284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

DATA PACKAGE

METALS

PROJECT NAME : FORMER SCHLUMBERGER SITE PRINCETON NJ

JACOBS ENGINEERING GROUP, INC.

412 Mt. Kemble Ave

Downtown Building

Morristown, NJ - 07960

Phone No: 9732670555

ORDER ID : P3657

ATTENTION : Mary I. Murphy

Laboratory Certification ID # 20012

Table Of Contents for P3657

1) METALS DATA 2
2) Signature Page 4
3) Case Narrative 5
4) Qualifier Page 7
5) Conformance/Non Conformance 8
6) QA Checklist 10
7) Chronicle 11
8) Hit Summary 12
9) Sample Data 13
9.1) 917-J-WS-081624 14
10) METALS CALIBRATION DATA 15
10.1) Initial and Continuing Calibration Verification 16
10.2) CRDL Standard For AA & ICP 24
10.3) Initial and Continuing Calibration Blank Summary 25
10.4) Preparation Blank Summary 32
10.5) Interference Check Sample 34
11) METALS QC DATA 36
11.1) Matrix Spike Summary 37
11.2) Post Digest Spike Summary 41
11.3) Duplicate Sample Summary 43
11.4) Laboratory Control Sample Summary 47
11.5) Internal Standard Relative Intensity Summary8A 49
11.6) Internal Standard Relative Intensity Summary8B 53
11.7) ICP Serial Dilutions 57
12) METALS PREPARATION & INSTRUMENT DATA 59
13) PREPARATION & ANALYTICAL SUMMARY 60
13.1) Sample Preparation Summary 61
13.2) Analysis Run Log 63
14) METALS RAW DATA 65
14.1) METALS RAW DATA - ANALYTICAL 66
14.2) LB132130 66
14.3) LB132280 68
14.4) METALS RAW DATA - PREP 491
14.4.1) PB162924 491
14.4.2) PB163150 494

15) Analytical Runlogs 497
16) Standard Prep Logs 504
17) Shipping Document 661
17.1) Chain Of Custody 662
17.2) Lab Certificate 667
17.3) Internal COC 668

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Cover Page

Order ID : P3657

Project ID : Former Schlumberger Site Princeton NJ

Client : JACOBS Engineering Group, Inc.

Lab Sample Number	Client Sample Number
P3657-01	917-J-WS-081624
P3657-02	TB-01-081624

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____ Date: 9/5/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

JACOBS Engineering Group, Inc.
Project Name: Former Schlumberger Site Princeton NJ
Project # N/A
Chemtech Project # P3657
Test Name: Metals Group4,Mercury

A. Number of Samples and Date of Receipt:
2 Water samples were received on 08/16/2024.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOCMS Group3, SVOCMS Group6 and VOCMS Group6. This data package contains results for Metals Group4,Mercury.

C. Analytical Techniques:
The analysis of Metals Group4 was based on method 6020B, digestion based on method 3010 (waters). The analysis and digestion of Mercury was based on method 7470A.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate (918-J-WS-081324-FDDUP) analysis met criteria for all samples except for Arsenic due to sample matrix interference.
The Matrix Spike (1027MS) analysis met criteria for all samples except for Mercury due to sample matrix interference. The Matrix Spike (918-J-WS-081324-FDMS) analysis met criteria for all samples except for Molybdenum and Silver due to Chemical Interference during Digestion Process.
The Matrix Spike Duplicate (1027MSD) analysis met criteria for all samples except for Mercury due to sample matrix interference. The Matrix Spike Duplicate (918-J-WS-081324-FDMSD) analysis met criteria for all samples except for Molybdenum and Silver due to Chemical Interference during Digestion Process.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution (918-J-WS-081324-FDL) met criteria for all samples except for Aluminum, Iron, and Manganese due to sample matrix interference.

E. Additional Comments:

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

284 Sheffield Street, Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers **"P"** for ICP instrument **"PM"** for ICP when Microwave Digestion is used **"CV"** for Manual Cold Vapor AA **"AV"** for automated Cold Vapor AA **"CA"** for MIDI-Distillation Spectrophotometric **"AS"** for Semi –Automated Spectrophotometric **"C"** for Manual Spectrophotometric **"T"** for Titrimetric **"NR"** for analyte not required to be analyzed
OR	Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

ALLIANCE **284 Sheffield Street, Mountainside New Jersey 07092**
NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P3657 MATRIX: Water

METHOD: 6020B,7470A

		NA	NO	YES
1.	Calibration Summary met criteria.			✓
2.	ICP Interference Check Sample Results Summary Submitted.			✓
3.	Serial Dilution Summary (if applicable) Submitted.		✓	
	The Serial Dilution (918-J-WS-081324-FDL) met criteria for all samples except for Aluminum, Iron, and Manganese due to sample matrix interference.			
4.	Laboratory Control Sample Summary (if applicable) Submitted.			✓
5.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Matrix Spike (1027MS) analysis met criteria for all samples except for Mercury due to sample matrix interference. The Matrix Spike (918-J-WS-081324-FDMS) analysis met criteria for all samples except for Molybdenum and Silver due to Chemical Interference during Digestion Process. The Matrix Spike Duplicate (1027MSD) analysis met criteria for all samples except for Mercury due to sample matrix interference. The Matrix Spike Duplicate (918-J-WS-081324-FDMSD) analysis met criteria for all samples except for Molybdenum and Silver due to Chemical Interference during Digestion Process.			
7.	Sample Duplicate Analysis Met QC Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range. The Duplicate (918-J-WS-081324-FDDUP) analysis met criteria for all samples except for Arsenic due to sample matrix interference.			
8.	Digestion Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

ADDITIONAL COMMENTS:

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

_____ _____

QA REVIEW Date

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P3657

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

1st Level QA Review Signature: SOHIL JODHANI **Date:** 09/05/2024

2nd Level QA Review Signature: _____ **Date:** _____

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

LAB CHRONICLE

OrderID:	P3657	**OrderDate:**	8/16/2024 2:45:00 PM
Client:	JACOBS Engineering Group, Inc.	**Project:**	Former Schlumberger Site Princeton NJ
Contact:	Mary I. Murphy	**Location:**	G11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3657-01	**917-J-WS-081624**	**Water**			**08/16/24**			**08/16/24**
			Mercury	7470A		08/21/24	08/22/24	
			Metals Group4	6020B		09/04/24	09/04/24	

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: P3657 **Order ID:** P3657

Client: JACOBS Engineering Group, Inc. **Project ID:** Former Schlumberger Site Princeton NJ

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : 917-J-WS-081624								
P3657-01	917-J-WS-081624	Water	Aluminum	92.1		1.98	20.0	ug/L
P3657-01	917-J-WS-081624	Water	Antimony	0.23	J	0.11	2.00	ug/L
P3657-01	917-J-WS-081624	Water	Arsenic	1.85		0.090	1.00	ug/L
P3657-01	917-J-WS-081624	Water	Barium	58.0		0.30	10.0	ug/L
P3657-01	917-J-WS-081624	Water	Calcium	19400		62.5	500	ug/L
P3657-01	917-J-WS-081624	Water	Chromium	1.48	J	0.40	2.00	ug/L
P3657-01	917-J-WS-081624	Water	Cobalt	0.60	J	0.062	1.00	ug/L
P3657-01	917-J-WS-081624	Water	Copper	2.68		0.40	2.00	ug/L
P3657-01	917-J-WS-081624	Water	Iron	3070		9.60	50.0	ug/L
P3657-01	917-J-WS-081624	Water	Lead	1.67		0.11	1.00	ug/L
P3657-01	917-J-WS-081624	Water	Magnesium	3500		26.6	500	ug/L
P3657-01	917-J-WS-081624	Water	Manganese	362		0.24	1.00	ug/L
P3657-01	917-J-WS-081624	Water	Nickel	2.83		0.18	1.00	ug/L
P3657-01	917-J-WS-081624	Water	Potassium	2760		46.1	500	ug/L
P3657-01	917-J-WS-081624	Water	Tin	0.23	J	0.12	5.00	ug/L
P3657-01	917-J-WS-081624	Water	Sodium	72200		85.8	500	ug/L
P3657-01	917-J-WS-081624	Water	Vanadium	0.94	J	0.072	5.00	ug/L
P3657-01	917-J-WS-081624	Water	Zinc	11.7		0.56	5.00	ug/L
P3657-01	917-J-WS-081624	Water	Strontium	133		0.35	1.00	ug/L
P3657-01	917-J-WS-081624	Water	Titanium	1.91	J	0.26	5.00	ug/L

SAMPLE DATA

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	08/16/24
Project:	Former Schlumberger Site Princeton NJ	Date Received:	08/16/24
Client Sample ID:	917-J-WS-081624	SDG No.:	P3657
Lab Sample ID:	P3657-01	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	92.1		1	1.98	20.0	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-36-0	Antimony	0.23	J	1	0.11	2.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-38-2	Arsenic	1.85	*	1	0.090	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-39-3	Barium	58.0		1	0.30	10.0	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-41-7	Beryllium	0.16	U	1	0.16	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-43-9	Cadmium	0.30	U	1	0.30	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-70-2	Calcium	19400		1	62.5	500	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-47-3	Chromium	1.48	J	1	0.40	2.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-48-4	Cobalt	0.60	J	1	0.062	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-50-8	Copper	2.68		1	0.40	2.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7439-89-6	Iron	3070		1	9.60	50.0	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7439-92-1	Lead	1.67		1	0.11	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7439-95-4	Magnesium	3500		1	26.6	500	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7439-96-5	Manganese	362		1	0.24	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7439-97-6	Mercury	0.081	UN	1	0.081	0.20	ug/L	08/21/24 15:15	08/22/24 15:53	SW7470A	
7439-98-7	Molybdenum	0.93	UN	1	0.93	5.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-02-0	Nickel	2.83		1	0.18	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-09-7	Potassium	2760		1	46.1	500	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7782-49-2	Selenium	1.38	U	1	1.38	5.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-22-4	Silver	0.077	UN	1	0.077	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-23-5	Sodium	72200		1	85.8	500	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-24-6	Strontium	133		1	0.35	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-28-0	Thallium	0.085	U	1	0.085	1.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-31-5	Tin	0.23	J	1	0.12	5.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-32-6	Titanium	1.91	J	1	0.26	5.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-62-2	Vanadium	0.94	J	1	0.072	5.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A
7440-66-6	Zinc	11.7		1	0.56	5.00	ug/L	09/04/24 12:30	09/04/24 16:16	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	Mercury				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

METAL CALIBRATION DATA

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV92	Mercury	3.78	4.0	95	90 - 110	CV	08/22/2024	14:26	LB132130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV11	Mercury	4.95	5.0	99	90 - 110	CV	08/22/2024	14:30	LB132130
CCV12	Mercury	4.83	5.0	96	90 - 110	CV	08/22/2024	14:58	LB132130
CCV13	Mercury	5.05	5.0	101	90 - 110	CV	08/22/2024	15:25	LB132130
CCV14	Mercury	4.60	5.0	92	90 - 110	CV	08/22/2024	15:58	LB132130
CCV15	Mercury	4.92	5.0	98	90 - 110	CV	08/22/2024	16:20	LB132130

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	536	500	107	90 - 110	P	09/04/2024	13:51	LB132280
	Antimony	196	200	98	90 - 110	P	09/04/2024	13:51	LB132280
	Arsenic	194	200	97	90 - 110	P	09/04/2024	13:51	LB132280
	Barium	97.8	100	98	90 - 110	P	09/04/2024	13:51	LB132280
	Beryllium	101	100	101	90 - 110	P	09/04/2024	13:51	LB132280
	Cadmium	103	100	103	90 - 110	P	09/04/2024	13:51	LB132280
	Calcium	2070	2000	103	90 - 110	P	09/04/2024	13:51	LB132280
	Chromium	97.1	100	97	90 - 110	P	09/04/2024	13:51	LB132280
	Cobalt	99.8	100	100	90 - 110	P	09/04/2024	13:51	LB132280
	Copper	99.7	100	100	90 - 110	P	09/04/2024	13:51	LB132280
	Iron	2110	2000	106	90 - 110	P	09/04/2024	13:51	LB132280
	Lead	190	200	95	90 - 110	P	09/04/2024	13:51	LB132280
	Magnesium	1200	1200	100	90 - 110	P	09/04/2024	13:51	LB132280
	Manganese	102	100	102	90 - 110	P	09/04/2024	13:51	LB132280
	Molybdenum	4900	5000	98	90 - 110	P	09/04/2024	13:51	LB132280
	Nickel	108	110	99	90 - 110	P	09/04/2024	13:51	LB132280
	Potassium	2030	2000	102	90 - 110	P	09/04/2024	13:51	LB132280
	Selenium	196	200	98	90 - 110	P	09/04/2024	13:51	LB132280
	Silver	50.3	50.0	101	90 - 110	P	09/04/2024	13:51	LB132280
	Sodium	2140	2000	107	90 - 110	P	09/04/2024	13:51	LB132280
	Strontium	519	500	104	90 - 110	P	09/04/2024	13:51	LB132280
	Thallium	201	210	96	90 - 110	P	09/04/2024	13:51	LB132280
	Tin	544	500	109	90 - 110	P	09/04/2024	13:51	LB132280
	Titanium	5060	5000	101	90 - 110	P	09/04/2024	13:51	LB132280
	Vanadium	93.2	100	93	90 - 110	P	09/04/2024	13:51	LB132280
	Zinc	197	200	98	90 - 110	P	09/04/2024	13:51	LB132280

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV	Aluminum	20.2	20.0	101	80 - 120	P	09/04/2024	14:06	LB132280
	Antimony	2.02	2.0	101	80 - 120	P	09/04/2024	14:06	LB132280
	Arsenic	1.06	1.0	106	80 - 120	P	09/04/2024	14:06	LB132280
	Barium	9.79	10.0	98	80 - 120	P	09/04/2024	14:06	LB132280
	Beryllium	1.02	1.0	102	80 - 120	P	09/04/2024	14:06	LB132280
	Cadmium	1.03	1.0	103	80 - 120	P	09/04/2024	14:06	LB132280
	Calcium	508	500	102	80 - 120	P	09/04/2024	14:06	LB132280
	Chromium	1.84	2.0	92	80 - 120	P	09/04/2024	14:06	LB132280
	Cobalt	1.11	1.0	111	80 - 120	P	09/04/2024	14:06	LB132280
	Copper	2.05	2.0	102	80 - 120	P	09/04/2024	14:06	LB132280
	Iron	49.1	50.0	98	80 - 120	P	09/04/2024	14:06	LB132280
	Lead	0.90	1.0	90	80 - 120	P	09/04/2024	14:06	LB132280
	Magnesium	541	500	108	80 - 120	P	09/04/2024	14:06	LB132280
	Manganese	0.96	1.0	96	80 - 120	P	09/04/2024	14:06	LB132280
	Molybdenum	5.06	5.0	101	80 - 120	P	09/04/2024	14:06	LB132280
	Nickel	0.93	1.0	93	80 - 120	P	09/04/2024	14:06	LB132280
	Potassium	524	500	105	80 - 120	P	09/04/2024	14:06	LB132280
	Selenium	4.28	5.0	86	80 - 120	P	09/04/2024	14:06	LB132280
	Silver	0.97	1.0	97	80 - 120	P	09/04/2024	14:06	LB132280
	Sodium	560	500	112	80 - 120	P	09/04/2024	14:06	LB132280
	Strontium	1.01	1.0	101	80 - 120	P	09/04/2024	14:06	LB132280
	Thallium	0.90	1.0	90	80 - 120	P	09/04/2024	14:06	LB132280
	Tin	4.97	5.0	99	80 - 120	P	09/04/2024	14:06	LB132280
	Titanium	5.46	5.0	109	80 - 120	P	09/04/2024	14:06	LB132280
	Vanadium	5.08	5.0	102	80 - 120	P	09/04/2024	14:06	LB132280
	Zinc	5.19	5.0	104	80 - 120	P	09/04/2024	14:06	LB132280

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	50200	50000	100	90 - 110	P	09/04/2024	14:20	LB132280
	Antimony	501	500	100	90 - 110	P	09/04/2024	14:20	LB132280
	Arsenic	518	500	104	90 - 110	P	09/04/2024	14:20	LB132280
	Barium	2530	2500	101	90 - 110	P	09/04/2024	14:20	LB132280
	Beryllium	519	500	104	90 - 110	P	09/04/2024	14:20	LB132280
	Cadmium	498	500	100	90 - 110	P	09/04/2024	14:20	LB132280
	Calcium	254000	250000	102	90 - 110	P	09/04/2024	14:20	LB132280
	Chromium	507	500	101	90 - 110	P	09/04/2024	14:20	LB132280
	Cobalt	501	500	100	90 - 110	P	09/04/2024	14:20	LB132280
	Copper	4900	5000	98	90 - 110	P	09/04/2024	14:20	LB132280
	Iron	128000	125000	103	90 - 110	P	09/04/2024	14:20	LB132280
	Lead	2520	2500	101	90 - 110	P	09/04/2024	14:20	LB132280
	Magnesium	254000	250000	101	90 - 110	P	09/04/2024	14:20	LB132280
	Manganese	5060	5000	101	90 - 110	P	09/04/2024	14:20	LB132280
	Molybdenum	5600	5500	102	90 - 110	P	09/04/2024	14:20	LB132280
	Nickel	497	500	99	90 - 110	P	09/04/2024	14:20	LB132280
	Potassium	133000	125000	107	90 - 110	P	09/04/2024	14:20	LB132280
	Selenium	501	500	100	90 - 110	P	09/04/2024	14:20	LB132280
	Silver	494	500	99	90 - 110	P	09/04/2024	14:20	LB132280
	Sodium	256000	250000	102	90 - 110	P	09/04/2024	14:20	LB132280
	Strontium	12900	12500	103	90 - 110	P	09/04/2024	14:20	LB132280
	Thallium	512	500	102	90 - 110	P	09/04/2024	14:20	LB132280
	Tin	505	500	101	90 - 110	P	09/04/2024	14:20	LB132280
	Titanium	5830	5500	106	90 - 110	P	09/04/2024	14:20	LB132280
	Vanadium	508	500	102	90 - 110	P	09/04/2024	14:20	LB132280
	Zinc	4890	5000	98	90 - 110	P	09/04/2024	14:20	LB132280
CCV02	Aluminum	52300	50000	105	90 - 110	P	09/04/2024	15:47	LB132280
	Antimony	498	500	100	90 - 110	P	09/04/2024	15:47	LB132280
	Arsenic	502	500	100	90 - 110	P	09/04/2024	15:47	LB132280
	Barium	2510	2500	100	90 - 110	P	09/04/2024	15:47	LB132280
	Beryllium	526	500	105	90 - 110	P	09/04/2024	15:47	LB132280
	Cadmium	493	500	99	90 - 110	P	09/04/2024	15:47	LB132280
	Calcium	256000	250000	102	90 - 110	P	09/04/2024	15:47	LB132280
	Chromium	512	500	102	90 - 110	P	09/04/2024	15:47	LB132280

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Cobalt	504	500	101	90 - 110	P	09/04/2024	15:47	LB132280
	Copper	5210	5000	104	90 - 110	P	09/04/2024	15:47	LB132280
	Iron	130000	125000	104	90 - 110	P	09/04/2024	15:47	LB132280
	Lead	2520	2500	101	90 - 110	P	09/04/2024	15:47	LB132280
	Magnesium	261000	250000	104	90 - 110	P	09/04/2024	15:47	LB132280
	Manganese	5160	5000	103	90 - 110	P	09/04/2024	15:47	LB132280
	Molybdenum	5590	5500	102	90 - 110	P	09/04/2024	15:47	LB132280
	Nickel	495	500	99	90 - 110	P	09/04/2024	15:47	LB132280
	Potassium	129000	125000	103	90 - 110	P	09/04/2024	15:47	LB132280
	Selenium	504	500	101	90 - 110	P	09/04/2024	15:47	LB132280
	Silver	485	500	97	90 - 110	P	09/04/2024	15:47	LB132280
	Sodium	263000	250000	105	90 - 110	P	09/04/2024	15:47	LB132280
	Strontium	12700	12500	101	90 - 110	P	09/04/2024	15:47	LB132280
	Thallium	519	500	104	90 - 110	P	09/04/2024	15:47	LB132280
	Tin	491	500	98	90 - 110	P	09/04/2024	15:47	LB132280
	Titanium	5710	5500	104	90 - 110	P	09/04/2024	15:47	LB132280
	Vanadium	514	500	103	90 - 110	P	09/04/2024	15:47	LB132280
	Zinc	5150	5000	103	90 - 110	P	09/04/2024	15:47	LB132280
CCV03	Aluminum	51400	50000	103	90 - 110	P	09/04/2024	16:30	LB132280
	Antimony	494	500	99	90 - 110	P	09/04/2024	16:30	LB132280
	Arsenic	499	500	100	90 - 110	P	09/04/2024	16:30	LB132280
	Barium	2510	2500	100	90 - 110	P	09/04/2024	16:30	LB132280
	Beryllium	516	500	103	90 - 110	P	09/04/2024	16:30	LB132280
	Cadmium	490	500	98	90 - 110	P	09/04/2024	16:30	LB132280
	Calcium	249000	250000	100	90 - 110	P	09/04/2024	16:30	LB132280
	Chromium	500	500	100	90 - 110	P	09/04/2024	16:30	LB132280
	Cobalt	496	500	99	90 - 110	P	09/04/2024	16:30	LB132280
	Copper	5020	5000	100	90 - 110	P	09/04/2024	16:30	LB132280
	Iron	130000	125000	104	90 - 110	P	09/04/2024	16:30	LB132280
	Lead	2560	2500	102	90 - 110	P	09/04/2024	16:30	LB132280
	Magnesium	256000	250000	102	90 - 110	P	09/04/2024	16:30	LB132280
	Manganese	5080	5000	102	90 - 110	P	09/04/2024	16:30	LB132280
	Molybdenum	5500	5500	100	90 - 110	P	09/04/2024	16:30	LB132280
	Nickel	489	500	98	90 - 110	P	09/04/2024	16:30	LB132280

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV03	Potassium	128000	125000	102	90 - 110	P	09/04/2024	16:30	LB132280
	Selenium	494	500	99	90 - 110	P	09/04/2024	16:30	LB132280
	Silver	492	500	98	90 - 110	P	09/04/2024	16:30	LB132280
	Sodium	258000	250000	103	90 - 110	P	09/04/2024	16:30	LB132280
	Strontium	12600	12500	101	90 - 110	P	09/04/2024	16:30	LB132280
	Thallium	514	500	103	90 - 110	P	09/04/2024	16:30	LB132280
	Tin	492	500	98	90 - 110	P	09/04/2024	16:30	LB132280
	Titanium	5700	5500	104	90 - 110	P	09/04/2024	16:30	LB132280
	Vanadium	504	500	101	90 - 110	P	09/04/2024	16:30	LB132280
	Zinc	4900	5000	98	90 - 110	P	09/04/2024	16:30	LB132280
CCV04	Aluminum	53100	50000	106	90 - 110	P	09/04/2024	17:28	LB132280
	Antimony	497	500	99	90 - 110	P	09/04/2024	17:28	LB132280
	Arsenic	504	500	101	90 - 110	P	09/04/2024	17:28	LB132280
	Barium	2540	2500	102	90 - 110	P	09/04/2024	17:28	LB132280
	Beryllium	520	500	104	90 - 110	P	09/04/2024	17:28	LB132280
	Cadmium	495	500	99	90 - 110	P	09/04/2024	17:28	LB132280
	Calcium	250000	250000	100	90 - 110	P	09/04/2024	17:28	LB132280
	Chromium	509	500	102	90 - 110	P	09/04/2024	17:28	LB132280
	Cobalt	503	500	100	90 - 110	P	09/04/2024	17:28	LB132280
	Copper	4980	5000	100	90 - 110	P	09/04/2024	17:28	LB132280
	Iron	133000	125000	106	90 - 110	P	09/04/2024	17:28	LB132280
	Lead	2520	2500	101	90 - 110	P	09/04/2024	17:28	LB132280
	Magnesium	262000	250000	105	90 - 110	P	09/04/2024	17:28	LB132280
	Manganese	5180	5000	104	90 - 110	P	09/04/2024	17:28	LB132280
	Molybdenum	5570	5500	101	90 - 110	P	09/04/2024	17:28	LB132280
	Nickel	493	500	99	90 - 110	P	09/04/2024	17:28	LB132280
	Potassium	130000	125000	104	90 - 110	P	09/04/2024	17:28	LB132280
	Selenium	487	500	97	90 - 110	P	09/04/2024	17:28	LB132280
	Silver	488	500	98	90 - 110	P	09/04/2024	17:28	LB132280
	Sodium	261000	250000	104	90 - 110	P	09/04/2024	17:28	LB132280
	Strontium	12700	12500	101	90 - 110	P	09/04/2024	17:28	LB132280
	Thallium	520	500	104	90 - 110	P	09/04/2024	17:28	LB132280
	Tin	501	500	100	90 - 110	P	09/04/2024	17:28	LB132280
	Titanium	5710	5500	104	90 - 110	P	09/04/2024	17:28	LB132280

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Vanadium	509	500	102	90 - 110	P	09/04/2024	17:28	LB132280
	Zinc	4890	5000	98	90 - 110	P	09/04/2024	17:28	LB132280
CCV05	Aluminum	52800	50000	106	90 - 110	P	09/04/2024	18:17	LB132280
	Antimony	508	500	102	90 - 110	P	09/04/2024	18:17	LB132280
	Arsenic	512	500	102	90 - 110	P	09/04/2024	18:17	LB132280
	Barium	2640	2500	106	90 - 110	P	09/04/2024	18:17	LB132280
	Beryllium	528	500	106	90 - 110	P	09/04/2024	18:17	LB132280
	Cadmium	505	500	101	90 - 110	P	09/04/2024	18:17	LB132280
	Calcium	258000	250000	103	90 - 110	P	09/04/2024	18:17	LB132280
	Chromium	510	500	102	90 - 110	P	09/04/2024	18:17	LB132280
	Cobalt	506	500	101	90 - 110	P	09/04/2024	18:17	LB132280
	Copper	5040	5000	101	90 - 110	P	09/04/2024	18:17	LB132280
	Iron	134000	125000	108	90 - 110	P	09/04/2024	18:17	LB132280
	Lead	2540	2500	102	90 - 110	P	09/04/2024	18:17	LB132280
	Magnesium	264000	250000	106	90 - 110	P	09/04/2024	18:17	LB132280
	Manganese	5120	5000	102	90 - 110	P	09/04/2024	18:17	LB132280
	Molybdenum	5660	5500	103	90 - 110	P	09/04/2024	18:17	LB132280
	Nickel	493	500	99	90 - 110	P	09/04/2024	18:17	LB132280
	Potassium	132000	125000	106	90 - 110	P	09/04/2024	18:17	LB132280
	Selenium	498	500	100	90 - 110	P	09/04/2024	18:17	LB132280
	Silver	512	500	102	90 - 110	P	09/04/2024	18:17	LB132280
	Sodium	264000	250000	105	90 - 110	P	09/04/2024	18:17	LB132280
	Strontium	12700	12500	102	90 - 110	P	09/04/2024	18:17	LB132280
	Thallium	520	500	104	90 - 110	P	09/04/2024	18:17	LB132280
	Tin	509	500	102	90 - 110	P	09/04/2024	18:17	LB132280
	Titanium	5810	5500	106	90 - 110	P	09/04/2024	18:17	LB132280
	Vanadium	515	500	103	90 - 110	P	09/04/2024	18:17	LB132280
	Zinc	4930	5000	99	90 - 110	P	09/04/2024	18:17	LB132280

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.23	0.2	117	40 - 160	CV	08/22/2024	14:35	LB132130
CRI	Aluminum	20.0	20.0	100	70 - 130	P	09/04/2024	14:40	LB132280
	Antimony	1.94	2.0	97	70 - 130	P	09/04/2024	14:40	LB132280
	Arsenic	1.00	1.0	100	70 - 130	P	09/04/2024	14:40	LB132280
	Barium	9.47	10.0	95	70 - 130	P	09/04/2024	14:40	LB132280
	Beryllium	1.12	1.0	112	70 - 130	P	09/04/2024	14:40	LB132280
	Cadmium	0.97	1.0	97	70 - 130	P	09/04/2024	14:40	LB132280
	Calcium	479	500	96	70 - 130	P	09/04/2024	14:40	LB132280
	Chromium	1.92	2.0	96	70 - 130	P	09/04/2024	14:40	LB132280
	Cobalt	1.02	1.0	102	50 - 150	P	09/04/2024	14:40	LB132280
	Copper	2.04	2.0	102	70 - 130	P	09/04/2024	14:40	LB132280
	Iron	50.1	50.0	100	70 - 130	P	09/04/2024	14:40	LB132280
	Lead	0.91	1.0	91	70 - 130	P	09/04/2024	14:40	LB132280
	Magnesium	528	500	106	70 - 130	P	09/04/2024	14:40	LB132280
	Manganese	0.96	1.0	96	50 - 150	P	09/04/2024	14:40	LB132280
	Molybdenum	4.87	5.0	97	70 - 130	P	09/04/2024	14:40	LB132280
	Nickel	1.05	1.0	105	70 - 130	P	09/04/2024	14:40	LB132280
	Potassium	527	500	105	70 - 130	P	09/04/2024	14:40	LB132280
	Selenium	4.95	5.0	99	70 - 130	P	09/04/2024	14:40	LB132280
	Silver	0.95	1.0	95	70 - 130	P	09/04/2024	14:40	LB132280
	Sodium	554	500	111	70 - 130	P	09/04/2024	14:40	LB132280
	Strontium	1.00	1.0	100	70 - 130	P	09/04/2024	14:40	LB132280
	Thallium	0.87	1.0	87	70 - 130	P	09/04/2024	14:40	LB132280
	Tin	4.74	5.0	95	70 - 130	P	09/04/2024	14:40	LB132280
	Titanium	5.26	5.0	105	70 - 130	P	09/04/2024	14:40	LB132280
	Vanadium	4.85	5.0	97	70 - 130	P	09/04/2024	14:40	LB132280
	Zinc	4.81	5.0	96	50 - 150	P	09/04/2024	14:40	LB132280

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB92	Mercury	0.20	+/-0.20	U	0.20	CV	08/22/2024	14:28	LB132130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB11	Mercury	0.20	+/-0.20	U	0.20	CV	08/22/2024	14:33	LB132130
CCB12	Mercury	0.20	+/-0.20	U	0.20	CV	08/22/2024	15:00	LB132130
CCB13	Mercury	0.20	+/-0.20	U	0.20	CV	08/22/2024	15:27	LB132130
CCB14	Mercury	0.20	+/-0.20	U	0.20	CV	08/22/2024	16:00	LB132130
CCB15	Mercury	0.20	+/-0.20	U	0.20	CV	08/22/2024	16:23	LB132130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	20.0	+/-20.0	U	20.0	P	09/04/2024	14:10	LB132280
	Antimony	2.00	+/-2.00	U	2.00	P	09/04/2024	14:10	LB132280
	Arsenic	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Barium	10.0	+/-10.0	U	10.0	P	09/04/2024	14:10	LB132280
	Beryllium	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Cadmium	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Calcium	500	+/-500	U	500	P	09/04/2024	14:10	LB132280
	Chromium	2.00	+/-2.00	U	2.00	P	09/04/2024	14:10	LB132280
	Cobalt	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Copper	2.00	+/-2.00	U	2.00	P	09/04/2024	14:10	LB132280
	Iron	50.0	+/-50.0	U	50.0	P	09/04/2024	14:10	LB132280
	Lead	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Magnesium	500	+/-500	U	500	P	09/04/2024	14:10	LB132280
	Manganese	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Nickel	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Potassium	500	+/-500	U	500	P	09/04/2024	14:10	LB132280
	Selenium	5.00	+/-5.00	U	5.00	P	09/04/2024	14:10	LB132280
	Tin	5.00	+/-5.00	U	5.00	P	09/04/2024	14:10	LB132280
	Molybdenum	5.00	+/-5.00	U	5.00	P	09/04/2024	14:10	LB132280
	Silver	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Sodium	500	+/-500	U	500	P	09/04/2024	14:10	LB132280
	Thallium	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Vanadium	5.00	+/-5.00	U	5.00	P	09/04/2024	14:10	LB132280
	Zinc	5.00	+/-5.00	U	5.00	P	09/04/2024	14:10	LB132280
	Strontium	1.00	+/-1.00	U	1.00	P	09/04/2024	14:10	LB132280
	Titanium	5.00	+/-5.00	U	5.00	P	09/04/2024	14:10	LB132280

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	20.0	+/-20.0	U	20.0	P	09/04/2024	14:34	LB132280
	Antimony	2.00	+/-2.00	U	2.00	P	09/04/2024	14:34	LB132280
	Arsenic	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Barium	10.0	+/-10.0	U	10.0	P	09/04/2024	14:34	LB132280
	Beryllium	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Cadmium	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Calcium	500	+/-500	U	500	P	09/04/2024	14:34	LB132280
	Chromium	2.00	+/-2.00	U	2.00	P	09/04/2024	14:34	LB132280
	Cobalt	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Copper	2.00	+/-2.00	U	2.00	P	09/04/2024	14:34	LB132280
	Iron	50.0	+/-50.0	U	50.0	P	09/04/2024	14:34	LB132280
	Lead	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Magnesium	500	+/-500	U	500	P	09/04/2024	14:34	LB132280
	Manganese	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Nickel	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Potassium	500	+/-500	U	500	P	09/04/2024	14:34	LB132280
	Tin	5.00	+/-5.00	U	5.00	P	09/04/2024	14:34	LB132280
	Selenium	5.00	+/-5.00	U	5.00	P	09/04/2024	14:34	LB132280
	Molybdenum	5.00	+/-5.00	U	5.00	P	09/04/2024	14:34	LB132280
	Silver	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Sodium	500	+/-500	U	500	P	09/04/2024	14:34	LB132280
	Thallium	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Vanadium	5.00	+/-5.00	U	5.00	P	09/04/2024	14:34	LB132280
	Zinc	5.00	+/-5.00	U	5.00	P	09/04/2024	14:34	LB132280
	Strontium	1.00	+/-1.00	U	1.00	P	09/04/2024	14:34	LB132280
	Titanium	5.00	+/-5.00	U	5.00	P	09/04/2024	14:34	LB132280
CCB02	Aluminum	20.0	+/-20.0	U	20.0	P	09/04/2024	15:54	LB132280
	Antimony	0.20	+/-2.00	J	2.00	P	09/04/2024	15:54	LB132280
	Arsenic	1.00	+/-1.00	U	1.00	P	09/04/2024	15:54	LB132280
	Barium	10.0	+/-10.0	U	10.0	P	09/04/2024	15:54	LB132280
	Beryllium	1.00	+/-1.00	U	1.00	P	09/04/2024	15:54	LB132280
	Cadmium	1.00	+/-1.00	U	1.00	P	09/04/2024	15:54	LB132280
	Calcium	500	+/-500	U	500	P	09/04/2024	15:54	LB132280
	Chromium	0.42	+/-2.00	J	2.00	P	09/04/2024	15:54	LB132280
	Cobalt	1.00	+/-1.00	U	1.00	P	09/04/2024	15:54	LB132280
	Copper	2.00	+/-2.00	U	2.00	P	09/04/2024	15:54	LB132280
	Iron	50.0	+/-50.0	U	50.0	P	09/04/2024	15:54	LB132280
	Lead	0.15	+/-1.00	J	1.00	P	09/04/2024	15:54	LB132280
	Magnesium	500	+/-500	U	500	P	09/04/2024	15:54	LB132280

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Manganese	1.00	+/-1.00	U	1.00	P	09/04/2024	15:54	LB132280
	Nickel	0.25	+/-1.00	J	1.00	P	09/04/2024	15:54	LB132280
	Potassium	500	+/-500	U	500	P	09/04/2024	15:54	LB132280
	Tin	5.00	+/-5.00	U	5.00	P	09/04/2024	15:54	LB132280
	Molybdenum	5.00	+/-5.00	U	5.00	P	09/04/2024	15:54	LB132280
	Selenium	5.00	+/-5.00	U	5.00	P	09/04/2024	15:54	LB132280
	Silver	1.00	+/-1.00	U	1.00	P	09/04/2024	15:54	LB132280
	Sodium	500	+/-500	U	500	P	09/04/2024	15:54	LB132280
	Thallium	1.00	+/-1.00	U	1.00	P	09/04/2024	15:54	LB132280
	Vanadium	5.00	+/-5.00	U	5.00	P	09/04/2024	15:54	LB132280
	Zinc	5.00	+/-5.00	U	5.00	P	09/04/2024	15:54	LB132280
	Strontium	1.00	+/-1.00	U	1.00	P	09/04/2024	15:54	LB132280
	Titanium	5.00	+/-5.00	U	5.00	P	09/04/2024	15:54	LB132280
CCB03	Aluminum	20.0	+/-20.0	U	20.0	P	09/04/2024	16:46	LB132280
	Antimony	2.00	+/-2.00	U	2.00	P	09/04/2024	16:46	LB132280
	Arsenic	1.00	+/-1.00	U	1.00	P	09/04/2024	16:46	LB132280
	Barium	10.0	+/-10.0	U	10.0	P	09/04/2024	16:46	LB132280
	Beryllium	1.00	+/-1.00	U	1.00	P	09/04/2024	16:46	LB132280
	Cadmium	1.00	+/-1.00	U	1.00	P	09/04/2024	16:46	LB132280
	Calcium	500	+/-500	U	500	P	09/04/2024	16:46	LB132280
	Chromium	0.45	+/-2.00	J	2.00	P	09/04/2024	16:46	LB132280
	Cobalt	1.00	+/-1.00	U	1.00	P	09/04/2024	16:46	LB132280
	Copper	2.00	+/-2.00	U	2.00	P	09/04/2024	16:46	LB132280
	Iron	50.0	+/-50.0	U	50.0	P	09/04/2024	16:46	LB132280
	Lead	1.00	+/-1.00	U	1.00	P	09/04/2024	16:46	LB132280
	Magnesium	500	+/-500	U	500	P	09/04/2024	16:46	LB132280
	Manganese	0.28	+/-1.00	J	1.00	P	09/04/2024	16:46	LB132280
	Nickel	0.29	+/-1.00	J	1.00	P	09/04/2024	16:46	LB132280
	Potassium	500	+/-500	U	500	P	09/04/2024	16:46	LB132280
	Selenium	5.00	+/-5.00	U	5.00	P	09/04/2024	16:46	LB132280
	Molybdenum	5.00	+/-5.00	U	5.00	P	09/04/2024	16:46	LB132280
	Tin	5.00	+/-5.00	U	5.00	P	09/04/2024	16:46	LB132280
	Silver	1.00	+/-1.00	U	1.00	P	09/04/2024	16:46	LB132280
	Sodium	500	+/-500	U	500	P	09/04/2024	16:46	LB132280
	Thallium	1.00	+/-1.00	U	1.00	P	09/04/2024	16:46	LB132280
	Vanadium	5.00	+/-5.00	U	5.00	P	09/04/2024	16:46	LB132280
	Zinc	5.00	+/-5.00	U	5.00	P	09/04/2024	16:46	LB132280
	Strontium	1.00	+/-1.00	U	1.00	P	09/04/2024	16:46	LB132280
	Titanium	5.00	+/-5.00	U	5.00	P	09/04/2024	16:46	LB132280

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Aluminum	20.0	+/-20.0	U	20.0	P	09/04/2024	17:36	LB132280
	Antimony	0.18	+/-2.00	J	2.00	P	09/04/2024	17:36	LB132280
	Arsenic	1.00	+/-1.00	U	1.00	P	09/04/2024	17:36	LB132280
	Barium	10.0	+/-10.0	U	10.0	P	09/04/2024	17:36	LB132280
	Beryllium	1.00	+/-1.00	U	1.00	P	09/04/2024	17:36	LB132280
	Cadmium	1.00	+/-1.00	U	1.00	P	09/04/2024	17:36	LB132280
	Calcium	500	+/-500	U	500	P	09/04/2024	17:36	LB132280
	Chromium	0.47	+/-2.00	J	2.00	P	09/04/2024	17:36	LB132280
	Cobalt	1.00	+/-1.00	U	1.00	P	09/04/2024	17:36	LB132280
	Copper	2.00	+/-2.00	U	2.00	P	09/04/2024	17:36	LB132280
	Iron	50.0	+/-50.0	U	50.0	P	09/04/2024	17:36	LB132280
	Lead	0.19	+/-1.00	J	1.00	P	09/04/2024	17:36	LB132280
	Magnesium	500	+/-500	U	500	P	09/04/2024	17:36	LB132280
	Manganese	0.38	+/-1.00	J	1.00	P	09/04/2024	17:36	LB132280
	Nickel	0.27	+/-1.00	J	1.00	P	09/04/2024	17:36	LB132280
	Potassium	500	+/-500	U	500	P	09/04/2024	17:36	LB132280
	Tin	5.00	+/-5.00	U	5.00	P	09/04/2024	17:36	LB132280
	Molybdenum	5.00	+/-5.00	U	5.00	P	09/04/2024	17:36	LB132280
	Selenium	5.00	+/-5.00	U	5.00	P	09/04/2024	17:36	LB132280
	Silver	1.00	+/-1.00	U	1.00	P	09/04/2024	17:36	LB132280
	Sodium	500	+/-500	U	500	P	09/04/2024	17:36	LB132280
	Thallium	1.00	+/-1.00	U	1.00	P	09/04/2024	17:36	LB132280
	Vanadium	5.00	+/-5.00	U	5.00	P	09/04/2024	17:36	LB132280
	Zinc	5.00	+/-5.00	U	5.00	P	09/04/2024	17:36	LB132280
	Strontium	1.00	+/-1.00	U	1.00	P	09/04/2024	17:36	LB132280
	Titanium	5.00	+/-5.00	U	5.00	P	09/04/2024	17:36	LB132280
CCB05	Aluminum	20.0	+/-20.0	U	20.0	P	09/04/2024	18:24	LB132280
	Antimony	0.24	+/-2.00	J	2.00	P	09/04/2024	18:24	LB132280
	Arsenic	1.00	+/-1.00	U	1.00	P	09/04/2024	18:24	LB132280
	Barium	10.0	+/-10.0	U	10.0	P	09/04/2024	18:24	LB132280
	Beryllium	1.00	+/-1.00	U	1.00	P	09/04/2024	18:24	LB132280
	Cadmium	1.00	+/-1.00	U	1.00	P	09/04/2024	18:24	LB132280
	Calcium	500	+/-500	U	500	P	09/04/2024	18:24	LB132280
	Chromium	0.44	+/-2.00	J	2.00	P	09/04/2024	18:24	LB132280
	Cobalt	1.00	+/-1.00	U	1.00	P	09/04/2024	18:24	LB132280
	Copper	2.00	+/-2.00	U	2.00	P	09/04/2024	18:24	LB132280
	Iron	50.0	+/-50.0	U	50.0	P	09/04/2024	18:24	LB132280
	Lead	0.25	+/-1.00	J	1.00	P	09/04/2024	18:24	LB132280
	Magnesium	500	+/-500	U	500	P	09/04/2024	18:24	LB132280

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB05	Manganese	1.00	+/-1.00	U	1.00	P	09/04/2024	18:24	LB132280
	Nickel	0.31	+/-1.00	J	1.00	P	09/04/2024	18:24	LB132280
	Potassium	500	+/-500	U	500	P	09/04/2024	18:24	LB132280
	Tin	5.00	+/-5.00	U	5.00	P	09/04/2024	18:24	LB132280
	Molybdenum	5.00	+/-5.00	U	5.00	P	09/04/2024	18:24	LB132280
	Selenium	5.00	+/-5.00	U	5.00	P	09/04/2024	18:24	LB132280
	Silver	1.00	+/-1.00	U	1.00	P	09/04/2024	18:24	LB132280
	Sodium	500	+/-500	U	500	P	09/04/2024	18:24	LB132280
	Thallium	1.00	+/-1.00	U	1.00	P	09/04/2024	18:24	LB132280
	Vanadium	5.00	+/-5.00	U	5.00	P	09/04/2024	18:24	LB132280
	Zinc	5.00	+/-5.00	U	5.00	P	09/04/2024	18:24	LB132280
	Strontium	0.38	+/-1.00	J	1.00	P	09/04/2024	18:24	LB132280
	Titanium	5.00	+/-5.00	U	5.00	P	09/04/2024	18:24	LB132280

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB162924BL		**WATER**		**Batch Number:**	**PB162924**		**Prep Date:**	**08/21/2024**	
	Mercury	0.20	<0.20	U	0.20	CV	08/22/2024	15:39	LB132130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Instrument: P7

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB163150BL		**WATER**		**Batch Number:**	**PB163150**		**Prep Date:**	**09/04/2024**	
	Aluminum	20.0	<20.0	U	20.0	P	09/04/2024	14:56	LB132280
	Antimony	2.00	<2.00	U	2.00	P	09/04/2024	14:56	LB132280
	Arsenic	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Barium	10.0	<10.0	U	10.0	P	09/04/2024	14:56	LB132280
	Beryllium	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Cadmium	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Calcium	500	<500	U	500	P	09/04/2024	14:56	LB132280
	Chromium	2.00	<2.00	U	2.00	P	09/04/2024	14:56	LB132280
	Cobalt	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Copper	2.00	<2.00	U	2.00	P	09/04/2024	14:56	LB132280
	Iron	50.0	<50.0	U	50.0	P	09/04/2024	14:56	LB132280
	Lead	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Magnesium	500	<500	U	500	P	09/04/2024	14:56	LB132280
	Manganese	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Nickel	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Potassium	500	<500	U	500	P	09/04/2024	14:56	LB132280
	Tin	5.00	<5.00	U	5.00	P	09/04/2024	14:56	LB132280
	Molybdenum	5.00	<5.00	U	5.00	P	09/04/2024	14:56	LB132280
	Selenium	5.00	<5.00	U	5.00	P	09/04/2024	14:56	LB132280
	Silver	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Sodium	500	<500	U	500	P	09/04/2024	14:56	LB132280
	Thallium	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Vanadium	5.00	<5.00	U	5.00	P	09/04/2024	14:56	LB132280
	Zinc	5.00	<5.00	U	5.00	P	09/04/2024	14:56	LB132280
	Strontium	1.00	<1.00	U	1.00	P	09/04/2024	14:56	LB132280
	Titanium	5.00	<5.00	U	5.00	P	09/04/2024	14:56	LB132280

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

ICS Source: EPA **Instrument ID:** P7

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Aluminum	91600	100000	92	0	0	09/04/2024	14:13	LB132280
	Antimony	1.06	1.5	71	-2.5	5.5	09/04/2024	14:13	LB132280
	Arsenic	0.37	0.1	370	-1.9	2.1	09/04/2024	14:13	LB132280
	Barium	1.36	1.2	113	-18.8	21.2	09/04/2024	14:13	LB132280
	Beryllium	0.26			-2	2	09/04/2024	14:13	LB132280
	Cadmium	0.18	0.7	26	-1.3	2.7	09/04/2024	14:13	LB132280
	Calcium	96000	100000	96	0	0	09/04/2024	14:13	LB132280
	Chromium	19.6	21.0	93	17	25	09/04/2024	14:13	LB132280
	Cobalt	1.21	1.0	121	-1	3	09/04/2024	14:13	LB132280
	Copper	8.03	8.0	100	4	12	09/04/2024	14:13	LB132280
	Iron	101000	100000	101	0	0	09/04/2024	14:13	LB132280
	Lead	4.34	4.0	108	2	6	09/04/2024	14:13	LB132280
	Magnesium	91700	100000	92	0	0	09/04/2024	14:13	LB132280
	Manganese	8.04	7.0	115	5	9	09/04/2024	14:13	LB132280
	Nickel	5.26	6.0	88	4	8	09/04/2024	14:13	LB132280
	Potassium	97600	100000	98	0	0	09/04/2024	14:13	LB132280
	Molybdenum	1920	2000	96	1600	2400	09/04/2024	14:13	LB132280
	Tin	0.22			0	0	09/04/2024	14:13	LB132280
	Selenium	0	0.3		-9.7	10	09/04/2024	14:13	LB132280
	Silver	0.080			-2	2	09/04/2024	14:13	LB132280
	Sodium	98300	100000	98	0	0	09/04/2024	14:13	LB132280
	Thallium	0.080			-2	2	09/04/2024	14:13	LB132280
	Vanadium	0.18	0.5	36	-9.5	10.5	09/04/2024	14:13	LB132280
	Zinc	11.0	11.0	100	7	15	09/04/2024	14:13	LB132280
	Strontium	35.0			0	0	09/04/2024	14:13	LB132280
	Titanium	2100	2000	105	1600	2400	09/04/2024	14:13	LB132280
ICSAB01	Aluminum	90900	100000	91	0	0	09/04/2024	14:17	LB132280
	Antimony	20.3	22.0	92	18	26	09/04/2024	14:17	LB132280
	Arsenic	19.5	19.0	103	16.2	21.9	09/04/2024	14:17	LB132280
	Barium	20.2	22.0	92	2	42	09/04/2024	14:17	LB132280
	Beryllium	19.6	19.0	103	16.2	21.9	09/04/2024	14:17	LB132280
	Cadmium	19.2	20.0	96	17	23	09/04/2024	14:17	LB132280
	Calcium	95100	100000	95	0	0	09/04/2024	14:17	LB132280
	Chromium	38.6	40.0	96	34	46	09/04/2024	14:17	LB132280
	Cobalt	21.1	20.0	106	17	23	09/04/2024	14:17	LB132280
	Copper	27.2	25.0	109	21	29	09/04/2024	14:17	LB132280
	Iron	101000	100000	101	0	0	09/04/2024	14:17	LB132280
	Lead	22.8	25.0	91	21.3	28.8	09/04/2024	14:17	LB132280
	Magnesium	91200	100000	91	0	0	09/04/2024	14:17	LB132280
	Manganese	28.3	27.0	105	23	31.1	09/04/2024	14:17	LB132280
	Nickel	25.1	24.0	105	20.4	27.6	09/04/2024	14:17	LB132280
	Potassium	98200	100000	98	0	0	09/04/2024	14:17	LB132280

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

ICS Source: EPA **Instrument ID:** P7

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Tin	50.6			0	0	09/04/2024	14:17	LB132280
	Selenium	19.0	19.0	100	9	29	09/04/2024	14:17	LB132280
	Molybdenum	1930	2000	96	1600	2400	09/04/2024	14:17	LB132280
	Silver	18.5	18.0	103	15.3	20.7	09/04/2024	14:17	LB132280
	Sodium	97000	100000	97	0	0	09/04/2024	14:17	LB132280
	Thallium	18.9	21.0	90	17.9	24.2	09/04/2024	14:17	LB132280
	Vanadium	19.1	19.0	100	9	29	09/04/2024	14:17	LB132280
	Zinc	30.8	29.0	106	25	33	09/04/2024	14:17	LB132280
	Strontium	85.7			0	0	09/04/2024	14:17	LB132280
	Titanium	2140	2000	107	1600	2400	09/04/2024	14:17	LB132280

METAL QC DATA

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

metals
- 5a -
MATRIX SPIKE SUMMARY

client: JACOBS Engineering Group, Inc. **level:** low **sdg no.:** P3657

contract: JACO05 **lab code:** CHEM **case no.:** P3657 **sas no.:** P3657

matrix: Water **sample id:** P3596-02 **client id:** 918-J-WS-081324-FDMS

Percent Solids for Sample: NA **Spiked ID:** P3596-02MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75 - 125	10000		88.2		10000	99		P
Antimony	ug/L	75 - 125	511		0.23	J	500	102		P
Arsenic	ug/L	75 - 125	530		1.74		500	106		P
Barium	ug/L	75 - 125	2510		57.6		2500	98		P
Beryllium	ug/L	75 - 125	556		1.00	U	500	111		P
Cadmium	ug/L	75 - 125	545		1.00	U	500	109		P
Calcium	ug/L	75 - 125	66000		19100		50000	94		P
Chromium	ug/L	75 - 125	510		1.21	J	500	102		P
Cobalt	ug/L	75 - 125	533		0.74	J	500	106		P
Copper	ug/L	75 - 125	5050		3.59		5000	101		P
Iron	ug/L	75 - 125	30200		3340		25000	107		P
Lead	ug/L	75 - 125	2550		1.75		2500	102		P
Magnesium	ug/L	75 - 125	53600		3440		50000	100		P
Manganese	ug/L	75 - 125	5510		511		5000	100		P
Nickel	ug/L	75 - 125	517		1.28		500	103		P
Potassium	ug/L	75 - 125	27600		2770		25000	100		P
Tin	ug/L	75 - 125	472		5.00	U	500	94		P
Selenium	ug/L	75 - 125	525		5.00	U	500	105		P
Molybdenum	ug/L	75 - 125	7150		5.00	U	5000	143	N	P
Silver	ug/L	75 - 125	336		1.00	U	500	67	N	P
Sodium	ug/L	75 - 125	109000		68300		50000	82		P
Thallium	ug/L	75 - 125	522		1.00	U	500	104		P
Vanadium	ug/L	75 - 125	527		0.98	J	500	105		P
Zinc	ug/L	75 - 125	5140		36.8		5000	102		P
Strontium	ug/L	75 - 125	11600		129		12500	92		P
Titanium	ug/L	75 - 125	6070		1.40	J	5000	121		P

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: JACOBS Engineering Group, Inc. **level:** low **sdg no.:** P3657

contract: JACO05 **lab code:** CHEM **case no.:** P3657 **sas no.:** P3657

matrix: Water **sample id:** P3596-02 **client id:** 918-J-WS-081324-FDMSD

Percent Solids for Sample: NA **Spiked ID:** P3596-02MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75 - 125	9970		88.2		10000	99		P
Antimony	ug/L	75 - 125	498		0.23	J	500	100		P
Arsenic	ug/L	75 - 125	529		1.74		500	105		P
Barium	ug/L	75 - 125	2440		57.6		2500	95		P
Beryllium	ug/L	75 - 125	533		1.00	U	500	107		P
Cadmium	ug/L	75 - 125	528		1.00	U	500	106		P
Calcium	ug/L	75 - 125	67000		19100		50000	96		P
Chromium	ug/L	75 - 125	503		1.21	J	500	100		P
Cobalt	ug/L	75 - 125	530		0.74	J	500	106		P
Copper	ug/L	75 - 125	5080		3.59		5000	101		P
Iron	ug/L	75 - 125	30100		3340		25000	107		P
Lead	ug/L	75 - 125	2490		1.75		2500	99		P
Magnesium	ug/L	75 - 125	52300		3440		50000	98		P
Manganese	ug/L	75 - 125	5480		511		5000	99		P
Nickel	ug/L	75 - 125	513		1.28		500	102		P
Potassium	ug/L	75 - 125	27000		2770		25000	97		P
Molybdenum	ug/L	75 - 125	6960		5.00	U	5000	139	N	P
Selenium	ug/L	75 - 125	507		5.00	U	500	101		P
Tin	ug/L	75 - 125	454		5.00	U	500	91		P
Silver	ug/L	75 - 125	295		1.00	U	500	59	N	P
Sodium	ug/L	75 - 125	112000		68300		50000	87		P
Thallium	ug/L	75 - 125	509		1.00	U	500	102		P
Vanadium	ug/L	75 - 125	522		0.98	J	500	104		P
Zinc	ug/L	75 - 125	5050		36.8		5000	100		P
Strontium	ug/L	75 - 125	11200		129		12500	89		P
Titanium	ug/L	75 - 125	5960		1.40	J	5000	119		P

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

metals
- 5a -
MATRIX SPIKE SUMMARY

client: JACOBS Engineering Group, Inc. **level:** low **sdg no.:** P3657

contract: JACO05 **lab code:** CHEM **case no.:** P3657 **sas no.:** P3657

matrix: Water **sample id:** P3669-03 **client id:** 1027MS

Percent Solids for Sample: NA **Spiked ID:** P3669-03MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	2.95		0.24		4.0	68	N	CV

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: JACOBS Engineering Group, Inc. **level:** low **sdg no.:** P3657

contract: JACO05 **lab code:** CHEM **case no.:** P3657 **sas no.:** P3657

matrix: Water **sample id:** P3669-03 **client id:** 1027MSD

Percent Solids for Sample: NA **Spiked ID:** P3669-03MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	2.78		0.24		4.0	64	N	CV

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Matrix: Water **Level:** LOW **Client ID:** 918-J-WS-081324-FDA

Sample ID: P3596-02 **Spiked ID:** P3596-02A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Molybdenum	ug/L	75 - 125	6960		5.00	U	5000	139		P
Silver	ug/L	75 - 125	376		1.00	U	500	75		P

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Matrix: Water **Level:** LOW **Client ID:** 1027A

Sample ID: P3669-03 **Spiked ID:** P3669-03A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	3.80		0.24		4.00	89		CV

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Matrix: Water **Sample ID:** P3596-02 **Client ID:** 918-J-WS-081324-FDDUP

Percent Solids for Sample: NA **Duplicate ID** P3596-02DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	20	88.2		74.8		16		P
Antimony	ug/L	20	0.23	J	0.20	J	14		P
Arsenic	ug/L	20	1.74		2.20		23	*	P
Barium	ug/L	20	57.6		58.6		2		P
Beryllium	ug/L	20	1.00	U	1.00	U			P
Cadmium	ug/L	20	1.00	U	1.00	U			P
Calcium	ug/L	20	19100		19300		1		P
Chromium	ug/L	20	1.21	J	1.16	J	4		P
Cobalt	ug/L	20	0.74	J	0.69	J	7		P
Copper	ug/L	20	3.59		3.54		1		P
Iron	ug/L	20	3340		3260		2		P
Lead	ug/L	20	1.75		1.78		2		P
Magnesium	ug/L	20	3440		3370		2		P
Manganese	ug/L	20	511		508		1		P
Nickel	ug/L	20	1.28		1.30		2		P
Potassium	ug/L	20	2770		2780		0		P
Tin	ug/L	20	5.00	U	5.00	U			P
Molybdenum	ug/L	20	5.00	U	5.00	U			P
Selenium	ug/L	20	5.00	U	5.00	U			P
Silver	ug/L	20	1.00	U	1.00	U			P
Sodium	ug/L	20	68300		67800		1		P
Thallium	ug/L	20	1.00	U	1.00	U			P
Vanadium	ug/L	20	0.98	J	1.06	J	8		P
Zinc	ug/L	20	36.8		36.1		2		P
Strontium	ug/L	20	129		130		1		P
Titanium	ug/L	20	1.40	J	1.66	J	17		P

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Matrix: Water **Sample ID:** P3596-02MS **Client ID:** 918-J-WS-081324-FDMSD

Percent Solids for Sample: NA **Duplicate ID** P3596-02MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	20	10000		9970		0		P
Antimony	ug/L	20	511		498		3		P
Arsenic	ug/L	20	530		529		0		P
Barium	ug/L	20	2510		2440		3		P
Beryllium	ug/L	20	556		533		4		P
Cadmium	ug/L	20	545		528		3		P
Calcium	ug/L	20	66000		67000		2		P
Chromium	ug/L	20	510		503		1		P
Cobalt	ug/L	20	533		530		1		P
Copper	ug/L	20	5050		5080		1		P
Iron	ug/L	20	30200		30100		0		P
Lead	ug/L	20	2550		2490		2		P
Magnesium	ug/L	20	53600		52300		2		P
Manganese	ug/L	20	5510		5480		1		P
Nickel	ug/L	20	517		513		1		P
Potassium	ug/L	20	27600		27000		2		P
Molybdenum	ug/L	20	7150		6960		3		P
Selenium	ug/L	20	525		507		3		P
Tin	ug/L	20	472		454		4		P
Silver	ug/L	20	336		295		13		P
Sodium	ug/L	20	109000		112000		3		P
Thallium	ug/L	20	522		509		3		P
Vanadium	ug/L	20	527		522		1		P
Zinc	ug/L	20	5140		5050		2		P
Strontium	ug/L	20	11600		11200		4		P
Titanium	ug/L	20	6070		5960		2		P

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Matrix: Water **Sample ID:** P3669-03 **Client ID:** 1027DUP

Percent Solids for Sample: NA **Duplicate ID** P3669-03DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	0.24		0.22		10		CV

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Matrix: Water **Sample ID:** P3669-03MS **Client ID:** 1027MSD

Percent Solids for Sample: NA **Duplicate ID** P3669-03MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L	20	2.95		2.78		6		CV

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

LABORATORY CONTROL SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB162924BS							
Mercury	ug/L	4.0	3.72		93	80 - 120	CV

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

LABORATORY CONTROL SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Case No.:** P3657 **SAS No.:** P3657

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB163150BS							
Aluminum	ug/L	10000	10500		105	80 - 120	P
Antimony	ug/L	500	500		100	80 - 120	P
Arsenic	ug/L	500	504		101	80 - 120	P
Barium	ug/L	2500	2510		100	80 - 120	P
Beryllium	ug/L	500	534		107	80 - 120	P
Cadmium	ug/L	500	510		102	80 - 120	P
Calcium	ug/L	50000	51700		103	80 - 120	P
Chromium	ug/L	500	505		101	80 - 120	P
Cobalt	ug/L	500	512		102	80 - 120	P
Copper	ug/L	5000	5100		102	80 - 120	P
Iron	ug/L	25000	27900		112	80 - 120	P
Lead	ug/L	2500	2490		100	80 - 120	P
Magnesium	ug/L	50000	52300		105	80 - 120	P
Manganese	ug/L	5000	5030		101	80 - 120	P
Nickel	ug/L	500	508		102	80 - 120	P
Potassium	ug/L	25000	25600		102	80 - 120	P
Tin	ug/L	500	502		100	80 - 120	P
Molybdenum	ug/L	5000	5370		107	80 - 120	P
Selenium	ug/L	500	500		100	80 - 120	P
Silver	ug/L	500	515		103	80 - 120	P
Sodium	ug/L	50000	52100		104	80 - 120	P
Thallium	ug/L	500	502		100	80 - 120	P
Vanadium	ug/L	500	502		100	80 - 120	P
Zinc	ug/L	5000	5080		102	80 - 120	P
Strontium	ug/L	12500	12500		100	80 - 120	P
Titanium	ug/L	5000	5720		114	80 - 120	P

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: P3657 Sas No.: P3657 SDG No.: P3657

Instrument ID: P7 Start Date : 09/04/2024

Run Number: LB132280 End Date : 09/04/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
S0	S0	1316	100		100		100		100		100	
S2	S2	1319	100		100		99		97		97	
S3	S3	1323	103		100		102		96		99	
S4	S4	1326	108		101		101		97		102	
S5	S5	1329	114		103		101		97		102	
S6	S6	1332	117		100		99		95		103	
S7	S7	1335	116		103		101		94		105	
S8	S8	1338	116		95		94		85		102	
ICV01	ICV01	1351	110		98		97		94		97	
LLICV	LLICV	1406	106		96		96		95		98	
ICB01	ICB01	1410	104		96		93		92		96	
ICSA01	ICSA01	1413	108		97		96		90		102	
ICSAB01	ICSAB01	1417	107		97		98		90		102	
CCV01	CCV01	1420	108		97		97		89		101	
CCB01	CCB01	1434	99		96		96		94		99	
CRI	CRI	1440	101		98		97		95		99	
ZZZZZZ	ZZZZZZ	1444										
ZZZZZZ	ZZZZZZ	1447										
PB163150BL	PB163150BL	1456	107		99		95		93		98	
PB163150BS	PB163150BS	1512	109		99		99		93		101	
ZZZZZZ	ZZZZZZ	1520										
ZZZZZZ	ZZZZZZ	1523										
P3596-02DUP	918-J-WS-08	1526	110		94		93		88		96	
P3596-02L	918-J-WS-08	1530	111		97		95		93		98	
P3596-02MS	918-J-WS-08	1541	110		95		92		87		96	
CCV02	CCV02	1547	114		98		96		87		101	
CCB02	CCB02	1554	109		97		97		94		100	
P3596-02MSD	918-J-WS-08	1557	108		94		92		88		96	
P3596-02A	918-J-WS-08	1600	111		95		94		87		95	
ZZZZZZ	ZZZZZZ	1603										
ZZZZZZ	ZZZZZZ	1607										
ZZZZZZ	ZZZZZZ	1610										
ZZZZZZ	ZZZZZZ	1613										
P3657-01	917-J-WS-08	1616	109		95		95		89		95	
ZZZZZZ	ZZZZZZ	1620										
ZZZZZZ	ZZZZZZ	1623										

Internal Standard %RI Limit: 70 - 130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: P3657 Sas No.: P3657 SDG No.: P3657

Instrument ID: P7 Start Date : 09/04/2024

Run Number: LB132280 End Date : 09/04/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
ZZZZZZ	ZZZZZZ	1626										
CCV03	CCV03	1630	115		100		98		89		102	
CCB03	CCB03	1646	102		97		96		93		96	

Internal Standard %RI Limit: 70 - 130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: P3657 Sas No.: P3657 SDG No.: P3657

Instrument ID: P7 Start Date : 09/04/2024

Run Number: LB132280 End Date : 09/04/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q	Element 165Ho	Q
S0	S0	1316	100		100		100		100		100	
S2	S2	1319	100		98		101		100		98	
S3	S3	1323	101		100		101		102		100	
S4	S4	1326	100		99		101		102		100	
S5	S5	1329	98		97		100		102		103	
S6	S6	1332	95		97		95		102		103	
S7	S7	1335	95		97		95		104		103	
S8	S8	1338	92		93		88		101		102	
ICV01	ICV01	1351	94		94		97		98		97	
LLICV	LLICV	1406	94		94		98		97		96	
ICB01	ICB01	1410	93		93		96		97		96	
ICSA01	ICSA01	1413	94		95		94		100		100	
ICSAB01	ICSAB01	1417	94		95		94		100		102	
CCV01	CCV01	1420	93		93		91		100		100	
CCB01	CCB01	1434	93		93		95		96		97	
CRI	CRI	1440	94		94		97		98		96	
ZZZZZZ	ZZZZZZ	1444										
ZZZZZZ	ZZZZZZ	1447										
PB163150BL	PB163150BL	1456	92		94		98		99		100	
PB163150BS	PB163150BS	1512	94		95		96		100		101	
ZZZZZZ	ZZZZZZ	1520										
ZZZZZZ	ZZZZZZ	1523										
P3596-02DUP	918-J-WS-08	1526	91		93		95		99		99	
P3596-02L	918-J-WS-08	1530	91		95		96		98		99	
P3596-02MS	918-J-WS-08	1541	90		91		93		99		101	
CCV02	CCV02	1547	91		93		91		100		100	
CCB02	CCB02	1554	94		94		98		99		100	
P3596-02MSD	918-J-WS-08	1557	89		90		91		96		96	
P3596-02A	918-J-WS-08	1600	90		91		94		98		98	
ZZZZZZ	ZZZZZZ	1603										
ZZZZZZ	ZZZZZZ	1607										
ZZZZZZ	ZZZZZZ	1610										
ZZZZZZ	ZZZZZZ	1613										
P3657-01	917-J-WS-08	1616	91		94		96		99		98	
ZZZZZZ	ZZZZZZ	1620										
ZZZZZZ	ZZZZZZ	1623										

Internal Standard %RI Limit: 70 - 130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: P3657 Sas No.: P3657 SDG No.: P3657

Instrument ID: P7 Start Date : 09/04/2024

Run Number: LB132280 End Date : 09/04/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q	Element 165Ho	Q
ZZZZZZ	ZZZZZZ	1626										
CCV03	CCV03	1630	93		94		92		102		103	
CCB03	CCB03	1646	94		94		98		98		98	

Internal Standard %RI Limit: 70 - 130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: P3657 Sas No.: P3657 SDG No.: P3657

Instrument ID: P7 Start Date : 09/04/2024

Run Number: LB132280 End Date : 09/04/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
S0	S0	1316	100		100							
S2	S2	1319	99		101							
S3	S3	1323	99		101							
S4	S4	1326	101		104							
S5	S5	1329	106		105							
S6	S6	1332	105		108							
S7	S7	1335	107		107							
S8	S8	1338	101		99							
ICV01	ICV01	1351	98		100							
LLICV	LLICV	1406	98		101							
ICB01	ICB01	1410	95		98							
ICSA01	ICSA01	1413	102		98							
ICSAB01	ICSAB01	1417	102		101							
CCV01	CCV01	1420	101		101							
CCB01	CCB01	1434	98		101							
CRI	CRI	1440	100		102							
ZZZZZZ	ZZZZZZ	1444										
ZZZZZZ	ZZZZZZ	1447										
PB163150BL	PB163150BL	1456	98		102							
PB163150BS	PB163150BS	1512	100		103							
ZZZZZZ	ZZZZZZ	1520										
ZZZZZZ	ZZZZZZ	1523										
P3596-02DUP	918-J-WS-081	1526	99		98							
P3596-02L	918-J-WS-081	1530	99		105							
P3596-02MS	918-J-WS-081	1541	96		99							
CCV02	CCV02	1547	100		99							
CCB02	CCB02	1554	100		103							
P3596-02MSD	918-J-WS-081	1557	96		96							
P3596-02A	918-J-WS-081	1600	98		100							
ZZZZZZ	ZZZZZZ	1603										
ZZZZZZ	ZZZZZZ	1607										
ZZZZZZ	ZZZZZZ	1610										
ZZZZZZ	ZZZZZZ	1613										
P3657-01	917-J-WS-081	1616	95		100							

Internal Standard %RI Limit: 70 -130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: P3657 Sas No.: P3657 SDG No.: P3657

Instrument ID: P7 Start Date : 09/04/2024

Run Number: LB132280 End Date : 09/04/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
ZZZZZZ	ZZZZZZ	1620										
ZZZZZZ	ZZZZZZ	1623										
ZZZZZZ	ZZZZZZ	1626										
CCV03	CCV03	1630	102		102							
CCB03	CCB03	1646	98		101							

Internal Standard %RI Limit: 70 -130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: P3657 Sas No.: P3657 SDG No.: P3657

Instrument ID: P7 Start Date : 09/04/2024

Run Number: LB132280 End Date : 09/04/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1316	100									
S2	S2	1319	100									
S3	S3	1323	99									
S4	S4	1326	99									
S5	S5	1329	102									
S6	S6	1332	101									
S7	S7	1335	99									
S8	S8	1338	89									
ICV01	ICV01	1351	98									
LLICV	LLICV	1406	92									
ICB01	ICB01	1410	92									
ICSA01	ICSA01	1413	92									
ICSAB01	ICSAB01	1417	89									
CCV01	CCV01	1420	95									
CCB01	CCB01	1434	98									
CRI	CRI	1440	93									
ZZZZZZ	ZZZZZZ	1444										
ZZZZZZ	ZZZZZZ	1447										
PB163150BL	PB163150BL	1456	99									
PB163150BS	PB163150BS	1512	97									
ZZZZZZ	ZZZZZZ	1520										
ZZZZZZ	ZZZZZZ	1523										
P3596-02DUP	918-J-WS-081	1526	96									
P3596-02L	918-J-WS-081	1530	97									
P3596-02MS	918-J-WS-081	1541	98									
CCV02	CCV02	1547	87									
CCB02	CCB02	1554	101									
P3596-02MSD	918-J-WS-081	1557	83									
P3596-02A	918-J-WS-081	1600	91									
ZZZZZZ	ZZZZZZ	1603										
ZZZZZZ	ZZZZZZ	1607										
ZZZZZZ	ZZZZZZ	1610										
ZZZZZZ	ZZZZZZ	1613										
P3657-01	917-J-WS-081	1616	96									

Internal Standard %RI Limit: 70 -130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: P3657 Sas No.: P3657 SDG No.: P3657

Instrument ID: P7 Start Date : 09/04/2024

Run Number: LB132280 End Date : 09/04/2024

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
ZZZZZZ	ZZZZZZ	1620										
ZZZZZZ	ZZZZZZ	1623										
ZZZZZZ	ZZZZZZ	1626										
CCV03	CCV03	1630	97									
CCB03	CCB03	1646	93									

Internal Standard %RI Limit: 70 -130

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

918-J-WS-081324-FDL

Lab Name: Chemtech Consulting Group **Contract:** JACO05

Lab Code: CHEM **Lb No.:** lb132280 **Lab Sample ID :** P3596-02L **SDG No.:** P3657

Matrix (soil/water): Water **Level (low/med):** LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	88.2		2460		2687		P
Antimony	0.23	J	0.80	J	248		P
Arsenic	1.74		3.85	J	121		P
Barium	57.6		253		339		P
Beryllium	1.00	U	0.90	J	100.0		P
Cadmium	1.00	U	2.35	J	100.0		P
Calcium	19100		22100		16		P
Chromium	1.21	J	7.00	J	479		P
Cobalt	0.74	J	9.25		1150		P
Copper	3.59		30.8		758		P
Iron	3340		5680		70		P
Lead	1.75		59.8		3317		P
Magnesium	3440		3670		7		P
Manganese	511		4730		825		P
Nickel	1.28		13.6		963		P
Potassium	2770		2680		3		P
Tin	5.00	U	25.0	U			P
Selenium	5.00	U	25.0	U			P
Molybdenum	5.00	U	25.0	U			P
Silver	1.00	U	5.00	U			P
Sodium	68300		66800		2		P
Thallium	1.00	U	5.00	U			P
Vanadium	0.98	J	8.95	J	813		P
Zinc	36.8		101		176		P
Strontium	129		141		9		P
Titanium	1.40	J	62.8		4382		P

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

1027L

Lab Name: Chemtech Consulting Group **Contract:** JACO05

Lab Code: CHEM **Lb No.:** lb132130 **Lab Sample ID :** P3669-03L **SDG No.:** P3657

Matrix (soil/water): Water **Level (low/med):** LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Mercury	0.24		1.00	U	100.0		CV

METAL PREPARATION & INSTRUMENT DATA

METAL PREPARATION & ANALYICAL SUMMARY

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Method:**

Case No.: P3657 **SAS No.:** P3657

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB162924**						
P3657-01	917-J-WS-081624	SAM	WATER	08/21/2024	30.0	30.0	
P3669-03DUP	1027DUP	DUP	WATER	08/21/2024	30.0	30.0	
P3669-03MS	1027MS	MS	WATER	08/21/2024	30.0	30.0	
P3669-03MSD	1027MSD	MSD	WATER	08/21/2024	30.0	30.0	
PB162924BL	PB162924BL	MB	WATER	08/21/2024	30.0	30.0	
PB162924BS	PB162924BS	LCS	WATER	08/21/2024	30.0	30.0	

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** P3657

Contract: JACO05 **Lab Code:** CHEM **Method:**

Case No.: P3657 **SAS No.:** P3657

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB163150**						
P3596-02DUP	918-J-WS-081324-FDDUP	DUP	WATER	09/04/2024	50.0	50.0	
P3596-02MS	918-J-WS-081324-FDMS	MS	WATER	09/04/2024	50.0	50.0	
P3596-02MSD	918-J-WS-081324-FDMSD	MSD	WATER	09/04/2024	50.0	50.0	
P3657-01	917-J-WS-081624	SAM	WATER	09/04/2024	50.0	50.0	
PB163150BL	PB163150BL	MB	WATER	09/04/2024	50.0	50.0	
PB163150BS	PB163150BS	LCS	WATER	09/04/2024	50.0	50.0	

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

metals
- 14 -
ANALYSIS RUN LOG

Client: JACOBS Engineering Group, Inc. **Contract:** JACO05

Lab code: CHEM **Case no.:** P3657 **Sas no.:** P3657 **Sdg no.:** P3657

Instrument id number: **Method:** **Run number:** LB132130

Start date: 08/22/2024 **End date:** 08/22/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1402	HG
S0.2	S0.2	1	1405	HG
S2.5	S2.5	1	1407	HG
S5	S5	1	1409	HG
S7.5	S7.5	1	1411	HG
S10	S10	1	1422	HG
ICV92	ICV92	1	1426	HG
ICB92	ICB92	1	1428	HG
CCV11	CCV11	1	1430	HG
CCB11	CCB11	1	1433	HG
CRA	CRA	1	1435	HG
CCV12	CCV12	1	1458	HG
CCB12	CCB12	1	1500	HG
CCV13	CCV13	1	1525	HG
CCB13	CCB13	1	1527	HG
PB162924BL	PB162924BL	1	1539	HG
PB162924BS	PB162924BS	1	1542	HG
P3669-03DUP	1027DUP	1	1546	HG
P3669-03MS	1027MS	1	1549	HG
P3669-03MSD	1027MSD	1	1551	HG
P3657-01	917-J-WS-081624	1	1553	HG
CCV14	CCV14	1	1558	HG
CCB14	CCB14	1	1600	HG
P3669-03L	1027L	5	1616	HG
P3669-03A	1027A	1	1618	HG
CCV15	CCV15	1	1620	HG
CCB15	CCB15	1	1623	HG

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

metals
- 14 -
ANALYSIS RUN LOG

Client: JACOBS Engineering Group, Inc. **Contract:** JACO05

Lab code: CHEM **Case no.:** P3657 **Sas no.:** P3657 **Sdg no.:** P3657

Instrument id number: **Method:** **Run number:** LB132280

Start date: 09/04/2024 **End date:** 09/04/2024

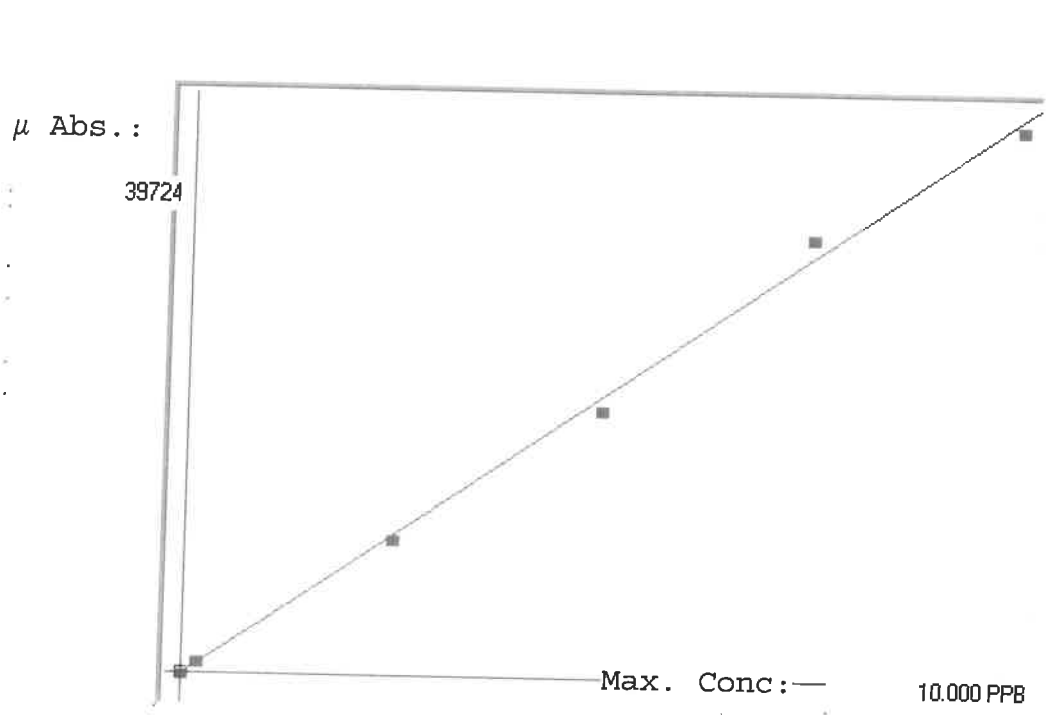
Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1316	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S2	S2	1	1319	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S3	S3	1	1323	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S4	S4	1	1326	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S5	S5	1	1329	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S6	S6	1	1332	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S7	S7	1	1335	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
S8	S8	1	1338	Al,Ca,Fe,K,Mg,Na
ICV01	ICV01	1	1351	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
LLICV	LLICV	1	1406	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
ICB01	ICB01	1	1410	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
ICSA01	ICSA01	1	1413	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
ICSAB01	ICSAB01	1	1417	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCV01	CCV01	1	1420	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCB01	CCB01	1	1434	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CRI	CRI	1	1440	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
PB163150BL	PB163150BL	1	1456	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
PB163150BS	PB163150BS	1	1512	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
P3596-02DUP	918-J-WS-081324-FDDUP	1	1526	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
P3596-02L	918-J-WS-081324-FDL	5	1530	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
P3596-02MS	918-J-WS-081324-FDMS	1	1541	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCV02	CCV02	1	1547	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCB02	CCB02	1	1554	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
P3596-02MSD	918-J-WS-081324-FDMSD	1	1557	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
P3596-02A	918-J-WS-081324-FDA	1	1600	Ag,Mo
P3657-01	917-J-WS-081624	1	1616	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCV03	CCV03	1	1630	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCB03	CCB03	1	1646	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCV04	CCV04	1	1728	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCB04	CCB04	1	1736	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCV05	CCV05	1	1817	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn
CCB05	CCB05	1	1824	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V,Zn

