nm)	0.0047	ppm	0.0012	25.22	4.0250	0.0047 (ppm)
B (249.678 nm)	0.0207	ppm	0.0001	0.42	187.8000	0.0207 (ppm)
Ba (233.527 nm)	0.0176	ppm	0.0001	0.69	1368.0000	0.0176 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0002	55.71	65.9000	0.0003 (ppm)
Ca (422.673 nm)	19.1300	ppm	0.0245	0.13	72000.0000	19.1300 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0004	> 100.00	4.0540	0.0004 (ppm)
Co (228.615 nm)	0.0009	ppm	0.0005	55.66	-2.4730	0.0009 (ppm)
Cr (205.560 nm)	0.0033	ppm	0.0000	0.68	14.8100	0.0033 (ppm)
Cu (324.754 nm)	0.0055	ppm	0.0002	2.90	224.3000	0.0055 (ppm)
Fe (238.204 nm)	0.1090	ppm	0.0035	3.20	220.2000	0.1090 (ppm)
K (766.491 nm)	1.3480	ppm	0.0560	4.16	1235.0000	1.3480 (ppm)
Li (670.783 nm)	0.0083	ppm	0.0002	1.92	542.6000	0.0083 (ppm)
Mg (279.078 nm)	1.9810	ppm	0.0123	0.62	4640.0000	1.9810 (ppm)
Mn (259.372 nm)	0.0105	ppm	0.0001	0.55	951.0000	0.0105 (ppm)
Mo (204.598 nm)	0.0084	ppm	0.0003	3.38	24.2300	0.0084 (ppm)
Na (589.592 nm)	3.7480	ppm	0.0107	0.28	21390.0000	3.7480 (ppm)
Ni (231.604 nm)	0.0037	ppm	0.0004	12.16	-1.5710	0.0037 (ppm)
P (213.618 nm)	0.0663	ppm	0.0002	0.33	46.8200	0.0663 (ppm)
Pb (220.353 nm)	0.0004 u	ppm	0.0048	> 100.00	-10.4600	0.0004 u (ppm)
Sb (206.834 nm)	0.0134	ppm	0.0079	59.03	7.2230	0.0134 (ppm)
Se (196.026 nm)	0.0087	ppm	0.0051	58.42	4.1250	0.0087 (ppm)
Si (251.611 nm)	1.8600	ppm	0.0054	0.29	3721.0000	1.8600 (ppm)
Sn (189.925 nm)	0.0024	ppm	0.0021	87.46	-0.2663	0.0024 (ppm)
Sr (421.552 nm)	0.0770	ppm	0.0000	0.01	25640.0000	0.0770 (ppm)
Ti (336.122 nm)	0.0091	ppm	0.0005	5.76	717.3000	0.0091 (ppm)
Tl (190.794 nm)	0.0018 u	ppm	0.0043	> 100.00	5.9300	0.0018 u (ppm)
V (292.401 nm)	0.0034	ppm	0.0003	9.55	196.6000	0.0034 (ppm)
W (207.912 nm)	0.0041	ppm	0.0002	5.95	1.3300	0.0041 (ppm)
Zn (202.548 nm)	0.0026	ppm	0.0002	6.80	42.5500	0.0026 (ppm)
Zr (343.823 nm)	0.0011	ppm	0.0001	6.03	189.0000	0.0011 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9734	336900.0000	0.0006	0.06
Y_R 371.029	0.9628	46780.0000	0.0004	0.05

Sample Name: 440-256298-E-3-B

Date: 12/10/2019 11:22:48 PM Rack:Tube: 4:34

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0001	44.18	-75.4800	-0.0001 u (ppm)
Al (396.152 nm)	0.2012	ppm	0.0001	0.06	4675.0000	0.2012 (ppm)
As (188.980 nm)	-0.0013 u	ppm	0.0008	58.61	0.8026	-0.0013 u (ppm)
B (249.678 nm)	0.0229	ppm	0.0007	2.91	209.3000	0.0229 (ppm)
Ba (233.527 nm)	0.0192	ppm	0.0006	2.92	1490.0000	0.0192 (ppm)
Be (234.861 nm)	-0.0001 u	ppm	0.0001	> 100.00	14.5000	-0.0001 u (ppm)
Ca (422.673 nm)	21.4200	ppm	0.0108	0.05	80590.0000	21.4200 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0003	> 100.00	1.2240	0.0002 (ppm)
Co (228.615 nm)	0.0003	ppm	0.0001	50.74	-9.3590	0.0003 (ppm)
Cr (205.560 nm)	0.0042	ppm	0.0001	2.62	18.4200	0.0042 (ppm)
Cu (324.754 nm)	0.0053	ppm	0.0004	8.11	216.0000	0.0053 (ppm)
Fe (238.204 nm)	0.1741	ppm	0.0019	1.07	381.5000	0.1741 (ppm)
K (766.491 nm)	1.5750	ppm	0.0141	0.89	1456.0000	1.5750 (ppm)
Li (670.783 nm)	0.0069	ppm	0.0002	2.67	464.2000	0.0069 (ppm)
Mg (279.078 nm)	2.1680	ppm	0.0014	0.06	5077.0000	2.1680 (ppm)
Mn (259.372 nm)	0.0146	ppm	0.0000	0.07	1302.0000	0.0146 (ppm)
Mo (204.598 nm)	0.0077	ppm	0.0007	9.55	21.8400	0.0077 (ppm)
Na (589.592 nm)	3.6180	ppm	0.0275	0.76	20680.0000	3.6180 (ppm)
Ni (231.604 nm)	0.0044	ppm	0.0004	8.26	1.0790	0.0044 (ppm)
P (213.618 nm)	0.0599	ppm	0.0037	6.15	42.2800	0.0599 (ppm)
Pb (220.353 nm)	0.0004	ppm	0.0003	71.41	-10.4100	0.0004 (ppm)
Sb (206.834 nm)	0.0049	ppm	0.0054	> 100.00	0.5725	0.0049 (ppm)
Se (196.026 nm)	0.0072	ppm	0.0087	> 100.00	3.2480	0.0072 (ppm)
Si (251.611 nm)	2.0650	ppm	0.0372	1.80	4130.0000	2.0650 (ppm)
Sn (189.925 nm)	-0.0025 u	ppm	0.0031	> 100.00	-2.6810	-0.0025 u (ppm)
Sr (421.552 nm)	0.0802	ppm	0.0003	0.33	26730.0000	0.0802 (ppm)
Ti (336.122 nm)	0.0126	ppm	0.0001	1.03	1040.0000	0.0126 (ppm)
Tl (190.794 nm)	-0.0004 u	ppm	0.0070	> 100.00	3.8800	-0.0004 u (ppm)
V (292.401 nm)	0.0031	ppm	0.0003	9.41	190.1000	0.0031 (ppm)
W (207.912 nm)	0.0001 u	ppm	0.0022	> 100.00	-4.4040	0.0001 u (ppm)
Zn (202.548 nm)	0.0028	ppm	0.0001	2.44	44.8700	0.0028 (ppm)
Zr (343.823 nm)	0.0011	ppm	0.0001	5.81	185.7000	0.0011 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9755	337700.0000	0.0025	0.25
Y_R 371.029	0.9622	46750.0000	0.0055	0.58

Sample Name: 440-256298-E-4-B

Date: 12/10/2019 11:26:08 PM Rack:Tube: 4:35

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001	ppm	0.0000	34.00	-66.3400	0.0001 (ppm)
Al (396.152 nm)	0.2492	ppm	0.0006	0.24	5863.0000	0.2492 (ppm)
As (188.980 nm)	0.0001 u	ppm	0.0001	> 100.00	1.5480	0.0001 u (ppm)
B (249.678 nm)	0.0296	ppm	0.0001	0.22	275.0000	0.0296 (ppm)
Ba (233.527 nm)	0.0216	ppm	0.0001	0.66	1674.0000	0.0216 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	22.0900	0.0000 u (ppm)
Ca (422.673 nm)	19.3900	ppm	0.0378	0.19	72950.0000	19.3900 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	-2.7710	0.0000 u (ppm)
Co (228.615 nm)	-0.0001 u	ppm	0.0005	> 100.00	-13.0800	-0.0001 u (ppm)
Cr (205.560 nm)	0.0035	ppm	0.0008	23.03	15.4900	0.0035 (ppm)
Cu (324.754 nm)	0.0029	ppm	0.0001	4.10	132.1000	0.0029 (ppm)
Fe (238.204 nm)	0.2273	ppm	0.0075	3.30	513.4000	0.2273 (ppm)
K (766.491 nm)	1.8980	ppm	0.0730	3.84	1770.0000	1.8980 (ppm)
Li (670.783 nm)	0.0070	ppm	0.0016	22.12	471.9000	0.0070 (ppm)
Mg (279.078 nm)	2.1050	ppm	0.0073	0.35	4930.0000	2.1050 (ppm)
Mn (259.372 nm)	0.0244	ppm	0.0001	0.58	2128.0000	0.0244 (ppm)
Mo (204.598 nm)	0.0063	ppm	0.0006	8.97	17.0100	0.0063 (ppm)
Na (589.592 nm)	6.0140	ppm	0.0119	0.20	33770.0000	6.0140 (ppm)
Ni (231.604 nm)	0.0042	ppm	0.0009	22.71	0.4208	0.0042 (ppm)
P (213.618 nm)	0.1133	ppm	0.0026	2.31	80.1600	0.1133 (ppm)
Pb (220.353 nm)	0.0006 u	ppm	0.0009	> 100.00	-10.0100	0.0006 u (ppm)
Sb (206.834 nm)	0.0022	ppm	0.0031	> 100.00	-1.6140	0.0022 (ppm)
Se (196.026 nm)	0.0042	ppm	0.0009	20.17	1.6000	0.0042 (ppm)
Si (251.611 nm)	2.3420	ppm	0.0356	1.52	4683.0000	2.3420 (ppm)
Sn (189.925 nm)	-0.0027 u	ppm	0.0039	> 100.00	-2.7870	-0.0027 u (ppm)
Sr (421.552 nm)	0.0759	ppm	0.0002	0.25	25280.0000	0.0759 (ppm)
Ti (336.122 nm)	0.0142	ppm	0.0001	0.57	1191.0000	0.0142 (ppm)
Tl (190.794 nm)	-0.0025 u	ppm	0.0062	> 100.00	2.0470	-0.0025 u (ppm)
V (292.401 nm)	0.0029	ppm	0.0002	7.94	181.9000	0.0029 (ppm)
W (207.912 nm)	0.0019	ppm	0.0009	46.91	-1.8010	0.0019 (ppm)
Zn (202.548 nm)	0.0015	ppm	0.0001	5.36	28.5100	0.0015 (ppm)
Zr (343.823 nm)	0.0006	ppm	0.0002	33.21	144.9000	0.0006 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9753	337600.0000	0.0033	0.33
Y_R 371.029	0.9622	46750.0000	0.0032	0.33

Sample Name: xRINSE 5993206

Date: 12/10/2019 11:29:26 PM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0007	> 100.00	-64.3200	0.0001 u (ppm)
Al (396.152 nm)	-0.0007 u	ppm	0.0003	35.90	-341.7000	-0.0007 u (ppm)
As (188.980 nm)	0.0023	ppm	0.0009	37.71	2.7970	0.0023 (ppm)
B (249.678 nm)	0.0005	ppm	0.0000	8.94	-8.4600	0.0005 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0000	> 100.00	40.3700	0.0000 u (ppm)
Be (234.861 nm)	0.0001	ppm	0.0000	87.38	30.2500	0.0001 (ppm)
Ca (422.673 nm)	0.0053	ppm	0.0041	76.32	139.0000	0.0053 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0002	72.40	-7.4670	-0.0002 u (ppm)
Co (228.615 nm)	0.0003	ppm	0.0002	64.39	-9.8390	0.0003 (ppm)
Cr (205.560 nm)	0.0011	ppm	0.0001	5.14	6.1960	0.0011 (ppm)
Cu (324.754 nm)	0.0004	ppm	0.0004	95.29	57.5800	0.0004 (ppm)
Fe (238.204 nm)	0.0013	ppm	0.0011	84.91	-46.9000	0.0013 (ppm)
K (766.491 nm)	0.0034 u	ppm	0.0405	> 100.00	-74.8800	0.0034 u (ppm)
Li (670.783 nm)	0.0032	ppm	0.0000	1.54	228.8000	0.0032 (ppm)
Mg (279.078 nm)	0.0064	ppm	0.0039	60.56	25.6800	0.0064 (ppm)
Mn (259.372 nm)	0.0001 u	ppm	0.0002	> 100.00	55.5300	0.0001 u (ppm)
Mo (204.598 nm)	0.0017	ppm	0.0006	35.89	1.6940	0.0017 (ppm)
Na (589.592 nm)	0.2459	ppm	0.0100	4.05	2257.0000	0.2459 (ppm)
Ni (231.604 nm)	0.0023	ppm	0.0015	63.65	-6.6540	0.0023 (ppm)
P (213.618 nm)	-0.0041 u	ppm	0.0030	73.74	-2.6400	-0.0041 u (ppm)
Pb (220.353 nm)	-0.0030 u	ppm	0.0019	64.60	-16.5200	-0.0030 u (ppm)
Sb (206.834 nm)	0.0058 u	ppm	0.0111	> 100.00	1.2660	0.0058 u (ppm)
Se (196.026 nm)	0.0005 u	ppm	0.0057	> 100.00	-0.4286	0.0005 u (ppm)
Si (251.611 nm)	0.0004	ppm	0.0001	17.52	11.2300	0.0004 (ppm)
Sn (189.925 nm)	0.0000 u	ppm	0.0017	> 100.00	-1.4310	0.0000 u (ppm)
Sr (421.552 nm)	0.0000 u	ppm	0.0001	> 100.00	-8.2830	0.0000 u (ppm)
Ti (336.122 nm)	-0.0001 u	ppm	0.0001	49.39	-145.3000	-0.0001 u (ppm)
Tl (190.794 nm)	0.0029	ppm	0.0032	> 100.00	7.1580	0.0029 (ppm)
V (292.401 nm)	0.0000 u	ppm	0.0000	0.54	86.1300	0.0000 u (ppm)
W (207.912 nm)	-0.0022 u	ppm	0.0009	42.47	-7.4080	-0.0022 u (ppm)
Zn (202.548 nm)	0.0004	ppm	0.0000	8.33	18.1900	0.0004 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0000	15.26	88.6000	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9826	340100.0000	0.0044	0.45
Y_R 371.029	0.9666	46960.0000	0.0051	0.53

Sample Name: CCV 5993196

Date: 12/10/2019 11:32:44 PM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4758	ppm	0.0037	0.78	17400.0000	0.4758 (ppm)
Al (396.152 nm)	0.9414	ppm	0.0083	0.88	23850.0000	0.9414 (ppm)
As (188.980 nm)	0.9493	ppm	0.0046	0.49	500.6000	0.9493 (ppm)
B (249.678 nm)	0.9443	ppm	0.0065	0.69	9118.0000	0.9443 (ppm)
Ba (233.527 nm)	0.9572	ppm	0.0021	0.22	72320.0000	0.9572 (ppm)
Be (234.861 nm)	0.9474	ppm	0.0046	0.49	140700.0000	0.9474 (ppm)
Ca (422.673 nm)	4.7900	ppm	0.0011	0.02	18110.0000	4.7900 (ppm)
Cd (214.439 nm)	0.9470	ppm	0.0045	0.48	17700.0000	0.9470 (ppm)
Co (228.615 nm)	0.9472	ppm	0.0027	0.29	10670.0000	0.9472 (ppm)
Cr (205.560 nm)	0.9486	ppm	0.0037	0.39	3662.0000	0.9486 (ppm)
Cu (324.754 nm)	0.9516	ppm	0.0029	0.30	33730.0000	0.9516 (ppm)
Fe (238.204 nm)	0.9467	ppm	0.0058	0.62	2295.0000	0.9467 (ppm)
K (766.491 nm)	9.6140	ppm	0.1698	1.77	9281.0000	9.6140 (ppm)
Li (670.783 nm)	0.9662	ppm	0.0037	0.38	53250.0000	0.9662 (ppm)
Mg (279.078 nm)	4.8020	ppm	0.0072	0.15	11230.0000	4.8020 (ppm)
Mn (259.372 nm)	0.9483	ppm	0.0046	0.49	80110.0000	0.9483 (ppm)
Mo (204.598 nm)	0.9454	ppm	0.0061	0.64	3175.0000	0.9454 (ppm)
Na (589.592 nm)	9.8290	ppm	0.0292	0.30	54670.0000	9.8290 (ppm)
Ni (231.604 nm)	0.9453	ppm	0.0049	0.52	3665.0000	0.9453 (ppm)
P (213.618 nm)	0.9586	ppm	0.0018	0.19	639.3000	0.9586 (ppm)
Pb (220.353 nm)	0.9443	ppm	0.0054	0.57	1638.0000	0.9443 (ppm)
Sb (206.834 nm)	0.9443	ppm	0.0254	2.69	735.6000	0.9443 (ppm)
Se (196.026 nm)	0.9375	ppm	0.0076	0.81	529.4000	0.9375 (ppm)
Si (251.611 nm)	4.7540	ppm	0.0453	0.95	9637.0000	4.7540 (ppm)
Sn (189.925 nm)	0.9386	ppm	0.0021	0.22	463.0000	0.9386 (ppm)
Sr (421.552 nm)	0.9472	ppm	0.0023	0.24	313500.0000	0.9472 (ppm)
Ti (336.122 nm)	0.9488	ppm	0.0114	1.21	89750.0000	0.9488 (ppm)
Tl (190.794 nm)	0.9493	ppm	0.0117	1.23	840.1000	0.9493 (ppm)
V (292.401 nm)	0.9524	ppm	0.0055	0.58	25300.0000	0.9524 (ppm)
W (207.912 nm)	0.9420	ppm	0.0025	0.26	1356.0000	0.9420 (ppm)
Zn (202.548 nm)	0.9441	ppm	0.0042	0.44	12270.0000	0.9441 (ppm)
Zr (343.823 nm)	0.9135	ppm	0.0143	1.56	69310.0000	0.9135 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9799	339200.0000	0.0043	0.44
Y_R 371.029	0.9696	47110.0000	0.0007	0.07

Sample Name: CCB 5993195

Date: 12/10/2019 11:36:02 PM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002	ppm	0.0002	> 100.00	-62.1800	0.0002 (ppm)
Al (396.152 nm)	-0.0006 u	ppm	0.0008	> 100.00	-337.1000	-0.0006 u (ppm)
As (188.980 nm)	-0.0046 u	ppm	0.0038	82.79	-0.8566	-0.0046 u (ppm)
B (249.678 nm)	0.0012	ppm	0.0006	47.04	-2.7880	0.0012 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0001	63.10	55.7100	0.0002 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	32.27	71.4500	0.0003 (ppm)
Ca (422.673 nm)	-0.0058 u	ppm	0.0081	> 100.00	97.2600	-0.0058 u (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0001	32.51	2.7400	0.0003 (ppm)
Co (228.615 nm)	0.0000 u	ppm	0.0012	> 100.00	-13.1600	0.0000 u (ppm)
Cr (205.560 nm)	0.0008	ppm	0.0009	> 100.00	4.9030	0.0008 (ppm)
Cu (324.754 nm)	0.0008	ppm	0.0008	91.17	71.5100	0.0008 (ppm)
Fe (238.204 nm)	0.0026	ppm	0.0008	29.37	-43.5900	0.0026 (ppm)
K (766.491 nm)	-0.0063 u	ppm	0.0897	> 100.00	-84.2600	-0.0063 u (ppm)
Li (670.783 nm)	0.0042	ppm	0.0005	11.46	286.0000	0.0042 (ppm)
Mg (279.078 nm)	0.0071	ppm	0.0030	42.31	27.3800	0.0071 (ppm)
Mn (259.372 nm)	0.0005	ppm	0.0003	71.67	87.5000	0.0005 (ppm)
Mo (204.598 nm)	0.0057	ppm	0.0001	2.32	15.0400	0.0057 (ppm)
Na (589.592 nm)	0.2182	ppm	0.0064	2.93	2105.0000	0.2182 (ppm)
Ni (231.604 nm)	0.0025	ppm	0.0003	12.73	-5.9530	0.0025 (ppm)
P (213.618 nm)	0.0020	ppm	0.0016	78.03	1.6480	0.0020 (ppm)
Pb (220.353 nm)	0.0033	ppm	0.0009	27.10	-5.6630	0.0033 (ppm)
Sb (206.834 nm)	0.0054	ppm	0.0013	23.91	0.9081	0.0054 (ppm)
Se (196.026 nm)	0.0000 u	ppm	0.0009	> 100.00	-0.6672	0.0000 u (ppm)
Si (251.611 nm)	0.0020	ppm	0.0004	20.22	15.1100	0.0020 (ppm)
Sn (189.925 nm)	0.0027	ppm	0.0025	93.62	-0.1190	0.0027 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0000	14.85	12.5700	0.0001 (ppm)
Ti (336.122 nm)	0.0019	ppm	0.0005	27.37	49.1300	0.0019 (ppm)
Tl (190.794 nm)	0.0044	ppm	0.0010	22.80	8.4790	0.0044 (ppm)
V (292.401 nm)	0.0000 u	ppm	0.0005	> 100.00	84.6100	0.0000 u (ppm)
W (207.912 nm)	0.0040	ppm	0.0047	> 100.00	1.3940	0.0040 (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0000	7.08	19.0900	0.0005 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0000	14.50	90.9800	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9837	340500.0000	0.0045	0.46
Y_R 371.029	0.9631	46790.0000	0.0001	0.01

Sample Name: 440-256298-E-5-B

Date: 12/10/2019 11:39:22 PM Rack:Tube: 4:36

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001 u	ppm	0.0006	> 100.00	-66.2200	0.0001 u (ppm)
Al (396.152 nm)	0.1310	ppm	0.0001	0.11	2943.0000	0.1310 (ppm)
As (188.980 nm)	0.0046	ppm	0.0024	51.93	3.9730	0.0046 (ppm)
B (249.678 nm)	0.1507	ppm	0.0002	0.14	1456.0000	0.1507 (ppm)
Ba (233.527 nm)	0.0327	ppm	0.0002	0.56	2508.0000	0.0327 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	> 100.00	30.4700	0.0000 (ppm)
Ca (422.673 nm)	14.1800	ppm	0.0121	0.09	53370.0000	14.1800 (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0001	10.47	6.9610	0.0005 (ppm)
Co (228.615 nm)	0.0013	ppm	0.0003	21.93	1.7710	0.0013 (ppm)
Cr (205.560 nm)	0.0050	ppm	0.0008	16.48	21.2400	0.0050 (ppm)
Cu (324.754 nm)	0.0165	ppm	0.0000	0.13	616.3000	0.0165 (ppm)
Fe (238.204 nm)	0.2196	ppm	0.0058	2.62	494.2000	0.2196 (ppm)
K (766.491 nm)	3.4680	ppm	0.0283	0.82	3296.0000	3.4680 (ppm)
Li (670.783 nm)	0.0063	ppm	0.0019	30.50	414.2000	0.0063 (ppm)
Mg (279.078 nm)	1.6480	ppm	0.0008	0.05	3863.0000	1.6480 (ppm)
Mn (259.372 nm)	0.1126	ppm	0.0003	0.30	9530.0000	0.1126 (ppm)
Mo (204.598 nm)	0.0241	ppm	0.0000	0.08	77.0300	0.0241 (ppm)
Na (589.592 nm)	5.4620	ppm	0.0250	0.46	30760.0000	5.4620 (ppm)
Ni (231.604 nm)	0.0108	ppm	0.0011	10.49	26.3200	0.0108 (ppm)
P (213.618 nm)	0.1394	ppm	0.0011	0.82	98.0400	0.1394 (ppm)
Pb (220.353 nm)	0.0035	ppm	0.0023	66.79	-5.0410	0.0035 (ppm)
Sb (206.834 nm)	0.0191	ppm	0.0040	20.88	11.4700	0.0191 (ppm)
Se (196.026 nm)	0.0027 u	ppm	0.0082	> 100.00	0.7719	0.0027 u (ppm)
Si (251.611 nm)	2.3060	ppm	0.0139	0.60	4610.0000	2.3060 (ppm)
Sn (189.925 nm)	0.0022	ppm	0.0014	62.45	-0.3338	0.0022 (ppm)
Sr (421.552 nm)	0.0505	ppm	0.0003	0.59	16820.0000	0.0505 (ppm)
Ti (336.122 nm)	0.0046	ppm	0.0003	7.28	289.3000	0.0046 (ppm)
Tl (190.794 nm)	-0.0001 u	ppm	0.0039	> 100.00	4.4080	-0.0001 u (ppm)
V (292.401 nm)	0.0026	ppm	0.0001	3.04	166.6000	0.0026 (ppm)
W (207.912 nm)	-0.0006 u	ppm	0.0006	94.87	-4.5650	-0.0006 u (ppm)
Zn (202.548 nm)	0.0705	ppm	0.0002	0.28	920.1000	0.0705 (ppm)
Zr (343.823 nm)	0.0017	ppm	0.0002	14.29	228.5000	0.0017 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9819	339900.0000	0.0002	0.02
Y_R 371.029	0.9662	46940.0000	0.0043	0.45

Sample Name: 440-256298-E-6-B

Date: 12/10/2019 11:42:42 PM Rack:Tube: 4:37

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0006 u	ppm	0.0001	17.17	-94.0000	-0.0006 u (ppm)
Al (396.152 nm)	0.2313	ppm	0.0015	0.65	5426.0000	0.2313 (ppm)
As (188.980 nm)	-0.0001 u	ppm	0.0032	> 100.00	1.4200	-0.0001 u (ppm)
B (249.678 nm)	0.0395	ppm	0.0001	0.29	371.8000	0.0395 (ppm)
Ba (233.527 nm)	0.0267	ppm	0.0004	1.36	2061.0000	0.0267 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	23.4500	0.0000 u (ppm)
Ca (422.673 nm)	31.4500	ppm	0.0401	0.13	118300.0000	31.4500 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0001	93.08	-0.1642	0.0002 (ppm)
Co (228.615 nm)	0.0015	ppm	0.0004	24.72	4.4360	0.0015 (ppm)
Cr (205.560 nm)	0.0045	ppm	0.0013	29.64	19.5900	0.0045 (ppm)
Cu (324.754 nm)	0.0117	ppm	0.0001	0.98	433.8000	0.0117 (ppm)
Fe (238.204 nm)	0.2013	ppm	0.0002	0.08	449.2000	0.2013 (ppm)
K (766.491 nm)	1.6320	ppm	0.0420	2.57	1513.0000	1.6320 (ppm)
Li (670.783 nm)	0.0066	ppm	0.0025	37.83	466.3000	0.0066 (ppm)
Mg (279.078 nm)	3.9720	ppm	0.0063	0.16	9293.0000	3.9720 (ppm)
Mn (259.372 nm)	0.0430	ppm	0.0001	0.22	3693.0000	0.0430 (ppm)
Mo (204.598 nm)	0.0092	ppm	0.0001	1.45	26.8400	0.0092 (ppm)
Na (589.592 nm)	7.7150	ppm	0.0129	0.17	43070.0000	7.7150 (ppm)
Ni (231.604 nm)	0.0048	ppm	0.0019	39.33	2.5640	0.0048 (ppm)
P (213.618 nm)	0.1141	ppm	0.0049	4.30	80.3400	0.1141 (ppm)
Pb (220.353 nm)	0.0008	ppm	0.0007	87.97	-9.5340	0.0008 (ppm)
Sb (206.834 nm)	0.0069	ppm	0.0006	8.62	2.1070	0.0069 (ppm)
Se (196.026 nm)	0.0008 u	ppm	0.0018	> 100.00	-0.4149	0.0008 u (ppm)
Si (251.611 nm)	3.0480	ppm	0.0310	1.02	6090.0000	3.0480 (ppm)
Sn (189.925 nm)	-0.0063 u	ppm	0.0015	23.17	-4.5680	-0.0063 u (ppm)
Sr (421.552 nm)	0.1003	ppm	0.0002	0.20	33480.0000	0.1003 (ppm)
Ti (336.122 nm)	0.0098	ppm	0.0001	1.33	768.2000	0.0098 (ppm)
Tl (190.794 nm)	0.0049	ppm	0.0033	66.86	8.7300	0.0049 (ppm)
V (292.401 nm)	0.0041	ppm	0.0005	12.53	227.6000	0.0041 (ppm)
W (207.912 nm)	0.0002 u	ppm	0.0004	> 100.00	-4.3580	0.0002 u (ppm)
Zn (202.548 nm)	0.0087	ppm	0.0001	1.26	118.9000	0.0087 (ppm)
Zr (343.823 nm)	0.0017	ppm	0.0001	3.66	232.8000	0.0017 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9798	339100.0000	0.0008	0.08
Y_R 371.029	0.9688	47070.0000	0.0030	0.31

Sample Name: 440-256298-E-7-B

Date: 12/10/2019 11:46:02 PM Rack:Tube: 4:38

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000 u	ppm	0.0004	> 100.00	-71.1300	0.0000 u (ppm)
Al (396.152 nm)	0.3067	ppm	0.0024	0.77	7285.0000	0.3067 (ppm)
As (188.980 nm)	0.0033	ppm	0.0035	> 100.00	3.2450	0.0033 (ppm)
B (249.678 nm)	0.0325	ppm	0.0002	0.71	303.6000	0.0325 (ppm)
Ba (233.527 nm)	0.0215	ppm	0.0001	0.63	1664.0000	0.0215 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	29.5600	0.0000 u (ppm)
Ca (422.673 nm)	15.7700	ppm	0.0404	0.26	59360.0000	15.7700 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0000	> 100.00	-3.6700	0.0000 u (ppm)
Co (228.615 nm)	0.0002 u	ppm	0.0007	> 100.00	-9.8750	0.0002 u (ppm)
Cr (205.560 nm)	0.0033	ppm	0.0011	32.77	14.7700	0.0033 (ppm)
Cu (324.754 nm)	0.0051	ppm	0.0000	0.53	213.5000	0.0051 (ppm)
Fe (238.204 nm)	0.2643	ppm	0.0019	0.71	605.0000	0.2643 (ppm)
K (766.491 nm)	2.9150	ppm	0.0736	2.52	2759.0000	2.9150 (ppm)
Li (670.783 nm)	0.0063	ppm	0.0015	24.56	426.2000	0.0063 (ppm)
Mg (279.078 nm)	2.1870	ppm	0.0114	0.52	5120.0000	2.1870 (ppm)
Mn (259.372 nm)	0.0133	ppm	0.0000	0.21	1201.0000	0.0133 (ppm)
Mo (204.598 nm)	0.0053	ppm	0.0005	10.17	13.8000	0.0053 (ppm)
Na (589.592 nm)	5.0480	ppm	0.0060	0.12	28500.0000	5.0480 (ppm)
Ni (231.604 nm)	0.0039	ppm	0.0008	20.17	-0.6059	0.0039 (ppm)
P (213.618 nm)	0.1399	ppm	0.0080	5.70	98.9900	0.1399 (ppm)
Pb (220.353 nm)	-0.0009 u	ppm	0.0034	> 100.00	-12.7000	-0.0009 u (ppm)
Sb (206.834 nm)	0.0075	ppm	0.0044	59.12	2.5890	0.0075 (ppm)
Se (196.026 nm)	0.0005 u	ppm	0.0030	> 100.00	-0.5100	0.0005 u (ppm)
Si (251.611 nm)	2.4120	ppm	0.0072	0.30	4821.0000	2.4120 (ppm)
Sn (189.925 nm)	0.0063	ppm	0.0020	31.89	1.6780	0.0063 (ppm)
Sr (421.552 nm)	0.0598	ppm	0.0002	0.25	19940.0000	0.0598 (ppm)
Ti (336.122 nm)	0.0163	ppm	0.0001	0.80	1398.0000	0.0163 (ppm)
Tl (190.794 nm)	0.0025 u	ppm	0.0081	> 100.00	6.5170	0.0025 u (ppm)
V (292.401 nm)	0.0029	ppm	0.0005	18.18	179.7000	0.0029 (ppm)
W (207.912 nm)	-0.0029 u	ppm	0.0016	55.09	-8.7140	-0.0029 u (ppm)
Zn (202.548 nm)	0.0041	ppm	0.0000	0.54	62.0600	0.0041 (ppm)
Zr (343.823 nm)	0.0009	ppm	0.0000	4.75	166.2000	0.0009 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9767	338100.0000	0.0049	0.50
Y_R 371.029	0.9644	46850.0000	0.0040	0.41

Sample Name: 440-256298-E-8-B

Date: 12/10/2019 11:49:22 PM Rack:Tube: 4:39

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0000	ppm	0.0000	41.52	-67.9600	0.0000 (ppm)
Al (396.152 nm)	0.1759	ppm	0.0003	0.19	4043.0000	0.1759 (ppm)
As (188.980 nm)	0.0039	ppm	0.0030	76.11	3.5990	0.0039 (ppm)
B (249.678 nm)	0.0250	ppm	0.0004	1.56	229.4000	0.0250 (ppm)
Ba (233.527 nm)	0.0157	ppm	0.0005	2.93	1229.0000	0.0157 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	> 100.00	32.9600	0.0001 (ppm)
Ca (422.673 nm)	9.4230	ppm	0.0326	0.35	35520.0000	9.4230 (ppm)
Cd (214.439 nm)	-0.0003 u	ppm	0.0000	5.56	-9.2060	-0.0003 u (ppm)
Co (228.615 nm)	0.0003 u	ppm	0.0005	> 100.00	-8.8610	0.0003 u (ppm)
Cr (205.560 nm)	0.0043	ppm	0.0004	8.53	18.5400	0.0043 (ppm)
Cu (324.754 nm)	0.0094	ppm	0.0003	2.72	370.0000	0.0094 (ppm)
Fe (238.204 nm)	0.1422	ppm	0.0014	0.97	302.5000	0.1422 (ppm)
K (766.491 nm)	0.9687	ppm	0.0279	2.88	865.2000	0.9687 (ppm)
Li (670.783 nm)	0.0064	ppm	0.0024	37.14	420.4000	0.0064 (ppm)
Mg (279.078 nm)	1.6740	ppm	0.0012	0.07	3922.0000	1.6740 (ppm)
Mn (259.372 nm)	0.0495	ppm	0.0003	0.68	4222.0000	0.0495 (ppm)
Mo (204.598 nm)	0.0057	ppm	0.0002	3.67	15.1800	0.0057 (ppm)
Na (589.592 nm)	2.2840	ppm	0.0058	0.25	13400.0000	2.2840 (ppm)
Ni (231.604 nm)	0.0054	ppm	0.0002	4.25	5.4490	0.0054 (ppm)
P (213.618 nm)	0.0561	ppm	0.0094	16.84	39.6000	0.0561 (ppm)
Pb (220.353 nm)	0.0046	ppm	0.0006	13.44	-3.1360	0.0046 (ppm)
Sb (206.834 nm)	0.0091	ppm	0.0003	3.53	3.8760	0.0091 (ppm)
Se (196.026 nm)	0.0017 u	ppm	0.0063	> 100.00	0.2241	0.0017 u (ppm)
Si (251.611 nm)	1.5960	ppm	0.0155	0.97	3194.0000	1.5960 (ppm)
Sn (189.925 nm)	0.0018 u	ppm	0.0042	> 100.00	-0.5412	0.0018 u (ppm)
Sr (421.552 nm)	0.0349	ppm	0.0000	0.01	11620.0000	0.0349 (ppm)
Ti (336.122 nm)	0.0056	ppm	0.0003	4.92	391.4000	0.0056 (ppm)
Tl (190.794 nm)	0.0025 u	ppm	0.0036	> 100.00	6.6670	0.0025 u (ppm)
V (292.401 nm)	0.0029	ppm	0.0000	0.18	173.3000	0.0029 (ppm)
W (207.912 nm)	0.0015	ppm	0.0015	> 100.00	-1.9900	0.0015 (ppm)
Zn (202.548 nm)	0.0335	ppm	0.0005	1.60	443.6000	0.0335 (ppm)
Zr (343.823 nm)	0.0006	ppm	0.0001	12.35	147.0000	0.0006 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9813	339700.0000	0.0023	0.23
Y_R 371.029	0.9684	47050.0000	0.0005	0.06

Sample Name: 440-256298-E-9-B

Date: 12/10/2019 11:52:42 PM Rack:Tube: 4:40

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0001	> 100.00	-73.1300	-0.0001 u (ppm)
Al (396.152 nm)	0.0526	ppm	0.0005	0.89	983.9000	0.0526 (ppm)
As (188.980 nm)	-0.0018 u	ppm	0.0033	> 100.00	0.5544	-0.0018 u (ppm)
B (249.678 nm)	0.0271	ppm	0.0009	3.42	250.3000	0.0271 (ppm)
Ba (233.527 nm)	0.0118	ppm	0.0002	1.42	931.2000	0.0118 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	23.8400	0.0000 u (ppm)
Ca (422.673 nm)	10.9000	ppm	0.0187	0.17	41070.0000	10.9000 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0000	20.62	-4.7480	-0.0001 u (ppm)
Co (228.615 nm)	0.0003	ppm	0.0002	74.33	-9.7920	0.0003 (ppm)
Cr (205.560 nm)	0.0036	ppm	0.0002	4.47	15.8300	0.0036 (ppm)
Cu (324.754 nm)	0.0044	ppm	0.0006	13.14	191.8000	0.0044 (ppm)
Fe (238.204 nm)	0.0523	ppm	0.0003	0.58	79.6400	0.0523 (ppm)
K (766.491 nm)	2.8230	ppm	0.0593	2.10	2668.0000	2.8230 (ppm)
Li (670.783 nm)	0.0059	ppm	0.0037	62.51	396.3000	0.0059 (ppm)
Mg (279.078 nm)	1.6350	ppm	0.0042	0.25	3832.0000	1.6350 (ppm)
Mn (259.372 nm)	0.0034	ppm	0.0002	5.45	339.6000	0.0034 (ppm)
Mo (204.598 nm)	0.0028	ppm	0.0014	50.55	5.4750	0.0028 (ppm)
Na (589.592 nm)	3.6760	ppm	0.0171	0.47	21000.0000	3.6760 (ppm)
Ni (231.604 nm)	0.0031	ppm	0.0002	7.89	-3.5350	0.0031 (ppm)
P (213.618 nm)	0.1321	ppm	0.0027	2.03	93.5600	0.1321 (ppm)
Pb (220.353 nm)	0.0000 u	ppm	0.0000	76.29	-11.3000	0.0000 u (ppm)
Sb (206.834 nm)	0.0045	ppm	0.0049	> 100.00	0.3025	0.0045 (ppm)
Se (196.026 nm)	0.0057	ppm	0.0029	50.99	2.4640	0.0057 (ppm)
Si (251.611 nm)	1.6690	ppm	0.0100	0.60	3340.0000	1.6690 (ppm)
Sn (189.925 nm)	-0.0004 u	ppm	0.0001	21.14	-1.6320	-0.0004 u (ppm)
Sr (421.552 nm)	0.0410	ppm	0.0001	0.22	13660.0000	0.0410 (ppm)
Ti (336.122 nm)	0.0017	ppm	0.0002	9.36	23.0100	0.0017 (ppm)
Tl (190.794 nm)	0.0040	ppm	0.0024	59.72	8.0610	0.0040 (ppm)
V (292.401 nm)	0.0020	ppm	0.0001	6.00	151.9000	0.0020 (ppm)
W (207.912 nm)	0.0002 u	ppm	0.0013	> 100.00	-3.8950	0.0002 u (ppm)
Zn (202.548 nm)	0.0246	ppm	0.0002	0.69	328.1000	0.0246 (ppm)
Zr (343.823 nm)	0.0003	ppm	0.0001	38.69	125.5000	0.0003 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9765	338000.0000	0.0023	0.23
Y_R 371.029	0.9620	46740.0000	0.0035	0.36

Sample Name: 440-256298-E-10-B

Date: 12/10/2019 11:56:02 PM Rack:Tube: 4:41

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0002	75.19	-80.7200	-0.0003 u (ppm)
Al (396.152 nm)	0.0212	ppm	0.0000	0.22	202.7000	0.0212 (ppm)
As (188.980 nm)	0.0016 u	ppm	0.0042	> 100.00	2.4060	0.0016 u (ppm)
B (249.678 nm)	0.0100	ppm	0.0001	1.14	83.8200	0.0100 (ppm)
Ba (233.527 nm)	0.0055	ppm	0.0000	0.83	457.7000	0.0055 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	19.6500	0.0000 u (ppm)
Ca (422.673 nm)	3.1460	ppm	0.0048	0.15	11940.0000	3.1460 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-2.2120	0.0001 u (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0004	> 100.00	-11.5800	0.0001 u (ppm)
Cr (205.560 nm)	0.0035	ppm	0.0006	17.43	15.3200	0.0035 (ppm)
Cu (324.754 nm)	0.0022	ppm	0.0000	0.51	116.6000	0.0022 (ppm)
Fe (238.204 nm)	0.0235	ppm	0.0013	5.48	8.1860	0.0235 (ppm)
K (766.491 nm)	1.4040	ppm	0.0305	2.17	1288.0000	1.4040 (ppm)
Li (670.783 nm)	0.0042	ppm	0.0018	44.24	288.3000	0.0042 (ppm)
Mg (279.078 nm)	0.4937	ppm	0.0048	0.98	1165.0000	0.4937 (ppm)
Mn (259.372 nm)	0.0016	ppm	0.0001	4.61	186.5000	0.0016 (ppm)
Mo (204.598 nm)	0.0012 u	ppm	0.0026	> 100.00	-0.1130	0.0012 u (ppm)
Na (589.592 nm)	1.3340	ppm	0.0052	0.39	8199.0000	1.3340 (ppm)
Ni (231.604 nm)	0.0036	ppm	0.0008	22.62	-1.5140	0.0036 (ppm)
P (213.618 nm)	0.0739	ppm	0.0024	3.20	52.4900	0.0739 (ppm)
Pb (220.353 nm)	-0.0005 u	ppm	0.0001	9.82	-12.2600	-0.0005 u (ppm)
Sb (206.834 nm)	0.0025	ppm	0.0023	91.37	-1.2830	0.0025 (ppm)
Se (196.026 nm)	0.0034	ppm	0.0008	24.47	1.1790	0.0034 (ppm)
Si (251.611 nm)	0.6429	ppm	0.0046	0.72	1292.0000	0.6429 (ppm)
Sn (189.925 nm)	0.0067	ppm	0.0020	29.30	1.8520	0.0067 (ppm)
Sr (421.552 nm)	0.0132	ppm	0.0000	0.08	4379.0000	0.0132 (ppm)
Ti (336.122 nm)	0.0003	ppm	0.0001	29.68	-104.1000	0.0003 (ppm)
Tl (190.794 nm)	-0.0026 u	ppm	0.0010	37.22	2.1700	-0.0026 u (ppm)
V (292.401 nm)	0.0006	ppm	0.0003	42.45	106.6000	0.0006 (ppm)
W (207.912 nm)	-0.0005 u	ppm	0.0011	> 100.00	-4.8730	-0.0005 u (ppm)
Zn (202.548 nm)	0.0222	ppm	0.0002	0.89	298.3000	0.0222 (ppm)
Zr (343.823 nm)	0.0002	ppm	0.0002	97.23	119.4000	0.0002 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9789	338800.0000	0.0063	0.64
Y_R 371.029	0.9604	46660.0000	0.0031	0.32

Sample Name: 440-256298-E-11-B

Date: 12/10/2019 11:59:22 PM Rack:Tube: 4:42

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0003 u	ppm	0.0003	94.53	-80.3800	-0.0003 u (ppm)
Al (396.152 nm)	0.0874	ppm	0.0001	0.13	1845.0000	0.0874 (ppm)
As (188.980 nm)	-0.0018 u	ppm	0.0072	> 100.00	0.5955	-0.0018 u (ppm)
B (249.678 nm)	0.0190	ppm	0.0001	0.41	171.3000	0.0190 (ppm)
Ba (233.527 nm)	0.0054	ppm	0.0001	1.04	449.8000	0.0054 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	19.5100	0.0000 u (ppm)
Ca (422.673 nm)	9.8490	ppm	0.0656	0.67	37120.0000	9.8490 (ppm)
Cd (214.439 nm)	0.0001 u	ppm	0.0002	> 100.00	-1.8680	0.0001 u (ppm)
Co (228.615 nm)	-0.0004 u	ppm	0.0006	> 100.00	-16.6500	-0.0004 u (ppm)
Cr (205.560 nm)	0.0039	ppm	0.0002	6.01	16.8000	0.0039 (ppm)
Cu (324.754 nm)	0.0044	ppm	0.0002	5.30	190.1000	0.0044 (ppm)
Fe (238.204 nm)	0.0821	ppm	0.0014	1.74	153.5000	0.0821 (ppm)
K (766.491 nm)	0.6354	ppm	0.0138	2.17	541.0000	0.6354 (ppm)
Li (670.783 nm)	0.0042	ppm	0.0001	2.64	301.6000	0.0042 (ppm)
Mg (279.078 nm)	1.1770	ppm	0.0087	0.74	2761.0000	1.1770 (ppm)
Mn (259.372 nm)	0.0022	ppm	0.0001	4.02	241.4000	0.0022 (ppm)
Mo (204.598 nm)	0.0028	ppm	0.0009	30.40	5.5000	0.0028 (ppm)
Na (589.592 nm)	1.7490	ppm	0.0023	0.13	10470.0000	1.7490 (ppm)
Ni (231.604 nm)	0.0049	ppm	0.0000	0.76	3.5370	0.0049 (ppm)
P (213.618 nm)	0.0599	ppm	0.0018	2.99	42.4600	0.0599 (ppm)
Pb (220.353 nm)	-0.0014 u	ppm	0.0008	55.54	-13.7000	-0.0014 u (ppm)
Sb (206.834 nm)	0.0069	ppm	0.0046	67.59	2.1480	0.0069 (ppm)
Se (196.026 nm)	0.0046	ppm	0.0024	52.42	1.8560	0.0046 (ppm)
Si (251.611 nm)	0.8566	ppm	0.0022	0.26	1720.0000	0.8566 (ppm)
Sn (189.925 nm)	0.0013 u	ppm	0.0078	> 100.00	-0.8100	0.0013 u (ppm)
Sr (421.552 nm)	0.0290	ppm	0.0001	0.40	9663.0000	0.0290 (ppm)
Ti (336.122 nm)	0.0035	ppm	0.0000	0.41	190.3000	0.0035 (ppm)
Tl (190.794 nm)	0.0009 u	ppm	0.0022	> 100.00	5.1710	0.0009 u (ppm)
V (292.401 nm)	0.0032	ppm	0.0004	12.86	181.3000	0.0032 (ppm)
W (207.912 nm)	-0.0004 u	ppm	0.0009	> 100.00	-4.9560	-0.0004 u (ppm)
Zn (202.548 nm)	0.0027	ppm	0.0000	1.35	45.4500	0.0027 (ppm)
Zr (343.823 nm)	0.0004	ppm	0.0002	38.32	135.9000	0.0004 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9760	337800.0000	0.0007	0.07
Y_R 371.029	0.9662	46940.0000	0.0063	0.65

Sample Name: 440-256298-E-12-B

Date: 12/11/2019 12:02:42 AM Rack:Tube: 4:43

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0001 u	ppm	0.0001	100.00	-72.4900	-0.0001 u (ppm)
Al (396.152 nm)	0.1725	ppm	0.0012	0.71	3956.0000	0.1725 (ppm)
As (188.980 nm)	-0.0038 u	ppm	0.0031	79.77	-0.5322	-0.0038 u (ppm)
B (249.678 nm)	0.0386	ppm	0.0014	3.64	362.3000	0.0386 (ppm)
Ba (233.527 nm)	0.0181	ppm	0.0001	0.35	1410.0000	0.0181 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	27.07	19.0800	0.0000 u (ppm)
Ca (422.673 nm)	15.7400	ppm	0.0220	0.14	59250.0000	15.7400 (ppm)
Cd (214.439 nm)	0.0002	ppm	0.0000	20.04	1.0730	0.0002 (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0008	> 100.00	-11.7200	0.0001 u (ppm)
Cr (205.560 nm)	0.0043	ppm	0.0004	9.36	18.7100	0.0043 (ppm)
Cu (324.754 nm)	0.0044	ppm	0.0001	3.14	188.6000	0.0044 (ppm)
Fe (238.204 nm)	0.1731	ppm	0.0045	2.60	379.1000	0.1731 (ppm)
K (766.491 nm)	1.8470	ppm	0.0885	4.79	1720.0000	1.8470 (ppm)
Li (670.783 nm)	0.0054	ppm	0.0032	59.95	375.7000	0.0054 (ppm)
Mg (279.078 nm)	1.4340	ppm	0.0015	0.10	3361.0000	1.4340 (ppm)
Mn (259.372 nm)	0.0073	ppm	0.0001	2.04	682.7000	0.0073 (ppm)
Mo (204.598 nm)	0.0020	ppm	0.0004	21.96	2.5080	0.0020 (ppm)
Na (589.592 nm)	3.4850	ppm	0.0210	0.60	19950.0000	3.4850 (ppm)
Ni (231.604 nm)	0.0024	ppm	0.0008	33.12	-6.4420	0.0024 (ppm)
P (213.618 nm)	0.0836	ppm	0.0019	2.32	59.2200	0.0836 (ppm)
Pb (220.353 nm)	-0.0002 u	ppm	0.0023	> 100.00	-11.5600	-0.0002 u (ppm)
Sb (206.834 nm)	0.0030 u	ppm	0.0051	> 100.00	-0.8782	0.0030 u (ppm)
Se (196.026 nm)	0.0068	ppm	0.0047	69.97	3.0240	0.0068 (ppm)
Si (251.611 nm)	2.2170	ppm	0.0146	0.66	4432.0000	2.2170 (ppm)
Sn (189.925 nm)	-0.0016 u	ppm	0.0076	> 100.00	-2.2530	-0.0016 u (ppm)
Sr (421.552 nm)	0.0564	ppm	0.0004	0.68	18790.0000	0.0564 (ppm)
Ti (336.122 nm)	0.0122	ppm	0.0004	3.04	1005.0000	0.0122 (ppm)
Tl (190.794 nm)	0.0010 u	ppm	0.0035	> 100.00	5.2060	0.0010 u (ppm)
V (292.401 nm)	0.0030	ppm	0.0002	7.22	182.9000	0.0030 (ppm)
W (207.912 nm)	-0.0017 u	ppm	0.0007	39.67	-6.9470	-0.0017 u (ppm)
Zn (202.548 nm)	0.0030	ppm	0.0004	11.71	47.9300	0.0030 (ppm)
Zr (343.823 nm)	0.0003	ppm	0.0001	30.45	125.4000	0.0003 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9751	337500.0000	0.0022	0.22
Y_R 371.029	0.9564	46460.0000	0.0051	0.53

Sample Name: 440-256683-N-1-B

Date: 12/11/2019 12:06:02 AM Rack:Tube: 4:44

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0012 u	ppm	0.0001	10.17	-118.5000	-0.0012 u (ppm)
Al (396.152 nm)	0.0205	ppm	0.0009	4.43	270.2000	0.0205 (ppm)
As (188.980 nm)	-0.0003 u	ppm	0.0044	> 100.00	1.2490	-0.0003 u (ppm)
B (249.678 nm)	1.0530	ppm	0.0057	0.54	10270.0000	1.0530 (ppm)
Ba (233.527 nm)	0.0722	ppm	0.0000	0.02	5498.0000	0.0722 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	19.0800	0.0000 u (ppm)
Ca (422.673 nm)	59.8500	ppm	0.1374	0.23	224900.0000	59.8500 (ppm)
Cd (214.439 nm)	-0.0001 u	ppm	0.0001	83.64	-5.6340	-0.0001 u (ppm)
Co (228.615 nm)	0.0017	ppm	0.0004	23.12	7.5920	0.0017 (ppm)
Cr (205.560 nm)	0.0021	ppm	0.0008	39.74	10.6100	0.0021 (ppm)
Cu (324.754 nm)	-0.0002 u	ppm	0.0006	> 100.00	-0.3682	-0.0002 u (ppm)
Fe (238.204 nm)	0.0134	ppm	0.0026	19.24	-13.4200	0.0134 (ppm)
K (766.491 nm)	27.6500	ppm	0.0667	0.24	26830.0000	27.6500 (ppm)
Li (670.783 nm)	0.0153	ppm	0.0001	0.76	1142.0000	0.0153 (ppm)
Mg (279.078 nm)	55.0200	ppm	0.2375	0.43	128600.0000	55.0200 (ppm)
Mn (259.372 nm)	0.0065	ppm	0.0000	0.16	768.8000	0.0065 (ppm)
Mo (204.598 nm)	0.0069	ppm	0.0010	14.52	19.1800	0.0069 (ppm)
Na (589.592 nm)	326.6000	ppm	0.4254	0.13	1785000.0000	326.6000 (ppm)
Ni (231.604 nm)	0.0006 u	ppm	0.0011	> 100.00	-14.3200	0.0006 u (ppm)
P (213.618 nm)	0.0664	ppm	0.0017	2.55	46.8100	0.0664 (ppm)
Pb (220.353 nm)	0.0003 u	ppm	0.0017	> 100.00	-9.4920	0.0003 u (ppm)
Sb (206.834 nm)	0.0050	ppm	0.0026	52.35	0.6191	0.0050 (ppm)
Se (196.026 nm)	0.0119	ppm	0.0027	22.84	5.6920	0.0119 (ppm)
Si (251.611 nm)	16.7500	ppm	0.0904	0.54	33420.0000	16.7500 (ppm)
Sn (189.925 nm)	-0.0021 u	ppm	0.0026	> 100.00	-2.4160	-0.0021 u (ppm)
Sr (421.552 nm)	1.0130	ppm	0.0028	0.28	335900.0000	1.0130 (ppm)
Ti (336.122 nm)	-0.0004 u	ppm	0.0003	78.96	-214.9000	-0.0004 u (ppm)
Tl (190.794 nm)	-0.0059 u	ppm	0.0065	> 100.00	-0.8754	-0.0059 u (ppm)
V (292.401 nm)	-0.0007 u	ppm	0.0002	24.04	130.8000	-0.0007 u (ppm)
W (207.912 nm)	-0.0091 u	ppm	0.0003	3.55	-18.2400	-0.0091 u (ppm)
Zn (202.548 nm)	-0.0022 u	ppm	0.0000	2.02	-11.1100	-0.0022 u (ppm)
Zr (343.823 nm)	0.0022	ppm	0.0002	7.90	279.0000	0.0022 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9342	323400.0000	0.0012	0.13
Y_R 371.029	0.9445	45890.0000	0.0074	0.79

Sample Name: xRINSE 5993206

Date: 12/11/2019 12:09:20 AM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0001	ppm	0.0001	> 100.00	-66.3100	0.0001 (ppm)
Al (396.152 nm)	-0.0001 u	ppm	0.0001	80.37	-328.6000	-0.0001 u (ppm)
As (188.980 nm)	-0.0016 u	ppm	0.0044	> 100.00	0.7177	-0.0016 u (ppm)
B (249.678 nm)	0.0016	ppm	0.0007	42.11	1.5530	0.0016 (ppm)
Ba (233.527 nm)	0.0000 u	ppm	0.0001	> 100.00	39.7600	0.0000 u (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	24.2100	0.0000 u (ppm)
Ca (422.673 nm)	0.0168	ppm	0.0037	21.94	182.1000	0.0168 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0000	88.22	-3.9360	0.0000 u (ppm)
Co (228.615 nm)	0.0002	ppm	0.0001	40.78	-10.1800	0.0002 (ppm)
Cr (205.560 nm)	-0.0001 u	ppm	0.0004	> 100.00	1.3870	-0.0001 u (ppm)
Cu (324.754 nm)	0.0008	ppm	0.0001	18.78	69.8500	0.0008 (ppm)
Fe (238.204 nm)	0.0045	ppm	0.0022	49.41	-38.8900	0.0045 (ppm)
K (766.491 nm)	0.0079 u	ppm	0.0729	> 100.00	-70.4900	0.0079 u (ppm)
Li (670.783 nm)	0.0050	ppm	0.0003	5.78	331.0000	0.0050 (ppm)
Mg (279.078 nm)	0.0217 Z	ppm	0.0093	42.80	61.4900 Z	0.0217 Z (ppm)
Mn (259.372 nm)	0.0000	ppm	0.0000	79.45	47.5900	0.0000 (ppm)
Mo (204.598 nm)	0.0003 u	ppm	0.0012	> 100.00	-3.0990	0.0003 u (ppm)
Na (589.592 nm)	0.2920	ppm	0.0138	4.73	2508.0000	0.2920 (ppm)
Ni (231.604 nm)	0.0013	ppm	0.0007	54.01	-10.6800	0.0013 (ppm)
P (213.618 nm)	0.0011	ppm	0.0011	> 100.00	1.0940	0.0011 (ppm)
Pb (220.353 nm)	-0.0003 u	ppm	0.0023	> 100.00	-11.8400	-0.0003 u (ppm)
Sb (206.834 nm)	0.0044 u	ppm	0.0083	> 100.00	0.1552	0.0044 u (ppm)
Se (196.026 nm)	-0.0010 u	ppm	0.0017	> 100.00	-1.2410	-0.0010 u (ppm)
Si (251.611 nm)	0.0077	ppm	0.0006	7.96	25.7100	0.0077 (ppm)
Sn (189.925 nm)	0.0018	ppm	0.0015	79.81	-0.5380	0.0018 (ppm)
Sr (421.552 nm)	0.0001	ppm	0.0002	> 100.00	22.1300	0.0001 (ppm)
Ti (336.122 nm)	-0.0004 u	ppm	0.0000	10.43	-173.4000	-0.0004 u (ppm)
Tl (190.794 nm)	0.0016 u	ppm	0.0039	> 100.00	5.9490	0.0016 u (ppm)
V (292.401 nm)	-0.0001 u	ppm	0.0000	24.88	83.7100	-0.0001 u (ppm)
W (207.912 nm)	-0.0002 u	ppm	0.0015	> 100.00	-4.5870	-0.0002 u (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0001	14.51	19.6300	0.0005 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0001	33.59	87.1200	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9826	340100.0000	0.0025	0.25
Y_R 371.029	0.9623	46750.0000	0.0079	0.82

Sample Name: CCV 5993196

Date: 12/11/2019 12:12:38 AM Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4729	ppm	0.0035	0.75	17300.0000	0.4729 (ppm)
Al (396.152 nm)	0.9326	ppm	0.0059	0.63	23630.0000	0.9326 (ppm)
As (188.980 nm)	0.9352	ppm	0.0068	0.73	493.2000	0.9352 (ppm)
B (249.678 nm)	0.9400	ppm	0.0082	0.88	9076.0000	0.9400 (ppm)
Ba (233.527 nm)	0.9524	ppm	0.0072	0.76	71960.0000	0.9524 (ppm)
Be (234.861 nm)	0.9406	ppm	0.0045	0.48	139700.0000	0.9406 (ppm)
Ca (422.673 nm)	4.7510	ppm	0.0385	0.81	17970.0000	4.7510 (ppm)
Cd (214.439 nm)	0.9410	ppm	0.0036	0.38	17580.0000	0.9410 (ppm)
Co (228.615 nm)	0.9387	ppm	0.0060	0.64	10570.0000	0.9387 (ppm)
Cr (205.560 nm)	0.9420	ppm	0.0006	0.07	3637.0000	0.9420 (ppm)
Cu (324.754 nm)	0.9449	ppm	0.0053	0.56	33490.0000	0.9449 (ppm)
Fe (238.204 nm)	0.9486	ppm	0.0108	1.14	2299.0000	0.9486 (ppm)
K (766.491 nm)	9.5320	ppm	0.0654	0.69	9202.0000	9.5320 (ppm)
Li (670.783 nm)	0.9607	ppm	0.0037	0.38	52940.0000	0.9607 (ppm)
Mg (279.078 nm)	4.7770	ppm	0.0407	0.85	11170.0000	4.7770 (ppm)
Mn (259.372 nm)	0.9408	ppm	0.0038	0.41	79480.0000	0.9408 (ppm)
Mo (204.598 nm)	0.9355	ppm	0.0034	0.36	3142.0000	0.9355 (ppm)
Na (589.592 nm)	9.7410	ppm	0.0545	0.56	54190.0000	9.7410 (ppm)
Ni (231.604 nm)	0.9378	ppm	0.0008	0.08	3636.0000	0.9378 (ppm)
P (213.618 nm)	0.9407	ppm	0.0065	0.69	627.0000	0.9407 (ppm)
Pb (220.353 nm)	0.9352	ppm	0.0079	0.85	1622.0000	0.9352 (ppm)
Sb (206.834 nm)	0.9273	ppm	0.0240	2.59	722.3000	0.9273 (ppm)
Se (196.026 nm)	0.9317	ppm	0.0100	1.07	526.1000	0.9317 (ppm)
Si (251.611 nm)	4.7160	ppm	0.0531	1.13	9560.0000	4.7160 (ppm)
Sn (189.925 nm)	0.9361	ppm	0.0000	0.00	461.8000	0.9361 (ppm)
Sr (421.552 nm)	0.9406	ppm	0.0036	0.38	311300.0000	0.9406 (ppm)
Ti (336.122 nm)	0.9387	ppm	0.0110	1.17	88790.0000	0.9387 (ppm)
Tl (190.794 nm)	0.9389	ppm	0.0062	0.66	830.8000	0.9389 (ppm)
V (292.401 nm)	0.9455	ppm	0.0056	0.60	25120.0000	0.9455 (ppm)
W (207.912 nm)	0.9371	ppm	0.0025	0.27	1349.0000	0.9371 (ppm)
Zn (202.548 nm)	0.9357	ppm	0.0051	0.54	12160.0000	0.9357 (ppm)
Zr (343.823 nm)	0.9104	ppm	0.0150	1.65	69070.0000	0.9104 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9784	338600.0000	0.0046	0.47
Y_R 371.029	0.9656	46910.0000	0.0076	0.79