METAL
RAW DATA

Reviewed By:mohan
On:8/23/2024 12:00:44 AM
Inst Id :CV1
LB :LB132130

LB132130

7470A INSTRUMENT ID: CV1



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	0/21)
0.0	0.000	0.033	0.033	34	0.000	34	0				—
0.2	0.200	0.247	0.047	901	0.0 %	901					24
2.5	2.500	2.451	-0.049	9837	0.0 %	9837					-2
5.0	5.000	4.776	-0.224	19262	0.0 %	19262					-4
7.5	7.500	7.869	0.369	31800	0.0 %	31800					5
10.0	10.000	9.824	-0.176	39724	0.0 %	39724					-2

Reviewed By:mohan
On:8/23/2024 12:00:44 AM
Inst Id :CV1
LB :LB132130

LB132130 INSTRUMENT ID : CV1

Method: 7470A Operator: Admin Date of Analysis: 22 Aug 2024 13:46:23

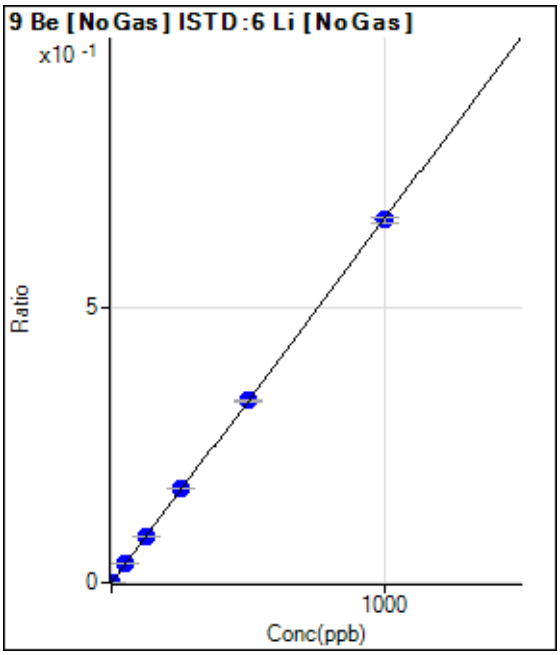
Sample ID	Extended ID	µ Abs	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1	S0	34	-	0.0000	7470A	PPB	22 Aug 2024 14:02:47	S	Std
0.2 - 1	S0-2	901	-	0.2000	7470A	PPB	22 Aug 2024 14:05:04	S	Std
2.5 - 1	S2.5	9837	-	2.5000	7470A	PPB	22 Aug 2024 14:07:20	S	Std
5.0 - 1	S5	19262	-	5.0000	7470A	PPB	22 Aug 2024 14:09:37	S	Std
7.5 - 1	S7.5	31800	-	7.5000	7470A	PPB	22 Aug 2024 14:11:54	S	Std
10.0 - 1	S10	39724	-	10.0000	7470A	PPB	22 Aug 2024 14:22:27	S	Std
ICV92 - 1	ICV92	15240	3.7840		7470A	PPB	22 Aug 2024 14:26:17	U	SMPL
ICB92 - 1	ICB92	-99	-0.0000		7470A	PPB	22 Aug 2024 14:28:32	U	SMPL
CCV11 - 1	CCV11	19985	4.9545		7470A	PPB	22 Aug 2024 14:30:48	U	SMPL
CCB11 - 1	CCB11	-131	-0.0079		7470A	PPB	22 Aug 2024 14:33:03	U	SMPL
CRA - 1	CRA	848	0.2336		7470A	PPB	22 Aug 2024 14:35:19	U	SMPL
HighStd - 1	HighStd	39850	9.8551		7470A	PPB	22 Aug 2024 14:37:34	U	SMPL
ChkStd - 1	ChkStd	29336	7.2614		7470A	PPB	22 Aug 2024 14:39:49	U	SMPL
PB162892BL - 1	PBW	-237	-0.0340		7470A	PPB	22 Aug 2024 14:42:07	U	SMPL
PB162892BS - 1	LCSW	17519	4.3462		7470A	PPB	22 Aug 2024 14:44:25	U	SMPL
P3669-05 - 1	20430	-183	-0.0207		7470A	PPB	22 Aug 2024 14:46:42	U	SMPL
P3684-03 - 1	D3646	-66	0.0081		7470A	PPB	22 Aug 2024 14:48:59	U	SMPL
P3684-04 - 1	D3638	-8	0.0224		7470A	PPB	22 Aug 2024 14:51:16	U	SMPL
P3684-06 - 1	D3564	366	0.1147		7470A	PPB	22 Aug 2024 14:53:32	U	SMPL
P3685-02 - 1	Stock Pile-1	-78	0.0052		7470A	PPB	22 Aug 2024 14:55:48	U	SMPL
CCV12 - 1	CCV12	19465	4.8263		7470A	PPB	22 Aug 2024 14:58:02	U	SMPL
CCB12 - 1	CCB12	-142	-0.0106		7470A	PPB	22 Aug 2024 15:00:18	U	SMPL
P3685-04 - 1	Stock Pile-2	-16	0.0205		7470A	PPB	22 Aug 2024 15:02:35	U	SMPL
P3685-04DUP - 1	Stock Pile-2DUP	0	0.0244		7470A	PPB	22 Aug 2024 15:04:50	U	SMPL
P3685-04MS - 1	Stock Pile-2MS	14573	3.6195		7470A	PPB	22 Aug 2024 15:07:05	U	SMPL
P3685-04MSD - 1	Stock Pile-2MSD	14335	3.5607		7470A	PPB	22 Aug 2024 15:09:20	U	SMPL
PB162896BL - 1	PBW	-173	-0.0183		7470A	PPB	22 Aug 2024 15:11:38	U	SMPL
P3684-08 - 1	T3650	-58	0.0101		7470A	PPB	22 Aug 2024 15:16:11	U	SMPL
P3684-09 - 1	D3643	11	0.0271		7470A	PPB	22 Aug 2024 15:18:28	U	SMPL
P3684-10 - 1	D3637	0	0.0244		7470A	PPB	22 Aug 2024 15:20:45	U	SMPL
P3684-10DUP - 1	D3637DUP	12	0.0274		7470A	PPB	22 Aug 2024 15:23:00	U	SMPL
CCV13 - 1	CCV13	20353	5.0453		7470A	PPB	22 Aug 2024 15:25:15	U	SMPL
CCB13 - 1	CCB13	-144	-0.0111		7470A	PPB	22 Aug 2024 15:27:31	U	SMPL
P3684-10MS - 1	D3637MS	15656	3.8866		7470A	PPB	22 Aug 2024 15:35:25	U	SMPL
P3684-10MSD - 1	D3637MSD	15617	3.8770		7470A	PPB	22 Aug 2024 15:37:40	U	SMPL
PB162924BL - 1	PBW	-177	-0.0192		7470A	PPB	22 Aug 2024 15:39:57	U	SMPL
PB162924BS - 1	LCSW	14978	3.7194		7470A	PPB	22 Aug 2024 15:42:13	U	SMPL
P3669-03 - 1	1027	861	0.2368		7470A	PPB	22 Aug 2024 15:44:29	U	SMPL
P3669-03DUP - 1	1027DUP	773	0.2151		7470A	PPB	22 Aug 2024 15:46:47	U	SMPL
P3669-03MS - 1	1027MS	11868	2.9522		7470A	PPB	22 Aug 2024 15:49:04	U	SMPL
P3669-03MSD - 1	1027MSD	11180	2.7824		7470A	PPB	22 Aug 2024 15:51:21	U	SMPL
P3657-01 - 1	917-J-WS-081624	-107	-0.0020		7470A	PPB	22 Aug 2024 15:53:40	U	SMPL
PB162896BS - 1	LCSW	15488	3.8452		7470A	PPB	22 Aug 2024 15:55:57	U	SMPL
CCV14 - 1	CCV14	18546	4.5996		7470A	PPB	22 Aug 2024 15:58:12	U	SMPL
CCB14 - 1	CCB14	-105	-0.0015		7470A	PPB	22 Aug 2024 16:00:29	U	SMPL
PB162871TB - 1	PB162871TB	-12	0.0215		7470A	PPB	22 Aug 2024 16:02:47	U	SMPL
PB162873TB - 1	PB162873TB	24	0.0303		7470A	PPB	22 Aug 2024 16:05:02	U	SMPL
P3685-04LX5 - 1		5	0.0257		7470A	PPB	22 Aug 2024 16:07:17	U	SMPL
P3685-04A - 1		15245	3.7852		7470A	PPB	22 Aug 2024 16:09:33	U	SMPL
P3684-10LX5 - 1		-152	-0.0131		7470A	PPB	22 Aug 2024 16:11:48	U	SMPL
P3684-10A - 1		17589	4.3635		7470A	PPB	22 Aug 2024 16:14:06	U	SMPL
P3669-03LX5 - 1		-3	0.0237		7470A	PPB	22 Aug 2024 16:16:21	U	SMPL
P3669-03A - 1		15312	3.8018		7470A	PPB	22 Aug 2024 16:18:40	U	SMPL
CCV15 - 1	CCV15	19825	4.9151		7470A	PPB	22 Aug 2024 16:20:57	U	SMPL
CCB15 - 1	CCB15	-222	-0.0303		7470A	PPB	22 Aug 2024 16:23:14	U	SMPL

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7090424-MS.b\
Analysis File: P7090424-MS.batch.bin
DA Date-Time: 2024-09-04 17:15:43
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2024-09-04 13:16:37
2	005CALS.d	S02	2024-09-04 13:19:59
3	006CALS.d	S03	2024-09-04 13:23:22
4	007CALS.d	S04	2024-09-04 13:26:40
5	008CALS.d	S05	2024-09-04 13:29:54
6	009CALS.d	S06	2024-09-04 13:32:58
7	010CALS.d	S07	2024-09-04 13:35:58
8	011CALS.d	S08	2024-09-04 13:38:51

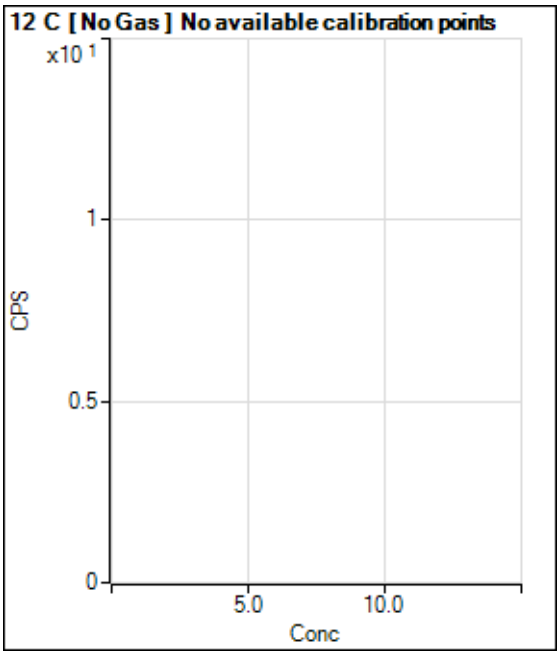
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.45	0.0000	P	47.3
2	☐	1.000	0.969	488.90	0.0007	P	7.0
3	☐	50.000	52.267	26248.92	0.0345	P	1.2
4	☐	125.000	128.026	67711.13	0.0845	P	1.5
5	☐	250.000	256.601	142290.32	0.1692	P	0.2
6	☐	500.000	501.275	285866.65	0.3306	P	1.3
7	☐	1000.000	997.221	566386.59	0.6577	P	1.3
8	☐			211.11	0.0002	P	22.9

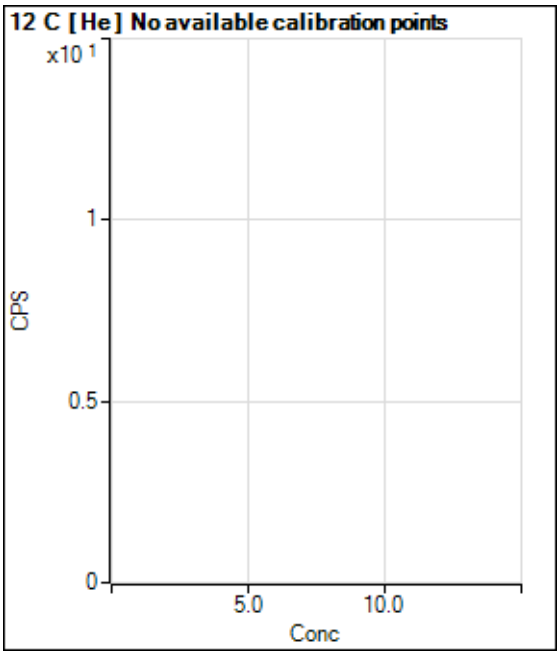
y = 6.5948E-004 * x + 1.9464E-005
R = 1.0000
DL = 0.04192
BEC = 0.02951

Weight: <None>
Min Conc: 0

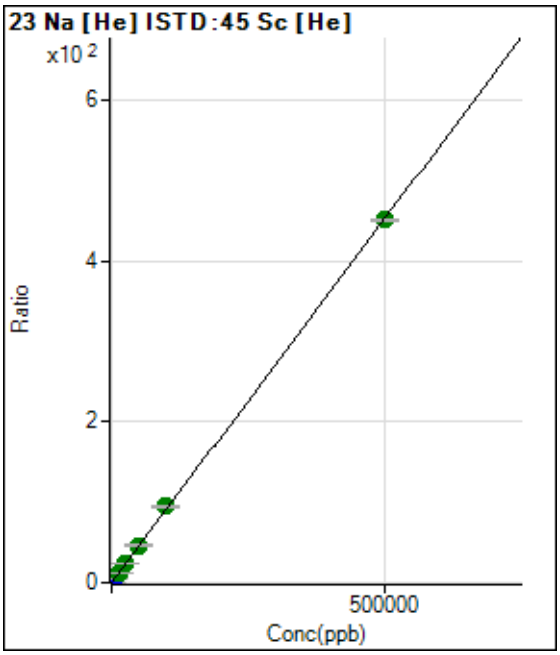


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

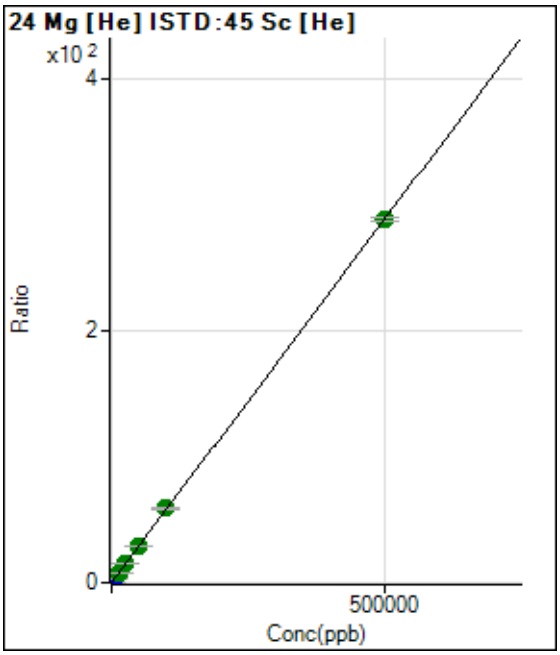


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9598.62	0.0561	P	0.3
2	☐	500.000	528.912	91885.21	0.5351	P	0.0
3	☐	5000.000	5497.872	870410.53	5.0354	P	1.1
4	☐	12500.000	12752.500	1979302.02	11.6057	A	2.3
5	☐	25000.000	25479.519	3860631.02	23.1322	A	1.0
6	☐	50000.000	51409.240	7557945.09	46.6161	A	0.8
7	☐	100000.00	104799.54	15396707.96	94.9703	A	1.6
8	☐	500000.00	498863.87	71121081.16	451.8639	A	0.8

y = 9.0567E-004 * x + 0.0561
R = 0.9999
DL = 0.6282
BEC = 61.97

Weight: <None>
Min Conc: 0

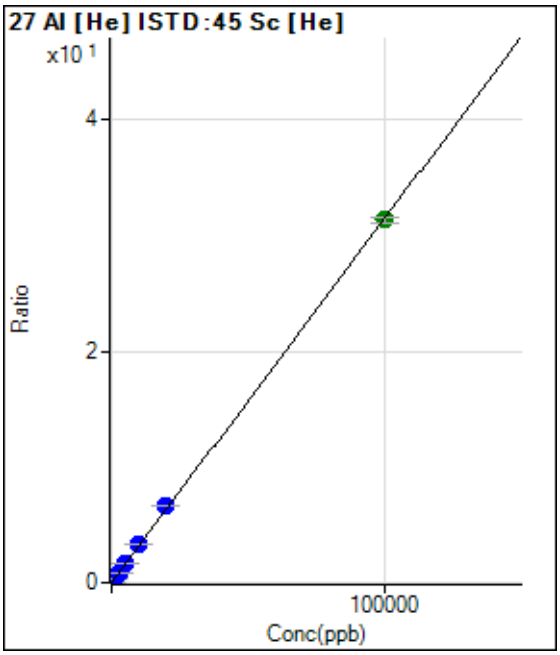
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	232.22	0.0014	P	10.6
2	☐	500.000	523.001	52072.15	0.3033	P	0.9
3	☐	5000.000	5411.779	540307.22	3.1257	P	0.5
4	☐	12500.000	12521.193	1233304.16	7.2301	A	0.8
5	☐	25000.000	25887.518	2494531.33	14.9467	A	1.1
6	☐	50000.000	50940.574	4767577.08	29.4103	A	1.8
7	☐	100000.00	102734.51	9615652.57	59.3119	A	1.8
8	☐	500000.00	499309.99	45371050.43	288.2622	A	1.0

y = 5.7732E-004 * x + 0.0014
R = 1.0000
DL = 0.7501
BEC = 2.352

Weight: <None>
Min Conc: 0

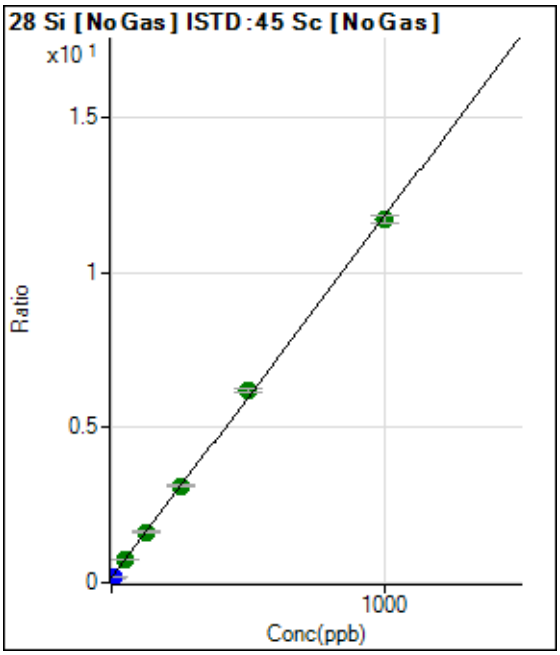


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.66	0.0004	P	23.1
2	☐	20.000	19.477	1118.94	0.0065	P	2.6
3	☐	1000.000	1051.565	57254.22	0.3312	P	0.4
4	☐	2500.000	2609.221	140067.41	0.8213	P	1.7
5	☐	5000.000	5232.668	274805.97	1.6466	P	0.8
6	☐	10000.000	10601.628	540792.18	3.3357	P	0.6
7	☐	20000.000	21218.720	1082315.47	6.6758	P	0.5
8	☐	100000.00	99681.214	4935875.79	31.3601	A	1.4

y = 3.1460E-004 * x + 3.8992E-004
R = 0.9999
DL = 0.8592
BEC = 1.239

Weight: <None>
Min Conc: 0

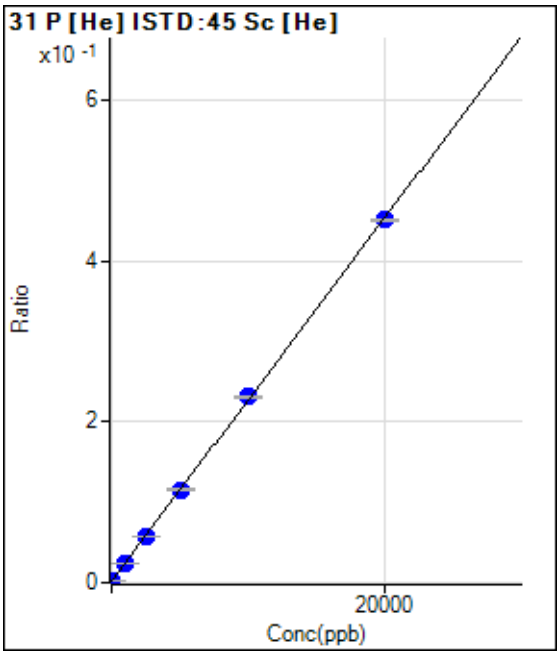
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	317720.94	0.1552	P	0.6
2	☐	10.000	0.221	321456.34	0.1577	P	1.0
3	☐	50.000	52.251	1572952.98	0.7650	A	1.5
4	☐	125.000	127.172	3389892.00	1.6394	A	2.3
5	☐	250.000	254.579	6599362.19	3.1263	A	1.6
6	☐	500.000	517.789	12633736.34	6.1982	A	1.5
7	☐	1000.000	989.675	24601979.36	11.7055	A	2.1
8	☐			493231.46	0.2539	P	4.9

y = 0.0117 * x + 0.1552
R = 0.9997
DL = 0.233
BEC = 13.29

Weight: <None>
Min Conc: 0

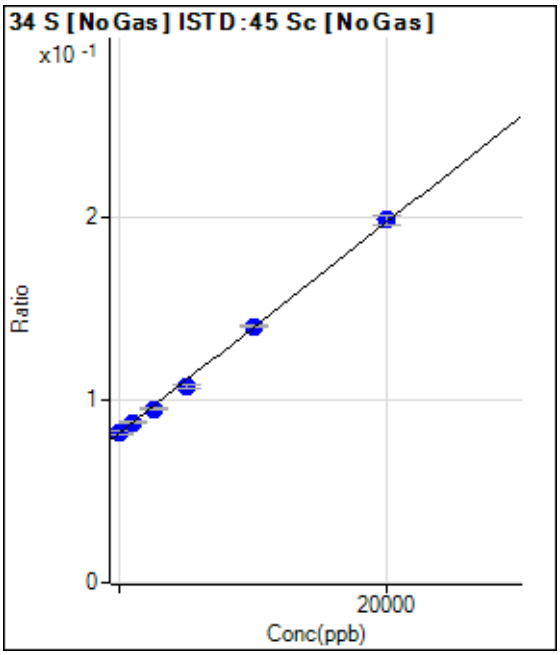


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-11.764	253.34	0.0015	P	7.8
2	☐	0.000	11.764	345.57	0.0020	P	8.4
3	☐	1000.000	985.622	4147.26	0.0240	P	2.3
4	☐	2500.000	2499.331	9919.96	0.0582	P	1.2
5	☐	5000.000	5009.659	19161.01	0.1148	P	2.1
6	☐	10000.000	10176.663	37523.69	0.2314	P	0.7
7	☐	20000.000	19910.056	73134.65	0.4511	P	0.5
8	☐			247.78	0.0016	P	15.7

y = 2.2569E-005 * x + 0.0017
R = 0.9999
DL = 18.93
BEC = 77.39

Weight: <None>
Min Conc: 0

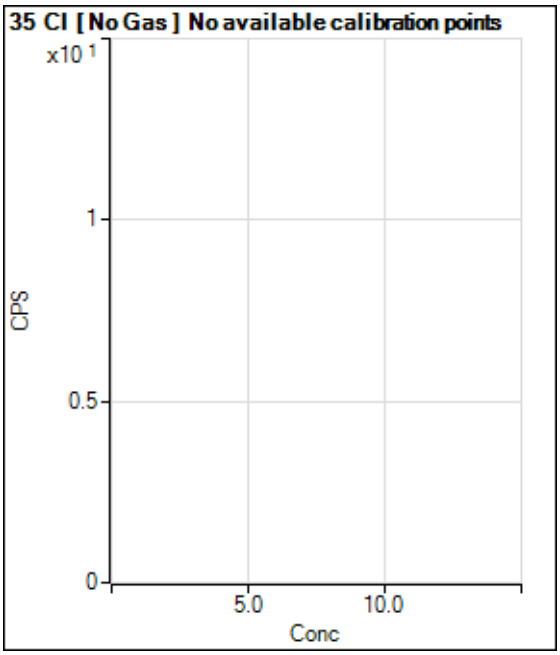
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-8.285	167785.37	0.0819	P	0.7
2	☐	0.000	8.285	167169.38	0.0820	P	1.5
3	☐	1000.000	1009.559	180580.99	0.0878	P	0.4
4	☐	2500.000	2219.499	196054.66	0.0948	P	1.3
5	☐	5000.000	4329.515	225867.95	0.1070	P	2.2
6	☐	10000.000	10074.896	285793.68	0.1402	P	0.9
7	☐	20000.000	20164.758	417195.31	0.1985	P	2.7
8	☐			157431.29	0.0810	P	1.9

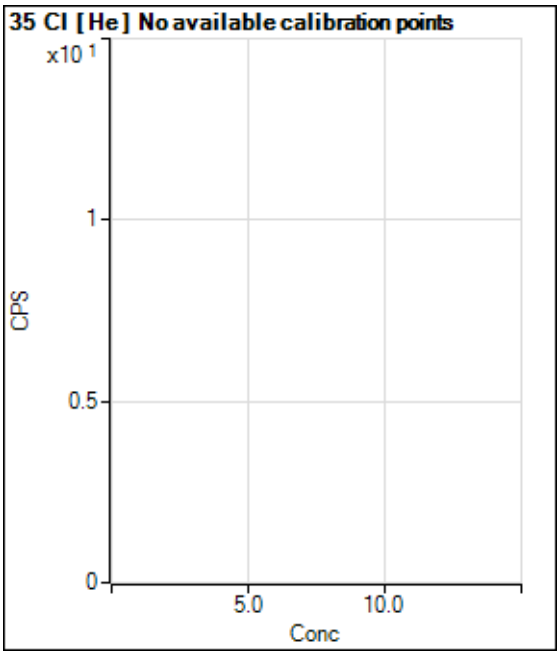
y = 5.7792E-006 * x + 0.0820
R = 0.9993
DL = 460.6
BEC = 1.419E+04

Weight: <None>
Min Conc: 0

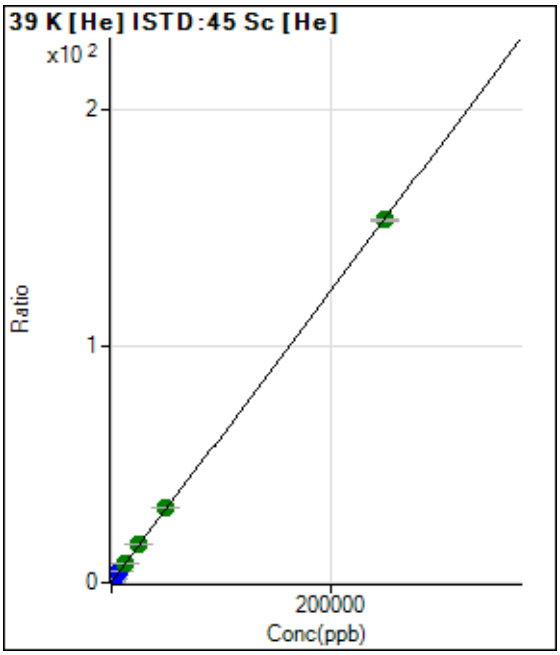


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

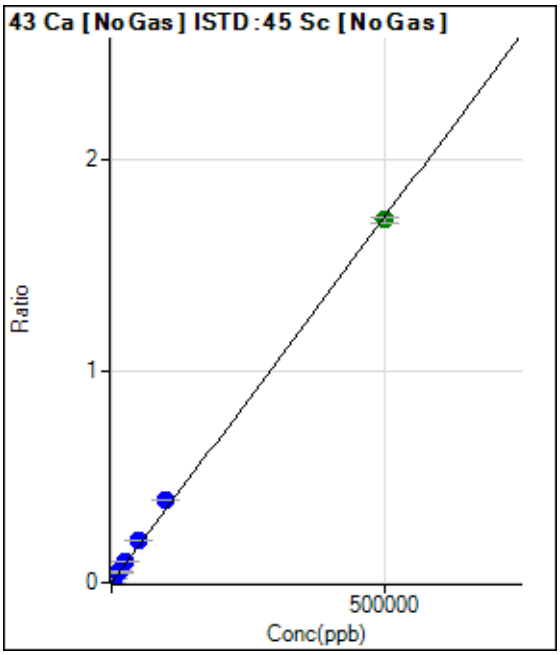


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52809.08	0.3088	P	0.8
2	☐	500.000	538.922	109740.59	0.6392	P	1.6
3	☐	2500.000	2768.118	346772.93	2.0061	P	0.6
4	☐	6250.000	6984.720	783190.88	4.5915	P	0.6
5	☐	12500.000	12950.865	1376828.24	8.2496	A	1.8
6	☐	25000.000	26106.171	2645169.06	16.3158	A	0.7
7	☐	50000.000	51077.330	5127415.69	31.6270	A	1.4
8	☐	250000.00	249630.24	24140068.53	153.3701	A	0.4

y = 6.1315E-004 * x + 0.3088
R = 1.0000
DL = 11.83
BEC = 503.6

Weight: <None>
Min Conc: 0

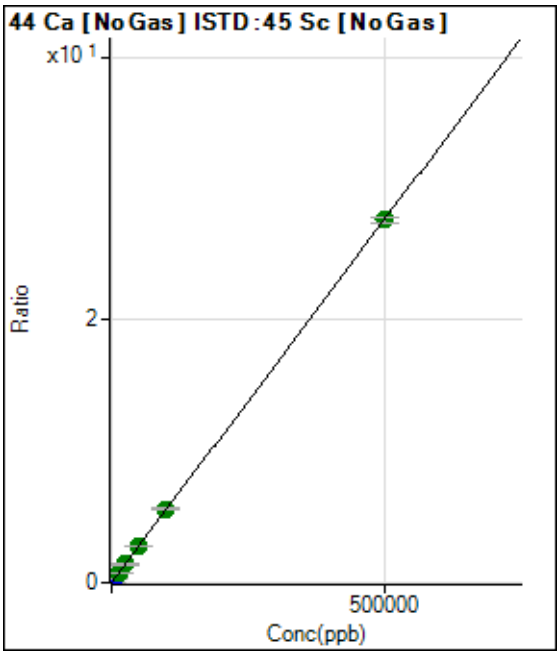
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	471.12	0.0002	P	8.4
2	☐	500.000	542.039	4278.42	0.0021	P	1.0
3	☐	5000.000	5780.384	41462.21	0.0202	P	1.2
4	☐	12500.000	14437.760	103430.68	0.0500	P	0.5
5	☐	25000.000	28223.852	205923.64	0.0976	P	2.1
6	☐	50000.000	57664.086	405799.47	0.1991	P	0.6
7	☐	100000.00	112839.87	818386.99	0.3894	P	1.9
8	☐	500000.00	496448.13	3327222.97	1.7122	A	1.6

y = 3.4485E-006 * x + 2.3014E-004
R = 0.9996
DL = 16.81
BEC = 66.74

Weight: <None>
Min Conc: 0

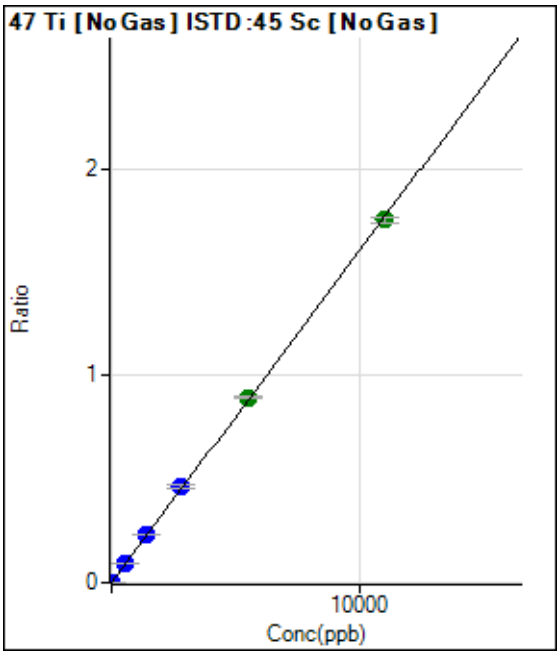


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15520.29	0.0076	P	2.7
2	☐	500.000	526.374	74788.97	0.0367	P	1.1
3	☐	5000.000	5569.841	649170.24	0.3157	P	1.1
4	☐	12500.000	12834.991	1483970.17	0.7176	A	1.2
5	☐	25000.000	25141.762	2950885.58	1.3984	A	4.0
6	☐	50000.000	50925.433	5758095.68	2.8248	A	1.0
7	☐	100000.00	101710.92	11842553.57	5.6343	A	1.9
8	☐	500000.00	499544.08	53716632.53	27.6429	A	1.6

y = 5.5321E-005 * x + 0.0076
R = 1.0000
DL = 11.15
BEC = 137

Weight: <None>
Min Conc: 0

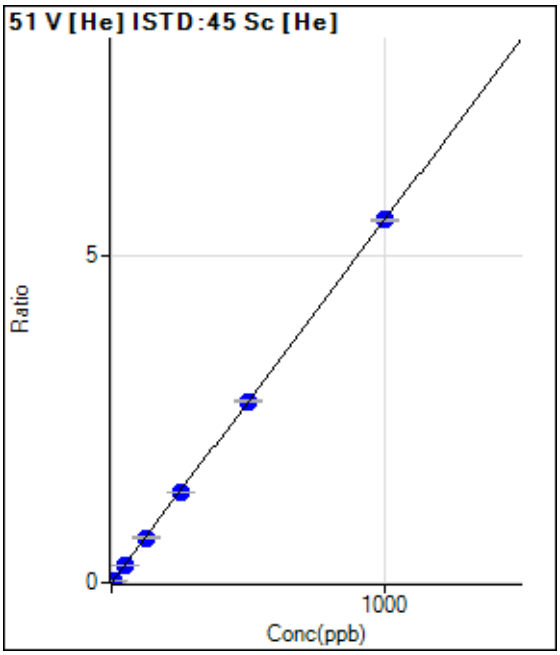
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	107.78	0.0001	P	12.9
2	☐	5.000	5.439	1886.80	0.0009	P	4.1
3	☐	550.000	593.464	196032.83	0.0953	P	0.4
4	☐	1375.000	1470.726	488403.31	0.2362	P	0.2
5	☐	2750.000	2893.756	980598.59	0.4647	P	3.2
6	☐	5500.000	5563.763	1820977.53	0.8933	A	1.1
7	☐	11000.000	10918.040	3684553.63	1.7530	A	1.9
8	☐			1081.16	0.0006	P	17.5

y = 1.6056E-004 * x + 5.2650E-005
R = 0.9999
DL = 0.1271
BEC = 0.3279

Weight: <None>
Min Conc: 0

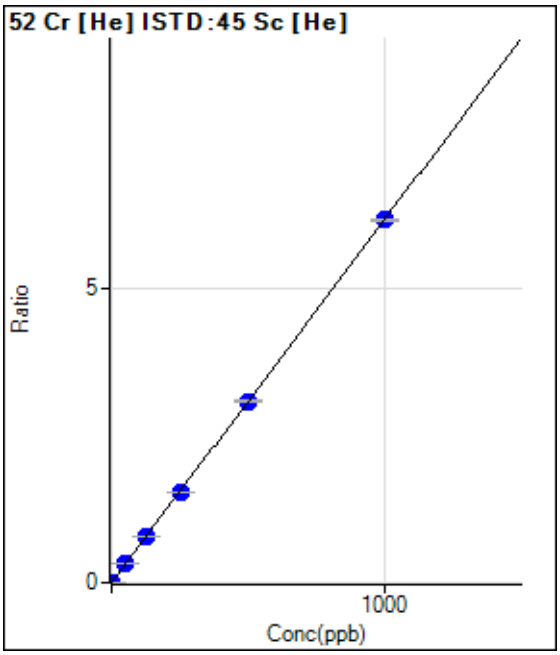


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	173.
2	☐	5.000	4.914	4669.65	0.0272	P	3.1
3	☐	50.000	48.897	46767.94	0.2706	P	0.6
4	☐	125.000	124.393	117413.46	0.6883	P	0.5
5	☐	250.000	247.997	229001.73	1.3721	P	0.8
6	☐	500.000	499.642	448160.96	2.7645	P	1.2
7	☐	1000.000	1000.811	897757.04	5.5373	P	0.4
8	☐			375.56	0.0024	P	11.5

y = 0.0055 * x + 1.3037E-005
R = 1.0000
DL = 0.01224
BEC = 0.002356

Weight: <None>
Min Conc: 0

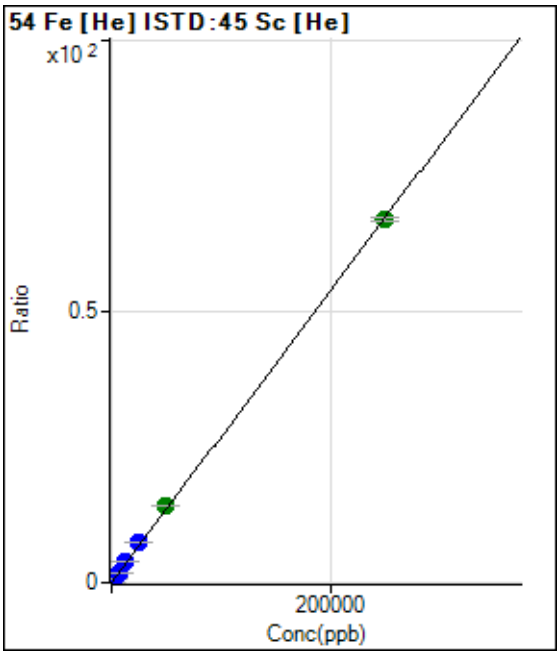
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	224.45	0.0013	P	15.4
2	☐	2.000	1.914	2247.97	0.0131	P	1.7
3	☐	50.000	50.504	53971.78	0.3122	P	1.4
4	☐	125.000	125.807	132327.42	0.7758	P	1.5
5	☐	250.000	249.769	256841.41	1.5390	P	0.9
6	☐	500.000	500.551	499745.25	3.0828	P	1.7
7	☐	1000.000	999.656	997955.26	6.1554	P	0.3
8	☐			4452.92	0.0283	P	4.5

y = 0.0062 * x + 0.0013
R = 1.0000
DL = 0.09853
BEC = 0.2132

Weight: <None>
Min Conc: 0

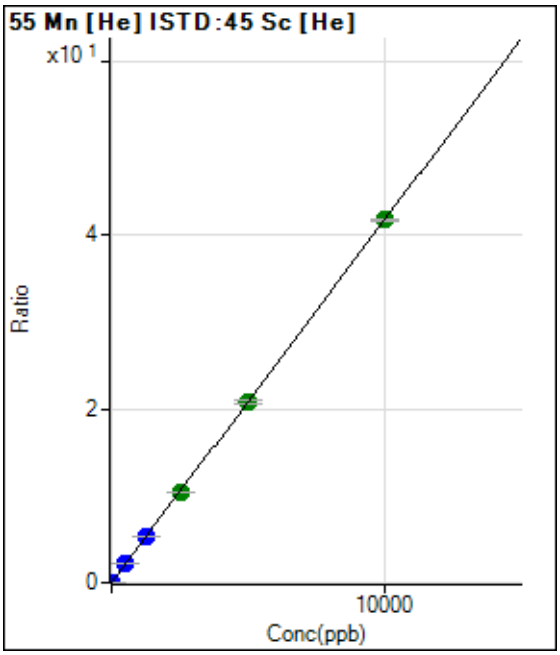


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1025.60	0.0060	P	5.6
2	☐	50.000	55.185	3576.01	0.0208	P	0.6
3	☐	2500.000	2829.468	132488.64	0.7665	P	1.0
4	☐	6250.000	7052.779	324321.88	1.9015	P	1.4
5	☐	12500.000	14059.672	631645.12	3.7847	P	0.4
6	☐	25000.000	28159.602	1227903.70	7.5742	P	1.2
7	☐	50000.000	52555.090	2291006.76	14.1308	A	0.9
8	☐	250000.00	249071.67	10537380.54	66.9471	A	1.1

y = 2.6876E-004 * x + 0.0060
R = 0.9999
DL = 3.75
BEC = 22.31

Weight: <None>
Min Conc: 0

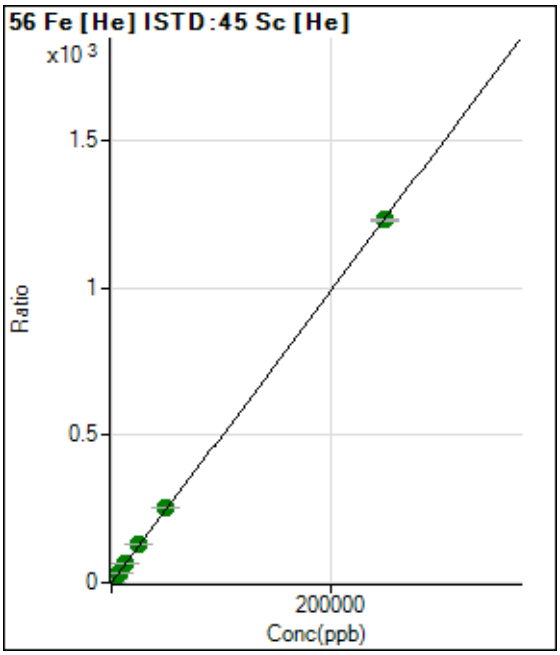
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	253.34	0.0015	P	9.2
2	☐	1.000	0.984	960.04	0.0056	P	6.8
3	☐	500.000	515.861	372716.07	2.1563	P	1.5
4	☐	1250.000	1289.067	918637.69	5.3860	P	1.3
5	☐	2500.000	2486.132	1733391.76	10.3862	A	0.8
6	☐	5000.000	4987.207	3377359.88	20.8333	A	1.3
7	☐	10000.000	10004.187	6775066.92	41.7894	A	0.8
8	☐			3952.78	0.0251	P	3.0

y = 0.0042 * x + 0.0015
R = 1.0000
DL = 0.09736
BEC = 0.3546

Weight: <None>
Min Conc: 0

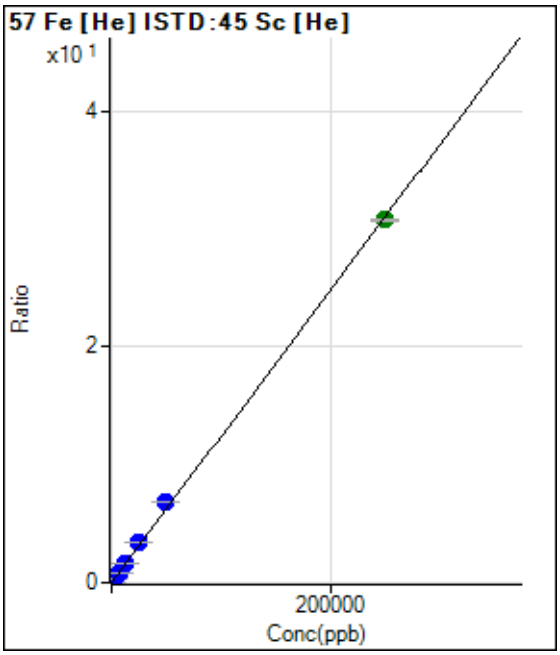


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4888.62	0.0286	P	4.0
2	☐	50.000	53.774	50506.88	0.2942	P	1.7
3	☐	2500.000	2579.279	2207298.61	12.7687	A	1.3
4	☐	6250.000	6394.872	5391316.69	31.6155	A	3.0
5	☐	12500.000	13133.388	10831344.35	64.8998	A	1.8
6	☐	25000.000	25995.536	20821961.63	128.4313	A	1.2
7	☐	50000.000	51510.828	41254295.77	254.4619	A	1.7
8	☐	250000.00	249562.19	194025830.4	1,232.719	A	0.5

y = 0.0049 * x + 0.0286
R = 1.0000
DL = 0.6994
BEC = 5.787

Weight: <None>
Min Conc: 0

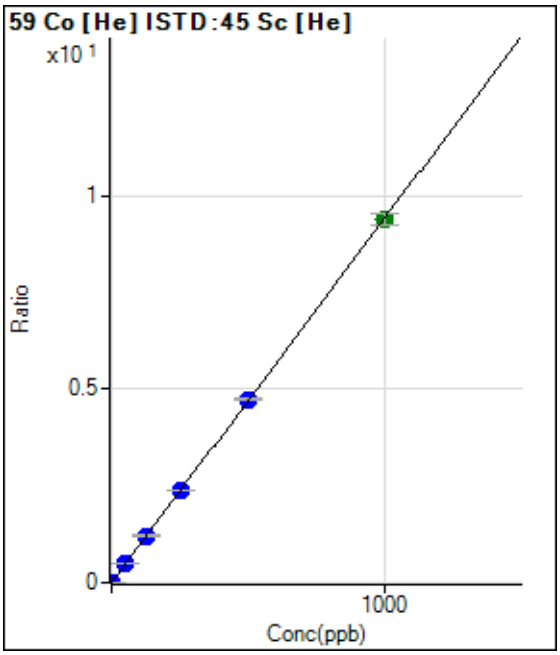
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1627.88	0.0095	P	5.3
2	☐	50.000	58.292	2870.31	0.0167	P	6.7
3	☐	2500.000	2757.662	60560.33	0.3504	P	1.6
4	☐	6250.000	6889.714	146861.44	0.8611	P	1.5
5	☐	12500.000	13698.578	284155.31	1.7026	P	0.1
6	☐	25000.000	27576.421	554095.68	3.4179	P	1.0
7	☐	50000.000	55103.986	1105732.25	6.8201	P	1.0
8	☐	250000.00	248643.06	4838521.00	30.7408	A	0.6

y = 1.2360E-004 * x + 0.0095
R = 0.9998
DL = 12.13
BEC = 77.01

Weight: <None>
Min Conc: 0

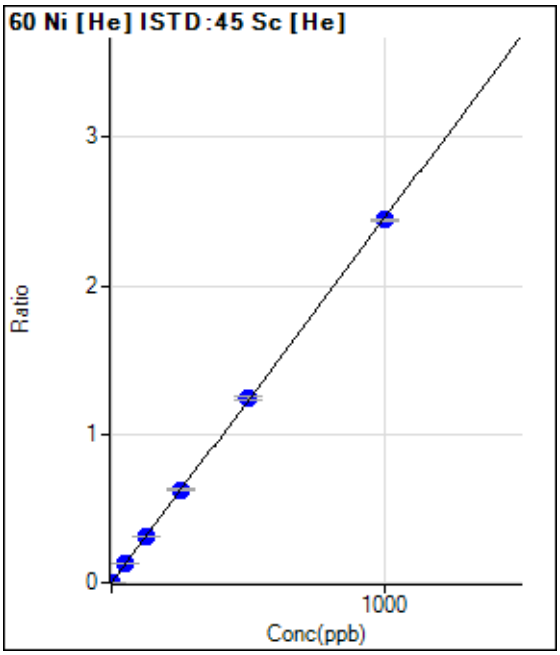


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0003	P	17.6
2	☐	1.000	1.081	1802.35	0.0105	P	7.0
3	☐	50.000	51.218	83329.85	0.4821	P	0.7
4	☐	125.000	128.615	206387.37	1.2100	P	1.3
5	☐	250.000	254.569	399663.02	2.3947	P	0.6
6	☐	500.000	504.171	768857.46	4.7424	P	0.6
7	☐	1000.000	996.259	1519246.49	9.3708	A	3.2
8	☐			3846.09	0.0244	P	2.8

y = 0.0094 * x + 3.2494E-004
R = 1.0000
DL = 0.01823
BEC = 0.03455

Weight: <None>
Min Conc: 0

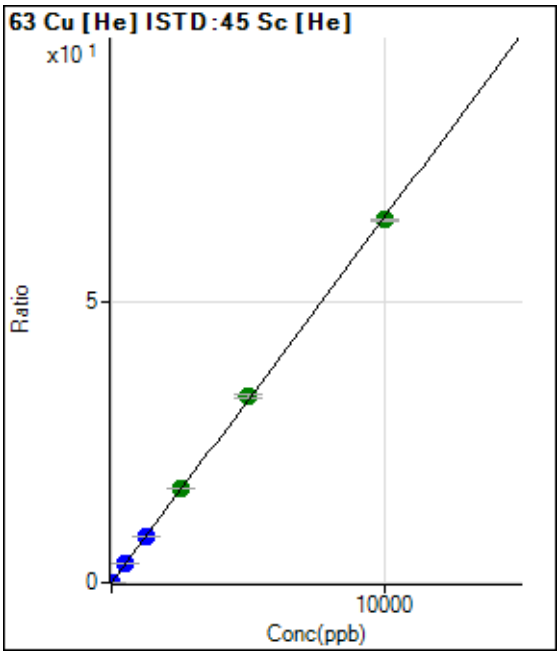
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0005	P	24.2
2	☐	1.000	1.058	524.46	0.0031	P	8.1
3	☐	50.000	51.606	21972.87	0.1271	P	1.9
4	☐	125.000	127.767	53560.78	0.3140	P	1.8
5	☐	250.000	254.226	104211.49	0.6244	P	1.5
6	☐	500.000	506.001	201402.54	1.2424	P	1.3
7	☐	1000.000	995.517	396209.14	2.4438	P	0.6
8	☐			1871.25	0.0119	P	8.7

y = 0.0025 * x + 4.5463E-004
R = 1.0000
DL = 0.1343
BEC = 0.1852

Weight: <None>
Min Conc: 0

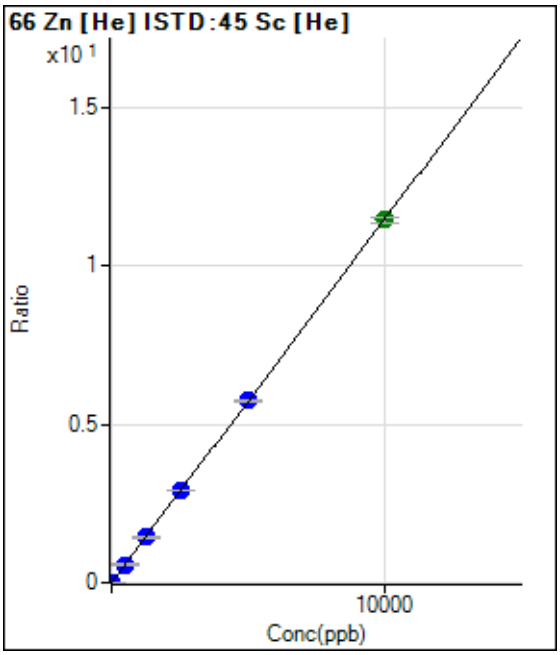


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	650.02	0.0038	P	6.0
2	☐	2.000	1.957	2839.19	0.0165	P	0.6
3	☐	500.000	512.588	577117.76	3.3386	P	0.4
4	☐	1250.000	1275.006	1415350.20	8.2987	P	1.9
5	☐	2500.000	2566.628	2787416.00	16.7017	A	0.5
6	☐	5000.000	5102.475	5381501.10	33.1994	A	2.8
7	☐	10000.000	9928.350	10472787.83	64.5954	A	0.6
8	☐			3221.49	0.0205	P	1.4

y = 0.0065 * x + 0.0038
R = 0.9999
DL = 0.105
BEC = 0.5842

Weight: <None>
Min Conc: 0

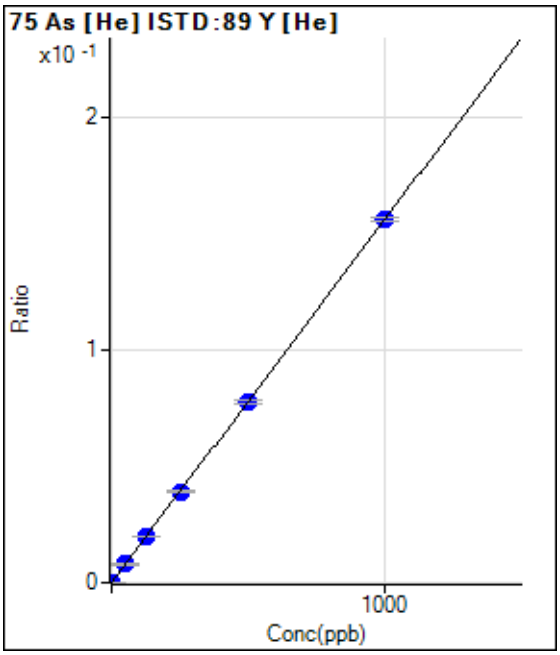
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	277.78	0.0016	P	8.0
2	☐	5.000	4.839	1230.06	0.0072	P	6.7
3	☐	500.000	501.225	99540.32	0.5758	P	1.3
4	☐	1250.000	1252.440	244982.57	1.4364	P	2.0
5	☐	2500.000	2519.142	481926.59	2.8876	P	0.2
6	☐	5000.000	5008.839	930499.46	5.7399	P	1.4
7	☐	10000.000	9990.429	1855842.02	11.4469	A	1.3
8	☐			995.60	0.0063	P	5.3

y = 0.0011 * x + 0.0016
R = 1.0000
DL = 0.3419
BEC = 1.418

Weight: <None>
Min Conc: 0

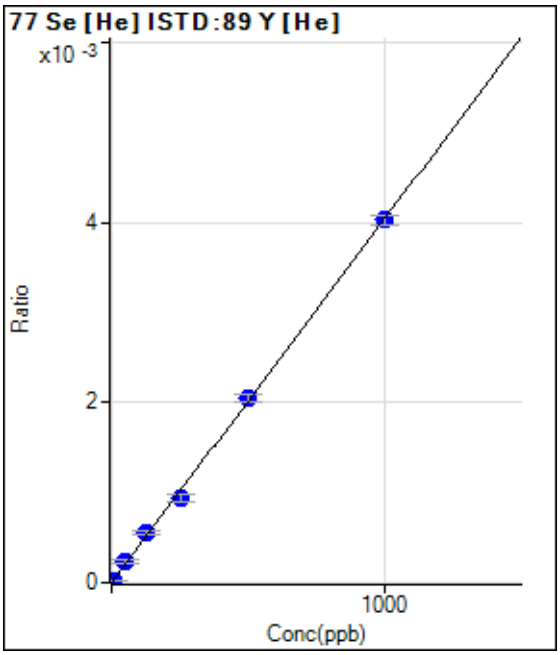


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.56	0.0000	P	91.5
2	☐	1.000	0.875	147.78	0.0001	P	14.2
3	☐	50.000	50.410	8362.43	0.0079	P	3.6
4	☐	125.000	127.052	20845.80	0.0198	P	1.1
5	☐	250.000	251.571	40753.64	0.0393	P	1.1
6	☐	500.000	498.340	80140.51	0.0778	P	1.5
7	☐	1000.000	1000.160	161418.58	0.1561	P	1.0
8	☐			115.56	0.0001	P	10.7

y = 1.5606E-004 * x + 5.2082E-006
R = 1.0000
DL = 0.09166
BEC = 0.03337

Weight: <None>
Min Conc: 0

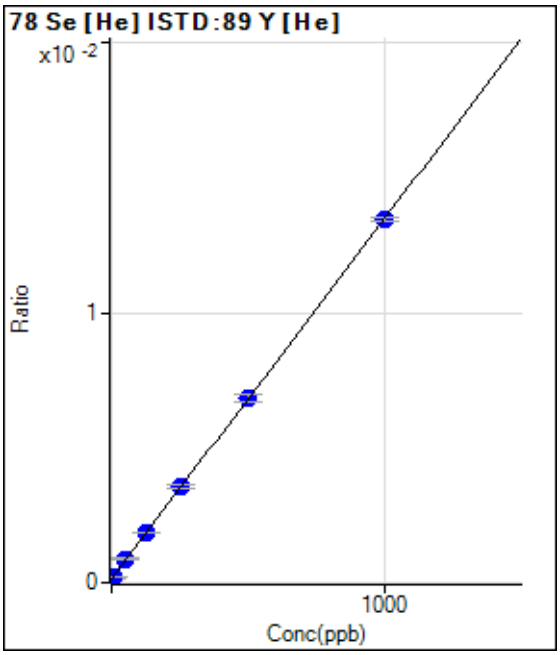
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	6.350	26.67	0.0000	P	13.4
3	☐	50.000	58.096	248.89	0.0002	P	9.5
4	☐	125.000	138.875	588.91	0.0006	P	7.2
5	☐	250.000	234.616	982.26	0.0009	P	9.2
6	☐	500.000	507.942	2112.39	0.0020	P	4.2
7	☐	1000.000	997.729	4163.97	0.0040	P	2.7
8	☐			1.11	0.0000	P	173.

y = 4.0350E-006 * x + 0.0000E+000
R = 0.9997
DL = 0
BEC = 0

Weight: <None>
Min Conc: 0

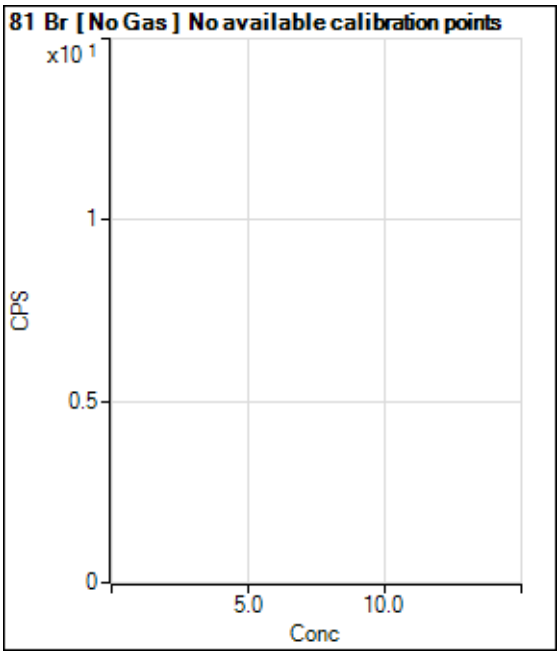


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	142.22	0.0001	P	7.8
2	☐	5.000	5.575	216.67	0.0002	P	3.3
3	☐	50.000	56.124	937.82	0.0009	P	7.2
4	☐	125.000	129.710	1961.26	0.0019	P	2.3
5	☐	250.000	258.965	3728.28	0.0036	P	4.0
6	☐	500.000	501.085	7032.84	0.0068	P	3.5
7	☐	1000.000	996.318	13899.95	0.0134	P	1.2
8	☐			156.67	0.0002	P	20.1

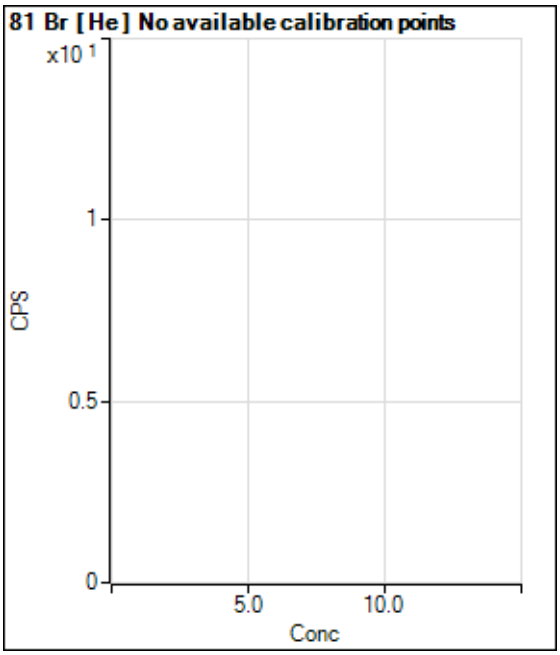
y = 1.3357E-005 * x + 1.3353E-004
R = 0.9999
DL = 2.339
BEC = 9.996

Weight: <None>
Min Conc: 0

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

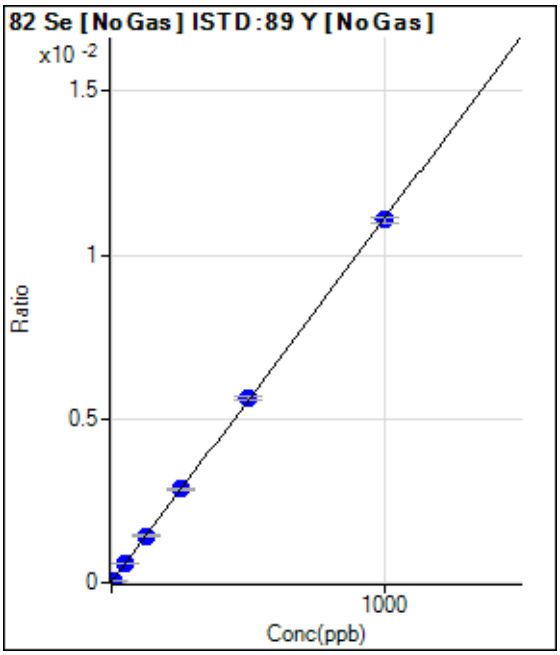


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4336.23		P	0.4
2	☐			4281.77		P	2.1
3	☐			4362.90		P	4.4
4	☐			4139.51		P	1.6
5	☐			4166.19		P	3.6
6	☐			3916.10		P	0.3
7	☐			3980.57		P	2.4
8	☐			4129.51		P	1.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			31.11		P	22.3
2	☐			37.78		P	22.2
3	☐			26.67		P	33.1
4	☐			26.67		P	37.5
5	☐			26.67		P	37.5
6	☐			22.22		P	31.2
7	☐			17.78		P	28.6
8	☐			44.44		P	26.3

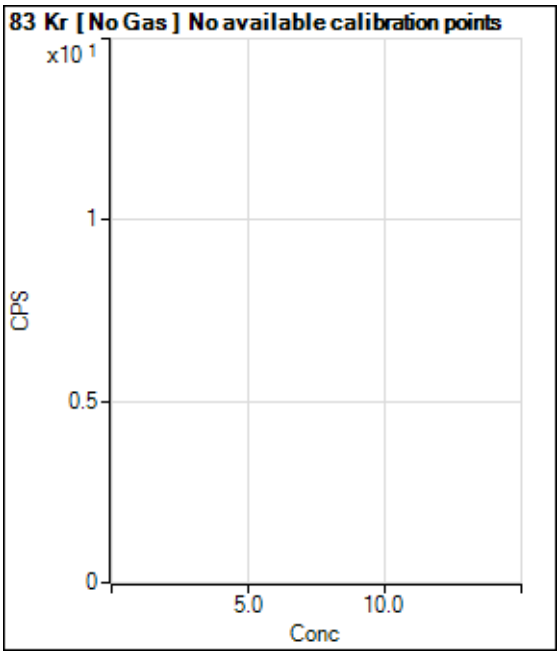
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	115.56	0.0000	P	28.3
2	☐	5.000	5.096	369.92	0.0001	P	9.6
3	☐	50.000	51.227	2769.72	0.0006	P	0.9
4	☐	125.000	126.474	6566.23	0.0014	P	1.8
5	☐	250.000	255.153	13115.36	0.0029	P	1.0
6	☐	500.000	504.889	25460.38	0.0056	P	2.7
7	☐	1000.000	996.021	50726.21	0.0111	P	1.5
8	☐			129.22	0.0000	P	35.9

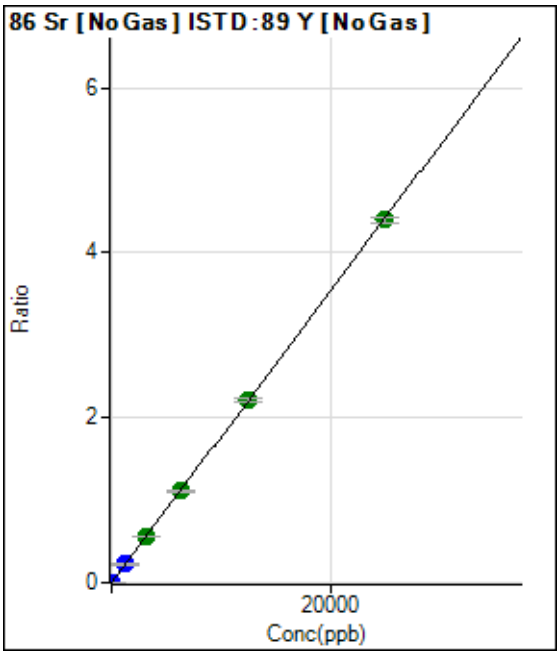
y = 1.1086E-005 * x + 2.5296E-005
R = 1.0000
DL = 1.939
BEC = 2.282

Weight: <None>
Min Conc: 0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			106.67		P	12.5
2	☐			125.56		P	6.7
3	☐			143.34		P	12.9
4	☐			148.89		P	16.5
5	☐			136.67		P	7.3
6	☐			126.67		P	4.6
7	☐			118.89		P	22.8
8	☐			144.45		P	15.0

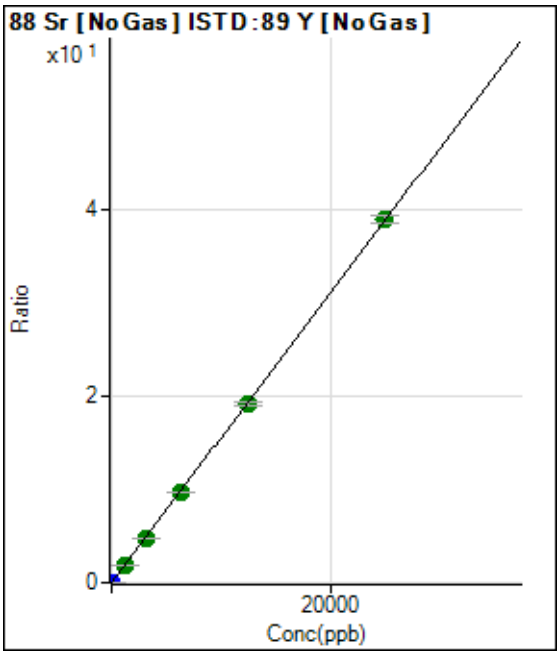
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	228.89	0.0001	P	9.0
2	☐	1.000	1.033	1051.16	0.0002	P	10.4
3	☐	1250.000	1265.219	1042095.55	0.2232	P	1.9
4	☐	3125.000	3164.445	2567956.11	0.5583	A	1.8
5	☐	6250.000	6315.948	5120199.68	1.1142	A	1.9
6	☐	12500.000	12593.628	10062047.35	2.2215	A	1.9
7	☐	25000.000	24931.008	20159724.84	4.3978	A	1.6
8	☐			5692.28	0.0013	P	11.9

y = 1.7640E-004 * x + 5.0232E-005
R = 1.0000
DL = 0.07676
BEC = 0.2848

Weight: <None>
Min Conc: 0

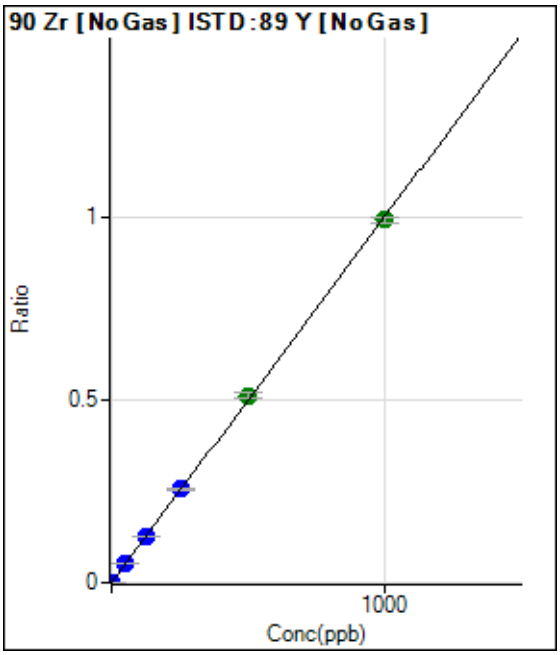


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	188.89	0.0000	P	6.1
2	☐	1.000	1.015	7314.11	0.0016	P	2.1
3	☐	1250.000	1221.983	8847531.88	1.8955	A	3.2
4	☐	3125.000	3112.994	22212375.50	4.8286	A	0.7
5	☐	6250.000	6249.890	44549947.67	9.6943	A	1.7
6	☐	12500.000	12332.846	86636574.27	19.1297	A	2.0
7	☐	25000.000	25086.506	178352088.4	38.9121	A	2.0
8	☐			48805.54	0.0113	P	13.9

y = 0.0016 * x + 4.1412E-005
R = 1.0000
DL = 0.004881
BEC = 0.0267

Weight: <None>
Min Conc: 0

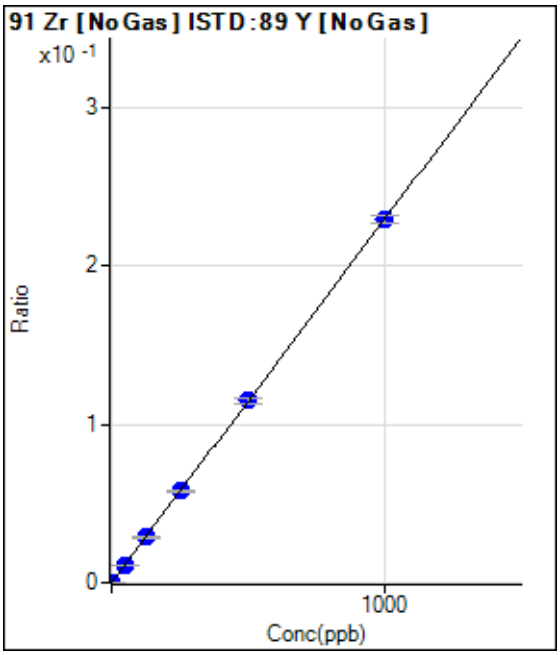
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	213.33	0.0000	P	15.2
2	☐	1.000	0.954	4538.53	0.0010	P	3.7
3	☐	50.000	50.925	238350.00	0.0511	P	2.2
4	☐	125.000	127.773	588976.02	0.1280	P	0.5
5	☐	250.000	257.352	1184725.24	0.2578	P	2.1
6	☐	500.000	510.896	2317834.60	0.5118	A	3.2
7	☐	1000.000	992.321	4556294.52	0.9940	A	1.3
8	☐			3074.79	0.0007	P	7.0

y = 0.0010 * x + 4.6832E-005
R = 0.9999
DL = 0.02129
BEC = 0.04675

Weight: <None>
Min Conc: 0

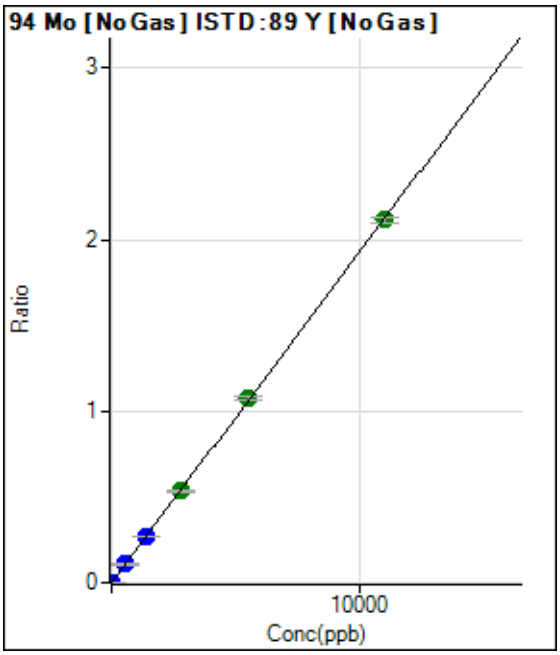


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	35.55	0.0000	P	12.0
2	☐	1.000	0.966	1037.83	0.0002	P	6.7
3	☐	50.000	49.324	52813.54	0.0113	P	2.6
4	☐	125.000	124.720	131542.57	0.0286	P	0.9
5	☐	250.000	252.759	266234.01	0.0579	P	2.6
6	☐	500.000	501.564	520658.66	0.1150	P	2.7
7	☐	1000.000	998.597	1049174.83	0.2289	P	2.3
8	☐			685.58	0.0002	P	8.2

y = 2.2922E-004 * x + 7.8047E-006
R = 1.0000
DL = 0.01223
BEC = 0.03405

Weight: <None>
Min Conc: 0

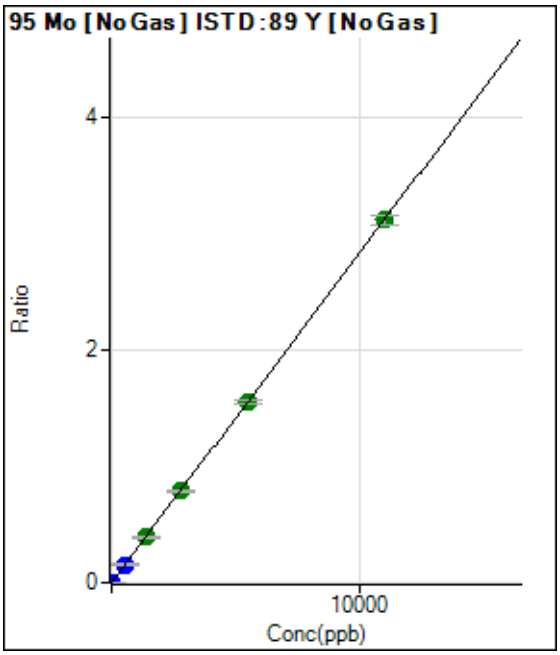
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.66	0.0000	P	12.3
2	☐	5.000	6.031	5352.14	0.0012	P	3.1
3	☐	550.000	555.454	500416.40	0.1072	P	2.0
4	☐	1375.000	1411.757	1253180.65	0.2724	P	0.6
5	☐	2750.000	2764.630	2450842.60	0.5335	A	3.8
6	☐	5500.000	5557.481	4856868.82	1.0724	A	2.1
7	☐	11000.000	10962.734	9696162.08	2.1153	A	1.8
8	☐			3910.57	0.0009	P	7.5

y = 1.9296E-004 * x + 1.8991E-005
R = 1.0000
DL = 0.03642
BEC = 0.09842

Weight: <None>
Min Conc: 0

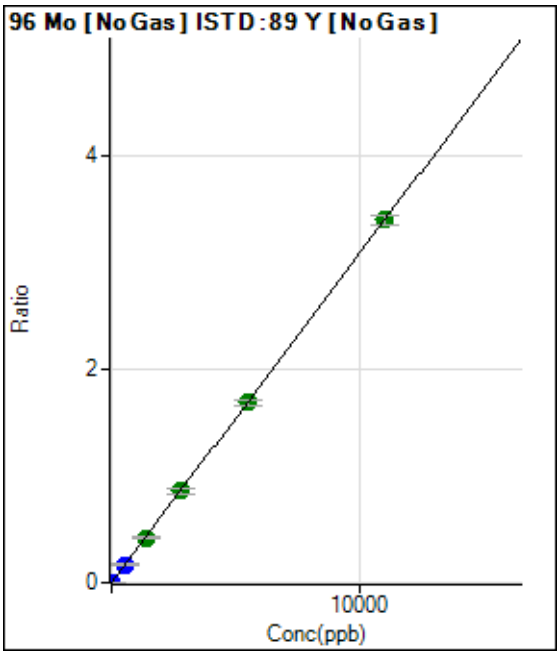


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	21.11	0.0000	P	25.2
2	☐	5.000	4.900	6311.42	0.0014	P	4.0
3	☐	550.000	549.924	728429.08	0.1560	P	1.6
4	☐	1375.000	1381.393	1803051.61	0.3919	A	2.4
5	☐	2750.000	2781.610	3626309.29	0.7892	A	2.3
6	☐	5500.000	5493.755	7059052.60	1.5588	A	2.3
7	☐	11000.000	10994.425	14298352.01	3.1195	A	2.8
8	☐			4606.33	0.0011	P	11.1

y = 2.8373E-004 * x + 4.6389E-006
R = 1.0000
DL = 0.01238
BEC = 0.01635

Weight: <None>
Min Conc: 0

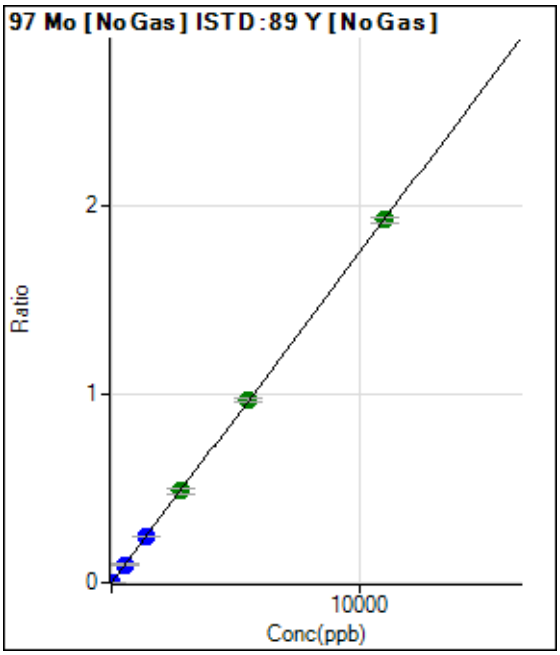
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	35.56	0.0000	P	28.3
2	☐	5.000	4.989	7011.75	0.0015	P	4.5
3	☐	550.000	549.939	793219.36	0.1699	P	2.3
4	☐	1375.000	1364.602	1939600.65	0.4216	A	1.6
5	☐	2750.000	2772.160	3933726.54	0.8565	A	5.8
6	☐	5500.000	5471.285	7654283.22	1.6905	A	3.4
7	☐	11000.000	11010.120	15592214.91	3.4018	A	2.5
8	☐			6799.43	0.0016	P	8.8

y = 3.0897E-004 * x + 7.8146E-006
R = 1.0000
DL = 0.02145
BEC = 0.02529

Weight: <None>
Min Conc: 0

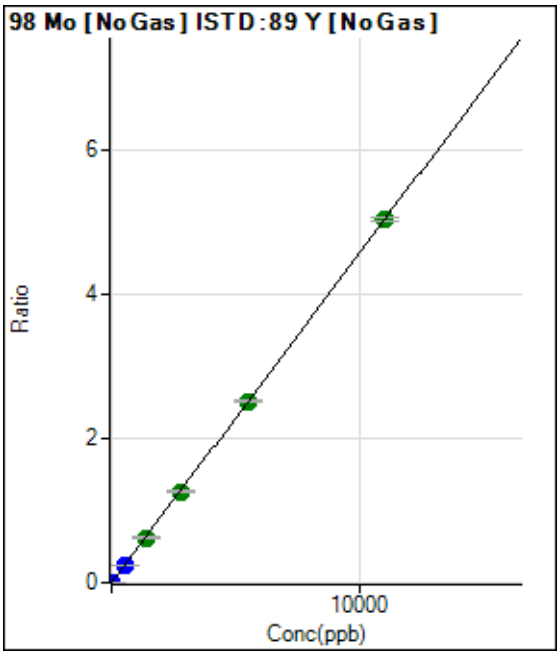


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.89	0.0000	P	50.4
2	☐	5.000	4.974	3971.70	0.0009	P	2.3
3	☐	550.000	550.246	451019.79	0.0966	P	1.7
4	☐	1375.000	1399.445	1130269.05	0.2457	P	1.1
5	☐	2750.000	2771.091	2234729.83	0.4865	A	4.9
6	☐	5500.000	5517.919	4387490.97	0.9688	A	2.4
7	☐	11000.000	10982.700	8838666.12	1.9283	A	1.8
8	☐			2811.41	0.0007	P	9.3

y = 1.7557E-004 * x + 4.1356E-006
R = 1.0000
DL = 0.03561
BEC = 0.02355

Weight: <None>
Min Conc: 0

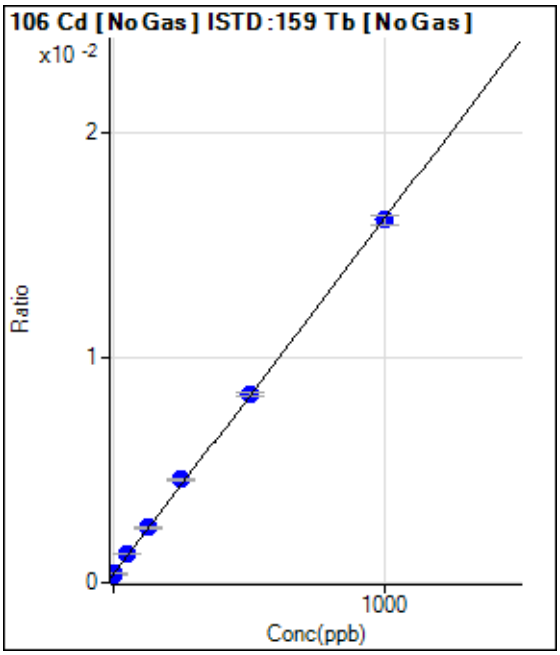
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.67	0.0000	P	26.4
2	☐	5.000	4.948	10283.72	0.0023	P	2.8
3	☐	550.000	543.903	1161791.61	0.2489	P	1.6
4	☐	1375.000	1367.730	2878771.14	0.6258	A	1.7
5	☐	2750.000	2745.302	5771445.40	1.2561	A	2.4
6	☐	5500.000	5507.721	11413631.91	2.5200	A	1.6
7	☐	11000.000	10998.528	23069101.60	5.0323	A	1.0
8	☐			7243.00	0.0017	P	12.1

y = 4.5754E-004 * x + 8.0296E-006
R = 1.0000
DL = 0.01392
BEC = 0.01755

Weight: <None>
Min Conc: 0

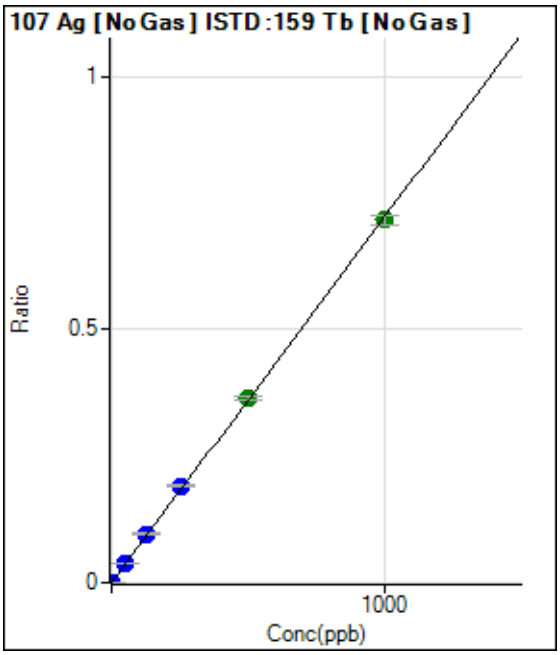


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1656.78	0.0004	P	3.6
2	☐	1.000	0.899	1670.11	0.0004	P	3.7
3	☐	50.000	55.314	5375.50	0.0013	P	1.0
4	☐	125.000	130.477	10767.42	0.0025	P	3.3
5	☐	250.000	264.630	20216.36	0.0046	P	1.4
6	☐	500.000	502.765	37294.54	0.0084	P	1.9
7	☐	1000.000	994.010	73456.77	0.0161	P	2.4
8	☐			1344.52	0.0003	P	2.0

y = 1.5859E-005 * x + 3.8399E-004
R = 0.9999
DL = 2.632
BEC = 24.21

Weight: <None>
Min Conc: 0

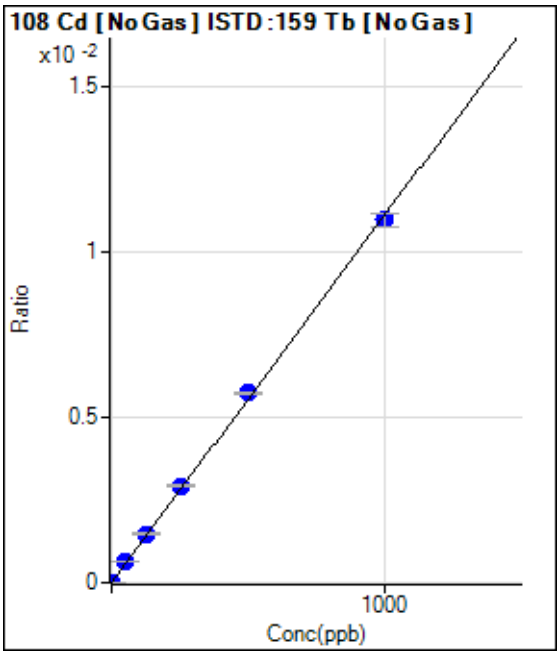
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.67	0.0000	P	25.1
2	☐	1.000	1.029	3150.38	0.0008	P	4.2
3	☐	50.000	54.104	166376.63	0.0390	P	1.7
4	☐	125.000	132.649	420090.75	0.0957	P	2.4
5	☐	250.000	264.535	842208.31	0.1908	P	2.0
6	☐	500.000	505.214	1626475.60	0.3645	A	1.7
7	☐	1000.000	992.598	3257017.83	0.7161	A	2.8
8	☐			751.15	0.0002	P	7.0

y = 7.2139E-004 * x + 8.5111E-006
R = 0.9999
DL = 0.008901
BEC = 0.0118

Weight: <None>
Min Conc: 0

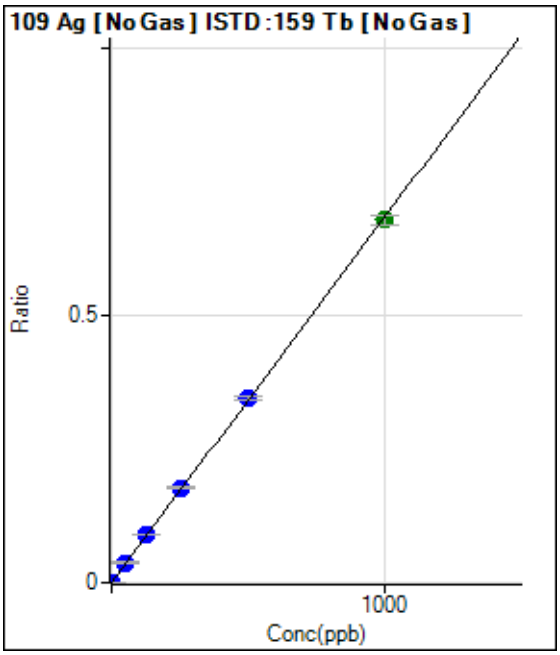


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	62.3
2	☐	1.000	0.795	47.78	0.0000	P	39.6
3	☐	50.000	55.921	2653.60	0.0006	P	3.4
4	☐	125.000	131.634	6414.81	0.0015	P	2.8
5	☐	250.000	262.531	12852.45	0.0029	P	2.2
6	☐	500.000	516.070	25535.96	0.0057	P	0.9
7	☐	1000.000	987.707	49796.50	0.0109	P	3.5
8	☐			36.67	0.0000	P	16.0

y = 1.1082E-005 * x + 2.5757E-006
R = 0.9997
DL = 0.4342
BEC = 0.2324

Weight: <None>
Min Conc: 0

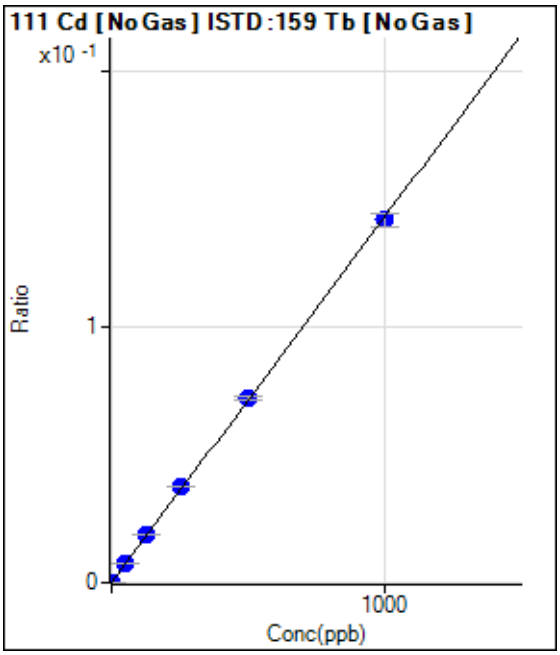
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.67	0.0000	P	38.5
2	☐	1.000	0.998	2888.09	0.0007	P	4.9
3	☐	50.000	54.967	160284.69	0.0376	P	1.5
4	☐	125.000	132.856	399062.54	0.0909	P	1.0
5	☐	250.000	259.898	784697.43	0.1778	P	1.1
6	☐	500.000	505.903	1544472.76	0.3461	P	1.7
7	☐	1000.000	993.344	3091143.39	0.6796	A	3.0
8	☐			642.24	0.0001	P	17.3

y = 6.8410E-004 * x + 6.1966E-006
R = 0.9999
DL = 0.01046
BEC = 0.009058

Weight: <None>
Min Conc: 0

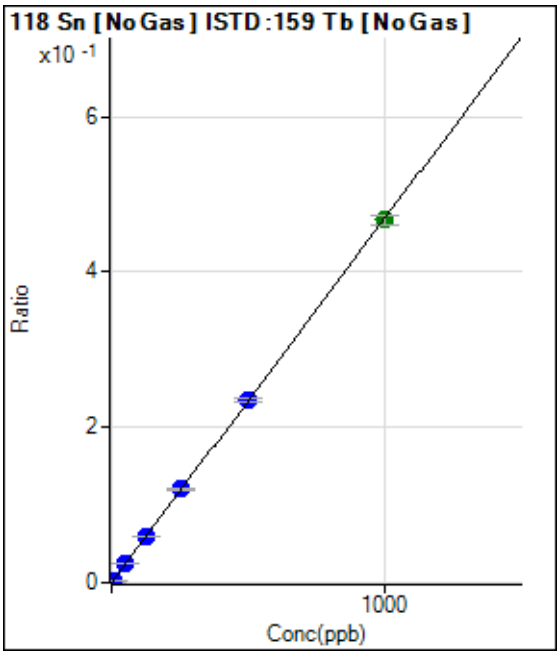


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	164.57	0.0000	P	3.8
2	☐	1.000	1.092	814.70	0.0002	P	10.0
3	☐	50.000	53.591	32818.07	0.0077	P	2.4
4	☐	125.000	131.671	82813.57	0.0189	P	2.4
5	☐	250.000	262.927	166092.58	0.0376	P	1.3
6	☐	500.000	505.720	322893.38	0.0724	P	1.6
7	☐	1000.000	992.895	645904.55	0.1420	P	3.4
8	☐			329.90	0.0001	P	8.5

y = 1.4299E-004 * x + 3.8143E-005
R = 0.9999
DL = 0.03039
BEC = 0.2667

Weight: <None>
Min Conc: 0

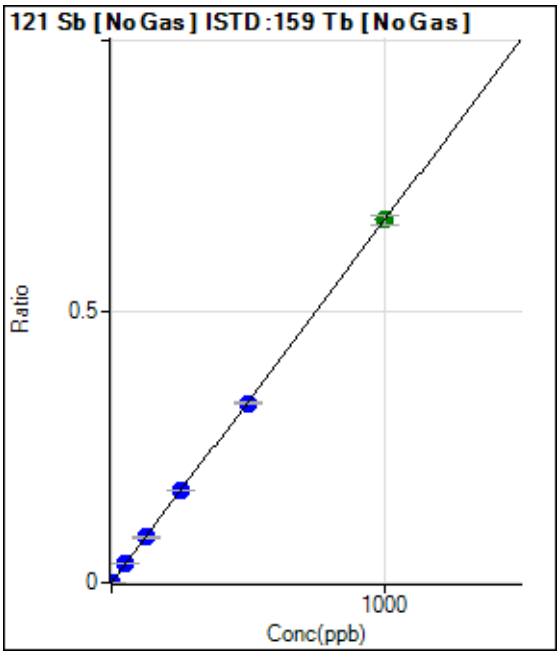
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	457.92	0.0001	P	43.2
2	☐	5.000	5.034	10334.91	0.0025	P	2.0
3	☐	50.000	52.559	105394.59	0.0247	P	0.9
4	☐	125.000	128.053	263818.23	0.0601	P	1.7
5	☐	250.000	256.245	530242.92	0.1201	P	1.6
6	☐	500.000	501.743	1049498.28	0.2352	P	1.2
7	☐	1000.000	997.057	2125249.08	0.4672	A	2.3
8	☐			2061.28	0.0005	P	1.5

y = 4.6847E-004 * x + 1.0605E-004
R = 1.0000
DL = 0.2931
BEC = 0.2264

Weight: <None>
Min Conc: 0

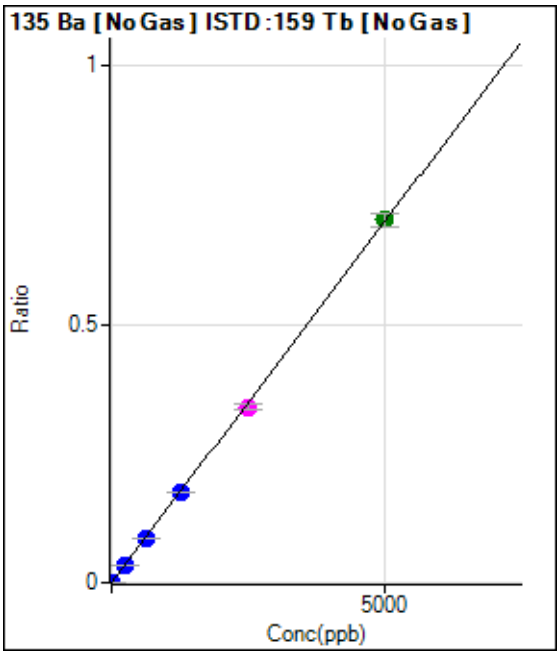


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	69.6
2	☐	2.000	2.054	5778.99	0.0014	P	2.4
3	☐	50.000	51.275	145965.12	0.0343	P	2.2
4	☐	125.000	125.611	368308.74	0.0839	P	2.1
5	☐	250.000	255.289	752502.80	0.1705	P	1.1
6	☐	500.000	495.399	1476628.88	0.3309	P	1.5
7	☐	1000.000	1000.838	3040596.45	0.6684	A	2.5
8	☐			2808.08	0.0006	P	1.7

y = 6.6788E-004 * x + 6.4204E-006
R = 1.0000
DL = 0.02006
BEC = 0.009613

Weight: <None>
Min Conc: 0

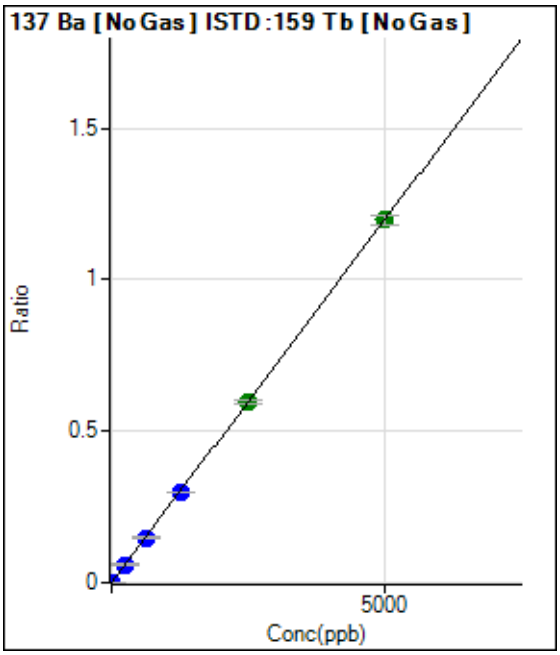
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.00	0.0000	P	44.6
2	☐	10.000	9.516	5586.70	0.0013	P	4.0
3	☐	250.000	248.466	147755.14	0.0347	P	1.4
4	☐	625.000	610.474	373871.38	0.0852	P	2.2
5	☐	1250.000	1246.352	767410.23	0.1739	P	0.7
6	☐	2500.000	2440.212	1519156.19	0.3404	M	3.7
7	☐	5000.000	5032.699	3193205.99	0.7021	A	3.5
8	☐			1568.99	0.0004	P	14.1

y = 1.3951E-004 * x + 4.6422E-006
R = 0.9999
DL = 0.0445
BEC = 0.03328

Weight: <None>
Min Conc: 0

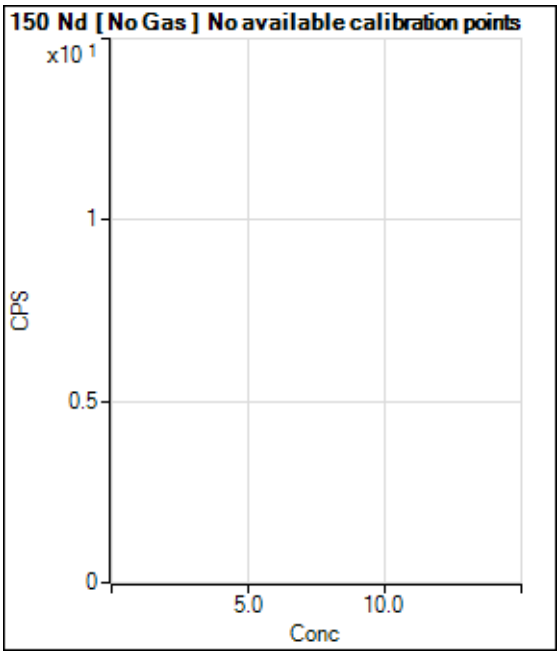


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	32.22	0.0000	P	29.1
2	☐	10.000	9.877	9940.24	0.0024	P	0.8
3	☐	250.000	250.410	255330.18	0.0599	P	1.5
4	☐	625.000	615.374	646162.77	0.1472	P	2.9
5	☐	1250.000	1242.841	1312195.22	0.2973	P	0.8
6	☐	2500.000	2500.028	2669235.86	0.5981	A	2.2
7	☐	5000.000	5002.959	5443825.82	1.1968	A	2.8
8	☐			2632.49	0.0006	P	10.4

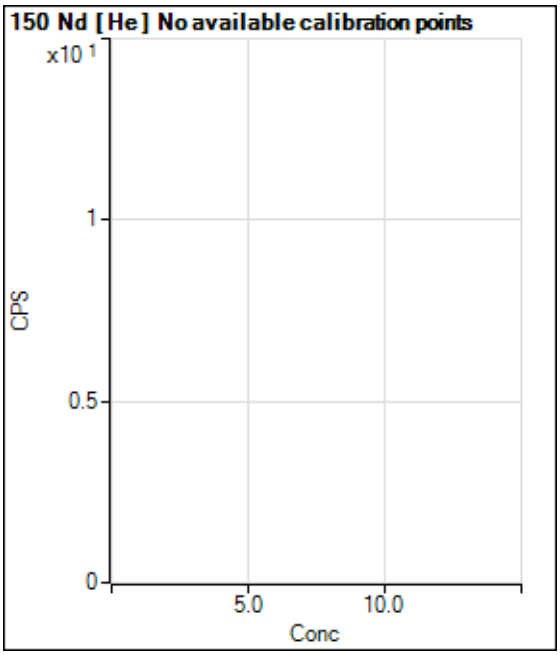
y = 2.3922E-004 * x + 7.4574E-006
R = 1.0000
DL = 0.02718
BEC = 0.03117

Weight: <None>
Min Conc: 0

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

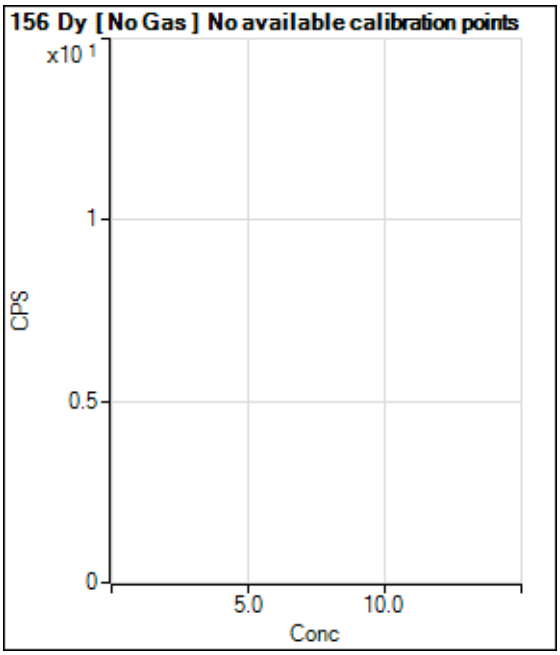


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4.45		P	86.6
2	☐			10.00		P	57.8
3	☐			14.45		P	26.7
4	☐			30.00		P	11.1
5	☐			74.44		P	6.8
6	☐			113.33		P	22.2
7	☐			253.34		P	4.7
8	☐			54.44		P	30.2

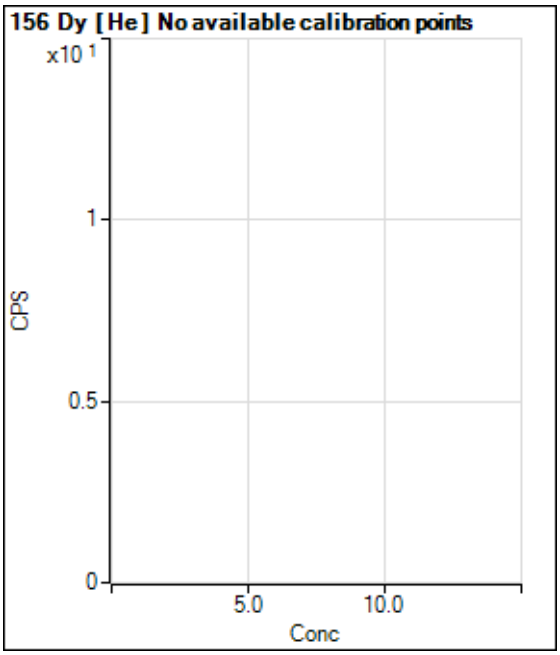


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			0.00		P	
2	☐			1.11		P	173.
3	☐			1.11		P	173.
4	☐			10.00		P	88.2
5	☐			22.22		P	31.2
6	☐			48.89		P	44.4
7	☐			111.11		P	14.8
8	☐			23.33		P	51.5

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

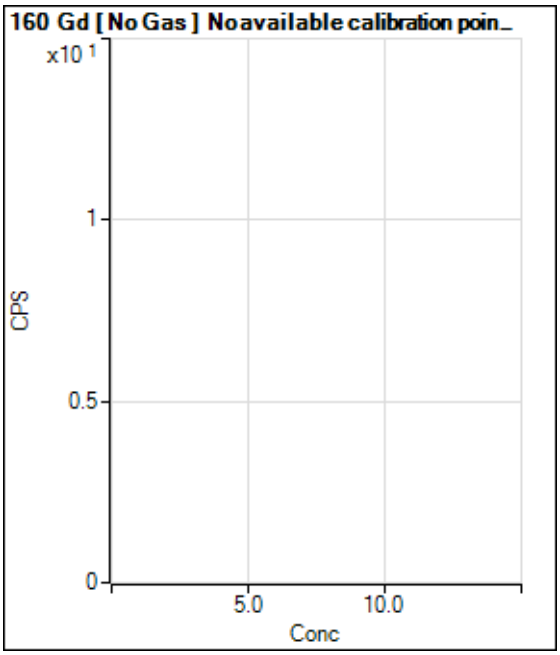


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			20.00		P	16.7
2	☐			18.89		P	36.7
3	☐			41.11		P	12.4
4	☐			44.44		P	28.4
5	☐			44.44		P	21.7
6	☐			81.11		P	31.4
7	☐			171.12		P	17.0
8	☐			124.45		P	5.6

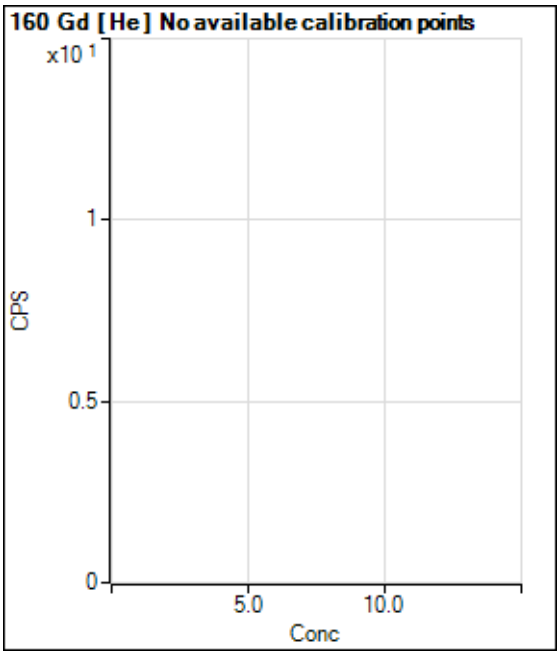


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			3.33		P	0.0
2	☐			5.55		P	69.3
3	☐			16.67		P	87.2
4	☐			38.89		P	32.4
5	☐			58.89		P	11.8
6	☐			96.66		P	11.9
7	☐			191.12		P	11.9
8	☐			74.45		P	5.2

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

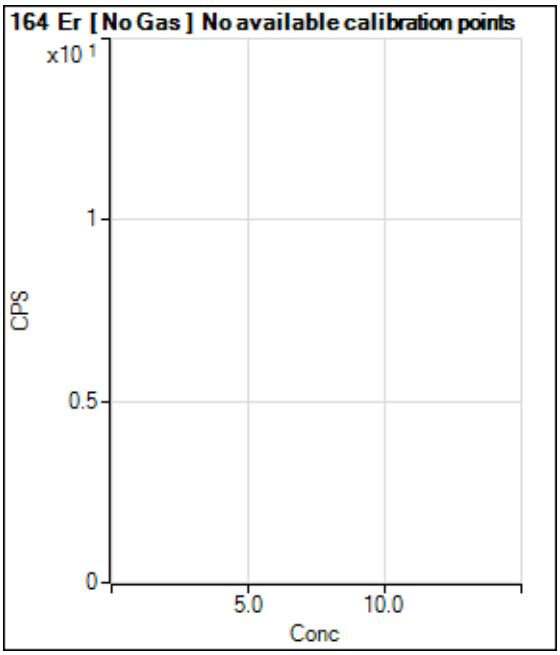


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			40.00		P	8.3
2	☐			52.22		P	57.6
3	☐			45.56		P	22.4
4	☐			43.34		P	26.6
5	☐			45.56		P	33.0
6	☐			78.89		P	21.3
7	☐			193.34		P	11.3
8	☐			105.55		P	34.8

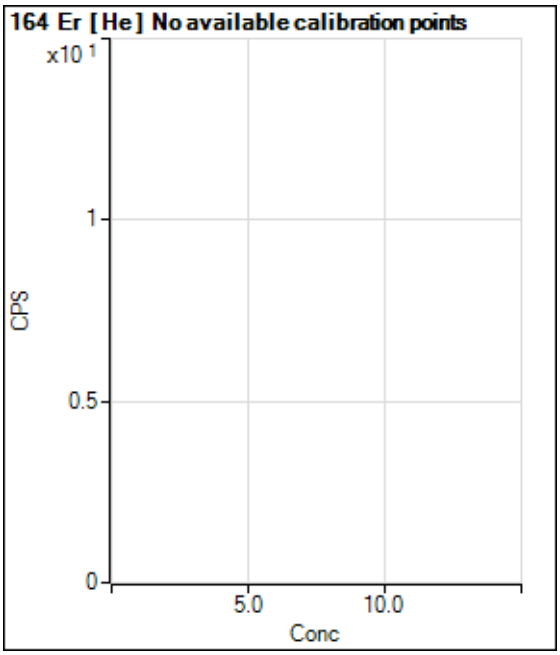


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			122.22		P	11.0
2	☐			133.34		P	10.9
3	☐			128.89		P	14.7
4	☐			145.56		P	7.0
5	☐			126.67		P	16.0
6	☐			157.78		P	16.9
7	☐			208.89		P	7.5
8	☐			166.67		P	6.9

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

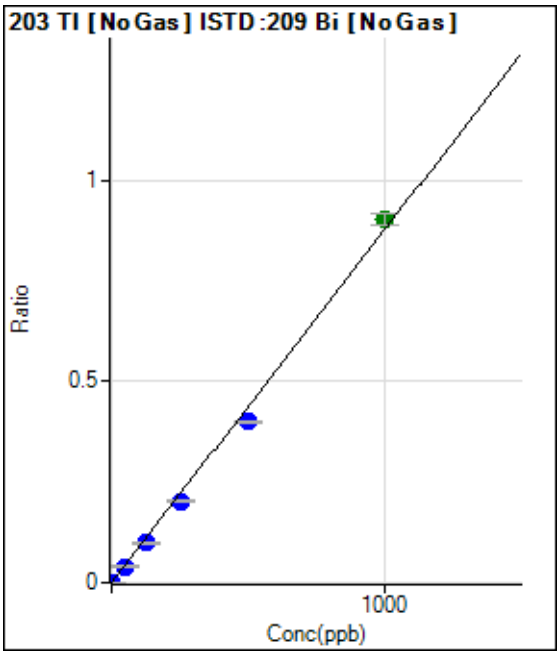


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			35.56		P	23.6
2	☐			33.33		P	10.0
3	☐			31.11		P	22.3
4	☐			57.78		P	20.3
5	☐			50.00		P	20.0
6	☐			76.67		P	22.6
7	☐			156.67		P	4.3
8	☐			106.67		P	8.3



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			12.22		P	41.7
2	☐			22.22		P	82.6
3	☐			22.22		P	22.9
4	☐			24.44		P	34.3
5	☐			32.22		P	41.8
6	☐			40.00		P	22.0
7	☐			77.78		P	9.9
8	☐			68.89		P	23.9

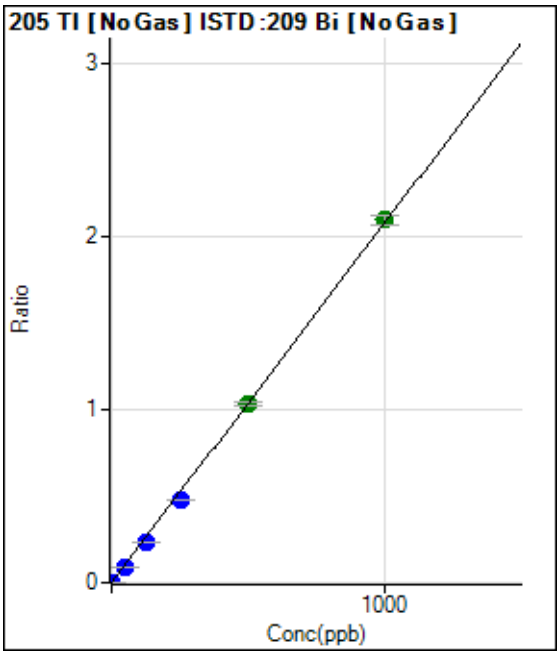
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	40.9
2	☐	1.000	0.905	1880.15	0.0008	P	5.8
3	☐	50.000	45.662	94354.05	0.0400	P	3.5
4	☐	125.000	112.892	239734.61	0.0989	P	3.6
5	☐	250.000	230.748	497994.77	0.2021	P	0.9
6	☐	500.000	455.941	1008823.74	0.3994	P	1.0
7	☐	1000.000	1028.573	2256439.15	0.9011	A	3.3
8	☐			577.80	0.0002	P	32.8

y = 8.7603E-004 * x + 5.6654E-006
R = 0.9984
DL = 0.007944
BEC = 0.006467

Weight: <None>
Min Conc: 0

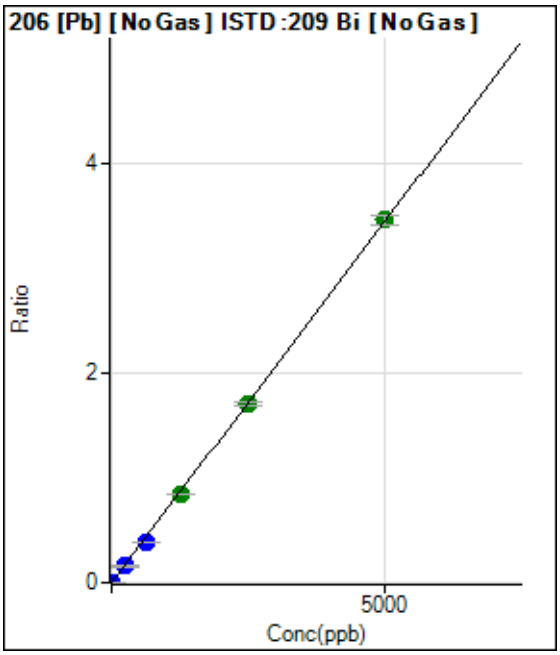


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28.89	0.0000	P	15.6
2	☐	1.000	0.850	4178.46	0.0018	P	3.9
3	☐	50.000	44.787	219189.34	0.0929	P	1.3
4	☐	125.000	112.135	563833.95	0.2326	P	4.1
5	☐	250.000	228.719	1169005.57	0.4745	P	0.6
6	☐	500.000	496.718	2602765.52	1.0305	A	2.4
7	☐	1000.000	1008.830	5241655.72	2.0928	A	2.8
8	☐			1380.09	0.0006	P	24.6

y = 0.0021 * x + 1.2314E-005
R = 0.9997
DL = 0.002776
BEC = 0.005936

Weight: <None>
Min Conc: 0

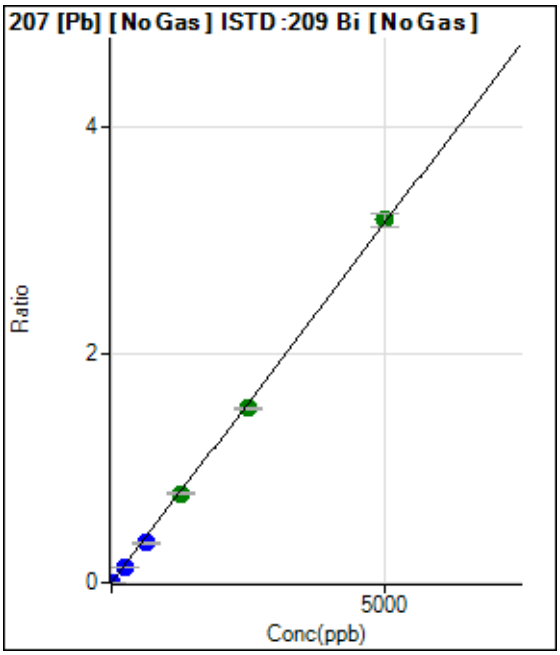
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.00	0.0000	P	24.0
2	☐	1.000	0.873	1487.88	0.0006	P	1.6
3	☐	250.000	227.197	369829.34	0.1568	P	2.3
4	☐	625.000	560.985	938696.13	0.3871	P	2.1
5	☐	1250.000	1233.801	2097432.59	0.8513	A	0.5
6	☐	2500.000	2470.883	4305675.42	1.7049	A	2.2
7	☐	5000.000	5027.750	8690924.04	3.4692	A	2.6
8	☐			3220.41	0.0014	P	9.3

y = 6.9000E-004 * x + 2.9889E-005
R = 0.9999
DL = 0.03125
BEC = 0.04332

Weight: <None>
Min Conc: 0

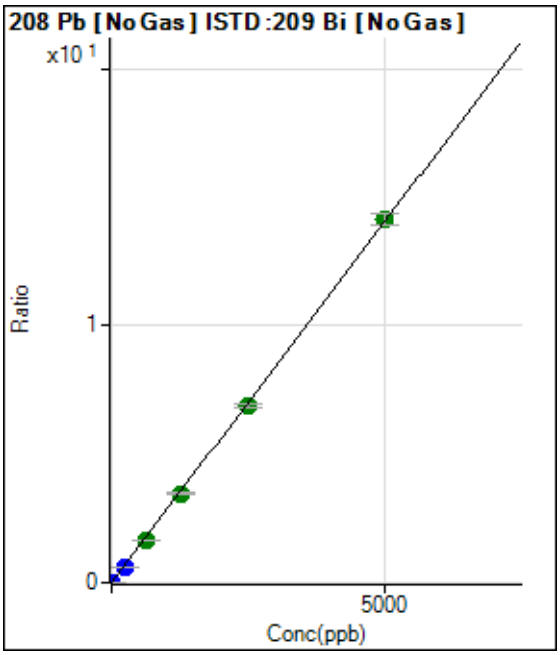


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	56.67	0.0000	P	13.9
2	☐	1.000	0.811	1261.19	0.0005	P	3.4
3	☐	250.000	220.780	328570.03	0.1393	P	2.3
4	☐	625.000	549.580	840646.88	0.3467	P	2.8
5	☐	1250.000	1242.582	1931504.61	0.7839	A	1.5
6	☐	2500.000	2431.166	3873503.24	1.5337	A	1.0
7	☐	5000.000	5047.160	7973082.17	3.1840	A	3.8
8	☐			2688.08	0.0012	P	16.1

y = 6.3085E-004 * x + 2.4183E-005
R = 0.9998
DL = 0.01595
BEC = 0.03833

Weight: <None>
Min Conc: 0

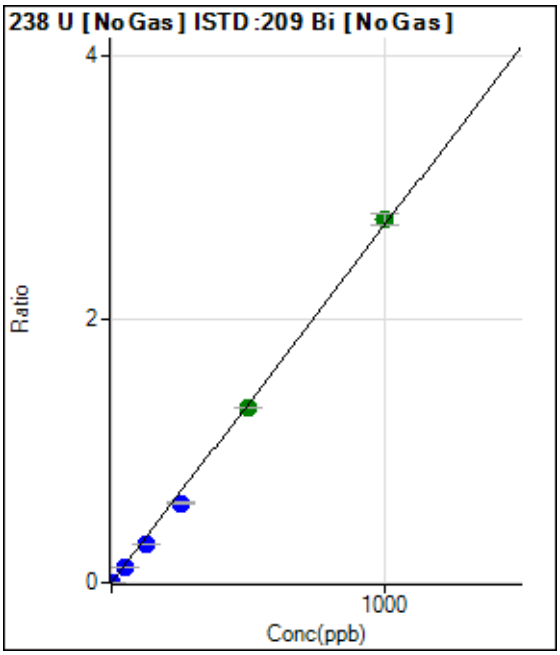
Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	272.22	0.0001	P	11.5
2	☐	1.000	0.852	5906.13	0.0025	P	2.1
3	☐	250.000	224.564	1487962.68	0.6308	P	1.5
4	☐	625.000	583.725	3975218.72	1.6395	A	2.6
5	☐	1250.000	1233.906	8538753.86	3.4656	A	1.5
6	☐	2500.000	2462.436	17469247.90	6.9160	A	2.2
7	☐	5000.000	5029.237	35374861.07	14.1250	A	3.0
8	☐			12611.32	0.0054	P	9.3

y = 0.0028 * x + 1.1620E-004
R = 0.9999
DL = 0.01432
BEC = 0.04137

Weight: <None>
Min Conc: 0

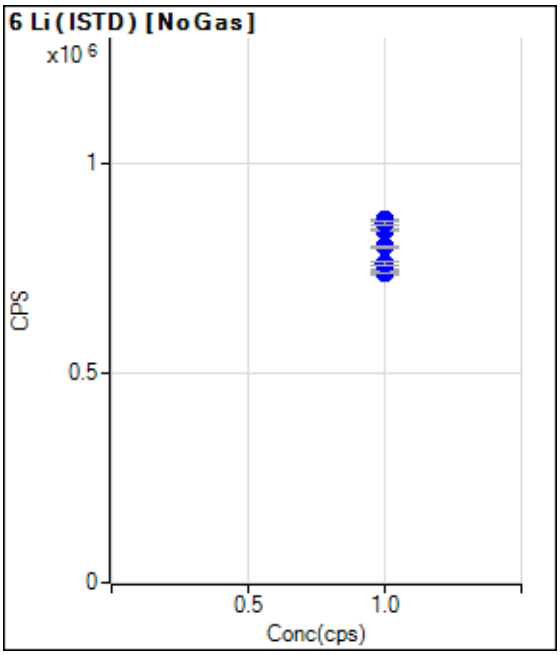


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.45	0.0000	P	27.5
2	☐	1.000	0.816	5224.41	0.0022	P	2.3
3	☐	50.000	42.700	273191.23	0.1158	P	2.2
4	☐	125.000	108.177	711434.79	0.2934	P	2.3
5	☐	250.000	223.296	1492083.90	0.6056	P	0.5
6	☐	500.000	487.736	3341070.47	1.3228	A	0.1
7	☐	1000.000	1015.276	6895927.12	2.7537	A	3.2
8	☐			1152.29	0.0005	P	29.3

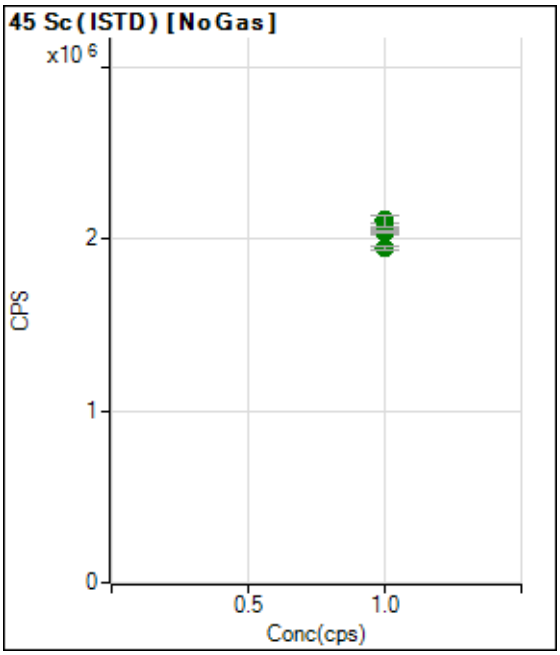
y = 0.0027 * x + 6.1843E-006
R = 0.9995
DL = 0.001878
BEC = 0.00228

Weight: <None>
Min Conc: 0

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

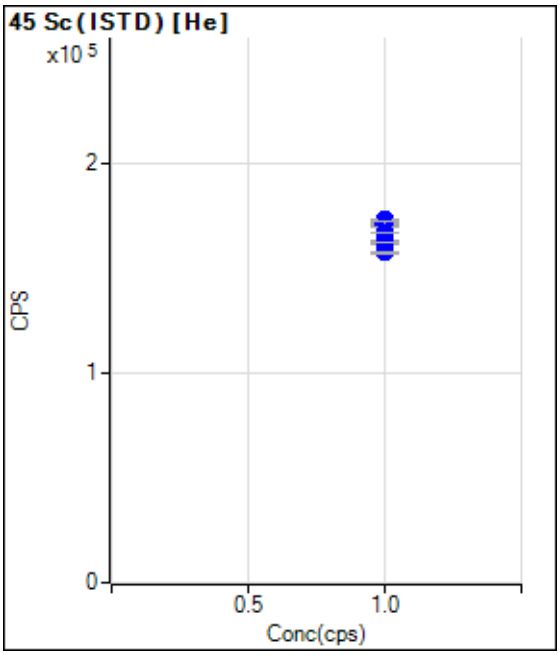


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		739280.37		P	1.5
2	☐	1.000		741937.60		P	0.5
3	☐	1.000		761105.80		P	1.1
4	☐	1.000		801801.42		P	0.6
5	☐	1.000		840752.26		P	0.9
6	☐	1.000		864637.25		P	0.7
7	☐	1.000		861185.54		P	0.3
8	☐	1.000		855819.38		P	1.3

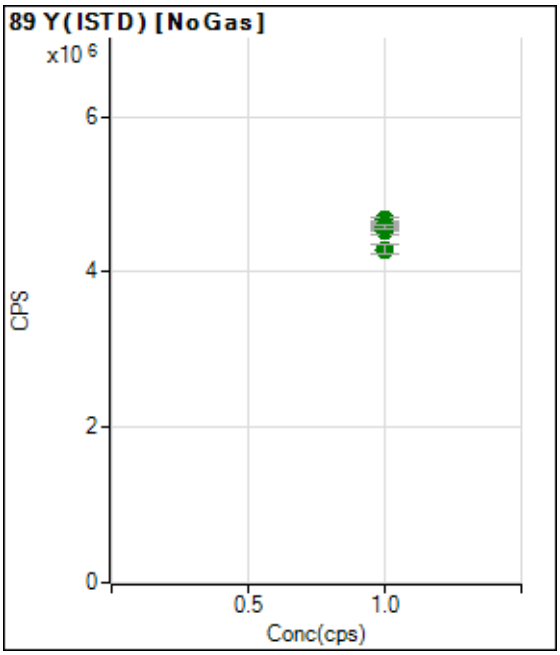


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2047725.65		A	0.8
2	☐	1.000		2038013.93		A	1.2
3	☐	1.000		2056218.11		A	0.4
4	☐	1.000		2067878.04		A	0.7
5	☐	1.000		2111363.21		A	2.2
6	☐	1.000		2038322.24		A	0.5
7	☐	1.000		2102707.23		A	3.2
8	☐	1.000		1943380.93		A	1.1

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

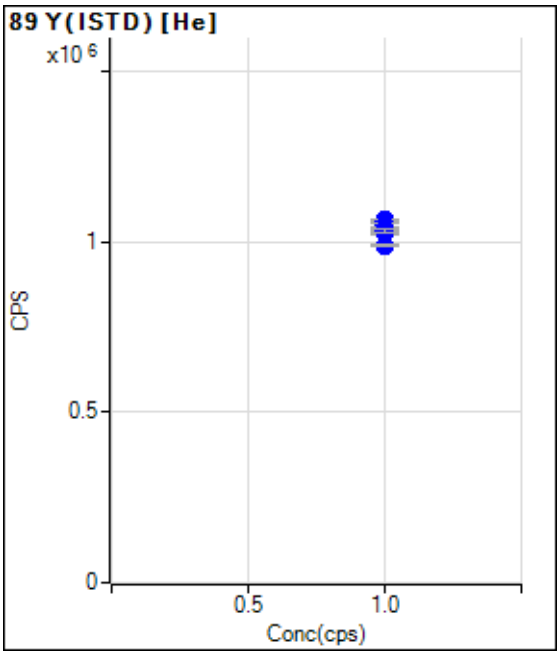


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		171023.11		P	0.4
2	☐	1.000		171700.64		P	1.3
3	☐	1.000		172864.94		P	0.7
4	☐	1.000		170587.21		P	1.7
5	☐	1.000		166894.36		P	0.1
6	☐	1.000		162133.72		P	1.5
7	☐	1.000		162126.78		P	0.3
8	☐	1.000		157398.28		P	0.4

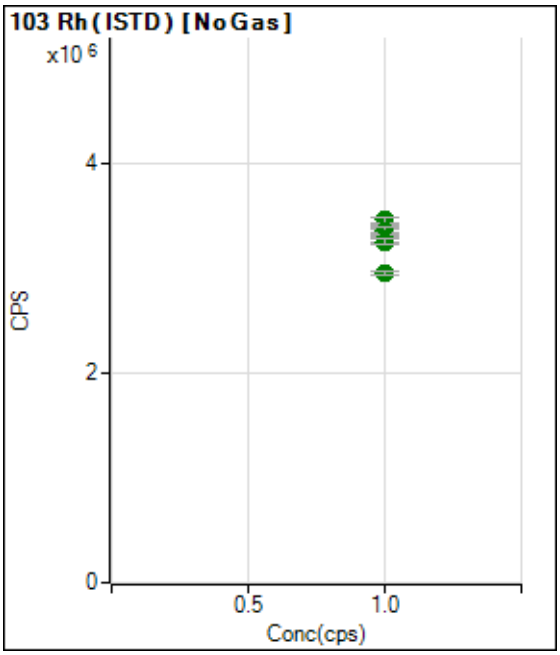


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4559288.96		A	1.1
2	☐	1.000		4526739.27		A	1.7
3	☐	1.000		4668974.24		A	1.3
4	☐	1.000		4600125.49		A	0.4
5	☐	1.000		4596240.14		A	2.1
6	☐	1.000		4530347.43		A	2.5
7	☐	1.000		4583932.12		A	1.0
8	☐	1.000		4293381.60		A	2.5

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

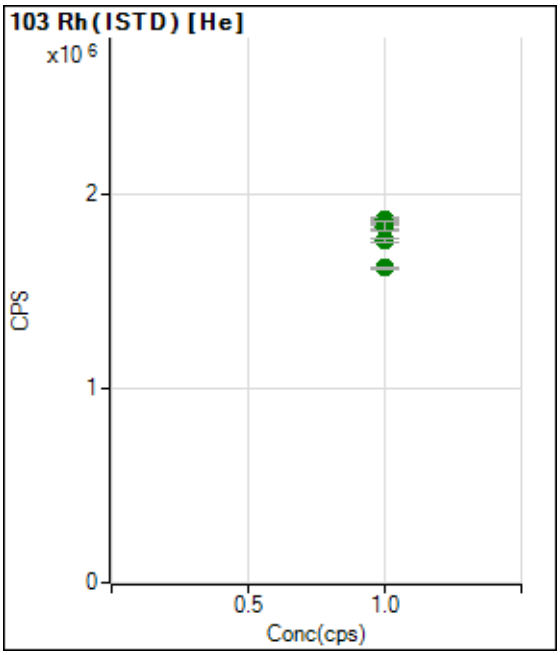


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1065275.70		P	0.3
2	☐	1.000		1041564.36		P	1.1
3	☐	1.000		1062161.07		P	0.7
4	☐	1.000		1051085.76		P	0.8
5	☐	1.000		1037911.93		P	0.7
6	☐	1.000		1030429.87		P	1.3
7	☐	1.000		1034157.61		P	1.0
8	☐	1.000		989718.91		P	0.8

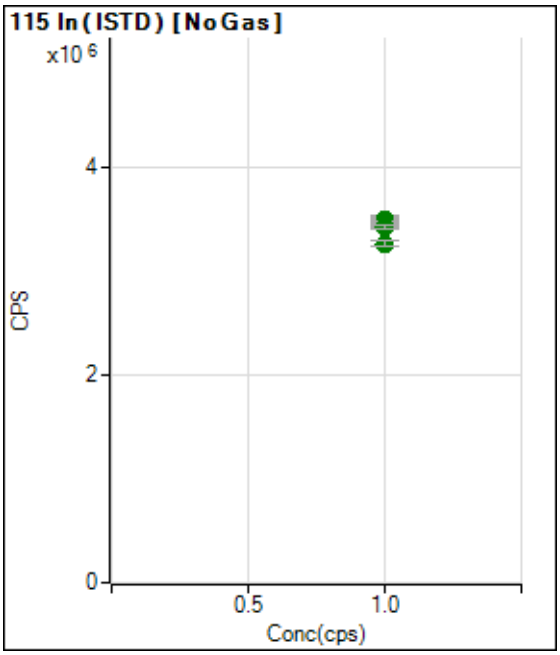


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3462581.75		A	1.8
2	☐	1.000		3360136.48		A	0.9
3	☐	1.000		3335947.76		A	0.6
4	☐	1.000		3360920.12		A	3.3
5	☐	1.000		3362224.39		A	1.8
6	☐	1.000		3286096.58		A	2.7
7	☐	1.000		3254661.76		A	1.7
8	☐	1.000		2953776.76		A	0.7

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

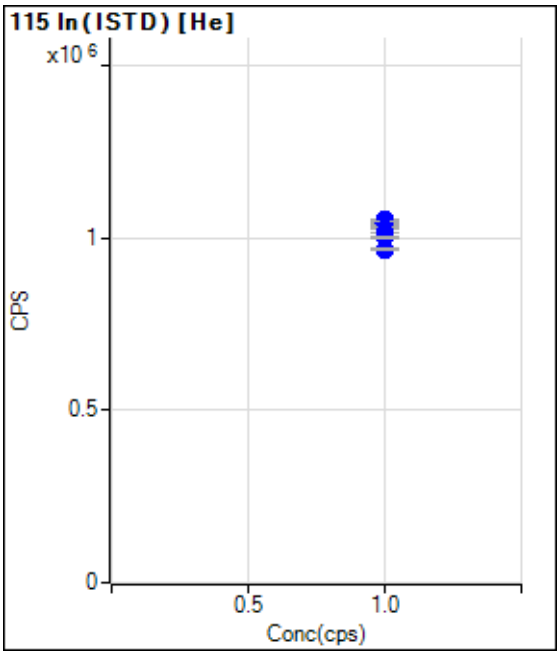


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1845675.65		A	2.7
2	☐	1.000		1861020.82		A	2.3
3	☐	1.000		1868735.30		A	1.0
4	☐	1.000		1857163.20		A	0.2
5	☐	1.000		1836555.80		A	2.4
6	☐	1.000		1762387.25		A	0.8
7	☐	1.000		1761852.41		A	1.3
8	☐	1.000		1621434.59		A	0.7

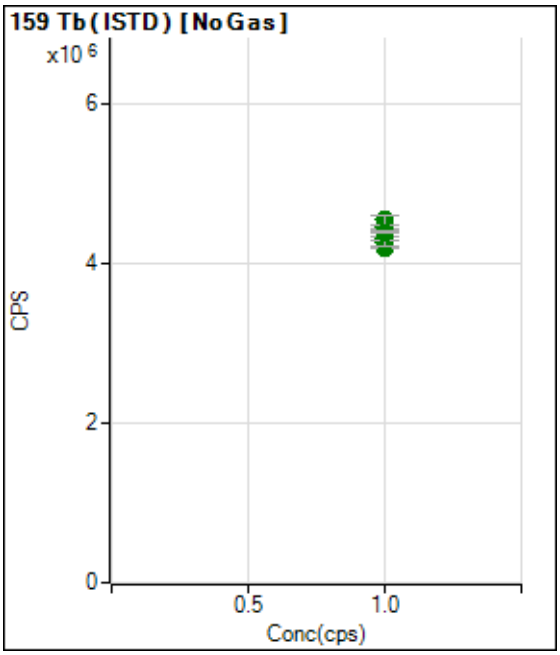


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3495991.99		A	2.5
2	☐	1.000		3473245.46		A	1.7
3	☐	1.000		3500644.31		A	1.3
4	☐	1.000		3462742.23		A	2.2
5	☐	1.000		3476842.37		A	1.7
6	☐	1.000		3479744.06		A	0.9
7	☐	1.000		3434978.79		A	0.7
8	☐	1.000		3274839.74		A	1.5

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

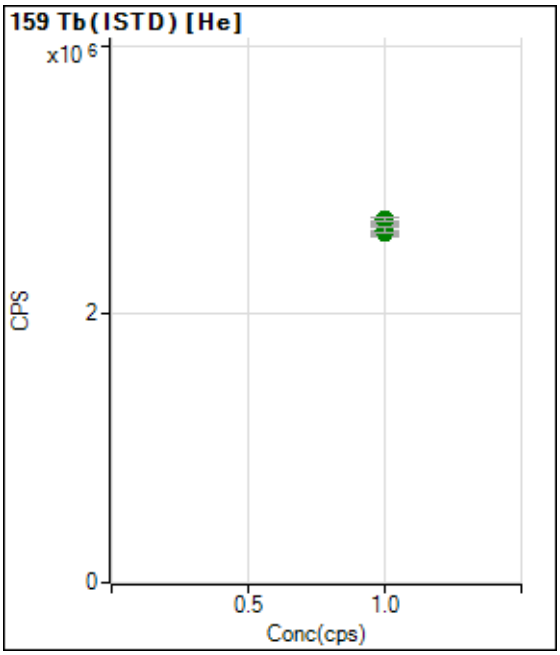


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1047306.03		P	0.8
2	☐	1.000		1036523.64		P	0.5
3	☐	1.000		1052936.17		P	0.6
4	☐	1.000		1044677.16		P	1.2
5	☐	1.000		1027836.22		P	0.4
6	☐	1.000		1015772.71		P	0.4
7	☐	1.000		1002210.35		P	0.9
8	☐	1.000		968272.13		P	0.6

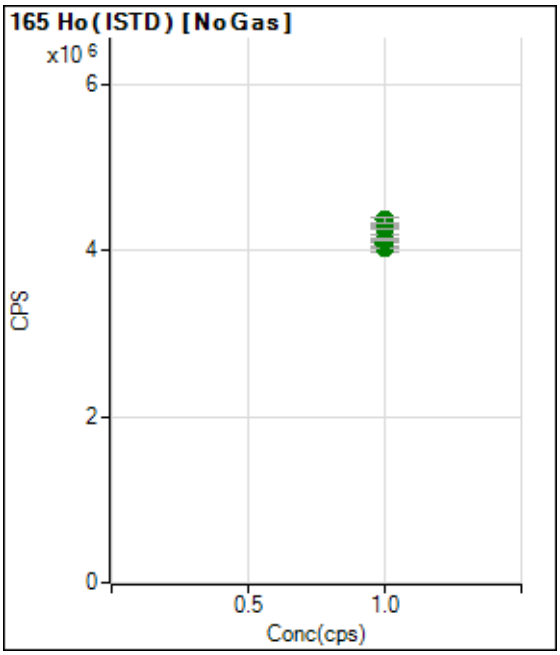


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4315179.86		A	1.1
2	☐	1.000		4193830.36		A	0.1
3	☐	1.000		4262541.74		A	1.7
4	☐	1.000		4391101.50		A	2.3
5	☐	1.000		4413508.72		A	0.7
6	☐	1.000		4463180.21		A	1.2
7	☐	1.000		4550868.72		A	2.7
8	☐	1.000		4400296.01		A	0.4

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

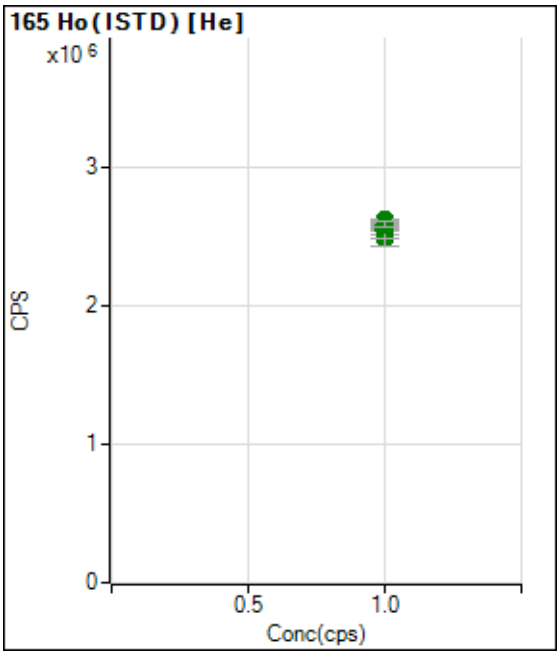


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2605189.82		A	1.3
2	☐	1.000		2613245.10		A	2.4
3	☐	1.000		2647425.51		A	2.8
4	☐	1.000		2644351.44		A	3.5
5	☐	1.000		2663385.95		A	0.9
6	☐	1.000		2647399.89		A	1.6
7	☐	1.000		2702717.53		A	1.2
8	☐	1.000		2624961.94		A	1.6

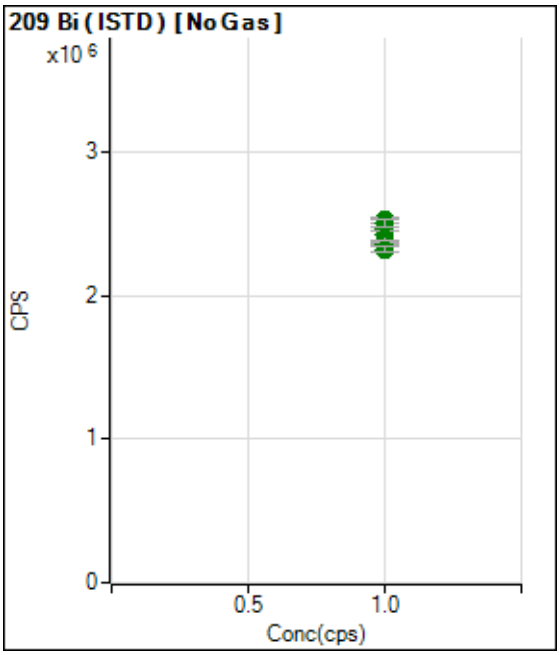


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4072377.78		A	1.3
2	☐	1.000		4026086.50		A	1.8
3	☐	1.000		4043440.22		A	0.7
4	☐	1.000		4113560.22		A	4.1
5	☐	1.000		4308180.73		A	0.6
6	☐	1.000		4264437.50		A	0.4
7	☐	1.000		4372753.48		A	1.6
8	☐	1.000		4129922.65		A	0.6

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

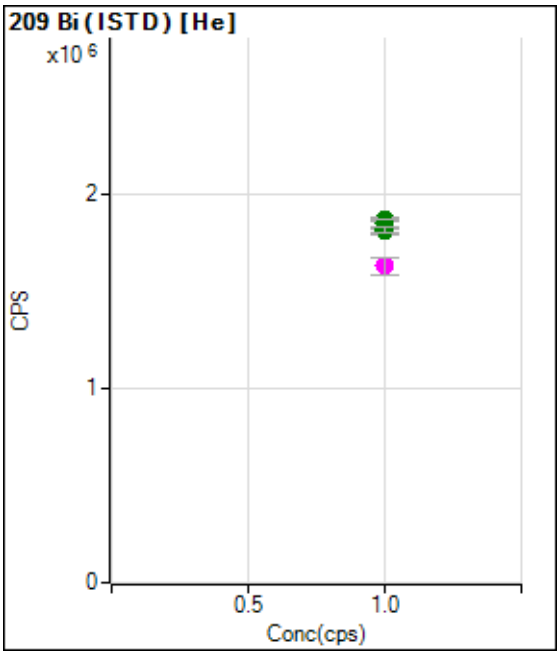


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2542184.44		A	2.0
2	☐	1.000		2496795.47		A	4.8
3	☐	1.000		2553603.23		A	1.1
4	☐	1.000		2541090.15		A	3.7
5	☐	1.000		2611386.58		A	0.6
6	☐	1.000		2612539.60		A	1.6
7	☐	1.000		2625091.19		A	0.6
8	☐	1.000		2594137.48		A	1.6



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2340485.56		A	2.9
2	☐	1.000		2353390.87		A	0.3
3	☐	1.000		2359052.36		A	1.1
4	☐	1.000		2426146.67		A	3.8
5	☐	1.000		2463657.45		A	1.1
6	☐	1.000		2525639.41		A	1.5
7	☐	1.000		2505541.70		A	2.5
8	☐	1.000		2320470.30		A	1.7

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1823662.63		A	3.4
2	☐	1.000		1814931.45		A	1.7
3	☐	1.000		1809120.70		A	0.8
4	☐	1.000		1808437.25		A	2.7
5	☐	1.000		1864804.99		A	1.0
6	☐	1.000		1847681.97		A	2.1
7	☐	1.000		1814123.55		A	1.4
8	☐	1.000		1629405.24		M	5.6

US EPA Tune Check Report

Operator Name	Jaswal
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\P7090424-MS.b
Acq. Date-Time	2024-09-04 12:31:29
Report Comment	---
Instrument Name	G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		2833	28331.15			1.596	5.000
24		34912	349120.10			1.242	5.000
25		4554	45536.89			1.321	5.000
26		5503	55025.53			0.909	5.000
59		25171	251707.85			0.650	5.000
113		3477	34770.54			0.987	5.000
115		40154	401538.18			0.992	5.000
206		6972	69717.36			1.641	5.000
207		6167	61673.58			1.254	5.000
208		14779	147793.44			1.680	5.000
220		1	8.90			21.903	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

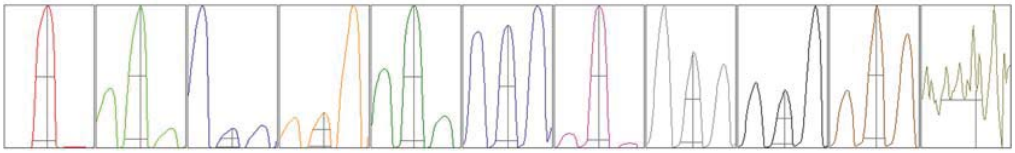
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	2887	2805	2861	2772	2840
24	34554	34613	35265	34639	35490
25	4573	4469	4569	4527	4631
26	5490	5434	5553	5485	5551
59	25092	25016	25285	25063	25399
113	3480	3418	3492	3488	3507
115	40177	39600	40216	40060	40716
206	6981	6772	7026	7044	7036
207	6177	6060	6127	6215	6258
208	14710	14381	14858	14942	15005

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	1	1	1	1	1

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	4672.61	8.95	8.90 - 9.10	
24	62427.41	24.00	23.90 - 24.10	
25	8308.34	25.00	24.90 - 25.10	
26	9751.85	26.00	25.90 - 26.10	
59	42735.70	58.95	58.90 - 59.10	
113	6674.33	113.05	112.90 - 113.10	
115	77681.74	115.00	114.90 - 115.10	
206	14523.70	206.10	205.90 - 206.10	
207	12825.15	207.10	206.90 - 207.10	
208	31305.11	208.10	207.90 - 208.10	
220	0.70	220.35	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.782	0.900	
24	0.60	0.783	0.900	
25	0.58	0.777	0.900	
26	0.57	0.773	0.900	
59	0.62	0.782	0.900	
113	0.53	0.731	0.900	
115	0.53	0.740	0.900	
206	0.50	0.733	0.900	
207	0.49	0.692	0.900	
208	0.49	0.695	0.900	
220	1.38			

Integration Time [sec] 0.1
Acquisition Time [sec] 256.770000000002
Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.1 V	Deflect	16.0 V
Extract 2	-125.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-65 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	136	Axis Gain	0.9979	QP Bias	-3.0 V
Mass Offset	129	Axis Offset	0.08		

Hardware Settings

Torch

Torch H	0.7 mm	Torch V	0.7 mm		

EM

Discriminator	4.8 mV	Analog HV	2328 V	Pulse HV	1482 V

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		8770	87698.56			0.919	
89		8013	80134.67			0.539	
205		7207	72073.70			0.565	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	8886	8717	8815	8746	8685
89	7995	7968	8081	8027	7997
205	7161	7246	7253	7197	7179

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.4 V	Deflect	4.2 V

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

US EPA Tune Check Report

Extract 2	-160.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-80 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	136	Axis Gain	0.9979	QP Bias	-13.0 V
Mass Offset	129	Axis Offset	0.08		