Sample Name: CCB 5993195

Date: 12/11/2019 12:15:56 AM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0002	ppm	0.0001	46.47	-61.7200	0.0002 (ppm)
Al (396.152 nm)	-0.0010 u	ppm	0.0009	95.81	-345.2000	-0.0010 u (ppm)
As (188.980 nm)	0.0031 u	ppm	0.0046	> 100.00	3.2420	0.0031 u (ppm)
B (249.678 nm)	0.0006	ppm	0.0004	59.96	-8.4000	0.0006 (ppm)
Ba (233.527 nm)	0.0001	ppm	0.0000	26.97	50.2200	0.0001 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0002	50.26	68.7200	0.0003 (ppm)
Ca (422.673 nm)	0.0053 u	ppm	0.0091	> 100.00	139.0000	0.0053 u (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0000	9.10	3.6980	0.0004 (ppm)
Co (228.615 nm)	0.0000 u	ppm	0.0000	34.33	-13.2500	0.0000 u (ppm)
Cr (205.560 nm)	0.0011	ppm	0.0002	15.97	6.0300	0.0011 (ppm)
Cu (324.754 nm)	0.0008	ppm	0.0003	34.80	70.8800	0.0008 (ppm)
Fe (238.204 nm)	0.0019 u	ppm	0.0045	> 100.00	-45.4100	0.0019 u (ppm)
K (766.491 nm)	0.0767	ppm	0.0672	87.58	-3.5960	0.0767 (ppm)
Li (670.783 nm)	0.0034	ppm	0.0005	14.44	243.2000	0.0034 (ppm)
Mg (279.078 nm)	0.0092	ppm	0.0020	22.20	32.2200	0.0092 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0002	72.12	75.6600	0.0003 (ppm)
Mo (204.598 nm)	0.0058	ppm	0.0010	16.69	15.3700	0.0058 (ppm)
Na (589.592 nm)	0.2014	ppm	0.0073	3.62	2014.0000	0.2014 (ppm)
Ni (231.604 nm)	0.0019	ppm	0.0003	14.17	-8.0490	0.0019 (ppm)
P (213.618 nm)	-0.0030 u	ppm	0.0009	31.19	-1.8730	-0.0030 u (ppm)
Pb (220.353 nm)	-0.0001 u	ppm	0.0022	> 100.00	-11.4600	-0.0001 u (ppm)
Sb (206.834 nm)	0.0074	ppm	0.0053	71.93	2.4840	0.0074 (ppm)
Se (196.026 nm)	0.0074	ppm	0.0061	82.71	3.4830	0.0074 (ppm)
Si (251.611 nm)	0.0014	ppm	0.0014	93.78	14.1300	0.0014 (ppm)
Sn (189.925 nm)	0.0038	ppm	0.0039	> 100.00	0.4272	0.0038 (ppm)
Sr (421.552 nm)	0.0002	ppm	0.0000	23.98	47.2800	0.0002 (ppm)
Ti (336.122 nm)	0.0021	ppm	0.0004	21.43	62.2400	0.0021 (ppm)
Tl (190.794 nm)	0.0043	ppm	0.0017	40.06	8.3510	0.0043 (ppm)
V (292.401 nm)	0.0004	ppm	0.0004	87.93	96.8100	0.0004 (ppm)
W (207.912 nm)	0.0045	ppm	0.0019	41.67	2.0820	0.0045 (ppm)
Zn (202.548 nm)	0.0004	ppm	0.0001	19.63	17.2300	0.0004 (ppm)
Zr (343.823 nm)	-0.0002 u	ppm	0.0002	> 100.00	90.3200	-0.0002 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9785	338700.0000	0.0019	0.20
Y_R 371.029	0.9608	46680.0000	0.0005	0.05

Sample Name: 440-256683-M-2-B

Date: 12/11/2019 12:19:16 AM Rack:Tube: 4:45

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0009 u	ppm	0.0003	29.42	-111.9000	-0.0009 u (ppm)
Al (396.152 nm)	0.0268	ppm	0.0005	1.79	455.5000	0.0268 (ppm)
As (188.980 nm)	0.0081	ppm	0.0041	50.96	5.4910	0.0081 (ppm)
B (249.678 nm)	0.8320	ppm	0.0033	0.39	8107.0000	0.8320 (ppm)
Ba (233.527 nm)	0.0859	ppm	0.0001	0.16	6535.0000	0.0859 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0000	> 100.00	19.7400	0.0000 u (ppm)
Ca (422.673 nm)	132.9000	ppm	0.1686	0.13	499400.0000	132.9000 (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0000	2.60	-4.0280	0.0000 u (ppm)
Co (228.615 nm)	0.0006	ppm	0.0001	15.62	-2.9610	0.0006 (ppm)
Cr (205.560 nm)	0.0027	ppm	0.0006	22.02	13.5700	0.0027 (ppm)
Cu (324.754 nm)	0.0001 u	ppm	0.0003	> 100.00	-40.0400	0.0001 u (ppm)
Fe (238.204 nm)	0.0167	ppm	0.0023	13.73	-4.3620	0.0167 (ppm)
K (766.491 nm)	22.7500	ppm	0.0620	0.27	22080.0000	22.7500 (ppm)
Li (670.783 nm)	0.0127	ppm	0.0001	0.40	1102.0000	0.0127 (ppm)
Mg (279.078 nm)	61.1400	ppm	0.1322	0.22	142900.0000	61.1400 (ppm)
Mn (259.372 nm)	0.0587	ppm	0.0000	0.05	5170.0000	0.0587 (ppm)
Mo (204.598 nm)	0.0048	ppm	0.0012	24.64	12.1000	0.0048 (ppm)
Na (589.592 nm)	167.1000	ppm	0.2205	0.13	913700.0000	167.1000 (ppm)
Ni (231.604 nm)	0.0006	ppm	0.0002	41.70	-15.3900	0.0006 (ppm)
P (213.618 nm)	0.0109	ppm	0.0033	30.50	6.9700	0.0109 (ppm)
Pb (220.353 nm)	0.0002 u	ppm	0.0015	> 100.00	-9.0740	0.0002 u (ppm)
Sb (206.834 nm)	0.0049 u	ppm	0.0071	> 100.00	0.7919	0.0049 u (ppm)
Se (196.026 nm)	0.0156	ppm	0.0020	12.61	7.5100	0.0156 (ppm)
Si (251.611 nm)	13.5500	ppm	0.0263	0.19	27030.0000	13.5500 (ppm)
Sn (189.925 nm)	-0.0059 u	ppm	0.0017	28.06	-4.2620	-0.0059 u (ppm)
Sr (421.552 nm)	1.6180	ppm	0.0029	0.18	536900.0000	1.6180 (ppm)
Ti (336.122 nm)	0.0004	ppm	0.0003	72.89	-199.9000	0.0004 (ppm)
Tl (190.794 nm)	0.0062	ppm	0.0003	4.62	9.8830	0.0062 (ppm)
V (292.401 nm)	-0.0035 u	ppm	0.0000	0.27	132.1000	-0.0035 u (ppm)
W (207.912 nm)	-0.0048 u	ppm	0.0016	33.63	-13.0000	-0.0048 u (ppm)
Zn (202.548 nm)	-0.0015 u	ppm	0.0004	26.96	-18.8400	-0.0015 u (ppm)
Zr (343.823 nm)	0.0034	ppm	0.0002	7.18	380.5000	0.0034 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9390	325000.0000	0.0023	0.25
Y_R 371.029	0.9459	45960.0000	0.0016	0.17

Sample Name: 440-256683-N-3-B

Date: 12/11/2019 12:22:36 AM Rack:Tube: 4:46

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0005 u	ppm	0.0000	2.38	-99.2300	-0.0005 u (ppm)
Al (396.152 nm)	0.0276	ppm	0.0011	4.10	466.5000	0.0276 (ppm)
As (188.980 nm)	0.0022	ppm	0.0008	35.76	2.2990	0.0022 (ppm)
B (249.678 nm)	0.3473	ppm	0.0017	0.49	3378.0000	0.3473 (ppm)
Ba (233.527 nm)	0.0202	ppm	0.0002	0.97	1571.0000	0.0202 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	15.1300	0.0000 u (ppm)
Ca (422.673 nm)	155.5000	ppm	0.4247	0.27	584400.0000	155.5000 (ppm)
Cd (214.439 nm)	-0.0002 u	ppm	0.0003	> 100.00	-6.3870	-0.0002 u (ppm)
Co (228.615 nm)	0.0002 u	ppm	0.0003	> 100.00	-8.0290	0.0002 u (ppm)
Cr (205.560 nm)	0.0024	ppm	0.0000	1.29	12.9000	0.0024 (ppm)
Cu (324.754 nm)	-0.0004 u	ppm	0.0002	41.91	-74.3600	-0.0004 u (ppm)
Fe (238.204 nm)	0.0106	ppm	0.0024	22.89	-20.3800	0.0106 (ppm)
K (766.491 nm)	20.8500	ppm	0.0486	0.23	20230.0000	20.8500 (ppm)
Li (670.783 nm)	0.0108	ppm	0.0010	9.16	969.8000	0.0108 (ppm)
Mg (279.078 nm)	43.4500	ppm	0.3362	0.77	101500.0000	43.4500 (ppm)
Mn (259.372 nm)	-0.0001 u	ppm	0.0000	57.56	189.9000	-0.0001 u (ppm)
Mo (204.598 nm)	0.0116	ppm	0.0010	8.27	34.7900	0.0116 (ppm)
Na (589.592 nm)	101.5000	ppm	0.0441	0.04	555600.0000	101.5000 (ppm)
Ni (231.604 nm)	0.0024	ppm	0.0009	38.89	-8.2840	0.0024 (ppm)
P (213.618 nm)	0.0226	ppm	0.0017	7.67	14.8700	0.0226 (ppm)
Pb (220.353 nm)	0.0029	ppm	0.0002	8.45	-4.5970	0.0029 (ppm)
Sb (206.834 nm)	0.0086	ppm	0.0010	11.66	3.6400	0.0086 (ppm)
Se (196.026 nm)	0.0099	ppm	0.0011	11.07	4.1830	0.0099 (ppm)
Si (251.611 nm)	9.2800	ppm	0.0666	0.72	18520.0000	9.2800 (ppm)
Sn (189.925 nm)	-0.0053 u	ppm	0.0020	36.58	-4.0200	-0.0053 u (ppm)
Sr (421.552 nm)	1.4320	ppm	0.0040	0.28	475600.0000	1.4320 (ppm)
Ti (336.122 nm)	-0.0002 u	ppm	0.0000	8.22	-270.9000	-0.0002 u (ppm)
Tl (190.794 nm)	-0.0011 u	ppm	0.0060	> 100.00	2.9900	-0.0011 u (ppm)
V (292.401 nm)	-0.0019 u	ppm	0.0003	14.47	193.0000	-0.0019 u (ppm)
W (207.912 nm)	-0.0037 u	ppm	0.0002	4.74	-11.6700	-0.0037 u (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0003	63.45	-5.3060	0.0005 (ppm)
Zr (343.823 nm)	0.0036	ppm	0.0002	5.31	398.5000	0.0036 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9448	327000.0000	0.0017	0.18
Y_R 371.029	0.9570	46490.0000	0.0006	0.06

Sample Name: 440-256743-A-1-B

Date: 12/11/2019 12:25:56 AM Rack:Tube: 4:47

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0023 u	ppm	0.0001	5.62	-174.2000	-0.0023 u (ppm)
Al (396.152 nm)	0.0385	ppm	0.0083	21.48	1213.0000	0.0385 (ppm)
As (188.980 nm)	0.0392	ppm	0.0010	2.59	21.2500	0.0392 (ppm)
B (249.678 nm)	12.5600	ppm	0.0844	0.67	122600.0000	12.5600 (ppm)
Ba (233.527 nm)	0.0843	ppm	0.0011	1.34	6424.0000	0.0843 (ppm)
Be (234.861 nm)	0.0001	ppm	0.0001	97.35	33.0700	0.0001 (ppm)
Ca (422.673 nm)	310.8000	ppm	0.9831	0.32	1168000.0000	310.8000 (ppm)
Cd (214.439 nm)	0.0004	ppm	0.0005	> 100.00	4.6520	0.0004 (ppm)
Co (228.615 nm)	0.0012	ppm	0.0001	5.92	6.7420	0.0012 (ppm)
Cr (205.560 nm)	0.0388	ppm	0.0007	1.88	153.9000	0.0388 (ppm)
Cu (324.754 nm)	0.0089	ppm	0.0000	0.14	159.2000	0.0089 (ppm)
Fe (238.204 nm)	0.0495	ppm	0.0004	0.85	82.0000	0.0495 (ppm)
K (766.491 nm)	94.6400	ppm	0.5728	0.61	92030.0000	94.6400 (ppm)
Li (670.783 nm)	0.6563	ppm	0.0017	0.26	37160.0000	0.6563 (ppm)
Mg (279.078 nm)	134.5000	ppm	1.1730	0.87	314400.0000	134.5000 (ppm)
Mn (259.372 nm)	-0.0049 u	ppm	0.0000	0.08	271.8000	-0.0049 u (ppm)
Mo (204.598 nm)	0.4915	ppm	0.0023	0.47	1648.0000	0.4915 (ppm)
Na (589.592 nm)	4456.0000 o	ppm	10.6000	0.24	24340000.0000	4456.0000 o (ppm)
Ni (231.604 nm)	0.0027	ppm	0.0015	55.53	-9.9380	0.0027 (ppm)
P (213.618 nm)	0.0712	ppm	0.0139	19.56	40.7900	0.0712 (ppm)
Pb (220.353 nm)	-0.0090 u	ppm	0.0027	30.15	-23.5600	-0.0090 u (ppm)
Sb (206.834 nm)	0.0151	ppm	0.0035	23.28	2.1940	0.0151 (ppm)
Se (196.026 nm)	0.0310	ppm	0.0008	2.68	15.3400	0.0310 (ppm)
Si (251.611 nm)	55.9600	ppm	0.2509	0.45	111600.0000	55.9600 (ppm)
Sn (189.925 nm)	-0.0207 u	ppm	0.0052	25.13	-11.4700	-0.0207 u (ppm)
Sr (421.552 nm)	3.9340	ppm	0.0189	0.48	1305000.0000	3.9340 (ppm)
Ti (336.122 nm)	-0.0013 u	ppm	0.0003	24.75	-503.2000	-0.0013 u (ppm)
Tl (190.794 nm)	0.0123	ppm	0.0045	36.78	13.4000	0.0123 (ppm)
V (292.401 nm)	0.0686	ppm	0.0003	0.46	2127.0000	0.0686 (ppm)
W (207.912 nm)	-0.0112 u	ppm	0.0023	20.66	-22.1300	-0.0112 u (ppm)
Zn (202.548 nm)	0.2007	ppm	0.0013	0.67	2568.0000	0.2007 (ppm)
Zr (343.823 nm)	0.0144	ppm	0.0008	5.26	1240.0000	0.0144 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029

Label	Internal Standard
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7616	263600.0000	0.0112	1.47
Y_R 371.029	0.8336	40500.0000	0.0015	0.18

Sample Name: 440-256743-A-2-B

Date: 12/11/2019 12:29:16 AM Rack:Tube: 4:48

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0011 u	ppm	0.0004	33.38	-132.4000	-0.0011 u (ppm)
Al (396.152 nm)	0.0485	ppm	0.0024	5.01	1489.0000	0.0485 (ppm)
As (188.980 nm)	0.0444	ppm	0.0042	9.47	23.8500	0.0444 (ppm)
B (249.678 nm)	15.1400	ppm	0.0770	0.51	147700.0000	15.1400 (ppm)
Ba (233.527 nm)	0.0836	ppm	0.0002	0.21	6373.0000	0.0836 (ppm)
Be (234.861 nm)	0.0000 u	ppm	0.0001	> 100.00	19.3100	0.0000 u (ppm)
Ca (422.673 nm)	346.5000	ppm	0.1102	0.03	1302000.0000	346.5000 (ppm)
Cd (214.439 nm)	0.0005	ppm	0.0000	5.02	5.4960	0.0005 (ppm)
Co (228.615 nm)	0.0008	ppm	0.0007	86.67	3.2760	0.0008 (ppm)
Cr (205.560 nm)	0.0475	ppm	0.0006	1.36	187.9000	0.0475 (ppm)
Cu (324.754 nm)	0.0106	ppm	0.0003	3.07	196.9000	0.0106 (ppm)
Fe (238.204 nm)	0.0576	ppm	0.0005	0.83	103.7000	0.0576 (ppm)
K (766.491 nm)	114.4000	ppm	0.3116	0.27	111200.0000	114.4000 (ppm)
Li (670.783 nm)	0.7955	ppm	0.0045	0.57	44990.0000	0.7955 (ppm)
Mg (279.078 nm)	159.5000	ppm	0.3004	0.19	372700.0000	159.5000 (ppm)
Mn (259.372 nm)	-0.0032 u	ppm	0.0001	1.97	481.2000	-0.0032 u (ppm)
Mo (204.598 nm)	0.4741	ppm	0.0029	0.61	1590.0000	0.4741 (ppm)
Na (589.592 nm)	####	ppm	N/A	N/A	####	#### (ppm)
Ni (231.604 nm)	0.0043	ppm	0.0007	16.97	-4.2370	0.0043 (ppm)
P (213.618 nm)	0.0707	ppm	0.0006	0.87	40.4100	0.0707 (ppm)
Pb (220.353 nm)	-0.0080 u	ppm	0.0016	19.92	-21.1100	-0.0080 u (ppm)
Sb (206.834 nm)	-0.0053 u	ppm	0.0125	> 100.00	-13.4900	-0.0053 u (ppm)
Se (196.026 nm)	0.0390	ppm	0.0030	7.74	19.6500	0.0390 (ppm)
Si (251.611 nm)	65.7500	ppm	0.2787	0.42	131200.0000	65.7500 (ppm)
Sn (189.925 nm)	-0.0151 u	ppm	0.0052	34.38	-8.6450	-0.0151 u (ppm)
Sr (421.552 nm)	4.5610	ppm	0.0035	0.08	1513000.0000	4.5610 (ppm)
Ti (336.122 nm)	-0.0017 u	ppm	0.0002	12.56	-571.2000	-0.0017 u (ppm)
Tl (190.794 nm)	0.0097	ppm	0.0082	85.15	10.7500	0.0097 (ppm)
V (292.401 nm)	0.0796	ppm	0.0000	0.03	2464.0000	0.0796 (ppm)
W (207.912 nm)	-0.0102 u	ppm	0.0002	2.04	-20.7200	-0.0102 u (ppm)
Zn (202.548 nm)	0.2382	ppm	0.0027	1.15	3052.0000	0.2382 (ppm)
Zr (343.823 nm)	0.0107	ppm	0.0007	6.71	962.0000	0.0107 (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.7395	256000.0000	0.0080	1.08
Y_R 371.029	0.8203	39850.0000	0.0055	0.67

Sample Name: xRINSE 5993206

Date: 12/11/2019 12:32:34 AM Rack:Tube: S1:8

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	-0.0002 u	ppm	0.0002	> 100.00	-75.2100	-0.0002 u (ppm)
Al (396.152 nm)	-0.0002 u	ppm	0.0002	87.58	-328.7000	-0.0002 u (ppm)
As (188.980 nm)	0.0034	ppm	0.0017	51.46	3.3860	0.0034 (ppm)
B (249.678 nm)	0.0096	ppm	0.0026	27.10	80.0300	0.0096 (ppm)
Ba (233.527 nm)	0.0000	ppm	0.0000	> 100.00	43.1700	0.0000 (ppm)
Be (234.861 nm)	0.0000	ppm	0.0000	51.36	23.0600	0.0000 (ppm)
Ca (422.673 nm)	0.1088 Z	ppm	0.0167	15.32	527.9000 Z	0.1088 Z (ppm)
Cd (214.439 nm)	0.0000 u	ppm	0.0002	> 100.00	-2.6890	0.0000 u (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0006	> 100.00	-11.7700	0.0001 u (ppm)
Cr (205.560 nm)	-0.0006 u	ppm	0.0004	74.93	-0.4069	-0.0006 u (ppm)
Cu (324.754 nm)	0.0007	ppm	0.0005	79.73	66.0300	0.0007 (ppm)
Fe (238.204 nm)	-0.0013 u	ppm	0.0005	42.37	-53.3300	-0.0013 u (ppm)
K (766.491 nm)	0.2606	ppm	0.0184	7.05	175.3000	0.2606 (ppm)
Li (670.783 nm)	0.0049	ppm	0.0001	1.40	326.2000	0.0049 (ppm)
Mg (279.078 nm)	0.0950 Z	ppm	0.0271	28.50	232.6000 Z	0.0950 Z (ppm)
Mn (259.372 nm)	0.0001 u	ppm	0.0001	> 100.00	52.6700	0.0001 u (ppm)
Mo (204.598 nm)	0.0026	ppm	0.0002	9.35	4.7840	0.0026 (ppm)
Na (589.592 nm)	3.3200 Z	ppm	0.0890	2.68	19050.0000 Z	3.3200 Z (ppm)
Ni (231.604 nm)	0.0016	ppm	0.0003	18.72	-9.5060	0.0016 (ppm)
P (213.618 nm)	0.0045	ppm	0.0032	70.54	3.4690	0.0045 (ppm)
Pb (220.353 nm)	-0.0020 u	ppm	0.0012	58.36	-14.8200	-0.0020 u (ppm)
Sb (206.834 nm)	0.0027 u	ppm	0.0104	> 100.00	-1.2310	0.0027 u (ppm)
Se (196.026 nm)	-0.0030 u	ppm	0.0003	9.94	-2.3880	-0.0030 u (ppm)
Si (251.611 nm)	0.0313	ppm	0.0086	27.51	72.8500	0.0313 (ppm)
Sn (189.925 nm)	-0.0014 u	ppm	0.0018	> 100.00	-2.1530	-0.0014 u (ppm)
Sr (421.552 nm)	0.0016	ppm	0.0002	14.32	507.9000	0.0016 (ppm)
Ti (336.122 nm)	-0.0005 u	ppm	0.0000	4.89	-178.3000	-0.0005 u (ppm)
Tl (190.794 nm)	0.0001 u	ppm	0.0042	> 100.00	4.6060	0.0001 u (ppm)
V (292.401 nm)	0.0002	ppm	0.0001	36.46	92.7900	0.0002 (ppm)
W (207.912 nm)	-0.0012 u	ppm	0.0008	65.10	-6.0480	-0.0012 u (ppm)
Zn (202.548 nm)	0.0005	ppm	0.0000	1.68	19.4600	0.0005 (ppm)
Zr (343.823 nm)	-0.0001 u	ppm	0.0000	17.29	99.3100	-0.0001 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9487	328400.0000	0.0039	0.41
Y_R 371.029	0.9341	45380.0000	0.0006	0.06

Sample Name: CCV 5993196

Date: 12/11/2019 12:35:52 AM
Rack:Tube: S1:4

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.4677	ppm	0.0025	0.53	17110.0000	0.4677 (ppm)
Al (396.152 nm)	0.9251	ppm	0.0068	0.73	23430.0000	0.9251 (ppm)
As (188.980 nm)	0.9346	ppm	0.0016	0.18	492.9000	0.9346 (ppm)
B (249.678 nm)	0.9349	ppm	0.0060	0.64	9027.0000	0.9349 (ppm)
Ba (233.527 nm)	0.9572	ppm	0.0046	0.48	72320.0000	0.9572 (ppm)
Be (234.861 nm)	0.9341	ppm	0.0048	0.51	138800.0000	0.9341 (ppm)
Ca (422.673 nm)	4.7520	ppm	0.0038	0.08	17970.0000	4.7520 (ppm)
Cd (214.439 nm)	0.9339	ppm	0.0042	0.45	17450.0000	0.9339 (ppm)
Co (228.615 nm)	0.9309	ppm	0.0066	0.71	10480.0000	0.9309 (ppm)
Cr (205.560 nm)	0.9352	ppm	0.0039	0.41	3611.0000	0.9352 (ppm)
Cu (324.754 nm)	0.9391	ppm	0.0032	0.34	33290.0000	0.9391 (ppm)
Fe (238.204 nm)	0.9347	ppm	0.0166	1.78	2265.0000	0.9347 (ppm)
K (766.491 nm)	9.4760	ppm	0.0805	0.85	9148.0000	9.4760 (ppm)
Li (670.783 nm)	0.9579	ppm	0.0068	0.71	52790.0000	0.9579 (ppm)
Mg (279.078 nm)	4.8080	ppm	0.0350	0.73	11240.0000	4.8080 (ppm)
Mn (259.372 nm)	0.9332	ppm	0.0039	0.42	78840.0000	0.9332 (ppm)
Mo (204.598 nm)	0.9280	ppm	0.0051	0.55	3117.0000	0.9280 (ppm)
Na (589.592 nm)	10.6400	ppm	0.0666	0.63	59100.0000	10.6400 (ppm)
Ni (231.604 nm)	0.9299	ppm	0.0021	0.23	3605.0000	0.9299 (ppm)
P (213.618 nm)	0.9488	ppm	0.0122	1.29	632.9000	0.9488 (ppm)
Pb (220.353 nm)	0.9311	ppm	0.0072	0.78	1615.0000	0.9311 (ppm)
Sb (206.834 nm)	0.9097	ppm	0.0231	2.54	708.4000	0.9097 (ppm)
Se (196.026 nm)	0.9264	ppm	0.0110	1.19	523.1000	0.9264 (ppm)
Si (251.611 nm)	4.7070	ppm	0.0417	0.89	9542.0000	4.7070 (ppm)
Sn (189.925 nm)	0.9364	ppm	0.0048	0.52	461.9000	0.9364 (ppm)
Sr (421.552 nm)	0.9347	ppm	0.0052	0.55	309400.0000	0.9347 (ppm)
Ti (336.122 nm)	0.9303	ppm	0.0110	1.18	88000.0000	0.9303 (ppm)
Tl (190.794 nm)	0.9283	ppm	0.0096	1.03	821.4000	0.9283 (ppm)
V (292.401 nm)	0.9405	ppm	0.0078	0.83	24990.0000	0.9405 (ppm)
W (207.912 nm)	0.9253	ppm	0.0059	0.63	1332.0000	0.9253 (ppm)
Zn (202.548 nm)	0.9317	ppm	0.0032	0.34	12110.0000	0.9317 (ppm)
Zr (343.823 nm)	0.8928 Q	ppm	0.0159	1.78	67740.0000 Q	0.8928 Q (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9601	332300.0000	0.0028	0.29
Y_R 371.029	0.9363	45490.0000	0.0062	0.67

Sample Name: CCB 5993195

Date: 12/11/2019 12:39:10 AM Rack:Tube: S1:1

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

Analyte Results

Label	Solution Concentration	Unit	SD	%RSD	Intensity	Calculated Concentration
Ag (328.068 nm)	0.0003 u	ppm	0.0004	> 100.00	-58.7300	0.0003 u (ppm)
Al (396.152 nm)	-0.0009 u	ppm	0.0001	9.65	-344.5000	-0.0009 u (ppm)
As (188.980 nm)	0.0019 u	ppm	0.0048	> 100.00	2.5810	0.0019 u (ppm)
B (249.678 nm)	0.0025	ppm	0.0005	21.35	9.7560	0.0025 (ppm)
Ba (233.527 nm)	0.0002	ppm	0.0001	39.95	59.2500	0.0002 (ppm)
Be (234.861 nm)	0.0003	ppm	0.0001	43.23	71.1000	0.0003 (ppm)
Ca (422.673 nm)	0.0153	ppm	0.0092	59.87	176.5000	0.0153 (ppm)
Cd (214.439 nm)	0.0003	ppm	0.0003	79.81	2.7480	0.0003 (ppm)
Co (228.615 nm)	0.0001 u	ppm	0.0010	> 100.00	-11.4900	0.0001 u (ppm)
Cr (205.560 nm)	0.0002 u	ppm	0.0011	> 100.00	2.6200	0.0002 u (ppm)
Cu (324.754 nm)	0.0009	ppm	0.0001	6.08	75.8000	0.0009 (ppm)
Fe (238.204 nm)	-0.0003 u	ppm	0.0013	> 100.00	-50.8200	-0.0003 u (ppm)
K (766.491 nm)	0.1840	ppm	0.1557	84.61	100.8000	0.1840 (ppm)
Li (670.783 nm)	0.0040	ppm	0.0010	25.60	275.6000	0.0040 (ppm)
Mg (279.078 nm)	0.0164	ppm	0.0025	15.47	49.0100	0.0164 (ppm)
Mn (259.372 nm)	0.0003	ppm	0.0002	58.86	72.1700	0.0003 (ppm)
Mo (204.598 nm)	0.0057	ppm	0.0014	25.03	15.0800	0.0057 (ppm)
Na (589.592 nm)	0.9077 Z	ppm	0.0733	8.08	5872.0000 Z	0.9077 Z (ppm)
Ni (231.604 nm)	0.0017	ppm	0.0012	72.07	-8.8500	0.0017 (ppm)
P (213.618 nm)	0.0016	ppm	0.0005	33.67	1.3420	0.0016 (ppm)
Pb (220.353 nm)	-0.0016 u	ppm	0.0013	81.22	-14.2300	-0.0016 u (ppm)
Sb (206.834 nm)	0.0105 Z	ppm	0.0006	5.93	4.8880 Z	0.0105 Z (ppm)
Se (196.026 nm)	0.0005 u	ppm	0.0021	> 100.00	-0.4035	0.0005 u (ppm)
Si (251.611 nm)	0.0052	ppm	0.0004	7.38	21.6300	0.0052 (ppm)
Sn (189.925 nm)	0.0079	ppm	0.0092	> 100.00	2.4730	0.0079 (ppm)
Sr (421.552 nm)	0.0003	ppm	0.0002	68.79	68.4400	0.0003 (ppm)
Ti (336.122 nm)	0.0020	ppm	0.0005	22.89	59.1300	0.0020 (ppm)
Tl (190.794 nm)	0.0045	ppm	0.0036	80.56	8.5860	0.0045 (ppm)
V (292.401 nm)	0.0004	ppm	0.0004	> 100.00	95.4600	0.0004 (ppm)
W (207.912 nm)	0.0058	ppm	0.0018	30.63	3.9980	0.0058 (ppm)
Zn (202.548 nm)	0.0004	ppm	0.0000	8.90	18.0800	0.0004 (ppm)
Zr (343.823 nm)	0.0000 u	ppm	0.0001	> 100.00	105.9000	0.0000 u (ppm)

Label	Internal Standard
Ag (328.068 nm)	Y 371.029
Al (396.152 nm)	Y 371.029
As (188.980 nm)	Y 371.029
B (249.678 nm)	Y 371.029

Label	Internal Standard
Ba (233.527 nm)	Y_R 371.029
Be (234.861 nm)	Y 371.029
Ca (422.673 nm)	Y_R 371.029
Cd (214.439 nm)	Y 371.029
Co (228.615 nm)	Y 371.029
Cr (205.560 nm)	Y 371.029
Cu (324.754 nm)	Y 371.029
Fe (238.204 nm)	Y_R 371.029
K (766.491 nm)	Y_R 371.029
Li (670.783 nm)	Y_R 371.029
Mg (279.078 nm)	Y_R 371.029
Mn (259.372 nm)	Y 371.029
Mo (204.598 nm)	Y 371.029
Na (589.592 nm)	Y_R 371.029
Ni (231.604 nm)	Y 371.029
P (213.618 nm)	Y 371.029
Pb (220.353 nm)	Y 371.029
Sb (206.834 nm)	Y 371.029
Se (196.026 nm)	Y 371.029
Si (251.611 nm)	Y 371.029
Sn (189.925 nm)	Y 371.029
Sr (421.552 nm)	Y_R 371.029
Ti (336.122 nm)	Y 371.029
Tl (190.794 nm)	Y 371.029
V (292.401 nm)	Y 371.029
W (207.912 nm)	Y 371.029
Zn (202.548 nm)	Y 371.029
Zr (343.823 nm)	Y 371.029

Internal Standards Results

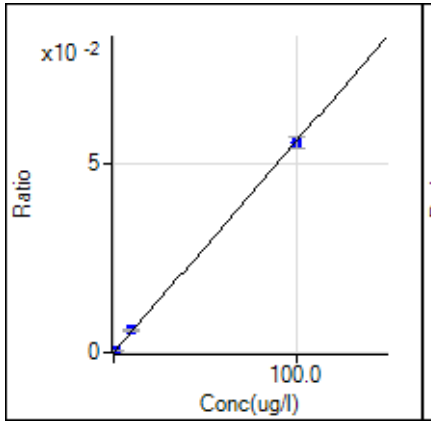
Label	Ratio	Intensity	SD	%RSD
Y 371.029	0.9630	333300.0000	0.0019	0.19
Y_R 371.029	0.9394	45640.0000	0.0043	0.46

Data File	Acq. Date-Time	Type	Sample Name	Vial Number	Comment
001SMPL.d	12/9/2019 7:03 PM	Sample	RINSE	2107	
002SMPL.d	12/9/2019 7:06 PM	Sample	Blank	1	
003CALB.d	12/9/2019 7:08 PM	CalBlk	STD0-5990822	1	BLANK
004CALS.d	12/9/2019 7:11 PM	CalStd	STD1-5990821	2	0.2 PPB
005CALS.d	12/9/2019 7:13 PM	CalStd	STD2-5990818	3	1.0 PPB
006CALS.d	12/9/2019 7:15 PM	CalStd	STD3-5990817	4	10.0 PPB
007CALS.d	12/9/2019 7:18 PM	CalStd	STD4-5990816	5	100 PPB
008_ICV.d	12/9/2019 7:20 PM	ICV	ICV-5990815	2101	25 PPB
009_ICB.d	12/9/2019 7:32 PM	ICB	XICB-5990822	1	
010_ICB.d	12/9/2019 7:34 PM	ICB	ICB-5990822	1	
011RL_2.d	12/9/2019 7:36 PM	RL0_2	CRI-5990829	2	+/- 50% 0.2PPB RL CHK
012_RL1.d	12/9/2019 7:39 PM	RL1_0	CRI-5990825	2102	+/- 50% 1xRL CHK
013_RL2.d	12/9/2019 7:41 PM	RL2_0	CRI-5990826	2103	+/- 50% 2xRL CHK
014ICSA.d	12/9/2019 7:44 PM	ICSA	ICSA-5990827	2104	
015ICSB.d	12/9/2019 7:46 PM	ICSB	ICSAB-5990828	2105	
016SMPL.d	12/9/2019 7:49 PM	Sample	RINSE	2107	
017SMPL.d	12/9/2019 7:51 PM	Sample	RINSE	2107	
018SMPL.d	12/9/2019 7:53 PM	Sample	RINSE	2107	
019SMPL.d	12/9/2019 7:56 PM	Sample	RINSE	2107	
020_CCV.d	12/9/2019 7:58 PM	CCV	CCV-5990824	2201	
021_CCB.d	12/9/2019 8:01 PM	CCB	CCB-5990822	2301	
022SMPL.d	12/9/2019 8:24 PM	Sample	RINSE	2107	
023SMPL.d	12/9/2019 8:26 PM	Sample	RINSE	2107	
024_CCV.d	12/9/2019 8:29 PM	CCV	CCV-5990824	2201	
025_CCB.d	12/9/2019 8:31 PM	CCB	CCB-5990822	2301	
026_MB.d	12/9/2019 8:41 PM	MB	mb 440-584703/1-a@20	3101	CAM (MN) SOIL 440-584703 MP
027SMPL.d	12/9/2019 8:43 PM	Sample	lcs 440-584703/2-a@20	3102	CAM (MN) SOIL 440-584703 MP
028SMPL.d	12/9/2019 8:46 PM	Sample	440-256528-b-1-a@20	3103	CAM (MN) SOIL 440-584703 MP
029SMPL.d	12/9/2019 8:48 PM	Sample	440-256528-b-1-b ms@20	3104	CAM (MN) SOIL 440-584703 MP
030SMPL.d	12/9/2019 8:50 PM	Sample	440-256528-b-1-c msd@20	3105	CAM (MN) SOIL 440-584703 MP
031SMPL.d	12/9/2019 8:53 PM	Sample	440-256528-b-1-a PDS@20	3106	CAM (MN) SOIL 440-584703 MP
032SMPL.d	12/9/2019 9:00 PM	Sample	440-256528-b-1-a SD@100	3107	CAM (MN) SOIL 440-584703 MP
033_CCV.d	12/9/2019 9:03 PM	CCV	CCV-5990824	2201	
034_CCB.d	12/9/2019 9:05 PM	CCB	CCB-5990822	2301	
035SMPL.d	12/9/2019 9:08 PM	Sample	440-256528-b-2-a@20	3108	CAM (MN) SOIL 440-584703 MP
036SMPL.d	12/9/2019 9:10 PM	Sample	440-256528-b-3-a@20	3109	CAM (MN) SOIL 440-584703 MP
037SMPL.d	12/9/2019 9:12 PM	Sample	440-256528-b-4-a@20	3110	CAM (MN) SOIL 440-584703 MP
038SMPL.d	12/9/2019 9:15 PM	Sample	440-256528-b-5-a@20	3111	CAM (MN) SOIL 440-584703 MP
039SMPL.d	12/9/2019 9:17 PM	Sample	440-256528-b-6-a@20	3112	CAM (MN) SOIL 440-584703 MP
040SMPL.d	12/9/2019 9:20 PM	Sample	440-256528-b-7-a@20	3201	CAM (MN) SOIL 440-584703 MP
041SMPL.d	12/9/2019 9:22 PM	Sample	440-256528-b-8-a@20	3202	CAM (MN) SOIL 440-584703 MP
042SMPL.d	12/9/2019 9:24 PM	Sample	440-256528-b-9-a@20	3203	CAM (MN) SOIL 440-584703 MP
043SMPL.d	12/9/2019 9:27 PM	Sample	440-256528-b-10-a@20	3204	CAM (MN) SOIL 440-584703 MP
044_CCV.d	12/9/2019 9:38 PM	CCV	CCV-5990824	2201	
045_CCB.d	12/9/2019 9:42 PM	CCB	CCB-5990822	2301	
046SMPL.d	12/9/2019 9:45 PM	Sample	440-256528-b-11-a@20	3205	CAM (MN) SOIL 440-584703 MP
047SMPL.d	12/9/2019 9:47 PM	Sample	440-256528-b-12-a@20	3206	CAM (MN) SOIL 440-584703 MP
048SMPL.d	12/9/2019 9:49 PM	Sample	440-256528-b-13-a@20	3207	CAM (MN) SOIL 440-584703 MP

049SMPL.d	12/9/2019 9:52 PM	Sample	440-256528-b-14-a@20	3208	CAM (MN) SOIL 440-584703 MP
050SMPL.d	12/9/2019 9:54 PM	Sample	440-256528-b-15-a@20	3209	CAM (MN) SOIL 440-584703 MP
051SMPL.d	12/9/2019 10:03 PM	Sample	440-256528-b-16-a@20	3210	CAM (MN) SOIL 440-584703 MP
052SMPL.d	12/9/2019 10:05 PM	Sample	440-256528-b-18-a@20	3211	CAM (MN) SOIL 440-584703 MP
053SMPL.d	12/9/2019 10:11 PM	Sample	440-256528-b-19-a@20	3212	CAM (MN) SOIL 440-584703 MP
054_CCV.d	12/9/2019 10:18 PM	CCV	CCV-5990824	2201	
055_CCB.d	12/9/2019 10:21 PM	CCB	XCCB-5990822	2301	
056_CCB.d	12/9/2019 10:23 PM	CCB	CCB-5990822	2301	
057_RL2.d	12/9/2019 10:26 PM	RL2_0	CRI-5990826	2103	+/- 50% 2xRL CHK
058ICSA.d	12/9/2019 10:28 PM	ICSA	ICSA-5990827	2104	
059ICSB.d	12/9/2019 10:31 PM	ICSB	ICSAB-5990828	2105	
060SMPL.d	12/9/2019 10:33 PM	Sample	RINSE	2107	
061SMPL.d	12/9/2019 10:35 PM	Sample	RINSE	2107	
062SMPL.d	12/9/2019 10:38 PM	Sample	RINSE	2107	
063_CCV.d	12/9/2019 10:40 PM	CCV	CCV-5990824	2201	
064_CCB.d	12/9/2019 10:43 PM	CCB	CCB-5990822	2301	
065_MB.d	12/9/2019 10:45 PM	MB	mb 440-584717/1-a@20	3301	CAM (MN) SOIL 440-584717 MP
066SMPL.d	12/9/2019 10:48 PM	Sample	lcs 440-584717/2-a@20	3302	CAM (MN) SOIL 440-584717 MP
067SMPL.d	12/9/2019 10:50 PM	Sample	440-255674-c-12-b@20	3303	CAM (MN) SOIL 440-584717 MP
068SMPL.d	12/9/2019 10:53 PM	Sample	440-255674-b-12-c ms@20	3304	CAM (MN) SOIL 440-584717 MP
069SMPL.d	12/9/2019 10:55 PM	Sample	440-255674-b-12-d msd@20	3305	CAM (MN) SOIL 440-584717 MP
070SMPL.d	12/9/2019 10:57 PM	Sample	440-255674-c-12-b PDS@20	3306	CAM (MN) SOIL 440-584717 MP
071_CCV.d	12/9/2019 11:00 PM	CCV	CCV-5990824	2201	
072_CCB.d	12/9/2019 11:02 PM	CCB	CCB-5990822	2301	
073SMPL.d	12/9/2019 11:04 PM	Sample	440-255674-c-12-b SD@100	3307	CAM (MN) SOIL 440-584717 MP
074SMPL.d	12/9/2019 11:07 PM	Sample	440-255674-b-1-b@20	3308	CAM (MN) SOIL 440-584717 MP
075SMPL.d	12/9/2019 11:09 PM	Sample	440-255674-b-2-b@20	3309	CAM (MN) SOIL 440-584717 MP
076SMPL.d	12/9/2019 11:12 PM	Sample	440-255674-b-3-b@20	3310	CAM (MN) SOIL 440-584717 MP
077SMPL.d	12/9/2019 11:14 PM	Sample	440-255674-b-5-b@20	3311	CAM (MN) SOIL 440-584717 MP
078SMPL.d	12/9/2019 11:16 PM	Sample	X440-255674-b-6-b@20	3312	CAM (MN) SOIL 440-584717 MP
079SMPL.d	12/9/2019 11:19 PM	Sample	X440-255674-b-7-b@20	3401	CAM (MN) SOIL 440-584717 MP
080SMPL.d	12/9/2019 11:21 PM	Sample	X440-255674-b-8-b@20	3402	CAM (MN) SOIL 440-584717 MP
081SMPL.d	12/9/2019 11:23 PM	Sample	X440-255674-b-9-b@20	3403	CAM (MN) SOIL 440-584717 MP
082SMPL.d	12/9/2019 11:26 PM	Sample	X440-255674-b-10-b@20	3404	CAM (MN) SOIL 440-584717 MP
083_CCV.d	12/9/2019 11:28 PM	CCV	CCV-5990824	2201	
084_CCB.d	12/9/2019 11:31 PM	CCB	CCB-5990822	2301	
085SMPL.d	12/9/2019 11:33 PM	Sample	440-255674-b-11-b@20	3405	CAM (MN) SOIL 440-584717 MP
086SMPL.d	12/9/2019 11:36 PM	Sample	440-255674-b-13-b@20	3406	CAM (MN) SOIL 440-584717 MP
087SMPL.d	12/9/2019 11:38 PM	Sample	440-255674-b-14-b@20	3407	CAM (MN) SOIL 440-584717 MP
088SMPL.d	12/9/2019 11:40 PM	Sample	440-255674-b-15-b@20	3408	CAM (MN) SOIL 440-584717 MP
089SMPL.d	12/9/2019 11:43 PM	Sample	440-255674-b-16-b@20	3409	CAM (MN) SOIL 440-584717 MP
090SMPL.d	12/9/2019 11:45 PM	Sample	440-255674-b-17-b@20	3410	CAM (MN) SOIL 440-584717 MP
091SMPL.d	12/9/2019 11:47 PM	Sample	440-255674-b-18-b@20	3411	CAM (MN) SOIL 440-584717 MP
092SMPL.d	12/9/2019 11:50 PM	Sample	440-255674-b-20-b@20	3412	CAM (MN) SOIL 440-584717 MP
093SMPL.d	12/9/2019 11:52 PM	Sample	440-255674-b-21-b@20	3501	CAM (MN) SOIL 440-584717 MP
094SMPL.d	12/9/2019 11:55 PM	Sample	440-255674-b-22-b@20	3502	CAM (MN) SOIL 440-584717 MP
095_CCV.d	12/9/2019 11:57 PM	CCV	CCV-5990824	2201	
096_CCB.d	12/9/2019 11:59 PM	CCB	CCB-5990822	2301	
097_CCB.d	12/10/2019 12:02 AM	CCB	CCB-5990822	2301	
098_RL2.d	12/10/2019 12:04 AM	RL2_0	CRI-5990826	2103	+/- 50% 2xRL CHK

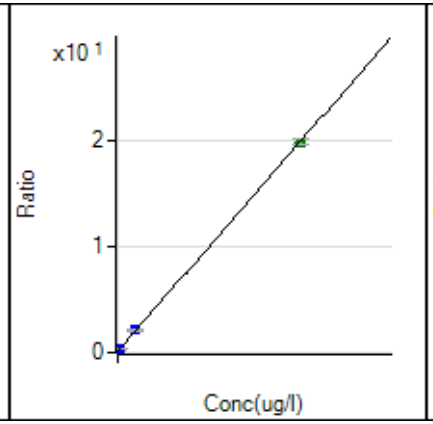
099ICSA.d	12/10/2019 12:07 AM	ICSA	ICSA-5990827	2104	
100ICSB.d	12/10/2019 12:09 AM	ICSB	ICSAB-5990828	2105	
101SMPL.d	12/10/2019 12:11 AM	Sample	RINSE	2107	
102SMPL.d	12/10/2019 12:14 AM	Sample	RINSE	2107	
103SMPL.d	12/10/2019 12:16 AM	Sample	RINSE	2107	

Tune Step	Mass	Name	R	a	b (blank)	DL	BEC	Units
1	9	Be	0.999972124	0.000559339	0	0	0	ug/l
1	23	Na	0.999999914	0.007912895	0.110986068	0.865513506	14.02597536	ug/l
1	24	Mg	0.999996488	0.00391968	0.001036869	0.131261668	0.264529088	ug/l
1	27	Al	0.999986936	0.001506612	0.000438117	0.415427695	0.290796103	ug/l
1	39	K	0.99999655	0.003543723	0.27390822	2.905266322	77.29392057	ug/l
1	44	Ca	0.999997288	0.000189986	0.000862498	2.240698659	4.53980706	ug/l
1	51	V	0.99999494	0.042504891	0.007759371	0.058555889	0.182552435	ug/l
1	52	Cr	0.999997655	0.053475378	0.006739078	0.058047733	0.126022076	ug/l
1	53	[V]						ug/l
1	55	Mn	0.999997608	0.029654844	0.000211773	0.012059388	0.007141275	ug/l
1	56	Fe	0.999999761	0.045727859	0.024141915	0.043130508	0.527947641	ug/l
1	59	Co	0.999997084	0.088110189	0.000124582	0.001904379	0.001413931	ug/l
1	60	Ni	0.999999983	0.023823746	0.000362562	0.007591811	0.015218514	ug/l
1	63	[Cu]	0.999996376	0.066895127	0.001747964	0.004138713	0.026129915	ug/l
1	65	Cu	0.999996747	0.033245162	0.001236206	0.006036095	0.037184541	ug/l
1	66	Zn	0.999993342	0.014817447	0.001576735	0.069296386	0.106410712	ug/l
1	75	As	0.999999892	0.009720304	0.000398442	0.047035877	0.040990708	ug/l
1	76	[Se]						ug/l
1	77	[As]						ug/l
1	78	Se	0.999994564	0.000654704	0.000925227	0.334244214	1.413198613	ug/l
1	83	[Se]						ug/l
1	85	Rb	0.999999953	0.003953318	1.26E-05	0.002114034	0.003198637	ug/l
1	88	Sr	0.999999333	0.005306137	2.99E-05	0.010739313	0.005641378	ug/l
1	90	Zr						ug/l
1	95	Mo	0.999999983	0.004471795	3.16E-05	0.01027591	0.007073628	ug/l
1	98	[Mo]						ug/l
1	99	[Mo]						ug/l
1	107	Ag	0.99999962	0.014894696	2.84E-05	0.001655018	0.001908455	ug/l
1	108	[Cd]						ug/l
1	111	Cd	0.999999906	0.002190816	1.58E-06	0.003740701	0.000719898	ug/l
1	114	[Cd]						ug/l
1	118	Sn	0.999999433	0.004913091	0.000347507	0.007803442	0.070730851	ug/l
1	123	Sb	0.999996956	0.00463374	0.000271489	0.044210088	0.058589702	ug/l
1	133	Cs	0.999999942	0.01332683	1.74E-05	0.000616888	0.001303428	ug/l
1	137	Ba	0.999999902	0.002313566	1.89E-05	0.016089471	0.008172862	ug/l
1	140	Ce	0.999992721	0.035258042	4.11E-05	0.002223611	0.001166094	ug/l
1	205	Tl	0.999975634	0.011179857	6.87E-06	0.00109381	0.000614656	ug/l
1	206	[Pb]						ug/l
1	207	[Pb]						ug/l
1	208	Pb	0.999991648	0.014683001	3.21E-05	0.00138888	0.002186821	ug/l
1	232	Th	0.999835234	0.000762133	0.0001918	0.110566169	0.251661521	ug/l
1	238	U	0.99998225	0.015274289	1.01E-05	0.001570214	0.000662285	ug/l
1	45	Sc-45 (IS)						ug/l
1	72	Ge (IS)						ug/l
1	115	In-115 (IS)						ug/l
1	159	Tb-159 (IS)						ug/l



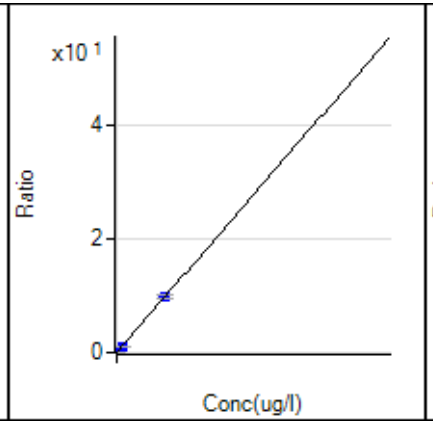
9 Be [He] / ISTD: 45 Sc-45 (IS)
y = 5.593E-4 x

R	1.0000
DL	0
BEC	0



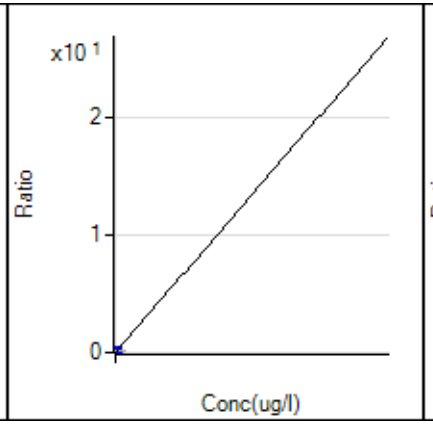
23 Na [He] / ISTD: 45 Sc-45 (IS)
y = 7.913E-3 x + 1.110E-1

R	1.0000
DL	0.8655
BEC	14.03



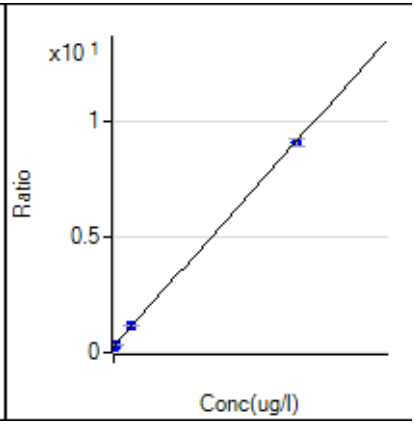
24 Mg [He] / ISTD: 45 Sc-45 (IS)
y = 3.920E-3 x + 1.037E-3

R	1.0000
DL	0.1313
BEC	0.2645



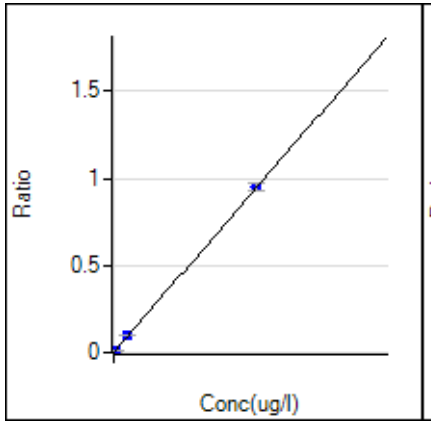
27 Al [He] / ISTD: 45 Sc-45 (IS)
y = 1.507E-3 x + 4.381E-4

R	1.0000
DL	0.4154
BEC	0.2908



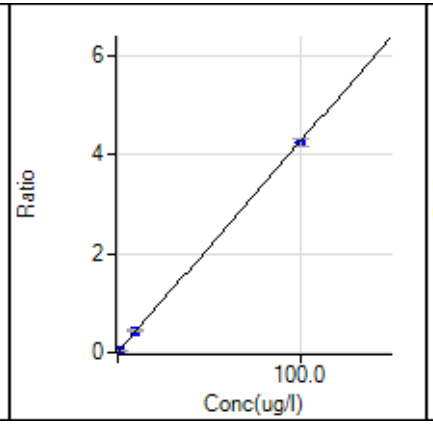
39 K [He] / ISTD: 45 Sc-45 (IS)
y = 3.544E-3 x + 2.739E-1

R	1.0000
DL	2.905
BEC	77.29



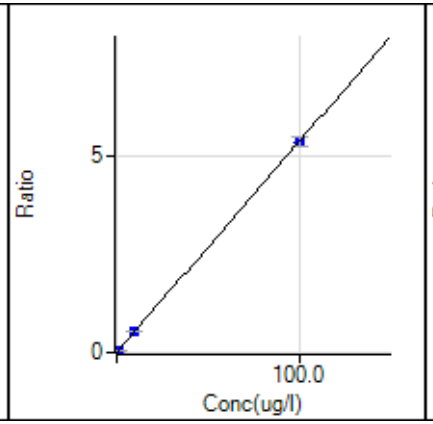
44 Ca [He] / ISTD: 45 Sc-45 (IS)
y = 1.900E-4 x + 8.625E-4

R	1.0000
DL	2.241
BEC	4.54



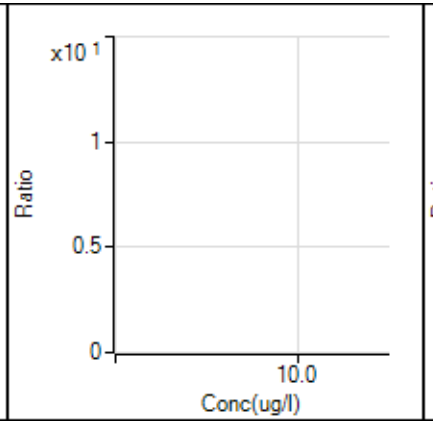
51 V [He] / ISTD: 45 Sc-45 (IS)
y = 4.250E-2 x + 7.759E-3

R	1.0000
DL	0.05856
BEC	0.1826



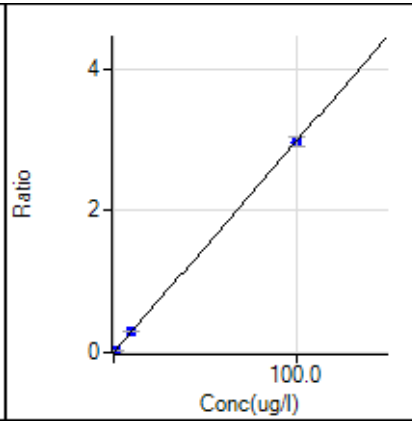
52 Cr [He] / ISTD: 45 Sc-45 (IS)
y = 5.348E-2 x + 6.739E-3

R	1.0000
DL	0.05805
BEC	0.126



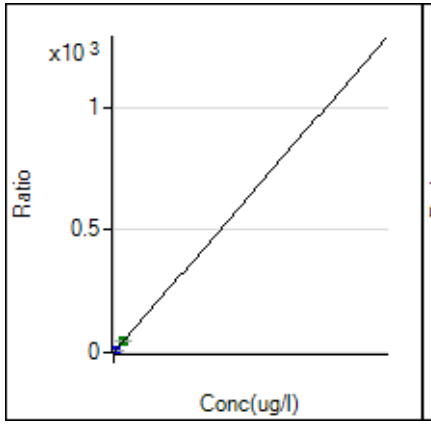
53 [V] [He] / ISTD: 45 Sc-45 (IS)
y =

R	
DL	
BEC	



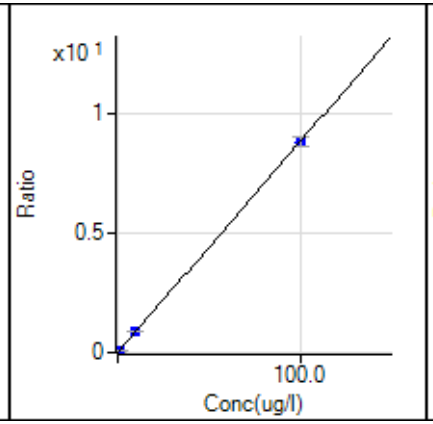
55 Mn [He] / ISTD: 45 Sc-45 (IS)
y = 2.965E-2 x + 2.118E-4

R	1.0000
DL	0.01206
BEC	0.007141



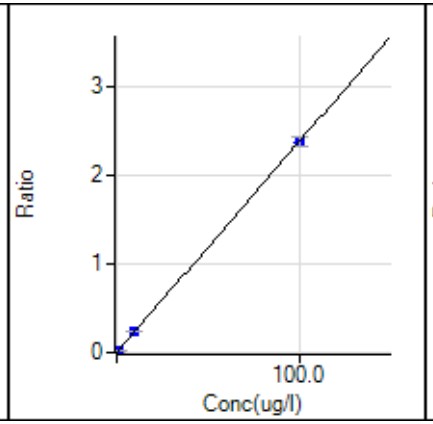
56 Fe [He] / ISTD: 45 Sc-45 (IS)
y = 4.573E-2 x + 2.414E-2

R	1.0000
DL	0.04313
BEC	0.5279



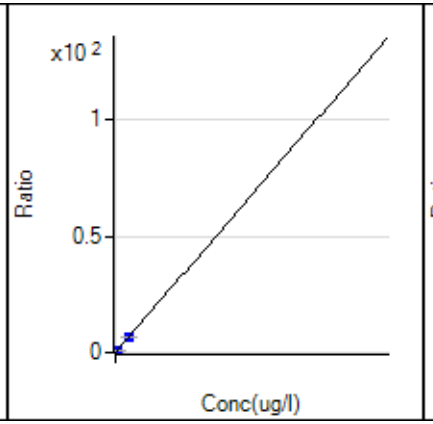
59 Co [He] / ISTD: 45 Sc-45 (IS)
y = 8.811E-2 x + 1.246E-4

R	1.0000
DL	0.001904
BEC	0.001414



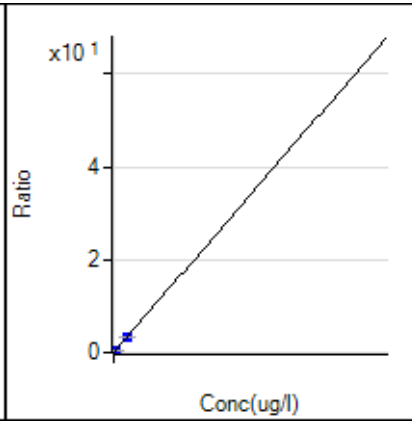
60 Ni [He] / ISTD: 45 Sc-45 (IS)
y = 2.382E-2 x + 3.626E-4

R	1.0000
DL	0.007592
BEC	0.01522



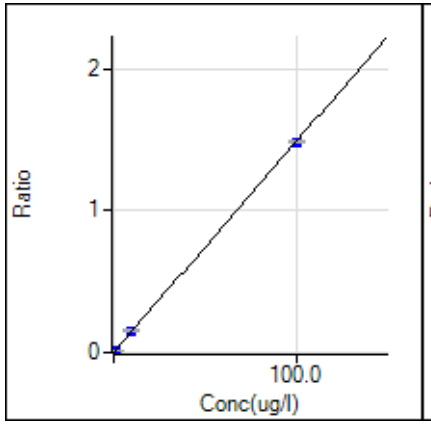
63 [Cu] [He] / ISTD: 45 Sc-45 (IS)
y = 6.690E-2 x + 1.748E-3