Hardware Settings

Torch

Torch H	0.7 mm	Torch V	0.7 mm

EM

Discriminator	4.8 mV	Analog HV	2328 V	Pulse HV	1482 V

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:16:37	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.06	0.31	-0.25	0.00	N/A	ppb
Antimony	121-1	-0.01	0.00	0.01	0.00	N/A	ppb
Arsenic	75-2	0.03	0.01	-0.03	0.00	N/A	ppb
Barium	135-1	-0.02	0.01	0.01	0.00	N/A	ppb
Barium	137-1	-0.01	-0.01	0.01	0.00	N/A	ppb
Beryllium	9-1	-0.02	0.00	0.01	0.00	N/A	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.16	0.05	0.11	0.00	N/A	ppb
Cadmium	106-1	0.73	0.24	-0.97	0.00	N/A	ppb
Cadmium	111-1	0.01	0.01	-0.01	0.00	N/A	ppb
Calcium	43-1	6.08	-1.13	-4.95	0.00	N/A	ppb
Calcium	44-1	2.06	2.23	-4.29	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.04	-0.02	-0.01	0.00	N/A	ppb
Cobalt	59-2	0.01	0.00	0.00	0.00	N/A	ppb
Copper	63-2	0.03	-0.04	0.00	0.00	N/A	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	56-2	-0.02	0.24	-0.22	0.00	N/A	ppb
Iron	57-2	1.28	-4.53	3.25	0.00	N/A	ppb
Iron	54-2	-1.36	0.27	1.09	0.00	N/A	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:16:37	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.00	0.01	-0.01	0.00	N/A	ppb
Lead	207-1	0.00	0.00	0.01	0.00	N/A	ppb
Lead	208-1	0.00	0.01	0.00	0.00	N/A	ppb
Lithium	6-1				100		%
Magnesium	24-2	0.29	-0.16	-0.13	0.00	N/A	ppb
Manganese	55-2	-0.01	-0.03	0.04	0.00	N/A	ppb
Molybdenum	94-1	0.01	0.01	-0.01	0.00	N/A	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	96-1	0.00	0.00	0.01	0.00	N/A	ppb
Molybdenum	97-1	0.01	-0.01	-0.01	0.00	N/A	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	N/A	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.01	-0.05	0.04	0.00	N/A	ppb
Phosphorus	31-2	-15.89	-13.40	-6.00	-11.76		ppb
Potassium	39-2	-3.66	4.18	-0.52	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	0.14	0.57	-0.70	0.00	N/A	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.89	0.32	0.57	0.00	N/A	ppb
Silicon	28-1	0.09	-0.02	-0.06	0.00	N/A	ppb
Silver	107-1	0.00	0.00	0.00	0.00	N/A	ppb
Silver	109-1	0.00	0.00	0.00	0.00	N/A	ppb
Sodium	23-2	0.08	-0.24	0.16	0.00	N/A	ppb
Strontium	86-1	0.00	-0.03	0.03	0.00	N/A	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	N/A	ppb
Sulfur	34-1	70.56	-111.50	16.09	-8.29		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	0.11	-0.05	-0.07	0.00	N/A	ppb
Titanium	47-1	0.04	0.00	-0.04	0.00	N/A	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:16:37	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	N/A	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	N/A	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	0.05	0.08	-0.13	0.00	N/A	ppb
Zirconium	90-1	0.00	-0.01	0.01	0.00	N/A	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	N/A	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:19:59	DataFile Name :	005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19.19	19.13	20.10	19.48	2.79	ppb
Antimony	121-1	2.00	2.06	2.10	2.05	2.38	ppb
Arsenic	75-2	1.02	0.80	0.80	0.88	14.79	ppb
Barium	135-1	9.82	9.64	9.08	9.52	4.05	ppb
Barium	137-1	9.79	9.89	9.95	9.88	0.84	ppb
Beryllium	9-1	1.01	0.89	1.01	0.97	7.18	ppb
Bismuth	209-1				101		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.91	0.34	1.13	0.80	51.13	ppb
Cadmium	106-1	1.05	1.74	-0.09	0.90	102.26	ppb
Cadmium	111-1	0.94	1.20	1.13	1.09	12.44	ppb
Calcium	43-1	545.75	535.26	545.11	542.04	1.09	ppb
Calcium	44-1	529.90	531.49	517.74	526.37	1.43	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.89	1.95	1.89	1.91	1.87	ppb
Cobalt	59-2	1.12	1.13	0.99	1.08	7.17	ppb
Copper	63-2	1.96	1.94	1.97	1.96	0.84	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				98		%
Indium	115-1				99		%
Indium	115-2				99		%
Iron	56-2	52.61	54.43	54.28	53.77	1.89	ppb
Iron	57-2	52.72	53.44	68.72	58.29	15.51	ppb
Iron	54-2	54.86	54.98	55.71	55.18	0.83	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:19:59	DataFile Name :	005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.86	0.88	0.88	0.87	1.65	ppb
Lead	207-1	0.82	0.78	0.84	0.81	3.57	ppb
Lead	208-1	0.84	0.85	0.87	0.85	2.23	ppb
Lithium	6-1				100		%
Magnesium	24-2	517.54	525.01	526.45	523.00	0.91	ppb
Manganese	55-2	1.02	0.88	1.05	0.98	9.24	ppb
Molybdenum	94-1	5.82	6.09	6.18	6.03	3.11	ppb
Molybdenum	95-1	4.68	4.97	5.05	4.90	3.97	ppb
Molybdenum	96-1	4.78	4.96	5.23	4.99	4.54	ppb
Molybdenum	97-1	4.88	4.94	5.10	4.97	2.30	ppb
Molybdenum	98-1	4.83	4.91	5.10	4.95	2.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.16	1.05	0.96	1.06	9.48	ppb
Phosphorus	31-2	15.86	3.14	16.29	11.76	63.54	ppb
Potassium	39-2	519.87	551.71	545.18	538.92	3.12	ppb
Rhodium	103-1				97		%
Rhodium	103-2				101		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	4.76	5.91	4.62	5.10	13.88	ppb
Selenium	77-2	6.30	7.22	5.53	6.35	13.37	ppb
Selenium	78-2	6.17	5.28	5.28	5.57	9.21	ppb
Silicon	28-1	0.38	0.18	0.11	0.22	63.46	ppb
Silver	107-1	0.99	1.03	1.07	1.03	4.27	ppb
Silver	109-1	1.02	0.94	1.04	1.00	4.96	ppb
Sodium	23-2	529.21	528.86	528.67	528.91	0.05	ppb
Strontium	86-1	0.92	1.18	1.00	1.03	13.24	ppb
Strontium	88-1	0.99	1.02	1.03	1.02	2.11	ppb
Sulfur	34-1	252.40	-83.08	-144.46	8.29	2578.34	ppb
Terbium	159-1				97		%
Terbium	159-2				100		%
Thallium	203-1	0.97	0.87	0.88	0.91	5.88	ppb
Thallium	205-1	0.81	0.87	0.87	0.85	3.95	ppb
Tin	118-1	4.91	5.10	5.09	5.03	2.12	ppb
Titanium	47-1	5.48	5.65	5.18	5.44	4.39	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:19:59	DataFile Name :	005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.82	0.83	0.79	0.82	2.33	ppb
Vanadium	51-2	4.75	5.04	4.96	4.91	3.08	ppb
Yttrium	89-1				99		%
Yttrium	89-2				98		%
Zinc	66-2	4.38	5.20	4.94	4.84	8.69	ppb
Zirconium	90-1	0.99	0.96	0.91	0.95	3.88	ppb
Zirconium	91-1	0.91	0.95	1.04	0.97	6.92	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:23:22	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1054.21	1046.75	1053.73	1051.57	0.40	ppb
Antimony	121-1	52.27	51.50	50.05	51.28	2.20	ppb
Arsenic	75-2	52.43	49.88	48.91	50.41	3.61	ppb
Barium	135-1	250.13	250.86	244.41	248.47	1.42	ppb
Barium	137-1	253.61	251.49	246.12	250.41	1.54	ppb
Beryllium	9-1	52.05	51.78	52.97	52.27	1.19	ppb
Bismuth	209-1				101		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	54.09	55.78	57.89	55.92	3.40	ppb
Cadmium	106-1	55.74	55.81	54.40	55.31	1.43	ppb
Cadmium	111-1	54.84	53.72	52.22	53.59	2.45	ppb
Calcium	43-1	5701.34	5844.17	5795.63	5780.38	1.26	ppb
Calcium	44-1	5499.15	5599.53	5610.84	5569.84	1.10	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	51.21	49.80	50.50	50.50	1.39	ppb
Cobalt	59-2	51.56	50.85	51.25	51.22	0.70	ppb
Copper	63-2	514.16	510.29	513.31	512.59	0.40	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				101		%
Iron	56-2	2617.72	2564.38	2555.73	2579.28	1.30	ppb
Iron	57-2	2779.69	2706.62	2786.68	2757.66	1.61	ppb
Iron	54-2	2851.50	2797.22	2839.68	2829.47	1.01	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:23:22	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	221.16	230.12	230.31	227.20	2.30	ppb
Lead	207-1	215.14	224.76	222.44	220.78	2.27	ppb
Lead	208-1	220.79	227.21	225.70	224.56	1.50	ppb
Lithium	6-1				103		%
Magnesium	24-2	5414.37	5381.41	5439.56	5411.78	0.54	ppb
Manganese	55-2	517.11	507.37	523.11	515.86	1.54	ppb
Molybdenum	94-1	548.16	550.14	568.06	555.45	1.97	ppb
Molybdenum	95-1	540.27	551.74	557.76	549.92	1.62	ppb
Molybdenum	96-1	535.48	554.51	559.83	549.94	2.33	ppb
Molybdenum	97-1	540.52	551.41	558.81	550.25	1.67	ppb
Molybdenum	98-1	535.48	543.15	553.07	543.90	1.62	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	52.66	50.65	51.51	51.61	1.95	ppb
Phosphorus	31-2	1013.39	969.86	973.62	985.62	2.45	ppb
Potassium	39-2	2787.27	2746.30	2770.79	2768.12	0.74	ppb
Rhodium	103-1				96		%
Rhodium	103-2				101		%
Scandium	45-1				100		%
Scandium	45-2				101		%
Selenium	82-1	51.73	51.11	50.83	51.23	0.90	ppb
Selenium	77-2	53.55	56.47	64.26	58.10	9.53	ppb
Selenium	78-2	56.35	51.23	60.79	56.12	8.52	ppb
Silicon	28-1	51.15	52.50	53.10	52.25	1.91	ppb
Silver	107-1	54.63	54.65	53.03	54.10	1.72	ppb
Silver	109-1	55.90	54.74	54.27	54.97	1.53	ppb
Sodium	23-2	5534.81	5426.10	5532.71	5497.87	1.13	ppb
Strontium	86-1	1243.18	1261.09	1291.39	1265.22	1.93	ppb
Strontium	88-1	1198.23	1200.41	1267.31	1221.98	3.21	ppb
Sulfur	34-1	1066.81	960.42	1001.44	1009.56	5.31	ppb
Terbium	159-1				99		%
Terbium	159-2				102		%
Thallium	203-1	43.83	46.74	46.42	45.66	3.49	ppb
Thallium	205-1	44.10	45.12	45.14	44.79	1.33	ppb
Tin	118-1	52.94	52.74	52.00	52.56	0.94	ppb
Titanium	47-1	590.47	594.49	595.43	593.46	0.44	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:23:22	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	41.72	42.78	43.60	42.70	2.20	ppb
Vanadium	51-2	48.84	48.64	49.21	48.90	0.58	ppb
Yttrium	89-1				102		%
Yttrium	89-2				100		%
Zinc	66-2	493.74	503.56	506.38	501.22	1.32	ppb
Zirconium	90-1	49.73	51.13	51.91	50.93	2.17	ppb
Zirconium	91-1	47.87	49.78	50.32	49.32	2.61	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:26:40	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2557.49	2643.85	2626.32	2609.22	1.75	ppb
Antimony	121-1	125.30	123.19	128.34	125.61	2.06	ppb
Arsenic	75-2	125.82	128.66	126.67	127.05	1.15	ppb
Barium	135-1	614.27	595.37	621.78	610.47	2.23	ppb
Barium	137-1	621.37	595.00	629.75	615.37	2.95	ppb
Beryllium	9-1	126.37	130.09	127.61	128.03	1.48	ppb
Bismuth	209-1				104		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	130.84	128.41	135.65	131.63	2.80	ppb
Cadmium	106-1	134.69	124.90	131.83	130.48	3.86	ppb
Cadmium	111-1	132.86	128.13	134.02	131.67	2.37	ppb
Calcium	43-1	14402.43	14383.72	14527.13	14437.76	0.54	ppb
Calcium	44-1	13007.15	12729.48	12768.35	12834.99	1.17	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	124.25	127.82	125.34	125.81	1.45	ppb
Cobalt	59-2	126.78	130.00	129.07	128.62	1.29	ppb
Copper	63-2	1247.64	1290.27	1287.11	1275.01	1.86	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				100		%
Indium	115-1				99		%
Indium	115-2				100		%
Iron	56-2	6170.60	6520.15	6493.87	6394.87	3.04	ppb
Iron	57-2	6773.65	6975.54	6919.95	6889.71	1.51	ppb
Iron	54-2	6939.47	7085.64	7133.22	7052.78	1.43	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:26:40	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	570.50	547.90	564.55	560.99	2.09	ppb
Lead	207-1	561.30	532.40	555.04	549.58	2.77	ppb
Lead	208-1	595.27	566.27	589.63	583.73	2.63	ppb
Lithium	6-1				108		%
Magnesium	24-2	12472.41	12453.50	12637.66	12521.19	0.81	ppb
Manganese	55-2	1269.39	1298.36	1299.45	1289.07	1.32	ppb
Molybdenum	94-1	1422.19	1407.35	1405.73	1411.76	0.64	ppb
Molybdenum	95-1	1401.46	1342.82	1399.90	1381.39	2.42	ppb
Molybdenum	96-1	1353.88	1350.79	1389.13	1364.60	1.56	ppb
Molybdenum	97-1	1397.22	1415.86	1385.26	1399.44	1.10	ppb
Molybdenum	98-1	1346.23	1392.06	1364.90	1367.73	1.68	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	125.31	128.31	129.69	127.77	1.75	ppb
Phosphorus	31-2	2486.91	2533.26	2477.83	2499.33	1.19	ppb
Potassium	39-2	6930.96	7002.56	7020.63	6984.72	0.68	ppb
Rhodium	103-1				97		%
Rhodium	103-2				101		%
Scandium	45-1				101		%
Scandium	45-2				100		%
Selenium	82-1	124.85	125.46	129.12	126.47	1.83	ppb
Selenium	77-2	135.47	150.09	131.06	138.87	7.17	ppb
Selenium	78-2	126.65	129.37	133.11	129.71	2.50	ppb
Silicon	28-1	123.42	128.77	129.32	127.17	2.56	ppb
Silver	107-1	135.51	129.26	133.18	132.65	2.38	ppb
Silver	109-1	133.53	131.34	133.70	132.86	0.99	ppb
Sodium	23-2	12432.58	12996.58	12828.34	12752.50	2.27	ppb
Strontium	86-1	3152.30	3227.63	3113.41	3164.45	1.84	ppb
Strontium	88-1	3132.71	3091.35	3114.92	3112.99	0.67	ppb
Sulfur	34-1	2229.05	2006.39	2423.05	2219.50	9.39	ppb
Terbium	159-1				102		%
Terbium	159-2				102		%
Thallium	203-1	116.65	108.60	113.43	112.89	3.59	ppb
Thallium	205-1	116.57	107.39	112.45	112.14	4.10	ppb
Tin	118-1	128.36	125.78	130.02	128.05	1.67	ppb
Titanium	47-1	1467.64	1473.02	1471.52	1470.73	0.19	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:26:40	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	110.85	105.79	107.89	108.18	2.35	ppb
Vanadium	51-2	124.99	123.65	124.55	124.39	0.55	ppb
Yttrium	89-1				101		%
Yttrium	89-2				99		%
Zinc	66-2	1223.07	1268.20	1266.05	1252.44	2.03	ppb
Zirconium	90-1	128.16	128.08	127.08	127.77	0.47	ppb
Zirconium	91-1	124.58	125.93	123.65	124.72	0.92	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:29:54	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5277.97	5190.00	5230.04	5232.67	0.84	ppb
Antimony	121-1	253.75	258.42	253.70	255.29	1.06	ppb
Arsenic	75-2	251.46	254.41	248.85	251.57	1.11	ppb
Barium	135-1	1251.02	1251.85	1236.19	1246.35	0.71	ppb
Barium	137-1	1234.33	1254.19	1240.01	1242.84	0.82	ppb
Beryllium	9-1	257.17	256.28	256.36	256.60	0.19	ppb
Bismuth	209-1				105		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	256.33	263.49	267.77	262.53	2.20	ppb
Cadmium	106-1	267.98	265.97	259.95	264.63	1.58	ppb
Cadmium	111-1	260.96	266.76	261.07	262.93	1.26	ppb
Calcium	43-1	27785.84	27985.91	28899.81	28223.85	2.10	ppb
Calcium	44-1	24721.14	24409.84	26294.31	25141.76	4.02	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	249.45	247.66	252.20	249.77	0.92	ppb
Cobalt	59-2	256.04	252.99	254.67	254.57	0.60	ppb
Copper	63-2	2572.84	2551.06	2575.98	2566.63	0.53	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				103		%
Indium	115-1				99		%
Indium	115-2				98		%
Iron	56-2	13189.25	12870.58	13340.34	13133.39	1.83	ppb
Iron	57-2	13687.68	13697.65	13710.41	13698.58	0.08	ppb
Iron	54-2	14071.18	13995.66	14112.17	14059.67	0.42	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:29:54	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1227.47	1238.30	1235.63	1233.80	0.46	ppb
Lead	207-1	1238.65	1226.51	1262.58	1242.58	1.48	ppb
Lead	208-1	1214.10	1235.45	1252.17	1233.91	1.55	ppb
Lithium	6-1				114		%
Magnesium	24-2	25986.39	26118.45	25557.71	25887.52	1.13	ppb
Manganese	55-2	2505.73	2467.67	2484.99	2486.13	0.77	ppb
Molybdenum	94-1	2702.86	2885.84	2705.19	2764.63	3.80	ppb
Molybdenum	95-1	2713.71	2844.10	2787.02	2781.61	2.35	ppb
Molybdenum	96-1	2589.94	2891.18	2835.35	2772.16	5.78	ppb
Molybdenum	97-1	2650.77	2916.51	2746.00	2771.09	4.86	ppb
Molybdenum	98-1	2674.80	2803.28	2757.82	2745.30	2.37	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	257.71	250.33	254.64	254.23	1.46	ppb
Phosphorus	31-2	4925.29	4975.72	5127.97	5009.66	2.11	ppb
Potassium	39-2	13050.69	13132.07	12669.84	12950.86	1.91	ppb
Rhodium	103-1				97		%
Rhodium	103-2				100		%
Scandium	45-1				103		%
Scandium	45-2				98		%
Selenium	82-1	253.70	258.15	253.61	255.15	1.02	ppb
Selenium	77-2	210.85	252.62	240.38	234.62	9.15	ppb
Selenium	78-2	247.91	269.35	259.63	258.97	4.15	ppb
Silicon	28-1	251.03	253.49	259.21	254.58	1.65	ppb
Silver	107-1	261.17	270.66	261.78	264.53	2.01	ppb
Silver	109-1	258.28	263.35	258.07	259.90	1.15	ppb
Sodium	23-2	25606.91	25191.97	25639.67	25479.52	0.98	ppb
Strontium	86-1	6190.46	6329.07	6428.31	6315.95	1.89	ppb
Strontium	88-1	6134.13	6281.50	6334.04	6249.89	1.66	ppb
Sulfur	34-1	4325.31	3922.71	4740.53	4329.51	9.45	ppb
Terbium	159-1				102		%
Terbium	159-2				102		%
Thallium	203-1	229.94	233.07	229.24	230.75	0.88	ppb
Thallium	205-1	227.07	229.50	229.58	228.72	0.62	ppb
Tin	118-1	253.78	260.99	253.97	256.25	1.60	ppb
Titanium	47-1	2848.92	2831.58	3000.77	2893.76	3.22	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:29:54	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	221.97	224.03	223.89	223.30	0.52	ppb
Vanadium	51-2	248.03	246.12	249.84	248.00	0.75	ppb
Yttrium	89-1				101		%
Yttrium	89-2				97		%
Zinc	66-2	2524.41	2519.49	2513.53	2519.14	0.22	ppb
Zirconium	90-1	251.84	262.60	257.62	257.35	2.09	ppb
Zirconium	91-1	247.12	259.95	251.22	252.76	2.59	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:32:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10604.59	10533.31	10666.99	10601.63	0.63	ppb
Antimony	121-1	491.46	503.88	490.86	495.40	1.48	ppb
Arsenic	75-2	500.03	504.59	490.40	498.34	1.45	ppb
Barium	135-1	2391.78	2544.09	2384.76	2440.21	3.69	ppb
Barium	137-1	2446.05	2556.07	2497.96	2500.03	2.20	ppb
Beryllium	9-1	493.94	505.19	504.69	501.27	1.27	ppb
Bismuth	209-1				108		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	514.46	521.11	512.63	516.07	0.86	ppb
Cadmium	106-1	508.32	508.76	491.21	502.77	1.99	ppb
Cadmium	111-1	502.48	514.77	499.91	505.72	1.57	ppb
Calcium	43-1	57300.30	58013.23	57678.73	57664.09	0.62	ppb
Calcium	44-1	50853.41	50441.17	51481.72	50925.43	1.03	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	505.57	490.51	505.58	500.55	1.74	ppb
Cobalt	59-2	506.13	500.96	505.42	504.17	0.56	ppb
Copper	63-2	5243.44	4956.34	5107.64	5102.48	2.81	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				103		%
Indium	115-1				100		%
Indium	115-2				97		%
Iron	56-2	25757.43	25869.97	26359.20	25995.54	1.23	ppb
Iron	57-2	27628.95	27273.15	27827.16	27576.42	1.02	ppb
Iron	54-2	28428.49	27783.06	28267.26	28159.60	1.19	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:32:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2443.10	2437.09	2532.46	2470.88	2.16	ppb
Lead	207-1	2419.55	2415.55	2458.40	2431.17	0.97	ppb
Lead	208-1	2401.86	2483.63	2501.82	2462.44	2.16	ppb
Lithium	6-1				117		%
Magnesium	24-2	51447.58	49902.67	51471.47	50940.57	1.76	ppb
Manganese	55-2	5013.50	4915.63	5032.49	4987.21	1.26	ppb
Molybdenum	94-1	5443.54	5553.86	5675.04	5557.48	2.08	ppb
Molybdenum	95-1	5432.12	5411.28	5637.87	5493.75	2.28	ppb
Molybdenum	96-1	5456.83	5291.71	5665.32	5471.29	3.42	ppb
Molybdenum	97-1	5535.80	5376.39	5641.57	5517.92	2.42	ppb
Molybdenum	98-1	5456.65	5456.92	5609.60	5507.72	1.60	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	508.87	498.31	510.82	506.00	1.33	ppb
Phosphorus	31-2	10098.52	10243.52	10187.95	10176.66	0.72	ppb
Potassium	39-2	26117.49	25903.18	26297.84	26106.17	0.76	ppb
Rhodium	103-1				95		%
Rhodium	103-2				95		%
Scandium	45-1				100		%
Scandium	45-2				95		%
Selenium	82-1	494.22	499.96	520.48	504.89	2.73	ppb
Selenium	77-2	487.09	529.88	506.86	507.94	4.22	ppb
Selenium	78-2	520.43	485.00	497.83	501.09	3.58	ppb
Silicon	28-1	510.44	525.98	516.94	517.79	1.51	ppb
Silver	107-1	514.10	504.99	496.54	505.21	1.74	ppb
Silver	109-1	508.04	513.39	496.27	505.90	1.73	ppb
Sodium	23-2	50987.49	51379.98	51860.25	51409.24	0.85	ppb
Strontium	86-1	12678.90	12327.44	12774.54	12593.63	1.87	ppb
Strontium	88-1	12168.13	12214.44	12615.97	12332.85	2.00	ppb
Sulfur	34-1	9946.23	10337.80	9940.66	10074.90	2.26	ppb
Terbium	159-1				103		%
Terbium	159-2				102		%
Thallium	203-1	451.29	456.42	460.11	455.94	0.97	ppb
Thallium	205-1	483.84	498.49	507.83	496.72	2.43	ppb
Tin	118-1	497.83	508.48	498.92	501.74	1.17	ppb
Titanium	47-1	5583.06	5494.35	5613.88	5563.76	1.12	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:32:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	487.41	488.23	487.56	487.74	0.09	ppb
Vanadium	51-2	501.07	493.26	504.60	499.64	1.16	ppb
Yttrium	89-1				99		%
Yttrium	89-2				97		%
Zinc	66-2	5042.39	4928.85	5055.27	5008.84	1.39	ppb
Zirconium	90-1	493.68	513.43	525.58	510.90	3.15	ppb
Zirconium	91-1	491.45	496.27	516.98	501.56	2.70	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:35:58	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21256.36	21309.46	21090.34	21218.72	0.54	ppb
Antimony	121-1	986.02	986.31	1030.18	1000.84	2.54	ppb
Arsenic	75-2	990.37	1000.23	1009.88	1000.16	0.98	ppb
Barium	135-1	4948.64	4916.46	5232.99	5032.70	3.46	ppb
Barium	137-1	4946.76	4901.14	5160.98	5002.96	2.77	ppb
Beryllium	9-1	982.22	1005.64	1003.80	997.22	1.31	ppb
Bismuth	209-1				107		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	958.03	978.85	1026.25	987.71	3.54	ppb
Cadmium	106-1	975.64	984.34	1022.05	994.01	2.48	ppb
Cadmium	111-1	967.79	978.98	1031.92	992.89	3.45	ppb
Calcium	43-1	112743.30	110784.40	114991.94	112839.88	1.87	ppb
Calcium	44-1	102597.25	99446.31	103089.21	101710.92	1.94	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	999.02	1002.82	997.12	999.66	0.29	ppb
Cobalt	59-2	1029.17	993.53	966.08	996.26	3.18	ppb
Copper	63-2	9960.47	9858.41	9966.18	9928.35	0.61	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				103		%
Indium	115-1				98		%
Indium	115-2				96		%
Iron	56-2	52149.52	51899.93	50483.04	51510.83	1.74	ppb
Iron	57-2	55719.88	54921.57	54670.51	55103.99	0.99	ppb
Iron	54-2	52218.47	52355.83	53090.97	52555.09	0.89	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:35:58	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4882.53	5141.57	5059.15	5027.75	2.63	ppb
Lead	207-1	4868.11	5026.86	5246.52	5047.16	3.76	ppb
Lead	208-1	4874.10	5035.25	5178.36	5029.24	3.03	ppb
Lithium	6-1				116		%
Magnesium	24-2	102049.07	104866.55	101287.92	102734.51	1.84	ppb
Manganese	55-2	9977.91	10092.31	9942.34	10004.19	0.78	ppb
Molybdenum	94-1	10755.43	11146.10	10986.67	10962.73	1.79	ppb
Molybdenum	95-1	10667.03	11281.37	11034.87	10994.43	2.81	ppb
Molybdenum	96-1	10705.39	11240.56	11084.42	11010.12	2.50	ppb
Molybdenum	97-1	10779.23	11161.88	11006.98	10982.70	1.75	ppb
Molybdenum	98-1	11043.37	11081.35	10870.86	10998.53	1.02	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1002.29	992.25	992.01	995.52	0.59	ppb
Phosphorus	31-2	19959.62	19979.65	19790.90	19910.06	0.52	ppb
Potassium	39-2	50670.91	51930.37	50630.71	51077.33	1.45	ppb
Rhodium	103-1				94		%
Rhodium	103-2				95		%
Scandium	45-1				103		%
Scandium	45-2				95		%
Selenium	82-1	978.43	1005.78	1003.85	996.02	1.53	ppb
Selenium	77-2	1024.21	971.30	997.67	997.73	2.65	ppb
Selenium	78-2	983.66	1007.80	997.50	996.32	1.22	ppb
Silicon	28-1	995.77	965.92	1007.33	989.67	2.16	ppb
Silver	107-1	979.11	974.18	1024.51	992.60	2.80	ppb
Silver	109-1	965.47	989.75	1024.81	993.34	3.00	ppb
Sodium	23-2	104707.05	106533.24	103158.34	104799.54	1.61	ppb
Strontium	86-1	24670.52	25388.67	24733.84	24931.01	1.59	ppb
Strontium	88-1	24504.58	25337.52	25417.42	25086.51	2.02	ppb
Sulfur	34-1	20264.11	19188.77	21041.39	20164.76	4.61	ppb
Terbium	159-1				105		%
Terbium	159-2				104		%
Thallium	203-1	1002.67	1016.15	1066.90	1028.57	3.29	ppb
Thallium	205-1	977.61	1014.70	1034.18	1008.83	2.85	ppb
Tin	118-1	983.38	983.80	1023.99	997.06	2.34	ppb
Titanium	47-1	10897.19	10718.22	11138.71	10918.04	1.93	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:35:58	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	986.79	1009.04	1049.99	1015.28	3.16	ppb
Vanadium	51-2	1004.89	996.84	1000.70	1000.81	0.40	ppb
Yttrium	89-1				101		%
Yttrium	89-2				97		%
Zinc	66-2	10116.78	9988.50	9866.00	9990.43	1.26	ppb
Zirconium	90-1	979.78	992.49	1004.69	992.32	1.25	ppb
Zirconium	91-1	972.53	1012.90	1010.36	998.60	2.26	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:38:51	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	98283.93	99652.02	101107.68	99681.21	1.42	ppb
Antimony	121-1	0.95	0.96	0.93	0.95	1.72	ppb
Arsenic	75-2	0.69	0.81	0.65	0.71	11.16	ppb
Barium	135-1	2.76	2.70	2.11	2.52	14.24	ppb
Barium	137-1	2.77	2.31	2.33	2.47	10.51	ppb
Beryllium	9-1	0.43	0.34	0.26	0.34	24.84	ppb
Bismuth	209-1				99		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.59	0.59	0.38	0.52	23.17	ppb
Cadmium	106-1	-5.12	-5.21	-4.50	-4.95		ppb
Cadmium	111-1	0.31	0.22	0.24	0.26	17.31	ppb
Calcium	43-1	492468.38	505803.21	491072.81	496448.13	1.64	ppb
Calcium	44-1	497283.05	508391.55	492957.66	499544.08	1.59	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4.32	4.61	4.21	4.38	4.72	ppb
Cobalt	59-2	2.54	2.64	2.50	2.56	2.79	ppb
Copper	63-2	2.60	2.51	2.57	2.56	1.78	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				102		%
Indium	115-1				94		%
Indium	115-2				92		%
Iron	56-2	249639.32	248368.37	250678.89	249562.20	0.46	ppb
Iron	57-2	249992.28	246892.97	249043.93	248643.06	0.64	ppb
Iron	54-2	246223.81	251851.30	249139.91	249071.67	1.13	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:38:51	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2.16	1.96	1.79	1.97	9.52	ppb
Lead	207-1	2.14	1.70	1.57	1.80	16.46	ppb
Lead	208-1	2.09	1.87	1.73	1.90	9.54	ppb
Lithium	6-1				116		%
Magnesium	24-2	501132.15	493447.80	503350.03	499309.99	1.04	ppb
Manganese	55-2	5.49	5.85	5.64	5.66	3.15	ppb
Molybdenum	94-1	4.97	4.60	4.27	4.62	7.61	ppb
Molybdenum	95-1	4.20	3.71	3.36	3.76	11.10	ppb
Molybdenum	96-1	5.59	4.97	4.72	5.09	8.80	ppb
Molybdenum	97-1	4.01	3.76	3.33	3.70	9.32	ppb
Molybdenum	98-1	4.13	3.60	3.25	3.66	12.15	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.18	4.97	4.82	4.66	9.00	ppb
Phosphorus	31-2	-20.25	-1.58	-1.04	-7.62		ppb
Potassium	39-2	248522.29	250050.38	250318.06	249630.25	0.39	ppb
Rhodium	103-1				85		%
Rhodium	103-2				88		%
Scandium	45-1				95		%
Scandium	45-2				92		%
Selenium	82-1	-0.41	0.24	1.52	0.45	218.74	ppb
Selenium	77-2	0.00	0.00	0.83	0.28	173.21	ppb
Selenium	78-2	3.99	2.31	-0.71	1.86	127.91	ppb
Silicon	28-1	7.24	9.24	8.90	8.46	12.62	ppb
Silver	107-1	0.24	0.21	0.22	0.22	7.39	ppb
Silver	109-1	0.24	0.21	0.17	0.20	18.08	ppb
Sodium	23-2	496392.79	496581.26	503617.57	498863.87	0.83	ppb
Strontium	86-1	8.02	7.38	6.25	7.22	12.40	ppb
Strontium	88-1	8.35	7.17	6.33	7.29	13.98	ppb
Sulfur	34-1	-456.35	79.57	-125.47	-167.41		ppb
Terbium	159-1				102		%
Terbium	159-2				101		%
Thallium	203-1	0.37	0.28	0.18	0.28	33.52	ppb
Thallium	205-1	0.36	0.27	0.22	0.28	25.07	ppb
Tin	118-1	0.78	0.76	0.78	0.77	1.94	ppb
Titanium	47-1	3.78	3.04	2.58	3.13	19.32	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:38:51	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.23	0.19	0.12	0.18	29.69	ppb
Vanadium	51-2	0.47	0.44	0.37	0.43	11.55	ppb
Yttrium	89-1				94		%
Yttrium	89-2				93		%
Zinc	66-2	4.12	4.39	3.80	4.10	7.19	ppb
Zirconium	90-1	0.72	0.67	0.62	0.67	7.49	ppb
Zirconium	91-1	0.67	0.72	0.60	0.66	8.57	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:51:16	DataFile Name :	012ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	542.68	525.45	539.67	535.93	1.72	ppb
Antimony	121-1	196.41	195.65	197.07	196.38	0.36	ppb
Arsenic	75-2	192.99	197.89	191.85	194.24	1.65	ppb
Barium	135-1	96.43	95.81	97.94	96.73	1.13	ppb
Barium	137-1	96.50	97.31	99.74	97.85	1.72	ppb
Beryllium	9-1	102.61	101.53	99.05	101.06	1.80	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	147.17	145.48	152.80	148.48	2.58	ppb
Cadmium	106-1	155.50	148.87	157.46	153.95	2.92	ppb
Cadmium	111-1	102.66	102.78	102.55	102.66	0.11	ppb
Calcium	43-1	2134.78	2073.16	2278.34	2162.09	4.87	ppb
Calcium	44-1	2060.37	2045.47	2098.88	2068.24	1.33	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	98.95	95.46	96.92	97.11	1.81	ppb
Cobalt	59-2	102.42	98.26	98.79	99.83	2.27	ppb
Copper	63-2	101.44	98.80	98.76	99.67	1.54	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				97		%
Indium	115-1				97		%
Indium	115-2				95		%
Iron	56-2	2073.90	1962.30	1972.34	2002.85	3.08	ppb
Iron	57-2	2144.00	2086.65	2098.77	2109.80	1.43	ppb
Iron	54-2	2251.17	2203.57	2201.48	2218.74	1.27	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:51:16	DataFile Name :	012ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	197.97	201.61	191.80	197.13	2.52	ppb
Lead	207-1	182.15	188.17	181.78	184.03	1.95	ppb
Lead	208-1	190.15	193.43	186.47	190.02	1.83	ppb
Lithium	6-1				110		%
Magnesium	24-2	1216.75	1175.34	1200.21	1197.43	1.74	ppb
Manganese	55-2	103.26	101.29	101.73	102.09	1.02	ppb
Molybdenum	94-1	5097.58	5190.22	5122.87	5136.89	0.93	ppb
Molybdenum	95-1	4974.85	4971.41	4776.88	4907.71	2.31	ppb
Molybdenum	96-1	5000.86	4917.66	4825.04	4914.52	1.79	ppb
Molybdenum	97-1	4871.05	4974.64	4799.31	4881.66	1.81	ppb
Molybdenum	98-1	4935.79	4964.31	4812.89	4904.33	1.64	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	111.09	107.29	107.10	108.49	2.08	ppb
Phosphorus	31-2	-10.26	-10.73	-13.63	-11.54		ppb
Potassium	39-2	2075.82	2031.60	1991.12	2032.85	2.08	ppb
Rhodium	103-1				94		%
Rhodium	103-2				97		%
Scandium	45-1				98		%
Scandium	45-2				94		%
Selenium	82-1	197.36	198.17	191.13	195.56	1.97	ppb
Selenium	77-2	190.81	211.32	191.24	197.79	5.92	ppb
Selenium	78-2	192.50	204.21	209.74	202.15	4.35	ppb
Silicon	28-1	32.12	31.82	33.75	32.56	3.20	ppb
Silver	107-1	49.73	50.03	51.10	50.29	1.44	ppb
Silver	109-1	49.61	49.90	50.59	50.03	1.01	ppb
Sodium	23-2	2193.46	2098.50	2130.45	2140.80	2.26	ppb
Strontium	86-1	530.04	546.40	528.09	534.84	1.88	ppb
Strontium	88-1	522.09	523.68	510.54	518.77	1.38	ppb
Sulfur	34-1	430.17	-118.87	9.36	106.89	268.71	ppb
Terbium	159-1				97		%
Terbium	159-2				98		%
Thallium	203-1	204.05	206.75	197.02	202.61	2.48	ppb
Thallium	205-1	199.81	203.94	198.91	200.89	1.34	ppb
Tin	118-1	538.46	541.32	553.52	544.43	1.47	ppb
Titanium	47-1	5109.10	4945.39	5113.16	5055.88	1.89	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:51:16	DataFile Name :	012ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	549.05	548.56	528.57	542.06	2.16	ppb
Vanadium	51-2	94.61	92.34	92.58	93.18	1.34	ppb
Yttrium	89-1				97		%
Yttrium	89-2				94		%
Zinc	66-2	197.20	196.99	196.94	197.05	0.07	ppb
Zirconium	90-1	502.13	516.79	509.62	509.51	1.44	ppb
Zirconium	91-1	507.17	508.35	496.18	503.90	1.33	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:06:05	DataFile Name :	014LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19.14	19.86	21.61	20.21	6.28	ppb
Antimony	121-1	2.01	2.07	1.96	2.02	2.70	ppb
Arsenic	75-2	1.04	0.97	1.16	1.06	9.42	ppb
Barium	135-1	9.38	9.78	9.95	9.70	2.99	ppb
Barium	137-1	9.72	9.79	9.85	9.79	0.67	ppb
Beryllium	9-1	0.88	1.14	1.04	1.02	12.73	ppb
Bismuth	209-1				101		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.97	0.99	0.54	0.83	30.21	ppb
Cadmium	106-1	-3.52	-4.29	-3.36	-3.73		ppb
Cadmium	111-1	1.00	0.98	1.11	1.03	6.71	ppb
Calcium	43-1	516.51	542.41	512.51	523.81	3.10	ppb
Calcium	44-1	501.74	520.67	501.89	508.10	2.14	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.93	1.81	1.77	1.84	4.43	ppb
Cobalt	59-2	1.07	1.07	1.18	1.11	5.80	ppb
Copper	63-2	1.93	2.10	2.12	2.05	5.03	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				96		%
Indium	115-1				97		%
Indium	115-2				95		%
Iron	56-2	56.35	55.44	55.12	55.64	1.15	ppb
Iron	57-2	46.66	51.33	49.30	49.09	4.77	ppb
Iron	54-2	54.00	54.41	51.95	53.45	2.46	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:06:05	DataFile Name :	014LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.91	0.84	0.96	0.90	6.69	ppb
Lead	207-1	0.84	0.96	0.90	0.90	7.10	ppb
Lead	208-1	0.89	0.89	0.90	0.90	0.95	ppb
Lithium	6-1				106		%
Magnesium	24-2	541.44	531.52	548.80	540.58	1.60	ppb
Manganese	55-2	0.95	1.01	0.93	0.96	4.01	ppb
Molybdenum	94-1	6.12	6.05	5.95	6.04	1.43	ppb
Molybdenum	95-1	5.00	5.30	5.06	5.12	3.03	ppb
Molybdenum	96-1	5.05	5.29	5.11	5.15	2.37	ppb
Molybdenum	97-1	5.10	5.04	4.87	5.01	2.42	ppb
Molybdenum	98-1	4.91	5.20	5.07	5.06	2.83	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.85	0.91	1.02	0.93	9.05	ppb
Phosphorus	31-2	18.83	17.91	24.47	20.40	17.40	ppb
Potassium	39-2	518.98	525.38	528.71	524.36	0.94	ppb
Rhodium	103-1				95		%
Rhodium	103-2				98		%
Scandium	45-1				96		%
Scandium	45-2				94		%
Selenium	82-1	4.61	4.05	4.17	4.28	6.87	ppb
Selenium	77-2	5.67	9.07	5.79	6.85	28.20	ppb
Selenium	78-2	5.68	6.95	7.50	6.71	13.95	ppb
Silicon	28-1	-0.45	-0.18	-0.60	-0.41		ppb
Silver	107-1	0.96	0.97	1.00	0.97	2.17	ppb
Silver	109-1	0.99	0.98	0.95	0.98	2.09	ppb
Sodium	23-2	556.18	554.69	570.38	560.41	1.55	ppb
Strontium	86-1	1.03	0.98	1.03	1.02	2.72	ppb
Strontium	88-1	0.99	1.03	1.02	1.01	1.99	ppb
Sulfur	34-1	728.46	914.09	763.38	801.98	12.30	ppb
Terbium	159-1				98		%
Terbium	159-2				97		%
Thallium	203-1	0.88	0.83	0.88	0.86	3.88	ppb
Thallium	205-1	0.90	0.86	0.93	0.90	4.24	ppb
Tin	118-1	4.88	5.05	4.97	4.97	1.72	ppb
Titanium	47-1	5.52	5.80	5.07	5.46	6.79	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:06:05	DataFile Name :	014LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.85	0.82	0.85	0.84	2.01	ppb
Vanadium	51-2	5.15	5.18	4.90	5.08	3.05	ppb
Yttrium	89-1				96		%
Yttrium	89-2				94		%
Zinc	66-2	5.18	4.88	5.51	5.19	6.09	ppb
Zirconium	90-1	0.96	1.02	1.00	0.99	3.01	ppb
Zirconium	91-1	1.06	0.94	0.98	1.00	6.24	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:10:30	DataFile Name :	015CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.37	-0.25	0.10	0.07	414.82	ppb
Antimony	121-1	0.01	0.03	0.02	0.02	48.12	ppb
Arsenic	75-2	0.01	-0.03	-0.01	-0.01		ppb
Barium	135-1	-0.02	0.00	-0.02	-0.01		ppb
Barium	137-1	-0.01	0.00	0.03	0.01	308.81	ppb
Beryllium	9-1	0.04	0.00	0.00	0.01	133.98	ppb
Bismuth	209-1				98		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.16	-0.16	-0.16	-0.16		ppb
Cadmium	106-1	-5.89	-6.74	-6.02	-6.21		ppb
Cadmium	111-1	-0.05	-0.07	-0.06	-0.06		ppb
Calcium	43-1	-27.79	-22.56	-19.74	-23.36		ppb
Calcium	44-1	-30.75	-33.01	-29.22	-30.99		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	0.01	0.00	0.00		ppb
Cobalt	59-2	0.00	0.02	0.00	0.01	145.12	ppb
Copper	63-2	0.04	-0.06	-0.01	-0.01		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				95		%
Holmium	165-2				96		%
Indium	115-1				96		%
Indium	115-2				94		%
Iron	56-2	-0.39	-0.02	-0.27	-0.23		ppb
Iron	57-2	-4.59	-9.01	-7.20	-6.94		ppb
Iron	54-2	-0.90	0.11	-0.44	-0.41		ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:10:30	DataFile Name :	015CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.02	0.04	0.04	0.03	43.06	ppb
Lead	207-1	0.01	0.05	0.02	0.03	67.15	ppb
Lead	208-1	0.02	0.04	0.03	0.03	19.12	ppb
Lithium	6-1				104		%
Magnesium	24-2	0.03	-0.04	0.30	0.10	186.50	ppb
Manganese	55-2	-0.11	-0.09	-0.06	-0.09		ppb
Molybdenum	94-1	0.03	0.02	0.05	0.03	33.30	ppb
Molybdenum	95-1	0.01	0.01	0.02	0.01	33.20	ppb
Molybdenum	96-1	0.01	0.02	0.02	0.02	30.61	ppb
Molybdenum	97-1	0.00	0.01	0.01	0.01	59.65	ppb
Molybdenum	98-1	0.01	0.00	0.02	0.01	57.91	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.03	-0.07	-0.03	-0.02		ppb
Phosphorus	31-2	-25.82	-12.71	-25.30	-21.28		ppb
Potassium	39-2	-3.80	-17.14	-9.21	-10.05		ppb
Rhodium	103-1				92		%
Rhodium	103-2				96		%
Scandium	45-1				96		%
Scandium	45-2				93		%
Selenium	82-1	-1.40	-0.73	-0.59	-0.91		ppb
Selenium	77-2	0.00	0.83	0.00	0.28	173.21	ppb
Selenium	78-2	2.42	3.82	-0.76	1.83	128.69	ppb
Silicon	28-1	-0.86	-0.97	-0.61	-0.81		ppb
Silver	107-1	0.00	0.00	0.00	0.00	393.90	ppb
Silver	109-1	0.00	0.00	0.00	0.00	53.63	ppb
Sodium	23-2	16.77	15.28	15.28	15.78	5.43	ppb
Strontium	86-1	-0.02	0.02	-0.01	0.00		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	701.71	657.72	1095.13	818.19	29.44	ppb
Terbium	159-1				96		%
Terbium	159-2				97		%
Thallium	203-1	0.01	0.01	0.01	0.01	28.98	ppb
Thallium	205-1	0.02	0.01	0.01	0.01	30.87	ppb
Tin	118-1	-0.04	-0.08	-0.03	-0.05		ppb
Titanium	47-1	0.03	0.06	0.05	0.05	37.83	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:10:30	DataFile Name :	015CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00		ppb
Vanadium	51-2	0.00	0.00	0.01	0.00	213.67	ppb
Yttrium	89-1				93		%
Yttrium	89-2				93		%
Zinc	66-2	0.13	0.07	-0.36	-0.05		ppb
Zirconium	90-1	0.00	0.00	0.02	0.01	255.60	ppb
Zirconium	91-1	0.01	0.01	-0.02	0.00	1342.00	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:13:52	DataFile Name :	016ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	90497.79	92509.05	91799.48	91602.11	1.11	ppb
Antimony	121-1	1.06	1.09	1.05	1.06	2.23	ppb
Arsenic	75-2	0.37	0.31	0.44	0.37	17.46	ppb
Barium	135-1	1.29	1.42	1.47	1.40	6.60	ppb
Barium	137-1	1.37	1.35	1.36	1.36	0.65	ppb
Beryllium	9-1	0.22	0.27	0.30	0.26	15.42	ppb
Bismuth	209-1				98		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	6.02	5.62	4.63	5.42	13.25	ppb
Cadmium	106-1	-8.12	-8.24	-6.90	-7.75		ppb
Cadmium	111-1	0.09	0.20	0.23	0.18	41.50	ppb
Calcium	43-1	102584.29	105146.95	105602.50	104444.58	1.56	ppb
Calcium	44-1	92889.40	99565.52	95480.46	95978.46	3.51	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.41	19.81	19.56	19.60	1.03	ppb
Cobalt	59-2	1.28	1.18	1.17	1.21	5.34	ppb
Copper	63-2	8.23	7.92	7.93	8.03	2.15	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				100		%
Indium	115-1				95		%
Indium	115-2				94		%
Iron	56-2	100823.31	100707.22	101186.91	100905.81	0.25	ppb
Iron	57-2	101336.86	100132.96	102215.01	101228.28	1.03	ppb
Iron	54-2	101396.03	102733.88	102466.99	102198.96	0.69	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:13:52	DataFile Name :	016ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4.50	4.66	4.73	4.63	2.53	ppb
Lead	207-1	4.33	4.10	3.94	4.13	4.72	ppb
Lead	208-1	4.32	4.40	4.32	4.34	1.12	ppb
Lithium	6-1				108		%
Magnesium	24-2	91300.21	91298.78	92407.15	91668.71	0.70	ppb
Manganese	55-2	8.06	8.10	7.95	8.04	0.97	ppb
Molybdenum	94-1	1607.79	1691.05	1659.77	1652.87	2.54	ppb
Molybdenum	95-1	1925.96	1988.09	1956.98	1957.01	1.59	ppb
Molybdenum	96-1	1859.14	1964.64	1861.19	1894.99	3.18	ppb
Molybdenum	97-1	1890.26	2018.39	1952.54	1953.73	3.28	ppb
Molybdenum	98-1	1890.37	1909.44	1956.99	1918.93	1.79	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.47	5.13	5.18	5.26	3.55	ppb
Phosphorus	31-2	96315.84	97006.61	97183.77	96835.41	0.47	ppb
Potassium	39-2	97084.01	98517.39	97334.03	97645.14	0.78	ppb
Rhodium	103-1				90		%
Rhodium	103-2				94		%
Scandium	45-1				97		%
Scandium	45-2				94		%
Selenium	82-1	0.51	-0.25	-1.78	-0.51		ppb
Selenium	77-2	0.00	0.00	0.82	0.27	173.21	ppb
Selenium	78-2	3.78	2.17	2.71	2.89	28.39	ppb
Silicon	28-1	1.12	1.31	1.19	1.21	7.76	ppb
Silver	107-1	0.09	0.09	0.07	0.08	15.67	ppb
Silver	109-1	0.10	0.08	0.08	0.09	11.33	ppb
Sodium	23-2	97261.88	98762.68	98880.84	98301.80	0.92	ppb
Strontium	86-1	34.28	36.64	34.82	35.24	3.51	ppb
Strontium	88-1	34.43	35.67	34.94	35.01	1.78	ppb
Sulfur	34-1	100077.12	107258.24	104187.84	103841.06	3.47	ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	0.07	0.07	0.09	0.07	14.20	ppb
Thallium	205-1	0.08	0.08	0.08	0.08	4.12	ppb
Tin	118-1	0.21	0.23	0.23	0.22	5.61	ppb
Titanium	47-1	2074.43	2137.02	2091.98	2101.15	1.54	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:13:52	DataFile Name :	016ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.02	0.01	0.01	28.27	ppb
Vanadium	51-2	0.15	0.20	0.19	0.18	14.76	ppb
Yttrium	89-1				96		%
Yttrium	89-2				95		%
Zinc	66-2	11.12	11.05	10.77	10.98	1.68	ppb
Zirconium	90-1	0.02	0.02	0.01	0.02	27.43	ppb
Zirconium	91-1	0.00	0.04	0.01	0.02	103.77	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:17:04	DataFile Name :	017ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	89800.32	92841.48	90009.31	90883.70	1.87	ppb
Antimony	121-1	20.17	20.35	20.27	20.27	0.44	ppb
Arsenic	75-2	20.12	19.31	18.94	19.46	3.09	ppb
Barium	135-1	20.27	20.03	19.90	20.07	0.94	ppb
Barium	137-1	20.31	20.44	19.86	20.20	1.52	ppb
Beryllium	9-1	19.66	19.95	19.23	19.61	1.86	ppb
Bismuth	209-1				101		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	29.75	26.77	25.20	27.24	8.49	ppb
Cadmium	106-1	17.70	14.34	14.48	15.51	12.24	ppb
Cadmium	111-1	19.76	19.36	18.50	19.20	3.36	ppb
Calcium	43-1	103065.62	105048.14	103801.70	103971.82	0.96	ppb
Calcium	44-1	93442.40	96167.69	95585.20	95065.10	1.51	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	38.67	39.18	37.98	38.61	1.56	ppb
Cobalt	59-2	21.06	20.88	21.25	21.06	0.89	ppb
Copper	63-2	27.06	27.43	27.18	27.22	0.70	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				102		%
Indium	115-1				95		%
Indium	115-2				95		%
Iron	56-2	102905.03	101468.28	99028.67	101133.99	1.94	ppb
Iron	57-2	100881.55	100665.70	100106.89	100551.38	0.40	ppb
Iron	54-2	100323.71	102846.52	102397.96	101856.06	1.32	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:17:04	DataFile Name :	017ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	23.73	23.33	23.30	23.45	1.01	ppb
Lead	207-1	22.04	22.29	22.37	22.23	0.76	ppb
Lead	208-1	22.90	22.74	22.74	22.80	0.40	ppb
Lithium	6-1				107		%
Magnesium	24-2	91096.43	91336.17	91070.55	91167.72	0.16	ppb
Manganese	55-2	28.04	28.49	28.41	28.31	0.85	ppb
Molybdenum	94-1	1698.53	1733.51	1708.84	1713.63	1.05	ppb
Molybdenum	95-1	1939.81	1925.75	1975.21	1946.92	1.31	ppb
Molybdenum	96-1	1888.76	1938.90	1957.96	1928.54	1.85	ppb
Molybdenum	97-1	1934.51	2014.73	1971.90	1973.71	2.03	ppb
Molybdenum	98-1	1900.73	1973.47	1918.44	1930.88	1.96	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	25.46	25.64	24.07	25.06	3.43	ppb
Phosphorus	31-2	96192.61	97479.85	96744.26	96805.57	0.67	ppb
Potassium	39-2	98687.10	97141.52	98707.33	98178.65	0.91	ppb
Rhodium	103-1				90		%
Rhodium	103-2				94		%
Scandium	45-1				97		%
Scandium	45-2				94		%
Selenium	82-1	19.60	17.33	19.97	18.97	7.54	ppb
Selenium	77-2	16.22	17.27	19.42	17.64	9.25	ppb
Selenium	78-2	16.22	24.53	22.51	21.09	20.56	ppb
Silicon	28-1	4.20	4.50	4.18	4.29	4.15	ppb
Silver	107-1	18.65	18.80	17.95	18.47	2.45	ppb
Silver	109-1	18.50	18.49	18.19	18.40	0.95	ppb
Sodium	23-2	97966.97	96863.16	96178.90	97003.01	0.93	ppb
Strontium	86-1	84.59	87.86	87.11	86.52	1.98	ppb
Strontium	88-1	85.44	86.26	85.33	85.68	0.59	ppb
Sulfur	34-1	100608.01	103894.09	100823.90	101775.33	1.81	ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	19.35	18.63	18.67	18.88	2.14	ppb
Thallium	205-1	19.07	18.74	18.76	18.86	0.99	ppb
Tin	118-1	50.85	51.05	49.92	50.61	1.19	ppb
Titanium	47-1	2119.99	2171.15	2143.77	2144.97	1.19	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:17:04	DataFile Name :	017ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	46.96	46.95	47.00	46.97	0.06	ppb
Vanadium	51-2	19.23	19.06	18.93	19.07	0.78	ppb
Yttrium	89-1				98		%
Yttrium	89-2				95		%
Zinc	66-2	31.21	31.11	30.20	30.84	1.81	ppb
Zirconium	90-1	49.47	50.92	51.10	50.50	1.77	ppb
Zirconium	91-1	48.37	49.67	49.23	49.09	1.35	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:20:13	DataFile Name :	018CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	50300.16	49715.39	50535.94	50183.83	0.84	ppb
Antimony	121-1	490.75	500.95	512.49	501.40	2.17	ppb
Arsenic	75-2	519.35	515.29	520.30	518.31	0.51	ppb
Barium	135-1	2431.03	2467.35	2509.79	2469.39	1.60	ppb
Barium	137-1	2577.57	2491.24	2532.90	2533.90	1.70	ppb
Beryllium	9-1	512.36	520.35	525.28	519.33	1.26	ppb
Bismuth	209-1				101		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	493.84	499.16	509.66	500.89	1.61	ppb
Cadmium	106-1	490.22	496.09	498.67	494.99	0.87	ppb
Cadmium	111-1	490.06	501.97	500.66	497.56	1.31	ppb
Calcium	43-1	247023.01	269100.61	254011.67	256711.76	4.40	ppb
Calcium	44-1	244725.50	261865.82	255764.79	254118.70	3.42	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	506.39	511.72	503.06	507.06	0.86	ppb
Cobalt	59-2	495.12	503.40	503.81	500.77	0.98	ppb
Copper	63-2	4806.72	4884.43	5023.38	4904.84	2.24	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				100		%
Indium	115-1				94		%
Indium	115-2				92		%
Iron	56-2	128543.93	126046.39	128245.24	127611.85	1.07	ppb
Iron	57-2	128288.34	129310.26	127650.94	128416.51	0.65	ppb
Iron	54-2	128457.69	128691.93	128798.80	128649.47	0.14	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:20:13	DataFile Name :	018CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2539.70	2584.15	2584.58	2569.48	1.00	ppb
Lead	207-1	2454.34	2586.69	2494.11	2511.72	2.70	ppb
Lead	208-1	2477.82	2549.60	2545.88	2524.43	1.60	ppb
Lithium	6-1				108		%
Magnesium	24-2	253578.03	247892.47	259141.33	253537.27	2.22	ppb
Manganese	55-2	4979.26	5119.99	5092.09	5063.78	1.47	ppb
Molybdenum	94-1	5637.28	5816.48	5809.21	5754.32	1.76	ppb
Molybdenum	95-1	5462.84	5751.07	5568.10	5594.00	2.61	ppb
Molybdenum	96-1	5406.26	5617.38	5650.63	5558.09	2.38	ppb
Molybdenum	97-1	5671.89	5587.22	5864.60	5707.90	2.49	ppb
Molybdenum	98-1	5538.56	5696.95	5566.53	5600.68	1.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	492.00	497.75	501.71	497.15	0.98	ppb
Phosphorus	31-2	10138.33	10087.12	10063.85	10096.43	0.38	ppb
Potassium	39-2	131533.71	133007.43	135352.86	133298.00	1.44	ppb
Rhodium	103-1				89		%
Rhodium	103-2				91		%
Scandium	45-1				97		%
Scandium	45-2				93		%
Selenium	82-1	488.69	508.19	507.01	501.30	2.18	ppb
Selenium	77-2	460.93	571.47	545.95	526.12	11.00	ppb
Selenium	78-2	498.63	525.57	494.82	506.34	3.31	ppb
Silicon	28-1	551.69	586.73	576.11	571.51	3.14	ppb
Silver	107-1	485.66	492.02	504.36	494.01	1.92	ppb
Silver	109-1	486.41	492.20	498.51	492.37	1.23	ppb
Sodium	23-2	253225.20	255098.89	260606.44	256310.18	1.50	ppb
Strontium	86-1	12430.50	12901.32	13005.90	12779.24	2.40	ppb
Strontium	88-1	12318.79	13347.97	13044.11	12903.62	4.10	ppb
Sulfur	34-1	9323.88	11106.27	10525.24	10318.47	8.81	ppb
Terbium	159-1				101		%
Terbium	159-2				100		%
Thallium	203-1	456.70	467.23	466.22	463.39	1.25	ppb
Thallium	205-1	503.22	508.27	525.90	512.47	2.32	ppb
Tin	118-1	493.10	510.63	510.22	504.65	1.98	ppb
Titanium	47-1	5603.86	5936.34	5962.98	5834.40	3.43	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:20:13	DataFile Name :	018CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	513.01	515.75	514.67	514.48	0.27	ppb
Vanadium	51-2	506.85	509.11	509.34	508.43	0.27	ppb
Yttrium	89-1				97		%
Yttrium	89-2				93		%
Zinc	66-2	4862.09	4873.07	4921.56	4885.57	0.65	ppb
Zirconium	90-1	530.08	526.97	528.33	528.46	0.29	ppb
Zirconium	91-1	506.50	519.98	525.27	517.25	1.87	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:34:57	DataFile Name :	019CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.38	0.08	0.83	0.18	341.37	ppb
Antimony	121-1	0.04	0.07	0.08	0.06	26.22	ppb
Arsenic	75-2	-0.03	-0.03	0.03	-0.01		ppb
Barium	135-1	-0.01	-0.02	0.01	-0.01		ppb
Barium	137-1	0.03	0.01	0.00	0.01	86.22	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	41.40	ppb
Bismuth	209-1				101		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.02	-0.23	-0.23	-0.16		ppb
Cadmium	106-1	-9.28	-10.59	-9.56	-9.81		ppb
Cadmium	111-1	-0.11	-0.09	-0.09	-0.10		ppb
Calcium	43-1	-25.48	-27.07	-25.35	-25.97		ppb
Calcium	44-1	-37.04	-39.20	-37.34	-37.86		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.02	0.00	0.03	0.02	72.82	ppb
Cobalt	59-2	-0.02	0.01	-0.01	-0.01		ppb
Copper	63-2	0.07	0.10	0.06	0.08	25.56	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				97		%
Indium	115-1				95		%
Indium	115-2				94		%
Iron	56-2	0.77	1.28	1.42	1.16	29.25	ppb
Iron	57-2	-4.54	-1.01	-4.93	-3.49		ppb
Iron	54-2	0.84	-0.81	0.36	0.13	661.51	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:34:57	DataFile Name :	019CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.05	0.05	0.06	0.05	9.19	ppb
Lead	207-1	0.07	0.08	0.06	0.07	16.49	ppb
Lead	208-1	0.07	0.06	0.05	0.06	13.55	ppb
Lithium	6-1				99		%
Magnesium	24-2	2.06	0.96	2.67	1.90	45.72	ppb
Manganese	55-2	0.01	-0.10	-0.01	-0.04		ppb
Molybdenum	94-1	0.00	-0.01	0.08	0.02	207.53	ppb
Molybdenum	95-1	0.03	0.04	0.03	0.03	31.59	ppb
Molybdenum	96-1	0.04	0.03	0.02	0.03	28.99	ppb
Molybdenum	97-1	0.04	0.03	0.04	0.03	12.43	ppb
Molybdenum	98-1	0.04	0.02	0.02	0.03	42.97	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.02	0.01	0.04	0.02	64.58	ppb
Phosphorus	31-2	-22.81	-15.69	0.82	-12.56		ppb
Potassium	39-2	2.84	-8.19	-3.34	-2.90		ppb
Rhodium	103-1				94		%
Rhodium	103-2				95		%
Scandium	45-1				96		%
Scandium	45-2				93		%
Selenium	82-1	-1.66	-0.12	-0.25	-0.68		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	1.03	1.35	0.41	0.93	51.08	ppb
Silicon	28-1	-0.97	-0.65	-0.86	-0.83		ppb
Silver	107-1	0.00	0.00	0.00	0.00		ppb
Silver	109-1	0.00	0.00	0.00	0.00		ppb
Sodium	23-2	25.29	24.82	26.80	25.64	4.04	ppb
Strontium	86-1	-0.02	-0.02	0.03	0.00	11157.31	ppb
Strontium	88-1	0.02	0.01	0.02	0.02	40.36	ppb
Sulfur	34-1	467.05	845.61	732.55	681.74	28.50	ppb
Terbium	159-1				99		%
Terbium	159-2				96		%
Thallium	203-1	0.02	0.01	0.01	0.01	28.64	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	5.98	ppb
Tin	118-1	-0.04	-0.06	-0.03	-0.04		ppb
Titanium	47-1	-0.05	0.13	0.02	0.03	254.77	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:34:57	DataFile Name :	019CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00		ppb
Vanadium	51-2	0.00	0.01	0.01	0.01	72.96	ppb
Yttrium	89-1				96		%
Yttrium	89-2				93		%
Zinc	66-2	0.09	0.11	0.01	0.07	71.83	ppb
Zirconium	90-1	0.00	0.00	0.01	0.00	101.49	ppb
Zirconium	91-1	0.04	0.02	0.03	0.03	38.33	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:40:25	DataFile Name :	020LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21.02	18.88	20.19	20.03	5.38	ppb
Antimony	121-1	1.85	2.03	1.94	1.94	4.75	ppb
Arsenic	75-2	0.83	1.10	1.07	1.00	14.87	ppb
Barium	135-1	8.82	9.25	9.65	9.24	4.48	ppb
Barium	137-1	8.93	9.82	9.64	9.47	4.97	ppb
Beryllium	9-1	1.20	1.03	1.13	1.12	7.61	ppb
Bismuth	209-1				102		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.30	1.06	1.28	0.88	58.28	ppb
Cadmium	106-1	-8.86	-8.31	-8.65	-8.61		ppb
Cadmium	111-1	0.98	0.97	0.95	0.97	1.56	ppb
Calcium	43-1	419.38	499.63	497.21	472.08	9.67	ppb
Calcium	44-1	443.91	503.62	488.70	478.74	6.49	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.92	1.93	1.89	1.92	1.12	ppb
Cobalt	59-2	1.00	1.05	1.02	1.02	2.66	ppb
Copper	63-2	1.97	2.05	2.12	2.04	3.66	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				96		%
Indium	115-1				99		%
Indium	115-2				95		%
Iron	56-2	55.97	54.81	56.36	55.71	1.44	ppb
Iron	57-2	46.71	51.38	52.11	50.07	5.85	ppb
Iron	54-2	50.70	55.79	58.02	54.84	6.84	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:40:25	DataFile Name :	020LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.86	0.94	0.86	0.89	5.35	ppb
Lead	207-1	0.89	0.89	0.96	0.91	4.77	ppb
Lead	208-1	0.89	0.92	0.90	0.91	1.73	ppb
Lithium	6-1				101		%
Magnesium	24-2	531.66	529.18	522.83	527.89	0.86	ppb
Manganese	55-2	1.01	0.82	1.06	0.96	13.23	ppb
Molybdenum	94-1	5.54	5.76	6.15	5.82	5.32	ppb
Molybdenum	95-1	4.79	5.13	4.98	4.97	3.47	ppb
Molybdenum	96-1	4.79	5.09	5.05	4.98	3.29	ppb
Molybdenum	97-1	4.70	5.00	5.02	4.91	3.63	ppb
Molybdenum	98-1	4.57	4.89	5.14	4.87	5.91	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.00	1.19	0.97	1.05	11.53	ppb
Phosphorus	31-2	7.07	24.10	10.31	13.83	65.41	ppb
Potassium	39-2	534.77	523.60	522.89	527.09	1.26	ppb
Rhodium	103-1				95		%
Rhodium	103-2				97		%
Scandium	45-1				98		%
Scandium	45-2				94		%
Selenium	82-1	3.72	5.96	5.17	4.95	22.90	ppb
Selenium	77-2	4.88	8.26	7.41	6.85	25.64	ppb
Selenium	78-2	3.28	9.73	6.92	6.65	48.61	ppb
Silicon	28-1	-1.35	-0.24	-0.53	-0.71		ppb
Silver	107-1	0.90	0.97	0.98	0.95	4.50	ppb
Silver	109-1	0.89	1.01	0.95	0.95	6.45	ppb
Sodium	23-2	558.13	549.65	555.17	554.32	0.78	ppb
Strontium	86-1	0.91	1.02	0.87	0.93	8.36	ppb
Strontium	88-1	0.94	1.04	1.01	1.00	4.92	ppb
Sulfur	34-1	-152.10	1016.09	812.61	558.87	111.67	ppb
Terbium	159-1				99		%
Terbium	159-2				98		%
Thallium	203-1	0.85	0.89	0.90	0.88	2.96	ppb
Thallium	205-1	0.85	0.91	0.85	0.87	4.09	ppb
Tin	118-1	4.51	4.82	4.88	4.74	4.23	ppb
Titanium	47-1	4.98	5.26	5.54	5.26	5.39	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:40:25	DataFile Name :	020LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.79	0.85	0.81	0.82	3.80	ppb
Vanadium	51-2	4.94	4.57	5.04	4.85	5.13	ppb
Yttrium	89-1				97		%
Yttrium	89-2				94		%
Zinc	66-2	5.07	4.67	4.68	4.81	4.77	ppb
Zirconium	90-1	0.88	0.96	0.93	0.92	4.24	ppb
Zirconium	91-1	0.98	1.03	0.83	0.95	11.08	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BL	Instrumnet Name :	P7
Client Sample ID :	PB162911BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:44:19	DataFile Name :	021CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.41	0.86	0.34	0.54	52.86	ppb
Antimony	121-1	0.01	0.02	0.02	0.02	43.07	ppb
Arsenic	75-2	-0.03	-0.01	-0.03	-0.03		ppb
Barium	135-1	0.02	-0.02	-0.01	0.00		ppb
Barium	137-1	0.01	-0.02	-0.02	-0.01		ppb
Beryllium	9-1	0.04	-0.02	0.02	0.01	205.51	ppb
Bismuth	209-1				101		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.23	-0.16	-0.23	-0.21		ppb
Cadmium	106-1	-7.73	-7.49	-7.70	-7.64		ppb
Cadmium	111-1	-0.08	-0.07	-0.08	-0.08		ppb
Calcium	43-1	-17.62	-20.33	-24.91	-20.96		ppb
Calcium	44-1	-41.30	-42.24	-44.99	-42.84		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.00	-0.01	0.00		ppb
Cobalt	59-2	-0.01	-0.01	-0.01	-0.01		ppb
Copper	63-2	-0.01	0.01	0.10	0.03	193.76	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				96		%
Indium	115-1				96		%
Indium	115-2				95		%
Iron	56-2	0.67	0.57	0.47	0.57	17.45	ppb
Iron	57-2	-5.39	-2.16	-5.46	-4.34		ppb
Iron	54-2	-1.21	1.82	0.37	0.33	462.70	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BL	Instrumnet Name :	P7
Client Sample ID :	PB162911BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:44:19	DataFile Name :	021CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.02	0.03	0.04	0.03	28.08	ppb
Lead	207-1	0.06	0.04	0.01	0.04	68.72	ppb
Lead	208-1	0.04	0.03	0.02	0.03	19.10	ppb
Lithium	6-1				101		%
Magnesium	24-2	-0.34	0.40	0.73	0.26	206.77	ppb
Manganese	55-2	-0.07	-0.06	-0.06	-0.06		ppb
Molybdenum	94-1	0.00	-0.01	0.01	0.00	1098.02	ppb
Molybdenum	95-1	0.01	0.02	0.01	0.01	55.40	ppb
Molybdenum	96-1	0.01	0.00	0.02	0.01	138.39	ppb
Molybdenum	97-1	0.03	0.00	0.02	0.02	81.22	ppb
Molybdenum	98-1	0.00	0.00	0.01	0.00	30.95	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	0.07	-0.03	0.01	446.38	ppb
Phosphorus	31-2	-13.87	-20.66	-30.70	-21.74		ppb
Potassium	39-2	-6.29	-15.05	-12.03	-11.12		ppb
Rhodium	103-1				94		%
Rhodium	103-2				96		%
Scandium	45-1				95		%
Scandium	45-2				94		%
Selenium	82-1	-1.16	-0.64	-0.38	-0.73		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	1.97	3.64	3.40	3.00	30.09	ppb
Silicon	28-1	-0.65	-0.50	-1.00	-0.71		ppb
Silver	107-1	0.01	0.00	0.00	0.01	117.98	ppb
Silver	109-1	0.00	-0.01	0.00	0.00		ppb
Sodium	23-2	15.99	17.11	16.38	16.49	3.44	ppb
Strontium	86-1	-0.02	-0.07	0.02	-0.02		ppb
Strontium	88-1	0.00	0.00	-0.01	0.00		ppb
Sulfur	34-1	1039.49	1304.48	709.48	1017.82	29.29	ppb
Terbium	159-1				98		%
Terbium	159-2				96		%
Thallium	203-1	0.00	0.00	0.00	0.00	20.23	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	35.86	ppb
Tin	118-1	-0.07	-0.09	-0.08	-0.08		ppb
Titanium	47-1	0.00	-0.05	-0.06	-0.03		ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BL	Instrumnet Name :	P7
Client Sample ID :	PB162911BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:44:19	DataFile Name :	021CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00		ppb
Vanadium	51-2	0.00	0.01	0.00	0.00	3243.66	ppb
Yttrium	89-1				96		%
Yttrium	89-2				94		%
Zinc	66-2	-0.18	-0.10	-0.10	-0.13		ppb
Zirconium	90-1	0.00	-0.01	0.01	0.00	770.43	ppb
Zirconium	91-1	0.02	0.01	0.03	0.02	63.21	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BS	Instrumnet Name :	P7
Client Sample ID :	PB162911BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:47:43	DataFile Name :	022LCSS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10916.61	10785.00	10940.87	10880.83	0.77	ppb
Antimony	121-1	506.21	511.09	508.50	508.60	0.48	ppb
Arsenic	75-2	512.01	515.09	525.18	517.43	1.33	ppb
Barium	135-1	2442.84	2465.21	2478.17	2462.07	0.73	ppb
Barium	137-1	2504.72	2592.67	2528.24	2541.88	1.79	ppb
Beryllium	9-1	524.98	521.34	539.48	528.60	1.82	ppb
Bismuth	209-1				101		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	518.94	516.82	528.45	521.40	1.19	ppb
Cadmium	106-1	519.87	511.37	513.33	514.86	0.86	ppb
Cadmium	111-1	520.97	522.14	524.06	522.39	0.30	ppb
Calcium	43-1	57536.85	56587.44	57976.22	57366.84	1.24	ppb
Calcium	44-1	51362.51	50272.53	51855.22	51163.42	1.58	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	513.68	517.98	515.99	515.88	0.42	ppb
Cobalt	59-2	524.11	523.28	528.59	525.33	0.54	ppb
Copper	63-2	5253.79	5282.46	5320.75	5285.67	0.64	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				97		%
Indium	115-1				96		%
Indium	115-2				93		%
Iron	56-2	26568.45	26957.83	27307.21	26944.50	1.37	ppb
Iron	57-2	28483.95	28619.62	28894.27	28665.95	0.73	ppb
Iron	54-2	29091.92	28953.65	29407.74	29151.10	0.80	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BS	Instrumnet Name :	P7
Client Sample ID :	PB162911BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:47:43	DataFile Name :	022LCSS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2455.37	2579.18	2546.68	2527.08	2.54	ppb
Lead	207-1	2433.91	2581.11	2611.14	2542.06	3.73	ppb
Lead	208-1	2444.23	2574.85	2577.88	2532.32	3.01	ppb
Lithium	6-1				106		%
Magnesium	24-2	53403.01	52380.15	54444.13	53409.10	1.93	ppb
Manganese	55-2	5140.94	5164.24	5243.75	5182.98	1.04	ppb
Molybdenum	94-1	5564.02	5599.01	5667.52	5610.18	0.94	ppb
Molybdenum	95-1	5449.34	5630.22	5549.95	5543.17	1.64	ppb
Molybdenum	96-1	5543.29	5593.25	5544.33	5560.29	0.51	ppb
Molybdenum	97-1	5503.31	5494.65	5445.64	5481.20	0.57	ppb
Molybdenum	98-1	5431.39	5481.47	5451.65	5454.83	0.46	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	519.59	515.22	526.83	520.55	1.13	ppb
Phosphorus	31-2	10152.74	10174.81	10511.96	10279.84	1.96	ppb
Potassium	39-2	26569.11	27081.53	27019.55	26890.06	1.04	ppb
Rhodium	103-1				91		%
Rhodium	103-2				93		%
Scandium	45-1				99		%
Scandium	45-2				92		%
Selenium	82-1	501.66	514.23	514.20	510.03	1.42	ppb
Selenium	77-2	495.49	540.68	538.91	525.03	4.88	ppb
Selenium	78-2	527.33	539.06	542.68	536.36	1.50	ppb
Silicon	28-1	523.97	507.94	517.98	516.63	1.57	ppb
Silver	107-1	532.03	519.37	523.95	525.12	1.22	ppb
Silver	109-1	520.17	510.53	514.84	515.18	0.94	ppb
Sodium	23-2	52514.32	54213.72	54081.26	53603.10	1.76	ppb
Strontium	86-1	12720.21	12621.25	12762.91	12701.46	0.57	ppb
Strontium	88-1	12459.20	12511.46	12755.98	12575.55	1.26	ppb
Sulfur	34-1	11506.50	10227.78	10828.19	10854.16	5.89	ppb
Terbium	159-1				100		%
Terbium	159-2				97		%
Thallium	203-1	449.99	474.09	473.05	465.71	2.93	ppb
Thallium	205-1	507.57	505.78	512.96	508.77	0.73	ppb
Tin	118-1	509.86	515.30	504.09	509.75	1.10	ppb
Titanium	47-1	5619.11	5516.71	5815.16	5650.32	2.68	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BS	Instrumnet Name :	P7
Client Sample ID :	PB162911BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:47:43	DataFile Name :	022LCSS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	476.07	514.22	511.30	500.53	4.24	ppb
Vanadium	51-2	507.74	511.98	518.93	512.88	1.10	ppb
Yttrium	89-1				98		%
Yttrium	89-2				93		%
Zinc	66-2	5186.43	5145.87	5283.62	5205.31	1.36	ppb
Zirconium	90-1	507.07	521.92	508.67	512.55	1.59	ppb
Zirconium	91-1	502.32	505.88	508.73	505.65	0.63	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BL	Instrumnet Name :	P7
Client Sample ID :	PB163150BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:56:59	DataFile Name :	023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.10	1.04	1.32	0.82	77.67	ppb
Antimony	121-1	0.09	0.11	0.10	0.10	11.23	ppb
Arsenic	75-2	-0.03	-0.01	0.05	0.00	1978.33	ppb
Barium	135-1	0.00	0.03	-0.01	0.01	224.92	ppb
Barium	137-1	0.02	0.00	0.02	0.01	97.40	ppb
Beryllium	9-1	0.04	0.03	0.03	0.04	9.30	ppb
Bismuth	209-1				102		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.09	-0.23	-0.23	-0.19		ppb
Cadmium	106-1	-9.68	-8.81	-10.36	-9.62		ppb
Cadmium	111-1	-0.10	-0.08	-0.10	-0.09		ppb
Calcium	43-1	-27.18	-34.48	-32.64	-31.44		ppb
Calcium	44-1	-49.54	-48.51	-47.98	-48.68		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	-0.01	0.01	-0.01		ppb
Cobalt	59-2	0.01	0.00	0.02	0.01	128.04	ppb
Copper	63-2	0.07	0.11	0.12	0.10	29.98	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				100		%
Indium	115-1				98		%
Indium	115-2				96		%
Iron	56-2	0.62	0.50	0.47	0.53	15.09	ppb
Iron	57-2	-12.92	-8.66	-5.07	-8.88		ppb
Iron	54-2	0.72	-2.24	0.43	-0.37		ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BL	Instrumnet Name :	P7
Client Sample ID :	PB163150BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:56:59	DataFile Name :	023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.03	0.06	0.04	0.05	31.64	ppb
Lead	207-1	0.07	0.06	0.08	0.07	14.85	ppb
Lead	208-1	0.06	0.06	0.07	0.06	7.68	ppb
Lithium	6-1				107		%
Magnesium	24-2	0.68	1.04	1.32	1.02	31.49	ppb
Manganese	55-2	0.02	0.04	0.05	0.04	44.03	ppb
Molybdenum	94-1	0.11	0.03	0.07	0.07	60.45	ppb
Molybdenum	95-1	0.06	0.06	0.09	0.07	32.02	ppb
Molybdenum	96-1	0.08	0.10	0.10	0.10	10.49	ppb
Molybdenum	97-1	0.05	0.03	0.10	0.06	59.54	ppb
Molybdenum	98-1	0.07	0.06	0.07	0.07	7.89	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.02	-0.07	0.00	-0.01		ppb
Phosphorus	31-2	-34.33	-24.18	-26.62	-28.38		ppb
Potassium	39-2	-20.80	-23.01	-21.67	-21.83		ppb
Rhodium	103-1				93		%
Rhodium	103-2				98		%
Scandium	45-1				99		%
Scandium	45-2				92		%
Selenium	82-1	-1.43	-0.39	-1.24	-1.02		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.96	1.79	1.48	1.41	29.57	ppb
Silicon	28-1	-1.29	-1.28	-1.45	-1.34		ppb
Silver	107-1	0.01	0.01	0.00	0.01	49.24	ppb
Silver	109-1	0.00	0.00	0.01	0.00	83.60	ppb
Sodium	23-2	13.27	13.07	12.96	13.10	1.22	ppb
Strontium	86-1	0.22	0.07	0.19	0.16	48.82	ppb
Strontium	88-1	0.07	0.07	0.10	0.08	17.58	ppb
Sulfur	34-1	-228.28	-436.77	-432.83	-365.96		ppb
Terbium	159-1				98		%
Terbium	159-2				99		%
Thallium	203-1	0.03	0.02	0.01	0.02	36.49	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	9.87	ppb
Tin	118-1	-0.05	-0.05	-0.05	-0.05		ppb
Titanium	47-1	-0.08	0.01	-0.03	-0.03		ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BL	Instrumnet Name :	P7
Client Sample ID :	PB163150BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:56:59	DataFile Name :	023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	131.89	ppb
Vanadium	51-2	0.02	0.02	0.01	0.01	30.77	ppb
Yttrium	89-1				95		%
Yttrium	89-2				94		%
Zinc	66-2	-0.09	0.14	0.30	0.12	166.08	ppb
Zirconium	90-1	0.00	0.02	0.02	0.02	72.50	ppb
Zirconium	91-1	0.05	0.04	0.02	0.04	44.33	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BS	Instrumnet Name :	P7
Client Sample ID :	PB163150BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:12:44	DataFile Name :	025LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10434.55	10620.15	10556.32	10537.01	0.89	ppb
Antimony	121-1	495.95	505.57	498.67	500.06	0.99	ppb
Arsenic	75-2	503.06	500.96	508.68	504.24	0.79	ppb
Barium	135-1	2429.39	2404.51	2462.69	2432.19	1.20	ppb
Barium	137-1	2494.96	2509.57	2534.04	2512.85	0.79	ppb
Beryllium	9-1	531.47	531.79	538.29	533.85	0.72	ppb
Bismuth	209-1				103		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	509.79	512.44	512.74	511.66	0.32	ppb
Cadmium	106-1	509.00	483.28	501.82	498.03	2.66	ppb
Cadmium	111-1	509.42	510.22	509.20	509.61	0.10	ppb
Calcium	43-1	57438.59	58926.42	56780.13	57715.04	1.91	ppb
Calcium	44-1	50560.52	52636.86	52012.99	51736.79	2.06	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	498.75	507.08	509.24	505.03	1.10	ppb
Cobalt	59-2	505.60	515.70	515.14	512.15	1.11	ppb
Copper	63-2	5025.58	5251.70	5035.10	5104.13	2.51	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				101		%
Indium	115-1				98		%
Indium	115-2				96		%
Iron	56-2	26783.18	26554.94	26564.36	26634.16	0.48	ppb
Iron	57-2	27572.01	28057.03	28086.16	27905.07	1.03	ppb
Iron	54-2	28147.17	28419.83	28616.20	28394.40	0.83	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BS	Instrumnet Name :	P7
Client Sample ID :	PB163150BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:12:44	DataFile Name :	025LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2435.50	2456.13	2516.20	2469.28	1.70	ppb
Lead	207-1	2457.42	2526.63	2455.05	2479.70	1.64	ppb
Lead	208-1	2466.47	2515.67	2484.37	2488.84	1.00	ppb
Lithium	6-1				109		%
Magnesium	24-2	50841.09	53140.69	52771.74	52251.17	2.36	ppb
Manganese	55-2	5026.77	4926.61	5128.96	5027.45	2.01	ppb
Molybdenum	94-1	5393.33	5567.25	5531.95	5497.51	1.67	ppb
Molybdenum	95-1	5192.94	5513.10	5482.13	5396.06	3.27	ppb
Molybdenum	96-1	5265.91	5548.30	5604.72	5472.98	3.32	ppb
Molybdenum	97-1	5516.84	5562.24	5505.38	5528.15	0.54	ppb
Molybdenum	98-1	5215.22	5478.41	5414.48	5369.37	2.56	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	500.43	510.06	512.89	507.79	1.29	ppb
Phosphorus	31-2	10171.49	10176.33	10273.83	10207.22	0.57	ppb
Potassium	39-2	25585.42	25663.98	25480.73	25576.71	0.36	ppb
Rhodium	103-1				93		%
Rhodium	103-2				96		%
Scandium	45-1				99		%
Scandium	45-2				94		%
Selenium	82-1	488.26	498.92	513.94	500.37	2.58	ppb
Selenium	77-2	507.56	543.10	490.05	513.57	5.26	ppb
Selenium	78-2	536.18	518.81	508.08	521.02	2.72	ppb
Silicon	28-1	523.23	540.07	513.02	525.44	2.60	ppb
Silver	107-1	526.39	513.61	506.20	515.40	1.98	ppb
Silver	109-1	503.16	504.20	505.09	504.15	0.19	ppb
Sodium	23-2	51518.09	52658.16	52005.41	52060.56	1.10	ppb
Strontium	86-1	12136.32	12896.71	12629.04	12554.02	3.07	ppb
Strontium	88-1	12262.01	12726.93	12574.13	12521.02	1.89	ppb
Sulfur	34-1	11324.55	11376.98	10291.58	10997.70	5.57	ppb
Terbium	159-1				101		%
Terbium	159-2				100		%
Thallium	203-1	445.51	458.76	458.69	454.32	1.68	ppb
Thallium	205-1	489.63	513.86	503.55	502.35	2.42	ppb
Tin	118-1	494.52	506.06	505.33	501.97	1.29	ppb
Titanium	47-1	5667.85	5837.04	5661.34	5722.08	1.74	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BS	Instrumnet Name :	P7
Client Sample ID :	PB163150BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:12:44	DataFile Name :	025LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	497.05	508.31	487.99	497.78	2.05	ppb
Vanadium	51-2	501.13	502.57	500.95	501.55	0.18	ppb
Yttrium	89-1				99		%
Yttrium	89-2				95		%
Zinc	66-2	5007.18	5102.68	5119.65	5076.50	1.19	ppb
Zirconium	90-1	485.48	511.06	514.18	503.57	3.13	ppb
Zirconium	91-1	480.97	505.94	506.96	497.96	2.96	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-01	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:20:15	DataFile Name :	026SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	108.77	110.75	105.67	108.40	2.36	ppb
Antimony	121-1	0.32	0.35	0.36	0.34	5.50	ppb
Arsenic	75-2	2.22	2.28	2.12	2.21	3.74	ppb
Barium	135-1	56.46	58.18	55.81	56.82	2.15	ppb
Barium	137-1	57.69	58.78	57.72	58.06	1.07	ppb
Beryllium	9-1	0.02	0.06	0.04	0.04	44.07	ppb
Bismuth	209-1				97		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.01	-0.01	-0.02	-0.01		ppb
Cadmium	106-1	-10.01	-8.12	-9.64	-9.26		ppb
Cadmium	111-1	-0.06	-0.05	-0.09	-0.07		ppb
Calcium	43-1	20574.44	20827.04	20117.28	20506.25	1.75	ppb
Calcium	44-1	19019.29	19275.70	18753.67	19016.22	1.37	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.12	2.36	2.25	2.24	5.43	ppb
Cobalt	59-2	0.70	0.73	0.73	0.72	2.53	ppb
Copper	63-2	76.36	78.72	80.55	78.54	2.67	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				95		%
Holmium	165-2				96		%
Indium	115-1				90		%
Indium	115-2				94		%
Iron	56-2	3344.99	3382.77	3288.68	3338.81	1.42	ppb
Iron	57-2	3507.22	3607.81	3595.18	3570.07	1.53	ppb
Iron	54-2	3497.82	3574.15	3578.34	3550.10	1.28	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-01	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:20:15	DataFile Name :	026SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.97	1.82	1.86	1.88	4.29	ppb
Lead	207-1	1.68	1.76	1.75	1.73	2.35	ppb
Lead	208-1	1.86	1.79	1.77	1.81	2.55	ppb
Lithium	6-1				106		%
Magnesium	24-2	3372.42	3433.93	3444.56	3416.97	1.14	ppb
Manganese	55-2	502.19	517.71	509.51	509.80	1.52	ppb
Molybdenum	94-1	1.03	0.98	1.16	1.06	8.77	ppb
Molybdenum	95-1	0.96	0.90	0.85	0.90	6.15	ppb
Molybdenum	96-1	0.98	1.02	0.89	0.96	6.76	ppb
Molybdenum	97-1	0.94	0.91	0.93	0.92	1.29	ppb
Molybdenum	98-1	0.94	0.91	0.88	0.91	3.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	13.66	13.88	14.57	14.03	3.38	ppb
Phosphorus	31-2	45.04	58.42	50.44	51.30	13.12	ppb
Potassium	39-2	2789.07	2719.61	2765.16	2757.95	1.28	ppb
Rhodium	103-1				89		%
Rhodium	103-2				93		%
Scandium	45-1				94		%
Scandium	45-2				89		%
Selenium	82-1	-1.12	-0.51	-0.09	-0.57		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	3.43	2.18	-0.68	1.64	128.48	ppb
Silicon	28-1	168.38	166.61	163.64	166.21	1.44	ppb
Silver	107-1	0.01	0.02	0.02	0.02	24.54	ppb
Silver	109-1	0.03	0.03	0.03	0.03	3.90	ppb
Sodium	23-2	67309.23	67870.67	69130.10	68103.33	1.37	ppb
Strontium	86-1	127.54	130.92	130.01	129.49	1.35	ppb
Strontium	88-1	126.75	129.93	127.58	128.09	1.29	ppb
Sulfur	34-1	4229.03	3922.41	2910.73	3687.39	18.71	ppb
Terbium	159-1				95		%
Terbium	159-2				97		%
Thallium	203-1	0.04	0.03	0.01	0.03	40.24	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	17.64	ppb
Tin	118-1	0.19	0.27	0.16	0.21	28.92	ppb
Titanium	47-1	2.41	2.39	1.99	2.26	10.66	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-01	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:20:15	DataFile Name :	026SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.04	0.03	0.04	0.03	10.36	ppb
Vanadium	51-2	1.04	0.98	1.16	1.06	8.73	ppb
Yttrium	89-1				92		%
Yttrium	89-2				93		%
Zinc	66-2	29.11	28.48	28.63	28.74	1.15	ppb
Zirconium	90-1	0.15	0.20	0.16	0.17	15.87	ppb
Zirconium	91-1	0.17	0.15	0.15	0.15	7.35	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FD	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:23:34	DataFile Name :	027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	119.09	72.48	73.02	88.20	30.33	ppb
Antimony	121-1	0.23	0.23	0.22	0.23	1.01	ppb
Arsenic	75-2	1.87	1.57	1.77	1.74	8.94	ppb
Barium	135-1	58.14	57.66	56.85	57.55	1.13	ppb
Barium	137-1	57.81	56.98	57.96	57.58	0.91	ppb
Beryllium	9-1	0.03	0.05	0.06	0.05	24.70	ppb
Bismuth	209-1				101		%
Bismuth	209-2				92		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.16	-0.02	-0.09	-0.09		ppb
Cadmium	106-1	-6.72	-9.21	-8.66	-8.20		ppb
Cadmium	111-1	-0.04	-0.07	-0.05	-0.06		ppb
Calcium	43-1	20318.08	20703.53	20734.25	20585.29	1.13	ppb
Calcium	44-1	18850.76	19076.70	19310.26	19079.24	1.20	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.17	1.31	1.15	1.21	7.54	ppb
Cobalt	59-2	0.78	0.74	0.68	0.74	6.99	ppb
Copper	63-2	3.63	3.80	3.34	3.59	6.42	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				97		%
Indium	115-1				92		%
Indium	115-2				93		%
Iron	56-2	3170.92	3056.47	3053.24	3093.54	2.17	ppb
Iron	57-2	3405.68	3362.47	3257.15	3341.76	2.29	ppb
Iron	54-2	3284.91	3272.27	3252.40	3269.86	0.50	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FD	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:23:34	DataFile Name :	027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.71	1.89	1.69	1.77	6.26	ppb
Lead	207-1	1.70	1.82	1.73	1.75	3.71	ppb
Lead	208-1	1.76	1.80	1.70	1.75	2.94	ppb
Lithium	6-1				109		%
Magnesium	24-2	3474.63	3432.80	3399.34	3435.59	1.10	ppb
Manganese	55-2	520.37	513.38	500.23	511.33	2.00	ppb
Molybdenum	94-1	0.56	0.67	0.66	0.63	9.45	ppb
Molybdenum	95-1	0.48	0.42	0.49	0.46	8.25	ppb
Molybdenum	96-1	0.54	0.59	0.54	0.56	5.99	ppb
Molybdenum	97-1	0.38	0.44	0.51	0.44	15.46	ppb
Molybdenum	98-1	0.48	0.48	0.49	0.48	1.26	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.22	1.34	1.29	1.28	4.49	ppb
Phosphorus	31-2	22.88	31.54	46.63	33.68	35.69	ppb
Potassium	39-2	2761.56	2784.29	2753.24	2766.36	0.58	ppb
Rhodium	103-1				89		%
Rhodium	103-2				95		%
Scandium	45-1				96		%
Scandium	45-2				90		%
Selenium	82-1	-0.31	0.02	-0.23	-0.17		ppb
Selenium	77-2	0.00	0.83	0.84	0.55	86.61	ppb
Selenium	78-2	-0.34	-0.26	1.66	0.35	320.52	ppb
Silicon	28-1	159.32	163.97	164.92	162.74	1.84	ppb
Silver	107-1	0.02	0.01	0.01	0.01	24.23	ppb
Silver	109-1	0.02	0.01	0.00	0.01	60.30	ppb
Sodium	23-2	69489.26	68624.07	66662.20	68258.51	2.12	ppb
Strontium	86-1	129.84	130.85	134.33	131.67	1.79	ppb
Strontium	88-1	128.27	127.89	131.68	129.28	1.62	ppb
Sulfur	34-1	3397.72	3377.02	3155.94	3310.23	4.05	ppb
Terbium	159-1				97		%
Terbium	159-2				96		%
Thallium	203-1	0.01	0.01	0.02	0.02	19.84	ppb
Thallium	205-1	0.02	0.01	0.02	0.02	16.68	ppb
Tin	118-1	0.08	0.04	0.04	0.05	37.63	ppb
Titanium	47-1	1.25	1.52	1.44	1.40	9.65	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FD	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:23:34	DataFile Name :	027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.03	0.03	0.03	0.03	9.67	ppb
Vanadium	51-2	0.98	1.04	0.93	0.98	5.50	ppb
Yttrium	89-1				93		%
Yttrium	89-2				94		%
Zinc	66-2	35.17	37.73	37.36	36.75	3.76	ppb
Zirconium	90-1	0.11	0.12	0.11	0.12	6.88	ppb
Zirconium	91-1	0.10	0.15	0.15	0.13	22.87	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02DUP	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDDU	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:26:55	DataFile Name :	028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	72.94	75.50	75.91	74.78	2.15	ppb
Antimony	121-1	0.21	0.19	0.19	0.20	6.25	ppb
Arsenic	75-2	2.39	2.02	2.18	2.20	8.48	ppb
Barium	135-1	57.79	58.51	56.57	57.63	1.70	ppb
Barium	137-1	59.14	58.17	58.59	58.63	0.82	ppb
Beryllium	9-1	0.07	0.04	0.03	0.05	48.24	ppb
Bismuth	209-1				98		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.01	-0.02	0.13	0.03	245.72	ppb
Cadmium	106-1	-7.36	-9.19	-9.33	-8.63		ppb
Cadmium	111-1	-0.04	-0.09	-0.07	-0.07		ppb
Calcium	43-1	21110.04	20946.30	21377.29	21144.54	1.03	ppb
Calcium	44-1	19028.64	19180.32	19599.21	19269.39	1.53	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.25	1.16	1.05	1.16	8.66	ppb
Cobalt	59-2	0.70	0.65	0.70	0.69	4.74	ppb
Copper	63-2	3.61	3.62	3.39	3.54	3.74	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				99		%
Indium	115-1				92		%
Indium	115-2				94		%
Iron	56-2	3033.86	3113.60	3066.04	3071.16	1.31	ppb
Iron	57-2	3253.18	3260.38	3252.02	3255.20	0.14	ppb
Iron	54-2	3234.02	3281.24	3212.28	3242.52	1.09	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02DUP	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDDU	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:26:55	DataFile Name :	028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.90	1.86	1.94	1.90	2.32	ppb
Lead	207-1	1.68	1.73	1.77	1.73	2.61	ppb
Lead	208-1	1.73	1.81	1.81	1.78	2.70	ppb
Lithium	6-1				110		%
Magnesium	24-2	3356.85	3427.52	3321.63	3368.67	1.60	ppb
Manganese	55-2	505.14	515.53	503.18	507.95	1.31	ppb
Molybdenum	94-1	0.57	0.52	0.60	0.57	6.89	ppb
Molybdenum	95-1	0.52	0.38	0.43	0.44	16.10	ppb
Molybdenum	96-1	0.53	0.54	0.51	0.52	2.96	ppb
Molybdenum	97-1	0.43	0.40	0.51	0.45	12.03	ppb
Molybdenum	98-1	0.43	0.45	0.48	0.45	5.65	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.21	1.45	1.23	1.30	10.43	ppb
Phosphorus	31-2	40.86	19.93	34.67	31.82	33.79	ppb
Potassium	39-2	2777.23	2814.29	2749.06	2780.19	1.18	ppb
Rhodium	103-1				88		%
Rhodium	103-2				95		%
Scandium	45-1				94		%
Scandium	45-2				91		%
Selenium	82-1	-0.18	0.17	-0.48	-0.17		ppb
Selenium	77-2	0.00	0.00	1.66	0.55	173.21	ppb
Selenium	78-2	-1.98	2.24	-2.21	-0.65		ppb
Silicon	28-1	163.31	164.34	169.13	165.59	1.87	ppb
Silver	107-1	0.02	0.00	0.02	0.01	55.26	ppb
Silver	109-1	0.01	0.01	0.01	0.01	24.64	ppb
Sodium	23-2	66619.07	69707.39	66981.70	67769.39	2.49	ppb
Strontium	86-1	129.08	131.11	135.07	131.75	2.31	ppb
Strontium	88-1	130.87	128.87	131.59	130.44	1.08	ppb
Sulfur	34-1	3709.82	3660.38	3885.40	3751.87	3.15	ppb
Terbium	159-1				96		%
Terbium	159-2				99		%
Thallium	203-1	0.02	0.01	0.02	0.02	26.51	ppb
Thallium	205-1	0.02	0.01	0.01	0.01	36.88	ppb
Tin	118-1	0.06	0.05	0.07	0.06	18.38	ppb
Titanium	47-1	1.71	1.65	1.61	1.66	2.95	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02DUP	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDDU	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:26:55	DataFile Name :	028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.03	0.03	0.03	0.03	6.78	ppb
Vanadium	51-2	0.93	1.16	1.08	1.06	11.19	ppb
Yttrium	89-1				93		%
Yttrium	89-2				93		%
Zinc	66-2	35.73	35.78	36.82	36.11	1.71	ppb
Zirconium	90-1	0.11	0.12	0.10	0.11	7.71	ppb
Zirconium	91-1	0.13	0.12	0.12	0.12	1.88	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02LX5	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDL	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 15:30:13	DataFile Name :	029SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	490.78	486.77	497.36	491.64	1.09	ppb
Antimony	121-1	0.17	0.16	0.16	0.16	5.01	ppb
Arsenic	75-2	0.83	0.71	0.77	0.77	8.18	ppb
Barium	135-1	48.62	50.64	51.97	50.41	3.35	ppb
Barium	137-1	50.04	50.75	50.76	50.52	0.81	ppb
Beryllium	9-1	0.25	0.17	0.13	0.18	34.60	ppb
Bismuth	209-1				105		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.26	0.41	0.13	0.27	53.07	ppb
Cadmium	106-1	-7.55	-6.29	-7.42	-7.09		ppb
Cadmium	111-1	0.44	0.49	0.48	0.47	6.42	ppb
Calcium	43-1	4372.77	4449.36	4412.43	4411.52	0.87	ppb
Calcium	44-1	4328.35	4493.14	4438.87	4420.12	1.90	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.38	1.47	1.34	1.40	4.58	ppb
Cobalt	59-2	1.91	1.88	1.76	1.85	4.07	ppb
Copper	63-2	6.07	6.23	6.16	6.16	1.29	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				99		%
Indium	115-1				95		%
Indium	115-2				95		%
Iron	56-2	1129.91	1152.81	1143.09	1141.94	1.01	ppb
Iron	57-2	1135.46	1158.70	1114.39	1136.18	1.95	ppb
Iron	54-2	1129.86	1144.98	1153.11	1142.65	1.03	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02LX5	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDL	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 15:30:13	DataFile Name :	029SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	11.97	12.45	12.77	12.40	3.25	ppb
Lead	207-1	10.99	11.57	12.10	11.55	4.80	ppb
Lead	208-1	11.52	12.06	12.30	11.96	3.36	ppb
Lithium	6-1				111		%
Magnesium	24-2	722.13	740.23	738.79	733.72	1.37	ppb
Manganese	55-2	935.15	945.48	956.28	945.64	1.12	ppb
Molybdenum	94-1	0.38	0.38	0.39	0.38	1.35	ppb
Molybdenum	95-1	0.26	0.24	0.24	0.25	5.09	ppb
Molybdenum	96-1	0.23	0.30	0.30	0.27	14.40	ppb
Molybdenum	97-1	0.21	0.30	0.23	0.25	18.83	ppb
Molybdenum	98-1	0.23	0.26	0.21	0.23	10.16	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.62	2.88	2.65	2.72	5.21	ppb
Phosphorus	31-2	75.34	68.34	64.65	69.45	7.82	ppb
Potassium	39-2	533.80	558.78	518.38	536.99	3.80	ppb
Rhodium	103-1				93		%
Rhodium	103-2				96		%
Scandium	45-1				97		%
Scandium	45-2				91		%
Selenium	82-1	0.13	-0.14	-1.82	-0.61		ppb
Selenium	77-2	0.82	0.82	0.00	0.54	86.60	ppb
Selenium	78-2	-0.86	2.86	0.57	0.86	219.11	ppb
Silicon	28-1	43.49	47.26	47.32	46.02	4.77	ppb
Silver	107-1	0.01	0.01	0.01	0.01	23.90	ppb
Silver	109-1	0.00	0.01	0.01	0.01	50.60	ppb
Sodium	23-2	13057.91	13639.59	13392.46	13363.32	2.18	ppb
Strontium	86-1	28.64	28.83	27.86	28.44	1.81	ppb
Strontium	88-1	28.32	28.99	27.47	28.26	2.70	ppb
Sulfur	34-1	511.96	731.82	705.18	649.65	18.47	ppb
Terbium	159-1				98		%
Terbium	159-2				98		%
Thallium	203-1	0.03	0.03	0.03	0.03	4.15	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	5.57	ppb
Tin	118-1	0.05	0.05	0.02	0.04	37.76	ppb
Titanium	47-1	11.70	13.82	12.12	12.55	8.93	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02LX5	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDL	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 15:30:13	DataFile Name :	029SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.06	0.06	0.05	0.06	6.45	ppb
Vanadium	51-2	1.84	1.82	1.71	1.79	3.93	ppb
Yttrium	89-1				95		%
Yttrium	89-2				95		%
Zinc	66-2	20.38	20.36	20.06	20.27	0.90	ppb
Zirconium	90-1	0.08	0.12	0.11	0.10	20.29	ppb
Zirconium	91-1	0.05	0.14	0.11	0.10	43.03	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MS	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:41:03	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10118.50	10047.26	9932.86	10032.87	0.93	ppb
Antimony	121-1	494.91	514.42	523.77	511.03	2.88	ppb
Arsenic	75-2	527.25	525.80	536.27	529.77	1.07	ppb
Barium	135-1	2295.74	2412.15	2424.62	2377.50	2.99	ppb
Barium	137-1	2407.98	2554.40	2555.02	2505.80	3.38	ppb
Beryllium	9-1	544.01	563.88	558.62	555.50	1.85	ppb
Bismuth	209-1				99		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	532.92	551.72	546.72	543.79	1.79	ppb
Cadmium	106-1	522.44	523.54	539.22	528.40	1.78	ppb
Cadmium	111-1	527.68	544.68	563.06	545.14	3.25	ppb
Calcium	43-1	73957.84	76323.84	71470.77	73917.49	3.28	ppb
Calcium	44-1	66107.67	67512.23	64362.69	65994.20	2.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	516.69	508.04	506.51	510.41	1.08	ppb
Cobalt	59-2	533.70	531.23	533.72	532.88	0.27	ppb
Copper	63-2	5090.34	5016.93	5054.93	5054.06	0.73	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				96		%
Holmium	165-2				101		%
Indium	115-1				91		%
Indium	115-2				92		%
Iron	56-2	28631.75	29129.99	27993.99	28585.24	1.99	ppb
Iron	57-2	30293.07	30381.95	29910.08	30195.04	0.83	ppb
Iron	54-2	30877.72	30852.23	30469.78	30733.24	0.74	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MS	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:41:03	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2609.40	2535.26	2660.16	2601.61	2.41	ppb
Lead	207-1	2556.53	2485.79	2558.22	2533.51	1.63	ppb
Lead	208-1	2567.22	2508.70	2563.48	2546.47	1.29	ppb
Lithium	6-1				110		%
Magnesium	24-2	52970.63	53674.18	54046.70	53563.84	1.02	ppb
Manganese	55-2	5497.85	5472.94	5560.47	5510.42	0.82	ppb
Molybdenum	94-1	6637.80	7043.43	7096.31	6925.85	3.62	ppb
Molybdenum	95-1	6891.55	7200.91	7302.77	7131.74	3.00	ppb
Molybdenum	96-1	6961.97	7153.08	7250.91	7121.99	2.06	ppb
Molybdenum	97-1	7102.53	7294.62	7178.23	7191.79	1.35	ppb
Molybdenum	98-1	6960.22	7132.04	7359.41	7150.56	2.80	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	517.89	515.37	516.39	516.55	0.25	ppb
Phosphorus	31-2	20.26	25.15	17.44	20.95	18.62	ppb
Potassium	39-2	27563.15	27596.97	27766.29	27642.14	0.39	ppb
Rhodium	103-1				87		%
Rhodium	103-2				93		%
Scandium	45-1				95		%
Scandium	45-2				90		%
Selenium	82-1	509.39	531.37	533.74	524.83	2.56	ppb
Selenium	77-2	527.41	561.93	562.45	550.60	3.65	ppb
Selenium	78-2	516.01	511.47	533.47	520.32	2.23	ppb
Silicon	28-1	177.42	185.04	175.10	179.18	2.90	ppb
Silver	107-1	326.57	240.94	441.64	336.38	29.94	ppb
Silver	109-1	262.85	368.40	252.25	294.50	21.80	ppb
Sodium	23-2	110456.42	108309.24	109595.22	109453.63	0.99	ppb
Strontium	86-1	11480.28	11812.36	11878.63	11723.75	1.82	ppb
Strontium	88-1	11232.13	11850.11	11860.54	11647.59	3.09	ppb
Sulfur	34-1	3791.81	3713.31	2555.24	3353.45	20.65	ppb
Terbium	159-1				96		%
Terbium	159-2				99		%
Thallium	203-1	478.43	465.30	477.66	473.80	1.56	ppb
Thallium	205-1	519.73	518.75	528.06	522.18	0.98	ppb
Tin	118-1	458.72	477.72	480.43	472.29	2.50	ppb
Titanium	47-1	6035.02	6250.79	5917.76	6067.86	2.78	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MS	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:41:03	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	530.22	528.69	546.53	535.15	1.85	ppb
Vanadium	51-2	528.48	529.57	521.83	526.63	0.80	ppb
Yttrium	89-1				92		%
Yttrium	89-2				91		%
Zinc	66-2	5165.83	5104.81	5147.92	5139.52	0.61	ppb
Zirconium	90-1	509.39	539.04	544.77	531.07	3.58	ppb
Zirconium	91-1	505.83	526.46	533.30	521.86	2.74	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:47:37	DataFile Name :	033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52907.45	52043.17	51996.03	52315.55	0.98	ppb
Antimony	121-1	487.39	505.48	500.39	497.75	1.87	ppb
Arsenic	75-2	505.23	499.20	502.34	502.25	0.60	ppb
Barium	135-1	2379.21	2421.74	2370.02	2390.32	1.15	ppb
Barium	137-1	2478.75	2589.93	2459.30	2509.33	2.81	ppb
Beryllium	9-1	521.93	529.43	526.97	526.11	0.73	ppb
Bismuth	209-1				99		%
Bismuth	209-2				87		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	488.19	505.27	487.26	493.57	2.05	ppb
Cadmium	106-1	481.48	491.04	482.01	484.84	1.11	ppb
Cadmium	111-1	486.22	498.16	494.71	493.03	1.25	ppb
Calcium	43-1	244972.48	260033.81	261797.88	255601.39	3.62	ppb
Calcium	44-1	247551.04	259193.55	260569.82	255771.47	2.80	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	514.02	506.13	514.39	511.51	0.91	ppb
Cobalt	59-2	506.25	504.51	502.19	504.32	0.40	ppb
Copper	63-2	5235.92	5164.45	5235.80	5212.06	0.79	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				93		%
Indium	115-2				92		%
Iron	56-2	130869.58	130416.34	130971.23	130752.38	0.23	ppb
Iron	57-2	128861.54	131113.30	128608.94	129527.93	1.06	ppb
Iron	54-2	130378.84	128428.56	131278.47	130028.63	1.12	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:47:37	DataFile Name :	033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2459.55	2496.43	2548.75	2501.58	1.79	ppb
Lead	207-1	2449.11	2542.00	2616.75	2535.95	3.31	ppb
Lead	208-1	2456.26	2518.81	2573.79	2516.29	2.34	ppb
Lithium	6-1				114		%
Magnesium	24-2	261881.20	258548.37	261839.22	260756.27	0.73	ppb
Manganese	55-2	5189.46	5063.94	5223.95	5159.12	1.63	ppb
Molybdenum	94-1	5448.80	5864.44	5613.97	5642.40	3.71	ppb
Molybdenum	95-1	5399.49	5826.21	5554.67	5593.46	3.86	ppb
Molybdenum	96-1	5442.30	5834.54	5526.77	5601.20	3.69	ppb
Molybdenum	97-1	5488.93	5688.68	5615.17	5597.59	1.80	ppb
Molybdenum	98-1	5445.56	5673.45	5652.07	5590.36	2.25	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	494.34	498.53	491.40	494.76	0.72	ppb
Phosphorus	31-2	10122.81	10323.11	10169.80	10205.24	1.03	ppb
Potassium	39-2	125901.06	131721.07	130289.10	129303.74	2.35	ppb
Rhodium	103-1				87		%
Rhodium	103-2				91		%
Scandium	45-1				98		%
Scandium	45-2				91		%
Selenium	82-1	491.45	518.07	503.87	504.46	2.64	ppb
Selenium	77-2	534.14	512.28	508.82	518.41	2.65	ppb
Selenium	78-2	502.41	508.02	533.30	514.58	3.20	ppb
Silicon	28-1	583.63	601.73	608.81	598.06	2.17	ppb
Silver	107-1	479.39	489.80	487.06	485.41	1.11	ppb
Silver	109-1	478.73	491.89	480.99	483.87	1.45	ppb
Sodium	23-2	264307.93	263964.38	260128.20	262800.17	0.88	ppb
Strontium	86-1	12373.71	13078.21	12551.45	12667.79	2.89	ppb
Strontium	88-1	12433.22	12972.90	12603.06	12669.73	2.18	ppb
Sulfur	34-1	10366.23	11076.63	11195.88	10879.58	4.12	ppb
Terbium	159-1				101		%
Terbium	159-2				100		%
Thallium	203-1	449.57	460.72	476.80	462.36	2.96	ppb
Thallium	205-1	516.93	517.73	522.00	518.88	0.52	ppb
Tin	118-1	483.96	495.67	494.25	491.30	1.30	ppb
Titanium	47-1	5457.47	5859.78	5814.75	5710.67	3.86	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:47:37	DataFile Name :	033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	493.69	523.10	540.67	519.15	4.57	ppb
Vanadium	51-2	515.60	508.23	516.76	513.53	0.90	ppb
Yttrium	89-1				96		%
Yttrium	89-2				93		%
Zinc	66-2	5212.04	5137.74	5099.03	5149.61	1.12	ppb
Zirconium	90-1	508.59	542.92	517.71	523.08	3.40	ppb
Zirconium	91-1	497.44	524.33	507.82	509.86	2.66	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:54:24	DataFile Name :	034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.23	0.21	0.45	0.30	45.63	ppb
Antimony	121-1	0.18	0.22	0.21	0.20	10.86	ppb
Arsenic	75-2	0.01	0.01	-0.03	-0.01		ppb
Barium	135-1	0.02	0.03	0.07	0.04	71.85	ppb
Barium	137-1	0.04	0.04	0.02	0.03	39.43	ppb
Beryllium	9-1	0.11	0.10	0.10	0.10	8.39	ppb
Bismuth	209-1				103		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.03	-0.02	-0.16	-0.07		ppb
Cadmium	106-1	-9.20	-11.28	-10.18	-10.22		ppb
Cadmium	111-1	-0.08	-0.13	-0.09	-0.10		ppb
Calcium	43-1	-23.45	-31.93	-30.34	-28.57		ppb
Calcium	44-1	-55.25	-54.20	-53.41	-54.29		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.43	0.41	0.43	0.42	3.06	ppb
Cobalt	59-2	0.01	0.02	0.01	0.01	50.72	ppb
Copper	63-2	0.06	0.04	0.08	0.06	35.08	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				96		%
Indium	115-2				96		%
Iron	56-2	4.22	3.97	4.80	4.33	9.76	ppb
Iron	57-2	-6.84	-4.67	-3.17	-4.89		ppb
Iron	54-2	2.79	2.56	5.79	3.71	48.53	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:54:24	DataFile Name :	034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.16	0.13	0.14	0.14	10.80	ppb
Lead	207-1	0.16	0.17	0.14	0.16	9.43	ppb
Lead	208-1	0.17	0.15	0.15	0.15	7.13	ppb
Lithium	6-1				109		%
Magnesium	24-2	3.14	4.71	3.40	3.75	22.44	ppb
Manganese	55-2	0.05	0.05	0.12	0.07	60.02	ppb
Molybdenum	94-1	0.18	0.15	0.20	0.18	13.33	ppb
Molybdenum	95-1	0.21	0.16	0.17	0.18	15.85	ppb
Molybdenum	96-1	0.25	0.19	0.19	0.21	17.83	ppb
Molybdenum	97-1	0.18	0.19	0.18	0.18	2.90	ppb
Molybdenum	98-1	0.23	0.18	0.22	0.21	13.87	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.25	0.25	0.24	0.25	2.82	ppb
Phosphorus	31-2	-28.46	-26.04	-18.01	-24.17		ppb
Potassium	39-2	-30.73	-19.72	-5.33	-18.59		ppb
Rhodium	103-1				94		%
Rhodium	103-2				98		%
Scandium	45-1				97		%
Scandium	45-2				94		%
Selenium	82-1	-0.26	-1.08	-0.75	-0.69		ppb
Selenium	77-2	0.00	0.00	0.85	0.28	173.21	ppb
Selenium	78-2	0.58	1.71	3.34	1.88	73.82	ppb
Silicon	28-1	-1.16	-1.14	-0.81	-1.04		ppb
Silver	107-1	0.02	0.02	0.03	0.02	28.12	ppb
Silver	109-1	0.04	0.02	0.01	0.02	61.10	ppb
Sodium	23-2	55.98	59.11	60.19	58.42	3.74	ppb
Strontium	86-1	0.12	0.09	0.18	0.13	32.88	ppb
Strontium	88-1	0.18	0.15	0.14	0.16	13.01	ppb
Sulfur	34-1	441.74	382.94	544.24	456.31	17.89	ppb
Terbium	159-1				100		%
Terbium	159-2				99		%
Thallium	203-1	0.04	0.04	0.05	0.05	15.44	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	11.25	ppb
Tin	118-1	-0.05	-0.01	0.01	-0.02		ppb
Titanium	47-1	0.02	0.10	0.27	0.13	97.77	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:54:24	DataFile Name :	034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.00	0.00	0.00	53.43	ppb
Vanadium	51-2	0.00	0.02	0.01	0.01	85.50	ppb
Yttrium	89-1				97		%
Yttrium	89-2				94		%
Zinc	66-2	0.35	0.51	-0.14	0.24	139.41	ppb
Zirconium	90-1	0.02	0.02	0.03	0.02	7.77	ppb
Zirconium	91-1	0.00	0.02	0.07	0.03	117.98	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MSD	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:57:44	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10015.25	9997.55	9886.47	9966.42	0.70	ppb
Antimony	121-1	491.41	497.50	505.03	497.98	1.37	ppb
Arsenic	75-2	534.58	533.01	519.87	529.15	1.53	ppb
Barium	135-1	2301.54	2316.88	2303.56	2307.33	0.36	ppb
Barium	137-1	2460.40	2448.08	2400.71	2436.40	1.29	ppb
Beryllium	9-1	527.88	537.86	531.77	532.50	0.94	ppb
Bismuth	209-1				96		%
Bismuth	209-2				83		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	532.59	522.16	533.23	529.33	1.17	ppb
Cadmium	106-1	514.78	524.92	526.48	522.06	1.22	ppb
Cadmium	111-1	527.73	531.88	524.23	527.94	0.73	ppb
Calcium	43-1	71302.93	72643.90	75714.57	73220.47	3.09	ppb
Calcium	44-1	64650.21	66525.81	69842.76	67006.26	3.92	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	498.66	505.68	503.90	502.75	0.73	ppb
Cobalt	59-2	535.36	526.13	527.68	529.72	0.93	ppb
Copper	63-2	5052.10	5152.12	5025.81	5076.67	1.31	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				96		%
Holmium	165-2				96		%
Indium	115-1				92		%
Indium	115-2				90		%
Iron	56-2	28873.79	28293.59	28472.45	28546.61	1.04	ppb
Iron	57-2	30351.12	29833.05	30125.35	30103.17	0.86	ppb
Iron	54-2	30682.70	30745.23	30555.61	30661.18	0.32	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MSD	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:57:44	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2483.57	2452.41	2560.04	2498.68	2.22	ppb
Lead	207-1	2410.10	2497.54	2485.85	2464.50	1.93	ppb
Lead	208-1	2478.82	2470.76	2511.27	2486.95	0.86	ppb
Lithium	6-1				108		%
Magnesium	24-2	52208.62	52314.51	52427.78	52316.97	0.21	ppb
Manganese	55-2	5378.33	5649.70	5424.27	5484.10	2.65	ppb
Molybdenum	94-1	6819.26	6720.23	6818.37	6785.95	0.84	ppb
Molybdenum	95-1	7086.77	6909.75	6853.13	6949.88	1.75	ppb
Molybdenum	96-1	7013.86	6947.44	6894.04	6951.78	0.86	ppb
Molybdenum	97-1	6972.00	6673.14	6993.27	6879.47	2.60	ppb
Molybdenum	98-1	7104.83	6870.53	6897.34	6957.57	1.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	516.98	509.51	512.24	512.91	0.74	ppb
Phosphorus	31-2	71.98	58.77	39.96	56.90	28.28	ppb
Potassium	39-2	27060.19	26896.65	27070.83	27009.23	0.36	ppb
Rhodium	103-1				88		%
Rhodium	103-2				91		%
Scandium	45-1				94		%
Scandium	45-2				89		%
Selenium	82-1	519.98	496.82	502.72	506.51	2.38	ppb
Selenium	77-2	527.34	526.71	487.10	513.72	4.49	ppb
Selenium	78-2	513.72	545.29	547.79	535.60	3.55	ppb
Silicon	28-1	181.77	185.64	190.92	186.11	2.47	ppb
Silver	107-1	207.24	309.62	369.14	295.33	27.73	ppb
Silver	109-1	219.29	240.93	277.19	245.80	11.90	ppb
Sodium	23-2	111655.43	109669.93	113227.42	111517.59	1.60	ppb
Strontium	86-1	11376.58	11137.15	11360.47	11291.40	1.19	ppb
Strontium	88-1	11275.51	11142.11	11286.85	11234.82	0.72	ppb
Sulfur	34-1	3865.95	3370.54	3740.87	3659.12	7.04	ppb
Terbium	159-1				96		%
Terbium	159-2				96		%
Thallium	203-1	462.46	460.30	465.27	462.68	0.54	ppb
Thallium	205-1	510.62	510.51	506.30	509.14	0.48	ppb
Tin	118-1	446.34	455.96	458.66	453.65	1.43	ppb
Titanium	47-1	5761.10	5750.19	6358.01	5956.43	5.84	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MSD	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:57:44	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	513.55	525.40	532.85	523.93	1.86	ppb
Vanadium	51-2	524.60	517.88	524.88	522.45	0.76	ppb
Yttrium	89-1				92		%
Yttrium	89-2				90		%
Zinc	66-2	5094.46	5050.66	4994.24	5046.45	1.00	ppb
Zirconium	90-1	531.79	515.51	506.51	517.94	2.47	ppb
Zirconium	91-1	515.93	510.47	507.76	511.39	0.81	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02A	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDA	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:00:44	DataFile Name :	036SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10059.27	9851.29	9966.18	9958.91	1.05	ppb
Antimony	121-1	507.82	515.94	530.46	518.07	2.21	ppb
Arsenic	75-2	528.07	536.15	537.08	533.77	0.93	ppb
Barium	135-1	2369.61	2375.28	2447.26	2397.38	1.81	ppb
Barium	137-1	2453.16	2398.12	2483.53	2444.94	1.77	ppb
Beryllium	9-1	541.17	540.98	538.03	540.06	0.33	ppb
Bismuth	209-1				100		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	539.66	544.98	560.00	548.21	1.92	ppb
Cadmium	106-1	533.01	535.76	542.88	537.22	0.95	ppb
Cadmium	111-1	534.55	544.25	559.87	546.22	2.34	ppb
Calcium	43-1	73456.22	74394.59	72461.22	73437.35	1.32	ppb
Calcium	44-1	66726.26	66527.94	65082.17	66112.12	1.36	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	514.88	504.68	510.40	509.99	1.00	ppb
Cobalt	59-2	538.70	526.15	530.30	531.72	1.20	ppb
Copper	63-2	5117.44	5031.11	4967.81	5038.79	1.49	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				98		%
Indium	115-1				92		%
Indium	115-2				91		%
Iron	56-2	28647.76	28125.25	28367.63	28380.21	0.92	ppb
Iron	57-2	30198.98	29847.47	30144.98	30063.81	0.63	ppb
Iron	54-2	31102.09	30079.66	30575.29	30585.68	1.67	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02A	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDA	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:00:44	DataFile Name :	036SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2493.66	2498.97	2574.52	2522.38	1.79	ppb
Lead	207-1	2480.64	2440.73	2535.59	2485.65	1.92	ppb
Lead	208-1	2516.88	2488.23	2561.33	2522.14	1.46	ppb
Lithium	6-1				111		%
Magnesium	24-2	54087.49	52253.99	53060.43	53133.97	1.73	ppb
Manganese	55-2	5531.86	5438.57	5485.14	5485.19	0.85	ppb
Molybdenum	94-1	6672.58	6638.57	6693.27	6668.14	0.41	ppb
Molybdenum	95-1	7072.45	6769.61	7125.84	6989.30	2.75	ppb
Molybdenum	96-1	6922.98	6835.05	7082.11	6946.71	1.80	ppb
Molybdenum	97-1	6740.21	6952.29	6951.29	6881.27	1.78	ppb
Molybdenum	98-1	6971.02	6849.34	7070.24	6963.53	1.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	510.79	509.78	519.73	513.43	1.07	ppb
Phosphorus	31-2	42.65	14.57	28.85	28.69	48.94	ppb
Potassium	39-2	27150.55	26963.14	27719.91	27277.87	1.44	ppb
Rhodium	103-1				87		%
Rhodium	103-2				94		%
Scandium	45-1				95		%
Scandium	45-2				90		%
Selenium	82-1	516.48	506.88	514.25	512.54	0.98	ppb
Selenium	77-2	505.15	519.37	563.55	529.36	5.75	ppb
Selenium	78-2	539.24	528.22	550.51	539.32	2.07	ppb
Silicon	28-1	184.88	184.35	181.64	183.62	0.94	ppb
Silver	107-1	296.70	531.28	301.27	376.42	35.64	ppb
Silver	109-1	245.32	577.08	360.35	394.25	42.73	ppb
Sodium	23-2	110732.11	108654.87	111053.17	110146.72	1.18	ppb
Strontium	86-1	11530.62	11366.22	11785.11	11560.65	1.83	ppb
Strontium	88-1	11603.26	11645.77	11434.98	11561.34	0.96	ppb
Sulfur	34-1	3435.16	3228.26	2808.43	3157.28	10.11	ppb
Terbium	159-1				95		%
Terbium	159-2				98		%
Thallium	203-1	467.22	461.48	475.12	467.94	1.46	ppb
Thallium	205-1	514.11	524.94	522.50	520.52	1.09	ppb
Tin	118-1	467.02	464.29	485.16	472.16	2.40	ppb
Titanium	47-1	5874.82	6062.32	5811.18	5916.11	2.21	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02A	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDA	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:00:44	DataFile Name :	036SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	545.12	526.96	538.63	536.90	1.71	ppb
Vanadium	51-2	534.56	524.66	524.45	527.89	1.09	ppb
Yttrium	89-1				94		%
Yttrium	89-2				91		%
Zinc	66-2	5157.89	5023.28	5133.42	5104.86	1.40	ppb
Zirconium	90-1	525.59	518.92	528.33	524.28	0.92	ppb
Zirconium	91-1	516.50	500.51	516.70	511.24	1.82	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-01	Instrumnet Name :	P7
Client Sample ID :	915-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:03:42	DataFile Name :	037SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	853.65	822.79	821.57	832.67	2.18	ppb
Antimony	121-1	0.93	0.90	0.95	0.93	2.57	ppb
Arsenic	75-2	3.70	4.14	3.59	3.81	7.65	ppb
Barium	135-1	62.12	62.85	63.34	62.77	0.98	ppb
Barium	137-1	61.99	63.22	63.69	62.97	1.39	ppb
Beryllium	9-1	0.36	0.26	0.19	0.27	31.17	ppb
Bismuth	209-1				100		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.42	0.49	-0.09	0.27	114.77	ppb
Cadmium	106-1	-8.04	-8.33	-9.07	-8.48		ppb
Cadmium	111-1	0.24	0.05	0.06	0.12	90.38	ppb
Calcium	43-1	21141.71	20989.33	20436.11	20855.72	1.78	ppb
Calcium	44-1	19355.59	19297.64	19265.34	19306.19	0.24	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.73	3.51	3.76	3.67	3.75	ppb
Cobalt	59-2	1.23	1.22	1.12	1.19	5.43	ppb
Copper	63-2	9.94	9.61	9.11	9.55	4.35	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				98		%
Indium	115-1				92		%
Indium	115-2				93		%
Iron	56-2	5700.46	5588.58	5514.46	5601.17	1.67	ppb
Iron	57-2	6057.45	6032.16	5968.82	6019.48	0.76	ppb
Iron	54-2	6097.23	5952.11	5960.46	6003.27	1.36	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-01	Instrumnet Name :	P7
Client Sample ID :	915-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:03:42	DataFile Name :	037SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	5.99	5.67	5.41	5.69	5.13	ppb
Lead	207-1	5.55	5.39	5.39	5.44	1.71	ppb
Lead	208-1	5.84	5.57	5.34	5.58	4.52	ppb
Lithium	6-1				110		%
Magnesium	24-2	3453.33	3500.14	3457.87	3470.45	0.74	ppb
Manganese	55-2	472.90	470.85	476.44	473.39	0.60	ppb
Molybdenum	94-1	3.84	2.78	2.44	3.02	24.18	ppb
Molybdenum	95-1	2.99	2.31	1.70	2.33	27.78	ppb
Molybdenum	96-1	3.11	2.24	1.98	2.44	24.22	ppb
Molybdenum	97-1	2.78	2.24	1.65	2.23	25.40	ppb
Molybdenum	98-1	2.91	2.22	1.68	2.27	27.05	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.79	2.81	2.52	2.70	5.90	ppb
Phosphorus	31-2	168.91	164.92	152.77	162.20	5.18	ppb
Potassium	39-2	2878.62	2868.18	2880.73	2875.84	0.23	ppb
Rhodium	103-1				89		%
Rhodium	103-2				94		%
Scandium	45-1				93		%
Scandium	45-2				92		%
Selenium	82-1	-1.20	0.27	-0.26	-0.40		ppb
Selenium	77-2	0.00	0.84	0.85	0.56	86.61	ppb
Selenium	78-2	1.17	1.95	4.64	2.59	70.45	ppb
Silicon	28-1	232.27	231.23	225.41	229.64	1.61	ppb
Silver	107-1	0.24	0.19	0.20	0.21	11.25	ppb
Silver	109-1	0.26	0.20	0.17	0.21	21.03	ppb
Sodium	23-2	68556.04	67659.44	67142.07	67785.85	1.06	ppb
Strontium	86-1	134.11	133.83	131.05	133.00	1.27	ppb
Strontium	88-1	134.52	132.16	131.24	132.64	1.27	ppb
Sulfur	34-1	4069.52	3673.17	3338.01	3693.56	9.91	ppb
Terbium	159-1				96		%
Terbium	159-2				98		%
Thallium	203-1	0.21	0.17	0.11	0.16	28.73	ppb
Thallium	205-1	0.20	0.16	0.13	0.16	22.77	ppb
Tin	118-1	0.73	0.69	0.79	0.74	6.32	ppb
Titanium	47-1	21.64	24.34	20.56	22.18	8.79	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-01	Instrumnet Name :	P7
Client Sample ID :	915-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:03:42	DataFile Name :	037SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.19	0.14	0.12	0.15	23.71	ppb
Vanadium	51-2	2.60	2.54	2.50	2.55	1.96	ppb
Yttrium	89-1				92		%
Yttrium	89-2				91		%
Zinc	66-2	53.41	53.78	54.87	54.02	1.40	ppb
Zirconium	90-1	0.48	0.47	0.44	0.47	4.51	ppb
Zirconium	91-1	0.57	0.44	0.52	0.51	12.75	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-02	Instrumnet Name :	P7
Client Sample ID :	920-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:07:02	DataFile Name :	038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	126.39	122.18	138.05	128.87	6.38	ppb
Antimony	121-1	0.30	0.31	0.35	0.32	8.14	ppb
Arsenic	75-2	2.22	1.97	2.07	2.08	5.97	ppb
Barium	135-1	55.83	59.86	57.83	57.84	3.49	ppb
Barium	137-1	57.04	59.28	58.81	58.37	2.02	ppb
Beryllium	9-1	0.15	0.10	0.10	0.12	22.49	ppb
Bismuth	209-1				99		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.05	-0.16	-0.23	-0.11		ppb
Cadmium	106-1	-7.09	-10.11	-10.47	-9.22		ppb
Cadmium	111-1	-0.05	-0.07	-0.08	-0.07		ppb
Calcium	43-1	21065.76	20539.37	20993.07	20866.07	1.37	ppb
Calcium	44-1	19123.41	19352.97	19177.53	19217.97	0.62	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.71	1.71	1.54	1.65	5.95	ppb
Cobalt	59-2	0.57	0.73	0.61	0.64	12.47	ppb
Copper	63-2	3.08	3.03	2.92	3.01	2.58	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				100		%
Indium	115-1				94		%
Indium	115-2				94		%
Iron	56-2	3118.25	3052.86	3093.98	3088.36	1.07	ppb
Iron	57-2	3357.86	3261.56	3344.45	3321.29	1.57	ppb
Iron	54-2	3331.02	3229.17	3253.63	3271.28	1.63	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-02	Instrumnet Name :	P7
Client Sample ID :	920-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:07:02	DataFile Name :	038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.74	1.54	1.62	1.63	5.98	ppb
Lead	207-1	1.69	1.58	1.52	1.59	5.32	ppb
Lead	208-1	1.69	1.59	1.61	1.63	3.05	ppb
Lithium	6-1				111		%
Magnesium	24-2	3479.35	3370.98	3456.30	3435.54	1.66	ppb
Manganese	55-2	468.16	455.01	465.66	462.94	1.51	ppb
Molybdenum	94-1	0.84	0.78	0.96	0.86	10.38	ppb
Molybdenum	95-1	0.76	0.80	0.81	0.79	2.99	ppb
Molybdenum	96-1	0.80	0.80	0.79	0.80	0.60	ppb
Molybdenum	97-1	0.75	0.54	0.71	0.67	16.33	ppb
Molybdenum	98-1	0.71	0.82	0.78	0.77	7.20	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.69	1.60	1.69	1.66	3.03	ppb
Phosphorus	31-2	73.29	77.89	72.00	74.39	4.16	ppb
Potassium	39-2	2837.12	2838.96	2885.10	2853.72	0.95	ppb
Rhodium	103-1				90		%
Rhodium	103-2				96		%
Scandium	45-1				96		%
Scandium	45-2				92		%
Selenium	82-1	-0.53	-0.93	-0.44	-0.63		ppb
Selenium	77-2	0.00	0.00	0.84	0.28	173.21	ppb
Selenium	78-2	0.21	1.45	-1.65	0.00	112332.66	ppb
Silicon	28-1	165.04	161.17	161.97	162.72	1.26	ppb
Silver	107-1	0.07	0.07	0.06	0.07	9.08	ppb
Silver	109-1	0.05	0.07	0.05	0.06	20.52	ppb
Sodium	23-2	70680.94	67772.92	69320.79	69258.22	2.10	ppb
Strontium	86-1	133.36	132.93	138.18	134.82	2.16	ppb
Strontium	88-1	132.74	132.52	135.50	133.59	1.24	ppb
Sulfur	34-1	3533.46	3136.77	3118.98	3263.07	7.18	ppb
Terbium	159-1				96		%
Terbium	159-2				98		%
Thallium	203-1	0.04	0.05	0.03	0.04	22.04	ppb
Thallium	205-1	0.05	0.05	0.05	0.05	4.71	ppb
Tin	118-1	0.20	0.25	0.33	0.26	23.98	ppb
Titanium	47-1	2.85	2.65	2.83	2.78	3.90	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-02	Instrumnet Name :	P7
Client Sample ID :	920-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:07:02	DataFile Name :	038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.03	0.03	0.03	0.03	9.95	ppb
Vanadium	51-2	1.10	1.03	1.01	1.04	4.59	ppb
Yttrium	89-1				92		%
Yttrium	89-2				93		%
Zinc	66-2	13.20	13.93	13.72	13.62	2.77	ppb
Zirconium	90-1	0.09	0.13	0.11	0.11	17.35	ppb
Zirconium	91-1	0.07	0.11	0.09	0.09	26.11	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-01	Instrumnet Name :	P7
Client Sample ID :	914-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:10:19	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	70.80	70.63	65.96	69.13	3.97	ppb
Antimony	121-1	0.19	0.18	0.21	0.19	8.13	ppb
Arsenic	75-2	5.55	4.98	5.69	5.41	6.95	ppb
Barium	135-1	85.55	87.56	86.23	86.44	1.18	ppb
Barium	137-1	87.60	88.01	86.64	87.42	0.81	ppb
Beryllium	9-1	0.12	0.15	0.06	0.11	39.83	ppb
Bismuth	209-1				98		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.02	-0.09	0.05	-0.02		ppb
Cadmium	106-1	-7.70	-6.08	-9.25	-7.67		ppb
Cadmium	111-1	-0.05	-0.02	-0.08	-0.05		ppb
Calcium	43-1	33862.69	33636.31	34485.27	33994.76	1.29	ppb
Calcium	44-1	31503.04	30893.30	32322.58	31572.97	2.27	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.77	1.78	1.68	1.74	3.11	ppb
Cobalt	59-2	4.35	4.08	4.05	4.16	4.00	ppb
Copper	63-2	1.24	1.24	1.10	1.19	6.95	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				100		%
Indium	115-1				94		%
Indium	115-2				94		%
Iron	56-2	6247.45	6386.10	6357.53	6330.36	1.16	ppb
Iron	57-2	6845.45	6719.83	6702.43	6755.90	1.16	ppb
Iron	54-2	6695.51	6721.18	6756.79	6724.49	0.46	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-01	Instrumnet Name :	P7
Client Sample ID :	914-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:10:19	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.42	1.43	1.38	1.41	1.72	ppb
Lead	207-1	1.33	1.41	1.32	1.35	3.52	ppb
Lead	208-1	1.43	1.37	1.39	1.39	2.17	ppb
Lithium	6-1				109		%
Magnesium	24-2	6305.14	6331.01	6344.02	6326.72	0.31	ppb
Manganese	55-2	1514.89	1505.23	1517.50	1512.54	0.43	ppb
Molybdenum	94-1	0.67	0.72	0.91	0.76	16.48	ppb
Molybdenum	95-1	0.58	0.58	0.76	0.64	16.41	ppb
Molybdenum	96-1	0.62	0.55	0.83	0.67	21.47	ppb
Molybdenum	97-1	0.58	0.59	0.65	0.61	6.25	ppb
Molybdenum	98-1	0.56	0.54	0.68	0.59	12.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.38	2.08	2.23	2.23	6.64	ppb
Phosphorus	31-2	157.84	205.62	188.09	183.85	13.15	ppb
Potassium	39-2	4779.34	4757.76	4789.09	4775.39	0.34	ppb
Rhodium	103-1				91		%
Rhodium	103-2				94		%
Scandium	45-1				97		%
Scandium	45-2				93		%
Selenium	82-1	-0.17	0.08	-0.38	-0.16		ppb
Selenium	77-2	0.83	0.00	0.00	0.28	173.21	ppb
Selenium	78-2	-0.93	4.28	-0.91	0.81	369.77	ppb
Silicon	28-1	294.10	285.80	298.31	292.74	2.17	ppb
Silver	107-1	0.03	0.03	0.04	0.03	28.31	ppb
Silver	109-1	0.04	0.04	0.03	0.04	9.23	ppb
Sodium	23-2	157798.20	156864.97	155602.25	156755.14	0.70	ppb
Strontium	86-1	221.22	223.64	228.76	224.54	1.72	ppb
Strontium	88-1	222.58	218.96	228.17	223.23	2.08	ppb
Sulfur	34-1	5910.41	5336.99	5921.87	5723.09	5.84	ppb
Terbium	159-1				98		%
Terbium	159-2				100		%
Thallium	203-1	0.07	0.06	0.04	0.05	23.82	ppb
Thallium	205-1	0.04	0.05	0.07	0.05	26.62	ppb
Tin	118-1	0.18	0.20	0.30	0.23	28.98	ppb
Titanium	47-1	2.32	1.69	2.01	2.01	15.69	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-01	Instrumnet Name :	P7
Client Sample ID :	914-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:10:19	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.04	0.04	0.04	0.04	1.37	ppb
Vanadium	51-2	1.31	1.35	1.54	1.40	8.93	ppb
Yttrium	89-1				95		%
Yttrium	89-2				94		%
Zinc	66-2	52.10	51.53	53.00	52.21	1.42	ppb
Zirconium	90-1	0.13	0.16	0.16	0.15	11.08	ppb
Zirconium	91-1	0.11	0.15	0.14	0.13	14.39	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-02	Instrumnet Name :	P7
Client Sample ID :	916-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:13:39	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	48.63	49.45	52.41	50.16	3.97	ppb
Antimony	121-1	0.20	0.19	0.22	0.20	8.92	ppb
Arsenic	75-2	3.15	3.43	3.73	3.44	8.39	ppb
Barium	135-1	67.78	66.56	68.95	67.76	1.76	ppb
Barium	137-1	68.06	67.19	67.35	67.53	0.69	ppb
Beryllium	9-1	0.10	0.07	0.11	0.10	18.85	ppb
Bismuth	209-1				99		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.09	0.19	-0.01	0.03	456.48	ppb
Cadmium	106-1	-9.64	-9.29	-8.71	-9.21		ppb
Cadmium	111-1	-0.06	-0.10	-0.09	-0.08		ppb
Calcium	43-1	25970.20	26685.64	26153.54	26269.79	1.41	ppb
Calcium	44-1	24403.87	23928.89	23446.39	23926.38	2.00	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.11	1.14	1.20	1.15	4.02	ppb
Cobalt	59-2	2.35	2.24	2.26	2.29	2.55	ppb
Copper	63-2	1.27	1.36	1.52	1.38	9.11	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				96		%
Holmium	165-2				97		%
Indium	115-1				94		%
Indium	115-2				94		%
Iron	56-2	3993.62	4058.52	4206.37	4086.17	2.67	ppb
Iron	57-2	4336.27	4242.14	4344.77	4307.72	1.32	ppb
Iron	54-2	4250.23	4207.12	4294.48	4250.61	1.03	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-02	Instrumnet Name :	P7
Client Sample ID :	916-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:13:39	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.85	0.97	0.88	0.90	6.61	ppb
Lead	207-1	0.84	0.92	0.82	0.86	5.95	ppb
Lead	208-1	0.87	0.93	0.89	0.90	3.34	ppb
Lithium	6-1				110		%
Magnesium	24-2	4804.57	4679.83	4792.79	4759.06	1.45	ppb
Manganese	55-2	798.82	790.62	802.15	797.20	0.74	ppb
Molybdenum	94-1	0.58	0.67	0.58	0.61	8.83	ppb
Molybdenum	95-1	0.50	0.47	0.59	0.52	11.94	ppb
Molybdenum	96-1	0.56	0.56	0.52	0.55	3.67	ppb
Molybdenum	97-1	0.67	0.55	0.48	0.57	17.65	ppb
Molybdenum	98-1	0.48	0.58	0.52	0.53	9.44	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.54	1.75	1.58	1.62	6.68	ppb
Phosphorus	31-2	85.33	76.61	103.64	88.53	15.58	ppb
Potassium	39-2	3546.02	3563.79	3569.51	3559.77	0.34	ppb
Rhodium	103-1				91		%
Rhodium	103-2				95		%
Scandium	45-1				95		%
Scandium	45-2				92		%
Selenium	82-1	-0.62	-0.78	-0.23	-0.55		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.24	4.16	-0.40	1.34	184.79	ppb
Silicon	28-1	211.22	209.04	208.94	209.73	0.61	ppb
Silver	107-1	0.03	0.03	0.03	0.03	11.00	ppb
Silver	109-1	0.02	0.02	0.03	0.02	20.07	ppb
Sodium	23-2	107615.97	107886.92	110336.24	108613.04	1.38	ppb
Strontium	86-1	167.90	170.12	165.81	167.95	1.28	ppb
Strontium	88-1	165.91	167.06	166.15	166.37	0.36	ppb
Sulfur	34-1	5221.94	4935.75	4712.58	4956.76	5.15	ppb
Terbium	159-1				96		%
Terbium	159-2				97		%
Thallium	203-1	0.02	0.03	0.03	0.03	16.21	ppb
Thallium	205-1	0.03	0.04	0.04	0.04	17.53	ppb
Tin	118-1	0.14	0.17	0.17	0.16	10.37	ppb
Titanium	47-1	0.90	0.96	0.79	0.89	10.14	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-02	Instrumnet Name :	P7
Client Sample ID :	916-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:13:39	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.03	0.02	0.03	0.02	26.82	ppb
Vanadium	51-2	0.76	0.82	0.77	0.79	4.39	ppb
Yttrium	89-1				95		%
Yttrium	89-2				93		%
Zinc	66-2	65.09	62.61	64.82	64.17	2.12	ppb
Zirconium	90-1	0.08	0.09	0.10	0.09	6.89	ppb
Zirconium	91-1	0.06	0.12	0.10	0.10	31.27	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3657-01	Instrumnet Name :	P7
Client Sample ID :	917-J-WS-081624	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:16:57	DataFile Name :	041SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	92.31	89.76	94.13	92.07	2.38	ppb
Antimony	121-1	0.24	0.21	0.23	0.23	6.18	ppb
Arsenic	75-2	2.11	1.61	1.83	1.85	13.56	ppb
Barium	135-1	57.41	57.07	58.87	57.78	1.65	ppb
Barium	137-1	57.32	57.72	59.03	58.02	1.54	ppb
Beryllium	9-1	0.09	0.06	0.05	0.07	29.04	ppb
Bismuth	209-1				100		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.01	0.21	0.06	0.08	129.41	ppb
Cadmium	106-1	-8.40	-8.47	-8.46	-8.44		ppb
Cadmium	111-1	-0.05	-0.05	-0.08	-0.06		ppb
Calcium	43-1	21023.21	21420.71	21082.31	21175.41	1.01	ppb
Calcium	44-1	19338.22	19293.03	19476.97	19369.41	0.49	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.45	1.48	1.50	1.48	1.51	ppb
Cobalt	59-2	0.63	0.56	0.61	0.60	6.55	ppb
Copper	63-2	2.53	2.70	2.81	2.68	5.24	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				95		%
Holmium	165-2				98		%
Indium	115-1				94		%
Indium	115-2				95		%
Iron	56-2	2812.78	2852.35	2810.59	2825.24	0.83	ppb
Iron	57-2	3035.83	3046.04	3126.44	3069.44	1.62	ppb
Iron	54-2	3014.18	3013.15	3040.97	3022.77	0.52	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3657-01	Instrumnet Name :	P7
Client Sample ID :	917-J-WS-081624	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:16:57	DataFile Name :	041SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.67	1.61	1.82	1.70	6.15	ppb
Lead	207-1	1.61	1.72	1.69	1.67	3.49	ppb
Lead	208-1	1.62	1.70	1.71	1.67	3.06	ppb
Lithium	6-1				109		%
Magnesium	24-2	3449.67	3532.69	3529.61	3503.99	1.34	ppb
Manganese	55-2	355.53	366.28	363.48	361.76	1.54	ppb
Molybdenum	94-1	0.48	0.55	0.56	0.53	7.70	ppb
Molybdenum	95-1	0.45	0.40	0.41	0.42	6.38	ppb
Molybdenum	96-1	0.45	0.43	0.49	0.46	6.83	ppb
Molybdenum	97-1	0.43	0.41	0.39	0.41	5.07	ppb
Molybdenum	98-1	0.43	0.42	0.41	0.42	1.53	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.72	2.87	2.91	2.83	3.59	ppb
Phosphorus	31-2	60.20	33.15	50.42	47.93	28.58	ppb
Potassium	39-2	2729.03	2767.44	2774.49	2756.99	0.89	ppb
Rhodium	103-1				89		%
Rhodium	103-2				96		%
Scandium	45-1				95		%
Scandium	45-2				91		%
Selenium	82-1	-0.76	-0.08	-1.01	-0.62		ppb
Selenium	77-2	0.83	0.00	0.00	0.28	173.21	ppb
Selenium	78-2	0.52	-1.16	1.90	0.42	362.50	ppb
Silicon	28-1	120.70	126.38	120.80	122.62	2.65	ppb
Silver	107-1	0.02	0.03	0.02	0.02	21.69	ppb
Silver	109-1	0.02	0.03	0.02	0.02	14.44	ppb
Sodium	23-2	71666.13	72175.15	72834.42	72225.24	0.81	ppb
Strontium	86-1	131.04	131.96	135.86	132.95	1.93	ppb
Strontium	88-1	130.40	132.36	134.88	132.55	1.70	ppb
Sulfur	34-1	3817.42	4104.98	3612.27	3844.89	6.44	ppb
Terbium	159-1				95		%
Terbium	159-2				99		%
Thallium	203-1	0.04	0.03	0.02	0.03	41.23	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	6.93	ppb
Tin	118-1	0.18	0.25	0.28	0.23	20.14	ppb
Titanium	47-1	1.70	1.84	2.20	1.91	13.55	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3657-01	Instrumnet Name :	P7
Client Sample ID :	917-J-WS-081624	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:16:57	DataFile Name :	041SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.03	0.03	0.03	0.03	4.52	ppb
Vanadium	51-2	0.90	0.98	0.92	0.94	4.63	ppb
Yttrium	89-1				95		%
Yttrium	89-2				94		%
Zinc	66-2	11.19	11.74	12.10	11.68	3.92	ppb
Zirconium	90-1	0.07	0.08	0.14	0.10	38.04	ppb
Zirconium	91-1	0.11	0.10	0.12	0.11	7.79	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:20:18	DataFile Name :	042SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19952.72	20275.65	20296.84	20175.07	0.96	ppb
Antimony	121-1	4.50	4.63	4.47	4.54	1.91	ppb
Arsenic	75-2	14.70	13.63	14.72	14.35	4.35	ppb
Barium	135-1	1536.32	1539.44	1514.45	1530.07	0.89	ppb
Barium	137-1	1605.54	1591.74	1654.42	1617.23	2.04	ppb
Beryllium	9-1	6.66	7.20	7.09	6.98	4.11	ppb
Bismuth	209-1				102		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	23.26	23.17	22.60	23.01	1.56	ppb
Cadmium	106-1	18.00	19.80	18.83	18.87	4.77	ppb
Cadmium	111-1	24.60	24.06	24.33	24.33	1.12	ppb
Calcium	43-1	21015.59	20806.85	21039.50	20953.98	0.61	ppb
Calcium	44-1	19155.25	19359.34	19087.70	19200.77	0.74	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	41.54	40.95	40.88	41.13	0.89	ppb
Cobalt	59-2	65.59	64.51	65.26	65.12	0.85	ppb
Copper	63-2	151.58	155.32	154.78	153.89	1.31	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				102		%
Indium	115-1				95		%
Indium	115-2				95		%
Iron	56-2	19177.45	19185.35	19071.46	19144.75	0.33	ppb
Iron	57-2	19845.11	19906.05	20230.51	19993.89	1.04	ppb
Iron	54-2	20051.61	20346.03	20639.86	20345.83	1.45	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:20:18	DataFile Name :	042SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	531.78	527.32	533.20	530.77	0.58	ppb
Lead	207-1	504.99	498.78	505.65	503.14	0.75	ppb
Lead	208-1	542.50	542.54	553.69	546.24	1.18	ppb
Lithium	6-1				112		%
Magnesium	24-2	3353.45	3406.93	3425.29	3395.22	1.10	ppb
Manganese	55-2	30158.28	30467.85	30731.20	30452.44	0.94	ppb
Molybdenum	94-1	5.95	6.11	5.79	5.95	2.64	ppb
Molybdenum	95-1	2.46	2.49	2.31	2.42	3.85	ppb
Molybdenum	96-1	2.45	2.57	2.43	2.48	3.10	ppb
Molybdenum	97-1	1.90	2.14	2.08	2.04	6.13	ppb
Molybdenum	98-1	2.06	2.09	1.96	2.04	3.44	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	97.66	100.11	100.15	99.31	1.44	ppb
Phosphorus	31-2	3309.81	3228.91	3351.62	3296.78	1.89	ppb
Potassium	39-2	1294.70	1308.18	1336.05	1312.98	1.61	ppb
Rhodium	103-1				92		%
Rhodium	103-2				96		%
Scandium	45-1				98		%
Scandium	45-2				94		%
Selenium	82-1	5.73	6.04	5.91	5.89	2.69	ppb
Selenium	77-2	23.87	23.53	25.18	24.19	3.60	ppb
Selenium	78-2	7.49	10.42	3.04	6.98	53.17	ppb
Silicon	28-1	546.15	544.58	530.91	540.55	1.55	ppb
Silver	107-1	0.35	0.37	0.35	0.36	2.66	ppb
Silver	109-1	0.37	0.49	0.39	0.42	14.93	ppb
Sodium	23-2	7092.77	7143.37	7166.37	7134.17	0.53	ppb
Strontium	86-1	114.32	112.39	111.04	112.58	1.46	ppb
Strontium	88-1	111.47	110.59	110.26	110.77	0.57	ppb
Sulfur	34-1	9523.31	8786.65	8739.77	9016.58	4.87	ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.95	0.88	0.92	0.92	3.49	ppb
Thallium	205-1	0.84	0.82	0.88	0.85	3.25	ppb
Tin	118-1	2.42	2.60	2.50	2.51	3.58	ppb
Titanium	47-1	542.33	551.23	531.56	541.71	1.82	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:20:18	DataFile Name :	042SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.36	2.31	2.30	2.32	1.35	ppb
Vanadium	51-2	67.75	67.00	67.32	67.36	0.56	ppb
Yttrium	89-1				132		%
Yttrium	89-2				129		%
Zinc	66-2	579.49	597.35	585.06	587.30	1.56	ppb
Zirconium	90-1	2.37	2.17	2.18	2.24	4.91	ppb
Zirconium	91-1	2.30	2.08	2.07	2.15	6.08	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:23:35	DataFile Name :	043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3884.25	3478.82	3843.93	3735.67	5.98	ppb
Antimony	121-1	0.89	0.93	0.96	0.93	3.99	ppb
Arsenic	75-2	3.89	3.15	3.38	3.48	10.88	ppb
Barium	135-1	301.66	309.89	306.26	305.94	1.35	ppb
Barium	137-1	298.80	312.91	307.95	306.55	2.34	ppb
Beryllium	9-1	1.07	1.21	1.37	1.22	12.12	ppb
Bismuth	209-1				104		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	4.60	5.21	3.21	4.34	23.57	ppb
Cadmium	106-1	-6.91	-2.73	-4.35	-4.66		ppb
Cadmium	111-1	4.62	4.63	4.54	4.60	1.10	ppb
Calcium	43-1	3923.54	4034.89	4089.98	4016.14	2.11	ppb
Calcium	44-1	4000.03	4058.83	4124.29	4061.05	1.53	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.64	7.35	8.53	8.17	8.81	ppb
Cobalt	59-2	12.62	11.39	12.17	12.06	5.17	ppb
Copper	63-2	30.56	26.61	30.90	29.36	8.13	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				104		%
Indium	115-1				97		%
Indium	115-2				100		%
Iron	56-2	3857.05	3302.06	3699.30	3619.47	7.90	ppb
Iron	57-2	3962.73	3441.11	3834.07	3745.97	7.25	ppb
Iron	54-2	4047.99	3524.52	3975.82	3849.44	7.37	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:23:35	DataFile Name :	043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	105.18	103.62	100.78	103.20	2.16	ppb
Lead	207-1	96.96	97.00	95.61	96.52	0.82	ppb
Lead	208-1	100.87	100.72	98.59	100.06	1.27	ppb
Lithium	6-1				114		%
Magnesium	24-2	664.87	597.48	653.99	638.78	5.66	ppb
Manganese	55-2	6110.77	5310.03	5844.00	5754.93	7.08	ppb
Molybdenum	94-1	1.21	1.40	1.28	1.30	7.21	ppb
Molybdenum	95-1	0.67	0.68	0.74	0.70	4.90	ppb
Molybdenum	96-1	0.67	0.68	0.67	0.67	0.69	ppb
Molybdenum	97-1	0.48	0.60	0.54	0.54	10.98	ppb
Molybdenum	98-1	0.49	0.52	0.51	0.51	3.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	20.29	17.75	20.07	19.37	7.28	ppb
Phosphorus	31-2	593.51	520.75	663.79	592.68	12.07	ppb
Potassium	39-2	220.38	151.78	209.94	194.03	19.05	ppb
Rhodium	103-1				94		%
Rhodium	103-2				102		%
Scandium	45-1				99		%
Scandium	45-2				98		%
Selenium	82-1	1.23	0.72	0.83	0.92	29.04	ppb
Selenium	77-2	12.09	5.45	5.35	7.63	50.64	ppb
Selenium	78-2	0.96	0.29	2.23	1.16	84.83	ppb
Silicon	28-1	105.90	105.91	106.40	106.07	0.27	ppb
Silver	107-1	0.09	0.08	0.08	0.08	6.38	ppb
Silver	109-1	0.10	0.08	0.08	0.09	13.17	ppb
Sodium	23-2	1415.66	1247.51	1389.23	1350.80	6.69	ppb
Strontium	86-1	27.45	28.85	28.08	28.13	2.49	ppb
Strontium	88-1	27.24	28.21	27.97	27.81	1.81	ppb
Sulfur	34-1	463.54	279.74	601.45	448.24	36.01	ppb
Terbium	159-1				100		%
Terbium	159-2				105		%
Thallium	203-1	0.17	0.18	0.17	0.17	3.58	ppb
Thallium	205-1	0.18	0.18	0.18	0.18	0.89	ppb
Tin	118-1	0.46	0.47	0.42	0.45	5.52	ppb
Titanium	47-1	103.12	108.36	106.45	105.98	2.50	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:23:35	DataFile Name :	043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.44	0.44	0.42	0.43	2.46	ppb
Vanadium	51-2	13.37	11.31	12.77	12.48	8.52	ppb
Yttrium	89-1				103		%
Yttrium	89-2				106		%
Zinc	66-2	117.10	101.54	113.15	110.60	7.31	ppb
Zirconium	90-1	0.48	0.49	0.48	0.48	0.93	ppb
Zirconium	91-1	0.48	0.50	0.47	0.48	3.01	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUP	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:26:57	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20285.33	19168.02	19814.05	19755.80	2.84	ppb
Antimony	121-1	4.44	4.00	4.66	4.37	7.67	ppb
Arsenic	75-2	13.79	14.57	13.79	14.05	3.19	ppb
Barium	135-1	1529.30	1337.19	1561.13	1475.87	8.21	ppb
Barium	137-1	1587.93	1419.02	1629.09	1545.35	7.20	ppb
Beryllium	9-1	7.14	7.10	6.62	6.95	4.19	ppb
Bismuth	209-1				106		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	21.37	20.12	21.14	20.88	3.18	ppb
Cadmium	106-1	15.04	13.62	17.55	15.40	12.90	ppb
Cadmium	111-1	24.22	20.46	24.69	23.12	10.04	ppb
Calcium	43-1	19949.60	17784.18	20595.73	19443.17	7.57	ppb
Calcium	44-1	18225.42	16389.70	18613.22	17742.78	6.69	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	41.55	40.25	40.62	40.81	1.64	ppb
Cobalt	59-2	65.99	62.53	64.70	64.41	2.71	ppb
Copper	63-2	158.29	148.27	153.09	153.21	3.27	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				95		%
Iron	56-2	19665.63	18251.47	18932.87	18949.99	3.73	ppb
Iron	57-2	20492.77	19343.12	19879.54	19905.14	2.89	ppb
Iron	54-2	20601.19	19453.89	19996.93	20017.34	2.87	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUP	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:26:57	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	522.44	466.48	527.60	505.50	6.71	ppb
Lead	207-1	491.94	437.11	502.95	477.33	7.39	ppb
Lead	208-1	528.39	476.42	543.78	516.19	6.84	ppb
Lithium	6-1				109		%
Magnesium	24-2	3449.45	3224.49	3389.90	3354.61	3.47	ppb
Manganese	55-2	30796.26	29106.13	29896.64	29933.01	2.83	ppb
Molybdenum	94-1	5.68	4.91	5.28	5.29	7.31	ppb
Molybdenum	95-1	2.48	2.10	2.37	2.32	8.46	ppb
Molybdenum	96-1	2.57	2.13	2.28	2.33	9.64	ppb
Molybdenum	97-1	2.17	1.88	1.89	1.98	8.41	ppb
Molybdenum	98-1	2.19	1.77	1.99	1.98	10.49	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	103.46	96.14	100.29	99.96	3.67	ppb
Phosphorus	31-2	3363.74	3046.20	3260.32	3223.42	5.02	ppb
Potassium	39-2	1377.05	1249.66	1293.20	1306.64	4.96	ppb
Rhodium	103-1				92		%
Rhodium	103-2				98		%
Scandium	45-1				103		%
Scandium	45-2				94		%
Selenium	82-1	6.17	5.56	4.91	5.55	11.41	ppb
Selenium	77-2	26.86	16.95	24.66	22.82	22.81	ppb
Selenium	78-2	7.52	7.92	9.26	8.24	11.06	ppb
Silicon	28-1	524.28	463.18	545.10	510.85	8.33	ppb
Silver	107-1	0.42	0.32	0.41	0.38	13.66	ppb
Silver	109-1	0.40	0.58	0.67	0.55	24.40	ppb
Sodium	23-2	7214.85	6768.91	7016.83	7000.19	3.19	ppb
Strontium	86-1	116.35	101.22	110.38	109.32	6.97	ppb
Strontium	88-1	115.51	100.10	109.67	108.42	7.18	ppb
Sulfur	34-1	8192.26	5728.53	8209.12	7376.64	19.35	ppb
Terbium	159-1				103		%
Terbium	159-2				100		%
Thallium	203-1	0.90	0.76	0.97	0.88	12.35	ppb
Thallium	205-1	0.88	0.80	0.88	0.85	5.53	ppb
Tin	118-1	2.46	2.14	2.55	2.38	8.88	ppb
Titanium	47-1	513.66	461.74	525.21	500.20	6.76	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUP	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:26:57	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.27	1.98	2.26	2.17	7.67	ppb
Vanadium	51-2	69.10	65.06	65.72	66.63	3.26	ppb
Yttrium	89-1				133		%
Yttrium	89-2				128		%
Zinc	66-2	587.21	555.37	568.11	570.23	2.81	ppb
Zirconium	90-1	1.99	1.72	1.94	1.88	7.61	ppb
Zirconium	91-1	1.97	1.69	1.91	1.86	7.83	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:30:13	DataFile Name :	045CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52414.04	50787.17	50989.93	51397.05	1.72	ppb
Antimony	121-1	490.72	491.55	498.90	493.72	0.91	ppb
Arsenic	75-2	498.13	503.54	495.50	499.05	0.82	ppb
Barium	135-1	2530.35	2580.72	2461.61	2524.23	2.37	ppb
Barium	137-1	2478.06	2557.98	2498.44	2511.49	1.65	ppb
Beryllium	9-1	507.32	520.56	520.26	516.05	1.46	ppb
Bismuth	209-1				102		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	479.04	500.24	496.51	491.93	2.30	ppb
Cadmium	106-1	480.62	474.88	496.68	484.06	2.33	ppb
Cadmium	111-1	487.20	484.96	498.57	490.24	1.49	ppb
Calcium	43-1	242570.46	264355.62	251808.15	252911.41	4.32	ppb
Calcium	44-1	241532.02	261382.46	243531.54	248815.34	4.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	498.51	495.06	504.94	499.50	1.00	ppb
Cobalt	59-2	495.68	491.26	501.13	496.02	1.00	ppb
Copper	63-2	5014.92	4962.00	5091.09	5022.67	1.29	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				103		%
Indium	115-1				96		%
Indium	115-2				93		%
Iron	56-2	129349.86	128151.49	130152.77	129218.04	0.78	ppb
Iron	57-2	127934.12	129013.27	134454.87	130467.42	2.68	ppb
Iron	54-2	128295.42	127643.26	130767.51	128902.06	1.28	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:30:13	DataFile Name :	045CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2565.22	2520.51	2580.72	2555.48	1.22	ppb
Lead	207-1	2563.65	2496.01	2596.80	2552.16	2.01	ppb
Lead	208-1	2550.73	2546.68	2580.18	2559.20	0.71	ppb
Lithium	6-1				115		%
Magnesium	24-2	258423.97	251961.27	258463.60	256282.95	1.46	ppb
Manganese	55-2	5086.44	5082.95	5066.40	5078.60	0.21	ppb
Molybdenum	94-1	5584.09	5648.61	5523.10	5585.27	1.12	ppb
Molybdenum	95-1	5572.45	5656.30	5502.29	5577.01	1.38	ppb
Molybdenum	96-1	5585.11	5713.90	5518.74	5605.91	1.77	ppb
Molybdenum	97-1	5467.71	5572.56	5512.18	5517.48	0.95	ppb
Molybdenum	98-1	5489.20	5576.67	5448.51	5504.79	1.19	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	491.43	481.59	494.54	489.19	1.38	ppb
Phosphorus	31-2	10047.04	9765.07	9934.75	9915.62	1.43	ppb
Potassium	39-2	126638.97	125246.43	131557.49	127814.30	2.59	ppb
Rhodium	103-1				89		%
Rhodium	103-2				92		%
Scandium	45-1				100		%
Scandium	45-2				93		%
Selenium	82-1	488.69	500.59	493.03	494.10	1.22	ppb
Selenium	77-2	510.38	510.32	495.26	505.32	1.72	ppb
Selenium	78-2	527.82	504.10	512.35	514.76	2.34	ppb
Silicon	28-1	596.19	621.31	603.01	606.84	2.14	ppb
Silver	107-1	481.75	501.28	493.23	492.08	1.99	ppb
Silver	109-1	485.73	486.47	490.20	487.47	0.49	ppb
Sodium	23-2	257827.33	258983.67	258503.79	258438.26	0.22	ppb
Strontium	86-1	12357.17	12657.88	12752.26	12589.10	1.64	ppb
Strontium	88-1	12516.69	12915.41	12416.66	12616.25	2.09	ppb
Sulfur	34-1	9673.17	10595.26	9954.08	10074.17	4.69	ppb
Terbium	159-1				102		%
Terbium	159-2				102		%
Thallium	203-1	465.28	454.91	472.02	464.07	1.86	ppb
Thallium	205-1	524.52	502.51	514.79	513.94	2.15	ppb
Tin	118-1	487.62	490.16	498.06	491.95	1.11	ppb
Titanium	47-1	5540.52	5827.50	5728.22	5698.75	2.56	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:30:13	DataFile Name :	045CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	516.71	529.26	541.80	529.26	2.37	ppb
Vanadium	51-2	507.23	497.58	507.58	504.13	1.13	ppb
Yttrium	89-1				98		%
Yttrium	89-2				94		%
Zinc	66-2	4900.99	4871.11	4915.51	4895.87	0.46	ppb
Zirconium	90-1	513.02	527.30	508.73	516.35	1.88	ppb
Zirconium	91-1	506.29	513.24	498.49	506.01	1.46	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:46:37	DataFile Name :	046CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.34	1.60	1.81	1.25	63.78	ppb
Antimony	121-1	0.07	0.09	0.12	0.09	25.77	ppb
Arsenic	75-2	0.01	-0.01	-0.01	0.00		ppb
Barium	135-1	0.03	0.05	0.03	0.03	33.88	ppb
Barium	137-1	0.04	0.02	0.02	0.03	43.35	ppb
Beryllium	9-1	0.04	0.02	0.03	0.03	32.54	ppb
Bismuth	209-1				101		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.09	-0.16	-0.16	-0.14		ppb
Cadmium	106-1	-11.00	-10.97	-9.84	-10.60		ppb
Cadmium	111-1	-0.11	-0.11	-0.11	-0.11		ppb
Calcium	43-1	-27.30	-34.07	-34.17	-31.84		ppb
Calcium	44-1	-59.02	-65.60	-61.04	-61.89		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.36	0.47	0.53	0.45	18.32	ppb
Cobalt	59-2	0.02	0.02	0.01	0.02	58.85	ppb
Copper	63-2	0.20	0.39	0.24	0.28	36.13	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				98		%
Indium	115-1				95		%
Indium	115-2				95		%
Iron	56-2	5.44	6.25	6.76	6.15	10.83	ppb
Iron	57-2	-5.97	-5.23	8.10	-1.03		ppb
Iron	54-2	4.44	6.76	8.30	6.50	29.91	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:46:37	DataFile Name :	046CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.09	0.07	0.07	0.08	15.48	ppb
Lead	207-1	0.09	0.09	0.08	0.09	5.43	ppb
Lead	208-1	0.09	0.08	0.08	0.08	9.88	ppb
Lithium	6-1				102		%
Magnesium	24-2	5.02	6.86	6.99	6.29	17.53	ppb
Manganese	55-2	0.27	0.32	0.26	0.28	10.38	ppb
Molybdenum	94-1	0.13	0.12	0.16	0.14	13.88	ppb
Molybdenum	95-1	0.19	0.14	0.19	0.17	16.59	ppb
Molybdenum	96-1	0.20	0.15	0.16	0.17	16.46	ppb
Molybdenum	97-1	0.13	0.13	0.20	0.15	27.56	ppb
Molybdenum	98-1	0.15	0.14	0.16	0.15	6.64	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.28	0.34	0.25	0.29	16.27	ppb
Phosphorus	31-2	-27.04	-27.68	-21.09	-25.27		ppb
Potassium	39-2	-17.88	-18.01	-9.45	-15.11		ppb
Rhodium	103-1				93		%
Rhodium	103-2				98		%
Scandium	45-1				97		%
Scandium	45-2				94		%
Selenium	82-1	-0.90	-0.63	-0.56	-0.70		ppb
Selenium	77-2	0.82	0.00	0.82	0.55	86.60	ppb
Selenium	78-2	-0.78	4.76	3.41	2.46	117.22	ppb
Silicon	28-1	-0.89	-1.29	-1.12	-1.10		ppb
Silver	107-1	0.01	0.00	0.01	0.01	77.10	ppb
Silver	109-1	0.01	0.01	0.00	0.01	78.03	ppb
Sodium	23-2	34.29	32.72	36.64	34.55	5.72	ppb
Strontium	86-1	0.09	0.27	0.17	0.17	51.36	ppb
Strontium	88-1	0.18	0.16	0.19	0.18	7.77	ppb
Sulfur	34-1	1112.92	612.09	929.95	884.99	28.64	ppb
Terbium	159-1				96		%
Terbium	159-2				98		%
Thallium	203-1	0.01	0.02	0.03	0.02	36.35	ppb
Thallium	205-1	0.03	0.01	0.02	0.02	35.32	ppb
Tin	118-1	-0.10	-0.07	-0.10	-0.09		ppb
Titanium	47-1	-0.03	-0.03	0.06	0.00		ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:46:37	DataFile Name :	046CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.00	0.01	0.00	43.30	ppb
Vanadium	51-2	0.01	0.02	0.01	0.01	62.43	ppb
Yttrium	89-1				96		%
Yttrium	89-2				94		%
Zinc	66-2	0.01	-0.04	0.04	0.00	3630.01	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	11.81	ppb
Zirconium	91-1	0.01	0.03	0.06	0.03	81.48	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:52:59	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4096.04	3911.21	3978.00	3995.08	2.34	ppb
Antimony	121-1	0.90	0.91	1.00	0.94	6.24	ppb
Arsenic	75-2	3.50	3.50	3.52	3.51	0.25	ppb
Barium	135-1	291.46	295.57	305.94	297.65	2.51	ppb
Barium	137-1	292.39	296.83	308.67	299.30	2.81	ppb
Beryllium	9-1	1.34	1.50	1.27	1.37	8.85	ppb
Bismuth	209-1				102		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	4.80	4.85	4.96	4.87	1.64	ppb
Cadmium	106-1	-4.62	-6.34	-4.92	-5.30		ppb
Cadmium	111-1	4.54	4.61	5.19	4.78	7.51	ppb
Calcium	43-1	3918.18	3821.65	3988.20	3909.34	2.14	ppb
Calcium	44-1	3882.40	3874.63	3964.50	3907.18	1.27	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.77	8.36	8.39	8.51	2.72	ppb
Cobalt	59-2	13.24	12.67	12.96	12.96	2.18	ppb
Copper	63-2	30.89	30.30	29.87	30.35	1.69	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				98		%
Indium	115-1				96		%
Indium	115-2				96		%
Iron	56-2	3805.36	3644.95	3766.07	3738.79	2.24	ppb
Iron	57-2	4044.94	3880.98	3890.72	3938.88	2.34	ppb
Iron	54-2	4109.85	4016.57	3970.43	4032.28	1.76	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:52:59	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	99.59	100.91	105.63	102.04	3.11	ppb
Lead	207-1	93.44	95.26	100.01	96.24	3.53	ppb
Lead	208-1	96.50	97.80	102.44	98.91	3.16	ppb
Lithium	6-1				104		%
Magnesium	24-2	673.66	654.50	665.88	664.68	1.45	ppb
Manganese	55-2	6161.13	5922.40	5923.49	6002.34	2.29	ppb
Molybdenum	94-1	1.36	1.33	1.67	1.45	12.93	ppb
Molybdenum	95-1	0.71	0.67	0.68	0.69	2.69	ppb
Molybdenum	96-1	0.73	0.63	0.61	0.66	10.16	ppb
Molybdenum	97-1	0.50	0.58	0.47	0.52	11.32	ppb
Molybdenum	98-1	0.55	0.50	0.52	0.52	4.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	20.47	19.72	20.37	20.19	2.01	ppb
Phosphorus	31-2	676.60	626.40	571.88	624.96	8.38	ppb
Potassium	39-2	262.73	248.78	245.97	252.49	3.55	ppb
Rhodium	103-1				94		%
Rhodium	103-2				99		%
Scandium	45-1				100		%
Scandium	45-2				95		%
Selenium	82-1	1.84	0.56	1.10	1.17	55.27	ppb
Selenium	77-2	6.15	7.55	10.51	8.07	27.57	ppb
Selenium	78-2	5.79	0.27	1.34	2.47	118.63	ppb
Silicon	28-1	97.58	98.94	100.92	99.15	1.70	ppb
Silver	107-1	0.10	0.07	0.08	0.08	22.77	ppb
Silver	109-1	0.07	0.08	0.07	0.08	7.47	ppb
Sodium	23-2	1429.15	1396.65	1412.45	1412.75	1.15	ppb
Strontium	86-1	27.84	27.15	27.50	27.50	1.24	ppb
Strontium	88-1	27.55	26.96	27.10	27.20	1.13	ppb
Sulfur	34-1	1478.19	968.44	1381.37	1276.00	21.22	ppb
Terbium	159-1				99		%
Terbium	159-2				97		%
Thallium	203-1	0.20	0.17	0.21	0.19	8.77	ppb
Thallium	205-1	0.18	0.17	0.17	0.17	2.55	ppb
Tin	118-1	0.38	0.43	0.45	0.42	8.99	ppb
Titanium	47-1	103.88	101.46	105.84	103.72	2.12	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:52:59	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.41	0.41	0.47	0.43	7.37	ppb
Vanadium	51-2	13.83	13.29	13.11	13.41	2.77	ppb
Yttrium	89-1				105		%
Yttrium	89-2				102		%
Zinc	66-2	115.04	113.00	117.13	115.06	1.79	ppb
Zirconium	90-1	0.51	0.52	0.57	0.54	5.82	ppb
Zirconium	91-1	0.51	0.58	0.61	0.57	9.70	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:56:17	DataFile Name :	048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4001.22	3980.21	3938.36	3973.26	0.81	ppb
Antimony	121-1	0.95	0.93	0.92	0.93	1.72	ppb
Arsenic	75-2	3.50	3.44	3.36	3.43	2.15	ppb
Barium	135-1	303.01	306.20	302.68	303.96	0.64	ppb
Barium	137-1	305.99	306.64	309.92	307.52	0.68	ppb
Beryllium	9-1	1.25	1.42	1.21	1.29	8.24	ppb
Bismuth	209-1				101		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	4.36	4.01	3.64	4.00	8.92	ppb
Cadmium	106-1	-5.21	-5.14	-2.98	-4.45		ppb
Cadmium	111-1	4.72	4.77	4.87	4.79	1.59	ppb
Calcium	43-1	3989.57	4089.83	4127.37	4068.92	1.75	ppb
Calcium	44-1	4021.57	4063.96	4057.03	4047.52	0.56	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.07	8.16	7.93	8.06	1.45	ppb
Cobalt	59-2	13.12	12.91	12.60	12.88	1.99	ppb
Copper	63-2	29.88	30.42	30.93	30.41	1.72	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				97		%
Indium	115-1				95		%
Indium	115-2				95		%
Iron	56-2	3786.02	3772.02	3766.01	3774.68	0.27	ppb
Iron	57-2	3943.65	3973.67	3913.26	3943.53	0.77	ppb
Iron	54-2	4020.87	4027.28	4007.32	4018.49	0.25	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:56:17	DataFile Name :	048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	104.04	102.75	103.74	103.51	0.65	ppb
Lead	207-1	97.97	96.20	96.45	96.88	0.99	ppb
Lead	208-1	100.89	99.21	100.13	100.08	0.84	ppb
Lithium	6-1				104		%
Magnesium	24-2	672.63	684.67	661.42	672.91	1.73	ppb
Manganese	55-2	5843.10	6146.22	6035.33	6008.22	2.55	ppb
Molybdenum	94-1	1.32	1.54	1.35	1.40	8.35	ppb
Molybdenum	95-1	0.57	0.58	0.62	0.59	4.13	ppb
Molybdenum	96-1	0.62	0.64	0.66	0.64	3.12	ppb
Molybdenum	97-1	0.42	0.52	0.46	0.47	10.14	ppb
Molybdenum	98-1	0.48	0.56	0.48	0.50	9.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	19.26	20.11	19.26	19.54	2.51	ppb
Phosphorus	31-2	589.04	624.91	587.79	600.58	3.51	ppb
Potassium	39-2	263.23	248.27	238.13	249.88	5.05	ppb
Rhodium	103-1				94		%
Rhodium	103-2				98		%
Scandium	45-1				98		%
Scandium	45-2				94		%
Selenium	82-1	0.54	1.22	0.52	0.76	52.75	ppb
Selenium	77-2	8.55	6.07	6.17	6.93	20.23	ppb
Selenium	78-2	6.67	5.37	3.98	5.34	25.22	ppb
Silicon	28-1	102.01	105.92	103.87	103.93	1.88	ppb
Silver	107-1	0.07	0.06	0.10	0.08	23.79	ppb
Silver	109-1	0.06	0.06	0.05	0.06	6.37	ppb
Sodium	23-2	1418.65	1429.76	1389.14	1412.52	1.49	ppb
Strontium	86-1	28.73	28.06	27.25	28.02	2.64	ppb
Strontium	88-1	27.76	28.41	27.47	27.88	1.72	ppb
Sulfur	34-1	887.50	1165.83	600.19	884.51	31.98	ppb
Terbium	159-1				98		%
Terbium	159-2				97		%
Thallium	203-1	0.18	0.19	0.20	0.19	5.31	ppb
Thallium	205-1	0.20	0.17	0.18	0.18	9.35	ppb
Tin	118-1	0.52	0.47	0.46	0.48	7.11	ppb
Titanium	47-1	104.00	107.20	106.63	105.94	1.61	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:56:17	DataFile Name :	048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.43	0.48	0.44	0.45	5.62	ppb
Vanadium	51-2	13.12	13.17	12.78	13.02	1.64	ppb
Yttrium	89-1				103		%
Yttrium	89-2				101		%
Zinc	66-2	117.89	115.46	116.56	116.64	1.04	ppb
Zirconium	90-1	0.53	0.52	0.44	0.50	9.37	ppb
Zirconium	91-1	0.53	0.52	0.43	0.50	10.60	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	25
Date & Time Acquired ::	2024-09-04 16:59:37	DataFile Name :	049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	732.15	754.85	753.30	746.77	1.70	ppb
Antimony	121-1	0.20	0.21	0.16	0.19	12.46	ppb
Arsenic	75-2	0.92	0.86	0.67	0.82	15.93	ppb
Barium	135-1	56.97	56.78	56.97	56.91	0.19	ppb
Barium	137-1	56.60	56.70	57.43	56.91	0.80	ppb
Beryllium	9-1	0.24	0.27	0.29	0.27	8.91	ppb
Bismuth	209-1				101		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.83	0.67	0.61	0.70	16.10	ppb
Cadmium	106-1	-7.17	-7.92	-8.31	-7.80		ppb
Cadmium	111-1	0.86	0.78	0.82	0.82	4.86	ppb
Calcium	43-1	784.56	778.17	764.07	775.60	1.35	ppb
Calcium	44-1	710.61	722.87	714.67	716.05	0.87	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.05	1.99	2.06	2.03	1.77	ppb
Cobalt	59-2	2.36	2.34	2.43	2.38	2.12	ppb
Copper	63-2	5.66	5.90	5.83	5.80	2.15	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				99		%
Indium	115-1				98		%
Indium	115-2				96		%
Iron	56-2	745.67	752.16	747.77	748.53	0.44	ppb
Iron	57-2	742.37	748.43	739.91	743.57	0.59	ppb
Iron	54-2	757.23	761.99	758.87	759.36	0.32	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	25
Date & Time Acquired ::	2024-09-04 16:59:37	DataFile Name :	049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	18.87	20.43	20.07	19.79	4.12	ppb
Lead	207-1	17.93	18.64	18.68	18.42	2.29	ppb
Lead	208-1	18.30	19.47	19.27	19.01	3.28	ppb
Lithium	6-1				105		%
Magnesium	24-2	118.42	124.46	125.52	122.80	3.12	ppb
Manganese	55-2	1147.27	1164.03	1164.84	1158.71	0.86	ppb
Molybdenum	94-1	0.31	0.23	0.25	0.26	15.92	ppb
Molybdenum	95-1	0.18	0.16	0.21	0.18	11.55	ppb
Molybdenum	96-1	0.20	0.19	0.13	0.18	22.02	ppb
Molybdenum	97-1	0.11	0.18	0.14	0.14	24.91	ppb
Molybdenum	98-1	0.15	0.14	0.14	0.14	1.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.06	3.99	3.93	3.99	1.64	ppb
Phosphorus	31-2	99.52	121.37	93.74	104.88	13.89	ppb
Potassium	39-2	12.59	28.88	20.66	20.71	39.32	ppb
Rhodium	103-1				95		%
Rhodium	103-2				99		%
Scandium	45-1				98		%
Scandium	45-2				95		%
Selenium	82-1	-0.65	-0.24	-0.10	-0.33		ppb
Selenium	77-2	0.78	1.62	1.61	1.33	35.72	ppb
Selenium	78-2	0.67	3.66	1.15	1.83	87.69	ppb
Silicon	28-1	19.44	19.54	19.27	19.42	0.70	ppb
Silver	107-1	0.03	0.01	0.02	0.02	40.25	ppb
Silver	109-1	0.02	0.01	0.01	0.01	70.55	ppb
Sodium	23-2	267.44	281.40	280.14	276.33	2.79	ppb
Strontium	86-1	5.38	5.53	5.66	5.52	2.52	ppb
Strontium	88-1	5.47	5.44	5.55	5.49	1.02	ppb
Sulfur	34-1	-770.30	-480.34	-514.54	-588.39		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.04	0.05	0.04	0.04	16.64	ppb
Thallium	205-1	0.04	0.03	0.03	0.03	12.35	ppb
Tin	118-1	0.00	0.00	-0.01	0.00		ppb
Titanium	47-1	19.73	20.15	20.41	20.10	1.70	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	25
Date & Time Acquired ::	2024-09-04 16:59:37	DataFile Name :	049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.07	0.08	0.08	0.08	7.72	ppb
Vanadium	51-2	2.46	2.63	2.23	2.44	8.21	ppb
Yttrium	89-1				100		%
Yttrium	89-2				97		%
Zinc	66-2	21.44	23.04	21.66	22.05	3.94	ppb
Zirconium	90-1	0.09	0.09	0.11	0.10	10.07	ppb
Zirconium	91-1	0.13	0.10	0.10	0.11	17.69	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:02:58	DataFile Name :	050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	26572.23	27052.14	26772.00	26798.79	0.90	ppb
Antimony	121-1	521.04	530.54	592.65	548.08	7.10	ppb
Arsenic	75-2	429.06	429.07	429.18	429.10	0.02	ppb
Barium	135-1	4053.86	3985.89	4423.10	4154.28	5.66	ppb
Barium	137-1	3883.99	4087.13	4386.91	4119.34	6.14	ppb
Beryllium	9-1	558.50	574.39	644.40	592.43	7.71	ppb
Bismuth	209-1				95		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	567.43	580.13	639.57	595.71	6.46	ppb
Cadmium	106-1	559.71	568.88	609.78	579.45	4.60	ppb
Cadmium	111-1	559.26	578.16	622.86	586.76	5.57	ppb
Calcium	43-1	72981.32	74384.78	83512.95	76959.68	7.43	ppb
Calcium	44-1	66525.14	67263.53	75389.82	69726.16	7.05	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	555.49	551.63	562.87	556.66	1.03	ppb
Cobalt	59-2	602.86	613.97	617.64	611.49	1.26	ppb
Copper	63-2	5431.76	5465.53	5523.77	5473.69	0.85	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				96		%
Holmium	165-2				98		%
Indium	115-1				90		%
Indium	115-2				92		%
Iron	56-2	44114.07	44221.03	44232.09	44189.06	0.15	ppb
Iron	57-2	45188.80	45797.21	46832.44	45939.48	1.81	ppb
Iron	54-2	44552.16	43544.84	44647.12	44248.04	1.38	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:02:58	DataFile Name :	050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	3131.54	3215.14	3479.73	3275.47	5.55	ppb
Lead	207-1	3125.55	3221.02	3445.22	3263.93	5.03	ppb
Lead	208-1	3150.64	3207.57	3429.03	3262.41	4.51	ppb
Lithium	6-1				101		%
Magnesium	24-2	54177.66	53388.72	55867.54	54477.97	2.32	ppb
Manganese	55-2	34390.56	34492.46	35086.93	34656.65	1.09	ppb
Molybdenum	94-1	5474.03	5573.09	5926.90	5658.01	4.21	ppb
Molybdenum	95-1	5273.40	5869.78	6151.67	5764.95	7.78	ppb