R	1.0000
DL	0.004139
BEC	0.02613



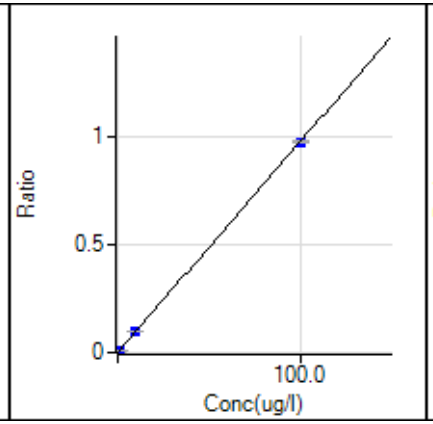
65 Cu [He] / ISTD: 45 Sc-45 (IS)
y = 3.325E-2 x + 1.236E-3

R	1.0000
DL	0.006036
BEC	0.03718



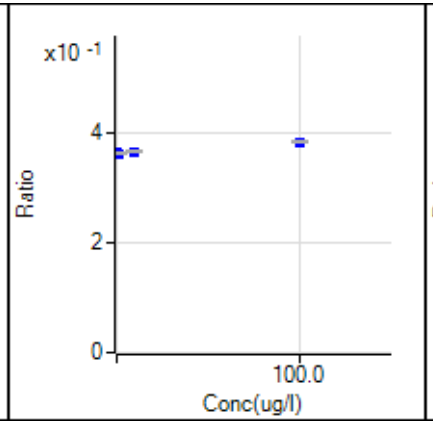
66 Zn [He] / ISTD: 72 Ge (IS)
y = 1.482E-2 x + 1.577E-3

R	1.0000
DL	0.0693
BEC	0.1064



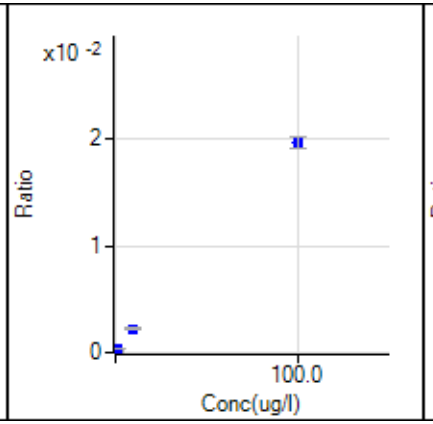
75 As [He] / ISTD: 72 Ge (IS)
y = 9.720E-3 x + 3.984E-4

R	1.0000
DL	0.04704
BEC	0.04099



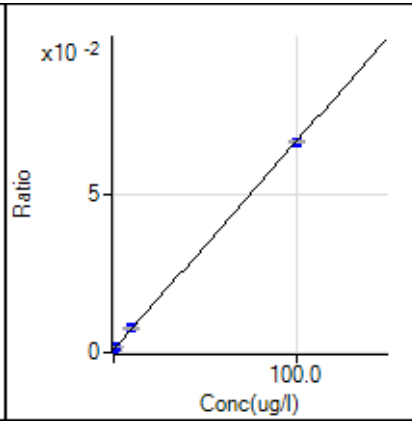
76 [Se] [He] / ISTD: 72 Ge (IS)
Excluded

R	
DL	
BEC	



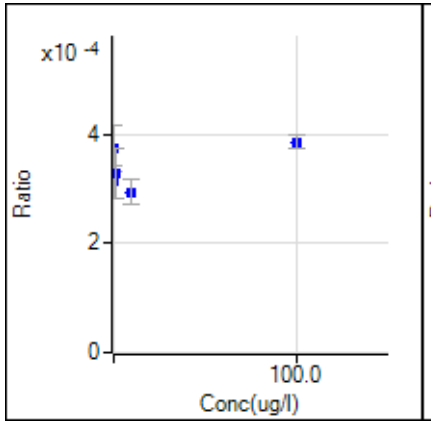
77 [As] [He] / ISTD: 72 Ge (IS)
Excluded

R	
DL	
BEC	

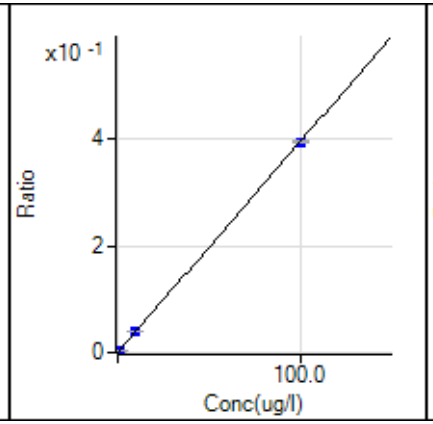


78 Se [He] / ISTD: 72 Ge (IS)
y = 6.547E-4 x + 9.252E-4

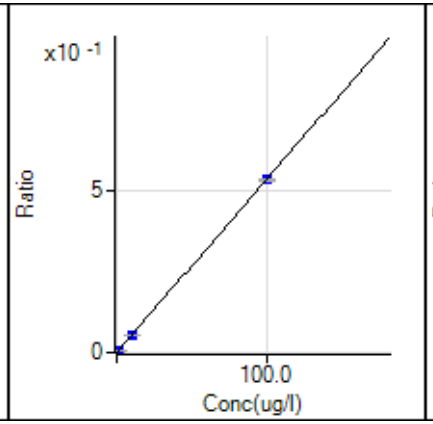
R	1.0000
DL	0.3342
BEC	1.413



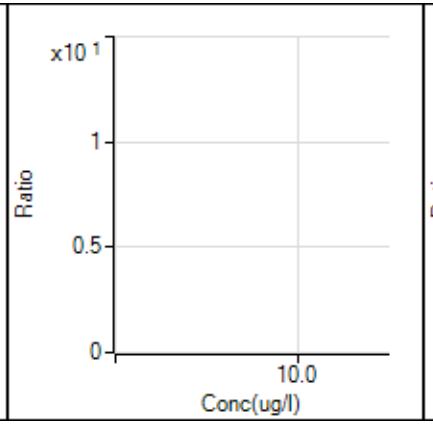
83 [Se] [He] / ISTD: 72 Ge (IS)
Excluded
R
DL
BEC



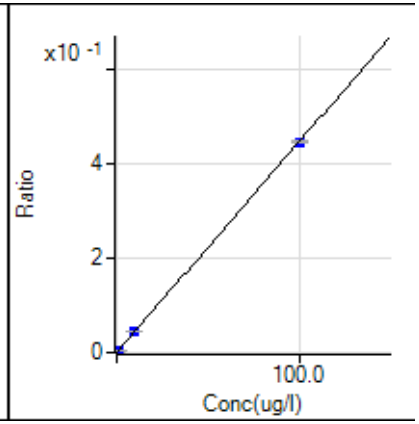
85 Rb [He] / ISTD: 115 In-115 (IS)
y = 3.953E-3 x + 1.265E-5
R 1.0000
DL 0.002114
BEC 0.003199



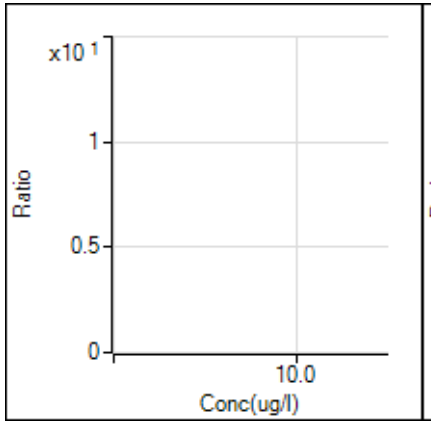
88 Sr [He] / ISTD: 115 In-115 (IS)
y = 5.306E-3 x + 2.993E-5
R 1.0000
DL 0.01074
BEC 0.005641



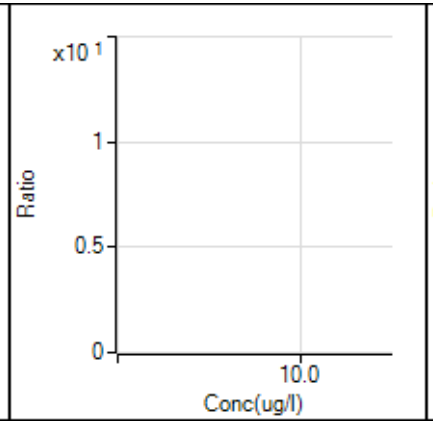
90 Zr [He] / ISTD: 72 Ge (IS)
y =
R
DL
BEC



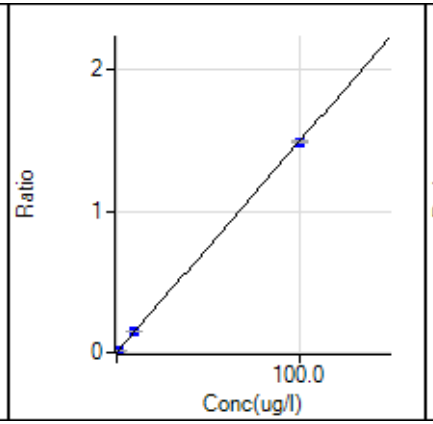
95 Mo [He] / ISTD: 115 In-115 (IS)
y = 4.472E-3 x + 3.163E-5
R 1.0000
DL 0.01028
BEC 0.007074



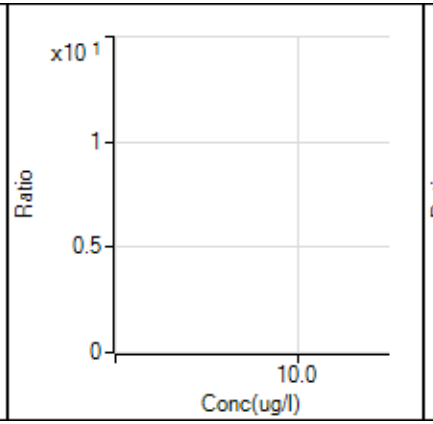
98 [Mo] [He] / ISTD: 115 In-115 (IS)
Excluded
R
DL
BEC



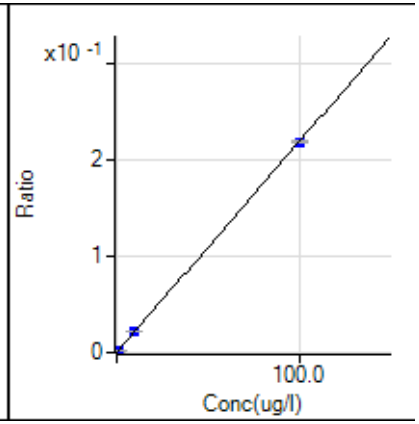
99 [Mo] [He] / ISTD: 115 In-115 (IS)
Excluded
R
DL
BEC



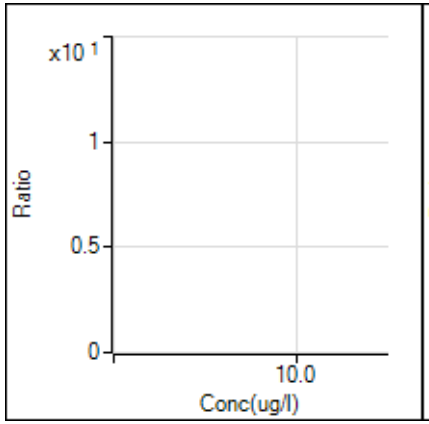
107 Ag [He] / ISTD: 115 In-115 (IS)
y = 1.489E-2 x + 2.843E-5
R 1.0000
DL 0.001655
BEC 0.001908



108 [Cd] [He] / ISTD: 115 In-115 (IS)
Excluded
R
DL
BEC



111 Cd [He] / ISTD: 115 In-115 (IS)
y = 2.191E-3 x + 1.577E-6
R 1.0000
DL 0.003741
BEC 0.0007199



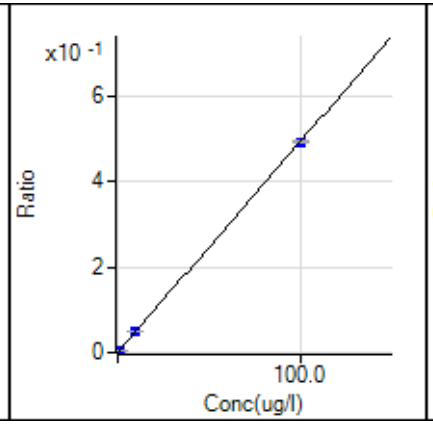
114 [Cd] [He] / ISTD: 115 In-115 (IS)

y =

R

DL

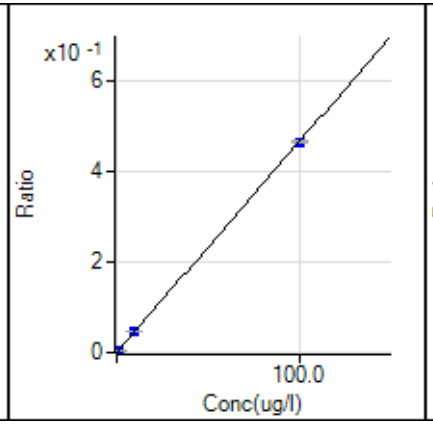
BEC



118 Sn [He] / ISTD: 115 In-115 (IS)

y = 4.913E-3 x + 3.475E-4

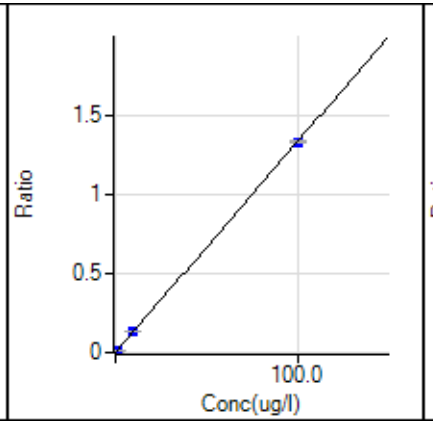
R	1.0000
DL	0.007803
BEC	0.07073



123 Sb [He] / ISTD: 115 In-115 (IS)

y = 4.634E-3 x + 2.715E-4

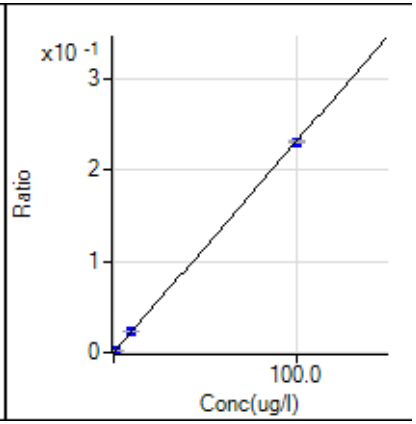
R	1.0000
DL	0.04421
BEC	0.05859



133 Cs [He] / ISTD: 115 In-115 (IS)

y = 1.333E-2 x + 1.737E-5

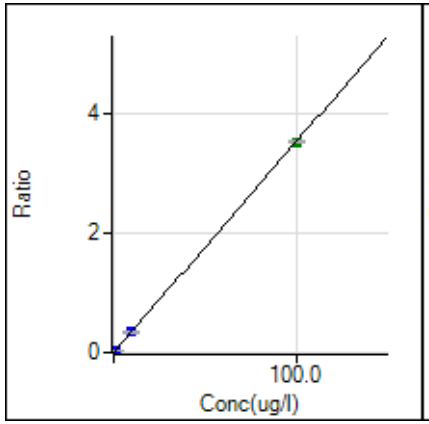
R	1.0000
DL	0.0006169
BEC	0.001303



137 Ba [He] / ISTD: 115 In-115 (IS)

y = 2.314E-3 x + 1.891E-5

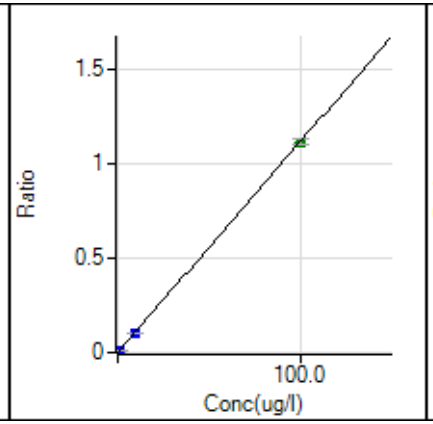
R	1.0000
DL	0.01609
BEC	0.008173



140 Ce [He] / ISTD: 115 In-115 (IS)

y = 3.526E-2 x + 4.111E-5

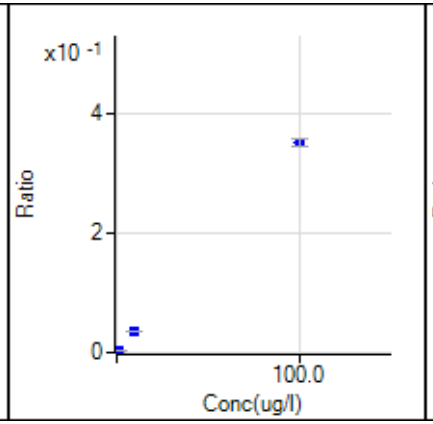
R	1.0000
DL	0.002224
BEC	0.001166



205 Tl [He] / ISTD: 159 Tb-159 (IS)

y = 1.118E-2 x + 6.872E-6

R	1.0000
DL	0.001094
BEC	0.0006147



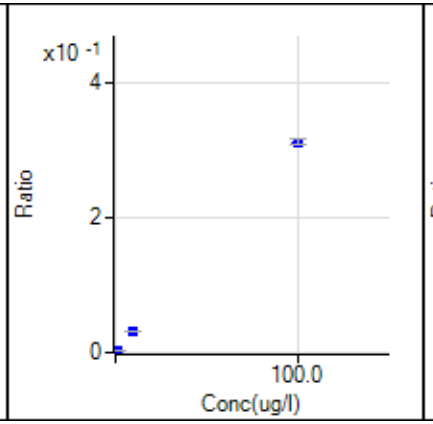
206 [Pb] [He] / ISTD: 159 Tb-159 (IS)

Excluded

R

DL

BEC



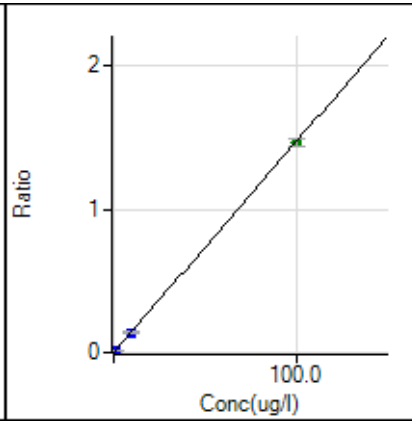
207 [Pb] [He] / ISTD: 159 Tb-159 (IS)

Excluded

R

DL

BEC

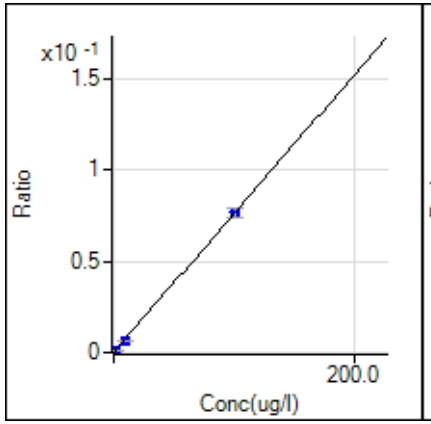


208 Pb [He] / ISTD: 159 Tb-159 (IS)

y = 1.468E-2 x + 3.211E-5

R	1.0000
DL	0.001389
BEC	0.002187

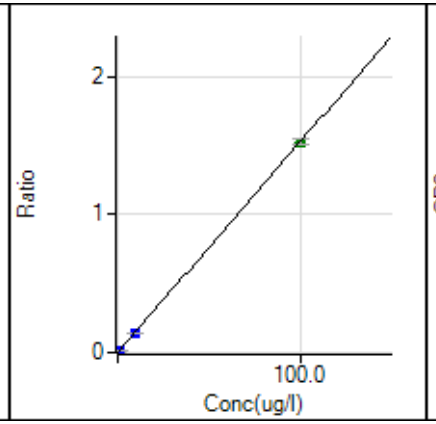
Calibration for C:\Agilent\ICPMH\1\DATA\191209-2LL.b\051SMPL.d



232 Th [He] / ISTD: 159 Tb-159 (IS)

y = 7.621E-4 x + 1.918E-4

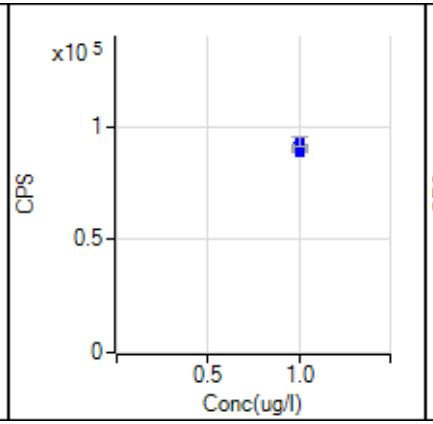
R	0.9998
DL	0.1106
BEC	0.2517



238 U [He] / ISTD: 159 Tb-159 (IS)

y = 1.527E-2 x + 1.012E-5

R	1.0000
DL	0.00157
BEC	0.0006623



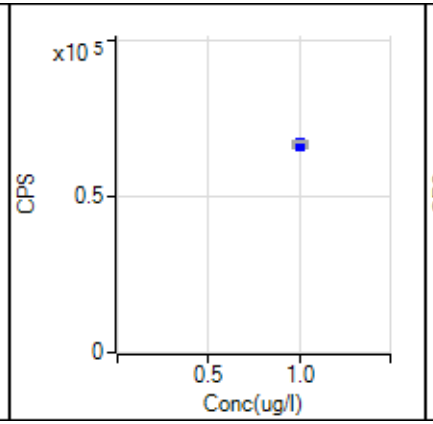
45 Sc-45 (IS) [He]

Excluded

R

DL

BEC



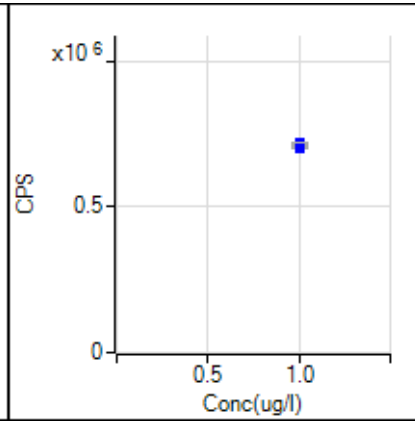
72 Ge (IS) [He]

Excluded

R

DL

BEC



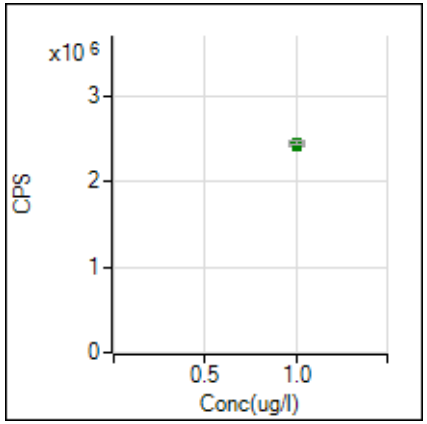
115 In-115 (IS) [He]

Excluded

R

DL

BEC



159 Tb-159 (IS) [He]

Excluded

R

DL

BEC

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	001SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:03:43-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

Sample Report

Sample Table

Sample Name	Blank
Data File Name	002SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:06:10-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	1
InstrumentModelName	ICPMS05

Calibration Blank Report

Sample Table

Sample Name	STD0-5990822
Data File Name	003CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:08:37-08:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	BLANK

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	He	0	#DIV/0!
Na	23	1	He	9875	2.79
Mg	24	1	He	92	16.30
Al	27	1	He	39	47.21
K	39	1	He	24367	0.69
Ca	44	1	He	77	15.68
V	51	1	He	690	10.09
Cr	52	1	He	600	16.19
Mn	55	1	He	19	56.72
Fe	56	1	He	2148	3.15
Co	59	1	He	11	45.82
Ni	60	1	He	32	15.80
Cu	65	1	He	110	6.06
Zn	66	1	He	106	21.02
As	75	1	He	27	37.75
Se	78	1	He	62	8.06
Rb	85	1	He	9	21.63
Sr	88	1	He	21	63.80
Mo	95	1	He	22	48.22
Ag	107	1	He	20	28.87
Cd	111	1	He	1	173.21
Sn	118	1	He	244	3.15
Sb	123	1	He	191	25.42
Cs	133	1	He	12	15.73
Ba	137	1	He	13	66.12
Ce	140	1	He	29	63.55
Tl	205	1	He	17	59.99
Pb	208	1	He	78	21.98
Th	232	1	He	464	15.43
U	238	1	He	24	78.75

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Sc-45 (IS)	45	1	He	88966	0.91
Ge (IS)	72	1	He	67006	0.72
In-115 (IS)	115	1	He	703530	0.57
Tb-159 (IS)	159	1	He	2419851	0.85

Calibration Standard Report

Sample Table

Sample Name	STD1-5990821
Data File Name	004CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:11:04-08:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	0.2 PPB
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	He	14	26.66
Na	23	1	He	13702	0.97
Mg	24	1	He	2050	5.45
Al	27	1	He	102	16.41
K	39	1	He	25535	0.18
Ca	44	1	He	283	8.88
V	51	1	He	1373	7.18
Cr	52	1	He	1697	4.62
Mn	55	1	He	647	5.43
Fe	56	1	He	11059	1.94
Co	59	1	He	1609	5.32
Ni	60	1	He	503	7.37
Cu	65	1	He	817	4.95
Zn	66	1	He	369	6.02
As	75	1	He	146	15.36
Se	78	1	He	71	5.08
Rb	85	1	He	606	8.35
Sr	88	1	He	828	2.46
Mo	95	1	He	699	16.97
Ag	107	1	He	2167	6.73
Cd	111	1	He	356	2.87
Sn	118	1	He	999	7.88
Sb	123	1	He	896	5.98
Cs	133	1	He	1999	2.68
Ba	137	1	He	317	11.14
Ce	140	1	He	4987	3.09
Tl	205	1	He	5049	1.65
Pb	208	1	He	7140	1.79
Th	232	1	He	612	3.63
U	238	1	He	7139	1.81

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	90436	1.23	88966	101.65	60	120	
Ge (IS)	72	1	He	66012	1.14	67006	98.52	60	120	
In-115 (IS)	115	1	He	705984	0.47	703530	100.35	60	120	
Tb-159 (IS)	159	1	He	2458679	0.28	2419851	101.60	60	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-5990818
Data File Name	005CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:13:31-08:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	1.0 PPB
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	He	43	27.73
Na	23	1	He	28145	0.30
Mg	24	1	He	9564	1.80
Al	27	1	He	171	8.11
K	39	1	He	32857	0.90
Ca	44	1	He	1012	3.52
V	51	1	He	4497	3.80
Cr	52	1	He	5631	1.32
Mn	55	1	He	2816	3.11
Fe	56	1	He	43945	1.18
Co	59	1	He	8103	1.87
Ni	60	1	He	2219	1.88
Cu	65	1	He	3487	3.11
Zn	66	1	He	1171	6.01
As	75	1	He	691	5.52
Se	78	1	He	113	16.42
Rb	85	1	He	2729	4.95
Sr	88	1	He	3947	3.02
Mo	95	1	He	3186	0.68
Ag	107	1	He	10480	1.23
Cd	111	1	He	1545	2.95
Sn	118	1	He	3764	5.51
Sb	123	1	He	3373	4.77
Cs	133	1	He	9631	0.92
Ba	137	1	He	1623	4.09
Ce	140	1	He	24312	1.73
Tl	205	1	He	24977	2.20
Pb	208	1	He	33835	0.48
Th	232	1	He	1346	5.15
U	238	1	He	34753	0.96

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	91367	0.51	88966	102.70	60	120	
Ge (IS)	72	1	He	66065	0.80	67006	98.60	60	120	
In-115 (IS)	115	1	He	704369	0.66	703530	100.12	60	120	
Tb-159 (IS)	159	1	He	2415126	0.61	2419851	99.80	60	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-5990817
Data File Name	006CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:15:57-08:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	10.0 PPB
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	He	548	3.46
Na	23	1	He	192269	0.52
Mg	24	1	He	92430	0.59
Al	27	1	He	1490	8.57
K	39	1	He	107979	0.34
Ca	44	1	He	9011	4.99
V	51	1	He	40831	0.38
Cr	52	1	He	50755	1.89
Mn	55	1	He	27842	2.22
Fe	56	1	He	418814	0.86
Co	59	1	He	82715	1.12
Ni	60	1	He	21866	1.21
Cu	65	1	He	31431	0.84
Zn	66	1	He	10441	2.55
As	75	1	He	6567	2.10
Se	78	1	He	516	3.89
Rb	85	1	He	28327	1.06
Sr	88	1	He	38489	1.01
Mo	95	1	He	32104	0.91
Ag	107	1	He	107586	0.58
Cd	111	1	He	15650	2.31
Sn	118	1	He	35101	0.84
Sb	123	1	He	32567	2.81
Cs	133	1	He	95289	0.79
Ba	137	1	He	16498	2.68
Ce	140	1	He	242888	0.59
Tl	205	1	He	252725	0.98
Pb	208	1	He	342530	1.53
Th	232	1	He	15434	1.96
U	238	1	He	349249	1.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	91693	1.41	88966	103.07	60	120	
Ge (IS)	72	1	He	67090	0.15	67006	100.12	60	120	
In-115 (IS)	115	1	He	716085	0.82	703530	101.78	60	120	
Tb-159 (IS)	159	1	He	2433029	0.06	2419851	100.54	60	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-5990816
Data File Name	007CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:18:24-08:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	100 PPB
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	He	5202	5.38
Na	23	1	He	1850842	1.18
Mg	24	1	He	911218	0.34
Al	27	1	He	14040	2.71
K	39	1	He	849501	0.71
Ca	44	1	He	88399	0.98
V	51	1	He	395966	0.33
Cr	52	1	He	497863	0.35
Mn	55	1	He	275733	0.69
Fe	56	1	He	4253473	2.16
Co	59	1	He	819246	0.53
Ni	60	1	He	221581	0.83
Cu	65	1	He	309188	0.86
Zn	66	1	He	99996	0.95
As	75	1	He	65578	0.51
Se	78	1	He	4476	1.05
Rb	85	1	He	286179	0.22
Sr	88	1	He	384076	0.96
Mo	95	1	He	323727	1.31
Ag	107	1	He	1078125	0.43
Cd	111	1	He	158597	1.40
Sn	118	1	He	355938	0.95
Sb	123	1	He	335715	1.77
Cs	133	1	He	964736	1.03
Ba	137	1	He	167497	0.60
Ce	140	1	He	2553302	1.01
Tl	205	1	He	2730944	1.38
Pb	208	1	He	3585382	1.63
Th	232	1	He	186809	4.51
U	238	1	He	3731043	0.33

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	93116	4.11	88966	104.67	60	120	
Ge (IS)	72	1	He	67440	0.41	67006	100.65	60	120	
In-115 (IS)	115	1	He	723881	0.30	703530	102.89	60	120	
Tb-159 (IS)	159	1	He	2441847	1.89	2419851	100.91	60	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-5990815
Data File Name	008_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:20:46-08:00
Sample Type	ICV
Dilution	1
Comment	25 PPB
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	He	24.213	3.984	1228	3.24	25	96.9	89.5	110.49	
Na	23	1	He	605.569	2.713	444474	0.69	625	96.9	89.5	110.49	
Mg	24	1	He	625.353	3.305	222290	1.18	625	100.1	89.5	110.49	
Al	27	1	He	25.518	0.854	3526	1.28	25	102.1	89.5	110.49	
K	39	1	He	625.727	2.857	225860	0.67	625	100.1	89.5	110.49	
Ca	44	1	He	1252.327	5.138	21640	3.08	1250	100.2	89.5	110.49	
V	51	1	He	25.022	2.412	97130	0.95	25	100.1	89.5	110.49	
Cr	52	1	He	25.013	3.913	121850	1.90	25	100.1	89.5	110.49	
Mn	55	1	He	25.114	3.616	67528	1.50	25	100.5	89.5	110.49	
Fe	56	1	He	247.327	3.087	1027438	1.07	250	98.9	89.5	110.49	
Co	59	1	He	25.191	3.383	201213	1.61	25	100.8	89.5	110.49	
Ni	60	1	He	25.324	2.906	54727	0.95	25	101.3	89.5	110.49	
Cu	65	1	He	25.052	3.317	75611	1.25	25	100.2	89.5	110.49	
Zn	66	1	He	26.175	1.708	26001	0.61	25	104.7	89.5	110.49	
As	75	1	He	24.601	1.333	15993	0.72	25	98.4	89.5	110.49	
Se	78	1	He	25.844	5.887	1192	5.76	25	103.4	89.5	110.49	
Rb	85	1	He	23.935	1.248	69189	0.64	25	95.7	89.5	110.49	
Sr	88	1	He	24.438	1.411	94826	1.24	25	97.8	89.5	110.49	
Mo	95	1	He	24.852	1.318	81273	0.79	25	99.4	89.5	110.49	
Ag	107	1	He	25.374	1.278	276332	0.70	25	101.5	89.5	110.49	
Cd	111	1	He	24.374	1.509	39044	1.56	25	97.5	89.5	110.49	
Sn	118	1	He	24.671	0.575	88876	0.05	25	98.7	89.5	110.49	
Sb	123	1	He	23.644	5.552	80299	5.44	25	94.6	89.5	110.49	
Cs	133	1	He	24.552	1.163	239239	0.81	25	98.2	89.5	110.49	
Ba	137	1	He	24.889	3.008	42112	2.68	25	99.6	89.5	110.49	
Ce	140	1	He	24.121	2.050	621819	1.89	25	96.5	89.5	110.49	
Tl	205	1	He	23.245	2.129	637139	0.53	25	93.0	89.5	110.49	
Pb	208	1	He	23.820	2.382	857514	0.71	25	95.3	89.5	110.49	
Th	232	1	He	97.114	4.541	181875	2.87	25	388.5	89.5	110.49	>+\-10%
U	238	1	He	23.713	3.141	887904	1.49	25	94.9	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	90691	2.12	88966	101.94	60	120	
Ge (IS)	72	1	He	66777	1.11	67006	99.66	60	120	
In-115 (IS)	115	1	He	731146	0.62	703530	103.93	60	120	
Tb-159 (IS)	159	1	He	2452202	1.69	2419851	101.34	60	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB-5990822
Data File Name	009_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:32:06-08:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.045	173.2	2	173.2	0.5	
Na	23	1	He	-0.535	-70.8	9539	0.5	110	
Mg	24	1	He	-0.036	-169.5	80	26.0	110	
Al	27	1	He	0.065	203.4	48	35.8	10	
K	39	1	He	-0.903	-335.7	24186	1.8	110	
Ca	44	1	He	0.246	281.8	81	12.6	110	
V	51	1	He	-0.037	-76.3	552	17.2	2	
Cr	52	1	He	-0.008	-265.2	567	19.8	2	
Mn	55	1	He	0.003	187.7	28	59.2	1	
Fe	56	1	He	0.084	25.2	2504	4.1	20	
Co	59	1	He	0.001	92.0	19	36.7	1	
Ni	60	1	He	0.008	96.1	49	31.5	2	
Cu	65	1	He	0.001	526.2	114	18.5	1	
Zn	66	1	He	0.049	92.5	152	29.6	20	
As	75	1	He	-0.003	-387.2	25	27.6	1	
Se	78	1	He	-0.057	-75.4	59	2.6	2	
Sr	88	1	He	0.002	79.2	28	18.3	2	
Mo	95	1	He	0.041	32.0	153	27.2	2	
Ag	107	1	He	0.002	38.6	39	17.8	1	
Cd	111	1	He	0.001	175.0	2	86.6	1	
Sn	118	1	He	0.035	39.1	369	13.3	2	
Sb	123	1	He	0.079	16.7	456	9.7	1	
Ba	137	1	He	-0.005	-24.6	6	34.7	1	
Ce	140	1	He	0.001	12.0	60	5.5	1	
Tl	205	1	He	0.003	31.2	97	26.0	1	
Pb	208	1	He	0.004	8.1	204	4.7	1	
U	238	1	He	0.004	6.9	179	6.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	89395	2.33	88966	100.48	60	120	
Ge (IS)	72	1	He	66098	0.88	67006	98.64	60	120	
In-115 (IS)	115	1	He	713046	0.62	703530	101.35	60	120	
Tb-159 (IS)	159	1	He	2400074	0.40	2419851	99.18	60	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB-5990822
Data File Name	010_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:34:32-08:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.022	173.2	1	173.2	0.5	
Na	23	1	He	-0.800	-5.1	9454	0.6	110	
Mg	24	1	He	-0.133	-19.3	47	18.9	110	
Al	27	1	He	0.003	1561.9	40	16.7	10	
K	39	1	He	-1.233	-81.8	24347	1.6	110	
Ca	44	1	He	-0.199	-799.1	74	36.2	110	
V	51	1	He	-0.046	-26.7	523	10.0	2	
Cr	52	1	He	0.002	935.7	617	12.2	2	
Mn	55	1	He	0.003	94.5	28	30.2	1	
Fe	56	1	He	0.026	179.8	2287	7.6	20	
Co	59	1	He	0.001	115.8	18	43.3	1	
Ni	60	1	He	0.003	81.9	39	13.1	2	
Cu	65	1	He	-0.006	-51.5	92	10.4	1	
Zn	66	1	He	0.029	94.9	132	20.4	20	
As	75	1	He	-0.006	-118.6	22	20.2	1	
Se	78	1	He	-0.225	-94.4	51	18.4	2	
Sr	88	1	He	-0.004	-14.5	8	24.7	2	
Mo	95	1	He	0.016	50.6	73	35.5	2	
Ag	107	1	He	0.000	412.2	23	51.5	1	
Cd	111	1	He	0.000	-13956.2	1	173.2	1	
Sn	118	1	He	0.019	44.9	316	9.8	2	
Sb	123	1	He	0.075	5.7	446	3.0	1	
Ba	137	1	He	-0.001	-398.0	11	86.6	1	
Ce	140	1	He	-0.001	-46.4	14	48.0	1	
Tl	205	1	He	0.001	39.6	54	27.6	1	
Pb	208	1	He	0.001	56.2	116	18.3	1	
U	238	1	He	0.001	45.6	63	27.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	90328	0.93	88966	101.53	60	120	
Ge (IS)	72	1	He	65935	0.61	67006	98.40	60	120	
In-115 (IS)	115	1	He	717884	0.69	703530	102.04	60	120	
Tb-159 (IS)	159	1	He	2439662	0.25	2419851	100.82	60	120	

Reporting Limit 0.2ppb (RL) Report

Sample Table

Sample Name	CRI-5990829
Data File Name	011RL_2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:36:59-08:00
Sample Type	RL0_2
Dilution	1
Comment	+/- 50% 0.2PPB RL CHK
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	He	0.290	48.447	14	48.02	0.2	144.8	50	150	
V	51	1	He	0.198	15.018	1443	7.17	0.2	98.8	50	150	
Co	59	1	He	0.218	8.434	1727	8.67	0.2	108.9	50	150	
Ni	60	1	He	0.186	19.876	428	18.15	0.2	92.9	50	150	
As	75	1	He	0.218	13.855	167	9.89	0.2	109.0	50	150	
Rb	85	1	He	0.208	11.674	592	11.54	0.2	103.9	50	150	
Mo	95	1	He	0.233	11.810	762	11.51	0.2	116.5	50	150	
Ag	107	1	He	0.211	5.038	2251	4.66	0.2	105.5	50	150	
Cd	111	1	He	0.213	3.407	332	3.52	0.2	106.4	50	150	
Cs	133	1	He	0.210	4.659	1995	4.33	0.2	104.8	50	150	
Ba	137	1	He	0.169	1.744	291	1.32	0.2	84.5	50	150	
Tl	205	1	He	0.189	4.497	5155	3.49	0.2	94.5	50	150	
Pb	208	1	He	0.192	2.017	6920	1.84	0.2	95.8	50	150	
U	238	1	He	0.193	1.954	7214	1.42	0.2	96.7	50	150	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	89351	0.66	88966	100.43	60	120	
Ge (IS)	72	1	He	66431	1.88	67006	99.14	60	120	
In-115 (IS)	115	1	He	709956	0.36	703530	100.91	60	120	
Tb-159 (IS)	159	1	He	2433185	1.04	2419851	100.55	60	120	

Reporting Limit 1.0ppb (RL) Report

Sample Table

Sample Name	CRI-5990825
Data File Name	012_RL1.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:39:26-08:00
Sample Type	RL1_0
Dilution	1
Comment	+/- 50% 1xRL CHK
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	He	0.576	80.039	30	80.13	0.5	115.3	50	150	
Al	27	1	He	9.951	0.599	1436	0.67	10	99.5	50	150	
V	51	1	He	1.020	2.230	4754	1.79	1	102.0	50	150	
Cr	52	1	He	0.989	2.332	5549	1.96	1	98.9	50	150	
Mn	55	1	He	1.038	3.514	2882	3.49	1	103.8	50	150	
Fe	56	1	He	20.179	0.852	88097	0.82	20	100.9	50	150	
Co	59	1	He	1.063	2.149	8729	2.22	1	106.3	50	150	
Ni	60	1	He	1.006	5.507	2264	5.40	1	100.6	50	150	
Cu	65	1	He	1.074	4.487	3436	4.27	1	107.4	50	150	
Zn	66	1	He	10.474	0.869	10453	1.26	10	104.7	50	150	
As	75	1	He	1.054	4.603	709	3.81	1	105.4	50	150	
Se	78	1	He	0.962	4.452	104	1.11	1	96.2	50	150	
Rb	85	1	He	0.512	5.044	1463	4.90	0.5	102.3	50	150	
Sr	88	1	He	1.075	7.814	4124	8.04	1	107.5	50	150	
Mo	95	1	He	1.053	3.884	3409	3.50	1	105.3	50	150	
Ag	107	1	He	1.045	1.335	11208	1.63	1	104.5	50	150	
Cd	111	1	He	1.058	4.973	1668	5.41	1	105.8	50	150	
Sn	118	1	He	10.113	1.471	35968	0.98	10	101.1	50	150	
Sb	123	1	He	1.043	7.374	3669	6.56	1	104.3	50	150	
Cs	133	1	He	0.509	0.311	4893	0.28	0.5	101.9	50	150	
Ba	137	1	He	1.079	6.142	1808	5.92	1	107.9	50	150	
Ce	140	1	He	1.006	2.691	25516	2.24	1	100.6	50	150	
Tl	205	1	He	0.936	1.193	25858	1.36	1	93.6	50	150	
Pb	208	1	He	0.953	1.893	34607	1.25	1	95.3	50	150	
Th	232	1	He	6.724	4.243	13121	3.54	0.5	1344.8	50	150	>+/-50%
U	238	1	He	0.965	1.314	36418	0.69	1	96.5	50	150	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	93039	0.11	88966	104.58	60	120	
Ge (IS)	72	1	He	66676	1.08	67006	99.51	60	120	
In-115 (IS)	115	1	He	718921	0.50	703530	102.19	60	120	
Tb-159 (IS)	159	1	He	2468475	0.63	2419851	102.01	60	120	

Reporting Limit 2.0ppb (RL) Report

Sample Table

Sample Name	CRI-5990826
Data File Name	013_RL2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:41:53-08:00
Sample Type	RL2_0
Dilution	1
Comment	+/- 50% 2xRL CHK
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	He	0.715	46.528	37	48.11	1	71.5	50	150	
Na	23	1	He	208.602	0.914	160739	0.67	200	104.3	50	150	
Mg	24	1	He	216.953	2.439	77676	1.01	200	108.5	50	150	
Al	27	1	He	21.077	6.618	2936	5.20	20	105.4	50	150	
K	39	1	He	213.647	1.341	94073	0.50	200	106.8	50	150	
Ca	44	1	He	1005.363	1.140	17508	1.88	1000	100.5	50	150	
V	51	1	He	2.135	1.992	8989	0.71	2	106.8	50	150	
Cr	52	1	He	2.145	1.994	11082	3.25	2	107.2	50	150	
Mn	55	1	He	2.196	2.341	5961	2.07	2	109.8	50	150	
Fe	56	1	He	42.018	1.608	177505	0.22	40	105.0	50	150	
Co	59	1	He	2.162	3.179	17393	1.78	2	108.1	50	150	
Ni	60	1	He	2.204	5.952	4822	4.47	2	110.2	50	150	
Cu	65	1	He	2.234	2.471	6888	1.36	2	111.7	50	150	
Zn	66	1	He	21.429	2.719	21403	1.61	20	107.1	50	150	
As	75	1	He	2.105	4.712	1399	3.73	2	105.3	50	150	
Se	78	1	He	2.413	8.304	168	4.76	2	120.6	50	150	
Rb	85	1	He	1.061	7.137	3037	6.78	1	106.1	50	150	
Sr	88	1	He	2.243	1.981	8613	1.30	2	112.1	50	150	
Mo	95	1	He	2.123	4.818	6876	4.32	2	106.1	50	150	
Ag	107	1	He	2.154	0.729	23182	0.80	2	107.7	50	150	
Cd	111	1	He	2.133	4.642	3375	4.91	2	106.6	50	150	
Sn	118	1	He	20.734	1.501	73799	1.20	20	103.7	50	150	
Sb	123	1	He	2.070	5.436	7120	5.02	2	103.5	50	150	
Cs	133	1	He	1.070	1.917	10310	1.20	1	107.0	50	150	
Ba	137	1	He	2.108	1.767	3536	2.36	2	105.4	50	150	
Ce	140	1	He	2.071	1.260	52744	0.92	2	103.5	50	150	
Tl	205	1	He	1.971	0.575	54274	0.96	2	98.6	50	150	
Pb	208	1	He	1.993	1.828	72125	1.46	2	99.7	50	150	
Th	232	1	He	15.622	4.169	29782	3.92	1	1562.2	50	150	>+/-50%
U	238	1	He	1.979	2.462	74456	2.29	2	99.0	50	150	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	91252	1.49	88966	102.57	60	120	
Ge (IS)	72	1	He	67086	1.16	67006	100.12	60	120	
In-115 (IS)	115	1	He	722044	0.75	703530	102.63	60	120	
Tb-159 (IS)	159	1	He	2462018	1.17	2419851	101.74	60	120	

Interference Check A (ICSA) Report

Sample Table

Sample Name	ICSA-5990827
Data File Name	014ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:44:20-08:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Low	QC High	QC Flag
Be	9	1	He	0.000	#DIV/0!	0	#DIV/0!	-1	1	
Na	23	1	He	88863.972	4.890	66301084	1.59	-100000	100000	
Mg	24	1	He	86265.347	5.097	31875610	1.80	-100000	100000	
Al	27	1	He	86207.915	5.397	12243100	2.12	-100000	100000	
K	39	1	He	87682.134	5.035	29317670	1.72	-100000	100000	
Ca	44	1	He	85355.605	4.807	1528897	1.58	-100000	100000	
V	51	1	He	-0.070	-14.220	452	5.53	-2	2	
Cr	52	1	He	0.261	11.105	1952	5.00	-2	2	
Mn	55	1	He	0.411	7.388	1169	4.33	-2	2	
Fe	56	1	He	86740.091	5.500	373882074	2.22	-100000	100000	
Co	59	1	He	0.288	1.659	2402	3.48	-2	2	
Ni	60	1	He	0.305	9.654	719	6.05	-2	2	
Cu	65	1	He	0.426	8.008	1451	7.10	-2	2	
Zn	66	1	He	0.460	20.839	538	18.10	-20	20	
As	75	1	He	0.042	33.853	52	16.23	-2	2	
Se	78	1	He	0.032	787.593	61	18.16	-2	2	
Rb	85	1	He	1.345	4.106	3497	3.69	-4	4	
Sr	88	1	He	0.818	7.967	2868	7.56	-2	2	
Mo	95	1	He	2080.951	1.646	6107696	1.50	2000	2000	
Ag	107	1	He	0.019	25.396	203	22.95	-2	2	
Cd	111	1	He	0.215	20.810	310	20.43	-2	2	
Sn	118	1	He	0.404	8.371	1530	7.01	-20	20	
Sb	123	1	He	0.314	7.038	1135	6.03	-2	2	
Cs	133	1	He	0.016	1.879	148	1.30	-1	1	
Ba	137	1	He	0.163	28.221	260	26.68	-2	2	
Ce	140	1	He	0.012	21.807	303	19.44	-2	2	
Tl	205	1	He	0.006	18.473	182	16.60	-2	2	
Pb	208	1	He	0.070	4.923	2472	4.98	-2	2	
Th	232	1	He	3.280	48.036	6312	44.25	-2	2	ICSA Main CR1 Failed
U	238	1	He	0.006	21.675	246	19.26	-2	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	94379	3.41	88966	106.08	60	120	
Ge (IS)	72	1	He	64056	1.28	67006	95.60	60	120	
In-115 (IS)	115	1	He	656359	0.43	703530	93.30	60	120	
Tb-159 (IS)	159	1	He	2347163	0.35	2419851	97.00	60	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-5990828
Data File Name	015ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:46:41-08:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	He	20.158	6.944	1048	6.87	20	100.8	79.5	120.49	
Na	23	1	He	94680.152	0.649	69637206	0.69	101000	93.7	69.5	120.49	
Mg	24	1	He	92503.811	1.617	33697311	1.66	101000	91.6	69.5	120.49	
Al	27	1	He	91969.114	2.145	12877528	2.23	101000	91.1	69.5	120.49	
K	39	1	He	93844.439	0.901	30932158	0.99	101000	92.9	69.5	120.49	
Ca	44	1	He	91081.454	1.921	1608277	2.04	101000	90.2	69.5	120.49	
V	51	1	He	19.830	0.556	79054	0.43	20	99.2	79.5	120.49	
Cr	52	1	He	19.589	1.957	97980	1.98	20	97.9	79.5	120.49	
Mn	55	1	He	19.691	1.563	54289	1.65	20	98.5	79.5	120.49	
Fe	56	1	He	93968.502	0.760	399346606	0.87	100000	94.0	69.5	130.49	
Co	59	1	He	19.476	0.562	159492	0.57	20	97.4	79.5	120.49	
Ni	60	1	He	19.043	0.824	42197	0.91	20	95.2	79.5	120.49	
Cu	65	1	He	18.839	0.808	58322	0.93	20	94.2	79.5	120.49	
Zn	66	1	He	18.930	0.759	18494	0.89	20	94.6	79.5	120.49	
As	75	1	He	20.100	1.544	12835	1.27	20	100.5	79.5	120.49	
Se	78	1	He	19.599	0.554	902	1.36	20	98.0	79.5	120.49	
Rb	85	1	He	21.952	1.669	58614	0.86	20	109.8	79.5	120.49	
Sr	88	1	He	21.859	1.436	78345	0.66	20	109.3	79.5	120.49	
Mo	95	1	He	2122.605	0.963	6410052	0.27	2020	105.1	79.5	120.49	
Ag	107	1	He	19.085	2.183	191978	1.37	20	95.4	79.5	120.49	
Cd	111	1	He	19.416	1.382	28727	0.81	20	97.1	79.5	120.49	
Sn	118	1	He	20.789	2.488	69205	1.68	20	103.9	79.5	120.49	
Sb	123	1	He	21.609	2.861	67796	2.08	20	108.0	79.5	120.49	
Cs	133	1	He	20.414	1.739	183726	0.94	20	102.1	79.5	120.49	
Ba	137	1	He	20.945	2.368	32735	1.72	20	104.7	79.5	120.49	
Ce	140	1	He	19.628	2.147	467355	1.34	20	98.1	79.5	120.49	
Tl	205	1	He	17.454	1.696	464769	1.02	20	87.3	79.5	120.49	
Pb	208	1	He	17.952	1.891	627871	1.28	20	89.8	79.5	120.49	
Th	232	1	He	18.088	4.578	33289	4.19	20	90.4	79.5	120.49	
U	238	1	He	18.878	1.583	686794	1.24	20	94.4	79.5	120.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	92936	0.13	88966	104.46	60	120	
Ge (IS)	72	1	He	65567	0.96	67006	97.85	60	120	
In-115 (IS)	115	1	He	675353	0.82	703530	96.00	60	120	
Tb-159 (IS)	159	1	He	2381879	0.90	2419851	98.43	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	016SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:49:01-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.000	0.000	#DIV/0!	0	#DIV/0!	100	
Na	23	1	He	75.416	75.416	28.09	64985	23.45	75000	
Mg	24	1	He	68.822	68.822	31.73	24863	31.36	125000	
Al	27	1	He	70.947	70.947	38.07	9853	37.61	4000	
K	39	1	He	69.155	69.155	28.58	47658	13.32	100000	
Ca	44	1	He	73.157	73.157	26.17	1356	24.50	250000	
V	51	1	He	-0.118	-0.118	-3.62	251	6.68	4000	
Cr	52	1	He	-0.003	-0.003	-390.47	602	9.98	4000	
Mn	55	1	He	0.022	0.022	14.98	80	11.02	4000	
Fe	56	1	He	78.821	78.821	34.38	333114	33.86	40000	
Co	59	1	He	0.010	0.010	18.76	96	16.11	4000	
Ni	60	1	He	0.026	0.026	11.34	90	6.42	4000	
Cu	65	1	He	0.034	0.034	70.91	217	33.74	4000	
Zn	66	1	He	1.265	1.265	8.39	1359	7.10	4000	
As	75	1	He	-0.008	-0.008	-114.23	22	26.65	4000	
Se	78	1	He	-0.174	-0.174	-104.76	54	15.65	4000	
Rb	85	1	He	0.013	0.013	34.83	46	27.70	100	
Sr	88	1	He	0.016	0.016	43.18	81	30.84	4000	
Mo	95	1	He	3.036	3.036	34.82	9835	34.01	4000	
Ag	107	1	He	0.017	0.017	31.85	206	27.82	100	
Cd	111	1	He	0.009	0.009	70.69	16	65.47	3500	
Sn	118	1	He	0.027	0.027	50.07	349	14.84	4000	
Sb	123	1	He	0.029	0.029	41.77	293	13.96	4000	
Cs	133	1	He	0.015	0.015	38.80	152	34.78	100	
Ba	137	1	He	0.017	0.017	113.65	42	77.50	4000	
Ce	140	1	He	0.013	0.013	30.94	354	27.65	4000	
Tl	205	1	He	0.027	0.027	44.10	756	42.97	3500	
Pb	208	1	He	0.016	0.016	34.66	658	30.48	4000	
Th	232	1	He	0.227	0.227	31.93	883	15.19	100	
U	238	1	He	0.016	0.016	31.26	616	30.06	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	91844	0.76	88966	103.24	60	120	
Ge (IS)	72	1	He	66902	0.91	67006	99.84	60	120	
In-115 (IS)	115	1	He	723677	0.88	703530	102.86	60	120	
Tb-159 (IS)	159	1	He	2422669	0.79	2419851	100.12	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	017SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:51:29-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.022	0.022	173.21	1	173.21	100	
Na	23	1	He	11.116	11.116	7.60	17813	4.01	75000	
Mg	24	1	He	7.075	7.075	10.24	2577	10.59	125000	
Al	27	1	He	7.103	7.103	10.79	998	11.11	4000	
K	39	1	He	4.387	4.387	45.12	25916	3.08	100000	
Ca	44	1	He	9.625	9.625	23.32	241	16.61	250000	
V	51	1	He	-0.126	-0.126	-8.33	213	18.02	4000	
Cr	52	1	He	0.008	0.008	141.81	641	8.06	4000	
Mn	55	1	He	0.017	0.017	59.96	63	41.78	4000	
Fe	56	1	He	9.952	9.952	10.27	42925	10.54	40000	
Co	59	1	He	0.001	0.001	36.38	20	16.65	4000	
Ni	60	1	He	0.006	0.006	82.42	44	21.66	4000	
Cu	65	1	He	0.017	0.017	30.42	162	10.13	4000	
Zn	66	1	He	1.324	1.324	3.52	1429	1.35	4000	
As	75	1	He	-0.022	-0.022	-15.89	12	18.72	4000	
Se	78	1	He	0.006	0.006	2763.84	63	11.32	4000	
Rb	85	1	He	-0.003	-0.003	-24.39	1	173.21	100	
Sr	88	1	He	0.004	0.004	131.46	37	55.30	4000	
Mo	95	1	He	0.629	0.629	2.84	2018	2.94	4000	
Ag	107	1	He	0.005	0.005	29.22	72	21.32	100	
Cd	111	1	He	0.001	0.001	0.37	3	0.00	3500	
Sn	118	1	He	0.017	0.017	27.66	306	5.38	4000	
Sb	123	1	He	0.011	0.011	108.75	229	17.50	4000	
Cs	133	1	He	0.001	0.001	57.25	24	28.38	100	
Ba	137	1	He	0.005	0.005	89.98	21	32.88	4000	
Ce	140	1	He	0.001	0.001	28.68	42	9.12	4000	
Tl	205	1	He	0.004	0.004	2.08	114	1.68	3500	
Pb	208	1	He	0.004	0.004	27.82	229	18.72	4000	
Th	232	1	He	0.118	0.118	29.69	677	9.62	100	
U	238	1	He	0.001	0.001	20.14	79	13.58	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	89524	0.80	88966	100.63	60	120	
Ge (IS)	72	1	He	67453	2.04	67006	100.67	60	120	
In-115 (IS)	115	1	He	709136	0.25	703530	100.80	60	120	
Tb-159 (IS)	159	1	He	2403982	0.48	2419851	99.34	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	018SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:53:56-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.022	0.022	173.21	1	173.21	100	
Na	23	1	He	5.742	5.742	11.39	14010	3.05	75000	
Mg	24	1	He	2.559	2.559	2.09	991	2.24	125000	
Al	27	1	He	3.003	3.003	3.27	444	2.63	4000	
K	39	1	He	0.434	0.434	274.24	24672	1.72	100000	
Ca	44	1	He	3.166	3.166	25.17	131	10.28	250000	
V	51	1	He	-0.134	-0.134	-3.31	184	8.92	4000	
Cr	52	1	He	-0.003	-0.003	-111.59	590	2.94	4000	
Mn	55	1	He	0.006	0.006	143.57	34	64.44	4000	
Fe	56	1	He	4.494	4.494	6.95	20568	6.14	40000	
Co	59	1	He	0.000	0.000	-55.90	8	24.71	4000	
Ni	60	1	He	0.022	0.022	27.60	79	16.00	4000	
Cu	65	1	He	0.005	0.005	77.60	127	9.49	4000	
Zn	66	1	He	1.206	1.206	6.47	1303	6.62	4000	
As	75	1	He	-0.020	-0.020	-36.41	14	32.99	4000	
Se	78	1	He	0.007	0.007	737.62	62	4.90	4000	
Rb	85	1	He	0.002	0.002	153.82	16	65.47	100	
Sr	88	1	He	0.004	0.004	73.67	36	30.14	4000	
Mo	95	1	He	0.280	0.280	5.94	913	6.24	4000	
Ag	107	1	He	0.002	0.002	86.17	46	48.72	100	
Cd	111	1	He	0.002	0.002	115.62	4	86.60	3500	
Sn	118	1	He	0.008	0.008	60.54	277	7.33	4000	
Sb	123	1	He	0.020	0.020	36.87	260	8.97	4000	
Cs	133	1	He	0.000	0.000	-145.87	9	57.30	100	
Ba	137	1	He	0.005	0.005	93.99	22	37.76	4000	
Ce	140	1	He	-0.001	-0.001	-77.83	14	81.07	4000	
Tl	205	1	He	0.001	0.001	28.24	53	18.75	3500	
Pb	208	1	He	0.002	0.002	26.78	151	13.30	4000	
Th	232	1	He	0.073	0.073	21.24	597	5.03	100	
U	238	1	He	0.001	0.001	68.12	49	34.32	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	89568	0.37	88966	100.68	60	120	
Ge (IS)	72	1	He	67007	1.61	67006	100.00	60	120	
In-115 (IS)	115	1	He	711022	0.89	703530	101.06	60	120	
Tb-159 (IS)	159	1	He	2412800	0.73	2419851	99.71	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	019SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:56:23-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.000	0.000	#DIV/0!	0	#DIV/0!	100	
Na	23	1	He	3.904	3.904	4.70	12858	1.34	75000	
Mg	24	1	He	1.140	1.140	3.77	499	2.70	125000	
Al	27	1	He	1.597	1.597	28.19	258	23.86	4000	
K	39	1	He	-3.986	-3.986	-9.78	23543	0.11	100000	
Ca	44	1	He	1.588	1.588	47.32	106	12.77	250000	
V	51	1	He	-0.125	-0.125	-8.47	221	17.86	4000	
Cr	52	1	He	-0.007	-0.007	-19.26	576	0.88	4000	
Mn	55	1	He	0.011	0.011	40.87	48	24.50	4000	
Fe	56	1	He	2.671	2.671	5.02	13258	4.55	40000	
Co	59	1	He	0.000	0.000	550.42	12	41.65	4000	
Ni	60	1	He	0.018	0.018	46.67	72	25.42	4000	
Cu	65	1	He	0.002	0.002	450.64	119	26.05	4000	
Zn	66	1	He	1.139	1.139	6.70	1246	6.03	4000	
As	75	1	He	-0.018	-0.018	-43.27	15	34.64	4000	
Se	78	1	He	0.186	0.186	131.58	71	15.00	4000	
Rb	85	1	He	-0.002	-0.002	-112.90	4	114.60	100	
Sr	88	1	He	0.001	0.001	317.10	27	64.94	4000	
Mo	95	1	He	0.189	0.189	7.37	620	7.03	4000	
Ag	107	1	He	0.001	0.001	115.79	33	45.83	100	
Cd	111	1	He	0.001	0.001	150.25	3	100.05	3500	
Sn	118	1	He	0.000	0.000	1254.99	247	2.34	4000	
Sb	123	1	He	-0.002	-0.002	-381.36	186	13.48	4000	
Cs	133	1	He	0.000	0.000	-317.14	11	34.61	100	
Ba	137	1	He	0.003	0.003	244.96	18	60.28	4000	
Ce	140	1	He	0.000	0.000	-375.66	26	52.73	4000	
Tl	205	1	He	0.001	0.001	39.52	46	23.52	3500	
Pb	208	1	He	0.003	0.003	34.55	167	17.44	4000	
Th	232	1	He	0.002	0.002	664.01	467	5.15	100	
U	238	1	He	0.000	0.000	140.97	31	30.93	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	90626	0.55	88966	101.87	60	120	
Ge (IS)	72	1	He	67514	0.37	67006	100.76	60	120	
In-115 (IS)	115	1	He	708491	0.35	703530	100.71	60	120	
Tb-159 (IS)	159	1	He	2412420	2.04	2419851	99.69	60	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-5990824
Data File Name	020_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T19:58:49-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	He	52.759	6.484	2734	4.36	50	105.5	89.5	110.49	
Na	23	1	He	1272.208	2.771	943334	1.47	1250	101.8	89.5	110.49	
Mg	24	1	He	1255.309	2.605	456122	0.15	1250	100.4	89.5	110.49	
Al	27	1	He	49.864	2.333	7004	0.36	50	99.7	89.5	110.49	
K	39	1	He	1263.995	2.954	440512	0.42	1250	101.1	89.5	110.49	
Ca	44	1	He	2543.408	2.694	44864	0.74	2500	101.7	89.5	110.49	
V	51	1	He	50.226	2.260	198589	0.41	50	100.5	89.5	110.49	
Cr	52	1	He	50.595	2.642	251381	0.40	50	101.2	89.5	110.49	
Mn	55	1	He	50.220	2.326	138055	0.70	50	100.4	89.5	110.49	
Fe	56	1	He	510.821	2.417	2167272	0.96	500	102.2	89.5	110.49	
Co	59	1	He	50.828	2.238	415116	1.07	50	101.7	89.5	110.49	
Ni	60	1	He	50.501	2.546	111541	0.21	50	101.0	89.5	110.49	
Cu	65	1	He	50.636	2.506	156136	0.22	50	101.3	89.5	110.49	
Zn	66	1	He	49.860	2.308	50518	1.70	50	99.7	89.5	110.49	
As	75	1	He	49.372	1.225	32774	0.69	50	98.7	89.5	110.49	
Se	78	1	He	50.930	1.149	2338	1.25	50	101.9	89.5	110.49	
Rb	85	1	He	49.690	0.516	143522	0.73	50	99.4	89.5	110.49	
Sr	88	1	He	49.168	0.736	190618	0.87	50	98.3	89.5	110.49	
Mo	95	1	He	49.858	1.814	162901	1.72	50	99.7	89.5	110.49	
Ag	107	1	He	49.918	1.682	543191	1.55	50	99.8	89.5	110.49	
Cd	111	1	He	49.244	2.166	78815	1.90	50	98.5	89.5	110.49	
Sn	118	1	He	49.679	1.656	178564	1.57	50	99.4	89.5	110.49	
Sb	123	1	He	48.922	3.248	165806	3.14	50	97.8	89.5	110.49	
Cs	133	1	He	49.084	0.812	477889	0.66	50	98.2	89.5	110.49	
Ba	137	1	He	49.925	1.020	84396	1.00	50	99.8	89.5	110.49	
Ce	140	1	He	47.428	0.628	1221686	0.52	50	94.9	89.5	110.49	
Tl	205	1	He	47.091	1.820	1286707	0.94	50	94.2	89.5	110.49	
Pb	208	1	He	47.784	1.845	1714847	1.09	50	95.6	89.5	110.49	
Th	232	1	He	58.083	1.578	108677	2.32	50	116.2	89.5	110.49	>+\-10%
U	238	1	He	50.380	1.100	1880814	0.26	50	100.8	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	92721	2.53	88966	104.22	60	120	
Ge (IS)	72	1	He	68241	1.10	67006	101.84	60	120	
In-115 (IS)	115	1	He	730560	0.37	703530	103.84	60	120	
Tb-159 (IS)	159	1	He	2444265	0.91	2419851	101.01	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	021_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:01:13-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.089	86.6	4	86.6	0.5	
Na	23	1	He	3.968	17.8	12781	4.6	110	
Mg	24	1	He	2.007	41.7	799	36.5	110	
Al	27	1	He	1.049	28.9	181	22.3	10	
K	39	1	He	-0.768	-160.7	24337	0.7	110	
Ca	44	1	He	4.397	71.7	152	34.8	110	
V	51	1	He	-0.091	-14.2	349	13.6	2	
Cr	52	1	He	0.039	70.6	792	16.0	2	
Mn	55	1	He	0.039	47.4	122	39.9	1	
Fe	56	1	He	2.479	20.3	12341	16.6	20	
Co	59	1	He	0.039	15.0	318	14.5	1	
Ni	60	1	He	0.040	34.6	118	24.7	2	
Cu	65	1	He	0.050	42.5	261	24.4	1	
Zn	66	1	He	0.126	35.3	233	20.0	20	
As	75	1	He	0.020	58.3	40	19.8	1	
Se	78	1	He	0.397	127.0	80	26.9	2	
Sr	88	1	He	0.034	36.2	150	31.1	2	
Mo	95	1	He	0.259	25.6	856	25.1	2	
Ag	107	1	He	0.048	43.5	537	41.9	1	
Cd	111	1	He	0.038	15.9	61	15.7	1	
Sn	118	1	He	0.141	47.3	748	31.6	2	
Sb	123	1	He	0.754	43.1	2709	40.1	1	
Ba	137	1	He	0.039	63.7	79	52.8	1	
Ce	140	1	He	0.039	25.6	1007	25.0	1	
Tl	205	1	He	0.042	34.8	1151	32.7	1	
Pb	208	1	He	0.046	24.4	1739	21.8	1	
U	238	1	He	0.054	41.5	2025	39.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	89751	0.93	88966	100.88	60	120	
Ge (IS)	72	1	He	67617	1.01	67006	100.91	60	120	
In-115 (IS)	115	1	He	719118	0.19	703530	102.22	60	120	
Tb-159 (IS)	159	1	He	2444421	1.65	2419851	101.02	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	022SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:24:09-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.000	0.000	#DIV/0!	0	#DIV/0!	100	
Na	23	1	He	1.022	1.022	33.48	11051	2.03	75000	
Mg	24	1	He	0.155	0.155	91.35	152	32.94	125000	
Al	27	1	He	0.751	0.751	39.49	146	28.26	4000	
K	39	1	He	-1.301	-1.301	-83.49	24992	0.61	100000	
Ca	44	1	He	1.078	1.078	171.02	99	32.04	250000	
V	51	1	He	-0.120	-0.120	-11.84	246	23.09	4000	
Cr	52	1	He	-0.011	-0.011	-131.86	572	12.83	4000	
Mn	55	1	He	0.011	0.011	60.50	50	37.12	4000	
Fe	56	1	He	0.571	0.571	9.26	4662	4.02	40000	
Co	59	1	He	0.000	0.000	268.60	14	53.28	4000	
Ni	60	1	He	0.034	0.034	11.83	108	8.93	4000	
Cu	65	1	He	0.008	0.008	87.59	140	16.49	4000	
Zn	66	1	He	1.088	1.088	4.47	1221	3.34	4000	
As	75	1	He	-0.017	-0.017	-45.74	16	30.20	4000	
Se	78	1	He	0.121	0.121	229.95	69	18.26	4000	
Rb	85	1	He	-0.002	-0.002	-57.72	3	100.05	100	
Sr	88	1	He	0.006	0.006	93.78	43	46.79	4000	
Mo	95	1	He	0.051	0.051	50.88	187	44.86	4000	
Ag	107	1	He	0.000	0.000	-437.07	19	36.75	100	
Cd	111	1	He	-0.001	-0.001	0.00	0	#DIV/0!	3500	
Sn	118	1	He	0.015	0.015	63.47	302	11.16	4000	
Sb	123	1	He	0.008	0.008	97.86	223	11.66	4000	
Cs	133	1	He	0.000	0.000	102.39	14	13.35	100	
Ba	137	1	He	0.008	0.008	167.38	27	81.96	4000	
Ce	140	1	He	-0.001	-0.001	-36.20	16	32.73	4000	
Tl	205	1	He	0.000	0.000	133.19	27	50.01	3500	
Pb	208	1	He	0.002	0.002	58.78	159	30.36	4000	
Th	232	1	He	0.007	0.007	1339.96	481	38.14	100	
U	238	1	He	0.000	0.000	167.08	30	29.40	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	92812	0.85	88966	104.32	60	120	
Ge (IS)	72	1	He	69009	0.84	67006	102.99	60	120	
In-115 (IS)	115	1	He	721414	0.57	703530	102.54	60	120	
Tb-159 (IS)	159	1	He	2436216	0.83	2419851	100.68	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	023SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:26:37-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.000	0.000	#DIV/0!	0	#DIV/0!	100	
Na	23	1	He	0.947	0.947	32.18	11058	1.30	75000	
Mg	24	1	He	0.215	0.215	92.18	176	41.79	125000	
Al	27	1	He	0.610	0.610	34.59	127	23.39	4000	
K	39	1	He	-1.677	-1.677	-9.56	25012	0.95	100000	
Ca	44	1	He	2.104	2.104	16.78	118	4.32	250000	
V	51	1	He	-0.121	-0.121	-5.47	244	11.60	4000	
Cr	52	1	He	-0.007	-0.007	-268.89	594	15.42	4000	
Mn	55	1	He	0.011	0.011	69.58	49	41.66	4000	
Fe	56	1	He	0.601	0.601	26.14	4823	14.80	40000	
Co	59	1	He	0.000	0.000	-1491.82	11	75.52	4000	
Ni	60	1	He	0.041	0.041	16.75	124	12.08	4000	
Cu	65	1	He	0.016	0.016	51.97	164	14.94	4000	
Zn	66	1	He	1.146	1.146	2.95	1276	2.79	4000	
As	75	1	He	-0.022	-0.022	-24.83	13	27.74	4000	
Se	78	1	He	0.291	0.291	14.67	77	2.72	4000	
Rb	85	1	He	-0.002	-0.002	-111.18	4	114.60	100	
Sr	88	1	He	0.002	0.002	132.69	30	38.49	4000	
Mo	95	1	He	0.035	0.035	21.95	134	18.94	4000	
Ag	107	1	He	-0.001	-0.001	-63.52	12	41.65	100	
Cd	111	1	He	0.001	0.001	357.17	2	173.21	3500	
Sn	118	1	He	-0.002	-0.002	-1267.63	243	28.77	4000	
Sb	123	1	He	0.006	0.006	261.58	213	22.15	4000	
Cs	133	1	He	0.000	0.000	-417.11	10	100.00	100	
Ba	137	1	He	0.000	0.000	-5554.10	13	90.16	4000	
Ce	140	1	He	-0.001	-0.001	-43.27	17	34.65	4000	
Tl	205	1	He	0.000	0.000	284.21	21	59.77	3500	
Pb	208	1	He	0.002	0.002	88.36	136	38.28	4000	
Th	232	1	He	-0.003	-0.003	-486.13	459	6.98	100	
U	238	1	He	0.000	0.000	118.14	30	22.23	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	93342	1.08	88966	104.92	60	120	
Ge (IS)	72	1	He	68724	0.28	67006	102.56	60	120	
In-115 (IS)	115	1	He	717944	0.98	703530	102.05	60	120	
Tb-159 (IS)	159	1	He	2423710	0.77	2419851	100.16	60	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-5990824
Data File Name	024_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:29:03-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	He	49.936	3.688	2677	3.00	50	99.9	89.5	110.49	
Na	23	1	He	1269.667	2.301	973514	0.95	1250	101.6	89.5	110.49	
Mg	24	1	He	1246.531	1.794	468391	0.36	1250	99.7	89.5	110.49	
Al	27	1	He	49.164	8.756	7138	7.75	50	98.3	89.5	110.49	
K	39	1	He	1257.551	1.716	453378	0.10	1250	100.6	89.5	110.49	
Ca	44	1	He	2488.794	2.069	45400	0.75	2500	99.6	89.5	110.49	
V	51	1	He	49.739	0.958	203390	0.78	50	99.5	89.5	110.49	
Cr	52	1	He	50.092	2.421	257364	0.90	50	100.2	89.5	110.49	
Mn	55	1	He	49.480	2.219	140646	0.69	50	99.0	89.5	110.49	
Fe	56	1	He	504.982	2.654	2215310	1.14	500	101.0	89.5	110.49	
Co	59	1	He	49.828	2.132	420784	0.74	50	99.7	89.5	110.49	
Ni	60	1	He	49.871	1.695	113909	0.19	50	99.7	89.5	110.49	
Cu	65	1	He	50.141	1.888	159888	1.05	50	100.3	89.5	110.49	
Zn	66	1	He	50.072	1.938	51770	1.54	50	100.1	89.5	110.49	
As	75	1	He	49.589	1.526	33589	0.24	50	99.2	89.5	110.49	
Se	78	1	He	50.115	5.415	2348	4.07	50	100.2	89.5	110.49	
Rb	85	1	He	50.240	1.106	146011	0.76	50	100.5	89.5	110.49	
Sr	88	1	He	49.786	1.177	194215	1.02	50	99.6	89.5	110.49	
Mo	95	1	He	49.667	1.049	163294	1.20	50	99.3	89.5	110.49	
Ag	107	1	He	49.923	1.378	546639	1.32	50	99.8	89.5	110.49	
Cd	111	1	He	49.538	0.764	79785	1.16	50	99.1	89.5	110.49	
Sn	118	1	He	49.658	1.126	179599	0.65	50	99.3	89.5	110.49	
Sb	123	1	He	49.138	2.502	167578	2.38	50	98.3	89.5	110.49	
Cs	133	1	He	49.406	1.200	484022	0.99	50	98.8	89.5	110.49	
Ba	137	1	He	49.520	1.946	84229	1.51	50	99.0	89.5	110.49	
Ce	140	1	He	47.317	1.189	1226394	0.81	50	94.6	89.5	110.49	
Tl	205	1	He	46.329	2.354	1275392	1.26	50	92.7	89.5	110.49	
Pb	208	1	He	47.090	1.954	1702657	0.97	50	94.2	89.5	110.49	
Th	232	1	He	56.662	4.623	106790	3.53	50	113.3	89.5	110.49	>+\-10%
U	238	1	He	50.160	1.549	1886695	0.41	50	100.3	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	95861	1.55	88966	107.75	60	120	
Ge (IS)	72	1	He	69636	1.43	67006	103.92	60	120	
In-115 (IS)	115	1	He	735119	0.47	703530	104.49	60	120	
Tb-159 (IS)	159	1	He	2462782	1.13	2419851	101.77	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	025_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:31:28-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.021	173.2	1	173.2	0.5	
Na	23	1	He	0.987	40.0	11149	3.7	110	
Mg	24	1	He	0.743	29.6	371	23.0	110	
Al	27	1	He	0.031	275.3	46	27.7	10	
K	39	1	He	-2.104	-55.9	24999	0.9	110	
Ca	44	1	He	3.192	11.5	138	3.7	110	
V	51	1	He	-0.075	-12.8	428	9.3	2	
Cr	52	1	He	0.016	15.2	711	2.9	2	
Mn	55	1	He	0.024	60.5	87	46.8	1	
Fe	56	1	He	0.628	14.3	4961	8.9	20	
Co	59	1	He	0.029	28.0	256	27.7	1	
Ni	60	1	He	0.025	32.5	90	19.6	2	
Cu	65	1	He	0.045	29.4	256	17.4	1	
Zn	66	1	He	0.103	63.3	216	29.8	20	
As	75	1	He	0.023	112.5	43	40.4	1	
Se	78	1	He	0.279	82.3	77	14.9	2	
Sr	88	1	He	0.028	29.3	131	24.9	2	
Mo	95	1	He	0.171	28.8	583	28.5	2	
Ag	107	1	He	0.036	41.3	408	40.2	1	
Cd	111	1	He	0.038	40.8	62	40.6	1	
Sn	118	1	He	0.150	20.6	791	14.5	2	
Sb	123	1	He	0.654	41.1	2414	38.6	1	
Ba	137	1	He	0.023	25.1	53	18.8	1	
Ce	140	1	He	0.030	19.2	801	19.4	1	
Tl	205	1	He	0.034	32.6	929	32.2	1	
Pb	208	1	He	0.042	16.0	1567	15.2	1	
U	238	1	He	0.051	32.0	1912	31.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	93831	1.26	88966	105.47	60	120	
Ge (IS)	72	1	He	69711	1.62	67006	104.04	60	120	
In-115 (IS)	115	1	He	729588	0.93	703530	103.70	60	120	
Tb-159 (IS)	159	1	He	2419603	0.75	2419851	99.99	60	120	

Method Blank (MB) Report

Sample Table

Sample Name	mb 440-584703/1-a@20
Data File Name	026_MB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:41:17-08:00
Sample Type	MB
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.000	#DIV/0!	0	#DIV/0!	0.5	
Na	23	1	He	9.044	8.3	17369	1.3	110	
Mg	24	1	He	1.554	9.9	678	6.5	110	
Al	27	1	He	2.218	22.5	360	20.2	10	
K	39	1	He	2.971	58.1	27072	2.4	110	
Ca	44	1	He	9.407	5.5	252	4.2	110	
V	51	1	He	-0.081	-12.8	409	9.4	2	
Cr	52	1	He	0.067	18.7	980	4.7	2	
Mn	55	1	He	0.151	22.9	446	22.5	1	
Fe	56	1	He	4.703	5.8	22755	3.6	20	
Co	59	1	He	0.017	5.2	154	3.3	1	
Ni	60	1	He	0.066	14.6	184	11.8	2	
Cu	65	1	He	0.940	2.3	3091	0.8	1	
Zn	66	1	He	2.214	7.0	2364	5.3	20	
As	75	1	He	-0.001	-2187.5	27	48.9	1	
Se	78	1	He	0.425	77.7	83	16.8	2	
Rb	85	1	He	0.004	103.4	22	60.6	0.5	
Sr	88	1	He	0.058	25.2	247	22.2	2	
Mo	95	1	He	0.048	17.5	181	16.1	2	
Ag	107	1	He	0.006	33.9	90	25.9	1	
Cd	111	1	He	0.008	98.5	13	90.1	1	
Sn	118	1	He	1.084	2.9	4138	2.1	2	
Sb	123	1	He	0.045	28.7	350	12.9	1	
Cs	133	1	He	0.002	27.4	31	16.4	0.5	
Ba	137	1	He	0.100	6.5	183	6.6	1	
Ce	140	1	He	0.006	23.3	186	19.0	1	
Tl	205	1	He	0.010	31.5	298	28.5	1	
Pb	208	1	He	0.055	4.4	2008	3.3	1	
Th	232	1	He	0.176	23.3	786	10.1	0.5	
U	238	1	He	0.006	22.8	240	19.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	95187	2.04	88966	106.99	60	120	
Ge (IS)	72	1	He	68800	1.54	67006	102.68	60	120	
In-115 (IS)	115	1	He	729830	0.77	703530	103.74	60	120	
Tb-159 (IS)	159	1	He	2412284	1.24	2419851	99.69	60	120	

Sample Report

Sample Table

Sample Name	lcs 440-584703/2-a@20
Data File Name	027SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:43:44-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3102
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	91.536	91.536	3.03	4944	3.73	100	>LDR
Na	23	1	He	893.185	893.185	3.13	692869	0.67	75000	
Mg	24	1	He	454.601	454.601	3.17	172084	1.01	125000	
Al	27	1	He	92.856	92.856	3.02	13546	1.58	4000	
K	39	1	He	926.860	926.860	2.97	343472	0.38	100000	
Ca	44	1	He	643.782	643.782	0.80	11893	1.70	250000	
V	51	1	He	90.724	90.724	3.02	372944	0.53	4000	
Cr	52	1	He	91.881	91.881	3.75	474835	1.58	4000	
Mn	55	1	He	89.989	89.989	3.71	257563	1.27	4000	
Fe	56	1	He	111.500	111.500	3.95	494370	1.47	40000	
Co	59	1	He	92.058	92.058	3.41	782852	0.98	4000	
Ni	60	1	He	92.525	92.525	3.11	212788	0.80	4000	
Cu	65	1	He	92.761	92.761	3.78	297731	1.35	4000	
Zn	66	1	He	91.714	91.714	1.02	93547	1.16	4000	
As	75	1	He	92.128	92.128	1.53	61596	0.74	4000	
Se	78	1	He	89.627	89.627	1.74	4098	0.51	4000	
Rb	85	1	He	0.013	0.013	12.88	48	10.66	100	
Sr	88	1	He	92.649	92.649	1.36	357947	1.10	4000	
Mo	95	1	He	92.490	92.490	1.43	301150	1.18	4000	
Ag	107	1	He	47.894	47.894	1.46	519398	1.19	100	
Cd	111	1	He	91.696	91.696	1.99	146261	1.71	3500	
Sn	118	1	He	93.169	93.169	1.66	333523	1.39	4000	
Sb	123	1	He	93.455	93.455	1.83	315484	1.55	4000	
Cs	133	1	He	0.001	0.001	81.51	19	26.96	100	
Ba	137	1	He	94.450	94.450	1.17	159110	1.07	4000	
Ce	140	1	He	0.009	0.009	13.82	269	12.17	4000	
Tl	205	1	He	91.544	91.544	0.42	2479775	0.75	3500	
Pb	208	1	He	92.250	92.250	1.51	3281752	0.82	4000	
Th	232	1	He	1.304	1.304	11.98	2873	10.32	100	
U	238	1	He	0.002	0.002	25.94	93	18.56	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	96567	2.50	88966	108.54	60	120	
Ge (IS)	72	1	He	68760	1.22	67006	102.62	60	120	
In-115 (IS)	115	1	He	728087	0.28	703530	103.49	60	120	
Tb-159 (IS)	159	1	He	2422956	0.69	2419851	100.13	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-1-a@20
Data File Name	028SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:46:10-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3103
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.285	0.285	25.59	16	24.76	100	
Na	23	1	He	490.978	490.978	2.17	389682	1.19	75000	
Mg	24	1	He	11356.633	11356.633	2.22	4340930	1.18	125000	
Al	27	1	He	13483.250	13483.250	1.25	1981188	1.14	4000	>LDR
K	39	1	He	2237.767	2237.767	1.91	800030	0.82	100000	
Ca	44	1	He	7043.092	7043.092	1.57	130577	0.99	250000	
V	51	1	He	37.655	37.655	2.36	156830	1.30	4000	
Cr	52	1	He	10.532	10.532	3.17	55577	2.08	4000	
Mn	55	1	He	115.500	115.500	2.40	334020	1.40	4000	
Fe	56	1	He	22540.070	22540.070	1.80	100515732	0.86	40000	
Co	59	1	He	7.223	7.223	2.06	62078	1.22	4000	
Ni	60	1	He	13.867	13.867	2.72	32249	1.67	4000	
Cu	65	1	He	3921.808	3921.808	1.73	12714745	0.77	4000	>LDR
Zn	66	1	He	29.012	29.012	2.42	29645	1.20	4000	
As	75	1	He	12.073	12.073	1.16	8092	1.31	4000	
Se	78	1	He	7.914	7.914	0.30	420	1.35	4000	
Rb	85	1	He	12.290	12.290	1.03	34758	0.75	100	
Sr	88	1	He	119.527	119.527	0.48	453620	0.86	4000	
Mo	95	1	He	8.265	8.265	1.42	26456	1.42	4000	
Ag	107	1	He	0.217	0.217	9.31	2336	9.20	100	
Cd	111	1	He	0.176	0.176	10.40	277	10.71	3500	
Sn	118	1	He	1.830	1.830	0.69	6679	0.97	4000	
Sb	123	1	He	2.130	2.130	4.67	7255	4.84	4000	
Cs	133	1	He	1.233	1.233	0.89	11761	0.69	100	
Ba	137	1	He	80.734	80.734	1.31	133600	1.32	4000	
Ce	140	1	He	29.193	29.193	1.02	736167	1.12	4000	
Tl	205	1	He	0.352	0.352	13.27	9633	13.69	3500	
Pb	208	1	He	7.080	7.080	0.23	253679	0.61	4000	
Th	232	1	He	135.742	135.742	6.46	252818	6.29	100	>LDR
U	238	1	He	2.567	2.567	1.38	95669	0.96	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	97531	1.07	88966	109.63	60	120	
Ge (IS)	72	1	He	68723	1.23	67006	102.56	60	120	
In-115 (IS)	115	1	He	715194	0.39	703530	101.66	60	120	
Tb-159 (IS)	159	1	He	2439477	0.70	2419851	100.81	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-1-b ms@20
Data File Name	029SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:48:34-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3104
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	85.816	85.816	2.98	4840	1.51	100	
Na	23	1	He	1368.635	1368.635	1.87	1103229	0.76	75000	
Mg	24	1	He	11388.983	11388.983	3.00	4501335	2.22	125000	
Al	27	1	He	16586.674	16586.674	3.05	2519522	1.44	4000	>LDR
K	39	1	He	3279.157	3279.157	2.14	1199397	1.47	100000	
Ca	44	1	He	7487.585	7487.585	3.18	143509	1.79	250000	
V	51	1	He	128.617	128.617	2.32	552008	0.99	4000	
Cr	52	1	He	95.629	95.629	2.52	516298	1.21	4000	
Mn	55	1	He	203.004	203.004	2.29	607021	0.74	4000	
Fe	56	1	He	25651.392	25651.392	1.67	118281738	0.37	40000	
Co	59	1	He	93.486	93.486	2.58	830525	1.00	4000	
Ni	60	1	He	99.773	99.773	2.47	239710	1.44	4000	
Cu	65	1	He	4292.909	4292.909	2.68	14389783	1.17	4000	>LDR
Zn	66	1	He	119.410	119.410	1.06	124257	0.93	4000	
As	75	1	He	103.789	103.789	1.19	70816	1.19	4000	
Se	78	1	He	96.420	96.420	0.35	4494	0.23	4000	
Rb	85	1	He	13.559	13.559	1.05	39220	1.83	100	
Sr	88	1	He	220.379	220.379	0.28	855404	1.06	4000	
Mo	95	1	He	96.492	96.492	1.13	315662	1.66	4000	
Ag	107	1	He	46.331	46.331	0.66	504811	1.03	100	
Cd	111	1	He	89.283	89.283	0.84	143077	0.52	3500	
Sn	118	1	He	90.679	90.679	1.19	326148	1.68	4000	
Sb	123	1	He	65.375	65.375	1.72	221787	1.84	4000	
Cs	133	1	He	1.427	1.427	0.40	13922	1.26	100	
Ba	137	1	He	182.473	182.473	0.60	308816	0.79	4000	
Ce	140	1	He	30.221	30.221	0.50	779452	0.92	4000	
Tl	205	1	He	88.434	88.434	2.44	2396567	1.17	3500	
Pb	208	1	He	96.680	96.680	2.10	3441151	0.87	4000	
Th	232	1	He	171.420	171.420	2.77	317137	1.44	100	>LDR
U	238	1	He	2.968	2.968	2.66	109923	1.38	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	100854	1.66	88966	113.36	60	120	
Ge (IS)	72	1	He	70166	0.15	67006	104.72	60	120	
In-115 (IS)	115	1	He	731487	0.87	703530	103.97	60	120	
Tb-159 (IS)	159	1	He	2424508	1.34	2419851	100.19	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-1-c msd@20
Data File Name	030SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:50:53-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3105
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	85.178	85.178	2.89	4866	1.67	100	
Na	23	1	He	1324.353	1324.353	1.22	1081858	0.75	75000	
Mg	24	1	He	16150.701	16150.701	1.92	6466632	0.98	125000	
Al	27	1	He	18028.319	18028.319	2.88	2774291	1.67	4000	>LDR
K	39	1	He	4364.928	4364.928	1.11	1608101	0.34	100000	
Ca	44	1	He	6454.708	6454.708	3.05	125339	1.85	250000	
V	51	1	He	138.982	138.982	2.00	604209	0.81	4000	
Cr	52	1	He	95.552	95.552	1.92	522623	0.69	4000	
Mn	55	1	He	223.800	223.800	2.70	677899	1.50	4000	
Fe	56	1	He	25065.071	25065.071	3.04	117069084	1.85	40000	
Co	59	1	He	93.806	93.806	2.72	844222	1.55	4000	
Ni	60	1	He	102.074	102.074	2.61	248422	1.39	4000	
Cu	65	1	He	4073.008	4073.008	1.25	13832318	0.30	4000	>LDR
Zn	66	1	He	117.758	117.758	1.15	125709	0.45	4000	
As	75	1	He	98.799	98.799	1.72	69154	1.29	4000	
Se	78	1	He	89.437	89.437	2.08	4281	1.41	4000	
Rb	85	1	He	17.599	17.599	1.30	51041	1.29	100	
Sr	88	1	He	192.446	192.446	0.84	748998	0.83	4000	
Mo	95	1	He	95.761	95.761	1.72	314106	1.62	4000	
Ag	107	1	He	46.660	46.660	1.69	509764	1.66	100	
Cd	111	1	He	89.212	89.212	1.40	143355	1.38	3500	
Sn	118	1	He	91.854	91.854	1.17	331255	0.99	4000	
Sb	123	1	He	67.081	67.081	1.22	228186	1.19	4000	
Cs	133	1	He	1.320	1.320	4.70	12910	4.52	100	
Ba	137	1	He	195.178	195.178	2.23	331213	2.18	4000	
Ce	140	1	He	20.756	20.756	1.75	536785	1.80	4000	
Tl	205	1	He	86.924	86.924	1.44	2395903	1.23	3500	
Pb	208	1	He	92.989	92.989	2.59	3365677	1.00	4000	
Th	232	1	He	143.872	143.872	1.54	270799	1.03	100	>LDR
U	238	1	He	2.590	2.590	1.79	97556	1.30	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102162	1.23	88966	114.83	60	120	
Ge (IS)	72	1	He	71984	0.79	67006	107.43	60	120	
In-115 (IS)	115	1	He	733469	0.29	703530	104.26	60	120	
Tb-159 (IS)	159	1	He	2465950	2.40	2419851	101.91	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-1-a PDS@20
Data File Name	031SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T20:53:13-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3106
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	86.615	86.615	3.74	4803	2.42	100	
Na	23	1	He	2865.569	2865.569	2.66	2259081	1.08	75000	
Mg	24	1	He	13785.325	13785.325	1.49	5357901	0.13	125000	
Al	27	1	He	13736.171	13736.171	1.97	2051979	0.39	4000	>LDR
K	39	1	He	4630.092	4630.092	1.69	1654057	0.15	100000	
Ca	44	1	He	12059.263	12059.263	2.69	227233	1.21	250000	
V	51	1	He	133.816	133.816	2.14	564713	0.64	4000	
Cr	52	1	He	106.153	106.153	1.94	563504	0.37	4000	
Mn	55	1	He	212.781	212.781	2.26	625644	0.69	4000	
Fe	56	1	He	23618.940	23618.940	2.65	107082351	1.14	40000	
Co	59	1	He	102.267	102.267	3.03	893337	1.47	4000	
Ni	60	1	He	107.807	107.807	1.83	254700	0.66	4000	
Cu	65	1	He	4037.053	4037.053	2.01	13307829	1.12	4000	>LDR
Zn	66	1	He	122.343	122.343	0.53	129003	0.66	4000	
As	75	1	He	108.491	108.491	0.85	75007	0.76	4000	
Se	78	1	He	101.323	101.323	0.74	4782	0.85	4000	
Rb	85	1	He	111.918	111.918	1.55	324319	0.94	100	>LDR
Sr	88	1	He	219.534	219.534	2.08	853819	1.06	4000	
Mo	95	1	He	108.138	108.138	1.58	354468	0.58	4000	
Ag	107	1	He	98.132	98.132	0.90	1071418	0.21	100	>LDR
Cd	111	1	He	96.644	96.644	1.81	155193	0.97	3500	
Sn	118	1	He	101.112	101.112	1.99	364365	0.99	4000	
Sb	123	1	He	101.213	101.213	2.40	343947	1.53	4000	
Cs	133	1	He	99.792	99.792	1.71	974794	0.68	100	
Ba	137	1	He	180.440	180.440	1.72	306009	1.24	4000	
Ce	140	1	He	125.957	125.957	1.42	3255223	0.52	4000	
Tl	205	1	He	95.865	95.865	1.52	2627388	0.82	3500	
Pb	208	1	He	102.562	102.562	1.31	3691852	0.76	4000	
Th	232	1	He	235.411	235.411	0.69	440324	0.77	100	>LDR
U	238	1	He	98.830	98.830	2.10	3700494	1.18	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	99172	1.59	88966	111.47	60	120	
Ge (IS)	72	1	He	71099	0.14	67006	106.11	60	120	
In-115 (IS)	115	1	He	733054	1.03	703530	104.20	60	120	
Tb-159 (IS)	159	1	He	2451667	0.94	2419851	101.31	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-1-a SD@100
Data File Name	032SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:00:59-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	3107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.083	0.083	86.62	4	86.60	100	
Na	23	1	He	104.513	104.513	1.87	89823	0.36	75000	
Mg	24	1	He	2454.011	2454.011	1.04	921332	1.43	125000	
Al	27	1	He	2844.297	2844.297	0.30	410457	1.15	4000	
K	39	1	He	469.112	469.112	1.25	185434	0.32	100000	
Ca	44	1	He	1498.041	1498.041	2.02	27338	1.52	250000	
V	51	1	He	7.831	7.831	2.21	32615	1.14	4000	
Cr	52	1	He	2.202	2.202	0.63	11925	0.70	4000	
Mn	55	1	He	24.439	24.439	1.61	69423	1.07	4000	
Fe	56	1	He	4786.174	4786.174	0.32	20964198	1.52	40000	
Co	59	1	He	1.554	1.554	2.00	13128	2.85	4000	
Ni	60	1	He	2.953	2.953	2.31	6774	3.20	4000	
Cu	65	1	He	845.123	845.123	1.13	2690941	1.35	4000	
Zn	66	1	He	6.275	6.275	1.87	6745	2.47	4000	
As	75	1	He	2.410	2.410	1.72	1699	0.66	4000	
Se	78	1	He	1.609	1.609	15.55	141	6.84	4000	
Rb	85	1	He	2.453	2.453	1.44	7212	0.94	100	
Sr	88	1	He	24.067	24.067	2.00	94878	1.47	4000	
Mo	95	1	He	1.654	1.654	2.26	5518	3.40	4000	
Ag	107	1	He	0.062	0.062	5.49	702	4.25	100	
Cd	111	1	He	0.047	0.047	15.80	78	15.05	3500	
Sn	118	1	He	0.343	0.343	9.42	1511	7.99	4000	
Sb	123	1	He	0.470	0.470	6.51	1818	4.40	4000	
Cs	133	1	He	0.256	0.256	8.87	2548	7.47	100	
Ba	137	1	He	15.808	15.808	0.64	27184	1.76	4000	
Ce	140	1	He	5.765	5.765	1.62	151013	1.63	4000	
Tl	205	1	He	0.076	0.076	9.16	2114	8.20	3500	
Pb	208	1	He	1.431	1.431	0.39	51925	0.98	4000	
Th	232	1	He	25.830	25.830	6.14	49067	7.24	100	
U	238	1	He	0.527	0.527	3.46	19896	2.59	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	95775	1.28	88966	107.65	60	120	
Ge (IS)	72	1	He	71325	1.60	67006	106.44	60	120	
In-115 (IS)	115	1	He	742890	1.44	703530	105.59	60	120	
Tb-159 (IS)	159	1	He	2467297	1.31	2419851	101.96	60	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-5990824
Data File Name	033_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:03:23-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	He	50.338	9.105	2738	8.68	50	100.7	89.5	110.49	
Na	23	1	He	1280.565	2.029	996251	0.62	1250	102.4	89.5	110.49	
Mg	24	1	He	1253.690	2.458	477983	1.00	1250	100.3	89.5	110.49	
Al	27	1	He	53.638	1.088	7903	1.26	50	107.3	89.5	110.49	
K	39	1	He	1271.050	1.853	464698	0.28	1250	101.7	89.5	110.49	
Ca	44	1	He	2538.809	3.113	46987	1.68	2500	101.6	89.5	110.49	
V	51	1	He	50.330	1.824	208813	0.96	50	100.7	89.5	110.49	
Cr	52	1	He	50.846	2.063	265085	0.83	50	101.7	89.5	110.49	
Mn	55	1	He	50.173	2.560	144713	1.21	50	100.3	89.5	110.49	
Fe	56	1	He	513.967	1.210	2288214	0.33	500	102.8	89.5	110.49	
Co	59	1	He	51.247	2.263	439133	0.80	50	102.5	89.5	110.49	
Ni	60	1	He	50.765	1.761	117656	0.29	50	101.5	89.5	110.49	
Cu	65	1	He	51.752	1.621	167450	0.15	50	103.5	89.5	110.49	
Zn	66	1	He	49.719	2.470	53115	1.81	50	99.4	89.5	110.49	
As	75	1	He	49.938	1.286	34953	0.81	50	99.9	89.5	110.49	
Se	78	1	He	50.044	2.809	2424	2.41	50	100.1	89.5	110.49	
Rb	85	1	He	49.994	0.528	150666	0.63	50	100.0	89.5	110.49	
Sr	88	1	He	49.720	0.888	201118	0.59	50	99.4	89.5	110.49	
Mo	95	1	He	49.954	1.586	170297	1.32	50	99.9	89.5	110.49	
Ag	107	1	He	49.732	1.162	564645	0.90	50	99.5	89.5	110.49	
Cd	111	1	He	49.399	1.016	82495	0.80	50	98.8	89.5	110.49	
Sn	118	1	He	49.219	1.872	184584	1.55	50	98.4	89.5	110.49	
Sb	123	1	He	48.701	3.630	172216	3.44	50	97.4	89.5	110.49	
Cs	133	1	He	49.061	1.207	498384	0.96	50	98.1	89.5	110.49	
Ba	137	1	He	49.120	1.628	86639	1.49	50	98.2	89.5	110.49	
Ce	140	1	He	46.888	1.479	1260162	1.23	50	93.8	89.5	110.49	
Tl	205	1	He	47.465	0.914	1314414	0.89	50	94.9	89.5	110.49	
Pb	208	1	He	48.647	1.015	1769356	1.23	50	97.3	89.5	110.49	
Th	232	1	He	65.741	2.957	124587	3.32	50	131.5	89.5	110.49	>+\-10%
U	238	1	He	49.590	1.476	1876207	1.57	50	99.2	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	97272	1.48	88966	109.34	60	120	
Ge (IS)	72	1	He	71951	0.65	67006	107.38	60	120	
In-115 (IS)	115	1	He	762260	0.32	703530	108.35	60	120	
Tb-159 (IS)	159	1	He	2476943	0.37	2419851	102.36	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	034_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:05:46-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.042	173.2	2	173.2	0.5	
Na	23	1	He	1.579	28.2	11697	3.4	110	
Mg	24	1	He	1.201	12.9	544	11.0	110	
Al	27	1	He	0.550	25.6	120	16.7	10	
K	39	1	He	-2.635	-27.8	25060	1.4	110	
Ca	44	1	He	0.705	141.3	94	19.4	110	
V	51	1	He	-0.098	-18.7	340	22.2	2	
Cr	52	1	He	0.014	245.0	709	24.7	2	
Mn	55	1	He	0.039	53.4	131	45.6	1	
Fe	56	1	He	1.708	17.7	9688	14.0	20	
Co	59	1	He	0.036	26.7	317	26.2	1	
Ni	60	1	He	0.046	40.9	139	31.2	2	
Cu	65	1	He	0.257	19.8	927	17.7	1	
Zn	66	1	He	0.121	14.5	240	8.4	20	
As	75	1	He	0.031	55.1	50	24.6	1	
Se	78	1	He	0.148	164.8	73	16.3	2	
Sr	88	1	He	0.038	25.5	174	23.1	2	
Mo	95	1	He	0.170	23.8	597	23.8	2	
Ag	107	1	He	0.045	36.9	523	36.4	1	
Cd	111	1	He	0.039	47.2	66	47.2	1	
Sn	118	1	He	0.161	37.2	856	26.7	2	
Sb	123	1	He	0.701	36.1	2650	34.1	1	
Ba	137	1	He	0.030	16.0	67	13.2	1	
Ce	140	1	He	0.034	36.7	942	36.3	1	
Tl	205	1	He	0.045	34.2	1251	33.7	1	
Pb	208	1	He	0.054	23.7	2046	22.8	1	
U	238	1	He	0.049	31.9	1893	31.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	94718	0.52	88966	106.47	60	120	
Ge (IS)	72	1	He	71041	0.85	67006	106.02	60	120	
In-115 (IS)	115	1	He	751822	0.90	703530	106.86	60	120	
Tb-159 (IS)	159	1	He	2476286	0.45	2419851	102.33	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-2-a@20
Data File Name	035SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:08:13-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3108
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.425	0.425	64.21	24	64.43	100	
Na	23	1	He	188.699	188.699	0.67	164833	0.70	75000	
Mg	24	1	He	10416.135	10416.135	1.74	4195191	1.33	125000	
Al	27	1	He	14231.850	14231.850	1.83	2203194	1.39	4000	>LDR
K	39	1	He	1878.384	1878.384	1.50	712105	1.03	100000	
Ca	44	1	He	6132.217	6132.217	2.12	119795	1.74	250000	
V	51	1	He	40.428	40.428	1.92	177359	1.47	4000	
Cr	52	1	He	10.668	10.668	2.40	59310	1.99	4000	
Mn	55	1	He	92.717	92.717	2.50	282529	2.10	4000	
Fe	56	1	He	25628.139	25628.139	2.80	120415293	2.46	40000	
Co	59	1	He	6.132	6.132	2.40	55525	2.10	4000	
Ni	60	1	He	12.581	12.581	1.79	30835	1.33	4000	
Cu	65	1	He	2699.701	2699.701	1.82	9222120	1.37	4000	
Zn	66	1	He	22.593	22.593	1.21	24300	1.05	4000	
As	75	1	He	16.892	16.892	1.62	11893	2.15	4000	
Se	78	1	He	8.609	8.609	3.80	474	2.74	4000	
Rb	85	1	He	11.095	11.095	2.28	32425	2.26	100	
Sr	88	1	He	156.577	156.577	1.42	614007	1.40	4000	
Mo	95	1	He	6.919	6.919	2.33	22889	2.30	4000	
Ag	107	1	He	0.231	0.231	4.50	2568	4.48	100	
Cd	111	1	He	0.080	0.080	38.86	131	38.50	3500	
Sn	118	1	He	1.665	1.665	1.76	6303	1.69	4000	
Sb	123	1	He	4.965	4.965	0.11	17204	0.08	4000	
Cs	133	1	He	1.319	1.319	2.38	13001	2.35	100	
Ba	137	1	He	98.404	98.404	1.88	168261	1.85	4000	
Ce	140	1	He	26.258	26.258	1.26	684207	1.23	4000	
Tl	205	1	He	0.264	0.264	2.21	7323	2.21	3500	
Pb	208	1	He	8.094	8.094	1.04	294414	0.76	4000	
Th	232	1	He	135.823	135.823	5.55	256832	5.23	100	>LDR
U	238	1	He	2.267	2.267	1.26	85769	0.95	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102755	0.46	88966	115.50	60	120	
Ge (IS)	72	1	He	72249	0.62	67006	107.82	60	120	
In-115 (IS)	115	1	He	739016	0.03	703530	105.04	60	120	
Tb-159 (IS)	159	1	He	2476816	0.33	2419851	102.35	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-3-a@20
Data File Name	036SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:10:36-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3109
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.213	0.213	32.65	12	31.50	100	
Na	23	1	He	153.299	153.299	1.86	136078	1.08	75000	
Mg	24	1	He	9985.754	9985.754	2.26	4022580	1.11	125000	
Al	27	1	He	13401.634	13401.634	2.23	2075066	1.11	4000	>LDR
K	39	1	He	2172.152	2172.152	2.00	819229	0.65	100000	
Ca	44	1	He	5653.635	5653.635	2.43	110473	1.35	250000	
V	51	1	He	37.133	37.133	2.45	163000	1.25	4000	
Cr	52	1	He	8.723	8.723	2.98	48631	1.85	4000	
Mn	55	1	He	97.576	97.576	2.13	297398	0.96	4000	
Fe	56	1	He	25711.803	25711.803	1.85	120836746	0.76	40000	
Co	59	1	He	6.696	6.696	3.06	60645	1.85	4000	
Ni	60	1	He	12.177	12.177	2.45	29851	1.82	4000	
Cu	65	1	He	2321.109	2321.109	2.49	7930103	1.18	4000	
Zn	66	1	He	29.315	29.315	1.94	32070	2.23	4000	
As	75	1	He	14.392	14.392	1.28	10320	1.50	4000	
Se	78	1	He	6.650	6.650	6.09	388	5.08	4000	
Rb	85	1	He	13.574	13.574	2.36	40325	2.50	100	
Sr	88	1	He	101.941	101.941	1.04	406388	1.11	4000	
Mo	95	1	He	6.519	6.519	2.83	21925	2.94	4000	
Ag	107	1	He	0.177	0.177	4.06	2002	4.13	100	
Cd	111	1	He	0.039	0.039	30.47	66	29.80	3500	
Sn	118	1	He	1.513	1.513	2.19	5847	1.99	4000	
Sb	123	1	He	9.852	9.852	1.53	34500	1.42	4000	
Cs	133	1	He	1.456	1.456	0.24	14592	0.37	100	
Ba	137	1	He	116.797	116.797	0.80	203018	0.91	4000	
Ce	140	1	He	34.836	34.836	0.85	922764	0.89	4000	
Tl	205	1	He	0.248	0.248	2.54	6864	2.88	3500	
Pb	208	1	He	6.423	6.423	1.56	232886	1.04	4000	
Th	232	1	He	156.983	156.983	3.06	295815	2.56	100	>LDR
U	238	1	He	2.883	2.883	1.79	108731	1.31	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102788	1.32	88966	115.54	60	120	
Ge (IS)	72	1	He	73560	0.30	67006	109.78	60	120	
In-115 (IS)	115	1	He	751257	0.15	703530	106.78	60	120	
Tb-159 (IS)	159	1	He	2468816	0.58	2419851	102.02	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-4-a@20
Data File Name	037SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:12:58-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3110
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.387	0.387	57.68	22	56.80	100	
Na	23	1	He	209.531	209.531	2.69	182234	0.72	75000	
Mg	24	1	He	10110.935	10110.935	2.42	4082926	0.93	125000	
Al	27	1	He	11734.550	11734.550	1.90	1821448	0.03	4000	>LDR
K	39	1	He	2291.413	2291.413	2.28	864754	0.34	100000	
Ca	44	1	He	7909.381	7909.381	2.06	154897	0.37	250000	
V	51	1	He	37.505	37.505	3.20	165010	1.36	4000	
Cr	52	1	He	11.794	11.794	2.45	65669	1.15	4000	
Mn	55	1	He	133.410	133.410	2.29	407591	0.55	4000	
Fe	56	1	He	27871.555	27871.555	2.65	131297404	1.09	40000	
Co	59	1	He	10.015	10.015	2.13	90923	0.75	4000	
Ni	60	1	He	15.320	15.320	1.86	37639	0.47	4000	
Cu	65	1	He	2079.800	2079.800	2.60	7122915	0.74	4000	
Zn	66	1	He	29.230	29.230	1.26	32513	0.90	4000	
As	75	1	He	7.069	7.069	1.03	5169	1.37	4000	
Se	78	1	He	4.584	4.584	1.89	294	1.09	4000	
Rb	85	1	He	12.747	12.747	2.98	37910	1.87	100	
Sr	88	1	He	75.179	75.179	2.90	300042	1.68	4000	
Mo	95	1	He	5.462	5.462	2.91	18395	1.50	4000	
Ag	107	1	He	0.206	0.206	5.34	2331	4.60	100	
Cd	111	1	He	0.050	0.050	17.66	83	17.43	3500	
Sn	118	1	He	1.621	1.621	3.84	6253	4.20	4000	
Sb	123	1	He	1.063	1.063	1.35	3908	1.80	4000	
Cs	133	1	He	1.528	1.528	0.52	15335	1.48	100	
Ba	137	1	He	77.173	77.173	3.02	134296	1.76	4000	
Ce	140	1	He	31.771	31.771	2.11	842581	0.85	4000	
Tl	205	1	He	0.150	0.150	4.35	4151	3.72	3500	
Pb	208	1	He	4.779	4.779	1.79	173052	0.68	4000	
Th	232	1	He	231.993	231.993	3.20	436257	1.99	100	>LDR
U	238	1	He	4.044	4.044	2.40	152285	1.28	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	103049	1.90	88966	115.83	60	120	
Ge (IS)	72	1	He	74797	0.36	67006	111.63	60	120	
In-115 (IS)	115	1	He	752296	1.45	703530	106.93	60	120	
Tb-159 (IS)	159	1	He	2465341	1.21	2419851	101.88	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-5-a@20
Data File Name	038SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:15:22-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3111
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.194	0.194	47.01	11	45.82	100	
Na	23	1	He	152.212	152.212	1.19	135146	0.32	75000	
Mg	24	1	He	10185.594	10185.594	1.29	4101851	0.39	125000	
Al	27	1	He	12495.945	12495.945	1.17	1934344	1.16	4000	>LDR
K	39	1	He	1857.945	1857.945	1.85	704542	0.56	100000	
Ca	44	1	He	6784.658	6784.658	1.61	132513	0.40	250000	
V	51	1	He	36.268	36.268	1.80	159170	0.71	4000	
Cr	52	1	He	8.634	8.634	2.72	48120	1.46	4000	
Mn	55	1	He	84.940	84.940	1.44	258805	0.66	4000	
Fe	56	1	He	19488.464	19488.464	2.08	91553167	0.91	40000	
Co	59	1	He	5.357	5.357	0.44	48512	0.88	4000	
Ni	60	1	He	10.981	10.981	2.29	26913	1.07	4000	
Cu	65	1	He	1013.147	1013.147	1.27	3460567	0.17	4000	
Zn	66	1	He	22.438	22.438	3.78	24441	2.64	4000	
As	75	1	He	9.075	9.075	1.19	6484	0.29	4000	
Se	78	1	He	3.746	3.746	12.72	247	10.24	4000	
Rb	85	1	He	12.238	12.238	2.71	35859	1.98	100	
Sr	88	1	He	134.143	134.143	0.80	527508	0.47	4000	
Mo	95	1	He	6.632	6.632	1.52	22000	1.33	4000	
Ag	107	1	He	0.088	0.088	6.45	997	6.68	100	
Cd	111	1	He	0.034	0.034	41.29	56	39.95	3500	
Sn	118	1	He	1.755	1.755	2.10	6647	1.28	4000	
Sb	123	1	He	0.928	0.928	2.47	3388	3.06	4000	
Cs	133	1	He	1.178	1.178	4.15	11650	4.62	100	
Ba	137	1	He	64.442	64.442	1.40	110499	0.98	4000	
Ce	140	1	He	21.008	21.008	1.43	548940	0.70	4000	
Tl	205	1	He	0.133	0.133	4.99	3652	4.76	3500	
Pb	208	1	He	6.506	6.506	0.57	234326	0.33	4000	
Th	232	1	He	147.903	147.903	1.51	276888	1.21	100	>LDR
U	238	1	He	2.708	2.708	0.45	101452	0.75	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102748	1.21	88966	115.49	60	120	
Ge (IS)	72	1	He	73188	1.47	67006	109.22	60	120	
In-115 (IS)	115	1	He	741105	0.77	703530	105.34	60	120	
Tb-159 (IS)	159	1	He	2452285	0.31	2419851	101.34	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-6-a@20
Data File Name	039SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:17:45-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3112
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.406	0.406	14.44	23	14.29	100	
Na	23	1	He	112.449	112.449	12.16	102811	10.57	75000	
Mg	24	1	He	11522.429	11522.429	1.84	4640488	1.57	125000	
Al	27	1	He	13686.546	13686.546	1.47	2118686	1.21	4000	>LDR
K	39	1	He	2537.034	2537.034	1.18	951885	0.88	100000	
Ca	44	1	He	7189.478	7189.478	1.70	140428	1.50	250000	
V	51	1	He	47.234	47.234	1.70	207077	1.42	4000	
Cr	52	1	He	8.459	8.459	2.37	47166	2.10	4000	
Mn	55	1	He	73.037	73.037	1.07	222562	0.92	4000	
Fe	56	1	He	20516.731	20516.731	1.39	96396841	1.12	40000	
Co	59	1	He	5.352	5.352	1.02	48462	0.75	4000	
Ni	60	1	He	11.529	11.529	2.47	28257	2.21	4000	
Cu	65	1	He	1199.196	1199.196	0.62	4096382	0.36	4000	
Zn	66	1	He	19.232	19.232	2.05	20968	1.48	4000	
As	75	1	He	8.359	8.359	0.25	5975	0.38	4000	
Se	78	1	He	4.738	4.738	11.21	295	8.41	4000	
Rb	85	1	He	15.636	15.636	1.23	46656	0.92	100	
Sr	88	1	He	160.074	160.074	0.65	641012	0.67	4000	
Mo	95	1	He	6.202	6.202	3.04	20953	2.63	4000	
Ag	107	1	He	0.160	0.160	7.76	1817	7.33	100	
Cd	111	1	He	0.023	0.023	30.96	39	30.10	3500	
Sn	118	1	He	1.527	1.527	4.34	5923	3.79	4000	
Sb	123	1	He	0.976	0.976	3.49	3617	3.10	4000	
Cs	133	1	He	1.256	1.256	1.15	12640	0.74	100	
Ba	137	1	He	89.146	89.146	1.52	155657	1.38	4000	
Ce	140	1	He	24.768	24.768	1.58	659050	1.42	4000	
Tl	205	1	He	0.136	0.136	5.53	3796	5.83	3500	
Pb	208	1	He	7.038	7.038	2.25	256524	0.64	4000	
Th	232	1	He	151.755	151.755	4.07	287425	2.47	100	>LDR
U	238	1	He	1.820	1.820	3.68	68997	2.25	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102748	0.27	88966	115.49	60	120	
Ge (IS)	72	1	He	73181	0.57	67006	109.21	60	120	
In-115 (IS)	115	1	He	754663	0.41	703530	107.27	60	120	
Tb-159 (IS)	159	1	He	2482115	1.64	2419851	102.57	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-7-a@20
Data File Name	040SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:20:07-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3201
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.327	0.327	9.98	19	10.18	100	
Na	23	1	He	129.422	129.422	3.12	117363	1.95	75000	
Mg	24	1	He	11691.874	11691.874	1.94	4738730	0.89	125000	
Al	27	1	He	13483.203	13483.203	1.21	2100613	0.42	4000	>LDR
K	39	1	He	2363.369	2363.369	1.86	894335	1.14	100000	
Ca	44	1	He	6815.720	6815.720	2.60	133974	1.55	250000	
V	51	1	He	46.373	46.373	2.41	204605	1.51	4000	
Cr	52	1	He	8.697	8.697	2.35	48783	1.26	4000	
Mn	55	1	He	78.328	78.328	1.87	240199	0.81	4000	
Fe	56	1	He	22750.529	22750.529	2.52	107568076	1.50	40000	
Co	59	1	He	5.713	5.713	1.45	52063	0.40	4000	
Ni	60	1	He	13.110	13.110	3.32	32328	2.26	4000	
Cu	65	1	He	1801.596	1801.596	2.43	6192962	1.40	4000	
Zn	66	1	He	20.055	20.055	2.06	22116	1.46	4000	
As	75	1	He	11.327	11.327	2.01	8181	2.29	4000	
Se	78	1	He	7.572	7.572	8.28	436	7.70	4000	
Rb	85	1	He	14.523	14.523	1.41	43192	1.05	100	
Sr	88	1	He	159.375	159.375	1.74	636073	1.30	4000	
Mo	95	1	He	6.586	6.586	1.12	22177	0.72	4000	
Ag	107	1	He	0.376	0.376	3.82	4231	4.22	100	
Cd	111	1	He	0.036	0.036	11.37	61	11.36	3500	
Sn	118	1	He	1.446	1.446	2.69	5603	2.41	4000	
Sb	123	1	He	2.718	2.718	5.40	9677	4.88	4000	
Cs	133	1	He	1.240	1.240	1.93	12446	1.56	100	
Ba	137	1	He	80.364	80.364	1.63	139857	1.20	4000	
Ce	140	1	He	24.598	24.598	1.59	652329	1.15	4000	
Tl	205	1	He	0.145	0.145	4.12	4039	4.25	3500	
Pb	208	1	He	6.172	6.172	1.67	224283	1.36	4000	
Th	232	1	He	148.026	148.026	2.33	279549	1.80	100	>LDR
U	238	1	He	2.166	2.166	0.67	81868	0.76	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	103413	1.07	88966	116.24	60	120	
Ge (IS)	72	1	He	74035	0.90	67006	110.49	60	120	
In-115 (IS)	115	1	He	752170	0.44	703530	106.91	60	120	
Tb-159 (IS)	159	1	He	2473925	0.57	2419851	102.23	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-8-a@20
Data File Name	041SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:22:30-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3202
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.581	0.581	19.84	33	20.00	100	
Na	23	1	He	262.217	262.217	0.73	224251	0.49	75000	
Mg	24	1	He	11342.704	11342.704	0.89	4561232	0.66	125000	
Al	27	1	He	13857.686	13857.686	1.64	2141934	1.53	4000	>LDR
K	39	1	He	3289.046	3289.046	1.43	1223860	1.50	100000	
Ca	44	1	He	9551.830	9551.830	1.40	186259	1.22	250000	
V	51	1	He	40.205	40.205	1.19	176117	1.17	4000	
Cr	52	1	He	12.431	12.431	1.94	68889	1.86	4000	
Mn	55	1	He	173.285	173.285	1.07	527206	0.91	4000	
Fe	56	1	He	26998.188	26998.188	0.99	126657577	0.89	40000	
Co	59	1	He	11.488	11.488	0.96	103854	0.69	4000	
Ni	60	1	He	15.846	15.846	1.18	38766	0.92	4000	
Cu	65	1	He	1760.455	1760.455	0.84	6004364	0.57	4000	
Zn	66	1	He	31.900	31.900	1.71	34855	1.91	4000	
As	75	1	He	5.795	5.795	1.65	4169	1.56	4000	
Se	78	1	He	5.561	5.561	14.81	335	10.89	4000	
Rb	85	1	He	17.212	17.212	0.95	51143	0.80	100	
Sr	88	1	He	97.268	97.268	1.21	387871	1.05	4000	
Mo	95	1	He	4.620	4.620	2.64	15550	2.49	4000	
Ag	107	1	He	0.250	0.250	4.60	2820	4.39	100	
Cd	111	1	He	0.056	0.056	12.61	93	12.37	3500	
Sn	118	1	He	1.788	1.788	3.57	6863	3.36	4000	
Sb	123	1	He	0.657	0.657	6.22	2491	5.65	4000	
Cs	133	1	He	1.601	1.601	1.61	16045	1.61	100	
Ba	137	1	He	97.626	97.626	0.20	169747	0.02	4000	
Ce	140	1	He	47.391	47.391	1.07	1255699	0.97	4000	
Tl	205	1	He	0.154	0.154	3.87	4282	2.89	3500	
Pb	208	1	He	4.952	4.952	3.04	179752	2.09	4000	
Th	232	1	He	313.038	313.038	3.92	589938	2.94	100	>LDR
U	238	1	He	5.621	5.621	2.82	212171	1.78	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102591	0.26	88966	115.32	60	120	
Ge (IS)	72	1	He	73496	0.89	67006	109.68	60	120	
In-115 (IS)	115	1	He	751485	0.19	703530	106.82	60	120	
Tb-159 (IS)	159	1	He	2471410	1.06	2419851	102.13	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-9-a@20
Data File Name	042SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:24:52-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3203
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.330	0.330	28.44	19	26.96	100	
Na	23	1	He	151.708	151.708	1.01	134708	1.16	75000	
Mg	24	1	He	11796.822	11796.822	0.68	4749831	1.15	125000	
Al	27	1	He	13965.050	13965.050	1.84	2160976	0.60	4000	>LDR
K	39	1	He	2402.304	2402.304	2.13	902447	0.36	100000	
Ca	44	1	He	6824.964	6824.964	0.83	133279	1.20	250000	
V	51	1	He	46.579	46.579	1.24	204151	0.73	4000	
Cr	52	1	He	8.608	8.608	2.46	47968	1.73	4000	
Mn	55	1	He	81.326	81.326	0.87	247744	0.87	4000	
Fe	56	1	He	23080.276	23080.276	0.78	108412171	1.00	40000	
Co	59	1	He	7.098	7.098	1.02	64253	0.73	4000	
Ni	60	1	He	12.687	12.687	1.83	31082	1.27	4000	
Cu	65	1	He	1682.382	1682.382	0.60	5745356	1.15	4000	
Zn	66	1	He	20.177	20.177	1.53	21929	1.76	4000	
As	75	1	He	11.517	11.517	2.17	8196	1.48	4000	
Se	78	1	He	6.171	6.171	6.71	362	6.00	4000	
Rb	85	1	He	14.813	14.813	1.64	44198	1.61	100	
Sr	88	1	He	131.401	131.401	1.61	526144	1.57	4000	
Mo	95	1	He	6.846	6.846	0.79	23124	0.82	4000	
Ag	107	1	He	0.165	0.165	5.09	1879	5.07	100	
Cd	111	1	He	0.025	0.025	36.20	43	35.25	3500	
Sn	118	1	He	1.425	1.425	3.95	5547	3.79	4000	
Sb	123	1	He	1.313	1.313	0.95	4796	0.94	4000	
Cs	133	1	He	1.332	1.332	2.10	13410	2.07	100	
Ba	137	1	He	91.620	91.620	0.95	159963	0.93	4000	
Ce	140	1	He	25.173	25.173	0.86	669754	0.82	4000	
Tl	205	1	He	0.120	0.120	2.19	3379	3.23	3500	
Pb	208	1	He	6.184	6.184	0.63	227695	1.23	4000	
Th	232	1	He	158.935	158.935	0.27	304129	1.23	100	>LDR
U	238	1	He	2.164	2.164	0.28	82901	0.90	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102727	1.72	88966	115.47	60	120	
Ge (IS)	72	1	He	72960	0.70	67006	108.89	60	120	
In-115 (IS)	115	1	He	754588	0.04	703530	107.26	60	120	
Tb-159 (IS)	159	1	He	2506792	1.16	2419851	103.59	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-10-a@20
Data File Name	043SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:27:14-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3204
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.366	0.366	17.84	21	18.21	100	
Na	23	1	He	250.923	250.923	9.19	215717	8.12	75000	
Mg	24	1	He	10649.053	10649.053	2.04	4295824	0.75	125000	
Al	27	1	He	13894.593	13894.593	1.71	2154498	0.61	4000	>LDR
K	39	1	He	934.301	934.301	1.72	368942	0.34	100000	
Ca	44	1	He	7247.619	7247.619	2.89	141785	1.62	250000	
V	51	1	He	36.778	36.778	2.59	161669	1.30	4000	
Cr	52	1	He	8.803	8.803	2.62	49135	1.30	4000	
Mn	55	1	He	80.506	80.506	2.25	245714	0.96	4000	
Fe	56	1	He	22750.101	22750.101	1.97	107066078	0.70	40000	
Co	59	1	He	8.205	8.205	2.17	74414	0.99	4000	
Ni	60	1	He	11.582	11.582	1.31	28435	0.70	4000	
Cu	65	1	He	1672.911	1672.911	1.34	5724212	0.54	4000	
Zn	66	1	He	13.621	13.621	1.73	15087	1.74	4000	
As	75	1	He	16.088	16.088	1.79	11628	1.31	4000	
Se	78	1	He	9.279	9.279	6.26	519	4.30	4000	
Rb	85	1	He	4.778	4.778	0.55	14261	0.47	100	
Sr	88	1	He	175.703	175.703	2.01	703391	1.31	4000	
Mo	95	1	He	6.195	6.195	0.72	20924	0.43	4000	
Ag	107	1	He	0.187	0.187	5.62	2125	5.25	100	
Cd	111	1	He	0.048	0.048	27.63	80	27.33	3500	
Sn	118	1	He	1.748	1.748	3.96	6742	3.20	4000	
Sb	123	1	He	1.833	1.833	1.61	6611	0.76	4000	
Cs	133	1	He	0.682	0.682	0.14	6867	0.90	100	
Ba	137	1	He	82.481	82.481	1.25	143985	0.44	4000	
Ce	140	1	He	15.932	15.932	1.22	423845	0.75	4000	
Tl	205	1	He	0.194	0.194	0.56	5404	1.86	3500	
Pb	208	1	He	5.488	5.488	1.77	200475	0.51	4000	
Th	232	1	He	107.207	107.207	2.25	203663	0.97	100	>LDR
U	238	1	He	3.432	3.432	3.53	130381	2.30	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102932	1.31	88966	115.70	60	120	
Ge (IS)	72	1	He	74175	1.11	67006	110.70	60	120	
In-115 (IS)	115	1	He	754519	0.82	703530	107.25	60	120	
Tb-159 (IS)	159	1	He	2487283	1.31	2419851	102.79	60	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-5990824
Data File Name	044_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:38:48-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	He	47.277	2.838	2676	3.86	50	94.6	89.5	110.49	
Na	23	1	He	1255.738	3.004	1016171	1.09	1250	100.5	89.5	110.49	
Mg	24	1	He	1242.603	2.786	492710	0.83	1250	99.4	89.5	110.49	
Al	27	1	He	52.853	4.541	8103	5.68	50	105.7	89.5	110.49	
K	39	1	He	1256.651	1.708	478173	0.65	1250	100.5	89.5	110.49	
Ca	44	1	He	2490.412	0.788	47955	1.69	2500	99.6	89.5	110.49	
V	51	1	He	50.056	2.180	215990	0.71	50	100.1	89.5	110.49	
Cr	52	1	He	50.175	3.143	272031	0.90	50	100.4	89.5	110.49	
Mn	55	1	He	49.596	2.792	148772	0.87	50	99.2	89.5	110.49	
Fe	56	1	He	502.562	2.272	2326997	1.31	500	100.5	89.5	110.49	
Co	59	1	He	49.774	2.765	443564	0.86	50	99.5	89.5	110.49	
Ni	60	1	He	49.781	1.855	120001	0.82	50	99.6	89.5	110.49	
Cu	65	1	He	50.107	2.885	168598	0.70	50	100.2	89.5	110.49	
Zn	66	1	He	49.648	1.560	53897	1.04	50	99.3	89.5	110.49	
As	75	1	He	49.792	0.792	35414	0.34	50	99.6	89.5	110.49	
Se	78	1	He	50.574	5.367	2489	5.32	50	101.1	89.5	110.49	
Rb	85	1	He	50.566	0.952	153729	1.23	50	101.1	89.5	110.49	
Sr	88	1	He	49.711	1.190	202856	1.44	50	99.4	89.5	110.49	
Mo	95	1	He	49.723	1.215	171003	1.51	50	99.4	89.5	110.49	
Ag	107	1	He	49.607	0.796	568189	1.09	50	99.2	89.5	110.49	
Cd	111	1	He	48.491	0.356	81691	0.65	50	97.0	89.5	110.49	
Sn	118	1	He	49.165	1.537	186013	1.82	50	98.3	89.5	110.49	
Sb	123	1	He	48.648	3.333	173558	3.62	50	97.3	89.5	110.49	
Cs	133	1	He	49.188	0.525	504068	0.59	50	98.4	89.5	110.49	
Ba	137	1	He	48.947	0.077	87092	0.27	50	97.9	89.5	110.49	
Ce	140	1	He	46.967	0.880	1273391	1.18	50	93.9	89.5	110.49	
Tl	205	1	He	46.487	1.645	1306105	1.25	50	93.0	89.5	110.49	
Pb	208	1	He	47.276	1.959	1744517	1.42	50	94.6	89.5	110.49	
Th	232	1	He	64.776	3.147	124540	2.64	50	129.6	89.5	110.49	>+\-10%
U	238	1	He	48.920	2.410	1877742	1.73	50	97.8	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	101180	2.27	88966	113.73	60	120	
Ge (IS)	72	1	He	73112	0.52	67006	109.11	60	120	
In-115 (IS)	115	1	He	768946	0.30	703530	109.30	60	120	
Tb-159 (IS)	159	1	He	2513216	0.77	2419851	103.86	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	045_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:42:35-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.000	#DIV/0!	0	#DIV/0!	0.5	
Na	23	1	He	1.087	8.2	11643	1.1	110	
Mg	24	1	He	1.232	8.4	571	7.0	110	
Al	27	1	He	0.845	40.5	167	30.3	10	
K	39	1	He	-2.778	-28.8	25706	0.5	110	
Ca	44	1	He	3.024	45.7	140	18.9	110	
V	51	1	He	-0.103	-6.8	328	9.1	2	
Cr	52	1	He	0.004	287.3	677	8.7	2	
Mn	55	1	He	0.033	28.5	117	23.4	1	
Fe	56	1	He	2.149	6.4	11917	5.3	20	
Co	59	1	He	0.023	8.3	207	7.4	1	
Ni	60	1	He	0.013	74.2	66	34.6	2	
Cu	65	1	He	0.256	5.4	950	5.3	1	
Zn	66	1	He	0.054	82.7	172	28.7	20	
As	75	1	He	0.011	67.8	37	15.5	1	
Se	78	1	He	0.378	17.9	85	4.1	2	
Sr	88	1	He	0.026	23.5	128	19.6	2	
Mo	95	1	He	0.081	16.5	298	15.1	2	
Ag	107	1	He	0.020	18.5	243	17.1	1	
Cd	111	1	He	0.020	15.0	34	14.8	1	
Sn	118	1	He	0.061	27.7	487	12.2	2	
Sb	123	1	He	0.246	27.4	1067	22.2	1	
Ba	137	1	He	0.024	36.5	56	27.1	1	
Ce	140	1	He	0.017	11.2	487	10.1	1	
Tl	205	1	He	0.025	7.2	701	8.0	1	
Pb	208	1	He	0.033	24.8	1283	23.9	1	
U	238	1	He	0.025	12.1	958	12.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	97353	0.62	88966	109.43	60	120	
Ge (IS)	72	1	He	72196	0.92	67006	107.75	60	120	
In-115 (IS)	115	1	He	755032	0.56	703530	107.32	60	120	
Tb-159 (IS)	159	1	He	2488524	1.20	2419851	102.84	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-11-a@20
Data File Name	046SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:45:01-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3205
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.170	0.170	118.92	10	120.16	100	
Na	23	1	He	141.375	141.375	7.44	128096	8.42	75000	
Mg	24	1	He	8899.173	8899.173	1.95	3630381	0.38	125000	
Al	27	1	He	10349.928	10349.928	3.88	1622543	2.22	4000	>LDR
K	39	1	He	1607.318	1607.318	2.14	621288	0.33	100000	
Ca	44	1	He	4890.318	4890.318	3.00	96774	1.56	250000	
V	51	1	He	33.718	33.718	1.80	149964	0.38	4000	
Cr	52	1	He	9.016	9.016	2.53	50876	0.98	4000	
Mn	55	1	He	81.530	81.530	3.03	251614	1.30	4000	
Fe	56	1	He	21592.559	21592.559	2.35	102759218	0.97	40000	
Co	59	1	He	5.366	5.366	1.17	49223	0.88	4000	
Ni	60	1	He	11.204	11.204	2.46	27815	1.04	4000	
Cu	65	1	He	1014.206	1014.206	1.51	3509382	0.22	4000	
Zn	66	1	He	17.086	17.086	0.30	18909	1.11	4000	
As	75	1	He	8.585	8.585	1.20	6223	0.58	4000	
Se	78	1	He	6.545	6.545	2.31	387	1.30	4000	
Rb	85	1	He	8.688	8.688	1.26	25994	1.40	100	
Sr	88	1	He	90.266	90.266	1.10	362362	0.80	4000	
Mo	95	1	He	4.746	4.746	3.36	16082	3.49	4000	
Ag	107	1	He	0.163	0.163	16.40	1863	16.53	100	
Cd	111	1	He	0.057	0.057	44.36	96	44.18	3500	
Sn	118	1	He	1.511	1.511	3.19	5879	3.22	4000	
Sb	123	1	He	1.095	1.095	7.02	4046	7.01	4000	
Cs	133	1	He	0.822	0.822	2.01	8304	2.33	100	
Ba	137	1	He	59.533	59.533	0.15	104212	0.43	4000	
Ce	140	1	He	22.935	22.935	0.45	611779	0.14	4000	
Tl	205	1	He	0.100	0.100	20.43	2833	21.58	3500	
Pb	208	1	He	3.336	3.336	1.50	122671	0.56	4000	
Th	232	1	He	142.854	142.854	6.77	272883	5.58	100	>LDR
U	238	1	He	2.311	2.311	1.74	88370	1.18	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	104096	1.72	88966	117.01	60	120	
Ge (IS)	72	1	He	74223	0.85	67006	110.77	60	120	
In-115 (IS)	115	1	He	756523	0.35	703530	107.53	60	120	
Tb-159 (IS)	159	1	He	2503410	1.30	2419851	103.45	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-12-a@20
Data File Name	047SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:47:25-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3206
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.057	0.057	1.41	3	0.00	100	
Na	23	1	He	118.482	118.482	1.48	109712	0.08	75000	
Mg	24	1	He	8662.905	8662.905	2.19	3552835	1.01	125000	
Al	27	1	He	9947.951	9947.951	2.92	1568051	1.54	4000	>LDR
K	39	1	He	1434.625	1434.625	1.73	560599	0.24	100000	
Ca	44	1	He	4619.684	4619.684	2.16	91918	0.75	250000	
V	51	1	He	31.900	31.900	1.49	142686	0.21	4000	
Cr	52	1	He	8.437	8.437	2.72	47906	1.29	4000	
Mn	55	1	He	80.044	80.044	1.95	248378	0.54	4000	
Fe	56	1	He	20899.157	20899.157	1.85	99994587	0.50	40000	
Co	59	1	He	5.237	5.237	1.18	48293	0.57	4000	
Ni	60	1	He	10.478	10.478	0.51	26160	1.05	4000	
Cu	65	1	He	1044.771	1044.771	2.68	3634012	1.29	4000	
Zn	66	1	He	15.784	15.784	1.07	17518	0.59	4000	
As	75	1	He	8.838	8.838	2.31	6421	1.57	4000	
Se	78	1	He	4.885	4.885	13.52	307	9.79	4000	
Rb	85	1	He	7.898	7.898	1.19	23752	1.09	100	
Sr	88	1	He	86.266	86.266	1.63	348069	1.39	4000	
Mo	95	1	He	4.199	4.199	2.59	14300	2.31	4000	
Ag	107	1	He	0.159	0.159	9.35	1828	9.16	100	
Cd	111	1	He	0.023	0.023	30.78	40	30.04	3500	
Sn	118	1	He	1.376	1.376	2.78	5403	2.90	4000	
Sb	123	1	He	0.872	0.872	3.68	3278	3.27	4000	
Cs	133	1	He	0.759	0.759	3.22	7704	3.07	100	
Ba	137	1	He	54.438	54.438	1.06	95780	0.91	4000	
Ce	140	1	He	18.876	18.876	1.52	506085	1.30	4000	
Tl	205	1	He	0.067	0.067	1.04	1886	1.96	3500	
Pb	208	1	He	3.281	3.281	1.79	120142	0.73	4000	
Th	232	1	He	132.822	132.822	1.96	252795	1.70	100	>LDR
U	238	1	He	2.240	2.240	1.44	85306	0.63	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	104648	1.42	88966	117.63	60	120	
Ge (IS)	72	1	He	74408	0.75	67006	111.05	60	120	
In-115 (IS)	115	1	He	760379	0.28	703530	108.08	60	120	
Tb-159 (IS)	159	1	He	2492729	1.10	2419851	103.01	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-13-a@20
Data File Name	048SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:49:48-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3207
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.310	0.310	39.89	18	39.03	100	
Na	23	1	He	157.394	157.394	10.10	139351	8.20	75000	
Mg	24	1	He	9144.582	9144.582	1.67	3684402	0.73	125000	
Al	27	1	He	9427.318	9427.318	1.95	1459908	0.61	4000	>LDR
K	39	1	He	2420.152	2420.152	1.54	909699	0.33	100000	
Ca	44	1	He	9917.034	9917.034	1.38	193753	0.38	250000	
V	51	1	He	31.803	31.803	2.16	139735	0.74	4000	
Cr	52	1	He	9.713	9.713	1.72	54079	0.46	4000	
Mn	55	1	He	129.126	129.126	1.92	393602	0.44	4000	
Fe	56	1	He	20624.433	20624.433	2.26	96935178	0.79	40000	
Co	59	1	He	8.645	8.645	1.41	78311	0.65	4000	
Ni	60	1	He	12.825	12.825	1.22	31447	1.33	4000	
Cu	65	1	He	951.225	951.225	1.19	3250742	0.34	4000	
Zn	66	1	He	20.842	20.842	2.04	23324	1.46	4000	
As	75	1	He	2.121	2.121	7.03	1580	7.53	4000	
Se	78	1	He	2.508	2.508	29.14	193	19.00	4000	
Rb	85	1	He	12.969	12.969	0.19	38819	0.27	100	
Sr	88	1	He	71.332	71.332	0.98	286533	0.79	4000	
Mo	95	1	He	3.860	3.860	4.09	13088	3.91	4000	
Ag	107	1	He	0.151	0.151	4.74	1728	4.38	100	
Cd	111	1	He	0.030	0.030	14.07	51	13.58	3500	
Sn	118	1	He	1.563	1.563	5.75	6076	5.19	4000	
Sb	123	1	He	0.310	0.310	7.24	1291	5.78	4000	
Cs	133	1	He	1.131	1.131	2.21	11423	2.43	100	
Ba	137	1	He	62.639	62.639	0.27	109716	0.55	4000	
Ce	140	1	He	27.467	27.467	1.91	733095	1.89	4000	
Tl	205	1	He	0.105	0.105	3.99	2993	3.71	3500	
Pb	208	1	He	2.691	2.691	0.37	99898	0.50	4000	
Th	232	1	He	315.991	315.991	2.18	608844	2.10	100	>LDR
U	238	1	He	3.780	3.780	1.06	145870	1.19	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102803	1.50	88966	115.55	60	120	
Ge (IS)	72	1	He	75146	0.68	67006	112.15	60	120	
In-115 (IS)	115	1	He	756976	0.33	703530	107.60	60	120	
Tb-159 (IS)	159	1	He	2526165	0.40	2419851	104.39	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-14-a@20
Data File Name	049SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:52:10-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3208
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.446	0.446	59.76	26	58.81	100	
Na	23	1	He	138.898	138.898	2.93	124873	1.19	75000	
Mg	24	1	He	8045.488	8045.488	2.08	3254602	0.42	125000	
Al	27	1	He	8229.889	8229.889	2.93	1279493	0.89	4000	>LDR
K	39	1	He	2098.418	2098.418	2.84	795606	0.61	100000	
Ca	44	1	He	7204.026	7204.026	2.64	141323	0.50	250000	
V	51	1	He	27.237	27.237	3.65	120248	1.53	4000	
Cr	52	1	He	11.346	11.346	3.34	63298	1.41	4000	
Mn	55	1	He	94.201	94.201	2.60	288291	0.55	4000	
Fe	56	1	He	17316.883	17316.883	2.25	81720857	0.31	40000	
Co	59	1	He	6.397	6.397	2.66	58179	0.63	4000	
Ni	60	1	He	12.175	12.175	3.46	29965	1.34	4000	
Cu	65	1	He	1348.088	1348.088	3.95	4624024	1.84	4000	
Zn	66	1	He	19.597	19.597	2.47	21524	1.44	4000	
As	75	1	He	2.229	2.229	2.24	1627	2.13	4000	
Se	78	1	He	2.979	2.979	5.30	212	2.63	4000	
Rb	85	1	He	12.162	12.162	2.11	36567	2.08	100	
Sr	88	1	He	59.035	59.035	1.68	238189	1.33	4000	
Mo	95	1	He	4.798	4.798	2.22	16336	1.81	4000	
Ag	107	1	He	0.152	0.152	4.79	1743	4.50	100	
Cd	111	1	He	0.025	0.025	20.89	43	20.34	3500	
Sn	118	1	He	1.399	1.399	2.42	5491	2.27	4000	
Sb	123	1	He	0.323	0.323	4.81	1345	3.92	4000	
Cs	133	1	He	0.991	0.991	2.14	10059	1.78	100	
Ba	137	1	He	56.733	56.733	0.55	99814	0.45	4000	
Ce	140	1	He	23.380	23.380	1.08	626791	0.78	4000	
Tl	205	1	He	0.106	0.106	6.87	2975	6.18	3500	
Pb	208	1	He	2.328	2.328	1.85	85734	1.18	4000	
Th	232	1	He	214.259	214.259	2.06	409621	1.44	100	>LDR
U	238	1	He	3.239	3.239	1.03	123984	0.51	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	103231	2.17	88966	116.03	60	120	
Ge (IS)	72	1	He	73736	1.17	67006	110.04	60	120	
In-115 (IS)	115	1	He	760345	0.44	703530	108.08	60	120	
Tb-159 (IS)	159	1	He	2505766	0.67	2419851	103.55	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-15-a@20
Data File Name	050SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T21:54:32-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3209
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.469	0.469	42.71	28	42.13	100	
Na	23	1	He	135.458	135.458	2.40	125595	1.58	75000	
Mg	24	1	He	13746.462	13746.462	1.89	5721209	0.96	125000	
Al	27	1	He	15874.020	15874.020	2.72	2539287	1.80	4000	>LDR
K	39	1	He	2609.133	2609.133	1.85	1010819	0.81	100000	
Ca	44	1	He	6712.045	6712.045	1.99	135487	0.84	250000	
V	51	1	He	40.721	40.721	2.68	184590	1.55	4000	
Cr	52	1	He	11.827	11.827	1.15	67872	0.68	4000	
Mn	55	1	He	108.292	108.292	1.71	341008	0.86	4000	
Fe	56	1	He	27855.503	27855.503	1.83	135248981	0.66	40000	
Co	59	1	He	6.789	6.789	1.74	63532	0.84	4000	
Ni	60	1	He	14.487	14.487	0.52	36687	0.68	4000	
Cu	65	1	He	1672.875	1672.875	1.54	5905346	0.36	4000	
Zn	66	1	He	30.172	30.172	0.72	33939	0.48	4000	
As	75	1	He	13.186	13.186	1.31	9726	0.84	4000	
Se	78	1	He	5.693	5.693	3.64	352	3.41	4000	
Rb	85	1	He	15.625	15.625	1.73	47074	0.98	100	
Sr	88	1	He	135.075	135.075	1.50	546127	0.97	4000	
Mo	95	1	He	8.450	8.450	1.76	28814	1.16	4000	
Ag	107	1	He	0.148	0.148	3.02	1703	3.34	100	
Cd	111	1	He	0.070	0.070	22.55	118	21.62	3500	
Sn	118	1	He	1.667	1.667	1.05	6507	1.66	4000	
Sb	123	1	He	1.326	1.326	1.71	4887	1.88	4000	
Cs	133	1	He	1.768	1.768	1.76	17969	2.53	100	
Ba	137	1	He	103.676	103.676	0.80	182780	0.11	4000	
Ce	140	1	He	40.671	40.671	2.01	1092594	1.29	4000	
Tl	205	1	He	0.195	0.195	2.71	5440	1.77	3500	
Pb	208	1	He	5.422	5.422	1.34	197664	0.56	4000	
Th	232	1	He	208.584	208.584	3.40	394951	2.66	100	>LDR
U	238	1	He	4.233	4.233	3.46	160469	2.57	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	106193	1.19	88966	119.36	60	120	
Ge (IS)	72	1	He	75650	0.56	67006	112.90	60	120	
In-115 (IS)	115	1	He	761993	0.78	703530	108.31	60	120	
Tb-159 (IS)	159	1	He	2481916	0.94	2419851	102.56	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-16-a@20
Data File Name	051SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:03:28-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3210
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.396	0.396	26.14	23	24.74	100	
Na	23	1	He	122.723	122.723	4.29	114250	1.28	75000	
Mg	24	1	He	9461.929	9461.929	3.33	3916303	0.73	125000	
Al	27	1	He	11864.193	11864.193	2.41	1887811	0.58	4000	>LDR
K	39	1	He	1915.390	1915.390	2.95	745710	0.25	100000	
Ca	44	1	He	6362.209	6362.209	3.31	127723	0.46	250000	
V	51	1	He	32.934	32.934	3.33	148634	0.42	4000	
Cr	52	1	He	8.195	8.195	2.96	46986	0.18	4000	
Mn	55	1	He	66.187	66.187	2.86	207294	0.33	4000	
Fe	56	1	He	18752.296	18752.296	3.19	90550059	0.36	40000	
Co	59	1	He	4.826	4.826	2.84	44920	0.12	4000	
Ni	60	1	He	10.570	10.570	3.97	26625	1.21	4000	
Cu	65	1	He	1363.471	1363.471	4.02	4785873	1.29	4000	
Zn	66	1	He	20.553	20.553	4.09	22543	2.87	4000	
As	75	1	He	8.947	8.947	2.01	6435	0.65	4000	
Se	78	1	He	5.220	5.220	6.80	320	6.24	4000	
Rb	85	1	He	12.551	12.551	1.13	37480	1.72	100	
Sr	88	1	He	122.036	122.036	0.57	489013	0.52	4000	
Mo	95	1	He	9.955	9.955	1.96	33641	1.89	4000	
Ag	107	1	He	0.094	0.094	1.64	1082	1.52	100	
Cd	111	1	He	0.023	0.023	47.20	40	46.40	3500	
Sn	118	1	He	1.458	1.458	2.25	5673	2.31	4000	
Sb	123	1	He	2.056	2.056	1.67	7399	1.14	4000	
Cs	133	1	He	1.307	1.307	1.55	13162	0.94	100	
Ba	137	1	He	84.856	84.856	1.24	148262	0.80	4000	
Ce	140	1	He	25.232	25.232	0.59	671854	0.91	4000	
Tl	205	1	He	0.125	0.125	4.93	3534	4.57	3500	
Pb	208	1	He	5.964	5.964	2.20	219748	0.50	4000	
Th	232	1	He	151.115	151.115	5.99	289333	5.16	100	>LDR
U	238	1	He	1.851	1.851	2.32	70964	1.04	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	105661	2.95	88966	118.77	60	120	
Ge (IS)	72	1	He	73665	1.36	67006	109.94	60	120	
In-115 (IS)	115	1	He	755166	0.66	703530	107.34	60	120	
Tb-159 (IS)	159	1	He	2509143	1.79	2419851	103.69	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-18-a@20
Data File Name	052SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:05:50-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3211
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.321	0.321	50.94	19	50.96	100	
Na	23	1	He	125.349	125.349	1.24	116162	0.73	75000	
Mg	24	1	He	9786.470	9786.470	0.82	4040516	0.44	125000	
Al	27	1	He	12151.652	12151.652	2.17	1928296	1.65	4000	>LDR
K	39	1	He	2006.003	2006.003	1.36	777590	0.80	100000	
Ca	44	1	He	5782.174	5782.174	1.91	115795	1.58	250000	
V	51	1	He	34.215	34.215	2.58	153990	2.04	4000	
Cr	52	1	He	10.801	10.801	2.53	61541	2.01	4000	
Mn	55	1	He	66.750	66.750	0.91	208516	0.40	4000	
Fe	56	1	He	18207.716	18207.716	1.06	87698737	0.61	40000	
Co	59	1	He	5.106	5.106	1.87	47402	1.53	4000	
Ni	60	1	He	12.036	12.036	1.76	30240	1.37	4000	
Cu	65	1	He	1970.609	1970.609	1.75	6900332	1.22	4000	
Zn	66	1	He	17.975	17.975	1.09	20050	0.99	4000	
As	75	1	He	10.940	10.940	1.79	7987	1.27	4000	
Se	78	1	He	6.585	6.585	12.23	392	10.50	4000	
Rb	85	1	He	11.278	11.278	1.82	33907	1.40	100	
Sr	88	1	He	100.256	100.256	1.25	404460	0.50	4000	
Mo	95	1	He	4.517	4.517	1.34	15381	0.84	4000	
Ag	107	1	He	0.159	0.159	8.19	1827	7.36	100	
Cd	111	1	He	0.015	0.015	43.66	26	41.94	3500	
Sn	118	1	He	1.373	1.373	1.76	5393	1.92	4000	
Sb	123	1	He	1.403	1.403	3.17	5149	2.37	4000	
Cs	133	1	He	1.284	1.284	2.26	13021	2.28	100	
Ba	137	1	He	85.721	85.721	0.77	150794	0.22	4000	
Ce	140	1	He	18.627	18.627	1.08	499332	0.58	4000	
Tl	205	1	He	0.217	0.217	1.10	6119	0.69	3500	
Pb	208	1	He	6.157	6.157	1.91	227135	1.09	4000	
Th	232	1	He	127.219	127.219	2.82	243978	2.11	100	>LDR
U	238	1	He	1.671	1.671	1.80	64137	0.98	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	105332	0.53	88966	118.40	60	120	
Ge (IS)	72	1	He	74838	0.54	67006	111.69	60	120	
In-115 (IS)	115	1	He	760308	0.75	703530	108.07	60	120	
Tb-159 (IS)	159	1	He	2511712	0.82	2419851	103.80	60	120	