Molybdenum	96-1	5428.37	5839.91	6157.51	5808.60	6.29	ppb
Molybdenum	97-1	5614.15	5731.63	6118.18	5821.32	4.53	ppb
Molybdenum	98-1	5525.82	5737.76	6070.39	5777.99	4.75	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	620.95	616.40	627.37	621.57	0.89	ppb
Phosphorus	31-2	3021.78	3080.55	3088.65	3063.66	1.19	ppb
Potassium	39-2	26198.61	26831.65	27501.38	26843.88	2.43	ppb
Rhodium	103-1				87		%
Rhodium	103-2				93		%
Scandium	45-1				94		%
Scandium	45-2				93		%
Selenium	82-1	399.44	420.85	441.85	420.71	5.04	ppb
Selenium	77-2	441.95	444.24	455.73	447.31	1.65	ppb
Selenium	78-2	431.78	410.20	415.44	419.14	2.69	ppb
Silicon	28-1	499.75	528.35	590.27	539.46	8.58	ppb
Silver	107-1	451.61	397.40	459.39	436.13	7.74	ppb
Silver	109-1	462.22	456.16	497.29	471.89	4.70	ppb
Sodium	23-2	56758.17	56726.82	57761.47	57082.15	1.03	ppb
Strontium	86-1	8477.72	8694.90	9439.60	8870.74	5.69	ppb
Strontium	88-1	8226.19	8921.62	9113.86	8753.89	5.33	ppb
Sulfur	34-1	8217.07	8245.95	11045.62	9169.55	17.72	ppb
Terbium	159-1				95		%
Terbium	159-2				98		%
Thallium	203-1	483.68	502.09	529.59	505.12	4.57	ppb
Thallium	205-1	542.65	565.93	601.33	569.97	5.18	ppb
Tin	118-1	464.32	484.01	522.51	490.28	6.04	ppb
Titanium	47-1	6895.34	6898.51	7871.24	7221.70	7.79	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:02:58	DataFile Name :	050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	566.14	573.22	593.09	577.48	2.42	ppb
Vanadium	51-2	595.06	602.76	604.62	600.81	0.84	ppb
Yttrium	89-1				124		%
Yttrium	89-2				125		%
Zinc	66-2	5740.38	5720.22	5782.16	5747.58	0.55	ppb
Zirconium	90-1	379.53	405.79	437.76	407.69	7.15	ppb
Zirconium	91-1	376.55	402.77	418.86	399.39	5.35	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:05:55	DataFile Name :	051SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5535.48	5642.05	5677.67	5618.40	1.32	ppb
Antimony	121-1	107.65	105.41	105.25	106.10	1.26	ppb
Arsenic	75-2	104.81	104.04	108.57	105.80	2.29	ppb
Barium	135-1	776.98	759.21	754.49	763.56	1.55	ppb
Barium	137-1	766.59	755.62	764.55	762.25	0.77	ppb
Beryllium	9-1	109.69	114.52	115.51	113.24	2.75	ppb
Bismuth	209-1				103		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	123.89	118.41	118.96	120.42	2.51	ppb
Cadmium	106-1	110.49	111.62	109.87	110.66	0.80	ppb
Cadmium	111-1	119.82	115.29	114.86	116.65	2.35	ppb
Calcium	43-1	14989.80	15103.23	15352.80	15148.61	1.23	ppb
Calcium	44-1	13634.28	13935.99	14216.11	13928.80	2.09	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	110.78	113.31	112.73	112.28	1.18	ppb
Cobalt	59-2	122.53	123.99	123.31	123.27	0.59	ppb
Copper	63-2	1086.78	1107.27	1109.27	1101.11	1.13	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				99		%
Indium	115-1				97		%
Indium	115-2				95		%
Iron	56-2	8646.05	9048.74	8803.54	8832.78	2.30	ppb
Iron	57-2	9157.37	9385.99	9271.60	9271.65	1.23	ppb
Iron	54-2	9380.39	9548.93	9507.24	9478.85	0.93	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:05:55	DataFile Name :	051SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	565.36	571.71	556.48	564.52	1.35	ppb
Lead	207-1	549.21	559.51	541.77	550.16	1.62	ppb
Lead	208-1	593.49	605.16	583.37	594.01	1.84	ppb
Lithium	6-1				110		%
Magnesium	24-2	11408.90	11443.32	11631.03	11494.42	1.04	ppb
Manganese	55-2	6973.58	7172.57	7026.71	7057.62	1.46	ppb
Molybdenum	94-1	1326.69	1352.61	1450.21	1376.51	4.73	ppb
Molybdenum	95-1	1389.69	1413.54	1501.47	1434.90	4.10	ppb
Molybdenum	96-1	1370.14	1419.96	1491.11	1427.07	4.26	ppb
Molybdenum	97-1	1387.97	1412.23	1494.20	1431.46	3.89	ppb
Molybdenum	98-1	1356.78	1357.51	1474.17	1396.15	4.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	124.90	128.05	127.17	126.71	1.28	ppb
Phosphorus	31-2	580.18	543.16	580.42	567.92	3.78	ppb
Potassium	39-2	5650.33	5740.09	5773.29	5721.24	1.11	ppb
Rhodium	103-1				93		%
Rhodium	103-2				97		%
Scandium	45-1				98		%
Scandium	45-2				94		%
Selenium	82-1	99.35	104.27	109.40	104.34	4.82	ppb
Selenium	77-2	94.28	102.90	114.11	103.77	9.58	ppb
Selenium	78-2	107.17	112.50	104.05	107.91	3.96	ppb
Silicon	28-1	107.74	104.15	110.58	107.49	3.00	ppb
Silver	107-1	99.90	97.30	96.96	98.05	1.64	ppb
Silver	109-1	98.87	97.13	97.75	97.92	0.90	ppb
Sodium	23-2	11537.04	11312.85	11747.36	11532.42	1.88	ppb
Strontium	86-1	2342.78	2387.15	2475.95	2401.96	2.82	ppb
Strontium	88-1	2348.25	2323.14	2458.71	2376.70	3.03	ppb
Sulfur	34-1	777.71	381.76	820.67	660.05	36.66	ppb
Terbium	159-1				100		%
Terbium	159-2				98		%
Thallium	203-1	96.09	96.23	94.35	95.56	1.10	ppb
Thallium	205-1	96.50	97.33	94.26	96.03	1.65	ppb
Tin	118-1	97.42	95.06	96.70	96.39	1.25	ppb
Titanium	47-1	1462.87	1439.38	1487.01	1463.09	1.63	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:05:55	DataFile Name :	051SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	96.13	99.08	95.56	96.92	1.95	ppb
Vanadium	51-2	118.24	118.05	119.94	118.75	0.87	ppb
Yttrium	89-1				104		%
Yttrium	89-2				101		%
Zinc	66-2	1179.49	1185.68	1182.24	1182.47	0.26	ppb
Zirconium	90-1	95.88	97.65	103.77	99.10	4.18	ppb
Zirconium	91-1	93.92	96.32	101.29	97.18	3.87	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:09:06	DataFile Name :	052SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	26780.23	27533.50	26514.07	26942.60	1.96	ppb
Antimony	121-1	530.79	597.61	551.19	559.86	6.12	ppb
Arsenic	75-2	431.49	434.14	432.74	432.79	0.31	ppb
Barium	135-1	4019.06	4261.98	4192.75	4157.93	3.01	ppb
Barium	137-1	3963.06	4378.67	4055.21	4132.31	5.28	ppb
Beryllium	9-1	576.70	605.91	584.47	589.03	2.57	ppb
Bismuth	209-1				100		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	600.22	640.21	588.88	609.77	4.42	ppb
Cadmium	106-1	567.83	619.60	576.56	588.00	4.71	ppb
Cadmium	111-1	584.03	612.35	593.05	596.48	2.43	ppb
Calcium	43-1	74070.03	79980.46	76254.02	76768.17	3.89	ppb
Calcium	44-1	66893.01	72048.32	69900.71	69614.01	3.72	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	563.83	568.29	558.80	563.64	0.84	ppb
Cobalt	59-2	613.90	619.14	617.37	616.80	0.43	ppb
Copper	63-2	5471.68	5634.15	5483.20	5529.68	1.64	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				101		%
Indium	115-1				91		%
Indium	115-2				93		%
Iron	56-2	43853.69	44406.46	43640.07	43966.74	0.90	ppb
Iron	57-2	45554.45	46225.95	46121.40	45967.27	0.79	ppb
Iron	54-2	45096.72	44118.07	44613.12	44609.30	1.10	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:09:06	DataFile Name :	052SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	3115.44	3321.73	3141.48	3192.88	3.52	ppb
Lead	207-1	3072.51	3229.23	3114.07	3138.61	2.59	ppb
Lead	208-1	3124.82	3302.45	3116.47	3181.25	3.30	ppb
Lithium	6-1				104		%
Magnesium	24-2	54242.28	54453.87	55909.15	54868.44	1.65	ppb
Manganese	55-2	35233.94	36034.51	35436.75	35568.40	1.17	ppb
Molybdenum	94-1	5641.81	5818.91	5556.25	5672.32	2.36	ppb
Molybdenum	95-1	5751.40	5989.08	5761.60	5834.03	2.30	ppb
Molybdenum	96-1	5748.16	5816.24	5633.37	5732.59	1.61	ppb
Molybdenum	97-1	5767.20	5990.94	5716.93	5825.02	2.50	ppb
Molybdenum	98-1	5746.16	6051.87	5721.47	5839.83	3.15	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	615.91	632.19	619.97	622.69	1.36	ppb
Phosphorus	31-2	3079.53	3028.05	3036.57	3048.05	0.91	ppb
Potassium	39-2	27249.50	27405.50	26648.03	27101.01	1.48	ppb
Rhodium	103-1				89		%
Rhodium	103-2				96		%
Scandium	45-1				96		%
Scandium	45-2				93		%
Selenium	82-1	415.68	426.84	417.49	420.00	1.43	ppb
Selenium	77-2	436.62	453.40	428.01	439.34	2.94	ppb
Selenium	78-2	433.64	416.90	426.09	425.55	1.97	ppb
Silicon	28-1	519.66	552.97	519.94	530.86	3.61	ppb
Silver	107-1	410.74	381.93	357.19	383.29	6.99	ppb
Silver	109-1	384.76	405.96	445.39	412.04	7.47	ppb
Sodium	23-2	57485.03	58755.09	57266.81	57835.65	1.39	ppb
Strontium	86-1	9295.92	9535.87	9220.40	9350.73	1.76	ppb
Strontium	88-1	9217.40	9460.65	9234.55	9304.20	1.46	ppb
Sulfur	34-1	7650.50	9273.12	7758.74	8227.45	11.03	ppb
Terbium	159-1				96		%
Terbium	159-2				101		%
Thallium	203-1	480.01	516.43	485.86	494.10	3.96	ppb
Thallium	205-1	554.16	581.33	537.15	557.55	4.00	ppb
Tin	118-1	480.60	516.09	488.09	494.93	3.78	ppb
Titanium	47-1	6888.14	7590.84	7264.06	7247.68	4.85	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:09:06	DataFile Name :	052SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	547.21	568.93	559.56	558.56	1.95	ppb
Vanadium	51-2	603.31	609.18	599.22	603.90	0.83	ppb
Yttrium	89-1				127		%
Yttrium	89-2				125		%
Zinc	66-2	5788.05	5866.27	5880.61	5844.97	0.85	ppb
Zirconium	90-1	412.65	414.94	412.77	413.45	0.31	ppb
Zirconium	91-1	401.44	417.35	397.24	405.34	2.62	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:12:04	DataFile Name :	053SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	6482.28	6053.43	6489.41	6341.71	3.94	ppb
Antimony	121-1	120.12	117.24	119.90	119.09	1.34	ppb
Arsenic	75-2	124.03	114.27	119.33	119.21	4.10	ppb
Barium	135-1	852.00	840.32	856.86	849.72	1.00	ppb
Barium	137-1	863.22	859.01	871.74	864.66	0.75	ppb
Beryllium	9-1	127.27	129.10	128.89	128.42	0.78	ppb
Bismuth	209-1				104		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	134.26	129.90	131.68	131.95	1.66	ppb
Cadmium	106-1	119.99	124.80	124.44	123.08	2.18	ppb
Cadmium	111-1	128.73	129.70	131.67	130.03	1.15	ppb
Calcium	43-1	16933.97	16879.65	16826.07	16879.89	0.32	ppb
Calcium	44-1	15762.93	15670.01	14892.80	15441.91	3.09	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	130.33	122.02	129.69	127.35	3.63	ppb
Cobalt	59-2	144.28	134.44	143.50	140.74	3.89	ppb
Copper	63-2	1283.25	1198.03	1267.05	1249.44	3.62	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				101		%
Indium	115-1				97		%
Indium	115-2				97		%
Iron	56-2	10027.77	9583.90	10218.68	9943.45	3.28	ppb
Iron	57-2	10760.57	10032.96	10699.29	10497.61	3.84	ppb
Iron	54-2	10906.68	10213.22	10899.23	10673.04	3.73	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:12:04	DataFile Name :	053SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	639.08	640.62	645.45	641.71	0.52	ppb
Lead	207-1	625.85	626.43	624.94	625.74	0.12	ppb
Lead	208-1	667.42	671.47	677.27	672.05	0.74	ppb
Lithium	6-1				112		%
Magnesium	24-2	12669.76	11870.49	12528.77	12356.34	3.45	ppb
Manganese	55-2	8209.69	7779.31	8355.24	8114.75	3.69	ppb
Molybdenum	94-1	1562.48	1570.22	1614.01	1582.23	1.76	ppb
Molybdenum	95-1	1633.17	1646.07	1653.78	1644.34	0.63	ppb
Molybdenum	96-1	1638.44	1681.21	1661.93	1660.53	1.29	ppb
Molybdenum	97-1	1601.37	1643.81	1682.14	1642.44	2.46	ppb
Molybdenum	98-1	1539.04	1645.73	1683.70	1622.82	4.62	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	147.49	136.86	146.94	143.76	4.16	ppb
Phosphorus	31-2	703.60	585.33	697.63	662.19	10.06	ppb
Potassium	39-2	6684.91	6279.67	6676.71	6547.10	3.54	ppb
Rhodium	103-1				93		%
Rhodium	103-2				100		%
Scandium	45-1				99		%
Scandium	45-2				93		%
Selenium	82-1	116.31	115.66	118.82	116.93	1.43	ppb
Selenium	77-2	118.00	115.79	112.18	115.32	2.55	ppb
Selenium	78-2	111.85	110.34	126.69	116.29	7.77	ppb
Silicon	28-1	122.25	124.29	121.82	122.79	1.07	ppb
Silver	107-1	113.32	110.32	111.84	111.83	1.34	ppb
Silver	109-1	110.74	109.99	111.13	110.62	0.52	ppb
Sodium	23-2	13255.43	12536.05	13030.58	12940.69	2.84	ppb
Strontium	86-1	2288.68	2366.63	2424.27	2359.86	2.88	ppb
Strontium	88-1	2254.55	2399.23	2394.94	2349.58	3.50	ppb
Sulfur	34-1	735.80	344.19	158.43	412.80	71.40	ppb
Terbium	159-1				102		%
Terbium	159-2				102		%
Thallium	203-1	110.09	109.60	109.99	109.90	0.23	ppb
Thallium	205-1	109.78	109.71	110.40	109.96	0.35	ppb
Tin	118-1	110.12	105.52	108.60	108.08	2.17	ppb
Titanium	47-1	1673.37	1665.11	1625.85	1654.78	1.53	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:12:04	DataFile Name :	053SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	110.45	111.02	110.49	110.65	0.29	ppb
Vanadium	51-2	138.51	129.44	137.38	135.11	3.66	ppb
Yttrium	89-1				103		%
Yttrium	89-2				103		%
Zinc	66-2	1391.67	1283.31	1375.56	1350.18	4.33	ppb
Zirconium	90-1	111.59	115.08	117.24	114.64	2.49	ppb
Zirconium	91-1	111.42	113.62	114.15	113.06	1.28	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01A	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:15:15	DataFile Name :	054SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	27712.80	27368.72	27319.02	27466.85	0.78	ppb
Antimony	121-1	507.47	527.36	532.96	522.59	2.56	ppb
Arsenic	75-2	426.13	435.82	430.66	430.87	1.12	ppb
Barium	135-1	3899.22	3921.38	3971.73	3930.78	0.95	ppb
Barium	137-1	3920.26	3987.77	3928.97	3945.67	0.93	ppb
Beryllium	9-1	566.57	571.49	560.20	566.09	1.00	ppb
Bismuth	209-1				101		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	550.96	586.83	574.52	570.77	3.19	ppb
Cadmium	106-1	545.83	566.72	564.59	559.05	2.06	ppb
Cadmium	111-1	548.59	576.95	581.26	568.93	3.12	ppb
Calcium	43-1	72272.34	74586.39	74031.04	73629.92	1.64	ppb
Calcium	44-1	66673.71	68517.04	67560.99	67583.91	1.36	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	567.70	567.00	561.74	565.48	0.58	ppb
Cobalt	59-2	617.76	618.31	602.97	613.01	1.42	ppb
Copper	63-2	5631.10	5599.75	5422.02	5550.95	2.03	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				100		%
Indium	115-1				93		%
Indium	115-2				91		%
Iron	56-2	46022.66	44601.67	43190.51	44604.95	3.17	ppb
Iron	57-2	46799.89	47039.17	45719.00	46519.36	1.51	ppb
Iron	54-2	46566.32	46323.33	44504.35	45798.00	2.46	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01A	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:15:15	DataFile Name :	054SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	3179.28	3145.09	3227.25	3183.87	1.30	ppb
Lead	207-1	3072.53	3199.14	3151.76	3141.14	2.04	ppb
Lead	208-1	3091.97	3167.64	3161.02	3140.21	1.33	ppb
Lithium	6-1				109		%
Magnesium	24-2	55230.81	55383.79	55213.68	55276.09	0.17	ppb
Manganese	55-2	33519.84	33946.39	33036.75	33500.99	1.36	ppb
Molybdenum	94-1	5439.12	5543.94	5653.24	5545.43	1.93	ppb
Molybdenum	95-1	5589.85	5703.04	5908.67	5733.85	2.82	ppb
Molybdenum	96-1	5525.29	5647.81	5856.60	5676.57	2.95	ppb
Molybdenum	97-1	5567.11	5623.04	5803.10	5664.42	2.18	ppb
Molybdenum	98-1	5569.00	5640.49	5761.21	5656.90	1.72	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	637.86	625.14	613.33	625.44	1.96	ppb
Phosphorus	31-2	3099.78	3114.24	2979.97	3064.66	2.40	ppb
Potassium	39-2	27448.55	27226.15	26775.84	27150.18	1.26	ppb
Rhodium	103-1				90		%
Rhodium	103-2				93		%
Scandium	45-1				99		%
Scandium	45-2				91		%
Selenium	82-1	402.21	407.34	424.00	411.18	2.77	ppb
Selenium	77-2	429.26	477.62	425.63	444.17	6.54	ppb
Selenium	78-2	422.69	435.18	424.23	427.37	1.59	ppb
Silicon	28-1	502.88	518.76	557.73	526.45	5.36	ppb
Silver	107-1	392.97	389.45	354.73	379.05	5.57	ppb
Silver	109-1	317.32	547.11	418.21	427.55	26.94	ppb
Sodium	23-2	57310.17	57277.40	57695.12	57427.57	0.40	ppb
Strontium	86-1	8528.88	8875.09	8809.00	8737.66	2.10	ppb
Strontium	88-1	8613.77	8703.06	8711.74	8676.19	0.63	ppb
Sulfur	34-1	7576.21	7722.70	7649.21	7649.37	0.96	ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	477.80	486.42	498.05	487.42	2.09	ppb
Thallium	205-1	534.76	549.52	542.18	542.15	1.36	ppb
Tin	118-1	455.56	473.94	484.62	471.37	3.12	ppb
Titanium	47-1	6881.58	7144.62	7203.24	7076.48	2.42	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01A	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:15:15	DataFile Name :	054SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	536.57	556.79	577.78	557.05	3.70	ppb
Vanadium	51-2	614.95	608.04	596.93	606.64	1.50	ppb
Yttrium	89-1				129		%
Yttrium	89-2				124		%
Zinc	66-2	5902.77	5909.51	5699.69	5837.32	2.04	ppb
Zirconium	90-1	389.82	402.75	410.00	400.86	2.55	ppb
Zirconium	91-1	386.29	388.24	401.47	392.00	2.11	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:18:12	DataFile Name :	055SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5612.88	5704.83	5581.28	5633.00	1.14	ppb
Antimony	121-1	105.34	105.55	104.18	105.02	0.71	ppb
Arsenic	75-2	106.58	107.43	109.43	107.81	1.36	ppb
Barium	135-1	749.29	746.03	740.48	745.26	0.60	ppb
Barium	137-1	742.70	751.82	738.56	744.36	0.91	ppb
Beryllium	9-1	116.16	117.38	113.13	115.56	1.89	ppb
Bismuth	209-1				103		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	116.95	119.70	114.67	117.11	2.15	ppb
Cadmium	106-1	99.58	102.58	104.71	102.29	2.52	ppb
Cadmium	111-1	118.39	117.43	115.57	117.13	1.22	ppb
Calcium	43-1	14651.98	15300.21	14769.10	14907.10	2.32	ppb
Calcium	44-1	13643.19	13616.95	13571.18	13610.44	0.27	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	113.55	114.17	112.45	113.39	0.77	ppb
Cobalt	59-2	123.03	123.76	121.46	122.75	0.96	ppb
Copper	63-2	1106.52	1118.16	1099.22	1107.97	0.86	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				98		%
Indium	115-2				94		%
Iron	56-2	8791.46	8832.39	8798.16	8807.34	0.25	ppb
Iron	57-2	9342.30	9314.16	9349.95	9335.47	0.20	ppb
Iron	54-2	9541.14	9509.91	9434.82	9495.29	0.58	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:18:12	DataFile Name :	055SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	566.86	565.73	560.85	564.48	0.57	ppb
Lead	207-1	553.13	543.51	545.60	547.41	0.92	ppb
Lead	208-1	589.01	580.39	588.83	586.07	0.84	ppb
Lithium	6-1				109		%
Magnesium	24-2	11438.64	11512.65	11378.63	11443.31	0.59	ppb
Manganese	55-2	6564.36	6697.39	6668.56	6643.44	1.05	ppb
Molybdenum	94-1	1389.82	1400.76	1389.95	1393.51	0.45	ppb
Molybdenum	95-1	1429.09	1434.61	1437.70	1433.80	0.30	ppb
Molybdenum	96-1	1448.09	1461.59	1418.85	1442.84	1.51	ppb
Molybdenum	97-1	1450.69	1463.31	1446.15	1453.38	0.61	ppb
Molybdenum	98-1	1420.21	1448.14	1453.97	1440.77	1.25	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	127.39	126.13	125.34	126.29	0.82	ppb
Phosphorus	31-2	593.44	601.70	589.23	594.79	1.07	ppb
Potassium	39-2	5772.55	5761.96	5677.11	5737.21	0.91	ppb
Rhodium	103-1				92		%
Rhodium	103-2				97		%
Scandium	45-1				98		%
Scandium	45-2				92		%
Selenium	82-1	106.57	103.89	105.66	105.37	1.29	ppb
Selenium	77-2	114.32	131.16	114.29	119.92	8.11	ppb
Selenium	78-2	109.35	114.52	112.61	112.16	2.33	ppb
Silicon	28-1	105.09	110.26	104.63	106.66	2.93	ppb
Silver	107-1	97.63	100.20	98.27	98.70	1.36	ppb
Silver	109-1	99.05	98.53	97.18	98.26	0.98	ppb
Sodium	23-2	11398.73	11606.89	11100.04	11368.55	2.24	ppb
Strontium	86-1	2421.75	2442.53	2443.10	2435.80	0.50	ppb
Strontium	88-1	2434.75	2447.73	2445.50	2442.66	0.28	ppb
Sulfur	34-1	-40.69	279.54	225.13	154.66	110.79	ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	95.40	95.64	96.07	95.71	0.35	ppb
Thallium	205-1	95.32	95.93	96.73	95.99	0.73	ppb
Tin	118-1	95.05	94.54	92.65	94.08	1.34	ppb
Titanium	47-1	1421.57	1480.02	1447.21	1449.60	2.02	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:18:12	DataFile Name :	055SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	98.34	96.59	98.00	97.64	0.95	ppb
Vanadium	51-2	119.02	121.47	120.23	120.24	1.02	ppb
Yttrium	89-1				101		%
Yttrium	89-2				100		%
Zinc	66-2	1184.77	1188.99	1181.24	1185.00	0.33	ppb
Zirconium	90-1	101.85	102.59	101.83	102.09	0.42	ppb
Zirconium	91-1	98.47	100.17	98.81	99.15	0.91	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:21:24	DataFile Name :	056SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	25480.17	25324.66	25442.05	25415.63	0.32	ppb
Antimony	121-1	4.81	4.81	4.83	4.81	0.23	ppb
Arsenic	75-2	23.72	24.37	23.58	23.89	1.77	ppb
Barium	135-1	1643.93	1606.31	1595.99	1615.41	1.56	ppb
Barium	137-1	1750.73	1707.41	1649.51	1702.55	2.98	ppb
Beryllium	9-1	5.56	5.76	5.95	5.76	3.39	ppb
Bismuth	209-1				100		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	17.67	19.01	18.03	18.23	3.80	ppb
Cadmium	106-1	12.54	12.79	10.17	11.83	12.23	ppb
Cadmium	111-1	20.21	19.47	19.89	19.86	1.87	ppb
Calcium	43-1	34733.08	33825.32	36094.66	34884.36	3.27	ppb
Calcium	44-1	31155.21	31759.04	33406.84	32107.03	3.63	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	47.58	47.26	50.21	48.35	3.35	ppb
Cobalt	59-2	27.59	27.25	27.56	27.47	0.68	ppb
Copper	63-2	201.79	201.89	207.61	203.76	1.63	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				102		%
Indium	115-1				92		%
Indium	115-2				94		%
Iron	56-2	20982.09	20629.74	20844.85	20818.90	0.85	ppb
Iron	57-2	21574.70	21301.74	21853.90	21576.78	1.28	ppb
Iron	54-2	21840.65	21623.01	22231.00	21898.22	1.41	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:21:24	DataFile Name :	056SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	697.88	663.95	709.00	690.27	3.40	ppb
Lead	207-1	653.66	630.24	666.14	650.01	2.80	ppb
Lead	208-1	704.72	688.28	727.20	706.73	2.76	ppb
Lithium	6-1				107		%
Magnesium	24-2	5050.44	5052.21	5121.11	5074.59	0.79	ppb
Manganese	55-2	26153.95	26398.63	26229.71	26260.77	0.48	ppb
Molybdenum	94-1	8.12	7.09	7.27	7.50	7.32	ppb
Molybdenum	95-1	5.11	4.75	4.94	4.93	3.67	ppb
Molybdenum	96-1	5.21	4.79	4.65	4.88	5.96	ppb
Molybdenum	97-1	4.77	4.61	4.58	4.65	2.21	ppb
Molybdenum	98-1	4.55	4.38	4.32	4.42	2.66	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	117.35	116.74	121.31	118.47	2.10	ppb
Phosphorus	31-2	2862.93	2910.50	2872.82	2882.08	0.87	ppb
Potassium	39-2	1567.88	1575.05	1602.49	1581.81	1.15	ppb
Rhodium	103-1				90		%
Rhodium	103-2				95		%
Scandium	45-1				97		%
Scandium	45-2				93		%
Selenium	82-1	8.59	7.53	8.86	8.33	8.43	ppb
Selenium	77-2	24.29	20.40	11.33	18.67	35.63	ppb
Selenium	78-2	12.43	8.49	11.17	10.70	18.85	ppb
Silicon	28-1	474.47	460.06	480.46	471.66	2.22	ppb
Silver	107-1	0.91	0.90	0.37	0.73	42.59	ppb
Silver	109-1	0.49	0.36	0.39	0.41	15.96	ppb
Sodium	23-2	9326.53	9372.67	9563.53	9420.91	1.33	ppb
Strontium	86-1	215.90	204.13	207.23	209.09	2.92	ppb
Strontium	88-1	214.48	206.88	201.98	207.78	3.03	ppb
Sulfur	34-1	10756.85	9695.10	10966.87	10472.94	6.51	ppb
Terbium	159-1				96		%
Terbium	159-2				99		%
Thallium	203-1	0.67	0.65	0.68	0.67	2.39	ppb
Thallium	205-1	0.65	0.63	0.65	0.64	2.14	ppb
Tin	118-1	2.21	2.21	2.31	2.24	2.46	ppb
Titanium	47-1	709.34	706.50	733.56	716.47	2.08	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:21:24	DataFile Name :	056SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	4.25	4.02	4.25	4.17	3.23	ppb
Vanadium	51-2	91.55	91.84	92.53	91.97	0.55	ppb
Yttrium	89-1				111		%
Yttrium	89-2				111		%
Zinc	66-2	653.28	643.49	667.87	654.88	1.87	ppb
Zirconium	90-1	2.11	1.99	1.92	2.01	4.70	ppb
Zirconium	91-1	2.06	2.01	1.92	2.00	3.46	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:28:27	DataFile Name :	058CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	53330.59	53856.23	52198.17	53128.33	1.59	ppb
Antimony	121-1	491.41	501.47	498.28	497.06	1.04	ppb
Arsenic	75-2	500.09	503.60	508.97	504.22	0.89	ppb
Barium	135-1	2617.33	2567.75	2451.38	2545.49	3.35	ppb
Barium	137-1	2544.48	2483.16	2606.63	2544.76	2.43	ppb
Beryllium	9-1	516.38	517.21	525.35	519.65	0.95	ppb
Bismuth	209-1				101		%
Bismuth	209-2				87		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	488.61	494.92	493.22	492.25	0.66	ppb
Cadmium	106-1	475.50	496.83	488.46	486.93	2.21	ppb
Cadmium	111-1	487.11	500.37	496.55	494.68	1.38	ppb
Calcium	43-1	247075.09	253201.57	242727.58	247668.08	2.12	ppb
Calcium	44-1	247477.12	253270.11	249291.92	250013.05	1.19	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	508.31	511.86	506.26	508.81	0.56	ppb
Cobalt	59-2	503.51	504.86	499.51	502.62	0.55	ppb
Copper	63-2	4952.82	4972.44	5016.10	4980.45	0.65	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				100		%
Indium	115-1				95		%
Indium	115-2				92		%
Iron	56-2	131833.66	133702.43	131164.00	132233.36	0.99	ppb
Iron	57-2	132538.72	136942.36	128252.51	132577.87	3.28	ppb
Iron	54-2	132801.56	131702.22	128737.72	131080.50	1.60	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:28:27	DataFile Name :	058CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2494.78	2474.87	2498.84	2489.49	0.52	ppb
Lead	207-1	2519.09	2494.66	2568.84	2527.53	1.50	ppb
Lead	208-1	2493.25	2528.56	2544.14	2521.98	1.03	ppb
Lithium	6-1				111		%
Magnesium	24-2	264545.44	263256.59	257126.98	261643.00	1.51	ppb
Manganese	55-2	5185.05	5147.51	5211.88	5181.48	0.62	ppb
Molybdenum	94-1	5543.73	5640.48	5841.87	5675.36	2.68	ppb
Molybdenum	95-1	5436.67	5442.23	5678.42	5519.11	2.50	ppb
Molybdenum	96-1	5421.10	5425.00	5636.70	5494.26	2.25	ppb
Molybdenum	97-1	5532.72	5529.17	5553.82	5538.57	0.24	ppb
Molybdenum	98-1	5491.60	5506.68	5722.96	5573.75	2.32	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	495.48	496.05	487.72	493.08	0.94	ppb
Phosphorus	31-2	10428.94	10386.17	9838.13	10217.74	3.22	ppb
Potassium	39-2	133653.87	129516.74	127481.07	130217.23	2.42	ppb
Rhodium	103-1				89		%
Rhodium	103-2				91		%
Scandium	45-1				100		%
Scandium	45-2				91		%
Selenium	82-1	480.68	486.79	494.05	487.17	1.37	ppb
Selenium	77-2	537.22	515.80	491.91	514.98	4.40	ppb
Selenium	78-2	495.09	511.39	513.36	506.61	1.98	ppb
Silicon	28-1	586.36	600.23	589.80	592.13	1.22	ppb
Silver	107-1	477.79	497.36	488.90	488.02	2.01	ppb
Silver	109-1	482.62	500.62	491.14	491.46	1.83	ppb
Sodium	23-2	261455.98	267501.65	254162.13	261039.92	2.56	ppb
Strontium	86-1	12665.20	12700.79	12987.33	12784.44	1.38	ppb
Strontium	88-1	12514.90	12670.15	12823.86	12669.64	1.22	ppb
Sulfur	34-1	9884.16	10425.37	9612.33	9973.95	4.15	ppb
Terbium	159-1				100		%
Terbium	159-2				99		%
Thallium	203-1	461.81	456.91	464.08	460.93	0.80	ppb
Thallium	205-1	516.73	508.14	536.50	520.46	2.79	ppb
Tin	118-1	494.32	504.83	504.69	501.28	1.20	ppb
Titanium	47-1	5684.00	5777.30	5674.42	5711.91	1.00	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:28:27	DataFile Name :	058CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	514.85	515.05	531.78	520.56	1.87	ppb
Vanadium	51-2	510.73	513.35	503.41	509.16	1.01	ppb
Yttrium	89-1				98		%
Yttrium	89-2				93		%
Zinc	66-2	4901.99	4884.74	4885.92	4890.88	0.20	ppb
Zirconium	90-1	525.00	518.59	541.37	528.32	2.22	ppb
Zirconium	91-1	499.81	497.76	516.14	504.57	2.00	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:36:04	DataFile Name :	059CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.72	1.27	1.50	1.16	34.26	ppb
Antimony	121-1	0.14	0.18	0.21	0.18	19.47	ppb
Arsenic	75-2	-0.01	0.01	0.01	0.00	518.73	ppb
Barium	135-1	0.06	0.04	0.09	0.06	39.23	ppb
Barium	137-1	0.08	0.06	0.06	0.07	20.89	ppb
Beryllium	9-1	0.13	0.07	0.06	0.09	41.42	ppb
Bismuth	209-1				100		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.09	-0.23	-0.16	-0.16		ppb
Cadmium	106-1	-10.08	-10.50	-9.55	-10.05		ppb
Cadmium	111-1	-0.11	-0.08	-0.09	-0.09		ppb
Calcium	43-1	-23.87	-26.09	-30.06	-26.67		ppb
Calcium	44-1	-62.11	-65.41	-67.65	-65.06		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.48	0.50	0.42	0.47	9.01	ppb
Cobalt	59-2	0.02	0.02	0.02	0.02	10.18	ppb
Copper	63-2	0.20	0.22	0.26	0.23	14.75	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				101		%
Indium	115-1				94		%
Indium	115-2				95		%
Iron	56-2	7.39	8.13	7.85	7.79	4.82	ppb
Iron	57-2	-1.47	2.61	-3.15	-0.67		ppb
Iron	54-2	3.49	5.27	6.42	5.06	29.23	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:36:04	DataFile Name :	059CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.19	0.22	0.22	0.21	7.36	ppb
Lead	207-1	0.17	0.16	0.18	0.17	6.69	ppb
Lead	208-1	0.19	0.20	0.19	0.19	3.26	ppb
Lithium	6-1				102		%
Magnesium	24-2	6.75	9.01	8.66	8.14	14.97	ppb
Manganese	55-2	0.36	0.34	0.44	0.38	13.17	ppb
Molybdenum	94-1	0.24	0.20	0.27	0.23	15.36	ppb
Molybdenum	95-1	0.25	0.20	0.21	0.22	12.07	ppb
Molybdenum	96-1	0.31	0.25	0.25	0.27	14.14	ppb
Molybdenum	97-1	0.24	0.11	0.24	0.20	37.58	ppb
Molybdenum	98-1	0.25	0.21	0.25	0.24	10.29	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.19	0.35	0.27	0.27	30.71	ppb
Phosphorus	31-2	-30.27	-26.43	-32.76	-29.82		ppb
Potassium	39-2	-9.30	-14.27	-12.07	-11.88		ppb
Rhodium	103-1				92		%
Rhodium	103-2				97		%
Scandium	45-1				96		%
Scandium	45-2				92		%
Selenium	82-1	-0.10	-0.37	-0.76	-0.41		ppb
Selenium	77-2	0.00	0.00	0.83	0.28	173.21	ppb
Selenium	78-2	-0.47	2.25	0.56	0.78	175.84	ppb
Silicon	28-1	-1.07	-0.91	-1.54	-1.17		ppb
Silver	107-1	0.03	0.03	0.01	0.03	38.70	ppb
Silver	109-1	0.02	0.02	0.02	0.02	9.84	ppb
Sodium	23-2	68.72	66.71	63.03	66.15	4.36	ppb
Strontium	86-1	0.38	0.22	0.26	0.29	28.62	ppb
Strontium	88-1	0.33	0.29	0.28	0.30	9.99	ppb
Sulfur	34-1	430.71	523.14	-334.79	206.35	228.21	ppb
Terbium	159-1				96		%
Terbium	159-2				98		%
Thallium	203-1	0.03	0.04	0.03	0.03	14.16	ppb
Thallium	205-1	0.04	0.03	0.03	0.04	11.95	ppb
Tin	118-1	-0.02	-0.02	-0.01	-0.02		ppb
Titanium	47-1	0.15	0.06	0.00	0.07	109.28	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:36:04	DataFile Name :	059CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.01	0.01	0.01	15.61	ppb
Vanadium	51-2	0.01	0.02	0.04	0.02	55.24	ppb
Yttrium	89-1				94		%
Yttrium	89-2				93		%
Zinc	66-2	0.20	0.16	0.40	0.25	50.00	ppb
Zirconium	90-1	0.02	0.04	0.03	0.03	34.63	ppb
Zirconium	91-1	0.03	0.03	0.05	0.04	32.69	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:39:28	DataFile Name :	060SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5393.14	5300.86	5538.10	5410.70	2.21	ppb
Antimony	121-1	0.99	1.04	1.02	1.02	2.32	ppb
Arsenic	75-2	6.09	5.07	4.88	5.35	12.20	ppb
Barium	135-1	314.59	323.26	323.59	320.48	1.59	ppb
Barium	137-1	319.33	325.58	323.45	322.78	0.98	ppb
Beryllium	9-1	1.11	1.19	1.22	1.17	4.79	ppb
Bismuth	209-1				105		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	3.48	3.38	3.16	3.34	4.79	ppb
Cadmium	106-1	-3.92	-4.93	-3.29	-4.05		ppb
Cadmium	111-1	3.74	3.83	4.01	3.86	3.59	ppb
Calcium	43-1	6787.49	6874.96	6831.97	6831.47	0.64	ppb
Calcium	44-1	6768.30	6838.90	6826.93	6811.38	0.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	10.09	10.15	10.73	10.33	3.45	ppb
Cobalt	59-2	5.44	5.59	5.64	5.56	1.86	ppb
Copper	63-2	40.74	40.70	43.54	41.66	3.91	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				101		%
Indium	115-1				96		%
Indium	115-2				97		%
Iron	56-2	4212.66	4172.56	4303.75	4229.66	1.59	ppb
Iron	57-2	4269.58	4312.82	4436.90	4339.77	2.00	ppb
Iron	54-2	4327.31	4397.99	4491.97	4405.76	1.87	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:39:28	DataFile Name :	060SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	129.99	134.08	134.18	132.75	1.80	ppb
Lead	207-1	123.39	127.49	126.42	125.77	1.69	ppb
Lead	208-1	126.43	130.48	130.03	128.98	1.72	ppb
Lithium	6-1				106		%
Magnesium	24-2	1042.55	1018.18	1056.60	1039.11	1.87	ppb
Manganese	55-2	5199.11	5267.82	5365.99	5277.64	1.59	ppb
Molybdenum	94-1	1.83	1.96	2.06	1.95	5.96	ppb
Molybdenum	95-1	1.07	1.16	1.18	1.14	5.24	ppb
Molybdenum	96-1	1.14	1.09	1.15	1.13	2.99	ppb
Molybdenum	97-1	1.03	1.04	1.13	1.07	5.14	ppb
Molybdenum	98-1	1.01	1.02	1.08	1.04	3.69	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	23.74	24.20	24.31	24.08	1.27	ppb
Phosphorus	31-2	518.50	547.84	586.55	550.96	6.20	ppb
Potassium	39-2	309.36	299.85	319.55	309.59	3.18	ppb
Rhodium	103-1				96		%
Rhodium	103-2				99		%
Scandium	45-1				101		%
Scandium	45-2				93		%
Selenium	82-1	0.99	1.01	0.13	0.71	70.94	ppb
Selenium	77-2	9.42	6.91	6.39	7.57	21.36	ppb
Selenium	78-2	4.46	-0.49	2.56	2.18	114.81	ppb
Silicon	28-1	88.29	87.61	89.70	88.53	1.21	ppb
Silver	107-1	0.08	0.08	0.06	0.08	13.86	ppb
Silver	109-1	0.07	0.09	0.08	0.08	12.19	ppb
Sodium	23-2	2086.86	2053.53	2112.37	2084.25	1.42	ppb
Strontium	86-1	46.10	45.97	47.56	46.55	1.90	ppb
Strontium	88-1	45.07	45.63	47.12	45.94	2.30	ppb
Sulfur	34-1	1390.54	1100.35	816.26	1102.38	26.05	ppb
Terbium	159-1				99		%
Terbium	159-2				99		%
Thallium	203-1	0.12	0.15	0.15	0.14	11.52	ppb
Thallium	205-1	0.13	0.13	0.13	0.13	2.83	ppb
Tin	118-1	0.34	0.39	0.44	0.39	13.29	ppb
Titanium	47-1	140.63	138.38	145.25	141.42	2.48	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:39:28	DataFile Name :	060SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.76	0.79	0.78	0.78	2.32	ppb
Vanadium	51-2	18.18	18.01	17.83	18.01	0.97	ppb
Yttrium	89-1				102		%
Yttrium	89-2				99		%
Zinc	66-2	133.61	133.85	134.82	134.09	0.48	ppb
Zirconium	90-1	0.55	0.62	0.59	0.59	5.93	ppb
Zirconium	91-1	0.49	0.56	0.58	0.54	8.29	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:42:47	DataFile Name :	061SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51955.51	51336.74	52611.89	51968.05	1.23	ppb
Antimony	121-1	1.56	1.63	1.57	1.58	2.33	ppb
Arsenic	75-2	13.98	13.13	13.92	13.68	3.46	ppb
Barium	135-1	210.76	206.23	200.80	205.93	2.42	ppb
Barium	137-1	216.20	205.49	205.66	209.12	2.93	ppb
Beryllium	9-1	5.19	5.46	5.28	5.31	2.58	ppb
Bismuth	209-1				98		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	5.21	4.38	3.69	4.42	17.26	ppb
Cadmium	106-1	-0.35	-1.51	-1.62	-1.16		ppb
Cadmium	111-1	2.32	2.34	2.47	2.38	3.50	ppb
Calcium	43-1	10331.57	10393.91	10786.35	10503.94	2.35	ppb
Calcium	44-1	10530.21	10450.94	10757.47	10579.54	1.50	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	253.00	253.81	250.34	252.38	0.72	ppb
Cobalt	59-2	28.85	29.18	28.69	28.91	0.88	ppb
Copper	63-2	136.57	139.88	138.72	138.39	1.21	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				96		%
Indium	115-1				93		%
Indium	115-2				93		%
Iron	56-2	144086.47	147147.85	146999.89	146078.07	1.18	ppb
Iron	57-2	144986.71	147013.80	145882.50	145961.00	0.70	ppb
Iron	54-2	151296.02	146370.94	146633.95	148100.30	1.87	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:42:47	DataFile Name :	061SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	123.74	125.04	129.06	125.94	2.20	ppb
Lead	207-1	115.40	117.95	121.85	118.40	2.74	ppb
Lead	208-1	120.48	121.79	125.45	122.57	2.10	ppb
Lithium	6-1				103		%
Magnesium	24-2	6333.74	6417.67	6469.43	6406.95	1.07	ppb
Manganese	55-2	1114.38	1120.30	1111.04	1115.24	0.42	ppb
Molybdenum	94-1	50.99	50.87	50.54	50.80	0.46	ppb
Molybdenum	95-1	1.63	1.70	1.67	1.67	1.93	ppb
Molybdenum	96-1	7.80	7.88	7.84	7.84	0.51	ppb
Molybdenum	97-1	1.63	1.61	1.63	1.62	0.51	ppb
Molybdenum	98-1	1.69	1.72	1.65	1.69	2.16	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	38.96	40.56	38.96	39.50	2.34	ppb
Phosphorus	31-2	3655.71	3623.73	3603.63	3627.69	0.72	ppb
Potassium	39-2	7860.78	8051.93	8055.21	7989.31	1.39	ppb
Rhodium	103-1				91		%
Rhodium	103-2				94		%
Scandium	45-1				101		%
Scandium	45-2				98		%
Selenium	82-1	0.46	0.78	1.87	1.03	71.46	ppb
Selenium	77-2	15.90	22.69	12.79	17.13	29.57	ppb
Selenium	78-2	4.87	3.94	4.32	4.38	10.62	ppb
Silicon	28-1	1818.41	1860.98	1895.90	1858.43	2.09	ppb
Silver	107-1	3.04	3.01	3.10	3.05	1.49	ppb
Silver	109-1	2.96	3.04	2.94	2.98	1.89	ppb
Sodium	23-2	499.50	501.09	504.28	501.62	0.49	ppb
Strontium	86-1	53.25	53.72	51.60	52.86	2.10	ppb
Strontium	88-1	51.99	52.71	50.89	51.86	1.76	ppb
Sulfur	34-1	-585.63	-765.67	-588.54	-646.61		ppb
Terbium	159-1				97		%
Terbium	159-2				97		%
Thallium	203-1	0.48	0.50	0.55	0.51	6.23	ppb
Thallium	205-1	0.53	0.48	0.55	0.52	6.82	ppb
Tin	118-1	1.88	1.86	1.71	1.82	5.10	ppb
Titanium	47-1	771.48	780.69	784.32	778.83	0.85	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:42:47	DataFile Name :	061SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	8.25	8.63	8.66	8.52	2.69	ppb
Vanadium	51-2	235.81	239.90	240.23	238.64	1.03	ppb
Yttrium	89-1				104		%
Yttrium	89-2				103		%
Zinc	66-2	460.29	465.19	466.88	464.12	0.74	ppb
Zirconium	90-1	26.49	26.66	25.90	26.35	1.50	ppb
Zirconium	91-1	25.55	25.89	25.15	25.53	1.46	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:46:08	DataFile Name :	062SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10849.38	10989.78	11073.47	10970.88	1.03	ppb
Antimony	121-1	0.32	0.33	0.33	0.33	2.16	ppb
Arsenic	75-2	2.99	2.32	3.22	2.84	16.51	ppb
Barium	135-1	40.62	39.08	41.04	40.24	2.57	ppb
Barium	137-1	40.66	40.73	40.27	40.55	0.61	ppb
Beryllium	9-1	1.05	1.13	1.12	1.10	4.07	ppb
Bismuth	209-1				102		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.55	0.89	0.91	0.78	26.07	ppb
Cadmium	106-1	-7.92	-8.91	-8.35	-8.40		ppb
Cadmium	111-1	0.49	0.29	0.40	0.40	24.89	ppb
Calcium	43-1	2032.64	2111.14	2034.97	2059.58	2.17	ppb
Calcium	44-1	2044.78	2083.80	2037.32	2055.30	1.21	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	50.37	50.84	50.89	50.70	0.57	ppb
Cobalt	59-2	5.72	5.81	5.97	5.83	2.18	ppb
Copper	63-2	28.03	28.17	28.40	28.20	0.67	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				97		%
Holmium	165-2				98		%
Indium	115-1				98		%
Indium	115-2				96		%
Iron	56-2	29507.54	29995.88	29415.67	29639.69	1.05	ppb
Iron	57-2	30734.24	31058.33	30925.25	30905.94	0.53	ppb
Iron	54-2	30822.50	31472.18	29792.48	30695.72	2.76	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:46:08	DataFile Name :	062SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	24.35	24.07	23.92	24.11	0.92	ppb
Lead	207-1	22.74	22.40	22.64	22.59	0.78	ppb
Lead	208-1	23.48	23.22	23.41	23.37	0.58	ppb
Lithium	6-1				106		%
Magnesium	24-2	1278.16	1291.50	1301.60	1290.42	0.91	ppb
Manganese	55-2	221.99	229.41	228.64	226.68	1.80	ppb
Molybdenum	94-1	10.20	10.80	10.71	10.57	3.03	ppb
Molybdenum	95-1	0.39	0.40	0.41	0.40	2.66	ppb
Molybdenum	96-1	1.54	1.67	1.78	1.66	7.30	ppb
Molybdenum	97-1	0.38	0.48	0.35	0.40	16.52	ppb
Molybdenum	98-1	0.39	0.39	0.35	0.38	5.72	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	7.94	8.19	8.09	8.07	1.54	ppb
Phosphorus	31-2	640.77	775.92	659.16	691.95	10.59	ppb
Potassium	39-2	1563.17	1573.04	1598.83	1578.35	1.17	ppb
Rhodium	103-1				93		%
Rhodium	103-2				98		%
Scandium	45-1				99		%
Scandium	45-2				95		%
Selenium	82-1	0.21	-0.43	-0.68	-0.30		ppb
Selenium	77-2	1.60	1.60	0.00	1.07	86.60	ppb
Selenium	78-2	1.36	3.98	2.76	2.70	48.45	ppb
Silicon	28-1	375.92	380.54	378.27	378.24	0.61	ppb
Silver	107-1	0.58	0.57	0.62	0.59	3.70	ppb
Silver	109-1	0.62	0.57	0.63	0.61	5.76	ppb
Sodium	23-2	115.29	122.70	118.19	118.73	3.15	ppb
Strontium	86-1	10.55	10.88	10.96	10.80	1.99	ppb
Strontium	88-1	10.64	10.93	10.95	10.84	1.62	ppb
Sulfur	34-1	-2529.99	-2358.41	-2457.53	-2448.64		ppb
Terbium	159-1				98		%
Terbium	159-2				97		%
Thallium	203-1	0.10	0.13	0.10	0.11	15.69	ppb
Thallium	205-1	0.12	0.11	0.11	0.11	4.58	ppb
Tin	118-1	0.30	0.30	0.32	0.31	2.93	ppb
Titanium	47-1	155.15	158.09	159.35	157.53	1.37	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:46:08	DataFile Name :	062SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.65	1.60	1.65	1.63	1.89	ppb
Vanadium	51-2	48.07	48.49	47.79	48.12	0.74	ppb
Yttrium	89-1				100		%
Yttrium	89-2				97		%
Zinc	66-2	91.41	95.53	96.00	94.31	2.68	ppb
Zirconium	90-1	5.36	5.50	5.67	5.51	2.82	ppb
Zirconium	91-1	5.14	5.31	5.60	5.35	4.27	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:49:27	DataFile Name :	063SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	107172.73	102233.57	105308.64	104904.98	2.38	ppb
Antimony	121-1	0.86	1.05	1.01	0.97	10.21	ppb
Arsenic	75-2	8.62	8.29	7.99	8.30	3.84	ppb
Barium	135-1	138.12	151.61	150.76	146.83	5.14	ppb
Barium	137-1	139.01	155.02	152.08	148.71	5.73	ppb
Beryllium	9-1	13.18	14.23	13.23	13.54	4.36	ppb
Bismuth	209-1				93		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	4.06	4.80	5.63	4.83	16.28	ppb
Cadmium	106-1	0.88	1.15	0.93	0.99	14.55	ppb
Cadmium	111-1	0.54	0.67	0.54	0.58	12.24	ppb
Calcium	43-1	6166.10	6595.89	6367.59	6376.53	3.37	ppb
Calcium	44-1	6122.35	6727.24	6441.26	6430.28	4.71	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	567.15	564.66	564.62	565.48	0.26	ppb
Cobalt	59-2	24.55	24.29	24.26	24.37	0.65	ppb
Copper	63-2	73.67	71.76	71.99	72.47	1.44	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				94		%
Holmium	165-2				99		%
Indium	115-1				90		%
Indium	115-2				94		%
Iron	56-2	393957.76	389501.03	394218.79	392559.19	0.68	ppb
Iron	57-2	393382.01	387433.79	390579.87	390465.22	0.76	ppb
Iron	54-2	399902.15	389839.91	401402.06	397048.04	1.58	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:49:27	DataFile Name :	063SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	39.04	42.73	41.53	41.10	4.57	ppb
Lead	207-1	36.21	40.40	38.49	38.37	5.47	ppb
Lead	208-1	38.03	41.75	39.78	39.85	4.66	ppb
Lithium	6-1				96		%
Magnesium	24-2	6393.58	6274.44	6317.20	6328.41	0.95	ppb
Manganese	55-2	409.47	404.59	411.30	408.45	0.85	ppb
Molybdenum	94-1	78.40	82.92	79.94	80.42	2.86	ppb
Molybdenum	95-1	0.67	0.63	0.57	0.62	7.53	ppb
Molybdenum	96-1	11.10	11.62	11.31	11.34	2.29	ppb
Molybdenum	97-1	0.69	0.70	0.80	0.73	8.27	ppb
Molybdenum	98-1	0.55	0.61	0.54	0.57	6.33	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	55.58	54.68	55.61	55.29	0.96	ppb
Phosphorus	31-2	8436.21	8076.35	8261.62	8258.06	2.18	ppb
Potassium	39-2	13284.52	12841.65	12994.15	13040.11	1.73	ppb
Rhodium	103-1				86		%
Rhodium	103-2				96		%
Scandium	45-1				104		%
Scandium	45-2				106		%
Selenium	82-1	1.09	1.09	0.54	0.91	35.05	ppb
Selenium	77-2	29.09	32.40	35.14	32.21	9.41	ppb
Selenium	78-2	4.31	6.31	8.58	6.40	33.41	ppb
Silicon	28-1	2218.04	2444.73	2330.40	2331.05	4.86	ppb
Silver	107-1	0.54	0.52	0.56	0.54	3.46	ppb
Silver	109-1	0.43	0.49	0.48	0.47	6.38	ppb
Sodium	23-2	158.07	154.39	153.72	155.39	1.51	ppb
Strontium	86-1	41.94	43.15	41.91	42.33	1.66	ppb
Strontium	88-1	40.92	43.34	40.59	41.62	3.61	ppb
Sulfur	34-1	-3813.33	-3555.88	-4091.82	-3820.34		ppb
Terbium	159-1				93		%
Terbium	159-2				100		%
Thallium	203-1	0.57	0.58	0.63	0.59	4.85	ppb
Thallium	205-1	0.56	0.63	0.61	0.60	5.57	ppb
Tin	118-1	0.78	1.01	0.90	0.89	12.96	ppb
Titanium	47-1	856.68	957.46	912.28	908.81	5.55	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:49:27	DataFile Name :	063SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	23.88	26.43	25.17	25.16	5.06	ppb
Vanadium	51-2	567.82	557.10	564.87	563.26	0.98	ppb
Yttrium	89-1				111		%
Yttrium	89-2				115		%
Zinc	66-2	288.06	285.11	285.87	286.34	0.53	ppb
Zirconium	90-1	40.95	43.62	41.17	41.91	3.53	ppb
Zirconium	91-1	40.48	42.38	40.23	41.03	2.86	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:52:45	DataFile Name :	064SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	22581.95	22704.35	22890.11	22725.47	0.68	ppb
Antimony	121-1	0.20	0.18	0.19	0.19	4.30	ppb
Arsenic	75-2	1.85	1.63	1.84	1.77	7.00	ppb
Barium	135-1	28.26	26.93	28.72	27.97	3.33	ppb
Barium	137-1	28.90	27.81	27.43	28.05	2.72	ppb
Beryllium	9-1	2.70	2.43	2.72	2.61	6.17	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.34	0.86	0.40	0.53	53.55	ppb
Cadmium	106-1	-6.19	-8.06	-7.98	-7.41		ppb
Cadmium	111-1	0.11	0.01	0.07	0.06	84.51	ppb
Calcium	43-1	1299.65	1295.91	1348.20	1314.59	2.22	ppb
Calcium	44-1	1264.44	1278.85	1305.23	1282.84	1.61	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	125.72	123.41	122.90	124.01	1.21	ppb
Cobalt	59-2	5.31	5.26	5.09	5.22	2.25	ppb
Copper	63-2	16.23	15.43	15.87	15.85	2.52	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				101		%
Indium	115-1				99		%
Indium	115-2				98		%
Iron	56-2	88186.77	86059.72	83663.49	85970.00	2.63	ppb
Iron	57-2	88262.15	84614.13	84699.42	85858.57	2.42	ppb
Iron	54-2	87464.61	86868.13	86340.75	86891.16	0.65	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:52:45	DataFile Name :	064SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	7.94	7.78	7.86	7.86	1.05	ppb
Lead	207-1	7.22	7.37	7.45	7.35	1.63	ppb
Lead	208-1	7.62	7.58	7.60	7.60	0.25	ppb
Lithium	6-1				103		%
Magnesium	24-2	1357.69	1352.26	1339.05	1349.67	0.71	ppb
Manganese	55-2	90.48	89.11	89.61	89.73	0.78	ppb
Molybdenum	94-1	17.39	17.45	17.50	17.45	0.31	ppb
Molybdenum	95-1	0.17	0.19	0.19	0.18	7.98	ppb
Molybdenum	96-1	2.73	2.56	2.47	2.59	5.05	ppb
Molybdenum	97-1	0.21	0.15	0.17	0.18	16.87	ppb
Molybdenum	98-1	0.20	0.17	0.16	0.17	11.22	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	12.54	12.53	12.29	12.45	1.16	ppb
Phosphorus	31-2	1719.10	1765.86	1844.20	1776.39	3.56	ppb
Potassium	39-2	3012.85	2956.12	2938.34	2969.10	1.31	ppb
Rhodium	103-1				97		%
Rhodium	103-2				101		%
Scandium	45-1				104		%
Scandium	45-2				100		%
Selenium	82-1	-0.90	-0.54	0.50	-0.32		ppb
Selenium	77-2	9.86	13.94	4.57	9.46	49.68	ppb
Selenium	78-2	0.77	3.81	3.35	2.64	61.94	ppb
Silicon	28-1	461.33	477.69	481.30	473.44	2.25	ppb
Silver	107-1	0.11	0.10	0.11	0.11	4.83	ppb
Silver	109-1	0.10	0.09	0.08	0.09	10.32	ppb
Sodium	23-2	46.10	44.32	43.85	44.76	2.65	ppb
Strontium	86-1	8.94	9.29	9.00	9.08	2.06	ppb
Strontium	88-1	9.10	9.17	9.01	9.09	0.92	ppb
Sulfur	34-1	-4467.83	-4639.53	-4325.96	-4477.77		ppb
Terbium	159-1				100		%
Terbium	159-2				101		%
Thallium	203-1	0.08	0.13	0.11	0.11	25.41	ppb
Thallium	205-1	0.14	0.14	0.12	0.13	8.94	ppb
Tin	118-1	0.11	0.11	0.08	0.10	17.59	ppb
Titanium	47-1	184.79	186.75	190.78	187.44	1.63	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:52:45	DataFile Name :	064SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	4.68	4.66	4.67	4.67	0.25	ppb
Vanadium	51-2	123.13	119.92	121.11	121.39	1.34	ppb
Yttrium	89-1				105		%
Yttrium	89-2				101		%
Zinc	66-2	65.23	61.98	63.14	63.45	2.60	ppb
Zirconium	90-1	9.06	9.03	8.96	9.02	0.58	ppb
Zirconium	91-1	8.83	8.63	8.55	8.67	1.67	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-07	Instrumnet Name :	P7
Client Sample ID :	S-930-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:56:02	DataFile Name :	065SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	54401.49	52300.44	52622.24	53108.06	2.13	ppb
Antimony	121-1	1.37	1.48	1.56	1.47	6.55	ppb
Arsenic	75-2	15.17	15.92	15.25	15.44	2.66	ppb
Barium	135-1	370.82	366.20	374.93	370.65	1.18	ppb
Barium	137-1	370.78	371.66	376.15	372.87	0.77	ppb
Beryllium	9-1	3.32	3.37	3.63	3.44	4.81	ppb
Bismuth	209-1				93		%
Bismuth	209-2				85		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	2.49	3.35	2.71	2.85	15.75	ppb
Cadmium	106-1	-5.91	-4.32	-5.81	-5.35		ppb
Cadmium	111-1	1.71	1.81	2.00	1.84	7.87	ppb
Calcium	43-1	42827.27	43305.60	43897.02	43343.30	1.24	ppb
Calcium	44-1	39343.64	40276.16	41076.17	40231.99	2.16	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	88.30	87.76	89.05	88.37	0.73	ppb
Cobalt	59-2	22.41	21.95	22.22	22.19	1.03	ppb
Copper	63-2	124.90	124.33	123.80	124.34	0.44	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				95		%
Holmium	165-2				95		%
Indium	115-1				92		%
Indium	115-2				93		%
Iron	56-2	57946.03	57140.54	57749.17	57611.91	0.73	ppb
Iron	57-2	58986.31	59054.54	59784.12	59274.99	0.75	ppb
Iron	54-2	56373.75	57768.19	57990.00	57377.31	1.53	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-07	Instrumnet Name :	P7
Client Sample ID :	S-930-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:56:02	DataFile Name :	065SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	208.70	214.03	214.59	212.44	1.53	ppb
Lead	207-1	195.42	200.34	200.84	198.86	1.51	ppb
Lead	208-1	201.44	206.28	207.08	204.93	1.49	ppb
Lithium	6-1				101		%
Magnesium	24-2	7793.00	7748.01	7777.98	7773.00	0.29	ppb
Manganese	55-2	1019.31	1027.34	1028.37	1025.00	0.48	ppb
Molybdenum	94-1	30.47	31.54	31.18	31.06	1.74	ppb
Molybdenum	95-1	2.51	2.75	2.65	2.63	4.52	ppb
Molybdenum	96-1	5.84	6.13	5.80	5.92	3.06	ppb
Molybdenum	97-1	2.62	2.72	2.37	2.57	7.09	ppb
Molybdenum	98-1	2.59	2.55	2.69	2.61	2.76	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	53.42	53.14	53.47	53.34	0.33	ppb
Phosphorus	31-2	1436.58	1479.31	1458.89	1458.26	1.47	ppb
Potassium	39-2	3197.55	3148.44	3163.34	3169.78	0.79	ppb
Rhodium	103-1				90		%
Rhodium	103-2				93		%
Scandium	45-1				99		%
Scandium	45-2				94		%
Selenium	82-1	1.47	0.86	1.94	1.42	37.94	ppb
Selenium	77-2	17.72	13.24	13.34	14.77	17.32	ppb
Selenium	78-2	5.13	5.53	7.08	5.91	17.35	ppb
Silicon	28-1	1840.48	1846.09	1930.64	1872.40	2.70	ppb
Silver	107-1	2.46	2.66	2.54	2.55	3.99	ppb
Silver	109-1	2.49	2.53	2.48	2.50	1.19	ppb
Sodium	23-2	469.92	473.54	464.62	469.36	0.96	ppb
Strontium	86-1	197.34	202.29	200.36	200.00	1.25	ppb
Strontium	88-1	194.91	197.65	196.62	196.40	0.71	ppb
Sulfur	34-1	-2327.27	-2835.38	-2670.73	-2611.13		ppb
Terbium	159-1				95		%
Terbium	159-2				96		%
Thallium	203-1	0.57	0.56	0.61	0.58	4.61	ppb
Thallium	205-1	0.61	0.60	0.63	0.61	2.04	ppb
Tin	118-1	1.95	2.04	2.07	2.02	3.16	ppb
Titanium	47-1	1056.58	1073.31	1099.56	1076.48	2.01	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-07	Instrumnet Name :	P7
Client Sample ID :	S-930-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:56:02	DataFile Name :	065SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	3.66	3.75	3.75	3.72	1.47	ppb
Vanadium	51-2	106.56	105.19	104.65	105.47	0.94	ppb
Yttrium	89-1				101		%
Yttrium	89-2				100		%
Zinc	66-2	428.35	417.57	416.84	420.92	1.53	ppb
Zirconium	90-1	14.86	15.51	15.39	15.25	2.28	ppb
Zirconium	91-1	14.66	14.90	14.93	14.83	1.02	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-1	Instrumnet Name :	P7
Client Sample ID :	DOC-1	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:02:41	DataFile Name :	067SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10465.41	10356.72	10339.81	10387.32	0.66	ppb
Antimony	121-1	509.74	496.28	504.48	503.50	1.35	ppb
Arsenic	75-2	515.99	507.02	504.23	509.08	1.21	ppb
Barium	135-1	2453.33	2423.07	2437.16	2437.85	0.62	ppb
Barium	137-1	2637.26	2563.04	2586.90	2595.73	1.46	ppb
Beryllium	9-1	505.60	518.03	514.76	512.80	1.26	ppb
Bismuth	209-1				101		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	519.30	508.34	506.21	511.28	1.37	ppb
Cadmium	106-1	516.53	491.56	526.23	511.44	3.50	ppb
Cadmium	111-1	515.13	504.13	521.29	513.52	1.69	ppb
Calcium	43-1	55879.77	56606.80	56531.59	56339.39	0.71	ppb
Calcium	44-1	50026.86	50593.33	51365.90	50662.03	1.33	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	506.86	502.56	497.92	502.45	0.89	ppb
Cobalt	59-2	510.13	514.80	507.93	510.95	0.69	ppb
Copper	63-2	5339.69	5200.87	5167.14	5235.90	1.75	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				101		%
Indium	115-1				98		%
Indium	115-2				97		%
Iron	56-2	26980.53	26622.47	26502.61	26701.87	0.93	ppb
Iron	57-2	27980.18	27818.43	27715.91	27838.17	0.48	ppb
Iron	54-2	28560.45	28001.61	28132.85	28231.64	1.04	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-1	Instrumnet Name :	P7
Client Sample ID :	DOC-1	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:02:41	DataFile Name :	067SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2476.52	2572.95	2453.90	2501.12	2.53	ppb
Lead	207-1	2459.58	2619.74	2472.86	2517.39	3.53	ppb
Lead	208-1	2439.15	2614.46	2494.66	2516.09	3.56	ppb
Lithium	6-1				104		%
Magnesium	24-2	52271.56	51661.41	50389.90	51440.96	1.87	ppb
Manganese	55-2	5151.67	5092.82	5066.59	5103.69	0.85	ppb
Molybdenum	94-1	5639.06	5635.78	5838.58	5704.47	2.04	ppb
Molybdenum	95-1	5636.90	5433.94	5624.27	5565.04	2.04	ppb
Molybdenum	96-1	5542.14	5274.81	5604.33	5473.76	3.20	ppb
Molybdenum	97-1	5656.07	5614.31	5715.93	5662.10	0.90	ppb
Molybdenum	98-1	5458.11	5472.29	5609.86	5513.42	1.52	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	509.37	516.90	498.44	508.24	1.83	ppb
Phosphorus	31-2	10088.80	9993.06	9916.81	9999.56	0.86	ppb
Potassium	39-2	26996.15	26276.89	26250.49	26507.84	1.60	ppb
Rhodium	103-1				95		%
Rhodium	103-2				97		%
Scandium	45-1				100		%
Scandium	45-2				96		%
Selenium	82-1	494.03	496.78	513.50	501.44	2.10	ppb
Selenium	77-2	523.27	521.36	511.19	518.61	1.25	ppb
Selenium	78-2	532.14	509.45	528.63	523.41	2.33	ppb
Silicon	28-1	568.12	564.27	577.62	570.00	1.21	ppb
Silver	107-1	545.14	530.62	540.02	538.59	1.37	ppb
Silver	109-1	522.19	505.32	519.34	515.61	1.75	ppb
Sodium	23-2	51588.19	51988.96	52430.83	52002.66	0.81	ppb
Strontium	86-1	12432.28	12868.50	12952.62	12751.13	2.19	ppb
Strontium	88-1	12277.69	12228.88	12660.58	12389.05	1.91	ppb
Sulfur	34-1	6253.33	6810.35	6944.62	6669.43	5.50	ppb
Terbium	159-1				99		%
Terbium	159-2				103		%
Thallium	203-1	442.47	465.70	441.81	449.99	3.02	ppb
Thallium	205-1	486.26	525.35	480.25	497.29	4.92	ppb
Tin	118-1	515.59	500.87	508.35	508.27	1.45	ppb
Titanium	47-1	5619.53	5700.84	5581.94	5634.10	1.08	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-1	Instrumnet Name :	P7
Client Sample ID :	DOC-1	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:02:41	DataFile Name :	067SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	478.26	522.14	486.76	495.72	4.69	ppb
Vanadium	51-2	507.66	496.30	500.26	501.41	1.15	ppb
Yttrium	89-1				99		%
Yttrium	89-2				97		%
Zinc	66-2	5087.77	5057.45	5000.95	5048.72	0.87	ppb
Zirconium	90-1	519.28	508.53	523.44	517.09	1.49	ppb
Zirconium	91-1	499.09	486.70	502.65	496.15	1.69	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-2	Instrumnet Name :	P7
Client Sample ID :	DOC-2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:05:42	DataFile Name :	068SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10466.65	10541.70	10341.54	10449.96	0.97	ppb
Antimony	121-1	486.10	494.04	507.78	495.97	2.21	ppb
Arsenic	75-2	511.93	509.44	504.71	508.69	0.72	ppb
Barium	135-1	2354.65	2558.40	2440.70	2451.25	4.17	ppb
Barium	137-1	2562.09	2504.12	2573.83	2546.68	1.47	ppb
Beryllium	9-1	518.35	521.47	516.57	518.80	0.48	ppb
Bismuth	209-1				104		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	491.93	512.68	508.31	504.31	2.17	ppb
Cadmium	106-1	473.36	496.45	504.91	491.57	3.32	ppb
Cadmium	111-1	491.68	499.94	513.11	501.58	2.15	ppb
Calcium	43-1	55775.95	57149.63	56039.36	56321.64	1.29	ppb
Calcium	44-1	49670.55	52732.89	51123.99	51175.81	2.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	512.44	505.01	501.66	506.37	1.09	ppb
Cobalt	59-2	516.16	509.20	510.38	511.91	0.73	ppb
Copper	63-2	5266.26	5152.79	5158.66	5192.57	1.23	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				104		%
Indium	115-1				100		%
Indium	115-2				97		%
Iron	56-2	26717.34	26700.81	27089.20	26835.78	0.82	ppb
Iron	57-2	28325.49	27600.98	27484.10	27803.52	1.64	ppb
Iron	54-2	28780.80	28154.38	28263.88	28399.68	1.18	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-2	Instrumnet Name :	P7
Client Sample ID :	DOC-2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:05:42	DataFile Name :	068SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2506.32	2486.10	2519.43	2503.95	0.67	ppb
Lead	207-1	2431.48	2472.31	2536.07	2479.95	2.13	ppb
Lead	208-1	2474.13	2494.11	2499.93	2489.39	0.54	ppb
Lithium	6-1				104		%
Magnesium	24-2	51585.46	51802.74	51865.00	51751.07	0.28	ppb
Manganese	55-2	5244.72	5305.86	5099.62	5216.73	2.03	ppb
Molybdenum	94-1	5693.40	5568.84	5821.93	5694.72	2.22	ppb
Molybdenum	95-1	5557.46	5493.81	5654.96	5568.75	1.46	ppb
Molybdenum	96-1	5470.54	5683.61	5671.65	5608.60	2.13	ppb
Molybdenum	97-1	5628.85	5535.11	5709.95	5624.64	1.56	ppb
Molybdenum	98-1	5543.06	5458.36	5576.87	5526.10	1.10	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	509.33	504.11	501.62	505.02	0.78	ppb
Phosphorus	31-2	10091.11	10086.18	9970.56	10049.29	0.68	ppb
Potassium	39-2	26753.79	26168.07	26307.18	26409.68	1.16	ppb
Rhodium	103-1				94		%
Rhodium	103-2				100		%
Scandium	45-1				101		%
Scandium	45-2				96		%
Selenium	82-1	508.61	497.22	519.95	508.59	2.23	ppb
Selenium	77-2	474.33	513.73	500.38	496.15	4.04	ppb
Selenium	78-2	534.40	529.42	517.10	526.97	1.69	ppb
Silicon	28-1	564.33	563.04	582.53	569.97	1.91	ppb
Silver	107-1	504.40	519.95	531.05	518.47	2.58	ppb
Silver	109-1	515.76	497.22	503.91	505.63	1.86	ppb
Sodium	23-2	52257.99	52308.01	51973.78	52179.93	0.35	ppb
Strontium	86-1	12867.79	12694.13	12762.52	12774.81	0.68	ppb
Strontium	88-1	12446.24	12244.06	12903.08	12531.13	2.69	ppb
Sulfur	34-1	7017.53	7612.74	7488.86	7373.04	4.26	ppb
Terbium	159-1				103		%
Terbium	159-2				101		%
Thallium	203-1	445.07	453.11	454.74	450.97	1.15	ppb
Thallium	205-1	495.48	502.03	507.32	501.61	1.18	ppb
Tin	118-1	486.98	493.26	506.32	495.52	1.99	ppb
Titanium	47-1	5559.04	5794.32	5734.75	5696.04	2.15	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-2	Instrumnet Name :	P7
Client Sample ID :	DOC-2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:05:42	DataFile Name :	068SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	486.03	486.93	522.95	498.64	4.22	ppb
Vanadium	51-2	513.65	506.93	498.51	506.36	1.50	ppb
Yttrium	89-1				100		%
Yttrium	89-2				98		%
Zinc	66-2	5065.48	5050.22	5014.37	5043.36	0.52	ppb
Zirconium	90-1	517.84	518.74	530.18	522.25	1.32	ppb
Zirconium	91-1	496.77	496.33	509.23	500.78	1.46	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-3	Instrumnet Name :	P7
Client Sample ID :	DOC-3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:11:47	DataFile Name :	069SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10390.83	10568.28	10482.12	10480.41	0.85	ppb
Antimony	121-1	492.97	505.02	501.24	499.75	1.23	ppb
Arsenic	75-2	513.97	512.95	499.26	508.73	1.61	ppb
Barium	135-1	2599.10	2415.52	2535.21	2516.61	3.70	ppb
Barium	137-1	2565.56	2576.54	2576.72	2572.94	0.25	ppb
Beryllium	9-1	522.61	524.68	517.95	521.75	0.66	ppb
Bismuth	209-1				105		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	515.49	517.02	511.92	514.81	0.51	ppb
Cadmium	106-1	501.72	514.91	498.19	504.94	1.75	ppb
Cadmium	111-1	501.62	515.70	508.45	508.59	1.38	ppb
Calcium	43-1	57261.20	56246.94	57224.40	56910.85	1.01	ppb
Calcium	44-1	51661.09	52054.83	52453.25	52056.39	0.76	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	500.35	514.70	501.40	505.48	1.58	ppb
Cobalt	59-2	508.41	513.64	509.35	510.47	0.55	ppb
Copper	63-2	5202.49	5323.96	5110.88	5212.44	2.05	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				104		%
Indium	115-1				97		%
Indium	115-2				95		%
Iron	56-2	25948.66	26588.49	26359.51	26298.89	1.23	ppb
Iron	57-2	27740.93	28139.03	27977.51	27952.49	0.72	ppb
Iron	54-2	28426.51	29104.24	28460.38	28663.71	1.33	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-3	Instrumnet Name :	P7
Client Sample ID :	DOC-3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:11:47	DataFile Name :	069SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2502.53	2545.91	2512.27	2520.24	0.90	ppb
Lead	207-1	2523.73	2509.50	2548.49	2527.24	0.78	ppb
Lead	208-1	2513.39	2504.24	2515.50	2511.04	0.24	ppb
Lithium	6-1				107		%
Magnesium	24-2	51808.34	52746.87	51937.13	52164.11	0.98	ppb
Manganese	55-2	5208.00	5204.20	5119.44	5177.21	0.97	ppb
Molybdenum	94-1	5586.12	5763.04	5675.45	5674.87	1.56	ppb
Molybdenum	95-1	5615.28	5663.70	5865.84	5714.94	2.33	ppb
Molybdenum	96-1	5595.05	5708.50	5811.11	5704.89	1.89	ppb
Molybdenum	97-1	5545.50	5791.69	5720.66	5685.95	2.23	ppb
Molybdenum	98-1	5611.46	5501.13	5707.14	5606.58	1.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	499.88	513.03	509.95	507.62	1.35	ppb
Phosphorus	31-2	10091.04	10152.22	9950.40	10064.56	1.03	ppb
Potassium	39-2	26051.90	26282.82	26202.60	26179.10	0.45	ppb
Rhodium	103-1				93		%
Rhodium	103-2				98		%
Scandium	45-1				99		%
Scandium	45-2				94		%
Selenium	82-1	500.82	506.35	524.10	510.42	2.38	ppb
Selenium	77-2	509.89	525.29	471.86	502.35	5.47	ppb
Selenium	78-2	509.02	518.53	523.94	517.16	1.46	ppb
Silicon	28-1	585.66	576.92	597.91	586.83	1.80	ppb
Silver	107-1	522.81	525.30	524.95	524.35	0.26	ppb
Silver	109-1	516.00	507.57	505.50	509.69	1.09	ppb
Sodium	23-2	51610.73	52410.68	53158.80	52393.40	1.48	ppb
Strontium	86-1	12686.74	12871.30	13083.04	12880.36	1.54	ppb
Strontium	88-1	12471.60	12532.25	13075.14	12693.00	2.62	ppb
Sulfur	34-1	8420.12	8375.48	8967.49	8587.70	3.84	ppb
Terbium	159-1				102		%
Terbium	159-2				103		%
Thallium	203-1	446.79	444.42	452.52	447.91	0.93	ppb
Thallium	205-1	501.09	497.37	511.73	503.40	1.48	ppb
Tin	118-1	494.19	503.31	504.97	500.82	1.16	ppb
Titanium	47-1	5833.89	5642.59	5778.10	5751.53	1.71	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-3	Instrumnet Name :	P7
Client Sample ID :	DOC-3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:11:47	DataFile Name :	069SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	500.99	500.89	514.57	505.48	1.56	ppb
Vanadium	51-2	500.16	514.38	505.35	506.63	1.42	ppb
Yttrium	89-1				98		%
Yttrium	89-2				96		%
Zinc	66-2	5069.01	5094.92	5057.50	5073.81	0.38	ppb
Zirconium	90-1	513.52	523.79	536.33	524.55	2.18	ppb
Zirconium	91-1	502.75	504.89	522.22	509.95	2.09	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-4	Instrumnet Name :	P7
Client Sample ID :	DOC-4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:14:44	DataFile Name :	070LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10490.67	10650.58	10491.37	10544.20	0.87	ppb
Antimony	121-1	500.70	497.54	507.72	501.99	1.04	ppb
Arsenic	75-2	512.59	519.22	513.48	515.10	0.70	ppb
Barium	135-1	2392.64	2569.73	2668.59	2543.65	5.50	ppb
Barium	137-1	2562.32	2545.26	2642.85	2583.48	2.02	ppb
Beryllium	9-1	504.09	520.63	522.81	515.84	1.98	ppb
Bismuth	209-1				106		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	508.63	518.48	530.54	519.22	2.11	ppb
Cadmium	106-1	503.24	501.89	521.16	508.76	2.11	ppb
Cadmium	111-1	518.70	505.97	512.70	512.46	1.24	ppb
Calcium	43-1	55869.30	57974.80	56846.05	56896.71	1.85	ppb
Calcium	44-1	49619.29	52463.85	51482.73	51188.62	2.82	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	515.40	516.65	504.06	512.03	1.35	ppb
Cobalt	59-2	519.78	523.65	510.42	517.95	1.31	ppb
Copper	63-2	5189.73	5342.15	5225.34	5252.40	1.52	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				104		%
Indium	115-1				98		%
Indium	115-2				96		%
Iron	56-2	27489.09	27562.60	27666.42	27572.70	0.32	ppb
Iron	57-2	28080.98	28510.29	27995.13	28195.47	0.98	ppb
Iron	54-2	28697.79	29141.55	28411.68	28750.34	1.28	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-4	Instrumnet Name :	P7
Client Sample ID :	DOC-4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:14:44	DataFile Name :	070LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2535.56	2582.62	2453.23	2523.80	2.59	ppb
Lead	207-1	2444.96	2513.00	2411.04	2456.33	2.11	ppb
Lead	208-1	2467.26	2537.75	2414.62	2473.21	2.50	ppb
Lithium	6-1				107		%
Magnesium	24-2	51929.35	53802.31	51455.82	52395.83	2.37	ppb
Manganese	55-2	5296.47	5189.41	5052.08	5179.32	2.37	ppb
Molybdenum	94-1	5439.23	5780.83	5717.54	5645.87	3.22	ppb
Molybdenum	95-1	5439.64	5836.22	5623.10	5632.99	3.52	ppb
Molybdenum	96-1	5554.96	5755.88	5661.35	5657.39	1.78	ppb
Molybdenum	97-1	5420.32	5646.48	5690.83	5585.88	2.60	ppb
Molybdenum	98-1	5277.52	5760.89	5662.19	5566.87	4.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	513.95	513.79	509.16	512.30	0.53	ppb
Phosphorus	31-2	9885.30	10338.24	10011.15	10078.23	2.32	ppb
Potassium	39-2	25987.79	26427.47	26179.95	26198.40	0.84	ppb
Rhodium	103-1				93		%
Rhodium	103-2				99		%
Scandium	45-1				100		%
Scandium	45-2				94		%
Selenium	82-1	486.19	523.71	506.88	505.60	3.72	ppb
Selenium	77-2	535.99	515.54	516.29	522.61	2.22	ppb
Selenium	78-2	516.60	555.50	488.96	520.35	6.42	ppb
Silicon	28-1	586.84	589.85	576.09	584.26	1.24	ppb
Silver	107-1	539.58	521.09	546.53	535.73	2.45	ppb
Silver	109-1	509.18	499.27	512.45	506.97	1.35	ppb
Sodium	23-2	54095.72	53227.56	51608.11	52977.13	2.38	ppb
Strontium	86-1	12668.73	12934.07	12982.56	12861.78	1.31	ppb
Strontium	88-1	12616.78	12865.04	12791.14	12757.65	1.00	ppb
Sulfur	34-1	8220.63	8826.78	8460.00	8502.47	3.59	ppb
Terbium	159-1				102		%
Terbium	159-2				104		%
Thallium	203-1	451.40	451.70	446.26	449.78	0.68	ppb
Thallium	205-1	487.90	512.66	492.38	497.65	2.65	ppb
Tin	118-1	501.86	496.48	510.25	502.87	1.38	ppb
Titanium	47-1	5610.42	5783.21	5752.77	5715.46	1.61	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-4	Instrumnet Name :	P7
Client Sample ID :	DOC-4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:14:44	DataFile Name :	070LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	495.14	493.23	501.06	496.48	0.82	ppb
Vanadium	51-2	508.31	512.45	507.67	509.48	0.51	ppb
Yttrium	89-1				100		%
Yttrium	89-2				96		%
Zinc	66-2	5134.82	5180.09	5094.75	5136.55	0.83	ppb
Zirconium	90-1	495.96	527.94	528.54	517.48	3.60	ppb
Zirconium	91-1	483.89	511.16	504.30	499.78	2.84	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P7
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:17:45	DataFile Name :	071CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52842.41	52789.92	52714.83	52782.39	0.12	ppb
Antimony	121-1	509.63	506.53	506.62	507.59	0.35	ppb
Arsenic	75-2	510.44	512.07	513.83	512.11	0.33	ppb
Barium	135-1	2491.94	2485.43	2618.19	2531.85	2.96	ppb
Barium	137-1	2716.99	2622.38	2572.75	2637.37	2.78	ppb
Beryllium	9-1	526.42	527.78	529.07	527.76	0.25	ppb
Bismuth	209-1				103		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	508.97	508.58	501.05	506.20	0.88	ppb
Cadmium	106-1	501.64	518.19	499.82	506.55	2.00	ppb
Cadmium	111-1	503.87	506.45	504.36	504.89	0.27	ppb
Calcium	43-1	247109.45	265772.14	266283.80	259721.80	4.21	ppb
Calcium	44-1	246748.39	264165.08	262898.23	257937.23	3.76	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	513.12	508.42	509.94	510.49	0.47	ppb
Cobalt	59-2	510.15	505.97	502.02	506.05	0.80	ppb
Copper	63-2	5056.04	5110.20	4956.67	5040.97	1.54	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				106		%
Indium	115-1				95		%
Indium	115-2				93		%
Iron	56-2	133148.17	132285.89	133369.16	132934.41	0.43	ppb
Iron	57-2	134166.82	134435.63	134497.52	134366.66	0.13	ppb
Iron	54-2	134488.76	133241.55	133140.14	133623.48	0.56	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P7
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:17:45	DataFile Name :	071CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2494.29	2558.44	2585.40	2546.04	1.84	ppb
Lead	207-1	2494.57	2524.58	2528.91	2516.02	0.74	ppb
Lead	208-1	2512.22	2544.23	2568.02	2541.49	1.10	ppb
Lithium	6-1				107		%
Magnesium	24-2	264145.55	264491.63	263106.90	263914.69	0.27	ppb
Manganese	55-2	5141.95	5107.53	5121.59	5123.69	0.34	ppb
Molybdenum	94-1	5776.55	5671.10	5719.57	5722.41	0.92	ppb
Molybdenum	95-1	5614.42	5672.49	5712.54	5666.48	0.87	ppb
Molybdenum	96-1	5567.77	5916.31	5795.93	5760.00	3.07	ppb
Molybdenum	97-1	5611.65	5887.25	5822.39	5773.76	2.50	ppb
Molybdenum	98-1	5704.80	5692.88	5593.26	5663.64	1.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	501.30	491.23	487.61	493.38	1.44	ppb
Phosphorus	31-2	10094.78	10251.65	10202.21	10182.88	0.79	ppb
Potassium	39-2	131563.74	132651.28	132304.01	132173.01	0.42	ppb
Rhodium	103-1				90		%
Rhodium	103-2				93		%
Scandium	45-1				99		%
Scandium	45-2				92		%
Selenium	82-1	495.00	497.28	502.16	498.15	0.73	ppb
Selenium	77-2	507.75	487.14	492.84	495.91	2.15	ppb
Selenium	78-2	500.94	503.99	513.03	505.99	1.24	ppb
Silicon	28-1	590.52	606.26	609.12	601.96	1.66	ppb
Silver	107-1	518.77	523.18	494.13	512.03	3.06	ppb
Silver	109-1	502.01	496.65	495.22	497.96	0.72	ppb
Sodium	23-2	264667.99	265211.59	260621.23	263500.27	0.95	ppb
Strontium	86-1	12782.67	13141.97	13182.26	13035.63	1.69	ppb
Strontium	88-1	12681.09	12720.77	12847.63	12749.83	0.68	ppb
Sulfur	34-1	8597.84	9808.83	9613.92	9340.20	6.96	ppb
Terbium	159-1				99		%
Terbium	159-2				103		%
Thallium	203-1	458.42	454.14	460.01	457.52	0.66	ppb
Thallium	205-1	508.07	525.64	525.57	519.76	1.95	ppb
Tin	118-1	511.31	513.05	502.92	509.09	1.06	ppb
Titanium	47-1	5699.99	5847.85	5884.39	5810.74	1.68	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P7
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:17:45	DataFile Name :	071CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	524.67	514.34	524.03	521.01	1.11	ppb
Vanadium	51-2	515.63	513.12	517.53	515.43	0.43	ppb
Yttrium	89-1				97		%
Yttrium	89-2				94		%
Zinc	66-2	4944.52	4927.01	4921.57	4931.03	0.24	ppb
Zirconium	90-1	532.94	518.42	519.49	523.62	1.55	ppb
Zirconium	91-1	507.37	515.81	507.12	510.10	0.97	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P7
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:24:40	DataFile Name :	072CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.16	1.13	1.63	1.31	21.52	ppb
Antimony	121-1	0.21	0.23	0.27	0.24	12.84	ppb
Arsenic	75-2	0.01	0.01	-0.01	0.00	532.50	ppb
Barium	135-1	0.08	0.06	0.07	0.07	14.40	ppb
Barium	137-1	0.07	0.06	0.06	0.06	10.33	ppb
Beryllium	9-1	0.15	0.17	0.11	0.14	20.79	ppb
Bismuth	209-1				103		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	-0.09	-0.09	-0.09	-0.09		ppb
Cadmium	106-1	-10.81	-11.24	-11.41	-11.15		ppb
Cadmium	111-1	-0.07	-0.10	-0.11	-0.09		ppb
Calcium	43-1	-29.67	-33.31	-32.99	-31.99		ppb
Calcium	44-1	-71.72	-71.28	-69.22	-70.74		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.46	0.39	0.47	0.44	9.80	ppb
Cobalt	59-2	0.03	0.03	0.03	0.03	4.25	ppb
Copper	63-2	0.19	0.24	0.26	0.23	15.44	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				101		%
Indium	115-1				99		%
Indium	115-2				95		%
Iron	56-2	6.59	6.54	7.34	6.82	6.55	ppb
Iron	57-2	-2.81	2.45	3.52	1.06	320.81	ppb
Iron	54-2	6.28	6.52	6.96	6.59	5.26	ppb
Krypton	83-1						cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P7
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:24:40	DataFile Name :	072CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.24	0.27	0.28	0.26	7.11	ppb
Lead	207-1	0.29	0.23	0.20	0.24	19.32	ppb
Lead	208-1	0.26	0.26	0.24	0.25	3.82	ppb
Lithium	6-1				104		%
Magnesium	24-2	6.86	7.27	6.14	6.75	8.46	ppb
Manganese	55-2	0.28	0.16	0.12	0.19	43.67	ppb
Molybdenum	94-1	0.28	0.31	0.35	0.31	10.22	ppb
Molybdenum	95-1	0.30	0.25	0.25	0.27	10.95	ppb
Molybdenum	96-1	0.29	0.29	0.26	0.28	5.34	ppb
Molybdenum	97-1	0.29	0.21	0.27	0.26	16.19	ppb
Molybdenum	98-1	0.26	0.23	0.34	0.28	20.18	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.36	0.26	0.30	0.31	16.33	ppb
Phosphorus	31-2	-34.71	-22.31	-39.29	-32.10		ppb
Potassium	39-2	-21.77	-12.90	-14.50	-16.39		ppb
Rhodium	103-1				94		%
Rhodium	103-2				99		%
Scandium	45-1				99		%
Scandium	45-2				93		%
Selenium	82-1	0.41	0.15	-0.38	0.06	690.12	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.99	1.17	-1.14	-0.32		ppb
Silicon	28-1	-1.74	-1.30	-1.38	-1.48		ppb
Silver	107-1	0.02	0.02	0.04	0.03	33.02	ppb
Silver	109-1	0.01	0.01	0.02	0.02	36.75	ppb
Sodium	23-2	63.19	66.88	66.96	65.68	3.28	ppb
Strontium	86-1	0.38	0.29	0.41	0.36	17.23	ppb
Strontium	88-1	0.39	0.37	0.37	0.38	3.78	ppb
Sulfur	34-1	-1200.57	-673.91	-675.06	-849.84		ppb
Terbium	159-1				98		%
Terbium	159-2				100		%
Thallium	203-1	0.05	0.06	0.04	0.05	16.89	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	2.00	ppb
Tin	118-1	-0.04	-0.02	0.01	-0.02		ppb
Titanium	47-1	0.26	0.05	0.15	0.15	69.73	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P7
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:24:40	DataFile Name :	072CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.01	0.01	0.01	19.80	ppb
Vanadium	51-2	0.02	0.00	0.01	0.01	99.50	ppb
Yttrium	89-1				97		%
Yttrium	89-2				94		%
Zinc	66-2	0.30	0.41	0.42	0.38	17.68	ppb
Zirconium	90-1	0.01	0.02	0.02	0.02	37.60	ppb
Zirconium	91-1	0.00	0.04	0.03	0.02	98.53	ppb

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:16:37	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	63	83	53	67	22.91	cps
Antimony	121-1	13	20	50	28	70.32	cps
Arsenic	75-2	10	7	0	6	91.64	cps
Barium	135-1	10	27	23	20	44.10	cps
Barium	137-1	27	27	43	32	29.85	cps
Beryllium	9-1	7	17	20	14	48.02	cps
Bismuth	209-1	2264463	2359468	2397526	2340486	2.93	cps
Bismuth	209-2	1819217	1764669	1887102	1823663	3.36	cps
Bromine	81-1	4317	4354	4337	4336	0.42	cps
Bromine	81-2	37	23	33	31	22.31	cps
Cadmium	108-1	3	13	17	11	62.48	cps
Cadmium	106-1	1713	1653	1603	1657	3.32	cps
Cadmium	111-1	169	166	159	165	3.24	cps
Calcium	43-1	510	467	437	471	7.83	cps
Calcium	44-1	15625	15888	15048	15520	2.77	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	263	200	210	224	15.17	cps
Cobalt	59-2	67	50	50	56	17.32	cps
Copper	63-2	687	610	653	650	5.91	cps
Dysprosium	156-1	17	23	20	20	16.65	cps
Dysprosium	156-2	3	3	3	3	0.00	cps
Erbium	164-1	43	27	37	36	23.58	cps
Erbium	164-2	17	7	13	12	41.65	cps
Gadolinium	160-1	43	40	37	40	8.32	cps
Gadolinium	160-2	130	130	107	122	11.02	cps
Holmium	165-1	4108038	4013677	4095419	4072378	1.26	cps
Holmium	165-2	2492888	2539897	2593769	2542184	1.99	cps
Indium	115-1	3543767	3393554	3550655	3495992	2.54	cps
Indium	115-2	1046220	1039755	1055944	1047306	0.78	cps
Iron	56-2	4858	5088	4721	4889	3.79	cps
Iron	57-2	1650	1530	1703	1628	5.45	cps
Iron	54-2	960	1037	1080	1026	5.93	cps
Krypton	83-1	107	93	120	107	12.50	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:16:37	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	60	90	60	70	24.74	cps
Lead	207-1	53	50	67	57	15.57	cps
Lead	208-1	240	310	267	272	12.98	cps
Lithium	6-1	727062	748777	742002	739280	1.50	cps
Magnesium	24-2	260	217	220	232	10.38	cps
Manganese	55-2	247	233	280	253	9.49	cps
Molybdenum	94-1	93	93	73	87	13.32	cps
Molybdenum	95-1	20	17	27	21	24.12	cps
Molybdenum	96-1	30	30	47	36	27.07	cps
Molybdenum	97-1	30	13	13	19	50.96	cps
Molybdenum	98-1	37	47	27	37	27.27	cps
Neodymium	150-1	7	0	7	4	86.60	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	83	57	93	78	24.37	cps
Phosphorus	31-2	237	247	277	253	8.22	cps
Potassium	39-2	52276	53179	52972	52809	0.90	cps
Rhodium	103-1	3400818	3528405	3458523	3462582	1.85	cps
Rhodium	103-2	1807678	1903018	1826331	1845676	2.74	cps
Scandium	45-1	2030909	2062735	2049533	2047726	0.78	cps
Scandium	45-2	170536	170805	171728	171023	0.37	cps
Selenium	82-1	123	145	79	116	29.16	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	130	147	150	142	7.53	cps
Silicon	28-1	317179	319472	316512	317721	0.49	cps
Silver	107-1	30	47	33	37	24.06	cps
Silver	109-1	27	37	17	27	37.50	cps
Sodium	23-2	9583	9550	9663	9599	0.61	cps
Strontium	86-1	230	210	247	229	8.02	cps
Strontium	88-1	197	197	173	189	7.13	cps
Sulfur	34-1	167338	167790	168228	167785	0.27	cps
Terbium	159-1	4331366	4263656	4350518	4315180	1.06	cps
Terbium	159-2	2583753	2586119	2645698	2605190	1.35	cps
Thallium	203-1	10	10	20	13	43.30	cps
Thallium	205-1	23	33	30	29	17.63	cps
Tin	118-1	687	360	327	458	43.49	cps
Titanium	47-1	120	110	93	108	12.50	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:16:37	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	17	10	17	14	26.66	cps
Vanadium	51-2	7	0	0	2	173.21	cps
Yttrium	89-1	4586095	4589257	4502515	4559289	1.08	cps
Yttrium	89-2	1068551	1064438	1062838	1065276	0.28	cps
Zinc	66-2	287	293	253	278	7.71	cps
Zirconium	90-1	220	180	240	213	14.32	cps
Zirconium	91-1	33	33	40	36	10.83	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:19:59	DataFile Name :	005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1120	1093	1143	1119	2.24	cps
Antimony	121-1	5631	5798	5908	5779	2.41	cps
Arsenic	75-2	173	133	137	148	15.02	cps
Barium	135-1	5768	5651	5341	5587	3.95	cps
Barium	137-1	9850	9944	10027	9940	0.89	cps
Beryllium	9-1	510	447	510	489	7.48	cps
Bismuth	209-1	2357563	2345861	2356749	2353391	0.28	cps
Bismuth	209-2	1821474	1781833	1841487	1814931	1.67	cps
Bromine	81-1	4367	4291	4187	4282	2.11	cps
Bromine	81-2	30	37	47	38	22.21	cps
Cadmium	108-1	53	27	63	48	39.66	cps
Cadmium	106-1	1680	1723	1607	1670	3.53	cps
Cadmium	111-1	724	880	840	815	9.96	cps
Calcium	43-1	4244	4251	4341	4278	1.26	cps
Calcium	44-1	74130	75721	74515	74789	1.11	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2260	2277	2207	2248	1.63	cps
Cobalt	59-2	1900	1863	1643	1802	7.70	cps
Copper	63-2	2887	2800	2830	2839	1.55	cps
Dysprosium	156-1	13	27	17	19	36.75	cps
Dysprosium	156-2	3	10	3	6	69.34	cps
Erbium	164-1	33	37	30	33	10.01	cps
Erbium	164-2	10	13	43	22	82.62	cps
Gadolinium	160-1	83	50	23	52	57.57	cps
Gadolinium	160-2	127	123	150	133	10.89	cps
Holmium	165-1	4085773	4045188	3947299	4026087	1.77	cps
Holmium	165-2	2493650	2377442	2619294	2496795	4.84	cps
Indium	115-1	3511436	3503690	3404611	3473245	1.71	cps
Indium	115-2	1040105	1038576	1030890	1036524	0.48	cps
Iron	56-2	50254	50742	50525	50507	0.48	cps
Iron	57-2	2794	2750	3067	2870	5.98	cps
Iron	54-2	3614	3544	3570	3576	0.99	cps
Krypton	83-1	127	117	133	126	6.68	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:19:59	DataFile Name :	005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1463	1497	1503	1488	1.44	cps
Lead	207-1	1273	1210	1300	1261	3.67	cps
Lead	208-1	5811	5854	6054	5906	2.20	cps
Lithium	6-1	743538	737383	744892	741938	0.54	cps
Magnesium	24-2	52295	51937	51984	52072	0.37	cps
Manganese	55-2	1000	880	1000	960	7.22	cps
Molybdenum	94-1	5264	5321	5471	5352	2.00	cps
Molybdenum	95-1	6141	6305	6488	6311	2.75	cps
Molybdenum	96-1	6845	6855	7335	7012	4.00	cps
Molybdenum	97-1	3967	3884	4064	3972	2.27	cps
Molybdenum	98-1	10224	10044	10584	10284	2.68	cps
Neodymium	150-1	13	13	3	10	57.75	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	577	517	480	524	9.31	cps
Phosphorus	31-2	367	310	360	346	8.96	cps
Potassium	39-2	109339	110383	109500	109741	0.51	cps
Rhodium	103-1	3382430	3373991	3323988	3360136	0.94	cps
Rhodium	103-2	1873785	1896814	1812463	1861021	2.34	cps
Scandium	45-1	2009285	2047529	2057227	2038014	1.24	cps
Scandium	45-2	174234	170589	170279	171701	1.28	cps
Selenium	82-1	360	404	346	370	8.28	cps
Selenium	77-2	27	30	23	27	12.51	cps
Selenium	78-2	227	210	213	217	4.07	cps
Silicon	28-1	320647	321893	321829	321456	0.22	cps
Silver	107-1	3020	3140	3290	3150	4.29	cps
Silver	109-1	2940	2724	3000	2888	5.04	cps
Sodium	23-2	93287	91281	91087	91885	1.33	cps
Strontium	86-1	977	1153	1023	1051	8.71	cps
Strontium	88-1	7275	7259	7409	7314	1.12	cps
Sulfur	34-1	167668	166890	166950	167169	0.26	cps
Terbium	159-1	4194218	4188060	4199213	4193830	0.13	cps
Terbium	159-2	2635183	2541335	2663217	2613245	2.44	cps
Thallium	203-1	2010	1807	1823	1880	6.01	cps
Thallium	205-1	3997	4274	4264	4178	3.76	cps
Tin	118-1	10094	10451	10461	10335	2.02	cps
Titanium	47-1	1873	1967	1820	1887	3.93	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:19:59	DataFile Name :	005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5278	5301	5094	5224	2.17	cps
Vanadium	51-2	4577	4757	4674	4670	1.93	cps
Yttrium	89-1	4610042	4452989	4517186	4526739	1.74	cps
Yttrium	89-2	1049837	1029128	1045728	1041564	1.05	cps
Zinc	66-2	1157	1293	1240	1230	5.60	cps
Zirconium	90-1	4768	4504	4344	4539	4.71	cps
Zirconium	91-1	1000	1000	1113	1038	6.31	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:23:22	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	57467	57340	56955	57254	0.47	cps
Antimony	121-1	146172	146882	144842	145965	0.71	cps
Arsenic	75-2	8716	8319	8052	8362	3.99	cps
Barium	135-1	146099	149429	147738	147755	1.13	cps
Barium	137-1	254007	256878	255106	255330	0.57	cps
Beryllium	9-1	25865	26306	26576	26249	1.37	cps
Bismuth	209-1	2387071	2334188	2355898	2359052	1.13	cps
Bismuth	209-2	1796709	1805209	1825444	1809121	0.82	cps
Bromine	81-1	4144	4494	4451	4363	4.37	cps
Bromine	81-2	30	17	33	27	33.06	cps
Cadmium	108-1	2520	2650	2790	2654	5.09	cps
Cadmium	106-1	5308	5418	5401	5376	1.10	cps
Cadmium	111-1	32984	32954	32517	32818	0.80	cps
Calcium	43-1	40848	42112	41426	41462	1.53	cps
Calcium	44-1	640300	655630	651581	649170	1.22	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	54786	53548	53581	53972	1.31	cps
Cobalt	59-2	83990	83229	82770	83330	0.74	cps
Copper	63-2	579584	578037	573732	577118	0.53	cps
Dysprosium	156-1	40	47	37	41	12.39	cps
Dysprosium	156-2	10	33	7	17	87.16	cps
Erbium	164-1	23	33	37	31	22.31	cps
Erbium	164-2	17	27	23	22	22.91	cps
Gadolinium	160-1	57	37	43	46	22.36	cps
Gadolinium	160-2	113	150	123	129	14.71	cps
Holmium	165-1	4011999	4050792	4067530	4043440	0.70	cps
Holmium	165-2	2580673	2555395	2524742	2553603	1.10	cps
Indium	115-1	3494810	3458219	3548905	3500644	1.30	cps
Indium	115-2	1060003	1050250	1048555	1052936	0.59	cps
Iron	56-2	2242751	2207897	2171248	2207299	1.62	cps
Iron	57-2	61107	59835	60739	60560	1.08	cps
Iron	54-2	133675	131791	132000	132489	0.78	cps
Krypton	83-1	163	140	127	143	12.95	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:23:22	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	364340	370689	374459	369829	1.38	cps
Lead	207-1	324038	331026	330646	328570	1.20	cps
Lead	208-1	1480471	1489773	1493643	1487963	0.45	cps
Lithium	6-1	753040	769916	760361	761106	1.11	cps
Magnesium	24-2	541221	540558	539142	540307	0.20	cps
Manganese	55-2	374083	368838	375227	372716	0.91	cps
Molybdenum	94-1	499257	497551	504441	500416	0.72	cps
Molybdenum	95-1	723465	733630	728193	728429	0.70	cps
Molybdenum	96-1	780830	802912	795916	793219	1.42	cps
Molybdenum	97-1	447890	453710	451459	451020	0.65	cps
Molybdenum	98-1	1156315	1164642	1164419	1161792	0.41	cps
Neodymium	150-1	10	17	17	14	26.66	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	22447	21699	21773	21973	1.88	cps
Phosphorus	31-2	4261	4111	4071	4147	2.42	cps
Potassium	39-2	349222	346561	344536	346773	0.68	cps
Rhodium	103-1	3341937	3353376	3312531	3335948	0.63	cps
Rhodium	103-2	1849521	1887157	1869528	1868735	1.01	cps
Scandium	45-1	2053569	2065944	2049141	2056218	0.42	cps
Scandium	45-2	173070	173917	171608	172865	0.68	cps
Selenium	82-1	2826	2774	2709	2770	2.11	cps
Selenium	77-2	230	243	273	249	8.92	cps
Selenium	78-2	943	873	997	938	6.60	cps
Silicon	28-1	1544550	1586428	1587881	1572953	1.56	cps
Silver	107-1	164997	168358	165775	166377	1.06	cps
Silver	109-1	160110	159888	160855	160285	0.32	cps
Sodium	23-2	877269	864435	869528	870411	0.74	cps
Strontium	86-1	1035168	1042712	1048406	1042096	0.64	cps
Strontium	88-1	8771580	8725885	9045130	8847532	1.95	cps
Sulfur	34-1	181029	180850	179864	180581	0.35	cps
Terbium	159-1	4186163	4269195	4332267	4262542	1.72	cps
Terbium	159-2	2630695	2728843	2582739	2647426	2.81	cps
Thallium	203-1	91673	95580	95808	94354	2.46	cps
Thallium	205-1	218403	218530	220635	219189	0.57	cps
Tin	118-1	104258	105926	106000	105395	0.93	cps
Titanium	47-1	194794	197301	196004	196033	0.64	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:23:22	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	270131	270846	278597	273191	1.72	cps
Vanadium	51-2	46772	46809	46722	46768	0.09	cps
Yttrium	89-1	4719364	4686254	4601305	4668974	1.30	cps
Yttrium	89-2	1064465	1067885	1054133	1062161	0.67	cps
Zinc	66-2	98177	100613	99831	99540	1.25	cps
Zirconium	90-1	235312	240256	239482	238350	1.12	cps
Zirconium	91-1	51821	53510	53109	52814	1.67	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:26:40	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	140066	140668	139468	140067	0.43	cps
Antimony	121-1	363456	370813	370658	368309	1.14	cps
Arsenic	75-2	20841	21005	20691	20846	0.75	cps
Barium	135-1	372178	374338	375099	373871	0.41	cps
Barium	137-1	645565	641493	651430	646163	0.77	cps
Beryllium	9-1	66686	68487	67961	67711	1.37	cps
Bismuth	209-1	2339467	2521293	2417680	2426147	3.76	cps
Bismuth	209-2	1849564	1820923	1754826	1808437	2.69	cps
Bromine	81-1	4214	4091	4114	4140	1.58	cps
Bromine	81-2	17	37	27	27	37.50	cps
Cadmium	108-1	6308	6425	6512	6415	1.59	cps
Cadmium	106-1	10944	10657	10701	10767	1.44	cps
Cadmium	111-1	82669	82743	83028	82814	0.23	cps
Calcium	43-1	103376	103648	103269	103431	0.19	cps
Calcium	44-1	1506488	1480461	1464961	1483970	1.41	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	133327	133244	130412	132327	1.25	cps
Cobalt	59-2	207544	206749	204869	206387	0.67	cps
Copper	63-2	1413004	1419616	1413431	1415350	0.26	cps
Dysprosium	156-1	30	53	50	44	28.39	cps
Dysprosium	156-2	53	33	30	39	32.45	cps
Erbium	164-1	47	70	57	58	20.26	cps
Erbium	164-2	23	17	33	24	34.31	cps
Gadolinium	160-1	37	57	37	43	26.64	cps
Gadolinium	160-2	157	143	137	146	7.00	cps
Holmium	165-1	4048238	4304959	3987484	4113560	4.10	cps
Holmium	165-2	2637480	2538330	2447460	2541090	3.74	cps
Indium	115-1	3404973	3550395	3432859	3462742	2.23	cps
Indium	115-2	1053038	1050575	1030419	1044677	1.19	cps
Iron	56-2	5308355	5448967	5416628	5391317	1.37	cps
Iron	57-2	147328	147349	145907	146861	0.56	cps
Iron	54-2	325566	322930	324469	324322	0.41	cps
Krypton	83-1	140	177	130	149	16.50	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:26:40	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	920984	953251	941854	938696	1.74	cps
Lead	207-1	828461	846876	846604	840647	1.26	cps
Lead	208-1	3911513	4010167	4003976	3975219	1.39	cps
Lithium	6-1	799973	798075	807356	801801	0.61	cps
Magnesium	24-2	1253135	1215584	1231194	1233304	1.53	cps
Manganese	55-2	922862	917022	916029	918638	0.40	cps
Molybdenum	94-1	1259246	1247081	1253215	1253181	0.49	cps
Molybdenum	95-1	1824549	1749577	1835029	1803052	2.58	cps
Molybdenum	96-1	1919393	1916511	1982898	1939601	1.93	cps
Molybdenum	97-1	1125624	1141531	1123652	1130269	0.87	cps
Molybdenum	98-1	2826319	2924808	2885186	2878771	1.72	cps
Neodymium	150-1	30	27	33	30	11.10	cps
Neodymium	150-2	13	0	17	10	88.20	cps
Nickel	60-2	53592	53311	53779	53561	0.44	cps
Phosphorus	31-2	10070	9960	9730	9920	1.75	cps
Potassium	39-2	793184	778005	778384	783191	1.11	cps
Rhodium	103-1	3343094	3478770	3260896	3360920	3.27	cps
Rhodium	103-2	1862326	1853981	1855182	1857163	0.24	cps
Scandium	45-1	2071774	2079917	2051944	2067878	0.70	cps
Scandium	45-2	174000	169043	168719	170587	1.74	cps
Selenium	82-1	6466	6503	6730	6566	2.17	cps
Selenium	77-2	580	633	553	589	6.92	cps
Selenium	78-2	1937	1947	2000	1961	1.74	cps
Silicon	28-1	3305763	3448508	3415405	3389892	2.20	cps
Silver	107-1	424565	420258	415449	420091	1.09	cps
Silver	109-1	396719	404956	395512	399063	1.29	cps
Sodium	23-2	1968985	1999229	1969693	1979302	0.87	cps
Strontium	86-1	2551679	2614686	2537504	2567956	1.60	cps
Strontium	88-1	22296206	22019032	22321889	22212376	0.76	cps
Sulfur	34-1	196550	194646	196969	196055	0.63	cps
Terbium	159-1	4342745	4506611	4323949	4391102	2.29	cps
Terbium	159-2	2751544	2599638	2581872	2644351	3.53	cps
Thallium	203-1	239070	239877	240257	239735	0.25	cps
Thallium	205-1	565759	561715	564027	563834	0.36	cps
Tin	118-1	261608	266024	263823	263818	0.84	cps
Titanium	47-1	488298	492011	484901	488403	0.73	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:26:40	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	703357	723453	707494	711435	1.49	cps
Vanadium	51-2	120330	115647	116264	117413	2.17	cps
Yttrium	89-1	4588426	4592013	4619938	4600125	0.38	cps
Yttrium	89-2	1061090	1045798	1046370	1051086	0.82	cps
Zinc	66-2	244088	245874	244986	244983	0.36	cps
Zirconium	90-1	589251	589354	588323	588976	0.10	cps
Zirconium	91-1	131059	132590	130978	131543	0.69	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:29:54	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	277259	272689	274470	274806	0.84	cps
Antimony	121-1	748585	756251	752673	752503	0.51	cps
Arsenic	75-2	40906	40906	40448	40754	0.65	cps
Barium	135-1	770918	765246	766066	767410	0.40	cps
Barium	137-1	1304284	1314650	1317652	1312195	0.53	cps
Beryllium	9-1	141127	142924	142820	142290	0.71	cps
Bismuth	209-1	2453429	2442096	2495448	2463657	1.14	cps
Bismuth	209-2	1847765	1862327	1884323	1864805	0.99	cps
Bromine	81-1	4271	4234	3994	4166	3.61	cps
Bromine	81-2	17	37	27	27	37.50	cps
Cadmium	108-1	12559	12806	13193	12852	2.49	cps
Cadmium	106-1	20468	20164	20017	20216	1.14	cps
Cadmium	111-1	164989	167302	165987	166093	0.70	cps
Calcium	43-1	205020	207254	205497	205924	0.57	cps
Calcium	44-1	2935342	2909258	3008056	2950886	1.74	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	256588	254786	259150	256841	0.85	cps
Cobalt	59-2	402083	397365	399541	399663	0.59	cps
Copper	63-2	2794914	2771775	2795559	2787416	0.49	cps
Dysprosium	156-1	50	50	33	44	21.66	cps
Dysprosium	156-2	57	53	67	59	11.79	cps
Erbium	164-1	40	60	50	50	20.00	cps
Erbium	164-2	20	47	30	32	41.81	cps
Gadolinium	160-1	30	47	60	46	32.99	cps
Gadolinium	160-2	150	117	113	127	16.00	cps
Holmium	165-1	4303739	4337099	4283704	4308181	0.63	cps
Holmium	165-2	2624975	2593226	2615958	2611387	0.63	cps
Indium	115-1	3500512	3520215	3409800	3476842	1.69	cps
Indium	115-2	1031344	1022706	1029459	1027836	0.44	cps
Iron	56-2	10880377	10619577	10994079	10831344	1.77	cps
Iron	57-2	284007	284265	284194	284155	0.05	cps
Iron	54-2	632331	629060	633544	631645	0.37	cps
Krypton	83-1	127	137	147	137	7.32	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:29:54	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2078009	2086647	2127642	2097433	1.26	cps
Lead	207-1	1917188	1889632	1987695	1931505	2.62	cps
Lead	208-1	8366115	8473910	8776236	8538754	2.49	cps
Lithium	6-1	832031	845547	844679	840752	0.90	cps
Magnesium	24-2	2504716	2517911	2460966	2494531	1.19	cps
Manganese	55-2	1747519	1721306	1731350	1733392	0.76	cps
Molybdenum	94-1	2448145	2506550	2397832	2450843	2.22	cps
Molybdenum	95-1	3614192	3632319	3632417	3626309	0.29	cps
Molybdenum	96-1	3756182	4020891	4024107	3933727	3.91	cps
Molybdenum	97-1	2184606	2304918	2214666	2234730	2.80	cps
Molybdenum	98-1	5744685	5773396	5796255	5771445	0.45	cps
Neodymium	150-1	70	80	73	74	6.84	cps
Neodymium	150-2	20	17	30	22	31.22	cps
Nickel	60-2	105666	102662	104306	104211	1.44	cps
Phosphorus	31-2	18848	19042	19593	19161	2.02	cps
Potassium	39-2	1387404	1395993	1347088	1376828	1.90	cps
Rhodium	103-1	3393010	3399905	3293758	3362224	1.77	cps
Rhodium	103-2	1814106	1886857	1808704	1836556	2.38	cps
Scandium	45-1	2134514	2142376	2057199	2111363	2.23	cps
Scandium	45-2	166939	166970	166774	166894	0.06	cps
Selenium	82-1	13320	12995	13031	13115	1.36	cps
Selenium	77-2	887	1050	1010	982	8.67	cps
Selenium	78-2	3590	3844	3751	3728	3.44	cps
Silicon	28-1	6584821	6670639	6542626	6599362	0.99	cps
Silver	107-1	832237	855541	838847	842208	1.43	cps
Silver	109-1	780458	789405	784230	784697	0.57	cps
Sodium	23-2	3880936	3818909	3882047	3860631	0.94	cps
Strontium	86-1	5125987	5025572	5209040	5120200	1.79	cps
Strontium	88-1	44662024	43857051	45130768	44549948	1.45	cps
Sulfur	34-1	228361	224217	225026	225868	0.97	cps
Terbium	159-1	4417026	4381632	4441868	4413509	0.69	cps
Terbium	159-2	2689561	2660945	2639652	2663386	0.94	cps
Thallium	203-1	494209	498619	501156	497995	0.71	cps
Thallium	205-1	1155741	1162735	1188541	1169006	1.48	cps
Tin	118-1	525596	536184	528949	530243	1.02	cps
Titanium	47-1	976458	974092	991246	980599	0.95	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:29:54	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1477052	1483868	1515332	1492084	1.37	cps
Vanadium	51-2	229092	227373	230541	229002	0.69	cps
Yttrium	89-1	4693965	4501227	4593529	4596240	2.10	cps
Yttrium	89-2	1042233	1030136	1041367	1037912	0.65	cps
Zinc	66-2	483063	482210	480506	481927	0.27	cps
Zirconium	90-1	1184351	1184236	1185590	1184725	0.06	cps
Zirconium	91-1	265918	268237	264547	266234	0.70	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:32:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	537179	546419	538779	540792	0.91	cps
Antimony	121-1	1455859	1489934	1484094	1476629	1.23	cps
Arsenic	75-2	79290	81412	79719	80141	1.40	cps
Barium	135-1	1479984	1571372	1506113	1519156	3.10	cps
Barium	137-1	2595364	2707167	2705177	2669236	2.40	cps
Beryllium	9-1	279548	289086	288966	285867	1.91	cps
Bismuth	209-1	2496768	2568974	2511176	2525639	1.51	cps
Bismuth	209-2	1803099	1867043	1872904	1847682	2.10	cps
Bromine	81-1	3917	3904	3927	3916	0.30	cps
Bromine	81-2	20	30	17	22	31.22	cps
Cadmium	108-1	25299	25579	25730	25536	0.86	cps
Cadmium	106-1	37458	37421	37004	37295	0.68	cps
Cadmium	111-1	318853	326056	323771	322893	1.14	cps
Calcium	43-1	402617	406756	408025	405799	0.70	cps
Calcium	44-1	5740860	5682370	5851058	5758096	1.49	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	501296	498082	499858	499745	0.32	cps
Cobalt	59-2	766477	776915	763180	768857	0.93	cps
Copper	63-2	5492620	5316951	5334933	5381501	1.80	cps
Dysprosium	156-1	53	103	87	81	31.39	cps
Dysprosium	156-2	103	83	103	97	11.95	cps
Erbium	164-1	67	97	67	77	22.59	cps
Erbium	164-2	30	43	47	40	22.05	cps
Gadolinium	160-1	97	77	63	79	21.27	cps
Gadolinium	160-2	160	183	130	158	16.95	cps
Holmium	165-1	4277356	4271675	4244282	4264438	0.41	cps
Holmium	165-2	2618989	2651129	2567500	2612540	1.61	cps
Indium	115-1	3484309	3509121	3445802	3479744	0.92	cps
Indium	115-2	1011744	1015785	1019790	1015773	0.40	cps
Iron	56-2	20487604	21072673	20905608	20821962	1.45	cps
Iron	57-2	551306	557333	553647	554096	0.55	cps
Iron	54-2	1231058	1232106	1220547	1227904	0.52	cps
Krypton	83-1	120	130	130	127	4.56	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:32:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4208945	4320012	4388069	4305675	2.10	cps
Lead	207-1	3811085	3914808	3894617	3873503	1.42	cps
Lead	208-1	16842813	17919879	17645052	17469248	3.20	cps
Lithium	6-1	858121	867646	868145	864637	0.65	cps
Magnesium	24-2	4782069	4750187	4770475	4767577	0.34	cps
Manganese	55-2	3371757	3385563	3374760	3377360	0.21	cps
Molybdenum	94-1	4809622	4939120	4821865	4856869	1.47	cps
Molybdenum	95-1	7057321	7076120	7043717	7059053	0.23	cps
Molybdenum	96-1	7720008	7535258	7707584	7654283	1.35	cps
Molybdenum	97-1	4450442	4350493	4361538	4387491	1.25	cps
Molybdenum	98-1	11431999	11507169	11301727	11413632	0.91	cps
Neodymium	150-1	110	90	140	113	22.21	cps
Neodymium	150-2	50	27	70	49	44.36	cps
Nickel	60-2	201151	201720	201337	201403	0.14	cps
Phosphorus	31-2	36975	38405	37192	37524	2.05	cps
Potassium	39-2	2627906	2669531	2638070	2645169	0.82	cps
Rhodium	103-1	3379430	3276353	3202506	3286097	2.70	cps
Rhodium	103-2	1754525	1779237	1753399	1762387	0.83	cps
Scandium	45-1	2035155	2030839	2048973	2038322	0.46	cps
Scandium	45-2	160996	164874	160531	162134	1.47	cps
Selenium	82-1	25203	25660	25518	25460	0.92	cps
Selenium	77-2	1997	2210	2130	2112	5.10	cps
Selenium	78-2	7198	6835	7065	7033	2.61	cps
Silicon	28-1	12439862	12781775	12679572	12633736	1.39	cps
Silver	107-1	1644960	1612881	1621585	1626476	1.02	cps
Silver	109-1	1541549	1554949	1536921	1544473	0.61	cps
Sodium	23-2	7443521	7681396	7548918	7557945	1.58	cps
Strontium	86-1	10241171	10022274	9922698	10062047	1.62	cps
Strontium	88-1	86423459	87318475	86167789	86636574	0.70	cps
Sulfur	34-1	283842	287836	285703	285794	0.70	cps
Terbium	159-1	4435334	4427279	4526928	4463180	1.24	cps
Terbium	159-2	2626506	2618622	2697072	2647400	1.63	cps
Thallium	203-1	987102	1027174	1012196	1008824	2.01	cps
Thallium	205-1	2506104	2656654	2645538	2602766	3.22	cps
Tin	118-1	1034863	1055084	1058549	1049498	1.22	cps
Titanium	47-1	1824399	1791607	1846926	1820978	1.53	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:32:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3300665	3401836	3320710	3341070	1.60	cps
Vanadium	51-2	446340	449960	448183	448161	0.40	cps
Yttrium	89-1	4578922	4608803	4403317	4530347	2.45	cps
Yttrium	89-2	1015992	1033742	1041556	1030430	1.27	cps
Zinc	66-2	930286	931244	929969	930499	0.07	cps
Zirconium	90-1	2264565	2370505	2318435	2317835	2.29	cps
Zirconium	91-1	515843	524303	521830	520659	0.84	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:35:58	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1085849	1082808	1078290	1082315	0.35	cps
Antimony	121-1	3030869	3057665	3033255	3040596	0.49	cps
Arsenic	75-2	161599	160410	162247	161419	0.58	cps
Barium	135-1	3177428	3183711	3218479	3193206	0.69	cps
Barium	137-1	5446375	5442211	5442892	5443826	0.04	cps
Beryllium	9-1	556487	570803	571869	566387	1.52	cps
Bismuth	209-1	2547890	2533669	2435066	2505542	2.45	cps
Bismuth	209-2	1841767	1808399	1792205	1814124	1.39	cps
Bromine	81-1	4024	3871	4047	3981	2.41	cps
Bromine	81-2	13	23	17	18	28.64	cps
Cadmium	108-1	48876	50364	50150	49797	1.62	cps
Cadmium	106-1	72979	74242	73149	73457	0.93	cps
Cadmium	111-1	637086	649950	650678	645905	1.18	cps
Calcium	43-1	813473	831806	809881	818387	1.44	cps
Calcium	44-1	11884176	11987459	11656026	11842554	1.43	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	998805	997303	997757	997955	0.08	cps
Cobalt	59-2	1571756	1509312	1476672	1519246	3.18	cps
Copper	63-2	10522057	10359212	10537094	10472788	0.94	cps
Dysprosium	156-1	163	203	147	171	17.02	cps
Dysprosium	156-2	217	173	183	191	11.87	cps
Erbium	164-1	157	163	150	157	4.26	cps
Erbium	164-2	73	87	73	78	9.90	cps
Gadolinium	160-1	213	197	170	193	11.31	cps
Gadolinium	160-2	203	227	197	209	7.54	cps
Holmium	165-1	4424770	4291901	4401590	4372753	1.62	cps
Holmium	165-2	2640530	2608071	2626672	2625091	0.62	cps
Indium	115-1	3451931	3447144	3405861	3434979	0.74	cps
Indium	115-2	1010189	1004206	992236	1002210	0.91	cps
Iron	56-2	41828315	41408144	40526428	41254296	1.61	cps
Iron	57-2	1119723	1097870	1099604	1105732	1.10	cps
Iron	54-2	2279683	2273598	2319739	2291007	1.09	cps
Krypton	83-1	107	100	150	119	22.83	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:35:58	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8583729	8988662	8500382	8690924	3.01	cps
Lead	207-1	7824788	8034857	8059602	7973082	1.62	cps
Lead	208-1	34878737	35830784	35415062	35374861	1.35	cps
Lithium	6-1	859069	860648	863840	861186	0.28	cps
Magnesium	24-2	9566012	9778163	9502782	9615653	1.50	cps
Manganese	55-2	6767380	6808797	6749024	6775067	0.45	cps
Molybdenum	94-1	9590872	9883807	9613807	9696162	1.68	cps
Molybdenum	95-1	13986784	14709829	14198444	14298352	2.60	cps
Molybdenum	96-1	15285628	15960259	15530758	15592215	2.19	cps
Molybdenum	97-1	8746103	9006068	8763827	8838666	1.64	cps
Molybdenum	98-1	23350808	23300437	22556060	23069102	1.93	cps
Neodymium	150-1	243	267	250	253	4.74	cps
Neodymium	150-2	130	103	100	111	14.80	cps
Nickel	60-2	399491	393401	395735	396209	0.78	cps
Phosphorus	31-2	73425	73110	72869	73135	0.38	cps
Potassium	39-2	5094699	5192498	5095050	5127416	1.10	cps
Rhodium	103-1	3251001	3312601	3200383	3254662	1.73	cps
Rhodium	103-2	1786075	1742111	1757372	1761852	1.27	cps
Scandium	45-1	2091043	2175954	2041125	2102707	3.24	cps
Scandium	45-2	162367	161508	162505	162127	0.33	cps
Selenium	82-1	50242	51355	50581	50726	1.12	cps
Selenium	77-2	4321	4027	4144	4164	3.55	cps
Selenium	78-2	13877	13970	13853	13900	0.44	cps
Silicon	28-1	24625577	24867354	24313007	24601979	1.13	cps
Silver	107-1	3250778	3262017	3258258	3257018	0.18	cps
Silver	109-1	3039812	3142875	3090743	3091143	1.67	cps
Sodium	23-2	15406394	15592096	15191633	15396708	1.30	cps
Strontium	86-1	20111581	20581583	19786011	20159725	1.98	cps
Strontium	88-1	175654424	180612217	178789624	178352088	1.41	cps
Sulfur	34-1	416324	419707	415555	417195	0.53	cps
Terbium	159-1	4602393	4641674	4408539	4550869	2.74	cps
Terbium	159-2	2681431	2686256	2740466	2702718	1.21	cps
Thallium	203-1	2237984	2255417	2275916	2256439	0.84	cps
Thallium	205-1	5167314	5333404	5224249	5241656	1.61	cps
Tin	118-1	2120735	2139746	2115267	2125249	0.60	cps
Titanium	47-1	3658603	3744645	3650413	3684554	1.42	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:35:58	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	6819173	6934016	6934592	6895927	0.96	cps
Vanadium	51-2	902747	890776	899748	897757	0.69	cps
Yttrium	89-1	4621340	4595566	4534890	4583932	0.97	cps
Yttrium	89-2	1045493	1027576	1029404	1034158	0.95	cps
Zinc	66-2	1882096	1848413	1837018	1855842	1.26	cps
Zirconium	90-1	4535799	4569001	4564084	4556295	0.39	cps
Zirconium	91-1	1030232	1067014	1050278	1049175	1.76	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:38:51	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4875680	4947692	4984256	4935876	1.12	cps
Antimony	121-1	2817	2840	2767	2808	1.33	cps
Arsenic	75-2	110	130	107	116	10.92	cps
Barium	135-1	1717	1670	1320	1569	13.82	cps
Barium	137-1	2950	2454	2494	2632	10.48	cps
Beryllium	9-1	260	210	163	211	22.90	cps
Bismuth	209-1	2274917	2338901	2347592	2320470	1.71	cps
Bismuth	209-2	1568662	1585849	1733705	1629405	5.57	cps
Bromine	81-1	4077	4097	4214	4130	1.79	cps
Bromine	81-2	33	43	57	44	26.35	cps
Cadmium	108-1	40	40	30	37	15.75	cps
Cadmium	106-1	1333	1320	1380	1345	2.34	cps
Cadmium	111-1	362	307	320	330	8.66	cps
Calcium	43-1	3338705	3354361	3288604	3327223	1.03	cps
Calcium	44-1	54090686	54093439	52965773	53716633	1.21	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4404	4687	4267	4453	4.81	cps
Cobalt	59-2	3824	3974	3741	3846	3.08	cps
Copper	63-2	3270	3180	3214	3221	1.41	cps
Dysprosium	156-1	130	117	127	124	5.57	cps
Dysprosium	156-2	70	77	77	74	5.17	cps
Erbium	164-1	100	103	117	107	8.27	cps
Erbium	164-2	50	77	80	69	23.87	cps
Gadolinium	160-1	63	130	123	106	34.79	cps
Gadolinium	160-2	160	160	180	167	6.93	cps
Holmium	165-1	4160061	4116979	4112728	4129923	0.63	cps
Holmium	165-2	2564298	2642036	2576079	2594137	1.62	cps
Indium	115-1	3331334	3258559	3234626	3274840	1.54	cps
Indium	115-2	968283	973764	962769	968272	0.57	cps
Iron	56-2	194440617	193612890	194023984	194025830	0.21	cps
Iron	57-2	4873636	4817268	4824659	4838521	0.63	cps
Iron	54-2	10435814	10683253	10493075	10537381	1.23	cps
Krypton	83-1	167	143	123	144	15.01	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:38:51	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3460	3237	2964	3220	7.73	cps
Lead	207-1	3120	2560	2384	2688	14.31	cps
Lead	208-1	13606	12552	11675	12611	7.66	cps
Lithium	6-1	851534	868647	847277	855819	1.32	cps
Magnesium	24-2	45620309	44958429	45534413	45371050	0.79	cps
Manganese	55-2	3851	4087	3921	3953	3.08	cps
Molybdenum	94-1	4314	3881	3537	3911	9.96	cps
Molybdenum	95-1	5268	4527	4024	4606	13.58	cps
Molybdenum	96-1	7645	6608	6145	6799	11.30	cps
Molybdenum	97-1	3124	2840	2470	2811	11.66	cps
Molybdenum	98-1	8372	7085	6271	7243	14.63	cps
Neodymium	150-1	73	47	43	54	30.20	cps
Neodymium	150-2	13	20	37	23	51.52	cps
Nickel	60-2	1690	1997	1927	1871	8.59	cps
Phosphorus	31-2	203	270	270	248	15.53	cps
Potassium	39-2	24076948	24244999	24098259	24140069	0.38	cps
Rhodium	103-1	2962491	2929840	2969000	2953777	0.71	cps
Rhodium	103-2	1616344	1635037	1612923	1621435	0.73	cps
Scandium	45-1	1965660	1922819	1941664	1943381	1.10	cps
Scandium	45-2	157684	157817	156694	157398	0.39	cps
Selenium	82-1	91	120	177	129	33.63	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	183	163	123	157	19.50	cps
Silicon	28-1	471147	505665	502883	493231	3.89	cps
Silver	107-1	810	703	740	751	7.21	cps
Silver	109-1	747	653	527	642	17.19	cps
Sodium	23-2	70898959	70985332	71478952	71121081	0.44	cps
Strontium	86-1	6458	5781	4838	5692	14.30	cps
Strontium	88-1	57298	47781	41338	48806	16.45	cps
Sulfur	34-1	155976	158532	157785	157431	0.83	cps
Terbium	159-1	4404258	4381331	4415299	4400296	0.39	cps
Terbium	159-2	2609440	2673169	2592277	2624962	1.62	cps
Thallium	203-1	750	593	390	578	31.24	cps
Thallium	205-1	1717	1330	1093	1380	22.80	cps
Tin	118-1	2080	2017	2087	2061	1.87	cps
Titanium	47-1	1297	1040	907	1081	18.34	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:38:51	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1447	1200	810	1152	27.86	cps
Vanadium	51-2	413	387	327	376	11.82	cps
Yttrium	89-1	4407800	4277645	4194700	4293382	2.50	cps
Yttrium	89-2	981121	993576	994460	989719	0.75	cps
Zinc	66-2	1000	1050	937	996	5.70	cps
Zirconium	90-1	3374	3060	2790	3075	9.50	cps
Zirconium	91-1	707	737	613	686	9.38	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:51:16	DataFile Name :	012ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	27107	26803	27201	27037	0.77	cps
Antimony	121-1	547026	552289	543418	547578	0.81	cps
Arsenic	75-2	30257	30916	30271	30481	1.23	cps
Barium	135-1	56117	56515	56428	56353	0.37	cps
Barium	137-1	96297	98414	98539	97750	1.29	cps
Beryllium	9-1	53974	54161	54214	54116	0.23	cps
Bismuth	209-1	2298380	2295980	2392280	2328880	2.36	cps
Bismuth	209-2	1776231	1749839	1828910	1784993	2.26	cps
Bromine	81-1	3897	3640	3857	3798	3.64	cps
Bromine	81-2	37	23	27	29	24.03	cps
Cadmium	108-1	6812	6825	7002	6879	1.54	cps
Cadmium	106-1	11885	11601	11895	11794	1.41	cps
Cadmium	111-1	61375	62275	60698	61449	1.29	cps
Calcium	43-1	15184	15054	16155	15465	3.89	cps
Calcium	44-1	243129	246306	247098	245511	0.86	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	96711	95279	95587	95859	0.79	cps
Cobalt	59-2	152655	149560	148581	150266	1.42	cps
Copper	63-2	105150	104593	103310	104351	0.90	cps
Dysprosium	156-1	10	23	17	17	39.99	cps
Dysprosium	156-2	7	3	3	4	43.40	cps
Erbium	164-1	20	50	37	36	42.27	cps
Erbium	164-2	10	17	23	17	39.99	cps
Gadolinium	160-1	50	33	13	32	56.98	cps
Gadolinium	160-2	117	133	120	123	7.15	cps
Holmium	165-1	4026258	3937996	3970861	3978372	1.12	cps
Holmium	165-2	2479086	2439683	2491333	2470034	1.09	cps
Indium	115-1	3400232	3413489	3396168	3403296	0.27	cps
Indium	115-2	998157	1001331	993996	997828	0.37	cps
Iron	56-2	1627310	1572536	1561803	1587216	2.21	cps
Iron	57-2	43486	43259	42985	43243	0.58	cps
Iron	54-2	96796	96772	95534	96367	0.75	cps
Krypton	83-1	133	97	133	121	17.48	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:51:16	DataFile Name :	012ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	314023	319463	316666	316717	0.86	cps
Lead	207-1	264165	272603	274402	270390	2.02	cps
Lead	208-1	1227695	1247552	1253172	1242806	1.08	cps
Lithium	6-1	797393	808628	829683	811902	2.02	cps
Magnesium	24-2	111494	109983	110973	110817	0.69	cps
Manganese	55-2	68565	68679	68157	68467	0.40	cps
Molybdenum	94-1	4309242	4357349	4479763	4382118	2.01	cps
Molybdenum	95-1	6183832	6137006	6142234	6154357	0.42	cps
Molybdenum	96-1	6769064	6610622	6756000	6711895	1.31	cps
Molybdenum	97-1	3746728	3800067	3818678	3788491	0.99	cps
Molybdenum	98-1	9893728	9882389	9979612	9918576	0.54	cps
Neodymium	150-1	3	0	7	3	100.05	cps
Neodymium	150-2	10	0	0	3	173.21	cps
Nickel	60-2	43266	42671	42089	42675	1.38	cps
Phosphorus	31-2	240	243	230	238	2.92	cps
Potassium	39-2	250546	251455	244504	248835	1.52	cps
Rhodium	103-1	3227683	3220297	3308724	3252235	1.51	cps
Rhodium	103-2	1777357	1761133	1804817	1781102	1.24	cps
Scandium	45-1	2000050	2040018	1997696	2012588	1.18	cps
Scandium	45-2	158415	161763	159844	160008	1.05	cps
Selenium	82-1	9696	9668	9717	9694	0.25	cps
Selenium	77-2	773	853	780	802	5.53	cps
Selenium	78-2	2717	2864	2967	2849	4.41	cps
Silicon	28-1	1060027	1074036	1096849	1076971	1.73	cps
Silver	107-1	149624	152569	152232	151475	1.06	cps
Silver	109-1	141554	144291	142914	142919	0.96	cps
Sodium	23-2	323592	316519	317389	319166	1.21	cps
Strontium	86-1	409830	419567	422385	417261	1.58	cps
Strontium	88-1	3547980	3534308	3589011	3557100	0.80	cps
Sulfur	34-1	168952	165856	163895	166234	1.53	cps
Terbium	159-1	4169996	4226477	4128480	4174984	1.18	cps
Terbium	159-2	2587902	2544997	2554160	2562353	0.88	cps
Thallium	203-1	410859	415861	412898	413206	0.61	cps
Thallium	205-1	952739	971420	987204	970454	1.78	cps
Tin	118-1	1052324	1072244	1070979	1065182	1.05	cps
Titanium	47-1	1640732	1619898	1640103	1633578	0.73	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 13:51:16	DataFile Name :	012ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3422642	3416001	3429591	3422744	0.20	cps
Vanadium	51-2	82930	82651	81877	82486	0.66	cps
Yttrium	89-1	4380967	4350808	4531842	4421206	2.19	cps
Yttrium	89-2	1004451	1000841	1010846	1005379	0.50	cps
Zinc	66-2	36047	36769	36324	36380	1.00	cps
Zirconium	90-1	2203744	2252447	2313645	2256612	2.44	cps
Zirconium	91-1	509327	507002	515453	510594	0.86	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:06:05	DataFile Name :	014LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1043	1070	1147	1087	4.94	cps
Antimony	121-1	5728	5835	5614	5726	1.92	cps
Arsenic	75-2	170	157	187	171	8.78	cps
Barium	135-1	5564	5751	5938	5751	3.25	cps
Barium	137-1	9884	9864	10084	9944	1.22	cps
Beryllium	9-1	473	603	553	543	12.07	cps
Bismuth	209-1	2343480	2377251	2365838	2362190	0.73	cps
Bismuth	209-2	1729009	1539153	1767072	1678411	7.27	cps
Bromine	81-1	3834	3914	3851	3866	1.09	cps
Bromine	81-2	33	17	13	21	50.75	cps
Cadmium	108-1	57	57	37	50	23.09	cps
Cadmium	106-1	1390	1327	1410	1376	3.16	cps
Cadmium	111-1	766	750	839	785	6.04	cps
Calcium	43-1	3971	4071	3991	4011	1.32	cps
Calcium	44-1	69756	70503	70610	70290	0.66	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2144	2010	1947	2033	4.94	cps
Cobalt	59-2	1697	1673	1827	1732	4.77	cps
Copper	63-2	2664	2814	2807	2761	3.07	cps
Dysprosium	156-1	7	17	27	17	59.99	cps
Dysprosium	156-2	13	10	7	10	33.30	cps
Erbium	164-1	40	23	37	33	26.47	cps
Erbium	164-2	17	17	27	20	28.86	cps
Gadolinium	160-1	23	40	23	29	33.32	cps
Gadolinium	160-2	107	130	90	109	18.45	cps
Holmium	165-1	3969660	3941942	4021759	3977787	1.02	cps
Holmium	165-2	2516316	2371650	2400890	2429619	3.15	cps
Indium	115-1	3339049	3382215	3429438	3383567	1.34	cps
Indium	115-2	1003673	990501	988603	994259	0.83	cps
Iron	56-2	49939	48749	47990	48893	2.01	cps
Iron	57-2	2487	2557	2490	2511	1.57	cps
Iron	54-2	3337	3324	3184	3281	2.59	cps
Krypton	83-1	120	160	127	136	15.81	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:06:05	DataFile Name :	014LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1533	1450	1640	1541	6.18	cps
Lead	207-1	1293	1503	1397	1398	7.51	cps
Lead	208-1	6127	6224	6287	6213	1.30	cps
Lithium	6-1	785725	780891	782683	783100	0.31	cps
Magnesium	24-2	51081	49683	50757	50507	1.45	cps
Manganese	55-2	890	917	857	888	3.39	cps
Molybdenum	94-1	5288	5138	5164	5197	1.54	cps
Molybdenum	95-1	6278	6528	6378	6395	1.97	cps
Molybdenum	96-1	6918	7108	7018	7015	1.36	cps
Molybdenum	97-1	3967	3854	3804	3875	2.16	cps
Molybdenum	98-1	9940	10334	10297	10190	2.13	cps
Neodymium	150-1	7	7	0	4	86.60	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	413	433	470	439	6.55	cps
Phosphorus	31-2	353	347	367	356	2.86	cps
Potassium	39-2	102019	101703	100969	101564	0.53	cps
Rhodium	103-1	3284564	3229210	3306987	3273587	1.22	cps
Rhodium	103-2	1842627	1811149	1791055	1814944	1.43	cps
Scandium	45-1	1974082	1937772	1997752	1969869	1.53	cps
Scandium	45-2	162710	161198	159518	161142	0.99	cps
Selenium	82-1	337	304	317	319	5.16	cps
Selenium	77-2	23	37	23	28	27.73	cps
Selenium	78-2	213	227	233	224	4.54	cps
Silicon	28-1	295828	296621	295961	296137	0.14	cps
Silver	107-1	2960	2960	3104	3008	2.75	cps
Silver	109-1	2904	2844	2807	2851	1.71	cps
Sodium	23-2	91091	90028	91356	90825	0.77	cps
Strontium	86-1	1023	970	1030	1008	3.26	cps
Strontium	88-1	6948	7072	7205	7075	1.82	cps
Sulfur	34-1	170162	169111	172605	170626	1.05	cps
Terbium	159-1	4236035	4199720	4264651	4233469	0.77	cps
Terbium	159-2	2548058	2520136	2499913	2522702	0.96	cps
Thallium	203-1	1827	1733	1847	1802	3.36	cps
Thallium	205-1	4424	4257	4607	4430	3.95	cps
Tin	118-1	10137	10387	10387	10304	1.40	cps
Titanium	47-1	1853	1907	1730	1830	4.95	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P7
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:06:05	DataFile Name :	014LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5435	5304	5438	5392	1.41	cps
Vanadium	51-2	4641	4624	4327	4531	3.89	cps
Yttrium	89-1	4408664	4331588	4427721	4389324	1.16	cps
Yttrium	89-2	1019114	1001437	998367	1006306	1.11	cps
Zinc	66-2	1230	1163	1267	1220	4.29	cps
Zirconium	90-1	4441	4607	4661	4570	2.51	cps
Zirconium	91-1	1110	970	1030	1037	6.78	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:10:30	DataFile Name :	015CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	80	50	67	66	22.93	cps
Antimony	121-1	53	110	90	84	34.04	cps
Arsenic	75-2	7	0	3	3	100.05	cps
Barium	135-1	10	20	10	13	43.30	cps
Barium	137-1	23	30	57	37	48.11	cps
Beryllium	9-1	33	17	17	22	43.28	cps
Bismuth	209-1	2275644	2311004	2269212	2285287	0.98	cps
Bismuth	209-2	1739807	1756113	1558907	1684943	6.50	cps
Bromine	81-1	3841	3744	3627	3737	2.86	cps
Bromine	81-2	23	23	23	23	0.00	cps
Cadmium	108-1	3	3	3	3	0.00	cps
Cadmium	106-1	1187	1163	1203	1185	1.70	cps
Cadmium	111-1	126	117	121	122	3.71	cps
Calcium	43-1	267	300	313	293	8.20	cps
Calcium	44-1	11671	11331	11528	11510	1.48	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	190	220	207	206	7.31	cps
Cobalt	59-2	57	80	50	62	25.32	cps
Copper	63-2	637	550	590	592	7.33	cps
Dysprosium	156-1	13	33	20	22	45.83	cps
Dysprosium	156-2	3	3	0	2	86.60	cps
Erbium	164-1	27	23	43	31	34.44	cps
Erbium	164-2	17	10	10	12	31.50	cps
Gadolinium	160-1	17	20	17	18	10.81	cps
Gadolinium	160-2	133	110	103	116	13.64	cps
Holmium	165-1	3925243	3884391	3850345	3886660	0.96	cps
Holmium	165-2	2492640	2358136	2438014	2429597	2.78	cps
Indium	115-1	3287945	3338454	3394593	3340331	1.60	cps
Indium	115-2	984311	990877	992103	989097	0.42	cps
Iron	56-2	4201	4551	4327	4360	4.07	cps
Iron	57-2	1410	1343	1370	1375	2.44	cps
Iron	54-2	907	963	933	934	3.03	cps
Krypton	83-1	140	123	120	128	8.38	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:10:30	DataFile Name :	015CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	93	127	133	118	18.20	cps
Lead	207-1	73	123	83	93	28.35	cps
Lead	208-1	423	507	470	467	8.95	cps
Lithium	6-1	771138	775193	770064	772132	0.35	cps
Magnesium	24-2	217	213	243	224	7.33	cps
Manganese	55-2	160	177	193	177	9.44	cps
Molybdenum	94-1	107	100	117	108	7.78	cps
Molybdenum	95-1	37	30	40	36	14.32	cps
Molybdenum	96-1	50	63	63	59	13.07	cps
Molybdenum	97-1	20	23	27	23	14.29	cps
Molybdenum	98-1	60	43	70	58	23.32	cps
Neodymium	150-1	3	7	0	3	100.05	cps
Neodymium	150-2	3	3	0	2	86.60	cps
Nickel	60-2	83	47	60	63	29.30	cps
Phosphorus	31-2	183	233	187	201	13.90	cps
Potassium	39-2	48280	47681	48139	48033	0.65	cps
Rhodium	103-1	3239246	3225262	3068463	3177657	2.98	cps
Rhodium	103-2	1782520	1750142	1766336	1766333	0.92	cps
Scandium	45-1	1985588	1969426	1933245	1962753	1.37	cps
Scandium	45-2	157544	159857	158803	158735	0.73	cps
Selenium	82-1	41	73	79	64	31.15	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	163	183	123	157	19.50	cps
Silicon	28-1	288197	283313	286197	285902	0.86	cps
Silver	107-1	43	43	27	38	25.46	cps
Silver	109-1	30	40	33	34	14.78	cps
Sodium	23-2	11234	11184	11111	11176	0.56	cps
Strontium	86-1	200	230	203	211	7.79	cps
Strontium	88-1	180	177	157	171	7.37	cps
Sulfur	34-1	170847	168955	170738	170180	0.62	cps
Terbium	159-1	4084448	4197486	4170315	4150750	1.42	cps
Terbium	159-2	2610885	2432035	2547213	2530044	3.58	cps
Thallium	203-1	40	30	30	33	17.32	cps
Thallium	205-1	100	67	87	84	19.87	cps
Tin	118-1	360	283	377	340	14.64	cps
Titanium	47-1	113	123	117	118	4.32	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:10:30	DataFile Name :	015CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7	0	10	6	91.64	cps
Vanadium	51-2	3	0	10	4	114.60	cps
Yttrium	89-1	4246736	4245840	4191130	4227902	0.75	cps
Yttrium	89-2	984944	993072	1000086	992701	0.76	cps
Zinc	66-2	280	273	193	249	19.38	cps
Zirconium	90-1	193	183	283	220	25.03	cps
Zirconium	91-1	47	43	13	34	53.31	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:13:52	DataFile Name :	016ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4558217	4688024	4584173	4610138	1.49	cps
Antimony	121-1	3120	3250	3097	3156	2.62	cps
Arsenic	75-2	63	53	73	63	15.79	cps
Barium	135-1	810	897	923	877	6.76	cps
Barium	137-1	1467	1463	1460	1463	0.23	cps
Beryllium	9-1	133	157	173	154	13.01	cps
Bismuth	209-1	2309004	2291172	2304047	2301408	0.40	cps
Bismuth	209-2	1733433	1573791	1715478	1674234	5.22	cps
Bromine	81-1	4514	4371	4641	4509	3.00	cps
Bromine	81-2	97	80	123	100	21.86	cps
Cadmium	108-1	303	287	237	276	12.59	cps
Cadmium	106-1	1117	1120	1207	1148	4.45	cps
Cadmium	111-1	226	298	315	280	16.90	cps
Calcium	43-1	709236	718969	729007	719070	1.37	cps
Calcium	44-1	10310791	10929553	10582262	10607535	2.92	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19343	19857	19326	19508	1.55	cps
Cobalt	59-2	1983	1833	1793	1870	5.36	cps
Copper	63-2	9176	8913	8796	8962	2.17	cps
Dysprosium	156-1	33	30	30	31	6.18	cps
Dysprosium	156-2	10	10	0	7	86.60	cps
Erbium	164-1	50	70	67	62	17.22	cps
Erbium	164-2	13	17	17	16	12.40	cps
Gadolinium	160-1	20	40	47	36	39.03	cps
Gadolinium	160-2	130	80	107	106	23.70	cps
Holmium	165-1	4124928	4211875	4153198	4163334	1.07	cps
Holmium	165-2	2570302	2508081	2553050	2543811	1.26	cps
Indium	115-1	3342975	3268226	3325482	3312228	1.18	cps
Indium	115-2	984630	984929	983933	984497	0.05	cps
Iron	56-2	79735860	80131275	79337919	79735018	0.50	cps
Iron	57-2	2006753	1995061	2006791	2002868	0.34	cps
Iron	54-2	4363925	4448540	4372231	4394899	1.06	cps
Krypton	83-1	90	143	187	140	34.59	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:13:52	DataFile Name :	016ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	7245	7442	7592	7427	2.34	cps
Lead	207-1	6365	5988	5788	6047	4.84	cps
Lead	208-1	28262	28585	28198	28348	0.73	cps
Lithium	6-1	807488	800444	793341	800424	0.88	cps
Magnesium	24-2	8438996	8490488	8468144	8465876	0.31	cps
Manganese	55-2	5628	5691	5508	5609	1.66	cps
Molybdenum	94-1	1374081	1413958	1402576	1396872	1.47	cps
Molybdenum	95-1	2420229	2444224	2431588	2432014	0.49	cps
Molybdenum	96-1	2544073	2630253	2518274	2564200	2.29	cps
Molybdenum	97-1	1469888	1535546	1501263	1502232	2.19	cps
Molybdenum	98-1	3830716	3785621	3921185	3845841	1.80	cps
Neodymium	150-1	17	3	20	13	66.16	cps
Neodymium	150-2	10	7	0	6	91.64	cps
Nickel	60-2	2224	2100	2090	2138	3.47	cps
Phosphorus	31-2	348300	352942	348426	349889	0.76	cps
Potassium	39-2	9579779	9779953	9522053	9627262	1.41	cps
Rhodium	103-1	3102131	3092341	3110500	3101658	0.29	cps
Rhodium	103-2	1752810	1741201	1689247	1727753	1.96	cps
Scandium	45-1	2003525	1981552	2000555	1995211	0.60	cps
Scandium	45-2	160100	161080	158729	159970	0.74	cps
Selenium	82-1	137	97	24	86	66.22	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	187	163	170	173	6.93	cps
Silicon	28-1	337154	337719	338128	337667	0.14	cps
Silver	107-1	313	333	253	300	13.88	cps
Silver	109-1	327	277	277	293	9.84	cps
Sodium	23-2	14111829	14417104	14223685	14250873	1.08	cps
Strontium	86-1	27001	28220	27115	27446	2.45	cps
Strontium	88-1	236708	239895	237507	238037	0.70	cps
Sulfur	34-1	1323041	1390767	1368605	1360804	2.54	cps
Terbium	159-1	4376881	4420913	4395921	4397905	0.50	cps
Terbium	159-2	2583096	2625081	2581800	2596659	0.95	cps
Thallium	203-1	153	147	187	162	13.21	cps
Thallium	205-1	417	387	390	398	4.13	cps
Tin	118-1	887	943	930	920	3.22	cps
Titanium	47-1	667402	679996	672049	673149	0.95	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:13:52	DataFile Name :	016ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	120	110	73	101	24.30	cps
Vanadium	51-2	137	183	170	163	14.72	cps
Yttrium	89-1	4428927	4333072	4379190	4380396	1.09	cps
Yttrium	89-2	1014217	1004883	1001664	1006921	0.65	cps
Zinc	66-2	2300	2300	2217	2272	2.12	cps
Zirconium	90-1	317	277	270	288	8.77	cps
Zirconium	91-1	37	70	47	51	33.46	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:17:04	DataFile Name :	017ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4553015	4669953	4569547	4597505	1.38	cps
Antimony	121-1	58147	59392	60564	59368	2.04	cps
Arsenic	75-2	3204	3034	3024	3087	3.28	cps
Barium	135-1	12219	12225	12432	12292	0.99	cps
Barium	137-1	20986	21393	21269	21216	0.98	cps
Beryllium	9-1	10290	10374	10007	10223	1.88	cps
Bismuth	209-1	2338746	2382246	2405118	2375370	1.42	cps
Bismuth	209-2	1593328	1736919	1548777	1626341	6.05	cps
Bromine	81-1	4434	4641	4607	4561	2.43	cps
Bromine	81-2	83	100	107	97	12.44	cps
Cadmium	108-1	1433	1307	1260	1333	6.73	cps
Cadmium	106-1	2867	2670	2744	2760	3.60	cps
Cadmium	111-1	12353	12255	11995	12201	1.52	cps
Calcium	43-1	709745	718731	719570	716015	0.76	cps
Calcium	44-1	10331094	10563499	10638009	10510867	1.52	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	38576	38776	37941	38431	1.14	cps
Cobalt	59-2	31971	31453	32312	31912	1.35	cps
Copper	63-2	28985	29142	29145	29091	0.31	cps
Dysprosium	156-1	30	23	33	29	17.63	cps
Dysprosium	156-2	10	7	10	9	21.63	cps
Erbium	164-1	53	33	33	40	28.87	cps
Erbium	164-2	20	27	23	23	14.29	cps
Gadolinium	160-1	40	43	43	42	4.55	cps
Gadolinium	160-2	103	153	100	119	25.13	cps
Holmium	165-1	4232024	4142676	4141074	4171925	1.25	cps
Holmium	165-2	2626767	2554442	2581397	2587535	1.41	cps
Indium	115-1	3327020	3339530	3324533	3330361	0.24	cps
Indium	115-2	1000417	979607	991880	990635	1.06	cps
Iron	56-2	81920574	80137627	78937397	80331866	1.87	cps
Iron	57-2	2010962	1990783	1998128	1999957	0.51	cps
Iron	54-2	4346354	4420365	4441968	4402896	1.14	cps
Krypton	83-1	110	163	90	121	31.30	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:17:04	DataFile Name :	017ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	38358	38421	38745	38508	0.54	cps
Lead	207-1	32576	33555	33993	33374	2.17	cps
Lead	208-1	150700	152444	153913	152352	1.06	cps
Lithium	6-1	792564	787273	787949	789262	0.36	cps
Magnesium	24-2	8475874	8430928	8484489	8463764	0.34	cps
Manganese	55-2	19116	19266	19386	19256	0.70	cps
Molybdenum	94-1	1461013	1496347	1474075	1477145	1.21	cps
Molybdenum	95-1	2453386	2444175	2505277	2467613	1.33	cps
Molybdenum	96-1	2601302	2679751	2704304	2661786	2.02	cps
Molybdenum	97-1	1514018	1582346	1547682	1548015	2.21	cps
Molybdenum	98-1	3876616	4039132	3923897	3946548	2.12	cps
Neodymium	150-1	10	27	30	22	48.22	cps
Neodymium	150-2	3	0	10	4	114.60	cps
Nickel	60-2	10144	10134	9606	9961	3.08	cps
Phosphorus	31-2	350156	352030	352621	351603	0.37	cps
Potassium	39-2	9801575	9572491	9816327	9730131	1.41	cps
Rhodium	103-1	3108202	3138116	3084674	3110331	0.86	cps
Rhodium	103-2	1721523	1684325	1780894	1728914	2.82	cps
Scandium	45-1	1995608	1982757	2008893	1995752	0.65	cps
Scandium	45-2	161160	159884	161369	160805	0.50	cps
Selenium	82-1	1081	973	1103	1052	6.64	cps
Selenium	77-2	67	70	80	72	9.61	cps
Selenium	78-2	357	463	443	421	13.47	cps
Silicon	28-1	407461	411779	409770	409670	0.53	cps
Silver	107-1	58079	59267	57942	58429	1.25	cps
Silver	109-1	54613	55278	55673	55188	0.97	cps
Sodium	23-2	14308117	14035053	14065407	14136192	1.06	cps
Strontium	86-1	66734	69553	68917	68401	2.16	cps
Strontium	88-1	590956	598708	591870	593845	0.71	cps
Sulfur	34-1	1323935	1353064	1335255	1337418	1.10	cps
Terbium	159-1	4313434	4367380	4470691	4383835	1.82	cps
Terbium	159-2	2638225	2602642	2587771	2609546	0.99	cps
Thallium	203-1	39651	38892	39347	39297	0.97	cps
Thallium	205-1	92550	92630	93621	92934	0.64	cps
Tin	118-1	103208	104905	105026	104380	0.97	cps
Titanium	47-1	679362	691272	691554	687396	1.01	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:17:04	DataFile Name :	017ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	297881	303351	306588	302607	1.45	cps
Vanadium	51-2	17147	16866	16903	16972	0.90	cps
Yttrium	89-1	4457554	4473236	4470269	4467020	0.19	cps
Yttrium	89-2	1018604	1004716	1020918	1014746	0.86	cps
Zinc	66-2	6025	5958	5845	5942	1.53	cps
Zirconium	90-1	221100	228361	229015	226159	1.94	cps
Zirconium	91-1	49453	50968	50480	50301	1.54	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:20:13	DataFile Name :	018CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2542399	2474009	2487655	2501354	1.45	cps
Antimony	121-1	1433056	1462615	1484106	1459926	1.76	cps
Arsenic	75-2	81070	79877	79140	80029	1.22	cps
Barium	135-1	1482858	1504767	1518167	1501931	1.19	cps
Barium	137-1	2695983	2605258	2627221	2642821	1.79	cps
Beryllium	9-1	269714	273665	273797	272392	0.85	cps
Bismuth	209-1	2407657	2362890	2349660	2373403	1.28	cps
Bismuth	209-2	1772159	1696795	1706747	1725234	2.37	cps
Bromine	81-1	4254	4174	4264	4231	1.17	cps
Bromine	81-2	37	47	23	36	32.93	cps
Cadmium	108-1	23940	24194	24501	24211	1.16	cps
Cadmium	106-1	35670	36071	35954	35899	0.57	cps
Cadmium	111-1	306550	313945	310572	310356	1.19	cps
Calcium	43-1	1734775	1795443	1733387	1754535	2.02	cps
Calcium	44-1	27578405	28035840	28006543	27873596	0.92	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	501062	498507	484779	494783	1.77	cps
Cobalt	59-2	748228	748976	741484	746229	0.55	cps
Copper	63-2	5024646	5026963	5114066	5055225	1.01	cps
Dysprosium	156-1	73	93	100	89	15.61	cps
Dysprosium	156-2	117	123	93	111	14.18	cps
Erbium	164-1	90	107	77	91	16.50	cps
Erbium	164-2	73	53	53	60	19.25	cps
Gadolinium	160-1	87	77	80	81	6.28	cps
Gadolinium	160-2	150	167	140	152	8.85	cps
Holmium	165-1	4120868	4123289	4147022	4130393	0.35	cps
Holmium	165-2	2612031	2542489	2479753	2544758	2.60	cps
Indium	115-1	3276329	3377513	3172669	3275504	3.13	cps
Indium	115-2	969537	967152	955861	964183	0.76	cps
Iron	56-2	102012065	98484245	99118949	99871753	1.88	cps
Iron	57-2	2548925	2529512	2470077	2516171	1.63	cps
Iron	54-2	5547648	5471873	5417212	5478911	1.20	cps
Krypton	83-1	170	100	160	143	26.41	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:20:13	DataFile Name :	018CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4219202	4213228	4190333	4207588	0.36	cps
Lead	207-1	3727909	3855873	3697057	3760280	2.24	cps
Lead	208-1	16755334	16920146	16800852	16825444	0.51	cps
Lithium	6-1	798171	797436	790332	795313	0.54	cps
Magnesium	24-2	23519932	22637259	23408655	23188615	2.07	cps
Manganese	55-2	3341716	3383056	3328251	3351008	0.85	cps
Molybdenum	94-1	4855443	4908300	4905541	4889762	0.61	cps
Molybdenum	95-1	6918612	7136091	6913826	6989510	1.82	cps
Molybdenum	96-1	7455972	7590189	7640377	7562179	1.26	cps