Sample Report

Sample Table

Sample Name	440-256528-b-19-a@20
Data File Name	053SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:11:50-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584703 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3212
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.432	0.432	6.43	26	7.55	100	
Na	23	1	He	145.323	145.323	1.92	133230	0.06	75000	
Mg	24	1	He	9488.645	9488.645	2.83	3929444	1.18	125000	
Al	27	1	He	12677.317	12677.317	4.16	2017579	2.40	4000	>LDR
K	39	1	He	2470.019	2470.019	2.65	953715	0.88	100000	
Ca	44	1	He	4921.492	4921.492	2.81	98874	1.07	250000	
V	51	1	He	36.697	36.697	2.29	165623	0.51	4000	
Cr	52	1	He	11.691	11.691	3.41	66760	1.84	4000	
Mn	55	1	He	83.469	83.469	2.01	261555	0.37	4000	
Fe	56	1	He	27585.812	27585.812	2.58	133274964	0.80	40000	
Co	59	1	He	6.756	6.756	3.59	62900	1.87	4000	
Ni	60	1	He	12.764	12.764	3.30	32162	1.50	4000	
Cu	65	1	He	2452.191	2452.191	2.72	8613029	0.94	4000	
Zn	66	1	He	29.413	29.413	2.66	32686	2.13	4000	
As	75	1	He	11.923	11.923	0.18	8691	1.16	4000	
Se	78	1	He	5.933	5.933	7.69	360	7.57	4000	
Rb	85	1	He	16.240	16.240	0.72	48382	1.13	100	
Sr	88	1	He	92.610	92.610	1.54	370251	1.19	4000	
Mo	95	1	He	6.302	6.302	2.58	21256	2.09	4000	
Ag	107	1	He	0.179	0.179	4.03	2025	3.33	100	
Cd	111	1	He	0.043	0.043	35.34	72	34.02	3500	
Sn	118	1	He	1.456	1.456	2.41	5651	2.34	4000	
Sb	123	1	He	1.254	1.254	2.80	4584	3.31	4000	
Cs	133	1	He	1.575	1.575	2.89	15824	2.52	100	
Ba	137	1	He	100.281	100.281	1.18	174815	0.99	4000	
Ce	140	1	He	40.026	40.026	1.46	1063281	1.22	4000	
Tl	205	1	He	0.218	0.218	4.00	6146	4.75	3500	
Pb	208	1	He	6.256	6.256	0.21	231091	1.24	4000	
Th	232	1	He	147.201	147.201	3.97	282723	5.25	100	>LDR
U	238	1	He	2.928	2.928	1.00	112506	1.70	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	105684	1.82	88966	118.79	60	120	
Ge (IS)	72	1	He	74737	1.34	67006	111.54	60	120	
In-115 (IS)	115	1	He	753450	0.67	703530	107.10	60	120	
Tb-159 (IS)	159	1	He	2514934	1.31	2419851	103.93	60	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-5990824
Data File Name	054_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:18:24-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	He	46.283	2.923	2671	1.98	50	92.6	89.5	110.49	
Na	23	1	He	1257.856	2.376	1038500	0.57	1250	100.6	89.5	110.49	
Mg	24	1	He	1241.572	2.969	502219	0.64	1250	99.3	89.5	110.49	
Al	27	1	He	53.307	4.881	8331	3.47	50	106.6	89.5	110.49	
K	39	1	He	1267.396	2.375	491718	0.68	1250	101.4	89.5	110.49	
Ca	44	1	He	2511.787	4.659	49309	1.90	2500	100.5	89.5	110.49	
V	51	1	He	50.151	3.684	220705	0.95	50	100.3	89.5	110.49	
Cr	52	1	He	50.209	3.448	277694	0.99	50	100.4	89.5	110.49	
Mn	55	1	He	49.521	3.005	151537	0.37	50	99.0	89.5	110.49	
Fe	56	1	He	510.627	2.681	2411833	1.09	500	102.1	89.5	110.49	
Co	59	1	He	50.340	3.242	457619	0.48	50	100.7	89.5	110.49	
Ni	60	1	He	49.858	3.490	122578	0.87	50	99.7	89.5	110.49	
Cu	65	1	He	50.483	2.992	173287	0.65	50	101.0	89.5	110.49	
Zn	66	1	He	49.754	2.023	55176	0.40	50	99.5	89.5	110.49	
As	75	1	He	50.104	2.195	36401	0.42	50	100.2	89.5	110.49	
Se	78	1	He	49.841	4.050	2506	2.18	50	99.7	89.5	110.49	
Rb	85	1	He	51.056	0.457	157450	0.73	50	102.1	89.5	110.49	
Sr	88	1	He	50.241	0.865	207960	0.34	50	100.5	89.5	110.49	
Mo	95	1	He	50.095	2.020	174747	1.47	50	100.2	89.5	110.49	
Ag	107	1	He	49.666	1.174	577021	0.66	50	99.3	89.5	110.49	
Cd	111	1	He	49.000	1.243	83734	0.92	50	98.0	89.5	110.49	
Sn	118	1	He	48.997	2.106	188028	1.57	50	98.0	89.5	110.49	
Sb	123	1	He	48.999	3.358	177294	2.81	50	98.0	89.5	110.49	
Cs	133	1	He	49.438	1.162	513908	0.68	50	98.9	89.5	110.49	
Ba	137	1	He	49.546	2.772	89418	2.22	50	99.1	89.5	110.49	
Ce	140	1	He	47.136	2.491	1296247	2.01	50	94.3	89.5	110.49	
Tl	205	1	He	46.755	1.112	1312590	1.38	50	93.5	89.5	110.49	
Pb	208	1	He	47.883	1.518	1765528	1.79	50	95.8	89.5	110.49	
Th	232	1	He	63.546	1.203	122095	1.54	50	127.1	89.5	110.49	>+\-10%
U	238	1	He	48.679	1.525	1867148	1.93	50	97.4	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	103232	2.81	88966	116.04	60	120	
Ge (IS)	72	1	He	74700	1.76	67006	111.48	60	120	
In-115 (IS)	115	1	He	780022	0.56	703530	110.87	60	120	
Tb-159 (IS)	159	1	He	2511016	0.45	2419851	103.77	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	055_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:21:26-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.020	173.2	1	173.2	0.5	
Na	23	1	He	0.418	72.9	11317	2.5	110	
Mg	24	1	He	1.032	27.4	503	22.0	110	
Al	27	1	He	0.439	24.5	109	15.1	10	
K	39	1	He	-2.929	-73.8	26090	2.5	110	
Ca	44	1	He	0.840	216.5	101	33.4	110	
V	51	1	He	-0.096	-14.8	362	16.7	2	
Cr	52	1	He	0.008	153.6	708	9.1	2	
Mn	55	1	He	0.026	60.9	98	47.9	1	
Fe	56	1	He	1.917	17.0	11069	13.4	20	
Co	59	1	He	0.024	32.9	219	31.1	1	
Ni	60	1	He	0.025	55.7	96	35.1	2	
Cu	65	1	He	0.186	18.6	733	15.5	1	
Zn	66	1	He	0.107	38.2	234	19.4	20	
As	75	1	He	0.015	2.7	41	1.4	1	
Se	78	1	He	0.590	10.9	97	2.6	2	
Sr	88	1	He	0.027	13.5	133	10.9	2	
Mo	95	1	He	0.103	21.4	374	20.6	2	
Ag	107	1	He	0.030	14.7	360	14.4	1	
Cd	111	1	He	0.021	38.2	36	37.9	1	
Sn	118	1	He	0.077	55.1	551	29.2	2	
Sb	123	1	He	0.354	27.4	1453	24.2	1	
Ba	137	1	He	0.032	28.9	71	24.1	1	
Ce	140	1	He	0.025	26.2	703	25.9	1	
Tl	205	1	He	0.034	25.3	952	25.0	1	
Pb	208	1	He	0.034	8.7	1327	8.3	1	
U	238	1	He	0.031	32.0	1210	31.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	99012	0.46	88966	111.29	60	120	
Ge (IS)	72	1	He	74211	0.71	67006	110.75	60	120	
In-115 (IS)	115	1	He	759577	1.32	703530	107.97	60	120	
Tb-159 (IS)	159	1	He	2495318	0.35	2419851	103.12	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	056_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:23:53-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.000	#DIV/0!	0	#DIV/0!	0.5	
Na	23	1	He	-0.312	-39.2	10778	0.7	110	
Mg	24	1	He	0.269	62.7	208	31.5	110	
Al	27	1	He	0.191	66.0	72	26.6	10	
K	39	1	He	-4.837	-45.2	25500	2.4	110	
Ca	44	1	He	0.941	121.1	103	20.1	110	
V	51	1	He	-0.118	-4.5	274	8.6	2	
Cr	52	1	He	-0.020	-55.6	562	11.3	2	
Mn	55	1	He	0.009	42.5	49	23.9	1	
Fe	56	1	He	0.977	9.7	6836	7.0	20	
Co	59	1	He	0.003	103.3	40	71.2	1	
Ni	60	1	He	0.000	-2271.2	36	32.9	2	
Cu	65	1	He	0.102	33.3	461	25.1	1	
Zn	66	1	He	0.116	29.7	241	15.2	20	
As	75	1	He	-0.012	-61.5	21	26.6	1	
Se	78	1	He	0.099	439.9	72	28.0	2	
Sr	88	1	He	0.006	58.6	49	31.5	2	
Mo	95	1	He	0.030	57.6	126	46.8	2	
Ag	107	1	He	0.005	70.0	74	49.9	1	
Cd	111	1	He	0.001	380.8	2	173.2	1	
Sn	118	1	He	0.006	82.3	289	7.0	2	
Sb	123	1	He	0.106	10.3	584	7.1	1	
Ba	137	1	He	-0.001	-495.5	13	43.3	1	
Ce	140	1	He	0.003	53.0	116	39.0	1	
Tl	205	1	He	0.004	9.4	126	8.5	1	
Pb	208	1	He	0.011	6.3	468	4.6	1	
U	238	1	He	0.005	20.4	210	17.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	99321	0.69	88966	111.64	60	120	
Ge (IS)	72	1	He	73209	1.24	67006	109.26	60	120	
In-115 (IS)	115	1	He	765488	0.49	703530	108.81	60	120	
Tb-159 (IS)	159	1	He	2483288	1.33	2419851	102.62	60	120	

Reporting Limit 2.0ppb (RL) Report

Sample Table

Sample Name	CRI-5990826
Data File Name	057_RL2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:26:20-08:00
Sample Type	RL2_0
Dilution	1
Comment	+/- 50% 2xRL CHK
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	He	0.927	24.793	52	24.17	1	92.7	50	150	
Na	23	1	He	206.654	1.965	176015	0.16	200	103.3	50	150	
Mg	24	1	He	213.026	2.285	84266	0.72	200	106.5	50	150	
Al	27	1	He	21.335	6.157	3283	4.43	20	106.7	50	150	
K	39	1	He	211.408	2.390	103126	0.52	200	105.7	50	150	
Ca	44	1	He	1001.670	1.005	19273	2.07	1000	100.2	50	150	
V	51	1	He	2.055	4.179	9585	2.18	2	102.8	50	150	
Cr	52	1	He	2.119	3.532	12100	2.72	2	105.9	50	150	
Mn	55	1	He	2.184	3.037	6548	1.97	2	109.2	50	150	
Fe	56	1	He	42.180	3.047	196827	1.34	40	105.5	50	150	
Co	59	1	He	2.193	2.882	19490	1.56	2	109.7	50	150	
Ni	60	1	He	2.115	3.202	5114	2.08	2	105.7	50	150	
Cu	65	1	He	2.353	3.089	8010	1.56	2	117.7	50	150	
Zn	66	1	He	20.713	1.519	22731	1.17	20	103.6	50	150	
As	75	1	He	2.035	4.605	1487	4.82	2	101.7	50	150	
Se	78	1	He	2.284	9.091	178	5.30	2	114.2	50	150	
Rb	85	1	He	1.066	4.544	3287	4.41	1	106.6	50	150	
Sr	88	1	He	2.208	2.768	9130	2.21	2	110.4	50	150	
Mo	95	1	He	2.207	2.578	7698	2.82	2	110.4	50	150	
Ag	107	1	He	2.130	1.660	24680	1.54	2	106.5	50	150	
Cd	111	1	He	2.073	5.573	3532	5.79	2	103.6	50	150	
Sn	118	1	He	20.469	1.577	78449	1.33	20	102.3	50	150	
Sb	123	1	He	2.059	4.446	7627	3.80	2	103.0	50	150	
Cs	133	1	He	1.061	3.215	11005	2.87	1	106.1	50	150	
Ba	137	1	He	2.123	4.116	3834	4.00	2	106.2	50	150	
Ce	140	1	He	2.046	0.983	56117	0.67	2	102.3	50	150	
Tl	205	1	He	1.949	0.771	54632	0.46	2	97.5	50	150	
Pb	208	1	He	2.019	2.087	74392	1.82	2	101.0	50	150	
Th	232	1	He	16.699	7.264	32375	6.83	1	1669.9	50	150	>+/-50%
U	238	1	He	1.987	2.893	76086	2.71	2	99.3	50	150	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	100819	1.70	88966	113.32	60	120	
Ge (IS)	72	1	He	73685	0.36	67006	109.97	60	120	
In-115 (IS)	115	1	He	777407	0.58	703530	110.50	60	120	
Tb-159 (IS)	159	1	He	2506466	0.34	2419851	103.58	60	120	

Interference Check A (ICSA) Report

Sample Table

Sample Name	ICSA-5990827
Data File Name	058ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:28:46-08:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Low	QC High	QC Flag
Be	9	1	He	0.000	#DIV/0!	0	#DIV/0!	-1	1	
Na	23	1	He	89483.904	3.862	70649942	0.81	-100000	100000	
Mg	24	1	He	87472.618	3.843	34204575	0.55	-100000	100000	
Al	27	1	He	87670.972	5.047	13173685	1.88	-100000	100000	
K	39	1	He	90258.149	3.963	31935301	0.85	-100000	100000	
Ca	44	1	He	86340.626	2.907	1636879	0.77	-100000	100000	
V	51	1	He	-0.098	-14.450	360	15.47	-2	2	
Cr	52	1	He	0.252	11.465	2013	5.45	-2	2	
Mn	55	1	He	0.416	10.392	1251	7.71	-2	2	
Fe	56	1	He	88442.765	4.391	403415442	1.11	-100000	100000	
Co	59	1	He	0.296	1.472	2618	2.15	-2	2	
Ni	60	1	He	0.344	7.414	853	3.96	-2	2	
Cu	65	1	He	0.478	7.370	1707	4.42	-2	2	
Zn	66	1	He	0.493	3.866	616	3.80	-20	20	
As	75	1	He	0.042	43.538	56	23.21	-2	2	
Se	78	1	He	0.318	53.020	79	10.96	-2	2	
Rb	85	1	He	1.375	2.844	3808	1.59	-4	4	
Sr	88	1	He	0.849	1.502	3171	0.95	-2	2	
Mo	95	1	He	2067.225	2.341	6460630	0.98	2000	2000	
Ag	107	1	He	0.018	40.400	204	37.76	-2	2	
Cd	111	1	He	0.181	7.854	279	7.68	-2	2	
Sn	118	1	He	0.395	2.300	1601	3.19	-20	20	
Sb	123	1	He	0.292	28.782	1138	25.23	-2	2	
Cs	133	1	He	0.016	3.817	166	2.32	-1	1	
Ba	137	1	He	0.169	18.723	286	16.60	-2	2	
Ce	140	1	He	0.014	14.558	371	13.95	-2	2	
Tl	205	1	He	0.008	24.921	229	23.23	-2	2	
Pb	208	1	He	0.076	5.889	2733	6.15	-2	2	
Th	232	1	He	2.334	46.893	4695	42.56	-2	2	ICSA Main CR1 Failed
U	238	1	He	0.008	8.124	312	7.57	-2	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	99847	3.37	88966	112.23	60	120	
Ge (IS)	72	1	He	69336	1.20	67006	103.48	60	120	
In-115 (IS)	115	1	He	699034	1.41	703530	99.36	60	120	
Tb-159 (IS)	159	1	He	2380127	0.62	2419851	98.36	60	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-5990828
Data File Name	059ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:31:06-08:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	He	19.248	1.316	1057	2.07	20	96.2	79.5	120.49	
Na	23	1	He	93270.308	2.147	72442570	1.87	101000	92.3	69.5	120.49	
Mg	24	1	He	90794.676	2.105	34925923	1.52	101000	89.9	69.5	120.49	
Al	27	1	He	90878.074	1.550	13437410	1.24	101000	90.0	69.5	120.49	
K	39	1	He	94301.592	1.766	32823662	1.47	101000	93.4	69.5	120.49	
Ca	44	1	He	91833.281	2.493	1712255	1.85	101000	90.9	69.5	120.49	
V	51	1	He	19.846	2.319	83546	1.75	20	99.2	79.5	120.49	
Cr	52	1	He	19.588	2.418	103454	1.72	20	97.9	79.5	120.49	
Mn	55	1	He	19.470	2.767	56682	2.18	20	97.4	79.5	120.49	
Fe	56	1	He	92331.348	2.103	414345486	1.38	100000	92.3	69.5	130.49	
Co	59	1	He	19.372	0.993	167540	1.29	20	96.9	79.5	120.49	
Ni	60	1	He	18.780	2.432	43941	1.53	20	93.9	79.5	120.49	
Cu	65	1	He	18.637	2.782	60924	1.99	20	93.2	79.5	120.49	
Zn	66	1	He	18.495	0.516	19241	0.81	20	92.5	79.5	120.49	
As	75	1	He	20.130	1.825	13687	1.82	20	100.6	79.5	120.49	
Se	78	1	He	19.315	4.354	947	4.16	20	96.6	79.5	120.49	
Rb	85	1	He	22.250	2.202	61908	1.67	20	111.2	79.5	120.49	
Sr	88	1	He	21.837	2.297	81556	1.45	20	109.2	79.5	120.49	
Mo	95	1	He	2085.797	1.956	6563624	1.08	2020	103.3	79.5	120.49	
Ag	107	1	He	18.931	1.308	198453	0.73	20	94.7	79.5	120.49	
Cd	111	1	He	19.332	2.298	29805	1.45	20	96.7	79.5	120.49	
Sn	118	1	He	20.535	2.759	71239	1.89	20	102.7	79.5	120.49	
Sb	123	1	He	21.241	2.899	69454	2.40	20	106.2	79.5	120.49	
Cs	133	1	He	20.327	2.290	190637	1.48	20	101.6	79.5	120.49	
Ba	137	1	He	20.691	3.177	33699	2.71	20	103.5	79.5	120.49	
Ce	140	1	He	19.254	2.117	477730	1.31	20	96.3	79.5	120.49	
Tl	205	1	He	17.476	1.968	470645	0.67	20	87.4	79.5	120.49	
Pb	208	1	He	17.922	1.921	633958	0.81	20	89.6	79.5	120.49	
Th	232	1	He	18.109	3.722	33701	2.37	20	90.5	79.5	120.49	
U	238	1	He	18.683	2.391	687388	1.17	20	93.4	79.5	120.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	98147	0.90	88966	110.32	60	120	
Ge (IS)	72	1	He	69808	0.66	67006	104.18	60	120	
In-115 (IS)	115	1	He	703783	0.90	703530	100.04	60	120	
Tb-159 (IS)	159	1	He	2409155	1.33	2419851	99.56	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	060SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:33:26-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.000	0.000	#DIV/0!	0	#DIV/0!	100	
Na	23	1	He	76.943	76.943	24.05	70296	21.85	75000	
Mg	24	1	He	67.320	67.320	27.24	25887	28.62	125000	
Al	27	1	He	66.165	66.165	24.85	9782	26.23	4000	
K	39	1	He	74.430	74.430	26.71	52470	14.62	100000	
Ca	44	1	He	65.487	65.487	19.12	1299	19.39	250000	
V	51	1	He	-0.083	-0.083	-22.23	412	17.29	4000	
Cr	52	1	He	0.014	0.014	26.88	731	2.11	4000	
Mn	55	1	He	0.026	0.026	32.44	97	26.93	4000	
Fe	56	1	He	73.951	73.951	25.82	332774	27.13	40000	
Co	59	1	He	0.012	0.012	44.91	118	41.73	4000	
Ni	60	1	He	0.024	0.024	15.89	91	9.21	4000	
Cu	65	1	He	0.146	0.146	13.07	596	11.88	4000	
Zn	66	1	He	0.715	0.715	0.74	884	1.32	4000	
As	75	1	He	0.007	0.007	99.83	34	15.28	4000	
Se	78	1	He	0.016	0.016	415.67	68	5.88	4000	
Rb	85	1	He	0.015	0.015	60.39	57	50.26	100	
Sr	88	1	He	0.012	0.012	47.50	73	32.77	4000	
Mo	95	1	He	2.839	2.839	27.14	9754	27.29	4000	
Ag	107	1	He	0.019	0.019	40.84	236	37.29	100	
Cd	111	1	He	0.015	0.015	26.34	27	24.99	3500	
Sn	118	1	He	-0.001	-0.001	-383.30	261	7.37	4000	
Sb	123	1	He	0.010	0.010	183.31	244	27.45	4000	
Cs	133	1	He	0.012	0.012	18.77	138	17.16	100	
Ba	137	1	He	0.019	0.019	60.41	48	42.05	4000	
Ce	140	1	He	0.011	0.011	22.97	320	20.81	4000	
Tl	205	1	He	0.026	0.026	28.94	730	28.63	3500	
Pb	208	1	He	0.017	0.017	8.73	688	8.26	4000	
Th	232	1	He	0.173	0.173	15.45	796	6.13	100	
U	238	1	He	0.015	0.015	31.34	579	29.35	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	97460	1.55	88966	109.55	60	120	
Ge (IS)	72	1	He	72658	1.76	67006	108.43	60	120	
In-115 (IS)	115	1	He	766141	0.21	703530	108.90	60	120	
Tb-159 (IS)	159	1	He	2459385	1.54	2419851	101.63	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	061SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:35:54-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.021	0.021	173.21	1	173.21	100	
Na	23	1	He	11.397	11.397	19.19	19382	8.55	75000	
Mg	24	1	He	8.300	8.300	20.52	3234	19.70	125000	
Al	27	1	He	7.641	7.641	12.09	1151	11.30	4000	
K	39	1	He	2.973	2.973	58.31	27407	2.20	100000	
Ca	44	1	He	12.338	12.338	14.28	309	10.20	250000	
V	51	1	He	-0.106	-0.106	-2.43	316	3.71	4000	
Cr	52	1	He	0.007	0.007	125.78	683	6.56	4000	
Mn	55	1	He	0.016	0.016	25.58	67	17.32	4000	
Fe	56	1	He	10.755	10.755	15.74	49702	14.80	40000	
Co	59	1	He	0.000	0.000	194.79	16	44.60	4000	
Ni	60	1	He	0.025	0.025	35.66	92	22.08	4000	
Cu	65	1	He	0.112	0.112	8.78	479	6.43	4000	
Zn	66	1	He	0.667	0.667	18.42	826	14.74	4000	
As	75	1	He	-0.013	-0.013	-31.90	20	15.00	4000	
Se	78	1	He	0.237	0.237	102.66	78	15.54	4000	
Rb	85	1	He	0.001	0.001	302.43	13	86.60	100	
Sr	88	1	He	0.006	0.006	83.26	47	42.85	4000	
Mo	95	1	He	0.571	0.571	19.89	1942	20.57	4000	
Ag	107	1	He	0.001	0.001	28.96	38	13.48	100	
Cd	111	1	He	-0.001	-0.001	0.00	0	#DIV/0!	3500	
Sn	118	1	He	-0.010	-0.010	-22.64	226	3.08	4000	
Sb	123	1	He	0.002	0.002	335.83	212	13.36	4000	
Cs	133	1	He	0.002	0.002	59.16	30	33.33	100	
Ba	137	1	He	0.003	0.003	287.25	19	71.30	4000	
Ce	140	1	He	0.000	0.000	271.40	36	35.49	4000	
Tl	205	1	He	0.004	0.004	29.96	119	25.29	3500	
Pb	208	1	He	0.005	0.005	26.96	269	18.65	4000	
Th	232	1	He	0.065	0.065	13.53	597	2.56	100	
U	238	1	He	0.002	0.002	32.80	87	23.40	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	96351	0.40	88966	108.30	60	120	
Ge (IS)	72	1	He	72158	1.41	67006	107.69	60	120	
In-115 (IS)	115	1	He	750830	0.94	703530	106.72	60	120	
Tb-159 (IS)	159	1	He	2473200	0.46	2419851	102.20	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	062SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:38:22-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.000	0.000	#DIV/0!	0	#DIV/0!	100	
Na	23	1	He	4.298	4.298	12.16	13868	3.64	75000	
Mg	24	1	He	2.079	2.079	16.09	879	14.89	125000	
Al	27	1	He	2.686	2.686	1.96	429	1.19	4000	
K	39	1	He	-3.805	-3.805	-54.29	24902	2.12	100000	
Ca	44	1	He	4.822	4.822	27.85	170	13.73	250000	
V	51	1	He	-0.100	-0.100	-13.76	334	17.04	4000	
Cr	52	1	He	-0.002	-0.002	-697.07	636	9.75	4000	
Mn	55	1	He	0.009	0.009	55.28	46	30.47	4000	
Fe	56	1	He	4.136	4.136	5.75	20400	5.85	40000	
Co	59	1	He	0.000	0.000	399.06	14	70.51	4000	
Ni	60	1	He	0.020	0.020	90.80	81	52.19	4000	
Cu	65	1	He	0.084	0.084	12.22	387	7.66	4000	
Zn	66	1	He	0.695	0.695	10.81	851	9.19	4000	
As	75	1	He	-0.006	-0.006	-252.05	24	45.27	4000	
Se	78	1	He	0.213	0.213	96.79	76	12.17	4000	
Rb	85	1	He	-0.003	-0.003	-23.16	1	173.21	100	
Sr	88	1	He	0.005	0.005	36.41	41	16.89	4000	
Mo	95	1	He	0.258	0.258	9.28	886	9.24	4000	
Ag	107	1	He	0.000	0.000	166.18	23	14.29	100	
Cd	111	1	He	0.001	0.001	369.11	2	173.21	3500	
Sn	118	1	He	-0.009	-0.009	-165.47	228	23.66	4000	
Sb	123	1	He	0.002	0.002	1101.76	209	30.46	4000	
Cs	133	1	He	0.000	0.000	977.53	13	25.01	100	
Ba	137	1	He	-0.002	-0.002	-137.41	10	57.72	4000	
Ce	140	1	He	-0.001	-0.001	-89.04	16	86.60	4000	
Tl	205	1	He	0.001	0.001	28.45	56	19.29	3500	
Pb	208	1	He	0.003	0.003	33.19	181	19.33	4000	
Th	232	1	He	0.046	0.046	91.67	560	15.98	100	
U	238	1	He	0.000	0.000	42.32	36	10.83	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	95634	0.80	88966	107.50	60	120	
Ge (IS)	72	1	He	71713	0.78	67006	107.02	60	120	
In-115 (IS)	115	1	He	748125	0.51	703530	106.34	60	120	
Tb-159 (IS)	159	1	He	2465546	1.98	2419851	101.89	60	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-5990824
Data File Name	063_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:40:50-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	He	47.868	6.973	2624	5.87	50	95.7	89.5	110.49	
Na	23	1	He	1287.152	3.699	1009124	2.52	1250	103.0	89.5	110.49	
Mg	24	1	He	1250.976	1.334	480776	0.21	1250	100.1	89.5	110.49	
Al	27	1	He	53.764	7.209	7983	6.89	50	107.5	89.5	110.49	
K	39	1	He	1279.324	1.138	471282	0.54	1250	102.3	89.5	110.49	
Ca	44	1	He	2556.825	2.105	47701	1.32	2500	102.3	89.5	110.49	
V	51	1	He	50.468	0.427	211062	0.83	50	100.9	89.5	110.49	
Cr	52	1	He	50.741	1.485	266648	0.50	50	101.5	89.5	110.49	
Mn	55	1	He	49.970	1.747	145279	0.59	50	99.9	89.5	110.49	
Fe	56	1	He	515.238	1.969	2311861	0.74	500	103.0	89.5	110.49	
Co	59	1	He	50.895	1.576	439601	0.68	50	101.8	89.5	110.49	
Ni	60	1	He	50.643	2.222	118306	1.74	50	101.3	89.5	110.49	
Cu	65	1	He	50.409	1.489	164401	0.34	50	100.8	89.5	110.49	
Zn	66	1	He	50.049	0.506	53968	1.24	50	100.1	89.5	110.49	
As	75	1	He	49.782	0.195	35168	0.63	50	99.6	89.5	110.49	
Se	78	1	He	49.567	4.386	2423	3.49	50	99.1	89.5	110.49	
Rb	85	1	He	50.065	0.444	151507	0.28	50	100.1	89.5	110.49	
Sr	88	1	He	50.144	0.942	203684	0.62	50	100.3	89.5	110.49	
Mo	95	1	He	50.116	0.758	171569	0.87	50	100.2	89.5	110.49	
Ag	107	1	He	49.619	0.521	565734	0.47	50	99.2	89.5	110.49	
Cd	111	1	He	49.401	0.912	82843	0.76	50	98.8	89.5	110.49	
Sn	118	1	He	49.798	0.490	187543	0.66	50	99.6	89.5	110.49	
Sb	123	1	He	49.360	1.968	175289	2.31	50	98.7	89.5	110.49	
Cs	133	1	He	49.185	0.485	501745	0.13	50	98.4	89.5	110.49	
Ba	137	1	He	49.166	1.155	87084	1.27	50	98.3	89.5	110.49	
Ce	140	1	He	46.945	0.722	1267005	0.99	50	93.9	89.5	110.49	
Tl	205	1	He	47.231	2.952	1308908	0.61	50	94.5	89.5	110.49	
Pb	208	1	He	48.183	3.726	1753530	1.33	50	96.4	89.5	110.49	
Th	232	1	He	61.876	4.741	117338	2.40	50	123.8	89.5	110.49	>+\-10%
U	238	1	He	49.393	3.062	1870113	0.66	50	98.8	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	98039	1.25	88966	110.20	60	120	
Ge (IS)	72	1	He	72616	0.82	67006	108.37	60	120	
In-115 (IS)	115	1	He	765451	0.38	703530	108.80	60	120	
Tb-159 (IS)	159	1	He	2479945	2.37	2419851	102.48	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	064_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:43:16-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.063	173.2	3	173.2	0.5	
Na	23	1	He	3.013	5.3	12847	1.9	110	
Mg	24	1	He	1.451	17.6	641	15.8	110	
Al	27	1	He	0.732	23.6	147	15.9	10	
K	39	1	He	-4.296	-54.8	24646	3.3	110	
Ca	44	1	He	1.917	116.6	117	33.7	110	
V	51	1	He	-0.072	-29.1	447	19.4	2	
Cr	52	1	He	0.017	44.5	730	6.4	2	
Mn	55	1	He	0.036	68.2	122	57.2	1	
Fe	56	1	He	2.037	12.5	11181	10.7	20	
Co	59	1	He	0.044	24.7	378	25.0	1	
Ni	60	1	He	0.037	57.1	118	41.0	2	
Cu	65	1	He	0.116	12.1	484	9.2	1	
Zn	66	1	He	0.092	40.8	211	21.0	20	
As	75	1	He	0.022	64.0	44	22.4	1	
Se	78	1	He	0.129	88.5	72	5.6	2	
Sr	88	1	He	0.039	47.5	179	42.9	2	
Mo	95	1	He	0.246	26.3	854	27.0	2	
Ag	107	1	He	0.047	42.5	556	42.3	1	
Cd	111	1	He	0.049	29.6	82	30.4	1	
Sn	118	1	He	0.116	41.5	691	27.0	2	
Sb	123	1	He	0.639	44.1	2444	41.7	1	
Ba	137	1	He	0.027	45.3	62	35.7	1	
Ce	140	1	He	0.035	18.1	959	18.8	1	
Tl	205	1	He	0.044	35.2	1238	35.3	1	
Pb	208	1	He	0.044	30.3	1681	29.5	1	
U	238	1	He	0.047	24.4	1797	24.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	95279	1.12	88966	107.10	60	120	
Ge (IS)	72	1	He	71717	2.09	67006	107.03	60	120	
In-115 (IS)	115	1	He	753691	1.35	703530	107.13	60	120	
Tb-159 (IS)	159	1	He	2463915	0.67	2419851	101.82	60	120	

Method Blank (MB) Report

Sample Table

Sample Name	mb 440-584717/1-a@20
Data File Name	065_MB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:45:45-08:00
Sample Type	MB
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.000	#DIV/0!	0	#DIV/0!	0.5	
Na	23	1	He	9.703	5.3	18108	0.8	110	
Mg	24	1	He	2.689	32.4	1117	29.6	110	
Al	27	1	He	3.556	23.3	559	21.4	10	
K	39	1	He	-2.943	-6.4	25414	1.3	110	
Ca	44	1	He	9.833	18.2	263	12.2	110	
V	51	1	He	-0.064	-2.1	486	1.0	2	
Cr	52	1	He	0.857	2.5	5067	1.1	2	
Mn	55	1	He	0.305	3.5	893	2.3	1	
Fe	56	1	He	54.039	2.6	240647	2.1	20	OUT OF RANGE
Co	59	1	He	0.018	14.2	163	13.4	1	
Ni	60	1	He	0.415	7.4	990	8.0	2	
Cu	65	1	He	1.332	2.0	4389	2.5	1	OUT OF RANGE
Zn	66	1	He	0.923	5.9	1076	5.2	20	
As	75	1	He	-0.006	-260.2	24	48.1	1	
Se	78	1	He	0.103	92.7	70	6.2	2	
Rb	85	1	He	0.009	77.4	36	57.3	0.5	
Sr	88	1	He	0.038	27.9	170	23.9	2	
Mo	95	1	He	0.146	9.6	510	9.8	2	
Ag	107	1	He	0.016	33.3	203	29.6	1	
Cd	111	1	He	0.012	81.9	21	77.9	1	
Sn	118	1	He	1.010	4.1	3944	4.1	2	
Sb	123	1	He	0.169	38.1	782	27.9	1	
Cs	133	1	He	0.006	32.9	68	27.1	0.5	
Ba	137	1	He	0.100	12.9	187	11.7	1	
Ce	140	1	He	0.016	30.8	446	28.5	1	
Tl	205	1	He	0.011	33.2	314	30.8	1	
Pb	208	1	He	0.077	4.9	2820	4.2	1	
Th	232	1	He	0.328	36.6	1065	19.8	0.5	
U	238	1	He	0.014	28.6	539	27.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	96456	1.35	88966	108.42	60	120	
Ge (IS)	72	1	He	70512	0.42	67006	105.23	60	120	
In-115 (IS)	115	1	He	742639	0.58	703530	105.56	60	120	
Tb-159 (IS)	159	1	He	2412727	1.14	2419851	99.71	60	120	

Sample Report

Sample Table

Sample Name	lcs 440-584717/2-a@20
Data File Name	066SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:48:13-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	3302
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	87.690	87.690	2.91	4847	3.65	100	
Na	23	1	He	888.258	888.258	3.04	705268	0.15	75000	
Mg	24	1	He	453.908	453.908	3.48	175835	0.45	125000	
Al	27	1	He	92.004	92.004	5.71	13731	3.41	4000	
K	39	1	He	927.975	927.975	3.63	351875	0.55	100000	
Ca	44	1	He	675.861	675.861	3.46	12770	2.17	250000	
V	51	1	He	91.664	91.664	4.30	385534	1.37	4000	
Cr	52	1	He	92.851	92.851	3.83	491056	0.90	4000	
Mn	55	1	He	91.015	91.015	4.13	266574	1.10	4000	
Fe	56	1	He	100.231	100.231	4.52	454993	1.43	40000	
Co	59	1	He	93.742	93.742	3.87	815764	0.79	4000	
Ni	60	1	He	93.618	93.618	3.45	220330	0.39	4000	
Cu	65	1	He	93.452	93.452	4.06	306950	1.07	4000	
Zn	66	1	He	92.652	92.652	0.68	97543	1.47	4000	
As	75	1	He	93.010	93.010	2.08	64180	0.94	4000	
Se	78	1	He	90.088	90.088	0.99	4251	0.45	4000	
Rb	85	1	He	0.010	0.010	66.02	40	50.68	100	
Sr	88	1	He	93.048	93.048	0.46	371261	0.40	4000	
Mo	95	1	He	91.538	91.538	0.43	307816	0.86	4000	
Ag	107	1	He	47.705	47.705	0.40	534312	1.10	100	
Cd	111	1	He	91.809	91.809	0.69	151246	1.40	3500	
Sn	118	1	He	92.971	92.971	0.43	343730	1.15	4000	
Sb	123	1	He	92.952	92.952	1.11	324087	1.82	4000	
Cs	133	1	He	0.001	0.001	56.69	23	24.74	100	
Ba	137	1	He	94.888	94.888	1.29	165095	1.99	4000	
Ce	140	1	He	0.008	0.008	18.04	247	15.05	4000	
Tl	205	1	He	90.568	90.568	0.57	2480830	1.21	3500	
Pb	208	1	He	92.608	92.608	1.25	3331436	0.98	4000	
Th	232	1	He	1.167	1.167	13.63	2649	11.16	100	
U	238	1	He	0.003	0.003	11.81	152	9.12	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	98843	3.12	88966	111.10	60	120	
Ge (IS)	72	1	He	70970	1.39	67006	105.92	60	120	
In-115 (IS)	115	1	He	751925	0.72	703530	106.88	60	120	
Tb-159 (IS)	159	1	He	2450066	0.82	2419851	101.25	60	120	

Sample Report

Sample Table

Sample Name	440-255674-c-12-b@20
Data File Name	067SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:50:38-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3303
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.371	0.371	55.00	21	55.45	100	
Na	23	1	He	105.668	105.668	1.87	96278	0.60	75000	
Mg	24	1	He	8961.863	8961.863	1.62	3571117	1.42	125000	
Al	27	1	He	10399.169	10399.169	2.21	1592614	1.08	4000	>LDR
K	39	1	He	2219.438	2219.438	2.48	827309	1.42	100000	
Ca	44	1	He	6565.992	6565.992	2.47	126886	1.37	250000	
V	51	1	He	33.545	33.545	2.23	145723	1.24	4000	
Cr	52	1	He	10.582	10.582	1.64	58212	1.55	4000	
Mn	55	1	He	68.109	68.109	2.02	205332	1.14	4000	
Fe	56	1	He	23114.017	23114.017	1.67	107444322	0.63	40000	
Co	59	1	He	4.382	4.382	2.07	39259	2.05	4000	
Ni	60	1	He	11.136	11.136	2.66	27003	1.50	4000	
Cu	65	1	He	1544.949	1544.949	1.56	5221248	0.59	4000	
Zn	66	1	He	15.427	15.427	1.44	16973	1.41	4000	
As	75	1	He	6.165	6.165	0.76	4449	0.92	4000	
Se	78	1	He	4.698	4.698	6.07	295	3.85	4000	
Rb	85	1	He	11.827	11.827	1.37	35010	1.31	100	
Sr	88	1	He	84.342	84.342	1.46	335024	1.29	4000	
Mo	95	1	He	3.340	3.340	2.06	11202	1.99	4000	
Ag	107	1	He	0.201	0.201	1.13	2266	0.96	100	
Cd	111	1	He	0.074	0.074	22.74	122	22.71	3500	
Sn	118	1	He	1.705	1.705	3.49	6532	3.46	4000	
Sb	123	1	He	4.096	4.096	1.17	14413	1.20	4000	
Cs	133	1	He	1.223	1.223	0.50	12210	0.33	100	
Ba	137	1	He	63.467	63.467	0.91	109930	0.76	4000	
Ce	140	1	He	26.085	26.085	0.70	688481	0.52	4000	
Tl	205	1	He	0.205	0.205	16.14	5652	15.81	3500	
Pb	208	1	He	3.059	3.059	2.04	110361	1.60	4000	
Th	232	1	He	212.363	212.363	5.33	397879	5.39	100	>LDR
U	238	1	He	1.766	1.766	0.25	66260	0.68	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	101665	1.20	88966	114.27	60	120	
Ge (IS)	72	1	He	73749	1.47	67006	110.06	60	120	
In-115 (IS)	115	1	He	748571	0.18	703530	106.40	60	120	
Tb-159 (IS)	159	1	He	2455375	0.47	2419851	101.47	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-12-c ms@20
Data File Name	068SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:53:02-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3304
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	80.923	80.923	5.27	4692	4.47	100	
Na	23	1	He	934.946	934.946	1.29	778530	0.69	75000	
Mg	24	1	He	10037.589	10037.589	0.80	4079391	0.83	125000	
Al	27	1	He	12309.333	12309.333	0.54	1922927	1.11	4000	>LDR
K	39	1	He	2546.963	2546.963	1.30	964161	0.50	100000	
Ca	44	1	He	6962.735	6962.735	1.30	137236	0.58	250000	
V	51	1	He	121.707	121.707	2.34	537111	1.53	4000	
Cr	52	1	He	95.859	95.859	2.05	532138	1.27	4000	
Mn	55	1	He	142.376	142.376	1.37	437760	0.62	4000	
Fe	56	1	He	19829.170	19829.170	1.62	94009503	0.84	40000	
Co	59	1	He	89.216	89.216	1.77	814980	1.01	4000	
Ni	60	1	He	95.755	95.755	1.87	236543	1.06	4000	
Cu	65	1	He	1686.776	1686.776	0.66	5814308	0.63	4000	
Zn	66	1	He	94.502	94.502	0.53	104802	0.41	4000	
As	75	1	He	96.987	96.987	0.20	70510	0.72	4000	
Se	78	1	He	89.970	89.970	2.30	4473	2.83	4000	
Rb	85	1	He	8.456	8.456	1.09	25308	1.07	100	
Sr	88	1	He	199.098	199.098	0.74	799540	0.69	4000	
Mo	95	1	He	91.489	91.489	1.35	309645	1.30	4000	
Ag	107	1	He	44.911	44.911	0.68	506279	0.65	100	
Cd	111	1	He	86.753	86.753	0.95	143839	0.90	3500	
Sn	118	1	He	89.452	89.452	1.22	332866	1.16	4000	
Sb	123	1	He	68.390	68.390	1.60	240036	1.56	4000	
Cs	133	1	He	0.884	0.884	1.37	8931	1.43	100	
Ba	137	1	He	151.189	151.189	1.53	264732	1.49	4000	
Ce	140	1	He	20.859	20.859	0.32	556634	0.30	4000	
Tl	205	1	He	85.091	85.091	0.13	2348878	0.51	3500	
Pb	208	1	He	88.889	88.889	0.74	3222590	0.60	4000	
Th	232	1	He	173.216	173.216	0.85	326419	0.43	100	>LDR
U	238	1	He	1.798	1.798	0.73	67816	1.08	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	103684	0.81	88966	116.54	60	120	
Ge (IS)	72	1	He	74761	0.65	67006	111.57	60	120	
In-115 (IS)	115	1	He	756806	0.12	703530	107.57	60	120	
Tb-159 (IS)	159	1	He	2469098	0.62	2419851	102.04	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-12-d msd@20
Data File Name	069SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:55:22-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3305
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	82.366	82.366	3.80	4773	3.95	100	
Na	23	1	He	973.413	973.413	1.28	809415	0.67	75000	
Mg	24	1	He	10594.253	10594.253	1.19	4301987	1.04	125000	
Al	27	1	He	13022.387	13022.387	2.11	2032507	1.91	4000	>LDR
K	39	1	He	2691.405	2691.405	0.91	1016410	0.44	100000	
Ca	44	1	He	7369.777	7369.777	1.51	145136	1.26	250000	
V	51	1	He	126.411	126.411	1.26	557413	0.79	4000	
Cr	52	1	He	100.083	100.083	0.95	555137	0.86	4000	
Mn	55	1	He	152.044	152.044	1.72	467103	1.35	4000	
Fe	56	1	He	20157.548	20157.548	2.06	95490072	1.81	40000	
Co	59	1	He	92.662	92.662	1.22	845789	0.78	4000	
Ni	60	1	He	99.666	99.666	0.90	246015	0.64	4000	
Cu	65	1	He	1690.549	1690.549	1.02	5822339	0.59	4000	
Zn	66	1	He	99.539	99.539	1.29	109786	0.37	4000	
As	75	1	He	100.349	100.349	1.05	72560	0.30	4000	
Se	78	1	He	91.298	91.298	1.04	4514	1.91	4000	
Rb	85	1	He	8.989	8.989	3.26	27178	2.76	100	
Sr	88	1	He	206.927	206.927	1.18	839545	0.53	4000	
Mo	95	1	He	95.600	95.600	1.72	326886	0.98	4000	
Ag	107	1	He	46.383	46.383	1.71	528237	0.96	100	
Cd	111	1	He	88.850	88.850	0.57	148844	1.04	3500	
Sn	118	1	He	92.144	92.144	2.08	346393	1.33	4000	
Sb	123	1	He	72.342	72.342	1.97	256505	1.28	4000	
Cs	133	1	He	0.928	0.928	2.85	9464	2.14	100	
Ba	137	1	He	158.185	158.185	1.94	279826	1.18	4000	
Ce	140	1	He	22.977	22.977	2.66	619410	1.91	4000	
Tl	205	1	He	87.812	87.812	2.03	2450168	1.66	3500	
Pb	208	1	He	91.917	91.917	2.69	3367905	1.20	4000	
Th	232	1	He	175.356	175.356	2.49	333997	1.58	100	>LDR
U	238	1	He	1.736	1.736	2.80	66207	1.27	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	103597	0.60	88966	116.45	60	120	
Ge (IS)	72	1	He	74362	0.99	67006	110.98	60	120	
In-115 (IS)	115	1	He	764647	0.76	703530	108.69	60	120	
Tb-159 (IS)	159	1	He	2496072	1.58	2419851	103.15	60	120	

Sample Report

Sample Table

Sample Name	440-255674-c-12-b PDS@20
Data File Name	070SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T22:57:42-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3306
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	88.224	88.224	3.27	5011	2.61	100	
Na	23	1	He	2471.447	2471.447	0.33	1997370	1.14	75000	
Mg	24	1	He	11315.916	11315.916	1.36	4504266	0.48	125000	
Al	27	1	He	10704.979	10704.979	1.31	1637853	0.52	4000	>LDR
K	39	1	He	4631.801	4631.801	2.91	1694379	1.55	100000	
Ca	44	1	He	11520.129	11520.129	1.89	222331	0.59	250000	
V	51	1	He	130.671	130.671	2.03	564770	0.76	4000	
Cr	52	1	He	106.804	106.804	1.75	580641	0.48	4000	
Mn	55	1	He	163.981	163.981	2.27	493792	0.94	4000	
Fe	56	1	He	24582.985	24582.985	2.60	114142360	1.26	40000	
Co	59	1	He	100.232	100.232	1.99	896776	0.72	4000	
Ni	60	1	He	105.365	105.365	2.49	254919	1.38	4000	
Cu	65	1	He	1648.057	1648.057	2.35	5563570	1.32	4000	
Zn	66	1	He	106.184	106.184	1.73	118015	1.38	4000	
As	75	1	He	100.976	100.976	0.83	73579	0.53	4000	
Se	78	1	He	99.255	99.255	1.28	4939	0.90	4000	
Rb	85	1	He	112.363	112.363	0.53	338650	0.52	100	>LDR
Sr	88	1	He	184.238	184.238	1.63	745241	0.90	4000	
Mo	95	1	He	101.561	101.561	1.29	346238	0.78	4000	
Ag	107	1	He	96.641	96.641	1.07	1097337	0.56	100	>LDR
Cd	111	1	He	95.601	95.601	1.66	159659	0.92	3500	
Sn	118	1	He	99.261	99.261	1.38	372027	0.66	4000	
Sb	123	1	He	102.319	102.319	2.80	361609	2.10	4000	
Cs	133	1	He	98.147	98.147	0.84	997130	0.33	100	
Ba	137	1	He	161.170	161.170	2.33	284253	1.73	4000	
Ce	140	1	He	120.257	120.257	0.69	3232350	0.10	4000	
Tl	205	1	He	93.780	93.780	1.65	2597814	0.41	3500	
Pb	208	1	He	97.464	97.464	1.62	3545909	0.45	4000	
Th	232	1	He	313.231	313.231	2.13	591954	0.98	100	>LDR
U	238	1	He	95.596	95.596	1.42	3618035	0.21	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	101560	1.35	88966	114.16	60	120	
Ge (IS)	72	1	He	74936	0.41	67006	111.83	60	120	
In-115 (IS)	115	1	He	762360	0.75	703530	108.36	60	120	
Tb-159 (IS)	159	1	He	2478106	1.30	2419851	102.41	60	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-5990824
Data File Name	071_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:00:02-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	He	46.983	4.485	2646	3.53	50	94.0	89.5	110.49	
Na	23	1	He	1256.997	1.846	1012760	1.15	1250	100.6	89.5	110.49	
Mg	24	1	He	1253.375	1.226	494825	0.44	1250	100.3	89.5	110.49	
Al	27	1	He	60.211	4.345	9185	5.94	50	120.4	89.5	110.49	>+\-10%
K	39	1	He	1290.098	1.711	487935	0.11	1250	103.2	89.5	110.49	
Ca	44	1	He	2499.018	1.590	47895	0.31	2500	100.0	89.5	110.49	
V	51	1	He	50.840	1.838	218374	0.52	50	101.7	89.5	110.49	
Cr	52	1	He	50.611	1.775	273202	0.54	50	101.2	89.5	110.49	
Mn	55	1	He	50.550	0.802	150982	0.92	50	101.1	89.5	110.49	
Fe	56	1	He	530.419	0.936	2445158	1.67	500	106.1	89.5	110.49	
Co	59	1	He	51.185	1.340	454155	0.33	50	102.4	89.5	110.49	
Ni	60	1	He	50.774	0.902	121851	0.90	50	101.5	89.5	110.49	
Cu	65	1	He	51.969	0.909	174112	0.73	50	103.9	89.5	110.49	
Zn	66	1	He	49.969	1.173	55099	0.17	50	99.9	89.5	110.49	
As	75	1	He	50.204	1.269	36267	0.39	50	100.4	89.5	110.49	
Se	78	1	He	50.827	1.028	2540	0.91	50	101.7	89.5	110.49	
Rb	85	1	He	50.202	0.799	156285	0.40	50	100.4	89.5	110.49	
Sr	88	1	He	50.090	1.756	209293	0.59	50	100.2	89.5	110.49	
Mo	95	1	He	49.521	1.735	174389	1.02	50	99.0	89.5	110.49	
Ag	107	1	He	49.569	1.517	581361	0.43	50	99.1	89.5	110.49	
Cd	111	1	He	48.959	2.738	84449	1.70	50	97.9	89.5	110.49	
Sn	118	1	He	49.549	0.698	191968	0.91	50	99.1	89.5	110.49	
Sb	123	1	He	49.918	1.582	182342	0.59	50	99.8	89.5	110.49	
Cs	133	1	He	49.332	1.108	517684	0.17	50	98.7	89.5	110.49	
Ba	137	1	He	49.647	1.505	90456	0.78	50	99.3	89.5	110.49	
Ce	140	1	He	46.904	1.834	1302148	0.84	50	93.8	89.5	110.49	
Tl	205	1	He	47.309	1.862	1340762	0.45	50	94.6	89.5	110.49	
Pb	208	1	He	48.377	1.872	1800676	0.22	50	96.8	89.5	110.49	
Th	232	1	He	64.366	1.182	124854	1.33	50	128.7	89.5	110.49	>+\-10%
U	238	1	He	48.856	1.776	1891725	0.17	50	97.7	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	100713	1.62	88966	113.20	60	120	
Ge (IS)	72	1	He	74265	1.20	67006	110.83	60	120	
In-115 (IS)	115	1	He	787477	1.20	703530	111.93	60	120	
Tb-159 (IS)	159	1	He	2535533	1.91	2419851	104.78	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	072_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:02:26-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.000	#DIV/0!	0	#DIV/0!	0.5	
Na	23	1	He	2.274	14.5	12739	2.0	110	
Mg	24	1	He	2.616	21.6	1116	19.8	110	
Al	27	1	He	1.412	11.6	253	9.5	10	
K	39	1	He	-3.653	-32.6	25773	1.1	110	
Ca	44	1	He	5.287	16.2	184	9.3	110	
V	51	1	He	-0.067	-24.4	487	14.6	2	
Cr	52	1	He	0.042	49.7	889	13.0	2	
Mn	55	1	He	0.067	16.8	218	15.3	1	
Fe	56	1	He	4.265	17.4	21660	16.0	20	
Co	59	1	He	0.049	34.4	436	34.0	1	
Ni	60	1	He	0.055	35.5	166	28.2	2	
Cu	65	1	He	0.298	14.6	1101	13.6	1	
Zn	66	1	He	0.110	15.7	238	8.0	20	
As	75	1	He	0.046	25.4	63	13.3	1	
Se	78	1	He	0.315	49.2	84	9.0	2	
Sr	88	1	He	0.060	24.0	270	22.9	2	
Mo	95	1	He	0.200	15.7	714	16.2	2	
Ag	107	1	He	0.061	38.1	728	38.0	1	
Cd	111	1	He	0.048	36.2	82	36.8	1	
Sn	118	1	He	0.186	20.9	973	16.1	2	
Sb	123	1	He	0.940	29.6	3569	28.9	1	
Ba	137	1	He	0.073	41.3	144	38.1	1	
Ce	140	1	He	0.050	32.2	1405	32.4	1	
Tl	205	1	He	0.068	23.5	1917	24.3	1	
Pb	208	1	He	0.073	25.1	2771	25.4	1	
U	238	1	He	0.065	32.0	2526	32.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	98768	0.55	88966	111.02	60	120	
Ge (IS)	72	1	He	74235	0.11	67006	110.79	60	120	
In-115 (IS)	115	1	He	769864	1.08	703530	109.43	60	120	
Tb-159 (IS)	159	1	He	2496851	1.13	2419851	103.18	60	120	

Sample Report

Sample Table

Sample Name	440-255674-c-12-b SD@100
Data File Name	073SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:04:52-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	3307
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.059	0.059	100.41	3	100.05	100	
Na	23	1	He	22.963	22.963	4.38	29751	2.40	75000	
Mg	24	1	He	1916.707	1916.707	0.47	763817	0.81	125000	
Al	27	1	He	2184.587	2184.587	1.69	334632	2.10	4000	
K	39	1	He	456.147	456.147	0.72	192166	1.11	100000	
Ca	44	1	He	1344.802	1344.802	1.09	26060	1.61	250000	
V	51	1	He	6.860	6.860	1.33	30431	1.63	4000	
Cr	52	1	He	2.189	2.189	0.52	12585	0.98	4000	
Mn	55	1	He	13.999	13.999	1.92	42223	2.42	4000	
Fe	56	1	He	4863.841	4863.841	2.07	22612213	2.36	40000	
Co	59	1	He	0.932	0.932	1.23	8363	1.79	4000	
Ni	60	1	He	2.306	2.306	3.07	5622	3.61	4000	
Cu	65	1	He	328.357	328.357	0.40	1109808	0.78	4000	
Zn	66	1	He	3.774	3.774	1.00	4287	1.75	4000	
As	75	1	He	1.213	1.213	4.42	909	4.81	4000	
Se	78	1	He	1.120	1.120	7.49	124	3.37	4000	
Rb	85	1	He	2.329	2.329	1.98	7159	2.33	100	
Sr	88	1	He	16.836	16.836	1.02	69370	0.85	4000	
Mo	95	1	He	0.671	0.671	2.77	2352	2.89	4000	
Ag	107	1	He	0.041	0.041	3.63	492	3.73	100	
Cd	111	1	He	0.010	0.010	57.94	18	54.11	3500	
Sn	118	1	He	0.343	0.343	5.39	1577	4.77	4000	
Sb	123	1	He	1.080	1.080	9.49	4096	9.05	4000	
Cs	133	1	He	0.256	0.256	8.09	2658	8.20	100	
Ba	137	1	He	12.792	12.792	0.51	22990	0.55	4000	
Ce	140	1	He	5.233	5.233	1.29	143264	1.57	4000	
Tl	205	1	He	0.030	0.030	4.49	870	4.80	3500	
Pb	208	1	He	0.622	0.622	2.18	23030	1.17	4000	
Th	232	1	He	39.924	39.924	6.02	76949	6.89	100	
U	238	1	He	0.368	0.368	4.16	14150	5.15	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	101653	0.55	88966	114.26	60	120	
Ge (IS)	72	1	He	74568	1.13	67006	111.29	60	120	
In-115 (IS)	115	1	He	776299	0.37	703530	110.34	60	120	
Tb-159 (IS)	159	1	He	2512165	1.10	2419851	103.81	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-1-b@20
Data File Name	074SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:07:16-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3308
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.260	0.260	31.18	16	32.73	100	
Na	23	1	He	576.248	576.248	2.49	498669	0.51	75000	
Mg	24	1	He	11975.757	11975.757	2.99	5011441	1.29	125000	
Al	27	1	He	14104.585	14104.585	3.43	2268459	1.37	4000	>LDR
K	39	1	He	867.477	867.477	2.56	357447	0.27	100000	
Ca	44	1	He	13435.403	13435.403	2.55	272605	0.63	250000	
V	51	1	He	35.384	35.384	2.52	161399	0.56	4000	
Cr	52	1	He	17.534	17.534	3.74	100806	1.62	4000	
Mn	55	1	He	150.070	150.070	3.06	475108	0.97	4000	
Fe	56	1	He	20509.239	20509.239	2.71	100125500	0.61	40000	
Co	59	1	He	7.388	7.388	1.69	69521	1.09	4000	
Ni	60	1	He	20.576	20.576	2.24	52376	0.46	4000	
Cu	65	1	He	1178.337	1178.337	2.42	4182534	0.72	4000	
Zn	66	1	He	17.442	17.442	0.48	19635	1.10	4000	
As	75	1	He	9.190	9.190	3.66	6773	2.08	4000	
Se	78	1	He	4.774	4.774	9.49	306	5.74	4000	
Rb	85	1	He	6.185	6.185	0.90	18670	0.34	100	
Sr	88	1	He	162.527	162.527	2.44	658083	1.68	4000	
Mo	95	1	He	4.834	4.834	0.51	16520	1.07	4000	
Ag	107	1	He	0.107	0.107	3.22	1238	2.32	100	
Cd	111	1	He	0.064	0.064	16.99	108	17.03	3500	
Sn	118	1	He	1.794	1.794	5.29	6988	4.32	4000	
Sb	123	1	He	2.459	2.459	0.78	8903	0.09	4000	
Cs	133	1	He	1.068	1.068	2.03	10872	1.85	100	
Ba	137	1	He	83.585	83.585	2.15	147580	1.59	4000	
Ce	140	1	He	20.029	20.029	2.54	538905	1.91	4000	
Tl	205	1	He	0.087	0.087	4.68	2472	3.98	3500	
Pb	208	1	He	6.338	6.338	1.83	234451	1.10	4000	
Th	232	1	He	102.161	102.161	4.02	196544	3.44	100	>LDR
U	238	1	He	2.703	2.703	1.96	103991	1.22	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	106800	2.14	88966	120.05	60	120	
Ge (IS)	72	1	He	75518	1.56	67006	112.70	60	120	
In-115 (IS)	115	1	He	763164	0.85	703530	108.48	60	120	
Tb-159 (IS)	159	1	He	2518525	0.77	2419851	104.08	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-2-b@20
Data File Name	075SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:09:40-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3309
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.317	0.317	8.78	19	10.18	100	
Na	23	1	He	535.893	535.893	1.72	463512	0.65	75000	
Mg	24	1	He	12570.956	12570.956	2.05	5248487	0.60	125000	
Al	27	1	He	14273.574	14273.574	1.18	2290806	0.50	4000	>LDR
K	39	1	He	755.619	755.619	2.18	314388	0.31	100000	
Ca	44	1	He	11534.006	11534.006	1.97	233496	0.35	250000	
V	51	1	He	38.676	38.676	2.14	175927	0.96	4000	
Cr	52	1	He	16.729	16.729	2.14	96003	0.96	4000	
Mn	55	1	He	161.774	161.774	2.11	511004	0.52	4000	
Fe	56	1	He	20909.810	20909.810	2.02	101846678	0.38	40000	
Co	59	1	He	7.846	7.846	2.86	73640	1.18	4000	
Ni	60	1	He	21.539	21.539	2.98	54692	1.88	4000	
Cu	65	1	He	1265.986	1265.986	2.63	4482848	1.26	4000	
Zn	66	1	He	18.894	18.894	2.53	21289	1.96	4000	
As	75	1	He	8.552	8.552	3.22	6318	4.36	4000	
Se	78	1	He	4.291	4.291	7.11	282	4.48	4000	
Rb	85	1	He	5.748	5.748	0.37	17469	1.32	100	
Sr	88	1	He	144.052	144.052	1.51	587180	0.83	4000	
Mo	95	1	He	4.478	4.478	1.76	15406	0.65	4000	
Ag	107	1	He	0.121	0.121	3.82	1407	3.81	100	
Cd	111	1	He	0.065	0.065	11.45	111	12.49	3500	
Sn	118	1	He	1.613	1.613	4.62	6352	3.30	4000	
Sb	123	1	He	1.596	1.596	7.81	5891	8.43	4000	
Cs	133	1	He	0.814	0.814	3.32	8348	2.18	100	
Ba	137	1	He	70.156	70.156	1.39	124696	0.23	4000	
Ce	140	1	He	19.806	19.806	1.07	536466	0.47	4000	
Tl	205	1	He	0.067	0.067	7.68	1897	7.42	3500	
Pb	208	1	He	5.876	5.876	0.75	217813	0.52	4000	
Th	232	1	He	97.167	97.167	2.00	187373	1.79	100	
U	238	1	He	2.088	2.088	0.69	80499	0.62	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	106537	1.67	88966	119.75	60	120	
Ge (IS)	72	1	He	75628	1.24	67006	112.87	60	120	
In-115 (IS)	115	1	He	768245	1.16	703530	109.20	60	120	
Tb-159 (IS)	159	1	He	2523751	0.27	2419851	104.29	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-3-b@20
Data File Name	076SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:12:02-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3310
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.377	0.377	33.30	22	31.22	100	
Na	23	1	He	104.220	104.220	3.61	99019	1.17	75000	
Mg	24	1	He	12307.063	12307.063	2.00	5105938	0.14	125000	
Al	27	1	He	13871.865	13871.865	0.32	2212620	1.75	4000	>LDR
K	39	1	He	492.127	492.127	2.55	213574	0.66	100000	
Ca	44	1	He	5560.891	5560.891	1.83	111919	1.00	250000	
V	51	1	He	35.994	35.994	1.13	162780	1.47	4000	
Cr	52	1	He	9.980	9.980	1.01	57211	1.30	4000	
Mn	55	1	He	69.033	69.033	1.42	216716	0.67	4000	
Fe	56	1	He	18785.805	18785.805	1.07	90936974	1.04	40000	
Co	59	1	He	8.055	8.055	1.50	75137	0.58	4000	
Ni	60	1	He	13.876	13.876	1.24	35034	1.45	4000	
Cu	65	1	He	1728.073	1728.073	1.48	6081346	0.95	4000	
Zn	66	1	He	10.993	10.993	2.43	12627	2.85	4000	
As	75	1	He	10.556	10.556	2.20	7907	1.75	4000	
Se	78	1	He	8.112	8.112	6.23	479	4.87	4000	
Rb	85	1	He	3.155	3.155	2.19	9665	3.03	100	
Sr	88	1	He	139.036	139.036	0.81	571014	1.33	4000	
Mo	95	1	He	5.008	5.008	1.39	17357	2.19	4000	
Ag	107	1	He	0.118	0.118	7.55	1385	8.35	100	
Cd	111	1	He	0.024	0.024	39.44	41	38.32	3500	
Sn	118	1	He	1.401	1.401	3.04	5597	2.11	4000	
Sb	123	1	He	1.330	1.330	1.84	4979	2.18	4000	
Cs	133	1	He	0.602	0.602	2.79	6225	3.57	100	
Ba	137	1	He	47.591	47.591	1.20	85226	0.80	4000	
Ce	140	1	He	17.005	17.005	0.57	464075	1.00	4000	
Tl	205	1	He	0.029	0.029	7.48	831	7.18	3500	
Pb	208	1	He	5.813	5.813	1.43	213769	1.37	4000	
Th	232	1	He	79.975	79.975	2.96	153072	2.78	100	
U	238	1	He	1.959	1.959	1.49	74955	1.37	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	105872	2.06	88966	119.00	60	120	
Ge (IS)	72	1	He	76771	0.45	67006	114.57	60	120	
In-115 (IS)	115	1	He	773963	0.92	703530	110.01	60	120	
Tb-159 (IS)	159	1	He	2503585	0.19	2419851	103.46	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-5-b@20
Data File Name	077SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:14:25-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass
VialNumber	3311
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.469	0.469	18.70	28	18.33	100	
Na	23	1	He	140.205	140.205	1.80	129163	1.24	75000	
Mg	24	1	He	9224.288	9224.288	1.18	3826784	0.80	125000	
Al	27	1	He	9895.982	9895.982	2.19	1577994	1.91	4000	>LDR
K	39	1	He	2215.071	2215.071	0.44	859785	0.06	100000	
Ca	44	1	He	7475.136	7475.136	0.70	150400	0.30	250000	
V	51	1	He	34.200	34.200	0.86	154679	0.86	4000	
Cr	52	1	He	12.085	12.085	0.39	69112	0.48	4000	
Mn	55	1	He	144.596	144.596	1.68	453848	1.43	4000	
Fe	56	1	He	22805.751	22805.751	1.76	110374416	1.41	40000	
Co	59	1	He	12.165	12.165	1.22	113460	1.15	4000	
Ni	60	1	He	14.742	14.742	1.19	37209	0.81	4000	
Cu	65	1	He	1394.712	1394.712	0.56	4907627	0.42	4000	
Zn	66	1	He	23.320	23.320	1.71	26834	1.08	4000	
As	75	1	He	3.404	3.404	0.94	2589	1.91	4000	
Se	78	1	He	3.165	3.165	5.35	232	2.87	4000	
Rb	85	1	He	12.315	12.315	1.10	37929	1.47	100	
Sr	88	1	He	72.335	72.335	1.24	298948	0.74	4000	
Mo	95	1	He	4.188	4.188	0.14	14611	0.55	4000	
Ag	107	1	He	0.152	0.152	4.17	1781	4.44	100	
Cd	111	1	He	0.062	0.062	25.43	107	25.58	3500	
Sn	118	1	He	1.550	1.550	1.42	6203	1.84	4000	
Sb	123	1	He	0.543	0.543	6.15	2172	5.04	4000	
Cs	133	1	He	1.095	1.095	3.91	11383	4.05	100	
Ba	137	1	He	61.927	61.927	0.69	111600	0.38	4000	
Ce	140	1	He	25.555	25.555	1.45	701763	0.97	4000	
Tl	205	1	He	0.096	0.096	4.50	2696	4.28	3500	
Pb	208	1	He	2.889	2.889	0.68	106503	0.93	4000	
Th	232	1	He	214.837	214.837	2.79	411283	2.83	100	>LDR
U	238	1	He	3.648	3.648	0.80	139839	0.71	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	105840	0.40	88966	118.97	60	120	
Ge (IS)	72	1	He	77311	1.00	67006	115.38	60	120	
In-115 (IS)	115	1	He	778843	0.50	703530	110.71	60	120	
Tb-159 (IS)	159	1	He	2508934	0.28	2419851	103.68	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-6-b@20
Data File Name	078SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:16:49-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3312
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.439	0.439	50.32	27	50.01	100	
Na	23	1	He	183.517	183.517	2.71	169433	0.61	75000	
Mg	24	1	He	9417.022	9417.022	0.99	4001893	1.10	125000	
Al	27	1	He	11939.811	11939.811	1.84	1950067	0.49	4000	>LDR
K	39	1	He	2249.763	2249.763	2.00	893920	0.25	100000	
Ca	44	1	He	6877.421	6877.421	2.88	141713	0.84	250000	
V	51	1	He	32.179	32.179	2.36	149100	0.41	4000	
Cr	52	1	He	8.398	8.398	1.69	49414	1.01	4000	
Mn	55	1	He	61.941	61.941	1.52	199151	0.55	4000	
Fe	56	1	He	16435.092	16435.092	3.13	81457672	1.26	40000	
Co	59	1	He	6.148	6.148	2.34	58734	0.37	4000	
Ni	60	1	He	10.917	10.917	3.38	28227	1.44	4000	
Cu	65	1	He	746.242	746.242	1.80	2689492	0.36	4000	
Zn	66	1	He	12.896	12.896	1.66	14901	1.67	4000	
As	75	1	He	10.345	10.345	1.19	7808	0.91	4000	
Se	78	1	He	7.697	7.697	9.72	461	8.28	4000	
Rb	85	1	He	12.009	12.009	2.18	37044	1.35	100	
Sr	88	1	He	185.829	185.829	1.37	769261	0.58	4000	
Mo	95	1	He	4.332	4.332	3.91	15137	3.93	4000	
Ag	107	1	He	0.193	0.193	4.35	2270	3.99	100	
Cd	111	1	He	0.030	0.030	11.94	53	12.50	3500	
Sn	118	1	He	1.441	1.441	1.86	5793	1.02	4000	
Sb	123	1	He	2.017	2.017	1.55	7503	1.80	4000	
Cs	133	1	He	0.902	0.902	2.00	9389	1.23	100	
Ba	137	1	He	88.450	88.450	1.23	159659	0.63	4000	
Ce	140	1	He	15.383	15.383	1.54	423174	1.12	4000	
Tl	205	1	He	0.088	0.088	7.31	2525	6.95	3500	
Pb	208	1	He	4.150	4.150	1.19	156161	0.65	4000	
Th	232	1	He	118.568	118.568	1.70	231962	1.49	100	>LDR
U	238	1	He	3.431	3.431	1.51	134249	1.23	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	108430	2.09	88966	121.88	60	120	ISTD Failed
Ge (IS)	72	1	He	77343	0.34	67006	115.43	60	120	
In-115 (IS)	115	1	He	780191	0.84	703530	110.90	60	120	
Tb-159 (IS)	159	1	He	2561602	0.56	2419851	105.86	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-7-b@20
Data File Name	079SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:19:12-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3401
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.405	0.405	28.00	24	28.38	100	
Na	23	1	He	209.523	209.523	1.19	190729	0.88	75000	
Mg	24	1	He	9090.957	9090.957	0.68	3842354	1.01	125000	
Al	27	1	He	11388.190	11388.190	2.12	1850017	1.97	4000	>LDR
K	39	1	He	1234.653	1234.653	1.35	501273	0.60	100000	
Ca	44	1	He	6667.728	6667.728	0.92	136681	0.74	250000	
V	51	1	He	29.890	29.890	2.41	137821	2.35	4000	
Cr	52	1	He	8.591	8.591	2.04	50265	2.12	4000	
Mn	55	1	He	58.708	58.708	1.45	187741	1.40	4000	
Fe	56	1	He	16648.173	16648.173	2.07	82086108	1.92	40000	
Co	59	1	He	4.715	4.715	2.51	44799	1.79	4000	
Ni	60	1	He	9.839	9.839	2.49	25311	1.99	4000	
Cu	65	1	He	793.461	793.461	0.72	2844391	0.65	4000	
Zn	66	1	He	11.978	11.978	2.10	13818	2.16	4000	
As	75	1	He	10.796	10.796	1.86	8128	1.62	4000	
Se	78	1	He	7.445	7.445	4.67	448	4.92	4000	
Rb	85	1	He	6.287	6.287	1.50	19445	1.99	100	
Sr	88	1	He	135.853	135.853	1.19	563651	1.69	4000	
Mo	95	1	He	4.575	4.575	3.07	16022	3.42	4000	
Ag	107	1	He	0.221	0.221	1.78	2594	2.23	100	
Cd	111	1	He	0.019	0.019	47.68	34	45.73	3500	
Sn	118	1	He	1.637	1.637	3.59	6559	3.67	4000	
Sb	123	1	He	2.231	2.231	1.02	8295	1.10	4000	
Cs	133	1	He	0.795	0.795	2.72	8297	3.04	100	
Ba	137	1	He	61.983	61.983	0.23	112135	0.69	4000	
Ce	140	1	He	14.195	14.195	0.14	391349	0.63	4000	
Tl	205	1	He	0.047	0.047	4.22	1345	3.44	3500	
Pb	208	1	He	4.323	4.323	1.64	160838	0.87	4000	
Th	232	1	He	99.507	99.507	2.86	192539	2.03	100	
U	238	1	He	3.725	3.725	1.67	144130	0.83	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	107827	0.92	88966	121.20	60	120	ISTD Failed
Ge (IS)	72	1	He	77169	0.99	67006	115.17	60	120	
In-115 (IS)	115	1	He	781857	0.50	703530	111.13	60	120	
Tb-159 (IS)	159	1	He	2532832	0.84	2419851	104.67	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-8-b@20
Data File Name	080SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:21:36-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3402
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.184	0.184	62.22	11	62.48	100	
Na	23	1	He	106.560	106.560	2.06	102802	1.14	75000	
Mg	24	1	He	11212.298	11212.298	0.69	4735617	1.42	125000	
Al	27	1	He	12668.162	12668.162	1.05	2056431	0.62	4000	>LDR
K	39	1	He	1273.690	1273.690	0.62	515845	1.02	100000	
Ca	44	1	He	6544.774	6544.774	1.54	134068	1.72	250000	
V	51	1	He	29.095	29.095	1.11	134088	1.41	4000	
Cr	52	1	He	9.751	9.751	1.20	56911	1.63	4000	
Mn	55	1	He	81.646	81.646	1.19	260910	1.78	4000	
Fe	56	1	He	17682.606	17682.606	1.36	87128701	1.84	40000	
Co	59	1	He	6.485	6.485	1.39	61578	1.54	4000	
Ni	60	1	He	12.944	12.944	1.33	33263	0.62	4000	
Cu	65	1	He	1054.023	1054.023	1.97	3775659	1.96	4000	
Zn	66	1	He	12.577	12.577	3.46	14720	4.09	4000	
As	75	1	He	9.066	9.066	2.88	6932	2.16	4000	
Se	78	1	He	6.564	6.564	4.92	409	4.04	4000	
Rb	85	1	He	7.475	7.475	0.86	23231	0.40	100	
Sr	88	1	He	103.120	103.120	0.49	429988	0.52	4000	
Mo	95	1	He	5.061	5.061	2.35	17809	2.08	4000	
Ag	107	1	He	0.178	0.178	5.02	2108	4.52	100	
Cd	111	1	He	0.022	0.022	43.61	39	42.28	3500	
Sn	118	1	He	1.337	1.337	3.21	5433	2.76	4000	
Sb	123	1	He	3.053	3.053	3.10	11329	3.30	4000	
Cs	133	1	He	0.990	0.990	2.11	10378	2.22	100	
Ba	137	1	He	65.132	65.132	1.92	118419	1.57	4000	
Ce	140	1	He	16.655	16.655	0.83	461460	0.84	4000	
Tl	205	1	He	0.059	0.059	9.30	1680	9.16	3500	
Pb	208	1	He	4.527	4.527	1.74	167481	1.24	4000	
Th	232	1	He	105.009	105.009	3.67	202009	3.15	100	>LDR
U	238	1	He	2.057	2.057	1.98	79133	1.54	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	107747	0.73	88966	121.11	60	120	ISTD Failed
Ge (IS)	72	1	He	78316	0.71	67006	116.88	60	120	
In-115 (IS)	115	1	He	785813	0.69	703530	111.70	60	120	
Tb-159 (IS)	159	1	He	2518428	0.53	2419851	104.07	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-9-b@20
Data File Name	081SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:23:59-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3403
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.295	0.295	54.02	18	54.11	100	
Na	23	1	He	121.965	121.965	0.97	115664	0.61	75000	
Mg	24	1	He	6518.611	6518.611	1.30	2746389	0.43	125000	
Al	27	1	He	7428.079	7428.079	1.76	1202862	0.60	4000	>LDR
K	39	1	He	1286.580	1286.580	0.98	519504	0.69	100000	
Ca	44	1	He	5079.026	5079.026	1.31	103809	0.85	250000	
V	51	1	He	20.154	20.154	0.85	92918	1.31	4000	
Cr	52	1	He	9.159	9.159	2.27	53360	1.00	4000	
Mn	55	1	He	70.505	70.505	1.94	224740	1.00	4000	
Fe	56	1	He	16006.688	16006.688	2.09	78669077	0.85	40000	
Co	59	1	He	4.248	4.248	0.47	40242	1.05	4000	
Ni	60	1	He	9.134	9.134	4.33	23424	3.30	4000	
Cu	65	1	He	739.859	739.859	1.30	2643874	0.59	4000	
Zn	66	1	He	15.063	15.063	2.09	17670	2.04	4000	
As	75	1	He	3.707	3.707	2.06	2864	2.02	4000	
Se	78	1	He	3.250	3.250	5.27	240	3.63	4000	
Rb	85	1	He	6.627	6.627	1.65	20748	1.73	100	
Sr	88	1	He	54.168	54.168	0.74	227531	0.26	4000	
Mo	95	1	He	2.988	2.988	3.75	10600	2.96	4000	
Ag	107	1	He	0.104	0.104	1.63	1253	2.44	100	
Cd	111	1	He	0.019	0.019	11.19	33	10.01	3500	
Sn	118	1	He	1.395	1.395	1.92	5700	1.52	4000	
Sb	123	1	He	0.927	0.927	1.13	3614	0.42	4000	
Cs	133	1	He	0.814	0.814	1.94	8600	1.99	100	
Ba	137	1	He	48.279	48.279	1.24	88427	0.74	4000	
Ce	140	1	He	20.452	20.452	1.32	570801	0.48	4000	
Tl	205	1	He	0.057	0.057	14.30	1636	13.56	3500	
Pb	208	1	He	2.522	2.522	2.12	94328	1.08	4000	
Th	232	1	He	134.147	134.147	3.07	260709	2.04	100	>LDR
U	238	1	He	2.213	2.213	1.92	86080	0.91	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	107494	1.29	88966	120.83	60	120	ISTD Failed
Ge (IS)	72	1	He	78610	0.25	67006	117.32	60	120	
In-115 (IS)	115	1	He	791579	0.88	703530	112.52	60	120	
Tb-159 (IS)	159	1	He	2545786	1.05	2419851	105.20	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-10-b@20
Data File Name	082SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:26:22-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3404
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.692	0.692	17.31	42	18.24	100	
Na	23	1	He	276.301	276.301	0.77	250211	0.61	75000	
Mg	24	1	He	11189.401	11189.401	1.12	4776803	0.45	125000	
Al	27	1	He	13776.081	13776.081	0.70	2260790	1.78	4000	>LDR
K	39	1	He	3478.280	3478.280	0.70	1372341	1.00	100000	
Ca	44	1	He	9433.479	9433.479	1.11	195288	0.72	250000	
V	51	1	He	37.051	37.051	0.55	172385	1.64	4000	
Cr	52	1	He	15.398	15.398	0.35	90419	1.21	4000	
Mn	55	1	He	172.089	172.089	0.49	555846	0.62	4000	
Fe	56	1	He	23886.952	23886.952	0.36	118971511	0.78	40000	
Co	59	1	He	13.332	13.332	0.40	127965	1.36	4000	
Ni	60	1	He	18.952	18.952	0.47	49218	1.31	4000	
Cu	65	1	He	1110.018	1110.018	0.85	4019283	0.27	4000	
Zn	66	1	He	31.268	31.268	2.22	36633	1.92	4000	
As	75	1	He	3.961	3.961	1.10	3066	0.56	4000	
Se	78	1	He	4.119	4.119	16.22	285	10.95	4000	
Rb	85	1	He	18.053	18.053	0.69	55893	0.68	100	
Sr	88	1	He	87.632	87.632	1.00	364127	1.43	4000	
Mo	95	1	He	3.910	3.910	1.22	13715	0.79	4000	
Ag	107	1	He	0.167	0.167	4.10	1975	3.98	100	
Cd	111	1	He	0.035	0.035	29.01	61	27.99	3500	
Sn	118	1	He	1.840	1.840	2.24	7350	1.87	4000	
Sb	123	1	He	0.481	0.481	2.89	1958	3.00	4000	
Cs	133	1	He	1.658	1.658	0.89	17315	0.63	100	
Ba	137	1	He	103.186	103.186	0.66	186947	1.09	4000	
Ce	140	1	He	48.483	48.483	3.39	1338618	3.68	4000	
Tl	205	1	He	0.153	0.153	3.40	4341	2.68	3500	
Pb	208	1	He	3.909	3.909	1.25	145536	0.79	4000	
Th	232	1	He	297.717	297.717	2.28	575551	1.79	100	>LDR
U	238	1	He	7.123	7.123	2.50	275787	2.20	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	108919	1.11	88966	122.43	60	120	ISTD Failed
Ge (IS)	72	1	He	78808	1.51	67006	117.61	60	120	
In-115 (IS)	115	1	He	783019	0.44	703530	111.30	60	120	
Tb-159 (IS)	159	1	He	2534657	0.70	2419851	104.74	60	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-5990824
Data File Name	083_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:28:43-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	He	46.669	8.845	2764	8.32	50	93.3	89.5	110.49	
Na	23	1	He	1251.989	3.003	1060592	1.10	1250	100.2	89.5	110.49	
Mg	24	1	He	1239.168	2.647	514357	0.68	1250	99.1	89.5	110.49	
Al	27	1	He	63.743	0.310	10217	1.75	50	127.5	89.5	110.49	>+\-10%
K	39	1	He	1286.223	2.584	511596	0.71	1250	102.9	89.5	110.49	
Ca	44	1	He	2529.909	1.652	50986	0.45	2500	101.2	89.5	110.49	
V	51	1	He	50.025	3.224	225927	1.22	50	100.1	89.5	110.49	
Cr	52	1	He	50.199	2.649	284932	1.03	50	100.4	89.5	110.49	
Mn	55	1	He	50.031	2.688	157102	0.72	50	100.1	89.5	110.49	
Fe	56	1	He	514.487	2.903	2493306	0.91	500	102.9	89.5	110.49	
Co	59	1	He	50.271	2.766	468960	0.84	50	100.5	89.5	110.49	
Ni	60	1	He	50.121	2.143	126471	0.67	50	100.2	89.5	110.49	
Cu	65	1	He	51.051	1.870	179840	0.21	50	102.1	89.5	110.49	
Zn	66	1	He	49.367	1.144	57565	2.13	50	98.7	89.5	110.49	
As	75	1	He	49.034	0.500	37455	0.91	50	98.1	89.5	110.49	
Se	78	1	He	47.961	1.129	2538	1.56	50	95.9	89.5	110.49	
Rb	85	1	He	50.608	0.738	162746	0.50	50	101.2	89.5	110.49	
Sr	88	1	He	50.056	0.860	216062	0.59	50	100.1	89.5	110.49	
Mo	95	1	He	48.885	1.202	177835	0.95	50	97.8	89.5	110.49	
Ag	107	1	He	48.560	0.768	588339	0.64	50	97.1	89.5	110.49	
Cd	111	1	He	48.078	1.257	85675	1.05	50	96.2	89.5	110.49	
Sn	118	1	He	48.717	0.758	194970	0.65	50	97.4	89.5	110.49	
Sb	123	1	He	48.108	3.191	181534	3.00	50	96.2	89.5	110.49	
Cs	133	1	He	48.831	1.125	529332	0.86	50	97.7	89.5	110.49	
Ba	137	1	He	48.568	2.388	91411	2.30	50	97.1	89.5	110.49	
Ce	140	1	He	46.362	2.385	1329625	2.31	50	92.7	89.5	110.49	
Tl	205	1	He	47.221	0.494	1338540	1.28	50	94.4	89.5	110.49	
Pb	208	1	He	48.181	0.527	1793805	1.46	50	96.4	89.5	110.49	
Th	232	1	He	69.118	6.287	133989	5.23	50	138.2	89.5	110.49	>+\-10%
U	238	1	He	47.717	0.789	1848069	1.77	50	95.4	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	105912	2.03	88966	119.05	60	120	
Ge (IS)	72	1	He	78521	1.41	67006	117.18	60	120	
In-115 (IS)	115	1	He	813398	0.28	703530	115.62	60	120	
Tb-159 (IS)	159	1	He	2535440	1.03	2419851	104.78	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	084_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:31:11-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.038	86.6	2	86.6	0.5	
Na	23	1	He	1.075	25.8	12434	2.5	110	
Mg	24	1	He	2.051	24.2	944	21.6	110	
Al	27	1	He	1.516	16.5	283	14.5	10	
K	39	1	He	-4.672	-19.1	26776	0.9	110	
Ca	44	1	He	3.443	63.6	158	27.5	110	
V	51	1	He	-0.066	-9.8	513	5.8	2	
Cr	52	1	He	0.006	106.6	736	5.0	2	
Mn	55	1	He	0.065	42.8	221	38.3	1	
Fe	56	1	He	3.573	12.1	19511	10.7	20	
Co	59	1	He	0.040	29.2	379	28.3	1	
Ni	60	1	He	0.045	46.6	150	34.6	2	
Cu	65	1	He	0.231	13.2	929	10.8	1	
Zn	66	1	He	0.110	8.9	249	3.4	20	
As	75	1	He	0.032	35.2	55	14.9	1	
Se	78	1	He	0.302	61.3	87	11.0	2	
Sr	88	1	He	0.039	16.8	189	15.0	2	
Mo	95	1	He	0.138	35.8	516	35.0	2	
Ag	107	1	He	0.048	39.4	587	38.8	1	
Cd	111	1	He	0.036	22.9	64	23.3	1	
Sn	118	1	He	0.087	52.1	616	29.7	2	
Sb	123	1	He	0.614	31.9	2470	30.0	1	
Ba	137	1	He	0.045	29.9	98	26.0	1	
Ce	140	1	He	0.041	24.1	1167	24.4	1	
Tl	205	1	He	0.046	30.4	1322	29.1	1	
Pb	208	1	He	0.047	27.3	1826	25.5	1	
U	238	1	He	0.046	32.7	1797	31.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	104047	0.68	88966	116.95	60	120	
Ge (IS)	72	1	He	77480	1.17	67006	115.63	60	120	
In-115 (IS)	115	1	He	791127	0.88	703530	112.45	60	120	
Tb-159 (IS)	159	1	He	2523615	1.13	2419851	104.29	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-11-b@20
Data File Name	085SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:33:38-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3405
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.348	0.348	25.87	21	24.12	100	
Na	23	1	He	160.519	160.519	2.05	150375	0.59	75000	
Mg	24	1	He	10317.962	10317.962	3.18	4402828	1.70	125000	
Al	27	1	He	12368.680	12368.680	3.42	2028683	2.18	4000	>LDR
K	39	1	He	765.072	765.072	2.68	324984	0.65	100000	
Ca	44	1	He	5727.966	5727.966	3.93	118549	2.27	250000	
V	51	1	He	31.016	31.016	3.59	144350	1.85	4000	
Cr	52	1	He	9.253	9.253	1.57	54609	1.33	4000	
Mn	55	1	He	49.725	49.725	3.58	160536	1.78	4000	
Fe	56	1	He	14828.303	14828.303	3.20	73816788	1.55	40000	
Co	59	1	He	4.630	4.630	3.90	44420	2.28	4000	
Ni	60	1	He	11.161	11.161	3.01	28986	1.55	4000	
Cu	65	1	He	2185.325	2185.325	3.05	7909387	1.79	4000	
Zn	66	1	He	8.987	8.987	2.86	10363	2.22	4000	
As	75	1	He	15.264	15.264	1.66	11443	1.04	4000	
Se	78	1	He	7.328	7.328	5.38	440	5.28	4000	
Rb	85	1	He	4.621	4.621	2.07	14253	1.39	100	
Sr	88	1	He	245.716	245.716	1.11	1016602	1.13	4000	
Mo	95	1	He	4.584	4.584	2.53	16008	3.02	4000	
Ag	107	1	He	0.316	0.316	0.96	3693	0.91	100	
Cd	111	1	He	0.042	0.042	58.24	73	56.77	3500	
Sn	118	1	He	2.654	2.654	1.07	10437	1.68	4000	
Sb	123	1	He	9.867	9.867	1.53	35862	1.67	4000	
Cs	133	1	He	0.773	0.773	1.83	8044	1.49	100	
Ba	137	1	He	74.964	74.964	0.80	135246	1.20	4000	
Ce	140	1	He	16.359	16.359	1.30	449770	1.38	4000	
Tl	205	1	He	0.057	0.057	10.53	1623	9.15	3500	
Pb	208	1	He	5.180	5.180	1.52	192013	0.48	4000	
Th	232	1	He	118.680	118.680	4.45	228805	5.23	100	>LDR
U	238	1	He	1.444	1.444	1.01	55677	2.38	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	108900	1.78	88966	122.41	60	120	ISTD Failed
Ge (IS)	72	1	He	76924	0.88	67006	114.80	60	120	
In-115 (IS)	115	1	He	779717	0.75	703530	110.83	60	120	
Tb-159 (IS)	159	1	He	2523786	1.43	2419851	104.30	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-13-b@20
Data File Name	086SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:36:01-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3406
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.344	0.344	60.02	21	59.77	100	
Na	23	1	He	116.465	116.465	0.99	113386	0.68	75000	
Mg	24	1	He	8451.374	8451.374	2.10	3637600	1.67	125000	
Al	27	1	He	8539.702	8539.702	1.45	1412830	0.99	4000	>LDR
K	39	1	He	2527.361	2527.361	1.07	1013553	0.60	100000	
Ca	44	1	He	6247.506	6247.506	2.02	130426	1.48	250000	
V	51	1	He	33.660	33.660	1.78	157950	1.23	4000	
Cr	52	1	He	10.043	10.043	1.34	59711	0.79	4000	
Mn	55	1	He	170.957	170.957	1.89	556702	1.37	4000	
Fe	56	1	He	21557.846	21557.846	2.91	108244711	2.44	40000	
Co	59	1	He	14.385	14.385	1.61	139189	1.08	4000	
Ni	60	1	He	16.083	16.083	0.82	42115	0.37	4000	
Cu	65	1	He	3367.016	3367.016	2.07	12291323	1.57	4000	
Zn	66	1	He	32.663	32.663	2.52	38371	1.38	4000	
As	75	1	He	2.098	2.098	3.47	1643	2.35	4000	
Se	78	1	He	3.020	3.020	16.22	229	10.56	4000	
Rb	85	1	He	14.161	14.161	0.35	44336	0.34	100	
Sr	88	1	He	59.194	59.194	0.78	248714	0.93	4000	
Mo	95	1	He	2.654	2.654	2.18	9424	2.32	4000	
Ag	107	1	He	0.201	0.201	7.76	2396	7.66	100	
Cd	111	1	He	0.121	0.121	11.43	211	11.20	3500	
Sn	118	1	He	1.356	1.356	6.12	5549	5.95	4000	
Sb	123	1	He	0.368	0.368	2.20	1563	1.95	4000	
Cs	133	1	He	1.098	1.098	0.65	11602	0.72	100	
Ba	137	1	He	51.412	51.412	0.47	94193	0.62	4000	
Ce	140	1	He	26.492	26.492	0.94	739604	1.09	4000	
Tl	205	1	He	0.101	0.101	7.74	2918	7.38	3500	
Pb	208	1	He	2.531	2.531	1.46	95134	0.73	4000	
Th	232	1	He	234.284	234.284	3.29	457243	2.69	100	>LDR
U	238	1	He	6.238	6.238	1.91	243757	1.14	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	109812	0.54	88966	123.43	60	120	ISTD Failed
Ge (IS)	72	1	He	79040	1.24	67006	117.96	60	120	
In-115 (IS)	115	1	He	791765	0.16	703530	112.54	60	120	
Tb-159 (IS)	159	1	He	2558409	0.80	2419851	105.73	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-14-b@20
Data File Name	087SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:38:25-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3407
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.241	0.241	26.65	14	26.66	100	
Na	23	1	He	175.149	175.149	1.45	160642	0.18	75000	
Mg	24	1	He	8699.838	8699.838	2.09	3659479	1.28	125000	
Al	27	1	He	9589.127	9589.127	0.81	1550500	0.44	4000	>LDR
K	39	1	He	2491.988	2491.988	1.05	977111	0.43	100000	
Ca	44	1	He	8813.676	8813.676	1.49	179787	0.46	250000	
V	51	1	He	29.159	29.159	1.28	133841	0.80	4000	
Cr	52	1	He	13.640	13.640	2.52	78994	1.29	4000	
Mn	55	1	He	114.500	114.500	1.43	364409	0.57	4000	
Fe	56	1	He	18885.620	18885.620	1.80	92676025	0.63	40000	
Co	59	1	He	8.077	8.077	1.64	76381	0.65	4000	
Ni	60	1	He	14.541	14.541	1.69	37214	0.60	4000	
Cu	65	1	He	1410.330	1410.330	2.28	5031434	1.25	4000	
Zn	66	1	He	22.098	22.098	1.28	25956	1.21	4000	
As	75	1	He	2.282	2.282	1.47	1781	0.65	4000	
Se	78	1	He	3.097	3.097	8.34	233	6.23	4000	
Rb	85	1	He	13.388	13.388	1.17	41950	0.95	100	
Sr	88	1	He	64.714	64.714	2.56	272093	1.71	4000	
Mo	95	1	He	3.316	3.316	4.90	11772	4.05	4000	
Ag	107	1	He	0.193	0.193	2.54	2296	2.57	100	
Cd	111	1	He	0.022	0.022	31.47	40	30.04	3500	
Sn	118	1	He	1.548	1.548	5.91	6300	4.74	4000	
Sb	123	1	He	0.530	0.530	5.28	2162	5.24	4000	
Cs	133	1	He	1.240	1.240	2.06	13107	1.24	100	
Ba	137	1	He	69.953	69.953	1.77	128251	0.92	4000	
Ce	140	1	He	29.155	29.155	1.46	814561	0.55	4000	
Tl	205	1	He	0.112	0.112	7.10	3184	5.28	3500	
Pb	208	1	He	2.798	2.798	2.31	103771	0.35	4000	
Th	232	1	He	252.158	252.158	4.43	485330	2.14	100	>LDR
U	238	1	He	4.211	4.211	3.22	162331	0.98	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	107326	1.21	88966	120.64	60	120	ISTD Failed
Ge (IS)	72	1	He	78893	0.82	67006	117.74	60	120	
In-115 (IS)	115	1	He	792443	0.94	703530	112.64	60	120	
Tb-159 (IS)	159	1	He	2524734	2.55	2419851	104.33	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-15-b@20
Data File Name	088SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:40:48-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3408
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.219	0.219	50.73	13	49.99	100	
Na	23	1	He	167.490	167.490	2.82	156497	1.16	75000	
Mg	24	1	He	8698.941	8698.941	2.62	3715314	1.42	125000	
Al	27	1	He	9492.940	9492.940	2.55	1558387	1.13	4000	>LDR
K	39	1	He	2374.700	2374.700	1.87	946824	0.33	100000	
Ca	44	1	He	9283.492	9283.492	2.22	192272	0.73	250000	
V	51	1	He	29.082	29.082	2.87	135526	1.33	4000	
Cr	52	1	He	14.834	14.834	2.56	87167	1.03	4000	
Mn	55	1	He	120.018	120.018	2.27	387827	0.75	4000	
Fe	56	1	He	16984.561	16984.561	3.04	84622117	1.54	40000	
Co	59	1	He	7.683	7.683	2.53	73773	1.01	4000	
Ni	60	1	He	14.647	14.647	1.84	38062	0.42	4000	
Cu	65	1	He	1401.529	1401.529	2.55	5076997	1.28	4000	
Zn	66	1	He	21.367	21.367	2.50	25052	2.39	4000	
As	75	1	He	2.143	2.143	4.27	1671	4.29	4000	
Se	78	1	He	3.268	3.268	9.66	241	6.84	4000	
Rb	85	1	He	12.758	12.758	1.61	39743	1.07	100	
Sr	88	1	He	69.251	69.251	2.02	289502	1.68	4000	
Mo	95	1	He	3.353	3.353	1.75	11838	1.22	4000	
Ag	107	1	He	0.162	0.162	9.33	1919	9.35	100	
Cd	111	1	He	0.039	0.039	19.30	68	18.62	3500	
Sn	118	1	He	1.472	1.472	2.36	5973	2.67	4000	
Sb	123	1	He	0.431	0.431	3.64	1786	3.71	4000	
Cs	133	1	He	1.149	1.149	1.58	12081	1.85	100	
Ba	137	1	He	61.124	61.124	2.18	111419	1.75	4000	
Ce	140	1	He	26.398	26.398	1.65	733272	1.28	4000	
Tl	205	1	He	0.102	0.102	7.89	2893	7.74	3500	
Pb	208	1	He	2.600	2.600	2.68	96751	1.72	4000	
Th	232	1	He	252.683	252.683	2.56	488129	1.57	100	>LDR
U	238	1	He	3.818	3.818	3.19	147683	2.20	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	108986	1.54	88966	122.50	60	120	ISTD Failed
Ge (IS)	72	1	He	78736	0.11	67006	117.50	60	120	
In-115 (IS)	115	1	He	787828	0.55	703530	111.98	60	120	
Tb-159 (IS)	159	1	He	2532623	1.00	2419851	104.66	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-16-b@20
Data File Name	089SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:43:11-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3409
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.473	0.473	28.27	29	29.04	100	
Na	23	1	He	148.895	148.895	6.90	140412	5.76	75000	
Mg	24	1	He	8007.286	8007.286	1.68	3419156	1.21	125000	
Al	27	1	He	10797.405	10797.405	2.30	1772107	1.78	4000	>LDR
K	39	1	He	530.662	530.662	2.51	234691	1.79	100000	
Ca	44	1	He	8263.693	8263.693	1.78	171117	1.06	250000	
V	51	1	He	24.260	24.260	1.93	113173	1.01	4000	
Cr	52	1	He	7.953	7.953	1.88	47062	1.09	4000	
Mn	55	1	He	60.561	60.561	1.81	195661	1.27	4000	
Fe	56	1	He	14838.396	14838.396	1.88	73916906	1.27	40000	
Co	59	1	He	6.357	6.357	2.66	61025	2.00	4000	
Ni	60	1	He	11.693	11.693	1.66	30388	1.70	4000	
Cu	65	1	He	1052.450	1052.450	1.62	3811586	0.84	4000	
Zn	66	1	He	11.356	11.356	2.86	13366	2.87	4000	
As	75	1	He	9.148	9.148	1.86	7029	1.18	4000	
Se	78	1	He	5.857	5.857	5.46	375	5.01	4000	
Rb	85	1	He	3.093	3.093	3.39	9667	2.62	100	
Sr	88	1	He	127.578	127.578	2.23	534657	1.43	4000	
Mo	95	1	He	5.592	5.592	5.61	19771	4.80	4000	
Ag	107	1	He	0.110	0.110	5.59	1320	4.81	100	
Cd	111	1	He	0.058	0.058	55.34	101	54.40	3500	
Sn	118	1	He	1.605	1.605	1.60	6501	1.16	4000	
Sb	123	1	He	3.008	3.008	0.41	11225	0.66	4000	
Cs	133	1	He	0.824	0.824	1.42	8687	0.73	100	
Ba	137	1	He	54.900	54.900	1.80	100331	1.25	4000	
Ce	140	1	He	15.548	15.548	1.51	433010	0.81	4000	
Tl	205	1	He	0.133	0.133	10.70	3798	9.35	3500	
Pb	208	1	He	7.766	7.766	2.97	290530	1.52	4000	
Th	232	1	He	78.965	78.965	2.68	153792	1.23	100	
U	238	1	He	2.930	2.930	3.02	114036	1.57	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	108943	0.92	88966	122.46	60	120	ISTD Failed
Ge (IS)	72	1	He	78699	0.70	67006	117.45	60	120	
In-115 (IS)	115	1	He	789867	0.81	703530	112.27	60	120	
Tb-159 (IS)	159	1	He	2548010	1.48	2419851	105.30	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-17-b@20
Data File Name	090SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:45:35-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3410
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.345	0.345	32.90	21	32.88	100	
Na	23	1	He	128.194	128.194	0.26	123182	0.57	75000	
Mg	24	1	He	8054.765	8054.765	0.90	3455843	0.34	125000	
Al	27	1	He	11075.257	11075.257	0.63	1826449	0.13	4000	>LDR
K	39	1	He	516.131	516.131	0.59	230182	0.50	100000	
Ca	44	1	He	5034.121	5034.121	1.96	104773	1.27	250000	
V	51	1	He	24.712	24.712	1.46	115814	0.87	4000	
Cr	52	1	He	8.492	8.492	1.27	50446	1.52	4000	
Mn	55	1	He	78.632	78.632	1.22	255250	0.56	4000	
Fe	56	1	He	15025.939	15025.939	1.16	75208597	0.45	40000	
Co	59	1	He	5.016	5.016	1.62	48389	1.25	4000	
Ni	60	1	He	11.562	11.562	0.43	30190	1.11	4000	
Cu	65	1	He	1095.165	1095.165	1.86	3985091	1.15	4000	
Zn	66	1	He	10.966	10.966	1.65	12961	1.08	4000	
As	75	1	He	7.694	7.694	1.03	5940	0.83	4000	
Se	78	1	He	5.171	5.171	12.38	341	10.18	4000	
Rb	85	1	He	3.452	3.452	2.85	10818	2.90	100	
Sr	88	1	He	104.578	104.578	1.43	439504	0.90	4000	
Mo	95	1	He	3.793	3.793	2.38	13456	1.85	4000	
Ag	107	1	He	0.115	0.115	12.21	1373	12.17	100	
Cd	111	1	He	0.026	0.026	44.01	47	43.45	3500	
Sn	118	1	He	1.543	1.543	1.25	6281	1.72	4000	
Sb	123	1	He	1.776	1.776	3.78	6734	3.03	4000	
Cs	133	1	He	0.749	0.749	2.65	7922	1.68	100	
Ba	137	1	He	55.784	55.784	2.32	102224	1.56	4000	
Ce	140	1	He	14.510	14.510	1.08	405233	0.60	4000	
Tl	205	1	He	0.057	0.057	8.22	1645	7.92	3500	
Pb	208	1	He	6.440	6.440	0.87	241304	1.35	4000	
Th	232	1	He	74.778	74.778	0.48	145869	1.20	100	
U	238	1	He	1.817	1.817	2.04	70824	2.28	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	109460	0.71	88966	123.04	60	120	ISTD Failed
Ge (IS)	72	1	He	79008	0.55	67006	117.91	60	120	
In-115 (IS)	115	1	He	792053	0.96	703530	112.58	60	120	
Tb-159 (IS)	159	1	He	2550876	0.72	2419851	105.41	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-18-b@20
Data File Name	091SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:47:59-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3411
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.351	0.351	25.44	21	24.12	100	
Na	23	1	He	125.135	125.135	1.46	118798	0.47	75000	
Mg	24	1	He	10533.426	10533.426	2.46	4453941	1.30	125000	
Al	27	1	He	13461.101	13461.101	2.70	2187778	1.68	4000	>LDR
K	39	1	He	661.927	661.927	2.03	282598	0.61	100000	
Ca	44	1	He	7800.692	7800.692	2.17	159966	0.91	250000	
V	51	1	He	31.787	31.787	1.30	146596	0.18	4000	
Cr	52	1	He	9.911	9.911	2.34	57900	1.65	4000	
Mn	55	1	He	69.182	69.182	1.12	221360	0.81	4000	
Fe	56	1	He	16982.260	16982.260	2.76	83774730	1.99	40000	
Co	59	1	He	5.935	5.935	3.86	56419	2.71	4000	
Ni	60	1	He	13.570	13.570	2.80	34913	1.96	4000	
Cu	65	1	He	1409.281	1409.281	2.70	5054023	1.39	4000	
Zn	66	1	He	13.009	13.009	2.22	14958	1.93	4000	
As	75	1	He	10.538	10.538	0.29	7915	0.31	4000	
Se	78	1	He	9.084	9.084	2.50	529	2.32	4000	
Rb	85	1	He	4.192	4.192	2.20	12937	1.78	100	
Sr	88	1	He	116.502	116.502	1.43	482191	0.88	4000	
Mo	95	1	He	4.023	4.023	0.27	14058	0.46	4000	
Ag	107	1	He	0.125	0.125	8.74	1476	7.96	100	
Cd	111	1	He	0.041	0.041	28.72	71	28.26	3500	
Sn	118	1	He	1.304	1.304	3.68	5268	2.88	4000	
Sb	123	1	He	1.828	1.828	2.73	6820	2.33	4000	
Cs	133	1	He	0.784	0.784	4.08	8161	4.01	100	
Ba	137	1	He	60.767	60.767	1.37	109672	0.81	4000	
Ce	140	1	He	16.030	16.030	1.15	440881	0.85	4000	
Tl	205	1	He	0.043	0.043	5.96	1232	7.36	3500	
Pb	208	1	He	6.443	6.443	2.38	239786	0.96	4000	
Th	232	1	He	109.020	109.020	4.50	210988	3.10	100	>LDR
U	238	1	He	1.683	1.683	3.38	65167	1.99	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	107895	1.31	88966	121.28	60	120	ISTD Failed
Ge (IS)	72	1	He	76974	0.60	67006	114.88	60	120	
In-115 (IS)	115	1	He	780031	0.63	703530	110.87	60	120	
Tb-159 (IS)	159	1	He	2534584	1.45	2419851	104.74	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-20-b@20
Data File Name	092SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:50:22-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3412
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.332	0.332	2.23	20	0.00	100	
Na	23	1	He	193.931	193.931	3.10	177428	0.75	75000	
Mg	24	1	He	9286.825	9286.825	2.70	3925123	0.48	125000	
Al	27	1	He	10811.146	10811.146	1.83	1756674	1.42	4000	>LDR
K	39	1	He	2160.974	2160.974	2.08	855342	0.30	100000	
Ca	44	1	He	11577.233	11577.233	2.50	237267	0.69	250000	
V	51	1	He	30.372	30.372	2.77	140033	0.56	4000	
Cr	52	1	He	11.927	11.927	2.33	69504	1.50	4000	
Mn	55	1	He	119.294	119.294	1.97	381515	0.26	4000	
Fe	56	1	He	18876.437	18876.437	2.80	93074183	0.61	40000	
Co	59	1	He	10.502	10.502	3.03	99784	0.88	4000	
Ni	60	1	He	14.504	14.504	2.82	37297	1.06	4000	
Cu	65	1	He	1146.824	1146.824	2.46	4111290	0.37	4000	
Zn	66	1	He	20.110	20.110	3.83	23259	3.49	4000	
As	75	1	He	4.013	4.013	2.61	3060	1.41	4000	
Se	78	1	He	4.214	4.214	6.66	286	3.94	4000	
Rb	85	1	He	11.284	11.284	0.88	34867	0.58	100	
Sr	88	1	He	124.073	124.073	1.39	514429	0.69	4000	
Mo	95	1	He	3.267	3.267	3.20	11439	2.45	4000	
Ag	107	1	He	0.149	0.149	4.07	1751	4.76	100	
Cd	111	1	He	0.035	0.035	61.46	61	60.09	3500	
Sn	118	1	He	1.494	1.494	4.51	6007	3.62	4000	
Sb	123	1	He	0.801	0.801	2.54	3111	2.17	4000	
Cs	133	1	He	1.114	1.114	2.30	11618	2.19	100	
Ba	137	1	He	81.026	81.026	1.96	146483	1.21	4000	
Ce	140	1	He	25.697	25.697	1.94	707937	1.18	4000	
Tl	205	1	He	0.095	0.095	2.19	2647	2.00	3500	
Pb	208	1	He	3.543	3.543	0.99	129376	0.79	4000	
Th	232	1	He	232.298	232.298	3.02	440516	2.95	100	>LDR
U	238	1	He	4.782	4.782	1.09	181590	0.95	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	107869	2.24	88966	121.25	60	120	ISTD Failed
Ge (IS)	72	1	He	77661	1.84	67006	115.90	60	120	
In-115 (IS)	115	1	He	781414	0.76	703530	111.07	60	120	
Tb-159 (IS)	159	1	He	2485546	0.23	2419851	102.71	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-21-b@20
Data File Name	093SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:52:44-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3501
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.308	0.308	20.18	19	20.36	100	
Na	23	1	He	435.479	435.479	0.91	389432	0.39	75000	
Mg	24	1	He	9396.916	9396.916	1.93	4032737	1.55	125000	
Al	27	1	He	12470.056	12470.056	1.34	2057007	0.88	4000	>LDR
K	39	1	He	2119.795	2119.795	1.12	852449	0.73	100000	
Ca	44	1	He	5391.108	5391.108	0.97	112235	0.64	250000	
V	51	1	He	34.833	34.833	1.61	162952	1.33	4000	
Cr	52	1	He	10.068	10.068	2.29	59683	2.01	4000	
Mn	55	1	He	110.837	110.837	1.07	359890	0.64	4000	
Fe	56	1	He	23614.362	23614.362	0.43	118232466	0.37	40000	
Co	59	1	He	7.285	7.285	1.87	70286	1.49	4000	
Ni	60	1	He	13.423	13.423	2.75	35050	2.41	4000	
Cu	65	1	He	3054.648	3054.648	0.83	11118792	0.38	4000	
Zn	66	1	He	34.613	34.613	1.28	40899	1.17	4000	
As	75	1	He	11.220	11.220	0.62	8702	0.65	4000	
Se	78	1	He	5.849	5.849	3.04	378	2.29	4000	
Rb	85	1	He	13.197	13.197	1.53	41337	0.98	100	
Sr	88	1	He	71.875	71.875	1.77	302126	1.29	4000	
Mo	95	1	He	8.037	8.037	2.10	28497	2.08	4000	
Ag	107	1	He	0.118	0.118	10.25	1415	9.61	100	
Cd	111	1	He	0.054	0.054	16.31	94	16.30	3500	
Sn	118	1	He	1.669	1.669	3.82	6771	3.15	4000	
Sb	123	1	He	1.502	1.502	1.00	5728	1.51	4000	
Cs	133	1	He	1.448	1.448	1.79	15305	1.99	100	
Ba	137	1	He	76.272	76.272	0.86	139799	0.31	4000	
Ce	140	1	He	38.606	38.606	1.11	1078275	0.65	4000	
Tl	205	1	He	0.259	0.259	2.89	7320	2.81	3500	
Pb	208	1	He	5.689	5.689	0.76	210660	0.30	4000	
Th	232	1	He	159.313	159.313	1.70	306601	1.82	100	>LDR
U	238	1	He	3.769	3.769	1.16	145161	0.72	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	109490	0.50	88966	123.07	60	120	ISTD Failed
Ge (IS)	72	1	He	79502	0.16	67006	118.65	60	120	
In-115 (IS)	115	1	He	792177	0.56	703530	112.60	60	120	
Tb-159 (IS)	159	1	He	2521192	0.64	2419851	104.19	60	120	

Sample Report

Sample Table

Sample Name	440-255674-b-22-b@20
Data File Name	094SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:55:06-08:00
Sample Type	Sample
Dilution	1
Comment	CAM (MN) SOIL 440-584717 MP
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail
VialNumber	3502
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.215	0.215	89.90	13	90.16	100	
Na	23	1	He	121.453	121.453	2.33	118221	0.30	75000	
Mg	24	1	He	8230.595	8230.595	2.20	3557818	0.79	125000	
Al	27	1	He	10870.872	10870.872	2.06	1806201	0.19	4000	>LDR
K	39	1	He	2077.147	2077.147	1.71	841987	0.28	100000	
Ca	44	1	He	4599.595	4599.595	1.83	96465	0.13	250000	
V	51	1	He	31.849	31.849	2.61	150137	0.93	4000	
Cr	52	1	He	9.048	9.048	1.89	54108	1.30	4000	
Mn	55	1	He	89.504	89.504	2.79	292701	0.94	4000	
Fe	56	1	He	25643.247	25643.247	2.68	129307359	1.01	40000	
Co	59	1	He	6.238	6.238	2.97	60620	1.20	4000	
Ni	60	1	He	11.701	11.701	2.99	30779	1.23	4000	
Cu	65	1	He	2248.800	2248.800	1.92	8244862	0.29	4000	
Zn	66	1	He	31.508	31.508	2.58	37413	1.92	4000	
As	75	1	He	12.444	12.444	1.13	9693	1.09	4000	
Se	78	1	He	5.192	5.192	7.02	345	4.85	4000	
Rb	85	1	He	13.620	13.620	3.29	43186	2.50	100	
Sr	88	1	He	97.760	97.760	2.07	415993	1.30	4000	
Mo	95	1	He	7.304	7.304	0.82	26219	0.40	4000	
Ag	107	1	He	0.153	0.153	4.29	1845	4.34	100	
Cd	111	1	He	0.042	0.042	41.39	76	40.99	3500	
Sn	118	1	He	1.477	1.477	3.10	6099	3.40	4000	
Sb	123	1	He	1.232	1.232	2.62	4796	1.83	4000	
Cs	133	1	He	1.446	1.446	2.29	15473	2.96	100	
Ba	137	1	He	84.058	84.058	1.93	155964	1.13	4000	
Ce	140	1	He	35.229	35.229	1.72	996084	0.91	4000	
Tl	205	1	He	0.227	0.227	2.48	6434	2.71	3500	
Pb	208	1	He	6.327	6.327	2.03	235029	1.18	4000	
Th	232	1	He	155.206	155.206	2.03	299678	2.08	100	>LDR
U	238	1	He	2.445	2.445	1.34	94489	0.52	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	110307	1.90	88966	123.99	60	120	ISTD Failed
Ge (IS)	72	1	He	79877	0.77	67006	119.21	60	120	
In-115 (IS)	115	1	He	801988	0.82	703530	113.99	60	120	
Tb-159 (IS)	159	1	He	2529440	1.08	2419851	104.53	60	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-5990824
Data File Name	095_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:57:28-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	He	44.666	4.338	2700	2.78	50	89.3	89.5	110.49	>+\-10%
Na	23	1	He	1228.701	1.030	1063191	0.92	1250	98.3	89.5	110.49	
Mg	24	1	He	1225.262	2.118	519294	0.31	1250	98.0	89.5	110.49	
Al	27	1	He	60.229	6.622	9856	6.06	50	120.5	89.5	110.49	>+\-10%
K	39	1	He	1268.899	1.294	515773	0.83	1250	101.5	89.5	110.49	
Ca	44	1	He	2491.188	1.129	51269	1.95	2500	99.6	89.5	110.49	
V	51	1	He	49.632	1.588	228908	0.22	50	99.3	89.5	110.49	
Cr	52	1	He	49.626	2.893	287588	1.14	50	99.3	89.5	110.49	
Mn	55	1	He	48.995	2.753	157078	0.94	50	98.0	89.5	110.49	
Fe	56	1	He	517.367	2.112	2560168	0.70	500	103.5	89.5	110.49	
Co	59	1	He	49.758	2.565	473932	0.75	50	99.5	89.5	110.49	
Ni	60	1	He	49.460	2.139	127423	0.80	50	98.9	89.5	110.49	
Cu	65	1	He	51.660	2.382	185790	0.62	50	103.3	89.5	110.49	
Zn	66	1	He	48.372	2.154	56961	1.87	50	96.7	89.5	110.49	
As	75	1	He	48.627	2.445	37507	0.62	50	97.3	89.5	110.49	
Se	78	1	He	49.391	3.624	2637	1.93	50	98.8	89.5	110.49	
Rb	85	1	He	50.945	1.351	164773	0.85	50	101.9	89.5	110.49	
Sr	88	1	He	50.157	1.839	217735	0.54	50	100.3	89.5	110.49	
Mo	95	1	He	49.156	2.308	179833	1.03	50	98.3	89.5	110.49	
Ag	107	1	He	48.590	1.706	592061	0.47	50	97.2	89.5	110.49	
Cd	111	1	He	48.165	1.565	86324	0.87	50	96.3	89.5	110.49	
Sn	118	1	He	49.042	2.175	197382	1.05	50	98.1	89.5	110.49	
Sb	123	1	He	47.640	3.843	180775	2.69	50	95.3	89.5	110.49	
Cs	133	1	He	49.092	0.970	535248	0.53	50	98.2	89.5	110.49	
Ba	137	1	He	48.963	1.178	92687	0.52	50	97.9	89.5	110.49	
Ce	140	1	He	46.651	2.575	1345444	1.29	50	93.3	89.5	110.49	
Tl	205	1	He	46.047	0.912	1342352	0.75	50	92.1	89.5	110.49	
Pb	208	1	He	46.936	0.872	1797068	0.43	50	93.9	89.5	110.49	
Th	232	1	He	66.042	3.567	131725	2.92	50	132.1	89.5	110.49	>+\-10%
U	238	1	He	47.034	0.233	1873388	1.13	50	94.1	89.5	110.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	108131	1.79	88966	121.54	60	120	ISTD Failed
Ge (IS)	72	1	He	79308	1.90	67006	118.36	60	120	
In-115 (IS)	115	1	He	818160	1.34	703530	116.29	60	120	
Tb-159 (IS)	159	1	He	2607588	0.90	2419851	107.76	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	096_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-09T23:59:52-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.094	34.6	6	34.7	0.5	
Na	23	1	He	0.926	69.4	12447	4.0	110	
Mg	24	1	He	2.233	8.8	1030	8.1	110	
Al	27	1	He	1.476	45.9	280	38.3	10	
K	39	1	He	-4.863	-21.6	27006	1.1	110	
Ca	44	1	He	3.854	41.8	168	19.1	110	
V	51	1	He	-0.066	-16.5	521	9.3	2	
Cr	52	1	He	0.016	127.5	799	14.5	2	
Mn	55	1	He	0.058	13.2	203	11.5	1	
Fe	56	1	He	4.780	4.4	25536	3.7	20	
Co	59	1	He	0.045	45.7	433	44.0	1	
Ni	60	1	He	0.041	23.4	140	16.7	2	
Cu	65	1	He	0.450	8.8	1706	7.9	1	
Zn	66	1	He	0.134	13.9	279	7.8	20	
As	75	1	He	0.024	77.7	49	28.1	1	
Se	78	1	He	0.501	15.8	98	4.4	2	
Sr	88	1	He	0.065	16.8	301	15.8	2	
Mo	95	1	He	0.153	40.4	576	38.9	2	
Ag	107	1	He	0.052	31.3	649	30.6	1	
Cd	111	1	He	0.036	44.7	64	44.0	1	
Sn	118	1	He	0.107	38.0	700	23.2	2	
Sb	123	1	He	0.672	41.5	2715	38.5	1	
Ba	137	1	He	0.064	33.8	133	30.3	1	
Ce	140	1	He	0.045	21.4	1305	21.2	1	
Tl	205	1	He	0.051	26.1	1456	25.8	1	
Pb	208	1	He	0.052	22.8	2021	21.9	1	
U	238	1	He	0.051	28.7	2001	28.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	105219	0.41	88966	118.27	60	120	
Ge (IS)	72	1	He	78202	0.32	67006	116.71	60	120	
In-115 (IS)	115	1	He	800959	0.48	703530	113.85	60	120	
Tb-159 (IS)	159	1	He	2519635	0.31	2419851	104.12	60	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB-5990822
Data File Name	097_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-10T00:02:19-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	He	0.000	#DIV/0!	0	#DIV/0!	0.5	
Na	23	1	He	0.036	265.0	11631	1.2	110	
Mg	24	1	He	0.332	39.7	244	22.0	110	
Al	27	1	He	0.394	31.4	108	17.9	10	
K	39	1	He	-5.335	-29.8	26657	2.7	110	
Ca	44	1	He	3.076	64.2	151	25.6	110	
V	51	1	He	-0.099	-23.3	369	27.6	2	
Cr	52	1	He	-0.029	-26.9	542	8.4	2	
Mn	55	1	He	0.007	103.3	43	50.4	1	
Fe	56	1	He	1.658	4.7	10447	3.3	20	
Co	59	1	He	0.004	20.4	47	14.3	1	
Ni	60	1	He	0.004	175.3	47	32.7	2	
Cu	65	1	He	0.166	9.9	708	8.1	1	
Zn	66	1	He	0.091	30.1	227	13.5	20	
As	75	1	He	-0.018	-34.5	18	25.5	1	
Se	78	1	He	0.332	55.9	89	10.5	2	
Sr	88	1	He	0.009	55.6	60	33.8	2	
Mo	95	1	He	0.040	11.6	169	9.9	2	
Ag	107	1	He	0.003	78.4	61	49.5	1	
Cd	111	1	He	0.001	278.8	3	173.2	1	
Sn	118	1	He	0.015	76.0	334	13.0	2	
Sb	123	1	He	0.124	17.0	676	11.8	1	
Ba	137	1	He	0.008	98.5	30	48.4	1	
Ce	140	1	He	0.003	26.9	116	19.6	1	
Tl	205	1	He	0.006	16.6	174	15.4	1	
Pb	208	1	He	0.011	4.2	494	4.3	1	
U	238	1	He	0.005	22.6	213	18.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	104526	0.53	88966	117.49	60	120	
Ge (IS)	72	1	He	77590	0.41	67006	115.79	60	120	
In-115 (IS)	115	1	He	798560	0.49	703530	113.51	60	120	
Tb-159 (IS)	159	1	He	2532540	0.98	2419851	104.66	60	120	

Reporting Limit 2.0ppb (RL) Report

Sample Table

Sample Name	CRI-5990826
Data File Name	098_RL2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-10T00:04:47-08:00
Sample Type	RL2_0
Dilution	1
Comment	+/- 50% 2xRL CHK
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	He	0.921	20.054	54	19.68	1	92.1	50	150	
Na	23	1	He	202.034	1.070	180684	0.95	200	101.0	50	150	
Mg	24	1	He	208.468	0.240	86467	0.15	200	104.2	50	150	
Al	27	1	He	20.762	3.985	3353	4.29	20	103.8	50	150	
K	39	1	He	211.693	0.669	108230	0.24	200	105.8	50	150	
Ca	44	1	He	1004.208	0.873	20254	0.98	1000	100.4	50	150	
V	51	1	He	2.001	1.982	9810	2.18	2	100.1	50	150	
Cr	52	1	He	2.094	2.618	12543	2.09	2	104.7	50	150	
Mn	55	1	He	2.177	6.188	6846	6.22	2	108.9	50	150	
Fe	56	1	He	42.047	0.297	205756	0.62	40	105.1	50	150	
Co	59	1	He	2.101	1.682	19575	1.34	2	105.0	50	150	
Ni	60	1	He	2.150	1.373	5452	1.74	2	107.5	50	150	
Cu	65	1	He	2.189	0.955	7822	1.30	2	109.4	50	150	
Zn	66	1	He	20.216	2.820	23394	1.72	20	101.1	50	150	
As	75	1	He	2.009	2.133	1548	1.21	2	100.4	50	150	
Se	78	1	He	2.558	13.929	202	8.63	2	127.9	50	150	
Rb	85	1	He	1.062	2.633	3377	2.50	1	106.2	50	150	
Sr	88	1	He	2.204	3.224	9407	2.89	2	110.2	50	150	
Mo	95	1	He	2.128	1.044	7658	1.36	2	106.4	50	150	
Ag	107	1	He	2.070	0.826	24763	0.49	2	103.5	50	150	
Cd	111	1	He	2.041	2.991	3589	3.30	2	102.1	50	150	
Sn	118	1	He	20.598	0.729	81467	0.79	20	103.0	50	150	
Sb	123	1	He	2.130	2.698	8138	2.64	2	106.5	50	150	
Cs	133	1	He	1.038	1.113	11113	0.76	1	103.8	50	150	
Ba	137	1	He	2.028	2.550	3779	2.45	2	101.4	50	150	
Ce	140	1	He	2.016	1.722	57069	1.61	2	100.8	50	150	
Tl	205	1	He	1.921	2.125	55433	1.29	2	96.1	50	150	
Pb	208	1	He	1.965	1.521	74506	0.40	2	98.2	50	150	
Th	232	1	He	16.542	8.255	33004	7.22	1	1654.2	50	150	>+/-50%
U	238	1	He	1.905	1.253	75104	1.30	2	95.3	50	150	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	105685	0.39	88966	118.79	60	120	
Ge (IS)	72	1	He	77705	1.11	67006	115.97	60	120	
In-115 (IS)	115	1	He	802274	0.34	703530	114.04	60	120	
Tb-159 (IS)	159	1	He	2580303	1.91	2419851	106.63	60	120	

Interference Check A (ICSA) Report

Sample Table

Sample Name	ICSA-5990827
Data File Name	099ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-10T00:07:15-08:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Low	QC High	QC Flag
Be	9	1	He	0.000	#DIV/0!	0	#DIV/0!	-1	1	
Na	23	1	He	87198.719	2.896	71296595	0.78	-100000	100000	
Mg	24	1	He	85486.846	3.564	34614562	1.34	-100000	100000	
Al	27	1	He	85794.511	3.905	13351979	1.60	-100000	100000	
K	39	1	He	89871.158	3.048	32930245	0.82	-100000	100000	
Ca	44	1	He	86192.192	3.471	1691721	1.28	-100000	100000	
V	51	1	He	-0.099	-5.514	367	8.77	-2	2	
Cr	52	1	He	0.254	10.571	2100	5.12	-2	2	
Mn	55	1	He	0.428	6.150	1333	7.79	-2	2	
Fe	56	1	He	87138.674	3.652	411617681	1.35	-100000	100000	
Co	59	1	He	0.272	2.604	2487	4.91	-2	2	
Ni	60	1	He	0.327	4.720	843	3.24	-2	2	
Cu	65	1	He	0.501	3.747	1850	3.42	-2	2	
Zn	66	1	He	0.452	9.957	602	7.22	-20	20	
As	75	1	He	0.035	34.747	54	15.52	-2	2	
Se	78	1	He	0.454	44.864	89	9.99	-2	2	
Rb	85	1	He	1.327	6.683	3806	6.49	-4	4	
Sr	88	1	He	0.870	2.674	3363	3.34	-2	2	
Mo	95	1	He	1989.841	0.992	6441657	0.45	2000	2000	
Ag	107	1	He	0.025	20.018	287	19.04	-2	2	
Cd	111	1	He	0.183	8.979	291	8.28	-2	2	
Sn	118	1	He	0.366	6.838	1553	5.50	-20	20	
Sb	123	1	He	0.298	11.327	1198	9.77	-2	2	
Cs	133	1	He	0.016	14.201	166	13.41	-1	1	
Ba	137	1	He	0.196	3.284	342	2.81	-2	2	
Ce	140	1	He	0.016	11.761	441	11.01	-2	2	
Tl	205	1	He	0.008	11.696	221	12.82	-2	2	
Pb	208	1	He	0.076	7.377	2772	6.09	-2	2	
Th	232	1	He	1.799	34.786	3816	32.59	-2	2	
U	238	1	He	0.008	25.507	323	25.02	-2	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	103358	2.31	88966	116.18	60	120	
Ge (IS)	72	1	He	72873	0.98	67006	108.76	60	120	
In-115 (IS)	115	1	He	723960	0.72	703530	102.90	60	120	
Tb-159 (IS)	159	1	He	2431486	2.12	2419851	100.48	60	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-5990828
Data File Name	100ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-10T00:09:38-08:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	He	17.908	0.954	1024	1.14	20	89.5	79.5	120.49	
Na	23	1	He	91178.638	0.490	73800539	0.40	101000	90.3	69.5	120.49	
Mg	24	1	He	88815.348	1.594	35602170	0.74	101000	87.9	69.5	120.49	
Al	27	1	He	89048.727	1.955	13720154	1.12	101000	88.2	69.5	120.49	
K	39	1	He	93677.821	0.965	33979103	0.61	101000	92.8	69.5	120.49	
Ca	44	1	He	89903.020	3.087	1746751	2.46	101000	89.0	69.5	120.49	
V	51	1	He	19.440	1.275	85298	0.77	20	97.2	79.5	120.49	
Cr	52	1	He	19.383	1.888	106696	1.67	20	96.9	79.5	120.49	
Mn	55	1	He	19.291	1.867	58527	1.19	20	96.5	79.5	120.49	
Fe	56	1	He	89784.612	2.279	419866463	1.58	100000	89.8	69.5	130.49	
Co	59	1	He	19.059	1.968	171744	1.23	20	95.3	79.5	120.49	
Ni	60	1	He	18.329	1.486	44695	1.03	20	91.6	79.5	120.49	
Cu	65	1	He	18.445	1.665	62840	1.48	20	92.2	79.5	120.49	
Zn	66	1	He	18.016	1.906	19495	1.17	20	90.1	79.5	120.49	
As	75	1	He	19.580	2.657	13846	1.77	20	97.9	79.5	120.49	
Se	78	1	He	19.140	3.673	977	3.62	20	95.7	79.5	120.49	
Rb	85	1	He	22.501	2.409	64987	1.62	20	112.5	79.5	120.49	
Sr	88	1	He	21.622	0.888	83837	0.35	20	108.1	79.5	120.49	
Mo	95	1	He	2028.795	2.195	6627079	0.97	2020	100.4	79.5	120.49	
Ag	107	1	He	18.582	1.601	202207	0.40	20	92.9	79.5	120.49	
Cd	111	1	He	18.671	1.738	29883	1.21	20	93.4	79.5	120.49	
Sn	118	1	He	20.289	3.202	73062	2.12	20	101.4	79.5	120.49	
Sb	123	1	He	20.987	3.499	71227	2.31	20	104.9	79.5	120.49	
Cs	133	1	He	20.090	1.901	195590	0.83	20	100.4	79.5	120.49	
Ba	137	1	He	20.686	3.124	34970	1.92	20	103.4	79.5	120.49	
Ce	140	1	He	18.870	1.992	486028	0.81	20	94.3	79.5	120.49	
Tl	205	1	He	17.120	1.886	468963	0.60	20	85.6	79.5	120.49	
Pb	208	1	He	17.721	2.434	637543	0.82	20	88.6	79.5	120.49	
Th	232	1	He	17.774	3.639	33653	2.02	20	88.9	79.5	120.49	
U	238	1	He	18.200	2.380	681106	1.27	20	91.0	79.5	120.49	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102277	0.87	88966	114.96	60	120	
Ge (IS)	72	1	He	72606	0.96	67006	108.36	60	120	
In-115 (IS)	115	1	He	730599	1.24	703530	103.85	60	120	
Tb-159 (IS)	159	1	He	2450601	1.59	2419851	101.27	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	101SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-10T00:11:59-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.000	0.000	#DIV/0!	0	#DIV/0!	100	
Na	23	1	He	88.071	88.071	24.97	83471	22.81	75000	
Mg	24	1	He	78.372	78.372	28.23	31863	29.36	125000	
Al	27	1	He	77.740	77.740	27.26	12152	28.39	4000	
K	39	1	He	85.625	85.625	26.50	59609	15.20	100000	
Ca	44	1	He	83.765	83.765	21.77	1733	21.92	250000	
V	51	1	He	-0.092	-0.092	-5.68	397	4.45	4000	
Cr	52	1	He	0.000	0.000	-5659.63	694	9.71	4000	
Mn	55	1	He	0.034	0.034	18.88	127	16.43	4000	
Fe	56	1	He	85.897	85.897	28.16	408538	29.22	40000	
Co	59	1	He	0.015	0.015	44.04	146	41.05	4000	
Ni	60	1	He	0.034	0.034	11.60	121	8.85	4000	
Cu	65	1	He	0.142	0.142	6.59	613	6.59	4000	
Zn	66	1	He	0.646	0.646	7.04	843	5.17	4000	
As	75	1	He	-0.013	-0.013	-36.72	20	17.27	4000	
Se	78	1	He	0.308	0.308	43.43	85	8.87	4000	
Rb	85	1	He	0.022	0.022	14.09	78	12.37	100	
Sr	88	1	He	0.013	0.013	34.59	79	24.03	4000	
Mo	95	1	He	2.921	2.921	30.72	10413	30.65	4000	
Ag	107	1	He	0.024	0.024	55.60	301	51.45	100	
Cd	111	1	He	0.008	0.008	13.51	16	12.40	3500	
Sn	118	1	He	0.010	0.010	163.10	316	20.16	4000	
Sb	123	1	He	0.003	0.003	92.65	228	4.71	4000	
Cs	133	1	He	0.020	0.020	18.42	226	17.26	100	
Ba	137	1	He	0.018	0.018	39.84	49	27.56	4000	
Ce	140	1	He	0.014	0.014	32.16	420	29.68	4000	
Tl	205	1	He	0.030	0.030	35.48	862	36.01	3500	
Pb	208	1	He	0.019	0.019	28.98	790	27.09	4000	
Th	232	1	He	0.094	0.094	43.81	666	12.81	100	
U	238	1	He	0.017	0.017	16.10	692	16.63	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	103127	1.40	88966	115.92	60	120	
Ge (IS)	72	1	He	75678	1.12	67006	112.94	60	120	
In-115 (IS)	115	1	He	795435	0.12	703530	113.06	60	120	
Tb-159 (IS)	159	1	He	2523075	1.13	2419851	104.27	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	102SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-10T00:14:29-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.000	0.000	#DIV/0!	0	#DIV/0!	100	
Na	23	1	He	14.267	14.267	15.76	22973	8.44	75000	
Mg	24	1	He	12.034	12.034	32.45	4940	31.08	125000	
Al	27	1	He	10.464	10.464	34.25	1661	32.79	4000	
K	39	1	He	4.281	4.281	64.76	29657	3.73	100000	
Ca	44	1	He	16.806	16.806	38.67	416	29.74	250000	
V	51	1	He	-0.086	-0.086	-23.90	419	19.76	4000	
Cr	52	1	He	-0.015	-0.015	-66.30	610	6.98	4000	
Mn	55	1	He	0.025	0.025	35.51	98	29.79	4000	
Fe	56	1	He	13.810	13.810	28.10	67233	26.61	40000	
Co	59	1	He	0.003	0.003	112.37	41	76.63	4000	
Ni	60	1	He	0.031	0.031	21.34	112	12.37	4000	
Cu	65	1	He	0.170	0.170	58.07	707	46.86	4000	
Zn	66	1	He	0.660	0.660	6.63	868	4.69	4000	
As	75	1	He	-0.005	-0.005	-146.42	27	20.65	4000	
Se	78	1	He	0.448	0.448	64.49	93	14.10	4000	
Rb	85	1	He	0.003	0.003	177.64	18	78.05	100	
Sr	88	1	He	0.011	0.011	73.50	68	47.77	4000	
Mo	95	1	He	0.570	0.570	12.94	2038	13.82	4000	
Ag	107	1	He	0.005	0.005	30.34	81	22.64	100	
Cd	111	1	He	0.001	0.001	159.62	3	100.05	3500	
Sn	118	1	He	-0.013	-0.013	-74.73	226	15.80	4000	
Sb	123	1	He	-0.008	-0.008	-169.05	187	25.19	4000	
Cs	133	1	He	0.001	0.001	66.73	26	30.11	100	
Ba	137	1	He	0.005	0.005	146.03	24	56.78	4000	
Ce	140	1	He	0.002	0.002	120.05	78	69.68	4000	
Tl	205	1	He	0.004	0.004	36.25	137	31.14	3500	
Pb	208	1	He	0.005	0.005	17.47	273	11.63	4000	
Th	232	1	He	0.000	0.000	46081.87	486	12.31	100	
U	238	1	He	0.002	0.002	30.26	88	20.91	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	102597	2.09	88966	115.32	60	120	
Ge (IS)	72	1	He	76434	1.49	67006	114.07	60	120	
In-115 (IS)	115	1	He	789289	1.26	703530	112.19	60	120	
Tb-159 (IS)	159	1	He	2531031	0.66	2419851	104.59	60	120	

Sample Report

Sample Table

Sample Name	RINSE
Data File Name	103SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\191209-2LL.b
Acq Date Time	2019-12-10T00:16:59-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass
VialNumber	2107
InstrumentModelName	ICPMS05

QC Analyte Table

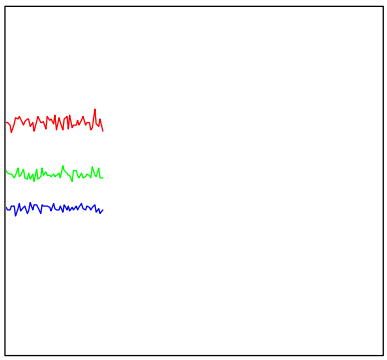
Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	He	0.000	0.000	#DIV/0!	0	#DIV/0!	100	
Na	23	1	He	4.006	4.006	3.43	14511	0.75	75000	
Mg	24	1	He	2.340	2.340	16.50	1039	15.61	125000	
Al	27	1	He	2.440	2.440	20.24	419	19.25	4000	
K	39	1	He	-4.845	-4.845	-42.72	26113	3.33	100000	
Ca	44	1	He	6.439	6.439	22.41	212	13.72	250000	
V	51	1	He	-0.092	-0.092	-15.96	390	16.84	4000	
Cr	52	1	He	-0.006	-0.006	-124.80	653	4.87	4000	
Mn	55	1	He	0.006	0.006	107.64	39	47.20	4000	
Fe	56	1	He	4.131	4.131	4.95	21670	4.95	40000	
Co	59	1	He	0.000	0.000	-207.28	10	57.72	4000	
Ni	60	1	He	0.022	0.022	30.59	91	17.29	4000	
Cu	65	1	He	0.091	0.091	18.29	433	12.09	4000	
Zn	66	1	He	0.655	0.655	8.74	861	8.06	4000	
As	75	1	He	-0.018	-0.018	-35.18	17	26.96	4000	
Se	78	1	He	0.242	0.242	51.49	83	7.87	4000	
Rb	85	1	He	0.001	0.001	445.04	12	83.33	100	
Sr	88	1	He	0.000	0.000	1910.27	24	78.75	4000	
Mo	95	1	He	0.239	0.239	4.68	864	4.01	4000	
Ag	107	1	He	0.001	0.001	141.33	32	43.06	100	
Cd	111	1	He	0.001	0.001	397.78	2	173.21	3500	
Sn	118	1	He	-0.020	-0.020	-40.33	196	15.37	4000	
Sb	123	1	He	-0.001	-0.001	-1730.81	210	26.23	4000	
Cs	133	1	He	0.000	0.000	442.36	16	53.90	100	
Ba	137	1	He	0.005	0.005	122.71	24	47.91	4000	
Ce	140	1	He	-0.001	-0.001	-93.06	17	87.16	4000	
Tl	205	1	He	0.001	0.001	63.07	50	41.63	3500	
Pb	208	1	He	0.004	0.004	12.71	217	7.69	4000	
Th	232	1	He	-0.030	-0.030	-21.42	423	3.15	100	
U	238	1	He	0.000	0.000	60.90	39	21.57	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Sc-45 (IS)	45	1	He	101703	1.22	88966	114.32	60	120	
Ge (IS)	72	1	He	76268	0.96	67006	113.82	60	120	
In-115 (IS)	115	1	He	786252	1.14	703530	111.76	60	120	
Tb-159 (IS)	159	1	He	2504690	0.41	2419851	103.51	60	120	

Current Signal

[No Gas]



Mass	Range	Count	Avg. Count	RSD [%]
7	50000	20762	21074.5	2.02
65	500	239	223.9	10.44
89	100000	64486	66828.5	2.12
63	1000	439	449.8	4.82
205	100000	50809	51827.2	2.08
156/140	1	0.496 %	0.469 %	7.57
70/140	1	0.516 %	0.631 %	6.46
115	100	60	51.3	19.91
60	100	65	61.1	14.59
220	20	0	1.7	95.65
23	20000	15206	14754.2	1.89
27	10000	6939	7088.3	2.78

Integration Time [sec] 0.10

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	℃
Smpl Depth	8.0	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.50	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-45	V
Extract 2	-135.0	V	Cell Exit	-60	V
Omega Bias	-60	V	Deflect	15.6	V
Omega Lens	7.2	V	Plate Bias	-50	V

Cell Parameters

Use Gas	false		OctP Bias	-10.0	V
He Flow	0.0	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Qpole Parameters

Mass Gain	132	Axis Offset	0.12	
Mass Offset	129	QP Bias	-5.0	V
Axis Gain	1.0008			

Torch Axis Parameters

Torch H	0.1	mm	Torch V	0.0	mm

EM Parameters

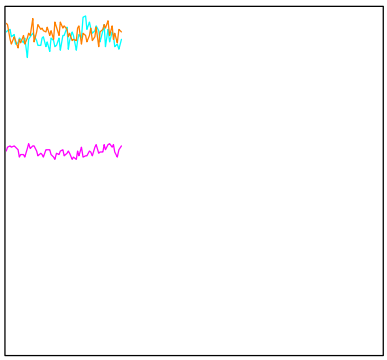
Discriminator	5.7	mV	Pulse HV	1201	V
Analog HV	1800	V			

Meters

IF/BK Press	2.38E+2	Pa	Carrier Gas(BP)	1.45E+2	kPa
Analyzer Press	8.61E-5	Pa	Ar Gas Tank Press	5.62E+2	kPa
Reflected Power	19	W			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	10000	9096	9129.9	2.60
89	10000	9303	9248.7	2.20
140	50000	29466	28477.8	2.09
205	50000	30020	29247.2	2.14
156/140	1	0.316 %	0.423 %	14.18
70/140	1	0.696 %	0.693 %	9.00
51	20	5	7.8	44.30
56	2000	1251	1132.3	4.60
75	20	1	0.7	144.74
78	20	9	5.8	55.59

Integration Time [sec] 0.10

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	℃
Smpl Depth	8.0	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.50	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-32	V
Extract 2	-135.0	V	Cell Exit	-70	V
Omega Bias	-60	V	Deflect	2.6	V
Omega Lens	7.2	V	Plate Bias	-60	V

Cell Parameters

Use Gas	true		OctP Bias	-18.0	V
He Flow	4.5	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	4.0	V
3rd Gas Flow	0	%			

Qpole Parameters

Mass Gain	132	Axis Offset	0.12	
Mass Offset	129	QP Bias	-14.0	V
Axis Gain	1.0008			

Torch Axis Parameters

Torch H	0.3	mm	Torch V	0.3	mm

EM Parameters

Discriminator	5.7	mV	Pulse HV	1201	V
Analog HV	1800	V			

Meters

IF/BK Press	2.39E+2	Pa	Carrier Gas(BP)	1.45E+2	kPa
Analyzer Press	2.24E-4	Pa	Ar Gas Tank Press	5.62E+2	kPa
Reflected Power	20	W			

200.8 Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\5_6020ng_template_180115A_3(csrbthFULL).b
Report Comment
Instrument Name ICPMS05 JP12091608

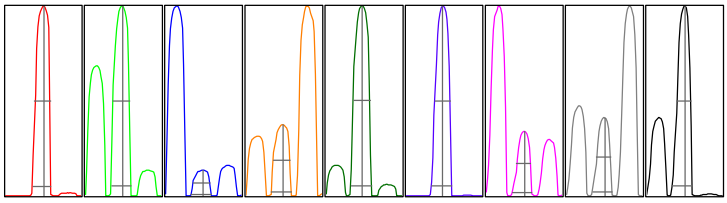
[No Gas]

Mass	Count (Actual)
9	34531
24	124022
25	16917
26	19996
59	229057
115	439647
206	101591
207	88366
208	214859

Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	0.46	5.00	
24	0.32	5.00	
25	0.46	5.00	
26	0.85	5.00	
59	0.38	5.00	
115	0.45	5.00	
206	0.09	5.00	
207	0.32	5.00	
208	0.23	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	34654	34662	34622	34338	34382
24	124316	123385	124369	124021	124021
25	16823	16949	17029	16898	16885
26	20068	20005	19746	20210	19951
59	229557	229671	229854	228169	228034
115	442670	439071	440256	438819	437419
206	101564	101611	101526	101519	101733
207	88420	88412	88147	88783	88066
208	215632	215063	214420	214460	214719

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	5772	9.05	8.9 - 9.1		0.737	0.900	
24	20018	24.00	23.9 - 24.1		0.785	0.900	
25	2697	25.00	24.9 - 25.1		0.787	0.900	
26	3187	26.00	25.9 - 26.1		0.786	0.900	
59	36765	58.95	58.9 - 59.1		0.820	0.900	
115	73537	114.95	114.9 - 115.1		0.807	0.900	
206	18493	206.05	205.9 - 206.1		0.770	0.900	
207	16030	207.05	206.9 - 207.1		0.778	0.900	
208	38876	208.05	207.9 - 208.1		0.789	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

RF Power	1500 W	Carrier Gas	0.55 L/min
RF Matching	1.80 V	Option Gas	0.0 %
Smpl Depth	8.0 mm	Nebulizer Pump	0.10 rps
S/C Temp	2 ℃		

Lenses Parameters

Extract 1	0.0 V	Omega Lens	7.2 V
Extract 2	-135.0 V	Cell Entrance	-45 V
Omega Bias	-60 V	Cell Exit	-60 V
Deflect	15.6 V		

Cell Parameters

Use Gas	false	3rd Gas Flow	0 %
He Flow	0.0 mL/min	OctP Bias	-10.0 V
H2 Flow	0.0 mL/min	OctP RF	200 V

200.8 Tune Check Sample Report

Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
Energy Discrimination		5.0 V					

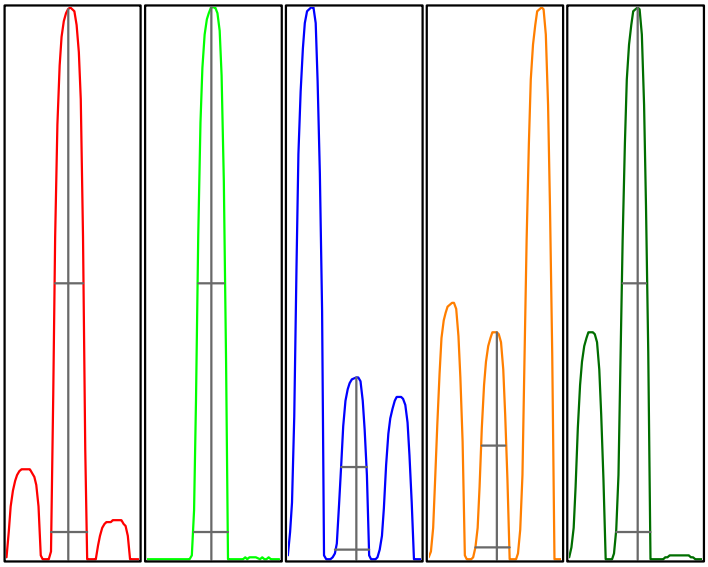
[He]

Mass	Count (Actual)
59	63663
115	91961
206	61979
207	54326
208	132386

Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	0.42	5.00	
115	0.77	5.00	
206	0.76	5.00	
207	0.50	5.00	
208	0.33	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	63422	63636	64098	63475	63682
115	91552	91792	91375	91908	93177
206	61570	61631	62402	61723	62566
207	54584	53883	54279	54435	54449
208	131741	132566	132135	132771	132716

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	10535	58.950	58.9 - 59.1		0.781	0.900	
115	15936	115.000	114.9 - 115.1		0.766	0.900	
206	11617	206.050	205.9 - 206.1		0.727	0.900	
207	10332	207.050	206.9 - 207.1		0.748	0.900	
208	25082	208.050	207.9 - 208.1		0.745	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 136.7 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

RF Power	1500 W	Carrier Gas	0.55 L/min
RF Matching	1.80 V	Option Gas	0.0 %
Smpl Depth	8.0 mm	Nebulizer Pump	0.10 rps
S/C Temp	2 ℃		

Lenses Parameters

Extract 1	0.0 V	Omega Lens	7.2 V
Extract 2	-135.0 V	Cell Entrance	-32 V
Omega Bias	-60 V	Cell Exit	-70 V
Deflect	2.6 V		

Cell Parameters

Use Gas	true	3rd Gas Flow	0 %
He Flow	4.5 mL/min	OctP Bias	-18.0 V
H2 Flow	0.0 mL/min	OctP RF	200 V
Energy Discrimination	4.0 V		

P/A Factor Tuning Report

========== Current Sample ==========
Sample Name: STD1-5990821
Data File: 004CALS.d
Acquired: 12/09/2019 13:58:17

========= Detector Parameters and P/A Factors =========
Discriminator: 5.7 mV
AnalogHV: 1800 V
PulseHV: 1201 V

Acquired: 12/09/2019 13:16:18

Mass[u]	Element	P/A Factor
9	Be	0.082841
24	Mg	0.096953
27	Al	0.102338
45	Sc	0.106052
51	V	0.109365
52	Cr	0.114326
55	Mn	0.116931
59	Co	0.123923
60	Ni	0.126454
65	Cu	0.129746
66	Zn	0.129542
72	Ge	0.126349
75	As	0.125623
95	Mo	0.125099
96	Mo	0.126522
98	Mo	0.127288
100	Mo	0.128763
101	Ru	0.130322
102	Ru	0.130635
104	Ru	0.132915
115	In	0.139865
118	Sn	0.138462
121	Sb	0.138988
138	Ba	0.141693
193	Ir	0.152182
205	Tl	0.155078
208	Pb	0.156326
209	Bi	0.156015
232	Th	0.155062
238	U	0.155231

12-10-19-soil

Method: SOIL Operator: Admin Date of Analysis: 10 Dec 2019 10:50:07

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs	Method	Chapter
19904	S	IC 440-584674/6-A - 1		10 Dec 2019 10:50:37	-	ppb	0.0000	257	SOIL	12-9-19-soil
19905	S	IC 440-584674/6-A - 2		10 Dec 2019 10:50:37	-	ppb	0.0000	305	SOIL	12-9-19-soil
19906	S	IC 440-584674/7-A - 1		10 Dec 2019 10:52:45	-	ppb	0.2000	1543	SOIL	12-9-19-soil
19907	S	IC 440-584674/7-A - 2		10 Dec 2019 10:52:45	-	ppb	0.2000	1568	SOIL	12-9-19-soil
19908	S	IC 440-584674/8-A - 1		10 Dec 2019 10:54:57	-	ppb	0.5000	3717	SOIL	12-9-19-soil
19909	S	IC 440-584674/8-A - 2		10 Dec 2019 10:54:57	-	ppb	0.5000	3888	SOIL	12-9-19-soil
19910	S	IC 440-584674/9-A - 1		10 Dec 2019 10:57:08	-	ppb	1.0000	7233	SOIL	12-9-19-soil
19911	S	IC 440-584674/9-A - 2		10 Dec 2019 10:57:08	-	ppb	1.0000	7528	SOIL	12-9-19-soil
19912	S	IC 440-584674/10-A - 1		10 Dec 2019 10:59:14	-	ppb	5.0000	36969	SOIL	12-9-19-soil
19913	S	IC 440-584674/10-A - 2		10 Dec 2019 10:59:14	-	ppb	5.0000	38447	SOIL	12-9-19-soil
19914	S	IC 440-584674/11-A - 1		10 Dec 2019 11:01:22	-	ppb	10.0000	74794	SOIL	12-9-19-soil
19915	S	IC 440-584674/11-A - 2		10 Dec 2019 11:01:22	-	ppb	10.0000	77558	SOIL	12-9-19-soil
19916	C	ICV 440-584674/1-A - 1		10 Dec 2019 11:03:43	94.8% 3.7911	ppb	-	28812	SOIL	12-9-19-soil
19917	C	ICV 440-584674/1-A - 2		10 Dec 2019 11:03:43	98.4% 3.9345	ppb	-	29902	SOIL	12-9-19-soil
19918	C	ICB 440-584674/2-A - 1		10 Dec 2019 11:06:15	-0.1384	ppb	-	-1061	SOIL	12-9-19-soil
19919	C	ICB 440-584674/2-A - 2		10 Dec 2019 11:06:15	-0.1363	ppb	-	-1045	SOIL	12-9-19-soil
19920	C	CRA 440-584674/5-A - 1		10 Dec 2019 11:08:39	79.2% 0.1583	ppb	-	1195	SOIL	12-9-19-soil
19921	C	CRA 440-584674/5-A - 2		10 Dec 2019 11:08:39	82.4% 0.1648	ppb	-	1244	SOIL	12-9-19-soil
19922	C	CCV 440-584674/3-A - 1		10 Dec 2019 11:10:46	102.2% 4.0886	ppb	-	31073	SOIL	12-9-19-soil
19923	C	CCV 440-584674/3-A - 2		10 Dec 2019 11:10:46	106.2% 4.2464	ppb	-	32273	SOIL	12-9-19-soil
19924	C	CCB 440-584674/4-A - 1		10 Dec 2019 11:12:57	-0.1353	ppb	-	-1037	SOIL	12-9-19-soil
19925	C	CCB 440-584674/4-A - 2		10 Dec 2019 11:12:57	-0.1286	ppb	-	-986	SOIL	12-9-19-soil
19926	U	MB 440-584679/1-A - 1		10 Dec 2019 11:15:16	0.0427	ppb	-	316	SOIL	12-9-19-soil
19927	U	MB 440-584679/1-A - 2		10 Dec 2019 11:15:16	0.0434	ppb	-	321	SOIL	12-9-19-soil
19928	U	LCS 440-584679/2-A - 1		10 Dec 2019 11:17:23	3.7368	ppb	-	28399	SOIL	12-9-19-soil
19929	U	LCS 440-584679/2-A - 2		10 Dec 2019 11:17:23	3.8979	ppb	-	29624	SOIL	12-9-19-soil
19930	U	440-255674-C-12-A - 1		10 Dec 2019 11:19:27	1.8568	ppb	-	14107	SOIL	12-9-19-soil
19931	U	440-255674-C-12-A - 2		10 Dec 2019 11:19:27	1.9477	ppb	-	14798	SOIL	12-9-19-soil
19932	U	440-255674-B-12-A MS - 1		10 Dec 2019 11:21:46	7.4901	ppb	-	56932	SOIL	12-9-19-soil
19933	U	440-255674-B-12-A MS - 2		10 Dec 2019 11:21:46	7.8287	ppb	-	59506	SOIL	12-9-19-soil
19934	U	440-255674-B-12-B MSD - 1		10 Dec 2019 11:24:09	7.0729	ppb	-	53760	SOIL	12-9-19-soil
19935	U	440-255674-B-12-B MSD - 2		10 Dec 2019 11:24:09	7.4036	ppb	-	56274	SOIL	12-9-19-soil
19936	U	440-255674-B-1-A - 1		10 Dec 2019 11:27:42	1.9898	ppb	-	15118	SOIL	12-9-19-soil
19937	U	440-255674-B-1-A - 2		10 Dec 2019 11:27:42	2.0954	ppb	-	15921	SOIL	12-9-19-soil
19938	U	440-255674-B-2-A - 1		10 Dec 2019 11:30:43	1.4047	ppb	-	10670	SOIL	12-9-19-soil
19939	U	440-255674-B-2-A - 2		10 Dec 2019 11:30:43	1.4823	ppb	-	11260	SOIL	12-9-19-soil
19940	U	440-255674-B-3-A - 1		10 Dec 2019 11:33:30	1.0243	ppb	-	7778	SOIL	12-9-19-soil
19941	U	440-255674-B-3-A - 2		10 Dec 2019 11:33:30	1.0839	ppb	-	8231	SOIL	12-9-19-soil
19942	U	440-255674-B-5-A - 1		10 Dec 2019 11:35:59	0.3710	ppb	-	2812	SOIL	12-9-19-soil
19943	U	440-255674-B-5-A - 2		10 Dec 2019 11:35:59	0.4040	ppb	-	3063	SOIL	12-9-19-soil
19944	U	440-255674-B-6-A - 1		10 Dec 2019 11:38:07	3.4481	ppb	-	26204	SOIL	12-9-19-soil
19945	U	440-255674-B-6-A - 2		10 Dec 2019 11:38:07	3.6142	ppb	-	27467	SOIL	12-9-19-soil
19946	C	CCV 440-584674/3-A - 1		10 Dec 2019 11:40:15	96.2% 3.8480	ppb	-	29244	SOIL	12-9-19-soil
19947	C	CCV 440-584674/3-A - 2		10 Dec 2019 11:40:15	100.0% 3.9994	ppb	-	30395	SOIL	12-9-19-soil
19948	C	CCB 440-584674/4-A - 1		10 Dec 2019 11:43:11	-0.1415	ppb	-	-1084	SOIL	12-9-19-soil
19949	C	CCB 440-584674/4-A - 2		10 Dec 2019 11:43:11	-0.1451	ppb	-	-1112	SOIL	12-9-19-soil
19950	U	440-255674-B-7-A - 1		10 Dec 2019 11:45:33	6.6860	ppb	-	50819	SOIL	12-9-19-soil
19951	U	440-255674-B-7-A - 2		10 Dec 2019 11:45:33	6.9532	ppb	-	52850	SOIL	12-9-19-soil
19952	U	440-255674-B-8-A - 1		10 Dec 2019 11:47:41	6.2353	ppb	-	47393	SOIL	12-9-19-soil
19953	U	440-255674-B-8-A - 2		10 Dec 2019 11:47:41	6.5176	ppb	-	49539	SOIL	12-9-19-soil
19954	U	440-255674-B-9-A - 1		10 Dec 2019 11:50:26	3.5565	ppb	-	27028	SOIL	12-9-19-soil
19955	U	440-255674-B-9-A - 2		10 Dec 2019 11:50:26	3.7340	ppb	-	28378	SOIL	12-9-19-soil
19956	U	440-255674-B-10-A - 1		10 Dec 2019 11:53:17	0.6774	ppb	-	5141	SOIL	12-9-19-soil
19957	U	440-255674-B-10-A - 2		10 Dec 2019 11:53:17	0.7251	ppb	-	5504	SOIL	12-9-19-soil
19958	U	440-255674-B-11-A - 1		10 Dec 2019 11:55:56	5.2296	ppb	-	39747	SOIL	12-9-19-soil
19959	U	440-255674-B-11-A - 2		10 Dec 2019 11:55:56	5.4459	ppb	-	41392	SOIL	12-9-19-soil
19960	U	440-255674-B-13-A - 1		10 Dec 2019 11:58:38	0.0516	ppb	-	384	SOIL	12-9-19-soil
19961	U	440-255674-B-13-A - 2		10 Dec 2019 11:58:38	0.0707	ppb	-	529	SOIL	12-9-19-soil
19962	U	440-255674-B-14-A - 1		10 Dec 2019 12:01:37	0.0665	ppb	-	497	SOIL	12-9-19-soil
19963	U	440-255674-B-14-A - 2		10 Dec 2019 12:01:37	0.0798	ppb	-	598	SOIL	12-9-19-soil
19964	U	440-255674-B-15-A - 1		10 Dec 2019 12:03:44	0.2326	ppb	-	1760	SOIL	12-9-19-soil
19965	U	440-255674-B-15-A - 2		10 Dec 2019 12:03:44	0.2447	ppb	-	1852	SOIL	12-9-19-soil
19966	U	440-255674-B-16-A - 1		10 Dec 2019 12:05:51	2.5469	ppb	-	19353	SOIL	12-9-19-soil
19967	U	440-255674-B-16-A - 2		10 Dec 2019 12:05:51	2.6732	ppb	-	20313	SOIL	12-9-19-soil
19968	U	440-255674-B-17-A - 1		10 Dec 2019 12:08:01	2.7919	ppb	-	21216	SOIL	12-9-19-soil
19969	U	440-255674-B-17-A - 2		10 Dec 2019 12:08:01	2.9119	ppb	-	22128	SOIL	12-9-19-soil
19970	C	CCV 440-584674/3-A - 1		10 Dec 2019 12:10:29	92.5% 3.6989	ppb	-	28111	SOIL	12-9-19-soil
19971	C	CCV 440-584674/3-A - 2		10 Dec 2019 12:10:29	96.2% 3.8473	ppb	-	29239	SOIL	12-9-19-soil
19972	C	CCB 440-584674/4-A - 1		10 Dec 2019 12:12:56	-0.1220	ppb	-	-936	SOIL	12-9-19-soil
19973	C	CCB 440-584674/4-A - 2		10 Dec 2019 12:12:56	-0.1246	ppb	-	-956	SOIL	12-9-19-soil
19974	U	440-255674-B-18-A - 1		10 Dec 2019 12:15:15	2.2049	ppb	-	16753	SOIL	12-9-19-soil
19975	U	440-255674-B-18-A - 2		10 Dec 2019 12:15:15	2.3006	ppb	-	17481	SOIL	12-9-19-soil
19976	U	440-255674-B-20-A - 1		10 Dec 2019 12:17:25	0.6433	ppb	-	4882	SOIL	12-9-19-soil
19977	U	440-255674-B-20-A - 2		10 Dec 2019 12:17:25	0.6833	ppb	-	5186	SOIL	12-9-19-soil
19978	U	440-255674-B-21-A - 1		10 Dec 2019 12:19:47	0.6094	ppb	-	4624	SOIL	12-9-19-soil
19979	U	440-255674-B-21-A - 2		10 Dec 2019 12:19:47	0.6583	ppb	-	4996	SOIL	12-9-19-soil
19980	U	440-255674-B-22-A - 1		10 Dec 2019 12:21:55	1.8694	ppb	-	14203	SOIL	12-9-19-soil
19981	U	440-255674-B-22-A - 2		10 Dec 2019 12:21:55	1.9601	ppb	-	14892	SOIL	12-9-19-soil
19982	C	CRA 440-584674/5-A - 1		10 Dec 2019 12:24:08	(L)-79.6% -0.1592	ppb	-	-1219	SOIL	12-9-19-soil
19983	C	CRA 440-584674/5-A - 2		10 Dec 2019 12:24:08	(L)-78.1% -0.1562	ppb	-	-1196	SOIL	12-9-19-soil
19984	C	CRA 440-584674/5-A - 1		10 Dec 2019 12:26:49	82.9% 0.1658	ppb	-	1252	SOIL	12-9-19-soil
19985	C	CRA 440-584674/5-A - 2		10 Dec 2019 12:26:49	87.0% 0.1740	ppb	-	1314	SOIL	12-9-19-soil
19986	C	CCV 440-584674/3-A - 1		10 Dec 2019 12:28:57	100.8% 4.0328	ppb	-	30649	SOIL	12-9-19-soil
19987	C	CCV 440-584674/3-A - 2		10 Dec 2019 12:28:57	104.6% 4.1837	ppb	-	31796	SOIL	12-9-19-soil
19988	C	CCB 440-584674/4-A - 1		10 Dec 2019 12:31:02	-0.0877	ppb	-	-675	SOIL	12-9-19-soil
19989	C	CCB 440-584674/4-A - 2		10 Dec 2019 12:31:02	-0.0923	ppb	-	-710	SOIL	12-9-19-soil
19990	C	CCV 440-584674/3-A - 1		10 Dec 2019 12:36:59	99.6% 3.9857	ppb	-	30291	SOIL	12-9-19-soil
19991	C	CCV 440-584674/3-A - 2		10 Dec 2019 12:36:59	103.5% 4.1380	ppb	-	31449	SOIL	12-9-19-soil
19992	C	CCB 440-584674/4-A - 1		10 Dec 2019 12:39:05	-0.0991	ppb	-	-762	SOIL	12-9-19-soil
19993	C	CCB 440-584674/4-A - 2		10 Dec 2019 12:39:05	-0.0878	ppb	-	-676	SOIL	12-9-19-soil
19994	U	MB 440-584680/1-A - 1		10 Dec 2019 12:41:25	0.0491	ppb	-	365	SOIL	12-9-19-soil
19995	U	MB 440-584680/1-A - 2		10 Dec 2019 12:41:25	0.0472	ppb	-	350	SOIL	12-9-19-soil
19996	U	LCS 440-584680/2-A - 1		10 Dec 2019 12:43:33	3.8523	ppb	-	29277	SOIL	12-9-19-soil
19997	U	LCS 440-584680/2-A - 2		10 Dec 2019 12:43:33	4.0067	ppb	-	30451	SOIL	12-9-19-soil
19998	U	440-255674-B-23-A - 1		10 Dec 2019 12:45:44	2.2730	ppb	-	17271	SOIL	12-9-19-soil
19999	U	440-255674-B-23-A - 2		10 Dec 2019 12:45:44	2.3790	ppb	-	18077	SOIL	12-9-19-soil
20000	U	440-255674-B-23-B MS - 1		10 Dec 2019 12:48:05	5.6946	ppb	-	43282	SOIL	12-9-19-soil
20001	U	440-255674-B-23-B MS - 2		10 Dec 2019 12:48:05	5.9517	ppb	-	45237	SOIL	12-9-19-soil
20002	U	440-255674-B-23-C MSD - 1		10 Dec 2019 12:50:45	6.3611	ppb	-	48349	SOIL	12-9-19-soil
20003	U	440-255674-B-23-C MSD - 2		10 Dec 2019 12:50:45	6.6385	ppb	-	50458	SOIL	12-9-19-soil
20004	U	440-255674-B-24-A - 1		10 Dec 2019 12:53:45	1.0687	ppb	-	8116	SOIL	12-9-19-soil
20005	U	440-255674-B-24-A - 2		10 Dec 2019 12:53:45	1.1323	ppb	-	8599	SOIL	12-9-19-soil
20006	U	440-256617-G-1-B - 1		10 Dec 2019 12:56:54	1.0378	ppb	-	7881	SOIL	12-9-19-soil
20007	U	440-256617-G-1-B - 2		10 Dec 2019 12:56:54	1.1206	ppb	-	8510	SOIL	12-9-19-soil
20008	U	720-96394-B-1-A - 1		10 Dec 2019 12:59:19	27.5470	ppb	-	209406	SOIL	12-9-19-soil
20009	U	720-96394-B-1-A - 2		10 Dec 2019 12:59:19	28.6476	ppb	-	217773	SOIL	12-9-19-soil
20010	U	720-96394-B-2-A - 1		10 Dec 2019 13:01:48	23.0176	ppb	-	174973	SOIL	12-9-19-soil
20011	U	720-96394-B-2-A - 2		10 Dec 2019 13:01:48	23.8675	ppb	-	181434	SOIL	12-9-19-soil
20012	U	720-96394-B-3-A - 1		10 Dec 2019 13:05:07	2.6148	ppb	-	19869	SOIL	12-9-19-soil
20013	U	720-96394-B-3-A - 2		10 Dec 2019 13:05:07	2.7388	ppb	-	20812	SOIL	12-9-19-soil

12-10-19-soil

Method: SOIL Operator: Admin Date of Analysis: 10 Dec 2019 10:50:07

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs	Method	Chapter
20014	C	CCV 440-584674/3-A - 1		10 Dec 2019 13:08:46	94.9% 3.7978	ppb	-	28863	SOIL	12-9-19-soil
20015	C	CCV 440-584674/3-A - 2		10 Dec 2019 13:08:46	98.4% 3.9347	ppb	-	29903	SOIL	12-9-19-soil
20016	C	CCB 440-584674/4-A - 1		10 Dec 2019 13:11:38	-0.1017	ppb	-	-782	SOIL	12-9-19-soil
20017	C	CCB 440-584674/4-A - 2		10 Dec 2019 13:11:38	-0.1037	ppb	-	-797	SOIL	12-9-19-soil
20018	U	720-96394-B-4-A - 1		10 Dec 2019 13:14:05	8.2621	ppb	-	62801	SOIL	12-9-19-soil
20019	U	720-96394-B-4-A - 2		10 Dec 2019 13:14:05	8.6239	ppb	-	65551	SOIL	12-9-19-soil
20020	U	720-96426-B-1-A - 1		10 Dec 2019 13:16:11	1.5168	ppb	-	11522	SOIL	12-9-19-soil
20021	U	720-96426-B-1-A - 2		10 Dec 2019 13:16:11	1.6073	ppb	-	12210	SOIL	12-9-19-soil
20022	U	720-96426-B-2-A - 1		10 Dec 2019 13:19:26	1.4653	ppb	-	11131	SOIL	12-9-19-soil
20023	U	720-96426-B-2-A - 2		10 Dec 2019 13:19:26	1.5402	ppb	-	11700	SOIL	12-9-19-soil
20024	U	720-96426-B-3-A - 1		10 Dec 2019 13:22:18	0.6786	ppb	-	5150	SOIL	12-9-19-soil
20025	U	720-96426-B-3-A - 2		10 Dec 2019 13:22:18	0.7175	ppb	-	5446	SOIL	12-9-19-soil
20026	U	440-256456-A-1-B - 1		10 Dec 2019 13:24:53	4.2614	ppb	-	32387	SOIL	12-9-19-soil
20027	U	440-256456-A-1-B - 2		10 Dec 2019 13:24:53	4.5137	ppb	-	34305	SOIL	12-9-19-soil
20028	U	440-256624-A-1-A - 1		10 Dec 2019 13:27:14	-0.1796	ppb	-	-1374	SOIL	12-9-19-soil
20029	U	440-256624-A-1-A - 2		10 Dec 2019 13:27:14	-0.1774	ppb	-	-1357	SOIL	12-9-19-soil
20030	U	440-256800-A-1-B - 1		10 Dec 2019 13:30:12	1.3860	ppb	-	10528	SOIL	12-9-19-soil
20031	U	440-256800-A-1-B - 2		10 Dec 2019 13:30:12	1.4614	ppb	-	11101	SOIL	12-9-19-soil
20032	U	440-256800-A-2-B - 1		10 Dec 2019 13:32:21	0.9321	ppb	-	7077	SOIL	12-9-19-soil
20033	U	440-256800-A-2-B - 2		10 Dec 2019 13:32:21	0.9848	ppb	-	7478	SOIL	12-9-19-soil
20034	U	440-256800-A-3-B - 1		10 Dec 2019 13:35:13	0.5389	ppb	-	4088	SOIL	12-9-19-soil
20035	U	440-256800-A-3-B - 2		10 Dec 2019 13:35:13	0.5785	ppb	-	4389	SOIL	12-9-19-soil
20036	U	440-256800-A-4-B - 1		10 Dec 2019 13:37:55	0.2057	ppb	-	1555	SOIL	12-9-19-soil
20037	U	440-256800-A-4-B - 2		10 Dec 2019 13:37:55	0.2269	ppb	-	1716	SOIL	12-9-19-soil
20038	C	CCV 440-584674/3-A - 1		10 Dec 2019 13:40:15	94.8% 3.7926	ppb	-	28823	SOIL	12-9-19-soil
20039	C	CCV 440-584674/3-A - 2		10 Dec 2019 13:40:15	98.2% 3.9285	ppb	-	29856	SOIL	12-9-19-soil
20040	C	CCB 440-584674/4-A - 1		10 Dec 2019 13:42:22	-0.1077	ppb	-	-827	SOIL	12-9-19-soil
20041	C	CCB 440-584674/4-A - 2		10 Dec 2019 13:42:22	-0.1150	ppb	-	-883	SOIL	12-9-19-soil
20042	U	440-256800-A-5-B - 1		10 Dec 2019 13:44:42	0.9678	ppb	-	7349	SOIL	12-9-19-soil
20043	U	440-256800-A-5-B - 2		10 Dec 2019 13:44:42	1.0111	ppb	-	7678	SOIL	12-9-19-soil
20044	U	440-256590-E-1-B - 1		10 Dec 2019 13:46:50	0.7649	ppb	-	5806	SOIL	12-9-19-soil
20045	U	440-256590-E-1-B - 2		10 Dec 2019 13:46:50	0.8118	ppb	-	6163	SOIL	12-9-19-soil
20046	U	440-256590-E-2-B - 1		10 Dec 2019 13:49:21	0.6449	ppb	-	4894	SOIL	12-9-19-soil
20047	U	440-256590-E-2-B - 2		10 Dec 2019 13:49:21	0.6865	ppb	-	5210	SOIL	12-9-19-soil
20048	U	440-256590-E-3-B - 1		10 Dec 2019 13:51:39	0.7184	ppb	-	5453	SOIL	12-9-19-soil
20049	U	440-256590-E-3-B - 2		10 Dec 2019 13:51:39	0.7643	ppb	-	5802	SOIL	12-9-19-soil
20050	U	MB 440-584718/1-A - 1		10 Dec 2019 13:53:59	-0.1050	ppb	-	-807	SOIL	12-9-19-soil
20051	U	MB 440-584718/1-A - 2		10 Dec 2019 13:53:59	-0.1038	ppb	-	-798	SOIL	12-9-19-soil
20052	U	LCS 440-584718/2-A - 1		10 Dec 2019 13:56:23	3.7554	ppb	-	28540	SOIL	12-9-19-soil
20053	U	LCS 440-584718/2-A - 2		10 Dec 2019 13:56:23	3.8940	ppb	-	29594	SOIL	12-9-19-soil
20054	U	440-256528-B-1-D - 1		10 Dec 2019 13:58:35	1.1488	ppb	-	8725	SOIL	12-9-19-soil
20055	U	440-256528-B-1-D - 2		10 Dec 2019 13:58:35	1.1867	ppb	-	9013	SOIL	12-9-19-soil
20056	U	440-256528-B-1-E MS - 1		10 Dec 2019 14:00:54	4.4310	ppb	-	33676	SOIL	12-9-19-soil
20057	U	440-256528-B-1-E MS - 2		10 Dec 2019 14:00:54	4.6243	ppb	-	35146	SOIL	12-9-19-soil
20058	U	440-256528-B-1-F MSD - 1		10 Dec 2019 14:04:04	4.3694	ppb	-	33208	SOIL	12-9-19-soil
20059	U	440-256528-B-1-F MSD - 2		10 Dec 2019 14:04:04	4.5508	ppb	-	34587	SOIL	12-9-19-soil
20060	U	440-256528-B-2-B - 1		10 Dec 2019 14:07:23	6.5076	ppb	-	49463	SOIL	12-9-19-soil
20061	U	440-256528-B-2-B - 2		10 Dec 2019 14:07:23	6.7560	ppb	-	51351	SOIL	12-9-19-soil
20062	C	CCV 440-584674/3-A - 1		10 Dec 2019 14:10:33	93.1% 3.7258	ppb	-	28315	SOIL	12-9-19-soil
20063	C	CCV 440-584674/3-A - 2		10 Dec 2019 14:10:33	96.4% 3.8556	ppb	-	29302	SOIL	12-9-19-soil
20064	C	CCB 440-584674/4-A - 1		10 Dec 2019 14:13:26	-0.0935	ppb	-	-719	SOIL	12-9-19-soil
20065	C	CCB 440-584674/4-A - 2		10 Dec 2019 14:13:26	-0.0931	ppb	-	-716	SOIL	12-9-19-soil
20066	U	440-256528-B-3-B - 1		10 Dec 2019 14:15:50	4.0070	ppb	-	30453	SOIL	12-9-19-soil
20067	U	440-256528-B-3-B - 2		10 Dec 2019 14:15:50	4.1750	ppb	-	31730	SOIL	12-9-19-soil
20068	U	440-256528-B-4-B - 1		10 Dec 2019 14:17:54	0.8467	ppb	-	6428	SOIL	12-9-19-soil
20069	U	440-256528-B-4-B - 2		10 Dec 2019 14:17:54	0.8933	ppb	-	6782	SOIL	12-9-19-soil
20070	U	440-256528-B-5-B - 1		10 Dec 2019 14:20:32	0.5925	ppb	-	4496	SOIL	12-9-19-soil
20071	U	440-256528-B-5-B - 2		10 Dec 2019 14:20:32	0.6282	ppb	-	4767	SOIL	12-9-19-soil
20072	U	440-256528-B-6-B - 1		10 Dec 2019 14:22:43	1.0844	ppb	-	8235	SOIL	12-9-19-soil
20073	U	440-256528-B-6-B - 2		10 Dec 2019 14:22:43	1.1423	ppb	-	8675	SOIL	12-9-19-soil
20074	U	440-256528-B-7-B - 1		10 Dec 2019 14:24:55	1.1761	ppb	-	8932	SOIL	12-9-19-soil
20075	U	440-256528-B-7-B - 2		10 Dec 2019 14:24:55	1.2275	ppb	-	9323	SOIL	12-9-19-soil
20076	U	440-256528-B-8-B - 1		10 Dec 2019 14:27:03	0.7578	ppb	-	5752	SOIL	12-9-19-soil
20077	U	440-256528-B-8-B - 2		10 Dec 2019 14:27:03	0.8021	ppb	-	6089	SOIL	12-9-19-soil
20078	U	440-256528-B-9-B - 1		10 Dec 2019 14:29:12	1.3821	ppb	-	10498	SOIL	12-9-19-soil
20079	U	440-256528-B-9-B - 2		10 Dec 2019 14:29:12	1.4603	ppb	-	11093	SOIL	12-9-19-soil
20080	U	440-256528-B-10-B - 1		10 Dec 2019 14:31:25	1.0564	ppb	-	8022	SOIL	12-9-19-soil
20081	U	440-256528-B-10-B - 2		10 Dec 2019 14:31:25	1.1058	ppb	-	8398	SOIL	12-9-19-soil
20082	U	440-256528-B-11-B - 1		10 Dec 2019 14:33:52	0.8400	ppb	-	6377	SOIL	12-9-19-soil
20083	U	440-256528-B-11-B - 2		10 Dec 2019 14:33:52	0.8864	ppb	-	6730	SOIL	12-9-19-soil
20084	U	440-256528-B-12-B - 1		10 Dec 2019 14:36:03	1.1448	ppb	-	8694	SOIL	12-9-19-soil
20085	U	440-256528-B-12-B - 2		10 Dec 2019 14:36:03	1.1951	ppb	-	9077	SOIL	12-9-19-soil
20086	C	CCV 440-584674/3-A - 1		10 Dec 2019 14:38:20	94.0% 3.7598	ppb	-	28574	SOIL	12-9-19-soil
20087	C	CCV 440-584674/3-A - 2		10 Dec 2019 14:38:20	97.9% 3.9165	ppb	-	29765	SOIL	12-9-19-soil
20088	C	CCB 440-584674/4-A - 1		10 Dec 2019 14:40:33	-0.1663	ppb	-	-1273	SOIL	12-9-19-soil
20089	C	CCB 440-584674/4-A - 2		10 Dec 2019 14:40:33	-0.1674	ppb	-	-1281	SOIL	12-9-19-soil
20090	U	440-256528-B-13-B - 1		10 Dec 2019 14:42:42	0.4130	ppb	-	3131	SOIL	12-9-19-soil
20091	U	440-256528-B-13-B - 2		10 Dec 2019 14:42:42	0.4414	ppb	-	3347	SOIL	12-9-19-soil
20092	U	440-256528-B-14-B - 1		10 Dec 2019 14:44:50	0.3622	ppb	-	2745	SOIL	12-9-19-soil
20093	U	440-256528-B-14-B - 2		10 Dec 2019 14:44:50	0.3818	ppb	-	2894	SOIL	12-9-19-soil
20094	U	440-256528-B-15-B - 1		10 Dec 2019 14:46:57	1.5311	ppb	-	11631	SOIL	12-9-19-soil
20095	U	440-256528-B-15-B - 2		10 Dec 2019 14:46:57	1.6149	ppb	-	12268	SOIL	12-9-19-soil
20096	U	440-256528-B-16-B - 1		10 Dec 2019 14:49:04	2.1996	ppb	-	16713	SOIL	12-9-19-soil
20097	U	440-256528-B-16-B - 2		10 Dec 2019 14:49:04	2.3021	ppb	-	17492	SOIL	12-9-19-soil
20098	U	440-256528-B-18-B - 1		10 Dec 2019 14:51:21	2.3055	ppb	-	17518	SOIL	12-9-19-soil
20099	U	440-256528-B-18-B - 2		10 Dec 2019 14:51:21	2.4005	ppb	-	18240	SOIL	12-9-19-soil
20100	U	440-256528-B-19-B - 1		10 Dec 2019 14:53:36	2.8563	ppb	-	21705	SOIL	12-9-19-soil
20101	U	440-256528-B-19-B - 2		10 Dec 2019 14:53:36	2.9987	ppb	-	22788	SOIL	12-9-19-soil
20102	U	MB 440-584682/1-A - 1		10 Dec 2019 14:56:16	-0.1467	ppb	-	-1124	SOIL	12-9-19-soil
20103	U	MB 440-584682/1-A - 2		10 Dec 2019 14:56:16	-0.1525	ppb	-	-1168	SOIL	12-9-19-soil
20104	U	LCS 440-584682/2-A - 1		10 Dec 2019 14:59:13	4.0111	ppb	-	30484	SOIL	12-9-19-soil
20105	U	LCS 440-584682/2-A - 2		10 Dec 2019 14:59:13	4.1484	ppb	-	31528	SOIL	12-9-19-soil
20106	U	440-256590-E-4-B - 1		10 Dec 2019 15:01:21	1.2621	ppb	-	9586	SOIL	12-9-19-soil
20107	U	440-256590-E-4-B - 2		10 Dec 2019 15:01:21	1.3465	ppb	-	10228	SOIL	12-9-19-soil
20108	U	440-256590-E-4-C MS - 1		10 Dec 2019 15:03:31	4.6810	ppb	-	35577	SOIL	12-9-19-soil
20109	U	440-256590-E-4-C MS - 2		10 Dec 2019 15:03:31	4.9145	ppb	-	37352	SOIL	12-9-19-soil
20110	C	CCV 440-584674/3-A - 1		10 Dec 2019 15:06:08	94.4% 3.7756	ppb	-	28694	SOIL	12-9-19-soil
20111	C	CCV 440-584674/3-A - 2		10 Dec 2019 15:06:08	98.0% 3.9215	ppb	-	29803	SOIL	12-9-19-soil
20112	C	CCB 440-584674/4-A - 1		10 Dec 2019 15:08:47	-0.0935	ppb	-	-719	SOIL	12-9-19-soil
20113	C	CCB 440-584674/4-A - 2		10 Dec 2019 15:08:47	-0.0969	ppb	-	-745	SOIL	12-9-19-soil
20114	U	440-256590-E-4-D MSD - 1		10 Dec 2019 15:11:10	4.7838	ppb	-	36358	SOIL	12-9-19-soil
20115	U	440-256590-E-4-D MSD - 2		10 Dec 2019 15:11:10	5.0209	ppb	-	38161	SOIL	12-9-19-soil
20116	U	440-256590-E-5-B - 1		10 Dec 2019 15:13:15	1.8433	ppb	-	14004	SOIL	12-9-19-soil
20117	U	440-256590-E-5-B - 2		10 Dec 2019 15:13:15	1.9316	ppb	-	14676	SOIL	12-9-19-soil
20118	U	440-256803-A-3-A - 1		10 Dec 2019 15:15:52	0.1969	ppb	-	1488	SOIL	12-9-19-soil
20119	U	440-256803-A-3-A - 2		10 Dec 2019 15:15:52	0.2111	ppb	-	1596	SOIL	12-9-19-soil
20120	U	720-96394-B-1-A@5 - 1		10 Dec 2019 15:18:30	5.4152	ppb	-	41158	SOIL	12-9-19-soil
20121	U	720-96394-B-1-A@5 - 2		10 Dec 2019 15:18:30	5.6809	ppb	-	43178	SOIL	12-9-19-soil
20122	U	720-96394-B-2-A@5 - 1		10 Dec 2019 15:20:37	4.0899	ppb	-	31083	SOIL	12-9-19-soil
20123	U	720-96394-B-2-A@5 - 2		10 Dec 2019 15:20:37	4.3047	ppb	-	32716	SOIL	12-9-19-soil

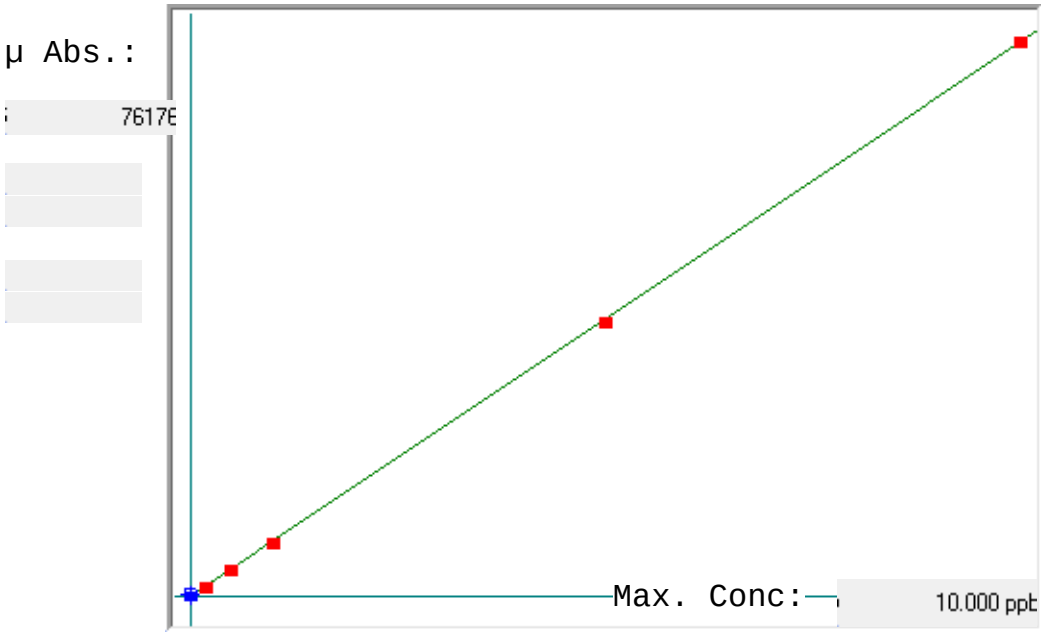
12-10-19-soil

Method: SOIL Operator: Admin Date of Analysis: 10 Dec 2019 10:50:07

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs	Method	Chapter
20124	C	CRA 440-584674/5-A - 1		10 Dec 2019 15:23:20	(L)27.9% 0.0557	ppb	-	415	SOIL	12-9-19-soil
20125	C	CRA 440-584674/5-A - 2		10 Dec 2019 15:23:20	(L)30.8% 0.0615	ppb	-	459	SOIL	12-9-19-soil
20126	C	CRA 440-584674/5-A - 1		10 Dec 2019 15:25:57	84.4% 0.1687	ppb	-	1274	SOIL	12-9-19-soil
20127	C	CRA 440-584674/5-A - 2		10 Dec 2019 15:25:57	86.9% 0.1737	ppb	-	1312	SOIL	12-9-19-soil
20128	C	CCV 440-584674/3-A - 1		10 Dec 2019 15:28:05	96.5% 3.8601	ppb	-	29336	SOIL	12-9-19-soil
20129	C	CCV 440-584674/3-A - 2		10 Dec 2019 15:28:05	100.2% 4.0061	ppb	-	30446	SOIL	12-9-19-soil
20130	C	CCB 440-584674/4-A - 1		10 Dec 2019 15:30:09	-0.1071	ppb	-	-823	SOIL	12-9-19-soil
20131	C	CCB 440-584674/4-A - 2		10 Dec 2019 15:30:09	-0.1142	ppb	-	-877	SOIL	12-9-19-soil

SOIL

Linear



A= 0.0000e+000

B= 1.3154e-004

C= 1.1275e-003

Rho= 0.9999735

Accept= Accepted

Accepted Date=

12/10/19 11:03

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
IC 440-584674/6-A	0.000	0.038	0.038	281	24.000	257	305			
IC 440-584674/7-A	0.200	0.206	0.006	1555	0.8 %	1543	1568			
IC 440-584674/8-A	0.500	0.501	0.001	3802	2.2 %	3717	3888			
IC 440-584674/9-A	1.000	0.972	-0.028	7380	2.0 %	7233	7528			
IC 440-584674/10-A	5.000	4.961	-0.039	37708	2.0 %	36969	38447			
IC 440-584674/11-A	10.000	10.022	0.022	76176	1.8 %	74794	77558			

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Irvine Job Number: 440-256528-1

SDG No.:

Project: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID	Lab Sample ID
STSB32_0-0.5	440-256528-1
STSB32_0.5-3	440-256528-2
STSB32_3-6	440-256528-3
STSB32_6-15	440-256528-4
STSB34_0-0.5	440-256528-5
STSB34_0.5-3	440-256528-6
STSB34_3-6	440-256528-7
STSB34_6-15	440-256528-8
STSB34-FD_3-6	440-256528-9
STSB33_0-0.5	440-256528-10
STSB33_0.5-3	440-256528-11
STSB33-FD_0.5-3	440-256528-12
STSB33_3-6	440-256528-13
STSB33_6-15	440-256528-14
STSB35_0-0.5	440-256528-15
STSB35_0.5-3	440-256528-16
STSB35_3-6	440-256528-18
STSB35_6-15	440-256528-19

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB32_0-0.5
Lab Sample ID: 440-256528-1
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 13:25
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB32_0.5-3
Lab Sample ID: 440-256528-2
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 13:40
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB32_3-6
Lab Sample ID: 440-256528-3
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 13:49
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB32_6-15
Lab Sample ID: 440-256528-4
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 14:06
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB34_0-0.5 Lab Sample ID: 440-256528-5

Lab Name: Eurofins TestAmerica, Irvine Job No.: 440-256528-1

SDG ID.:

Matrix: Solid Date Sampled: 11/25/2019 15:00

Reporting Basis: WET Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB34_0.5-3
Lab Sample ID: 440-256528-6
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 15:05
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB34_3-6
Lab Sample ID: 440-256528-7
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 15:12
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB34_6-15
Lab Sample ID: 440-256528-8
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 15:28
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB34-FD_3-6
Lab Sample ID: 440-256528-9
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/25/2019 15:12
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB33_0-0.5
Lab Sample ID: 440-256528-10
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 12:31
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB33_0.5-3
Lab Sample ID: 440-256528-11
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 12:40
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB33-FD_0.5-3
Lab Sample ID: 440-256528-12
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 12:48
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB33_3-6
Lab Sample ID: 440-256528-13
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 12:51
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB33_6-15
Lab Sample ID: 440-256528-14
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 13:05
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB35_0-0.5
Lab Sample ID: 440-256528-15
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 14:35
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB35_0.5-3
Lab Sample ID: 440-256528-16
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 14:41
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB35_3-6
Lab Sample ID: 440-256528-18
Lab Name: Eurofins TestAmerica, Irvine
Job No.: 440-256528-1
SDG ID.:
Matrix: Solid
Date Sampled: 12/03/2019 14:54
Reporting Basis: WET
Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: STSB35_6-15 | Lab Sample ID: 440-256528-19

Lab Name: Eurofins TestAmerica, Irvine | Job No.: 440-256528-1

SDG ID.:

Matrix: Solid | Date Sampled: 12/03/2019 15:00

Reporting Basis: WET | Date Received: 12/05/2019 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Irvine Job Number: 440-256528-1

SDG Number:

Matrix: Solid Instrument ID: BAL065

Method: Moisture RL Date: 10/26/2010 18:28

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Irvine Job Number: 440-256528-1

SDG Number:

Matrix: Solid Instrument ID: BAL065

Method: Moisture XRL Date: 11/16/2010 10:12

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.1	

FORM IX - IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Homogenization

Start Date: 12/07/2019 22:00 End Date: 12/07/2019 22:00

Lab Sample Id	D/F	Type	Time	Analytes																							
				SHD																							
440-256528-1	1	T	22:00	X																							
440-256528-1 MS	1	T	22:00	X																							
440-256528-1 MSD	1	T	22:00	X																							
440-256528-2	1	T	22:00	X																							
440-256528-3	1	T	22:00	X																							
440-256528-4	1	T	22:00	X																							
440-256528-5	1	T	22:00	X																							
440-256528-6	1	T	22:00	X																							
440-256528-7	1	T	22:00	X																							
440-256528-8	1	T	22:00	X																							
440-256528-9	1	T	22:00	X																							
440-256528-10	1	T	22:00	X																							
440-256528-11	1	T	22:00	X																							
440-256528-12	1	T	22:00	X																							
440-256528-13	1	T	22:00	X																							
440-256528-14	1	T	22:00	X																							
440-256528-15	1	T	22:00	X																							
440-256528-16	1	T	22:00	X																							
440-256528-19	1	T	22:00	X																							
440-256528-18	1	T	22:00	X																							

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Irvine Job No.: 440-256528-1

SDG No.:

Instrument ID: BAL065 Analysis Method: Moisture

Start Date: 12/08/2019 02:04 End Date: 12/08/2019 02:17

Lab Sample Id	D/F	Type	Time	Analytes																							
				Moist																							
440-256528-1	1	T	02:04	X																							
440-256528-1 DU	1	T	02:04	X																							
440-256528-1 MS	1	T	02:04	X																							
440-256528-1 MSD	1	T	02:04	X																							
440-256528-2	1	T	02:04	X																							
440-256528-3	1	T	02:04	X																							
440-256528-4	1	T	02:04	X																							
440-256528-5	1	T	02:04	X																							
440-256528-6	1	T	02:04	X																							
440-256528-7	1	T	02:04	X																							
440-256528-8	1	T	02:04	X																							
440-256528-9	1	T	02:04	X																							
440-256528-10	1	T	02:04	X																							
440-256528-11	1	T	02:04	X																							
440-256528-12	1	T	02:04	X																							
440-256528-13	1	T	02:04	X																							
440-256528-14	1	T	02:04	X																							
440-256528-15	1	T	02:04	X																							
440-256528-16	1	T	02:04	X																							
440-256528-18	1	T	02:04	X																							
440-256528-19	1	T	02:17	X																							

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584500 Batch Start Date: 12/08/19 02:04 Batch Analyst: Luck, Kamoltip

Batch Method: Moisture Batch End Date: 12/09/19 16:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	AnalysisComment		
440-256528-B-1	STSB32_0-0.5	Moisture	T	2.0993 g	12.2136 g	11.7314 g	11.7313		
440-256528-B-1 DU	STSB32_0-0.5	Moisture	T	2.1531 g	12.4949 g	11.9731 g	11.9730		
440-256528-B-1 MS	STSB32_0-0.5	Moisture	T	2.1474 g	12.0242 g	11.5678 g	11.5677		
440-256528-B-1 MSD	STSB32_0-0.5	Moisture	T	2.1758 g	12.2163 g	11.7456 g	11.7455		
440-256528-B-2	STSB32_0.5-3	Moisture	T	2.1376 g	12.3557 g	11.9885 g	11.9884		
440-256528-B-3	STSB32_3-6	Moisture	T	2.1828 g	12.4598 g	11.0845 g	11.0844		
440-256528-B-4	STSB32_6-15	Moisture	T	2.1403 g	12.1864 g	11.9862 g	11.9860		
440-256528-B-5	STSB34_0-0.5	Moisture	T	2.1496 g	12.1611 g	11.6738 g	11.6737		
440-256528-B-6	STSB34_0.5-3	Moisture	T	2.1111 g	12.3307 g	11.9421 g	11.9420		
440-256528-B-7	STSB34_3-6	Moisture	T	2.0703 g	12.0869 g	11.7687 g	11.7686		
440-256528-B-8	STSB34_6-15	Moisture	T	2.0912 g	12.3153 g	10.5242 g	10.5241		
440-256528-B-9	STSB34-FD_3-6	Moisture	T	2.1354 g	12.5679 g	12.1856 g	12.1855		
440-256528-B-10	STSB33_0-0.5	Moisture	T	2.1507 g	12.4409 g	12.0649 g	12.0647		
440-256528-B-11	STSB33_0.5-3	Moisture	T	2.1410 g	12.2982 g	11.8569 g	11.8567		
440-256528-B-12	STSB33-FD_0.5-3	Moisture	T	2.1374 g	12.4244 g	12.0259 g	12.0258		
440-256528-B-13	STSB33_3-6	Moisture	T	2.1492 g	12.1445 g	11.5054 g	11.5054		
440-256528-B-14	STSB33_6-15	Moisture	T	2.1000 g	12.2043 g	11.2871 g	11.2870		
440-256528-B-15	STSB35_0-0.5	Moisture	T	2.1276 g	12.3129 g	11.7323 g	11.7322		
440-256528-B-16	STSB35_0.5-3	Moisture	T	2.1005 g	12.1312 g	11.8153 g	11.8152		
440-256528-B-18	STSB35_3-6	Moisture	T	2.1040 g	12.0214 g	11.6264 g	11.6263		
440-256528-B-19	STSB35_6-15	Moisture	T	2.1221 g	12.5654 g	11.9241 g	11.9240		

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Irvine Job No.: 440-256528-1

SDG No.:

Batch Number: 584500 Batch Start Date: 12/08/19 02:04 Batch Analyst: Luck, Kamoltip

Batch Method: Moisture Batch End Date: 12/09/19 16:15

Batch Notes	
Balance ID	65
Batch Comment	put the samples back in the oven another 30 mins@ temp 105 c
Date and Time Samples in Desiccator	12/08/2019 16:04
Date and Time Samples out of Desiccator	12/09/2019 14:03
Date samples were placed in the oven	12/08/2019
Oven Temp In	105 Degrees C
Time samples were place in the oven	03:02
Date samples were removed from oven	12/08/2019
Oven Temp Out	105 Degrees C
Time Samples were removed from oven	16:03
Oven ID	6
Thermometer ID	p139, cf 0
Temperature - Start - Uncorrected	105 Degrees C
Temperature - End - Uncorrected	105 Degrees C

Basis	Basis Description
T	Total/NA

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.

Daily Balance Calibration Logbook

Weight Set ID: **D-6**

Weight Set Calib Due: 01.09.20

Date	Initials	Balance ID	0.0020g	1.000g	100.0000g	OK?	COMMENTS/ MAINTENANCE
12.03.19	XL	65	0.0020	1.0001	99.9997	ok	
12.03.19	XL	74	0.0019	0.9998	100.0004	ok	
12-04-19	LL	65	0.0019	0.9998	99.9998	ok	
12-04-19	LL	74	0.0020	0.9999	100.0000	ok	
12.05.19	XL	65	0.0020	0.9998	9.9996	ok	
12.05.19	XL	74	0.0019	0.9999	100.0002	ok	
12.06.19	XL	65	0.0019	0.9999	99.9997	ok	
12.06.19	XL	74	0.0020	1.0001	100.0004	ok	
12-7-19	LL	65	0.0020	1.0001	99.9999	ok	
12-7-19	LL	74	0.0019	0.9999	100.0001	ok	
12-9-19	LL	65	0.0020	1.0000	99.9998	ok	
12-9-19	LL	74	0.0019	0.9998	100.0001	ok	

Reviewed: _____

Shipping and Receiving Documents

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Site Node Path: NV_YERINGTON **Req Due Date (mm/dd/yy):** STD TAT **Rush TAT:** Yes ___ No X

BP/ARC Facility Name: Anaconda Copper Mine Site **Lab Work Order Number:**

Lab Name:	TestAmerica, Inc.	BP/ARC Facility Address:	1 Austin Circle	Consultant/Contractor	Wood - E&I Solutions, Inc.
Lab Address:	17461 Derian Ave, Suite #100 Irvine, CA 92614	City, State, ZIP Code.	Yerington, Nevada 89447	Consultant/Contractor Project No:	SA18170340.005.055B
Lab PM:	Christian Bondoc	Lead Regulatory Agency:	NDEP Abandoned Mine Lands Program	Address.	10940 White Rock Rd, Ste 190 Rancho Cordova, CA 95670
Lab Phone	949-261-1022	California Global ID No..		Consultant/Contractor PM:	Kent Parrish
Lab Shipping Accnt:	1103-6633-7 (TAL Acct #)	Enfos Proposal No: D019Q-0047	Work Release No: WR331232	Phone: 916-636-3200 Email:	Kent Parrish@woodplc.com
Lab Bottle Order No:	NA	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email Report/EDD To:	lynda.lombardi@woodplc.com
Other Info:	OU-4b_OU-5_Soil	Stage: Appraise	Activity: Field Work/Remedial Investigation	Invoice To:	BP/ARC X Contractor ___

BP/ARC EBM: Chuck Stilwell
EBM Phone: 713-998-2443
EBM Email: Chuck.Stilwell@bp.com

Report Type & QC Level: Standard ___ Full Data Package X

Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor	Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Metals[1] (SW 6010B/6020)	Mercury (SW7471B/7470A)	Thorium, Uranium (SW6020)	MS/MSD	Comments
	STSB32_0-0.5	11/25/19	1325	X			2	2				X	X		X	[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	STSB32_0.5-3	11/25/19	1340	X			1	1				X	X			Na, P, Sr, Sn, Ti, by 6010B;
	STSB32_3-6	11/25/19	1349	X			1	1				X	X			As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	STSB32_6-15	11/25/19	1406	X			1	1				X	X			Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB34_0-0.5	11/25/19	1500	X			1	1				X	X			
	STSB34_0.5-3	11/25/19	1505	X			1	1				X	X			
	STSB34_3-6	11/25/19	1512	X			1	1				X	X			Report soil on dry weight basis.
	STSB34_6-15	11/25/19	1528	X			1	1				X	X			
	STSB34-FD_3-6	11/25/19	1513	X			1	1				X	X			
	STSB33_0-0.5	12/03/19	1231	X			1	1				X	X			

440-256528 Chain of Custody

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	[illegible] / Wood	12/4/19	1200			
Shipment Method: Fed Ex Ship Date: ~~11/25~~ 12/4/19						
Shipment Tracking No: 7771 5029 9844				TA IPV	12/5/19	1000

Special Instructions:

THIS LINE - LAB USE ONLY. Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 4.6 / 5.0 °F/C (IR24) | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

LB 12/05/19

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Site Node Path: NV_YERINGTON **Req Due Date (mm/dd/yy):** STD TAT **Rush TAT:** Yes ___ No X

BP/ARC Facility Name: Anaconda Copper Mine Site **Lab Work Order Number:**

Lab Name:	TestAmerica, Inc.	BP/ARC Facility Address.	1 Austin Circle	Consultant/Contractor	Wood - E&I Solutions, Inc.
Lab Address:	17461 Derian Ave, Suite #100 Irvine, CA 92614	City, State, ZIP Code:	Yerington, Nevada 89447	Consultant/Contractor Project No:	SA18170340.005.055B
Lab PM:	Christian Bondoc	Lead Regulatory Agency:	NDEP Abandoned Mine Lands Program	Address:	10940 White Rock Rd, Ste 190 Rancho Cordova, CA 95670
Lab Phone:	949-261-1022	California Global ID No.:		Consultant/Contractor PM:	Kent Parrish
Lab Shipping Accnt:	1103-6633-7 (TAL Acct #)	Enfos Proposal No: D019Q-0047	Work Release No: WR331232	Phone: 916-636-3200	Email: Kent.Parrish@woodplc.com
Lab Bottle Order No:	NA	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email Report/EDD To.	lynda.lombardi@woodplc com
Other Info:	OU-4b_OU-5_Soil	Stage: Appraise	Activity: Field Work/Remedial Investigation	Invoice To:	BP/ARC X Contractor ___

BP/ARC EBM: Chuck Stilwell
EBM Phone: 713-998-2443
EBM Email: Chuck.Stilwell@bp.com

Report Type & QC Level: Standard ___ Full Data Package X

Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor		Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl			Metals[1] (SW 6010B/6020)	Mercury (SW7471B/7470A)	Thorium, Uranium (SW6020)							MS/MSD	Comments (Note If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description)
	STSB33_0.5-3	12/03/19	1240	X				1	1						X	X									[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	STSB33-FD_0.5-3	12/03/19	1248	X				1	1						X	X									Na, P, Sr, Sn, Ti, by 6010B;
	STSB33_3-6	12/03/19	1251	X				1	1						X	X									As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	STSB33_6-15	12/03/19	1305	X				1	1						X	X									Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB35_0-0.5	12/03/19	1435	X				1	1						X	X									
	STSB35_0.5-3	12/03/19	1441	X				1	1						X	X									
	FB02	12/03/19	1452		X			1			1				X	X	X								Report soil on dry weight basis
	STSB35_3-6	12/03/19	1454	X				1	1						X	X									
	STSB35_6-15	12/03/19	1500	X				1	1						X	X									

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Sampler's Name: Bryce Johnson	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Wood	/ Wood	12/4/19	1200			
Shipment Method: Fed Ex Ship Date: 12/4/19						
Shipment Tracking No: 7771 5029 9844				TA 12V	12/5/19	1000

Special Instructions: IRGL

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 4.6/5.0 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 440-256528-1

Login Number: 256528
List Number: 1
Creator: Bonta, Lucia F

List Source: Eurofins Irvine

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.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
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?	True	
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.	True	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-256528	1	STSB32_0-0.5	Solid	440-5985901	440-256528-A-1	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	1	STSB32_0-0.5	Solid	440-5985901	440-256528-A-1	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	1	STSB32_0-0.5	Solid	440-5985901	440-256528-A-1	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	1	STSB32_0-0.5	Solid	440-5985939	440-256528-A-1	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	1	STSB32_0-0.5	Solid	440-5985939	440-256528-A-1	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	1	STSB32_0-0.5	Solid	440-5985939	440-256528-A-1	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	1	STSB32_0-0.5	Solid	440-5985941	440-256528-A-1	No Container	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	1	STSB32_0-0.5	Solid	440-5985941	440-256528-A-1	No Container	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	1	STSB32_0-0.5	Solid	440-5985941	440-256528-A-1	No Container	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	1	STSB32_0-0.5	Solid	440-5985902	440-256528-B-1	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	1	STSB32_0-0.5	Solid	440-5985902	440-256528-B-1	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	1	STSB32_0-0.5	Solid	440-5985902	440-256528-B-1	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	1	STSB32_0-0.5	Solid	440-5985940	440-256528-B-1	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	1	STSB32_0-0.5	Solid	440-5985940	440-256528-B-1	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	1	STSB32_0-0.5	Solid	440-5985940	440-256528-B-1	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	1	STSB32_0-0.5	Solid	440-5985942	440-256528-B-1	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	1	STSB32_0-0.5	Solid	440-5985942	440-256528-B-1	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	1	STSB32_0-0.5	Solid	440-5985942	440-256528-B-1	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	2	STSB32_0.5-3	Solid	440-5985903	440-256528-A-2	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	2	STSB32_0.5-3	Solid	440-5985903	440-256528-A-2	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	2	STSB32_0.5-3	Solid	440-5985903	440-256528-A-2	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	2	STSB32_0.5-3	Solid	440-5985904	440-256528-B-2	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	2	STSB32_0.5-3	Solid	440-5985904	440-256528-B-2	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	2	STSB32_0.5-3	Solid	440-5985904	440-256528-B-2	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	3	STSB32_3-6	Solid	440-5985905	440-256528-A-3	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	3	STSB32_3-6	Solid	440-5985905	440-256528-A-3	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	3	STSB32_3-6	Solid	440-5985905	440-256528-A-3	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	3	STSB32_3-6	Solid	440-5985906	440-256528-B-3	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	3	STSB32_3-6	Solid	440-5985906	440-256528-B-3	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	3	STSB32_3-6	Solid	440-5985906	440-256528-B-3	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	4	STSB32_6-15	Solid	440-5985907	440-256528-A-4	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	4	STSB32_6-15	Solid	440-5985907	440-256528-A-4	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	4	STSB32_6-15	Solid	440-5985907	440-256528-A-4	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	4	STSB32_6-15	Solid	440-5985908	440-256528-B-4	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	4	STSB32_6-15	Solid	440-5985908	440-256528-B-4	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	4	STSB32_6-15	Solid	440-5985908	440-256528-B-4	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	5	STSB34_0-0.5	Solid	440-5985909	440-256528-A-5	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	5	STSB34_0-0.5	Solid	440-5985909	440-256528-A-5	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	5	STSB34_0-0.5	Solid	440-5985909	440-256528-A-5	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	5	STSB34_0-0.5	Solid	440-5985910	440-256528-B-5	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-256528	5	STSB34_0-0.5	Solid	440-5985910	440-256528-B-5	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	5	STSB34_0-0.5	Solid	440-5985910	440-256528-B-5	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	6	STSB34_0.5-3	Solid	440-5985911	440-256528-A-6	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	6	STSB34_0.5-3	Solid	440-5985911	440-256528-A-6	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	6	STSB34_0.5-3	Solid	440-5985911	440-256528-A-6	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	6	STSB34_0.5-3	Solid	440-5985912	440-256528-B-6	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	6	STSB34_0.5-3	Solid	440-5985912	440-256528-B-6	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	6	STSB34_0.5-3	Solid	440-5985912	440-256528-B-6	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	7	STSB34_3-6	Solid	440-5985913	440-256528-A-7	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	7	STSB34_3-6	Solid	440-5985913	440-256528-A-7	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	7	STSB34_3-6	Solid	440-5985913	440-256528-A-7	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	7	STSB34_3-6	Solid	440-5985914	440-256528-B-7	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	7	STSB34_3-6	Solid	440-5985914	440-256528-B-7	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	7	STSB34_3-6	Solid	440-5985914	440-256528-B-7	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	8	STSB34_6-15	Solid	440-5985915	440-256528-A-8	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	8	STSB34_6-15	Solid	440-5985915	440-256528-A-8	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	8	STSB34_6-15	Solid	440-5985915	440-256528-A-8	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	8	STSB34_6-15	Solid	440-5985916	440-256528-B-8	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	8	STSB34_6-15	Solid	440-5985916	440-256528-B-8	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	8	STSB34_6-15	Solid	440-5985916	440-256528-B-8	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	9	STSB34-FD_3-6	Solid	440-5985917	440-256528-A-9	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	9	STSB34-FD_3-6	Solid	440-5985917	440-256528-A-9	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	9	STSB34-FD_3-6	Solid	440-5985917	440-256528-A-9	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	9	STSB34-FD_3-6	Solid	440-5985918	440-256528-B-9	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	9	STSB34-FD_3-6	Solid	440-5985918	440-256528-B-9	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	9	STSB34-FD_3-6	Solid	440-5985918	440-256528-B-9	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	10	STSB33_0-0.5	Solid	440-5985919	440-256528-A-10	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	10	STSB33_0-0.5	Solid	440-5985919	440-256528-A-10	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	10	STSB33_0-0.5	Solid	440-5985919	440-256528-A-10	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	10	STSB33_0-0.5	Solid	440-5985920	440-256528-B-10	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	10	STSB33_0-0.5	Solid	440-5985920	440-256528-B-10	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	10	STSB33_0-0.5	Solid	440-5985920	440-256528-B-10	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	11	STSB33_0.5-3	Solid	440-5985921	440-256528-A-11	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	11	STSB33_0.5-3	Solid	440-5985921	440-256528-A-11	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	11	STSB33_0.5-3	Solid	440-5985921	440-256528-A-11	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	11	STSB33_0.5-3	Solid	440-5985922	440-256528-B-11	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	11	STSB33_0.5-3	Solid	440-5985922	440-256528-B-11	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	11	STSB33_0.5-3	Solid	440-5985922	440-256528-B-11	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	12	STSB33-FD_0.5-3	Solid	440-5985923	440-256528-A-12	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	12	STSB33-FD_0.5-3	Solid	440-5985923	440-256528-A-12	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-256528	12	STSB33-FD_0.5-3	Solid	440-5985923	440-256528-A-12	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	12	STSB33-FD_0.5-3	Solid	440-5985924	440-256528-B-12	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	12	STSB33-FD_0.5-3	Solid	440-5985924	440-256528-B-12	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	12	STSB33-FD_0.5-3	Solid	440-5985924	440-256528-B-12	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	13	STSB33_3-6	Solid	440-5985925	440-256528-A-13	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	13	STSB33_3-6	Solid	440-5985925	440-256528-A-13	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	13	STSB33_3-6	Solid	440-5985925	440-256528-A-13	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	13	STSB33_3-6	Solid	440-5985926	440-256528-B-13	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	13	STSB33_3-6	Solid	440-5985926	440-256528-B-13	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	13	STSB33_3-6	Solid	440-5985926	440-256528-B-13	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	14	STSB33_6-15	Solid	440-5985927	440-256528-A-14	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	14	STSB33_6-15	Solid	440-5985927	440-256528-A-14	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	14	STSB33_6-15	Solid	440-5985927	440-256528-A-14	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	14	STSB33_6-15	Solid	440-5985928	440-256528-B-14	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	14	STSB33_6-15	Solid	440-5985928	440-256528-B-14	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	14	STSB33_6-15	Solid	440-5985928	440-256528-B-14	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	15	STSB35_0-0.5	Solid	440-5985929	440-256528-A-15	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	15	STSB35_0-0.5	Solid	440-5985929	440-256528-A-15	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	15	STSB35_0-0.5	Solid	440-5985929	440-256528-A-15	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	15	STSB35_0-0.5	Solid	440-5985930	440-256528-B-15	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	15	STSB35_0-0.5	Solid	440-5985930	440-256528-B-15	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	15	STSB35_0-0.5	Solid	440-5985930	440-256528-B-15	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	16	STSB35_0.5-3	Solid	440-5985931	440-256528-A-16	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	16	STSB35_0.5-3	Solid	440-5985931	440-256528-A-16	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	16	STSB35_0.5-3	Solid	440-5985931	440-256528-A-16	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	16	STSB35_0.5-3	Solid	440-5985932	440-256528-B-16	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	16	STSB35_0.5-3	Solid	440-5985932	440-256528-B-16	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	16	STSB35_0.5-3	Solid	440-5985932	440-256528-B-16	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	ICOCWI3-06	Garcia, Mayra 1	I	440-149979	12/12/19 17:14
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	_Metals Prep	Garcia, Mayra 1	I	440-149973	12/12/19 16:39
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	ICOCWI3-06	Garcia, Mayra 1	I	440-149934	12/11/19 18:47
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	ICOCWI3-06	Mercado, Michael E	I	440-149914	12/11/19 13:39
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	_Metals Prep	Garcia, Mayra 1	I	440-149915	12/11/19 14:21
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-149815	12/10/19 13:42
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	ICOCWI3-06	Mercado, Michael E	I	440-149610	12/06/19 09:41
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	ICOCWI3-06	Garcia, Mayra 1	I	440-149632	12/06/19 12:04
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	_Metals Prep	Garcia, Mayra 1	I	440-149619	12/06/19 10:44
440-256528	17	FB02	Water	440-5985933	440-256528-A-17	Plastic 250ml - with Nitric Acid	ICOCWI3-06	Bonta, Lucia F	I	440-149589	12/05/19 21:49

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-256528	18	STSB35_3-6	Solid	440-5985935	440-256528-A-18	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	18	STSB35_3-6	Solid	440-5985935	440-256528-A-18	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	18	STSB35_3-6	Solid	440-5985935	440-256528-A-18	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	18	STSB35_3-6	Solid	440-5985936	440-256528-B-18	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	18	STSB35_3-6	Solid	440-5985936	440-256528-B-18	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	18	STSB35_3-6	Solid	440-5985936	440-256528-B-18	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	19	STSB35_6-15	Solid	440-5985937	440-256528-A-19	Soil jar 4oz	ICOC14R-M	Mercado, Michael E	I	440-149609	12/06/19 09:40
440-256528	19	STSB35_6-15	Solid	440-5985937	440-256528-A-19	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149592	12/06/19 07:59
440-256528	19	STSB35_6-15	Solid	440-5985937	440-256528-A-19	Soil jar 4oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50
440-256528	19	STSB35_6-15	Solid	440-5985938	440-256528-B-19	Soil jar 8oz	ICOC14R-M	Mercado, Michael E	I	440-149759	12/09/19 14:42
440-256528	19	STSB35_6-15	Solid	440-5985938	440-256528-B-19	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149751	12/09/19 13:05
440-256528	19	STSB35_6-15	Solid	440-5985938	440-256528-B-19	Soil jar 8oz	ICOC14R-M	Bonta, Lucia F	I	440-149590	12/05/19 21:50