Molybdenum	97-1	4445092	4290031	4506112	4413745	2.52	cps
Molybdenum	98-1	11311571	11399362	11146081	11285671	1.14	cps
Neodymium	150-1	97	127	90	104	18.70	cps
Neodymium	150-2	40	60	27	42	39.73	cps
Nickel	60-2	194076	193310	192740	193376	0.35	cps
Phosphorus	31-2	37041	36286	35812	36380	1.70	cps
Potassium	39-2	13006789	12948711	13033742	12996414	0.33	cps
Rhodium	103-1	3060304	3040285	3093973	3064854	0.89	cps
Rhodium	103-2	1737214	1669933	1653001	1686716	2.64	cps
Scandium	45-1	2035898	1934268	1978314	1982827	2.57	cps
Scandium	45-2	160659	158176	156466	158434	1.33	cps
Selenium	82-1	24295	24748	24708	24583	1.02	cps
Selenium	77-2	1860	2290	2147	2099	10.43	cps
Selenium	78-2	6795	7105	6572	6824	3.93	cps
Silicon	28-1	13424351	13545299	13608559	13526069	0.69	cps
Silver	107-1	1531833	1551638	1577574	1553682	1.48	cps
Silver	109-1	1454906	1471970	1478691	1468522	0.83	cps
Sodium	23-2	36854444	36553309	36938606	36782119	0.55	cps
Strontium	86-1	9787843	9952758	10040357	9926986	1.29	cps
Strontium	88-1	85291529	90545029	88544819	88127125	3.01	cps
Sulfur	34-1	276623	282739	282534	280632	1.24	cps
Terbium	159-1	4372206	4371492	4335835	4359844	0.48	cps
Terbium	159-2	2710648	2523685	2572167	2602167	3.73	cps
Thallium	203-1	963282	967167	959656	963368	0.39	cps
Thallium	205-1	2513447	2491508	2563488	2522814	1.46	cps
Tin	118-1	1010447	1046179	1036821	1031149	1.80	cps
Titanium	47-1	1831866	1843675	1894120	1856554	1.78	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:20:13	DataFile Name :	018CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3350027	3305291	3279901	3311740	1.07	cps
Vanadium	51-2	450543	445554	440942	445680	1.08	cps
Yttrium	89-1	4463683	4373256	4376272	4404404	1.17	cps
Yttrium	89-2	1000156	993199	974550	989302	1.34	cps
Zinc	66-2	895152	883307	882451	886970	0.80	cps
Zirconium	90-1	2370312	2308680	2316249	2331747	1.44	cps
Zirconium	91-1	518258	521274	526947	522160	0.84	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:34:57	DataFile Name :	019CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	43	67	103	71	42.53	cps
Antimony	121-1	153	220	237	203	21.68	cps
Arsenic	75-2	0	0	10	3	173.21	cps
Barium	135-1	13	7	27	16	65.47	cps
Barium	137-1	60	47	33	47	28.58	cps
Beryllium	9-1	20	20	17	19	10.18	cps
Bismuth	209-1	2344347	2411275	2320033	2358552	2.00	cps
Bismuth	209-2	1785175	1766861	1787388	1779808	0.63	cps
Bromine	81-1	3787	3724	4011	3841	3.92	cps
Bromine	81-2	27	37	13	26	45.82	cps
Cadmium	108-1	10	0	0	3	173.21	cps
Cadmium	106-1	1017	930	970	972	4.46	cps
Cadmium	111-1	98	106	104	103	4.14	cps
Calcium	43-1	283	267	280	277	3.19	cps
Calcium	44-1	11014	10547	10817	10793	2.17	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	233	213	233	227	5.09	cps
Cobalt	59-2	20	67	40	42	55.45	cps
Copper	63-2	680	713	667	687	3.50	cps
Dysprosium	156-1	13	10	27	17	52.93	cps
Dysprosium	156-2	7	0	3	3	100.05	cps
Erbium	164-1	40	47	40	42	9.12	cps
Erbium	164-2	23	7	10	13	66.12	cps
Gadolinium	160-1	33	33	27	31	12.36	cps
Gadolinium	160-2	110	133	113	119	10.62	cps
Holmium	165-1	3973835	4012533	3956430	3980933	0.72	cps
Holmium	165-2	2434190	2523861	2419952	2459335	2.29	cps
Indium	115-1	3324644	3297011	3329805	3317153	0.53	cps
Indium	115-2	997809	974326	981103	984413	1.23	cps
Iron	56-2	5174	5598	5644	5472	4.73	cps
Iron	57-2	1430	1507	1413	1450	3.43	cps
Iron	54-2	993	927	967	962	3.49	cps
Krypton	83-1	180	117	107	134	29.58	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:34:57	DataFile Name :	019CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	157	153	163	158	3.23	cps
Lead	207-1	163	180	140	161	12.47	cps
Lead	208-1	733	710	617	687	8.99	cps
Lithium	6-1	728985	727398	730017	728800	0.18	cps
Magnesium	24-2	407	307	460	391	19.90	cps
Manganese	55-2	240	170	227	212	17.51	cps
Molybdenum	94-1	83	73	153	103	42.19	cps
Molybdenum	95-1	53	73	53	60	19.25	cps
Molybdenum	96-1	90	77	67	78	15.05	cps
Molybdenum	97-1	47	40	47	44	8.66	cps
Molybdenum	98-1	120	77	80	92	26.15	cps
Neodymium	150-1	3	7	7	6	34.70	cps
Neodymium	150-2	3	13	0	6	124.93	cps
Nickel	60-2	80	77	87	81	6.28	cps
Phosphorus	31-2	197	223	280	233	18.24	cps
Potassium	39-2	49580	48724	48664	48990	1.05	cps
Rhodium	103-1	3264984	3292267	3188084	3248445	1.66	cps
Rhodium	103-2	1783071	1739517	1735523	1752704	1.50	cps
Scandium	45-1	1991642	1949235	1961974	1967617	1.11	cps
Scandium	45-2	159668	160403	158652	159574	0.55	cps
Selenium	82-1	30	103	101	78	53.41	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	147	150	137	144	4.80	cps
Silicon	28-1	286388	287559	284832	286259	0.48	cps
Silver	107-1	23	33	40	32	26.04	cps
Silver	109-1	23	27	13	21	32.88	cps
Sodium	23-2	12619	12609	12755	12661	0.65	cps
Strontium	86-1	207	203	250	220	11.83	cps
Strontium	88-1	327	240	290	286	15.23	cps
Sulfur	34-1	168667	169340	169164	169057	0.21	cps
Terbium	159-1	4292385	4306223	4173601	4257403	1.71	cps
Terbium	159-2	2523291	2505893	2507556	2512246	0.38	cps
Thallium	203-1	50	37	37	41	18.72	cps
Thallium	205-1	127	127	133	129	2.99	cps
Tin	118-1	367	343	393	368	6.80	cps
Titanium	47-1	90	143	110	114	23.55	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:34:57	DataFile Name :	019CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	10	0	7	6	91.64	cps
Vanadium	51-2	3	13	13	10	57.75	cps
Yttrium	89-1	4345265	4293197	4472356	4370273	2.11	cps
Yttrium	89-2	995438	989551	982801	989263	0.64	cps
Zinc	66-2	277	280	260	272	3.94	cps
Zirconium	90-1	207	217	257	227	11.67	cps
Zirconium	91-1	77	53	63	64	18.17	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:40:25	DataFile Name :	020LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1127	1013	1090	1077	5.37	cps
Antimony	121-1	5594	5705	5424	5574	2.53	cps
Arsenic	75-2	137	177	173	162	13.68	cps
Barium	135-1	5564	5411	5638	5538	2.09	cps
Barium	137-1	9657	9850	9653	9720	1.16	cps
Beryllium	9-1	617	520	560	566	8.59	cps
Bismuth	209-1	2491779	2282727	2392524	2389010	4.38	cps
Bismuth	209-2	1765932	1751054	1584989	1700658	5.91	cps
Bromine	81-1	3897	3991	4131	4006	2.93	cps
Bromine	81-2	40	40	27	36	21.64	cps
Cadmium	108-1	27	60	70	52	43.44	cps
Cadmium	106-1	1097	1053	1030	1060	3.19	cps
Cadmium	111-1	804	737	727	756	5.56	cps
Calcium	43-1	3537	3771	3817	3708	4.05	cps
Calcium	44-1	67807	68417	67941	68055	0.47	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2117	2117	2097	2110	0.55	cps
Cobalt	59-2	1560	1633	1600	1598	2.30	cps
Copper	63-2	2670	2744	2840	2751	3.10	cps
Dysprosium	156-1	13	20	17	17	20.01	cps
Dysprosium	156-2	7	3	3	4	43.40	cps
Erbium	164-1	20	13	47	27	66.16	cps
Erbium	164-2	33	37	23	31	22.31	cps
Gadolinium	160-1	33	13	3	17	91.67	cps
Gadolinium	160-2	123	123	97	114	13.45	cps
Holmium	165-1	4240946	4009730	3932849	4061175	3.95	cps
Holmium	165-2	2482498	2449748	2402014	2444753	1.66	cps
Indium	115-1	3570920	3392355	3422247	3461840	2.76	cps
Indium	115-2	997653	995177	980816	991215	0.92	cps
Iron	56-2	49076	47916	49628	48874	1.79	cps
Iron	57-2	2460	2540	2580	2527	2.42	cps
Iron	54-2	3157	3360	3490	3336	5.04	cps
Krypton	83-1	133	103	120	119	12.65	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:40:25	DataFile Name :	020LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1557	1553	1490	1533	2.45	cps
Lead	207-1	1457	1330	1510	1432	6.46	cps
Lead	208-1	6527	6181	6357	6355	2.73	cps
Lithium	6-1	760729	744282	735454	746822	1.72	cps
Magnesium	24-2	49603	49125	49021	49250	0.63	cps
Manganese	55-2	917	783	953	884	10.12	cps
Molybdenum	94-1	5028	4878	5228	5044	3.48	cps
Molybdenum	95-1	6295	6305	6141	6247	1.47	cps
Molybdenum	96-1	6868	6822	6795	6828	0.54	cps
Molybdenum	97-1	3831	3804	3837	3824	0.46	cps
Molybdenum	98-1	9693	9690	10234	9872	3.17	cps
Neodymium	150-1	3	3	3	3	0.00	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	467	540	457	488	9.33	cps
Phosphorus	31-2	307	367	320	331	9.51	cps
Potassium	39-2	102438	100827	101760	101675	0.80	cps
Rhodium	103-1	3361253	3306706	3168504	3278821	3.03	cps
Rhodium	103-2	1815206	1784479	1791803	1797162	0.89	cps
Scandium	45-1	2109962	1930485	1962787	2001078	4.78	cps
Scandium	45-2	160895	160087	161680	160887	0.50	cps
Selenium	82-1	307	394	358	353	12.34	cps
Selenium	77-2	20	33	30	28	24.98	cps
Selenium	78-2	180	263	227	223	18.70	cps
Silicon	28-1	294167	294074	292342	293528	0.35	cps
Silver	107-1	2960	2950	2980	2964	0.52	cps
Silver	109-1	2760	2910	2730	2800	3.44	cps
Sodium	23-2	90360	88677	90366	89801	1.08	cps
Strontium	86-1	970	993	883	949	6.11	cps
Strontium	88-1	6942	7122	6982	7015	1.35	cps
Sulfur	34-1	171137	169613	170143	170297	0.45	cps
Terbium	159-1	4503063	4177807	4172738	4284536	4.42	cps
Terbium	159-2	2606882	2540566	2516602	2554683	1.83	cps
Thallium	203-1	1870	1800	1893	1855	2.62	cps
Thallium	205-1	4444	4344	4231	4340	2.46	cps
Tin	118-1	9987	9877	9984	9949	0.63	cps
Titanium	47-1	1797	1733	1850	1793	3.26	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P7
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:40:25	DataFile Name :	020LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5371	5298	5284	5318	0.88	cps
Vanadium	51-2	4404	4047	4507	4320	5.59	cps
Yttrium	89-1	4618536	4316427	4333544	4422836	3.84	cps
Yttrium	89-2	1014670	999534	1002845	1005683	0.79	cps
Zinc	66-2	1197	1117	1130	1148	3.73	cps
Zirconium	90-1	4291	4344	4241	4292	1.20	cps
Zirconium	91-1	1070	1053	857	993	11.94	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BL	Instrumnet Name :	P7
Client Sample ID :	PB162911BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:44:19	DataFile Name :	021CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	83	107	80	90	16.15	cps
Antimony	121-1	50	87	80	72	27.04	cps
Arsenic	75-2	0	3	0	1	173.21	cps
Barium	135-1	30	10	13	18	60.28	cps
Barium	137-1	43	10	13	22	82.62	cps
Beryllium	9-1	33	7	23	21	63.80	cps
Bismuth	209-1	2346782	2370376	2377168	2364775	0.67	cps
Bismuth	209-2	1548892	1707252	1735886	1664010	6.05	cps
Bromine	81-1	3961	4251	3991	4067	3.92	cps
Bromine	81-2	27	10	27	21	45.58	cps
Cadmium	108-1	0	3	0	1	173.21	cps
Cadmium	106-1	1100	1117	1117	1111	0.87	cps
Cadmium	111-1	110	116	115	114	2.83	cps
Calcium	43-1	330	307	287	308	7.05	cps
Calcium	44-1	10317	10047	10117	10160	1.38	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	210	213	200	208	3.34	cps
Cobalt	59-2	33	43	40	39	13.09	cps
Copper	63-2	597	620	717	644	9.87	cps
Dysprosium	156-1	20	13	13	16	24.76	cps
Dysprosium	156-2	3	10	0	4	114.60	cps
Erbium	164-1	40	63	37	47	31.13	cps
Erbium	164-2	17	3	30	17	80.01	cps
Gadolinium	160-1	30	43	40	38	18.36	cps
Gadolinium	160-2	80	97	137	104	27.88	cps
Holmium	165-1	3934889	4090253	3937234	3987459	2.23	cps
Holmium	165-2	2429732	2455696	2447308	2444245	0.54	cps
Indium	115-1	3352078	3311332	3454861	3372757	2.19	cps
Indium	115-2	986520	992318	996928	991922	0.53	cps
Iron	56-2	5118	5071	4988	5059	1.30	cps
Iron	57-2	1420	1493	1427	1447	2.80	cps
Iron	54-2	910	1047	983	980	6.98	cps
Krypton	83-1	127	107	117	117	8.57	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BL	Instrumnet Name :	P7
Client Sample ID :	PB162911BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:44:19	DataFile Name :	021CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	107	113	133	118	11.78	cps
Lead	207-1	140	123	70	111	32.91	cps
Lead	208-1	507	503	440	483	7.77	cps
Lithium	6-1	745036	754812	745481	748443	0.74	cps
Magnesium	24-2	187	257	287	243	21.09	cps
Manganese	55-2	190	200	197	196	2.60	cps
Molybdenum	94-1	87	73	93	84	12.06	cps
Molybdenum	95-1	30	43	30	34	22.34	cps
Molybdenum	96-1	47	30	60	46	32.99	cps
Molybdenum	97-1	40	20	30	30	33.33	cps
Molybdenum	98-1	43	43	47	44	4.34	cps
Neodymium	150-1	10	10	7	9	21.63	cps
Neodymium	150-2	0	7	7	4	86.60	cps
Nickel	60-2	73	100	60	78	26.19	cps
Phosphorus	31-2	230	207	170	202	14.96	cps
Potassium	39-2	48922	48357	48627	48635	0.58	cps
Rhodium	103-1	3210735	3340761	3203594	3251697	2.37	cps
Rhodium	103-2	1776607	1769895	1748312	1764938	0.84	cps
Scandium	45-1	1948520	1916386	1987325	1950744	1.82	cps
Scandium	45-2	160437	161430	161336	161067	0.34	cps
Selenium	82-1	56	80	91	76	23.48	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	160	180	180	173	6.66	cps
Silicon	28-1	287592	286251	285277	286373	0.41	cps
Silver	107-1	77	43	40	53	38.02	cps
Silver	109-1	23	7	33	21	63.80	cps
Sodium	23-2	11328	11561	11448	11445	1.02	cps
Strontium	86-1	213	170	230	204	15.15	cps
Strontium	88-1	173	157	130	153	14.26	cps
Sulfur	34-1	171461	171568	171085	171371	0.15	cps
Terbium	159-1	4207850	4210141	4263243	4227078	0.74	cps
Terbium	159-2	2493382	2513977	2500481	2502613	0.42	cps
Thallium	203-1	20	23	23	22	8.65	cps
Thallium	205-1	80	57	60	66	19.25	cps
Tin	118-1	307	277	290	291	5.16	cps
Titanium	47-1	103	87	87	92	10.43	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BL	Instrumnet Name :	P7
Client Sample ID :	PB162911BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:44:19	DataFile Name :	021CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	10	7	13	10	33.30	cps
Vanadium	51-2	0	7	0	2	173.21	cps
Yttrium	89-1	4502058	4387928	4302701	4397562	2.27	cps
Yttrium	89-2	1001194	988327	1006125	998549	0.92	cps
Zinc	66-2	227	243	243	238	4.05	cps
Zirconium	90-1	207	167	263	212	22.89	cps
Zirconium	91-1	53	40	60	51	19.92	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BS	Instrumnet Name :	P7
Client Sample ID :	PB162911BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:47:43	DataFile Name :	022LCSS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	544386	535342	536953	538894	0.90	cps
Antimony	121-1	1451880	1474074	1471122	1465692	0.82	cps
Arsenic	75-2	79813	79602	80296	79903	0.44	cps
Barium	135-1	1463512	1485190	1497598	1482100	1.16	cps
Barium	137-1	2573107	2678369	2619869	2623781	2.01	cps
Beryllium	9-1	266553	270759	279829	272380	2.49	cps
Bismuth	209-1	2386345	2327676	2360664	2358229	1.25	cps
Bismuth	209-2	1747520	1738686	1522025	1669410	7.65	cps
Bromine	81-1	3864	3771	3781	3805	1.35	cps
Bromine	81-2	33	17	17	22	43.28	cps
Cadmium	108-1	24708	24744	25379	24944	1.51	cps
Cadmium	106-1	37054	36680	36927	36887	0.52	cps
Cadmium	111-1	320068	322586	324767	322474	0.73	cps
Calcium	43-1	394612	405546	401041	400400	1.37	cps
Calcium	44-1	5659555	5788678	5762837	5737023	1.19	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	501422	503276	495692	500130	0.79	cps
Cobalt	59-2	781365	776525	775550	777813	0.40	cps
Copper	63-2	5417906	5422331	5400028	5413422	0.22	cps
Dysprosium	156-1	87	67	83	79	13.58	cps
Dysprosium	156-2	87	80	87	84	4.56	cps
Erbium	164-1	97	70	70	79	19.52	cps
Erbium	164-2	40	50	23	38	35.67	cps
Gadolinium	160-1	80	107	73	87	20.36	cps
Gadolinium	160-2	120	123	83	109	20.39	cps
Holmium	165-1	4081865	4109182	4077023	4089357	0.42	cps
Holmium	165-2	2445878	2498454	2482860	2475731	1.09	cps
Indium	115-1	3335622	3329452	3410737	3358604	1.35	cps
Indium	115-2	982906	990624	959027	977519	1.69	cps
Iron	56-2	20804036	21011459	21043661	20953052	0.62	cps
Iron	57-2	559485	559548	558533	559189	0.10	cps
Iron	54-2	1240181	1228595	1233775	1234184	0.47	cps
Krypton	83-1	150	117	153	140	14.48	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BS	Instrumnet Name :	P7
Client Sample ID :	PB162911BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:47:43	DataFile Name :	022LCSS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4043003	4142456	4148221	4111227	1.44	cps
Lead	207-1	3664148	3790223	3888657	3781009	2.98	cps
Lead	208-1	16381893	16833084	17091737	16768905	2.14	cps
Lithium	6-1	769857	787464	786479	781267	1.27	cps
Magnesium	24-2	4886655	4770943	4902999	4853532	1.48	cps
Manganese	55-2	3403717	3403361	3416780	3407953	0.22	cps
Molybdenum	94-1	4838042	4868747	4875946	4860912	0.41	cps
Molybdenum	95-1	6967323	7199012	7020951	7062429	1.72	cps
Molybdenum	96-1	7717858	7787871	7637702	7714477	0.97	cps
Molybdenum	97-1	4354104	4347506	4262935	4321515	1.18	cps
Molybdenum	98-1	11198473	11302385	11121430	11207429	0.81	cps
Neodymium	150-1	143	113	123	127	12.06	cps
Neodymium	150-2	23	47	30	33	36.07	cps
Nickel	60-2	202192	199568	201762	201174	0.70	cps
Phosphorus	31-2	36594	36503	37279	36792	1.15	cps
Potassium	39-2	2630943	2668370	2632347	2643887	0.80	cps
Rhodium	103-1	3220297	3184260	3081481	3162012	2.28	cps
Rhodium	103-2	1722977	1742804	1692743	1719508	1.47	cps
Scandium	45-1	1986498	2075754	2003582	2021945	2.34	cps
Scandium	45-2	158494	157762	155983	157413	0.82	cps
Selenium	82-1	25174	25803	25528	25502	1.24	cps
Selenium	77-2	1997	2160	2130	2096	4.15	cps
Selenium	78-2	7168	7262	7232	7221	0.66	cps
Silicon	28-1	12455901	12627350	12423077	12502109	0.88	cps
Silver	107-1	1648189	1617991	1637281	1634487	0.94	cps
Silver	109-1	1528166	1508225	1525667	1520686	0.71	cps
Sodium	23-2	7546977	7754962	7648783	7650241	1.36	cps
Strontium	86-1	10111467	10033379	10038160	10061002	0.44	cps
Strontium	88-1	87086252	87456639	88218159	87587016	0.66	cps
Sulfur	34-1	294968	292882	289651	292500	0.92	cps
Terbium	159-1	4294300	4318353	4331666	4314773	0.44	cps
Terbium	159-2	2581424	2538575	2495833	2538611	1.69	cps
Thallium	203-1	940717	966726	978274	961906	2.00	cps
Thallium	205-1	2512756	2442347	2512104	2489069	1.63	cps
Tin	118-1	1026157	1042912	1023383	1030817	1.02	cps
Titanium	47-1	1792280	1838680	1870758	1833906	2.15	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB162911BS	Instrumnet Name :	P7
Client Sample ID :	PB162911BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:47:43	DataFile Name :	022LCSS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3081260	3246369	3273692	3200440	3.25	cps
Vanadium	51-2	445252	446895	447850	446665	0.29	cps
Yttrium	89-1	4506248	4506509	4458613	4490456	0.61	cps
Yttrium	89-2	998767	990159	979613	989513	0.97	cps
Zinc	66-2	941977	930300	944424	938900	0.80	cps
Zirconium	90-1	2289073	2356234	2272022	2305776	1.93	cps
Zirconium	91-1	518891	522595	519956	520481	0.37	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BL	Instrumnet Name :	P7
Client Sample ID :	PB163150BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:56:59	DataFile Name :	023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	67	113	127	102	30.82	cps
Antimony	121-1	277	337	323	312	10.09	cps
Arsenic	75-2	0	3	13	6	124.93	cps
Barium	135-1	20	37	17	24	43.83	cps
Barium	137-1	50	30	50	43	26.65	cps
Beryllium	9-1	37	33	33	34	5.60	cps
Bismuth	209-1	2427761	2343265	2367220	2379415	1.83	cps
Bismuth	209-2	1825043	1780801	1812528	1806124	1.26	cps
Bromine	81-1	3851	3654	3947	3817	3.92	cps
Bromine	81-2	47	23	33	34	34.00	cps
Cadmium	108-1	7	0	0	2	173.21	cps
Cadmium	106-1	977	1030	933	980	4.94	cps
Cadmium	111-1	103	110	103	105	3.57	cps
Calcium	43-1	273	223	240	246	10.37	cps
Calcium	44-1	9697	9830	10053	9860	1.83	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	183	200	213	199	7.56	cps
Cobalt	59-2	60	50	80	63	24.12	cps
Copper	63-2	667	717	720	701	4.26	cps
Dysprosium	156-1	13	13	10	12	15.73	cps
Dysprosium	156-2	13	3	3	7	86.65	cps
Erbium	164-1	23	23	30	26	15.07	cps
Erbium	164-2	17	20	17	18	10.81	cps
Gadolinium	160-1	20	30	13	21	39.75	cps
Gadolinium	160-2	130	133	123	129	3.95	cps
Holmium	165-1	4044883	3969565	4004946	4006464	0.94	cps
Holmium	165-2	2479238	2591138	2523465	2531280	2.23	cps
Indium	115-1	3435452	3375260	3425200	3411971	0.94	cps
Indium	115-2	1006123	1000936	997636	1001565	0.43	cps
Iron	56-2	4994	4914	4854	4921	1.43	cps
Iron	57-2	1250	1337	1397	1328	5.55	cps
Iron	54-2	977	853	960	930	7.20	cps
Krypton	83-1	160	103	127	130	21.91	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BL	Instrumnet Name :	P7
Client Sample ID :	PB163150BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:56:59	DataFile Name :	023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	130	173	143	149	14.91	cps
Lead	207-1	170	147	180	166	10.33	cps
Lead	208-1	667	690	710	689	3.15	cps
Lithium	6-1	797646	790259	792422	793442	0.48	cps
Magnesium	24-2	277	310	333	307	9.29	cps
Manganese	55-2	247	260	267	258	3.95	cps
Molybdenum	94-1	173	100	147	140	26.51	cps
Molybdenum	95-1	90	87	140	106	28.30	cps
Molybdenum	96-1	147	163	173	161	8.36	cps
Molybdenum	97-1	60	37	93	63	44.96	cps
Molybdenum	98-1	167	153	183	168	8.96	cps
Neodymium	150-1	0	7	7	4	86.60	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	80	47	73	67	26.45	cps
Phosphorus	31-2	153	190	180	174	10.86	cps
Potassium	39-2	46715	46628	46421	46588	0.32	cps
Rhodium	103-1	3174083	3261072	3252738	3229298	1.49	cps
Rhodium	103-2	1818430	1763894	1863977	1815434	2.76	cps
Scandium	45-1	2003974	2007828	2041237	2017680	1.02	cps
Scandium	45-2	157806	158237	157094	157712	0.37	cps
Selenium	82-1	41	88	51	60	41.02	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	147	157	153	152	3.35	cps
Silicon	28-1	280849	281562	282255	281556	0.25	cps
Silver	107-1	70	53	50	58	18.55	cps
Silver	109-1	40	27	43	37	24.04	cps
Sodium	23-2	10754	10754	10660	10723	0.50	cps
Strontium	86-1	387	263	370	340	19.68	cps
Strontium	88-1	653	647	840	713	15.39	cps
Sulfur	34-1	161658	159550	162251	161153	0.88	cps
Terbium	159-1	4238626	4218009	4249028	4235221	0.37	cps
Terbium	159-2	2557277	2600783	2543287	2567116	1.17	cps
Thallium	203-1	73	63	40	59	29.04	cps
Thallium	205-1	127	117	107	117	8.57	cps
Tin	118-1	347	350	357	351	1.45	cps
Titanium	47-1	80	110	97	96	15.73	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BL	Instrumnet Name :	P7
Client Sample ID :	PB163150BL	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 14:56:59	DataFile Name :	023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	23	13	47	28	61.59	cps
Vanadium	51-2	17	17	10	14	26.66	cps
Yttrium	89-1	4355356	4193526	4434682	4327855	2.84	cps
Yttrium	89-2	1001852	995171	999986	999003	0.35	cps
Zinc	66-2	240	283	310	278	12.72	cps
Zirconium	90-1	217	277	317	270	18.64	cps
Zirconium	91-1	83	70	53	69	21.82	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BS	Instrumnet Name :	P7
Client Sample ID :	PB163150BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:12:44	DataFile Name :	025LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	537324	532921	525773	532006	1.10	cps
Antimony	121-1	1432320	1472990	1477450	1460920	1.70	cps
Arsenic	75-2	79877	79572	80175	79874	0.38	cps
Barium	135-1	1465565	1463351	1524110	1484342	2.32	cps
Barium	137-1	2580882	2618893	2689166	2629647	2.09	cps
Beryllium	9-1	280356	283778	290085	284739	1.73	cps
Bismuth	209-1	2383767	2383890	2438875	2402177	1.32	cps
Bismuth	209-2	1820330	1761261	1747266	1776286	2.18	cps
Bromine	81-1	3937	3694	3871	3834	3.28	cps
Bromine	81-2	23	17	20	20	16.65	cps
Cadmium	108-1	24441	24785	25219	24815	1.57	cps
Cadmium	106-1	36566	35109	37007	36227	2.74	cps
Cadmium	111-1	315150	318425	323170	318915	1.26	cps
Calcium	43-1	398166	405457	409247	404290	1.39	cps
Calcium	44-1	5631201	5818625	6022704	5824177	3.36	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	502732	498083	496478	499098	0.65	cps
Cobalt	59-2	778349	773639	767044	773010	0.73	cps
Copper	63-2	5351660	5449670	5186010	5329113	2.50	cps
Dysprosium	156-1	73	80	67	73	9.09	cps
Dysprosium	156-2	77	117	80	91	24.36	cps
Erbium	164-1	57	70	73	67	13.22	cps
Erbium	164-2	73	50	30	51	42.43	cps
Gadolinium	160-1	60	70	67	66	7.77	cps
Gadolinium	160-2	157	143	123	141	11.89	cps
Holmium	165-1	4056873	4080397	4131715	4089662	0.94	cps
Holmium	165-2	2587821	2595809	2500589	2561406	2.06	cps
Indium	115-1	3426395	3401270	3419277	3415647	0.38	cps
Indium	115-2	1009303	1004313	998414	1004010	0.54	cps
Iron	56-2	21656270	20923703	20775208	21118394	2.23	cps
Iron	57-2	559289	554574	551013	554959	0.75	cps
Iron	54-2	1239081	1219141	1218414	1225545	0.96	cps
Krypton	83-1	93	157	137	129	25.12	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BS	Instrumnet Name :	P7
Client Sample ID :	PB163150BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:12:44	DataFile Name :	025LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4005946	4040100	4234367	4093471	3.01	cps
Lead	207-1	3695546	3799814	3777336	3757566	1.46	cps
Lead	208-1	16513078	16843365	17017474	16791306	1.53	cps
Lithium	6-1	799839	809116	817103	808686	1.07	cps
Magnesium	24-2	4803996	4893109	4822943	4840016	0.97	cps
Manganese	55-2	3436699	3282254	3391599	3370184	2.36	cps
Molybdenum	94-1	4781952	4805688	4789102	4792248	0.25	cps
Molybdenum	95-1	6770217	6997645	6978567	6915476	1.82	cps
Molybdenum	96-1	7476011	7668720	7769227	7637986	1.95	cps
Molybdenum	97-1	4450737	4368759	4336674	4385390	1.34	cps
Molybdenum	98-1	10964469	11213378	11114741	11097529	1.13	cps
Neodymium	150-1	117	130	127	124	5.57	cps
Neodymium	150-2	50	30	43	41	24.77	cps
Nickel	60-2	201091	199730	199341	200054	0.46	cps
Phosphorus	31-2	37857	36908	36981	37249	1.42	cps
Potassium	39-2	2618054	2558910	2522063	2566342	1.89	cps
Rhodium	103-1	3307671	3138572	3169223	3205156	2.81	cps
Rhodium	103-2	1791081	1753746	1747267	1764031	1.34	cps
Scandium	45-1	2007814	1993015	2087595	2029475	2.51	cps
Scandium	45-2	163664	159486	158298	160483	1.76	cps
Selenium	82-1	24987	24856	25675	25173	1.75	cps
Selenium	77-2	2084	2230	1997	2104	5.61	cps
Selenium	78-2	7422	7188	6988	7200	3.01	cps
Silicon	28-1	12572276	12871286	12823184	12755582	1.26	cps
Silver	107-1	1642050	1616304	1619946	1626100	0.86	cps
Silver	109-1	1488460	1504693	1532849	1508667	1.49	cps
Sodium	23-2	7645499	7615023	7464718	7575080	1.28	cps
Strontium	86-1	9837263	10177292	9995048	10003201	1.70	cps
Strontium	88-1	87395335	88311385	87504865	87737195	0.57	cps
Sulfur	34-1	296022	294444	295322	295263	0.27	cps
Terbium	159-1	4324137	4362273	4436066	4374158	1.30	cps
Terbium	159-2	2630151	2619617	2596897	2615555	0.65	cps
Thallium	203-1	930354	958074	980013	956147	2.60	cps
Thallium	205-1	2421334	2541276	2547709	2503440	2.84	cps
Tin	118-1	1002213	1034646	1050621	1029160	2.40	cps
Titanium	47-1	1827223	1867895	1897648	1864255	1.90	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	PB163150BS	Instrumnet Name :	P7
Client Sample ID :	PB163150BS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:12:44	DataFile Name :	025LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3213557	3286582	3227927	3242689	1.19	cps
Vanadium	51-2	453789	443472	438749	445337	1.73	cps
Yttrium	89-1	4594963	4473513	4486522	4518333	1.48	cps
Yttrium	89-2	1017334	1017701	1009852	1014962	0.44	cps
Zinc	66-2	939097	932576	928707	933460	0.56	cps
Zirconium	90-1	2234753	2290310	2311012	2278692	1.73	cps
Zirconium	91-1	506620	518828	521392	515613	1.53	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-01	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:20:15	DataFile Name :	026SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5344	5364	5091	5267	2.89	cps
Antimony	121-1	890	950	1030	957	7.34	cps
Arsenic	75-2	347	363	333	348	4.32	cps
Barium	135-1	31846	32467	32805	32372	1.50	cps
Barium	137-1	55792	56247	58172	56737	2.23	cps
Beryllium	9-1	27	47	37	37	27.27	cps
Bismuth	209-1	2184260	2303942	2322890	2270364	3.31	cps
Bismuth	209-2	1750500	1552853	1537310	1613555	7.37	cps
Bromine	81-1	10234	12435	13586	12085	14.10	cps
Bromine	81-2	1727	1703	1670	1700	1.68	cps
Cadmium	108-1	10	10	10	10	0.00	cps
Cadmium	106-1	910	1020	973	968	5.71	cps
Cadmium	111-1	117	122	107	115	6.53	cps
Calcium	43-1	132581	136946	139296	136274	2.50	cps
Calcium	44-1	1973856	2041153	2091403	2035471	2.90	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2214	2410	2294	2306	4.29	cps
Cobalt	59-2	1067	1100	1087	1084	1.55	cps
Copper	63-2	77302	78558	79892	78584	1.65	cps
Dysprosium	156-1	167	150	117	144	17.62	cps
Dysprosium	156-2	77	87	93	86	9.80	cps
Erbium	164-1	183	140	137	153	16.98	cps
Erbium	164-2	87	87	110	94	14.26	cps
Gadolinium	160-1	133	163	173	157	13.29	cps
Gadolinium	160-2	213	193	240	216	10.86	cps
Holmium	165-1	3761092	3883171	3971166	3871810	2.72	cps
Holmium	165-2	2445783	2475640	2406551	2442658	1.42	cps
Indium	115-1	3100224	3179982	3174735	3151647	1.42	cps
Indium	115-2	981489	977486	978743	979239	0.21	cps
Iron	56-2	2555810	2548403	2463116	2522443	2.04	cps
Iron	57-2	68408	69342	68699	68817	0.69	cps
Iron	54-2	146095	147171	146478	146581	0.37	cps
Krypton	83-1	140	103	103	116	18.32	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-01	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:20:15	DataFile Name :	026SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3037	2957	3044	3013	1.60	cps
Lead	207-1	2374	2607	2627	2536	5.56	cps
Lead	208-1	11652	11839	11825	11772	0.88	cps
Lithium	6-1	758019	790304	804030	784118	3.01	cps
Magnesium	24-2	300862	302052	301210	301375	0.20	cps
Manganese	55-2	324153	329480	322363	325332	1.14	cps
Molybdenum	94-1	913	870	1043	942	9.57	cps
Molybdenum	95-1	1160	1083	1053	1099	5.01	cps
Molybdenum	96-1	1300	1343	1213	1286	5.15	cps
Molybdenum	97-1	703	683	713	700	2.18	cps
Molybdenum	98-1	1833	1770	1750	1785	2.44	cps
Neodymium	150-1	227	170	180	192	15.74	cps
Neodymium	150-2	110	73	83	89	21.33	cps
Nickel	60-2	5248	5254	5481	5328	2.49	cps
Phosphorus	31-2	427	467	437	443	4.70	cps
Potassium	39-2	311763	300909	303372	305348	1.86	cps
Rhodium	103-1	3068410	2989124	3146871	3068135	2.57	cps
Rhodium	103-2	1701337	1747025	1708926	1719096	1.42	cps
Scandium	45-1	1862573	1900635	2001241	1921483	3.73	cps
Scandium	45-2	154422	152257	151365	152681	1.03	cps
Selenium	82-1	54	82	104	80	31.51	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	177	163	123	154	17.97	cps
Silicon	28-1	3949232	3990694	4132560	4024162	2.39	cps
Silver	107-1	77	103	100	93	15.56	cps
Silver	109-1	103	97	103	101	3.80	cps
Sodium	23-2	9422237	9367597	9485326	9425054	0.63	cps
Strontium	86-1	94233	96360	98390	96327	2.16	cps
Strontium	88-1	821803	839272	847316	836130	1.56	cps
Sulfur	34-1	198231	198914	197742	198296	0.30	cps
Terbium	159-1	4040454	3998036	4210686	4083059	2.76	cps
Terbium	159-2	2557446	2513309	2500402	2523719	1.19	cps
Thallium	203-1	80	67	43	63	29.31	cps
Thallium	205-1	127	103	113	114	10.23	cps
Tin	118-1	790	937	757	828	11.57	cps
Titanium	47-1	820	830	743	798	5.94	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-01	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:20:15	DataFile Name :	026SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	233	203	237	224	8.18	cps
Vanadium	51-2	887	823	970	893	8.23	cps
Yttrium	89-1	4179181	4163400	4280791	4207791	1.51	cps
Yttrium	89-2	984922	1004383	991560	993622	1.00	cps
Zinc	66-2	5401	5214	5211	5275	2.06	cps
Zirconium	90-1	803	1020	900	908	11.96	cps
Zirconium	91-1	193	177	177	182	5.28	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FD	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:23:34	DataFile Name :	027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5799	3554	3617	4323	29.57	cps
Antimony	121-1	657	670	657	661	1.16	cps
Arsenic	75-2	300	250	277	276	9.08	cps
Barium	135-1	33643	34057	33466	33722	0.90	cps
Barium	137-1	57358	57713	58503	57858	1.01	cps
Beryllium	9-1	33	40	47	40	16.68	cps
Bismuth	209-1	2334660	2371881	2396543	2367695	1.32	cps
Bismuth	209-2	1560300	1739843	1758779	1686307	6.50	cps
Bromine	81-1	11832	14377	15662	13957	13.97	cps
Bromine	81-2	2170	2097	1973	2080	4.78	cps
Cadmium	108-1	3	10	7	7	50.03	cps
Cadmium	106-1	1150	1007	1040	1066	7.04	cps
Cadmium	111-1	133	117	129	126	6.54	cps
Calcium	43-1	137645	139546	141046	139412	1.22	cps
Calcium	44-1	2056769	2070830	2115407	2081002	1.47	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1300	1440	1297	1346	6.08	cps
Cobalt	59-2	1180	1117	1043	1113	6.14	cps
Copper	63-2	4201	4367	3954	4174	4.98	cps
Dysprosium	156-1	197	143	153	164	17.24	cps
Dysprosium	156-2	80	90	80	83	6.93	cps
Erbium	164-1	140	160	133	144	9.61	cps
Erbium	164-2	103	103	87	98	9.84	cps
Gadolinium	160-1	153	103	160	139	22.30	cps
Gadolinium	160-2	207	143	190	180	18.24	cps
Holmium	165-1	3900442	4068425	4041909	4003592	2.26	cps
Holmium	165-2	2468296	2468992	2476077	2471122	0.17	cps
Indium	115-1	3220997	3192362	3210748	3208036	0.45	cps
Indium	115-2	977963	983416	971147	977509	0.63	cps
Iron	56-2	2403865	2317657	2339370	2353631	1.91	cps
Iron	57-2	65944	65137	63801	64961	1.67	cps
Iron	54-2	136172	135675	136264	136037	0.23	cps
Krypton	83-1	100	100	117	106	9.12	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FD	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:23:34	DataFile Name :	027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2830	3170	2870	2957	6.29	cps
Lead	207-1	2554	2780	2667	2667	4.25	cps
Lead	208-1	11802	12276	11712	11930	2.54	cps
Lithium	6-1	791307	803319	818346	804324	1.68	cps
Magnesium	24-2	307522	303874	304055	305150	0.67	cps
Manganese	55-2	333225	328808	323735	328589	1.45	cps
Molybdenum	94-1	540	640	617	599	8.74	cps
Molybdenum	95-1	593	533	610	579	6.97	cps
Molybdenum	96-1	733	823	733	763	6.81	cps
Molybdenum	97-1	297	347	397	347	14.42	cps
Molybdenum	98-1	953	987	973	971	1.73	cps
Neodymium	150-1	173	153	130	152	14.25	cps
Neodymium	150-2	83	83	80	82	2.34	cps
Nickel	60-2	530	573	560	554	4.00	cps
Phosphorus	31-2	347	377	433	386	11.42	cps
Potassium	39-2	306711	308900	309176	308262	0.44	cps
Rhodium	103-1	3112694	3109553	3014617	3078954	1.81	cps
Rhodium	103-2	1758815	1767337	1744652	1756934	0.65	cps
Scandium	45-1	1958036	1948240	1966276	1957518	0.46	cps
Scandium	45-2	153200	153226	154825	153750	0.61	cps
Selenium	82-1	93	110	96	99	9.28	cps
Selenium	77-2	0	3	3	2	86.60	cps
Selenium	78-2	130	130	153	138	9.78	cps
Silicon	28-1	3944632	4030570	4089764	4021655	1.81	cps
Silver	107-1	90	80	70	80	12.50	cps
Silver	109-1	73	67	37	59	33.16	cps
Sodium	23-2	9650149	9531736	9356108	9512664	1.56	cps
Strontium	86-1	97024	99420	100104	98849	1.64	cps
Strontium	88-1	841187	852772	861246	851735	1.18	cps
Sulfur	34-1	198984	197755	197074	197938	0.49	cps
Terbium	159-1	4145605	4231510	4216901	4198005	1.09	cps
Terbium	159-2	2479634	2517207	2536454	2511098	1.15	cps
Thallium	203-1	40	43	53	46	15.23	cps
Thallium	205-1	110	93	120	108	12.50	cps
Tin	118-1	590	530	533	551	6.12	cps
Titanium	47-1	497	577	557	543	7.66	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FD	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:23:34	DataFile Name :	027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	223	230	197	217	8.14	cps
Vanadium	51-2	833	883	800	839	5.00	cps
Yttrium	89-1	4226994	4298088	4215681	4246921	1.05	cps
Yttrium	89-2	1007494	999976	984812	997427	1.16	cps
Zinc	66-2	6421	6872	6878	6724	3.89	cps
Zirconium	90-1	680	737	657	691	5.95	cps
Zirconium	91-1	127	180	177	161	18.54	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02DUP	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDDU	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:26:55	DataFile Name :	028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3644	3700	3807	3717	2.23	cps
Antimony	121-1	603	557	570	577	4.17	cps
Arsenic	75-2	377	313	343	344	9.20	cps
Barium	135-1	32791	34181	33232	33401	2.13	cps
Barium	137-1	57536	58272	59015	58274	1.27	cps
Beryllium	9-1	53	40	30	41	28.47	cps
Bismuth	209-1	2297312	2321849	2296687	2305283	0.62	cps
Bismuth	209-2	1758402	1748475	1769157	1758678	0.59	cps
Bromine	81-1	12015	14384	15582	13993	12.97	cps
Bromine	81-2	2157	2127	2187	2157	1.39	cps
Cadmium	108-1	10	10	17	12	31.50	cps
Cadmium	106-1	1087	997	993	1026	5.16	cps
Cadmium	111-1	132	106	121	120	10.79	cps
Calcium	43-1	139784	140534	142300	140873	0.92	cps
Calcium	44-1	2029455	2072519	2100980	2067652	1.74	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1410	1300	1223	1311	7.16	cps
Cobalt	59-2	1083	983	1090	1052	5.68	cps
Copper	63-2	4264	4194	4054	4171	2.56	cps
Dysprosium	156-1	100	150	173	141	26.55	cps
Dysprosium	156-2	80	70	97	82	16.39	cps
Erbium	164-1	210	160	160	177	16.34	cps
Erbium	164-2	73	87	110	90	20.62	cps
Gadolinium	160-1	93	117	123	111	14.18	cps
Gadolinium	160-2	213	203	123	180	27.40	cps
Holmium	165-1	3981670	3990915	4173177	4048587	2.67	cps
Holmium	165-2	2559513	2531299	2458974	2516596	2.06	cps
Indium	115-1	3224592	3236466	3197559	3219539	0.62	cps
Indium	115-2	992815	983966	984251	987011	0.51	cps
Iron	56-2	2344170	2361835	2379929	2361978	0.76	cps
Iron	57-2	64263	63229	64538	64010	1.08	cps
Iron	54-2	136643	136099	136358	136367	0.20	cps
Krypton	83-1	100	107	97	101	5.04	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02DUP	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDDU	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:26:55	DataFile Name :	028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3084	3044	3150	3093	1.74	cps
Lead	207-1	2494	2584	2624	2567	2.59	cps
Lead	208-1	11399	12042	11952	11798	2.95	cps
Lithium	6-1	797063	820175	814200	810480	1.48	cps
Magnesium	24-2	302791	303528	301000	302439	0.43	cps
Manganese	55-2	329665	330311	329909	329962	0.10	cps
Molybdenum	94-1	543	517	567	542	4.61	cps
Molybdenum	95-1	633	480	527	547	14.38	cps
Molybdenum	96-1	717	747	690	718	3.95	cps
Molybdenum	97-1	337	320	390	349	10.48	cps
Molybdenum	98-1	850	927	950	909	5.76	cps
Neodymium	150-1	203	143	200	182	18.50	cps
Neodymium	150-2	90	97	97	94	4.08	cps
Nickel	60-2	533	617	547	566	7.91	cps
Phosphorus	31-2	417	337	397	383	10.86	cps
Potassium	39-2	314082	311842	312823	312916	0.36	cps
Rhodium	103-1	2990650	3033144	3105833	3043209	1.91	cps
Rhodium	103-2	1753661	1741428	1740777	1745289	0.42	cps
Scandium	45-1	1914102	1939369	1924275	1925916	0.66	cps
Scandium	45-2	156132	153287	156853	155424	1.21	cps
Selenium	82-1	98	117	84	99	16.79	cps
Selenium	77-2	0	0	7	2	173.21	cps
Selenium	78-2	107	160	103	123	25.78	cps
Silicon	28-1	3945139	4020611	4096777	4020842	1.89	cps
Silver	107-1	83	50	90	74	28.79	cps
Silver	109-1	40	50	43	44	11.46	cps
Sodium	23-2	9428977	9685937	9524044	9546319	1.36	cps
Strontium	86-1	95521	99611	100168	98433	2.58	cps
Strontium	88-1	849942	859254	856491	855229	0.56	cps
Sulfur	34-1	197971	200031	200976	199659	0.77	cps
Terbium	159-1	4064920	4184999	4208076	4152665	1.85	cps
Terbium	159-2	2627860	2556417	2537505	2573927	1.85	cps
Thallium	203-1	53	37	47	46	18.41	cps
Thallium	205-1	120	100	70	97	26.03	cps
Tin	118-1	547	540	587	558	4.53	cps
Titanium	47-1	627	617	600	614	2.19	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02DUP	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDDU	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:26:55	DataFile Name :	028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	210	193	187	197	6.11	cps
Vanadium	51-2	807	990	943	913	10.43	cps
Yttrium	89-1	4186044	4297827	4195336	4226402	1.47	cps
Yttrium	89-2	996337	978874	993519	989577	0.95	cps
Zinc	66-2	6645	6531	6872	6683	2.59	cps
Zirconium	90-1	677	723	633	678	6.64	cps
Zirconium	91-1	153	153	150	152	1.27	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02LX5	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDL	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 15:30:13	DataFile Name :	029SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	24400	23652	24466	24172	1.87	cps
Antimony	121-1	513	493	463	490	5.14	cps
Arsenic	75-2	137	117	127	127	7.89	cps
Barium	135-1	28769	29925	30509	29734	2.98	cps
Barium	137-1	50777	51423	51095	51098	0.63	cps
Beryllium	9-1	153	107	87	116	29.61	cps
Bismuth	209-1	2509325	2457502	2403869	2456899	2.15	cps
Bismuth	209-2	1767512	1769495	1797125	1778044	0.93	cps
Bromine	81-1	6975	7302	7132	7136	2.29	cps
Bromine	81-2	497	537	563	532	6.30	cps
Cadmium	108-1	23	30	17	23	28.56	cps
Cadmium	106-1	1120	1203	1120	1148	4.19	cps
Cadmium	111-1	426	459	450	445	3.91	cps
Calcium	43-1	30738	30932	30651	30773	0.47	cps
Calcium	44-1	495966	508735	502320	502340	1.27	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1547	1593	1493	1545	3.24	cps
Cobalt	59-2	2877	2767	2637	2760	4.35	cps
Copper	63-2	6828	6832	6845	6835	0.13	cps
Dysprosium	156-1	1527	1617	1590	1578	2.93	cps
Dysprosium	156-2	1150	1060	1197	1136	6.12	cps
Erbium	164-1	1747	1790	1923	1820	5.06	cps
Erbium	164-2	1120	1063	1127	1103	3.15	cps
Gadolinium	160-1	1870	1967	1827	1888	3.80	cps
Gadolinium	160-2	1190	1293	1277	1253	4.43	cps
Holmium	165-1	4078929	4113853	3919848	4037543	2.56	cps
Holmium	165-2	2536351	2474118	2517955	2509475	1.27	cps
Indium	115-1	3323306	3337934	3351251	3337497	0.42	cps
Indium	115-2	993310	984827	996048	991395	0.59	cps
Iron	56-2	884260	881626	885121	883669	0.21	cps
Iron	57-2	23622	23528	22968	23373	1.51	cps
Iron	54-2	48812	48331	49274	48806	0.97	cps
Krypton	83-1	113	107	163	128	24.24	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02LX5	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDL	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 15:30:13	DataFile Name :	029SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	20806	21187	21260	21084	1.16	cps
Lead	207-1	17458	17999	18406	17954	2.65	cps
Lead	208-1	81483	83545	83353	82794	1.38	cps
Lithium	6-1	821097	804381	834267	819915	1.83	cps
Magnesium	24-2	65931	66045	66737	66238	0.66	cps
Manganese	55-2	615966	608635	623261	615954	1.19	cps
Molybdenum	94-1	397	397	420	404	3.33	cps
Molybdenum	95-1	337	307	327	323	4.72	cps
Molybdenum	96-1	337	427	443	402	14.27	cps
Molybdenum	97-1	177	243	200	207	16.37	cps
Molybdenum	98-1	483	540	467	497	7.74	cps
Neodymium	150-1	2220	2080	2267	2189	4.44	cps
Neodymium	150-2	1100	1210	1217	1176	5.57	cps
Nickel	60-2	1087	1160	1087	1111	3.81	cps
Phosphorus	31-2	543	507	500	517	4.52	cps
Potassium	39-2	100267	100351	97738	99452	1.49	cps
Rhodium	103-1	3193927	3187628	3253773	3211776	1.14	cps
Rhodium	103-2	1796885	1753969	1789236	1780030	1.29	cps
Scandium	45-1	2007730	1986120	1984340	1992730	0.65	cps
Scandium	45-2	157631	154055	155974	155887	1.15	cps
Selenium	82-1	115	102	23	80	62.17	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	123	173	143	147	17.16	cps
Silicon	28-1	1330569	1403705	1403819	1379364	3.06	cps
Silver	107-1	60	73	73	69	11.17	cps
Silver	109-1	40	43	60	48	22.43	cps
Sodium	23-2	1873026	1911683	1900596	1895102	1.05	cps
Strontium	86-1	21950	22037	22170	22052	0.50	cps
Strontium	88-1	189129	193156	190463	190916	1.07	cps
Sulfur	34-1	170550	171238	170779	170856	0.21	cps
Terbium	159-1	4238795	4232937	4205560	4225764	0.42	cps
Terbium	159-2	2590400	2561220	2528949	2560190	1.20	cps
Thallium	203-1	80	73	73	76	5.10	cps
Thallium	205-1	167	177	160	168	5.00	cps
Tin	118-1	540	557	493	530	6.19	cps
Titanium	47-1	3877	4511	3967	4118	8.32	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02LX5	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDL	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 15:30:13	DataFile Name :	029SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	400	417	360	392	7.43	cps
Vanadium	51-2	1603	1557	1477	1546	4.14	cps
Yttrium	89-1	4301348	4291078	4465835	4352753	2.25	cps
Yttrium	89-2	1010907	1009345	1015329	1011860	0.31	cps
Zinc	66-2	3937	3844	3837	3873	1.44	cps
Zirconium	90-1	537	697	707	647	14.75	cps
Zirconium	91-1	87	170	143	133	31.92	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MS	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:41:03	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	491187	487241	481936	486788	0.95	cps
Antimony	121-1	1397757	1415171	1435977	1416302	1.35	cps
Arsenic	75-2	80051	80959	80651	80554	0.57	cps
Barium	135-1	1354349	1386126	1388536	1376337	1.39	cps
Barium	137-1	2435888	2517007	2509021	2487305	1.80	cps
Beryllium	9-1	290033	300736	304380	298383	2.50	cps
Bismuth	209-1	2274282	2329840	2326907	2310343	1.35	cps
Bismuth	209-2	1794431	1794631	1792741	1793934	0.06	cps
Bromine	81-1	9320	10667	11528	10505	10.60	cps
Bromine	81-2	1567	1483	1527	1526	2.73	cps
Cadmium	108-1	24985	25195	24881	25021	0.64	cps
Cadmium	106-1	36660	35781	36680	36373	1.41	cps
Cadmium	111-1	319229	320963	330655	323616	1.90	cps
Calcium	43-1	489438	500515	500434	496796	1.28	cps
Calcium	44-1	7026375	7110476	7238181	7125011	1.50	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	490954	482262	481047	484754	1.11	cps
Cobalt	59-2	774516	770166	774163	772948	0.31	cps
Copper	63-2	5109919	5031197	5071847	5070988	0.78	cps
Dysprosium	156-1	163	147	223	178	22.68	cps
Dysprosium	156-2	130	187	163	160	17.80	cps
Erbium	164-1	130	150	133	138	7.78	cps
Erbium	164-2	110	117	80	102	19.11	cps
Gadolinium	160-1	170	123	140	144	16.37	cps
Gadolinium	160-2	127	193	163	161	20.72	cps
Holmium	165-1	3910641	3864337	3988304	3921094	1.60	cps
Holmium	165-2	2565940	2598478	2546833	2570417	1.02	cps
Indium	115-1	3079444	3211366	3243800	3178203	2.74	cps
Indium	115-2	968381	967713	955368	963820	0.76	cps
Iron	56-2	21823762	22181244	21327110	21777372	1.97	cps
Iron	57-2	579120	580234	571532	576962	0.82	cps
Iron	54-2	1281286	1278947	1263740	1274658	0.75	cps
Krypton	83-1	133	117	140	130	9.24	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MS	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:41:03	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4094850	4075695	4271111	4147218	2.60	cps
Lead	207-1	3668010	3653633	3755362	3692335	1.49	cps
Lead	208-1	16398184	16415893	16753187	16522421	1.21	cps
Lithium	6-1	808379	808673	826175	814409	1.25	cps
Magnesium	24-2	4718331	4776213	4811778	4768774	0.99	cps
Manganese	55-2	3543304	3523726	3581873	3549634	0.83	cps
Molybdenum	94-1	5425183	5648431	5651434	5575016	2.33	cps
Molybdenum	95-1	8282260	8491282	8551777	8441773	1.68	cps
Molybdenum	96-1	9111105	9185140	9246291	9180845	0.74	cps
Molybdenum	97-1	5281989	5322805	5201619	5268804	1.17	cps
Molybdenum	98-1	13489027	13562060	13897527	13649538	1.60	cps
Neodymium	150-1	203	200	187	197	4.48	cps
Neodymium	150-2	93	80	73	82	12.39	cps
Nickel	60-2	196178	195029	195512	195573	0.30	cps
Phosphorus	31-2	340	357	330	342	3.94	cps
Potassium	39-2	2655089	2655629	2672973	2661230	0.38	cps
Rhodium	103-1	2995002	3020547	3040671	3018740	0.76	cps
Rhodium	103-2	1720290	1727545	1702678	1716838	0.74	cps
Scandium	45-1	1917297	1899962	2028527	1948596	3.58	cps
Scandium	45-2	154283	154129	154206	154206	0.05	cps
Selenium	82-1	24026	24587	24525	24379	1.26	cps
Selenium	77-2	2070	2237	2187	2165	3.95	cps
Selenium	78-2	6835	6872	6995	6901	1.22	cps
Silicon	28-1	4267453	4397853	4460114	4375140	2.25	cps
Silver	107-1	996229	715950	1307848	1006676	29.41	cps
Silver	109-1	760408	1038093	708401	835634	21.21	cps
Sodium	23-2	15442756	15127579	15314783	15295039	1.04	cps
Strontium	86-1	8577947	8660060	8648351	8628786	0.51	cps
Strontium	88-1	73795854	76391609	75929537	75372333	1.84	cps
Sulfur	34-1	199210	196547	196271	197343	0.82	cps
Terbium	159-1	4228618	4118979	4104915	4150837	1.63	cps
Terbium	159-2	2509103	2611280	2589630	2570004	2.10	cps
Thallium	203-1	953214	949693	973699	958868	1.35	cps
Thallium	205-1	2452113	2507299	2549077	2502829	1.94	cps
Tin	118-1	909165	922249	924307	918574	0.89	cps
Titanium	47-1	1857876	1906899	1927469	1897415	1.88	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MS	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:41:03	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3270608	3340817	3449183	3353536	2.68	cps
Vanadium	51-2	451124	451605	445225	449318	0.79	cps
Yttrium	89-1	4235700	4156032	4127259	4172997	1.35	cps
Yttrium	89-2	972793	986534	963594	974307	1.18	cps
Zinc	66-2	913314	901625	909695	908211	0.66	cps
Zirconium	90-1	2161472	2244251	2252415	2219379	2.27	cps
Zirconium	91-1	491143	501553	504558	499085	1.41	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:47:37	DataFile Name :	033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2587161	2563711	2553389	2568087	0.67	cps
Antimony	121-1	1425878	1458805	1472674	1452452	1.65	cps
Arsenic	75-2	77937	76774	78419	77710	1.09	cps
Barium	135-1	1453932	1459925	1456995	1456950	0.21	cps
Barium	137-1	2597409	2677245	2592471	2622375	1.81	cps
Beryllium	9-1	290140	291870	291806	291272	0.34	cps
Bismuth	209-1	2365317	2306414	2280978	2317570	1.87	cps
Bismuth	209-2	1525295	1551140	1683287	1586574	5.34	cps
Bromine	81-1	3697	3754	3851	3767	2.06	cps
Bromine	81-2	57	60	47	54	12.74	cps
Cadmium	108-1	23709	24207	23806	23908	1.10	cps
Cadmium	106-1	35129	35309	35376	35272	0.36	cps
Cadmium	111-1	304709	307973	311886	308189	1.17	cps
Calcium	43-1	1725755	1789405	1776572	1763911	1.91	cps
Calcium	44-1	27983820	28620643	28373755	28326073	1.13	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	492051	488086	494497	491545	0.66	cps
Cobalt	59-2	740156	743065	737333	740184	0.39	cps
Copper	63-2	5295153	5261490	5317508	5291384	0.53	cps
Dysprosium	156-1	137	163	137	146	10.58	cps
Dysprosium	156-2	100	110	190	133	37.00	cps
Erbium	164-1	147	77	120	114	30.87	cps
Erbium	164-2	60	70	47	59	19.88	cps
Gadolinium	160-1	113	90	77	93	19.88	cps
Gadolinium	160-2	190	183	133	169	18.34	cps
Holmium	165-1	4078796	4035694	4144296	4086262	1.34	cps
Holmium	165-2	2507890	2551030	2574434	2544451	1.33	cps
Indium	115-1	3230629	3239764	3293999	3254797	1.05	cps
Indium	115-2	959527	959440	966297	961755	0.41	cps
Iron	56-2	100478035	100870242	100982989	100777089	0.26	cps
Iron	57-2	2476993	2538881	2482636	2499503	1.37	cps
Iron	54-2	5447380	5405574	5508247	5453734	0.95	cps
Krypton	83-1	153	133	130	139	9.09	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:47:37	DataFile Name :	033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4014197	3972921	4011461	3999526	0.58	cps
Lead	207-1	3654535	3698694	3765457	3706229	1.51	cps
Lead	208-1	16317468	16316318	16488592	16374126	0.61	cps
Lithium	6-1	842874	835891	839619	839461	0.42	cps
Magnesium	24-2	23499653	23372090	23595637	23489127	0.48	cps
Manganese	55-2	3369451	3312264	3406240	3362652	1.41	cps
Molybdenum	94-1	4670313	4800954	4761531	4744266	1.41	cps
Molybdenum	95-1	6805161	7013396	6927496	6915351	1.51	cps
Molybdenum	96-1	7469216	7648139	7505782	7541046	1.25	cps
Molybdenum	97-1	4280808	4237463	4333441	4283904	1.12	cps
Molybdenum	98-1	11067625	11013245	11367151	11149340	1.71	cps
Neodymium	150-1	160	170	107	146	23.39	cps
Neodymium	150-2	60	73	70	68	10.24	cps
Nickel	60-2	188654	191659	188327	189547	0.97	cps
Phosphorus	31-2	35782	36754	36099	36212	1.37	cps
Potassium	39-2	12046734	12694549	12517846	12419710	2.70	cps
Rhodium	103-1	3009125	3001599	2996107	3002277	0.22	cps
Rhodium	103-2	1652905	1679215	1694362	1675494	1.25	cps
Scandium	45-1	2042260	1994963	1967313	2001512	1.89	cps
Scandium	45-2	155431	156580	156091	156034	0.37	cps
Selenium	82-1	24312	24473	24663	24483	0.72	cps
Selenium	77-2	2130	2037	2053	2073	2.40	cps
Selenium	78-2	6765	6818	7258	6947	3.90	cps
Silicon	28-1	14227577	14319634	14283731	14276981	0.32	cps
Silver	107-1	1514846	1526826	1548298	1529990	1.11	cps
Silver	109-1	1434581	1454079	1449988	1446216	0.71	cps
Sodium	23-2	37215297	37441679	36782416	37146464	0.90	cps
Strontium	86-1	9695799	9787860	9732167	9738609	0.48	cps
Strontium	88-1	85665659	85372174	85927295	85655043	0.32	cps
Sulfur	34-1	289790	291269	288588	289882	0.46	cps
Terbium	159-1	4380280	4321095	4406530	4369301	1.00	cps
Terbium	159-2	2604440	2634451	2551869	2596920	1.61	cps
Thallium	203-1	931551	930890	952763	938401	1.33	cps
Thallium	205-1	2536531	2477190	2470060	2494594	1.46	cps
Tin	118-1	993564	1003845	1020764	1006058	1.37	cps
Titanium	47-1	1789588	1877005	1836768	1834454	2.39	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:47:37	DataFile Name :	033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3167155	3272253	3344867	3261425	2.74	cps
Vanadium	51-2	443409	440299	446293	443333	0.68	cps
Yttrium	89-1	4442002	4242628	4395524	4360051	2.39	cps
Yttrium	89-2	988375	985392	1000205	991324	0.79	cps
Zinc	66-2	928338	921871	912070	920760	0.89	cps
Zirconium	90-1	2263182	2307522	2279687	2283464	0.98	cps
Zirconium	91-1	506523	509935	511680	509379	0.51	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:54:24	DataFile Name :	034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	77	73	83	78	6.55	cps
Antimony	121-1	543	650	627	607	9.24	cps
Arsenic	75-2	7	7	0	4	86.60	cps
Barium	135-1	30	40	63	44	38.48	cps
Barium	137-1	77	70	50	66	21.17	cps
Beryllium	9-1	77	70	67	71	7.16	cps
Bismuth	209-1	2453298	2430238	2368308	2417281	1.82	cps
Bismuth	209-2	1897675	1830509	1789310	1839165	2.97	cps
Bromine	81-1	3797	3811	3630	3746	2.68	cps
Bromine	81-2	47	30	53	43	27.73	cps
Cadmium	108-1	10	10	3	8	49.52	cps
Cadmium	106-1	1040	880	947	956	8.41	cps
Cadmium	111-1	114	81	109	101	17.46	cps
Calcium	43-1	300	240	247	262	12.54	cps
Calcium	44-1	9090	9160	9090	9113	0.44	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	660	617	620	632	3.81	cps
Cobalt	59-2	67	87	70	74	14.39	cps
Copper	63-2	700	650	673	674	3.71	cps
Dysprosium	156-1	10	23	17	17	39.99	cps
Dysprosium	156-2	3	3	0	2	86.60	cps
Erbium	164-1	33	40	17	30	40.05	cps
Erbium	164-2	20	7	33	20	66.65	cps
Gadolinium	160-1	10	13	27	17	52.93	cps
Gadolinium	160-2	83	123	117	108	19.89	cps
Holmium	165-1	4023017	4070675	4107485	4067059	1.04	cps
Holmium	165-2	2674727	2509053	2442485	2542088	4.70	cps
Indium	115-1	3409003	3342024	3289747	3346925	1.79	cps
Indium	115-2	1038893	1005033	974333	1006086	3.21	cps
Iron	56-2	8209	7765	8192	8056	3.12	cps
Iron	57-2	1440	1440	1430	1437	0.40	cps
Iron	54-2	1120	1077	1183	1127	4.76	cps
Krypton	83-1	133	143	143	140	4.12	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:54:24	DataFile Name :	034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	343	290	297	310	9.37	cps
Lead	207-1	307	327	273	302	8.91	cps
Lead	208-1	1440	1303	1257	1333	7.15	cps
Lithium	6-1	812503	813613	799897	808671	0.94	cps
Magnesium	24-2	527	657	520	568	13.57	cps
Manganese	55-2	280	270	313	288	7.88	cps
Molybdenum	94-1	243	217	247	236	6.98	cps
Molybdenum	95-1	290	223	230	248	14.82	cps
Molybdenum	96-1	383	297	287	322	16.50	cps
Molybdenum	97-1	157	167	157	160	3.61	cps
Molybdenum	98-1	503	400	480	461	11.75	cps
Neodymium	150-1	7	10	7	8	24.71	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	177	173	163	171	4.05	cps
Phosphorus	31-2	183	187	210	193	7.51	cps
Potassium	39-2	48143	47792	47875	47936	0.38	cps
Rhodium	103-1	3239333	3251404	3231052	3240597	0.32	cps
Rhodium	103-2	1857545	1817810	1766256	1813870	2.52	cps
Scandium	45-1	2009594	1999490	1965520	1991534	1.16	cps
Scandium	45-2	166044	161081	156702	161276	2.90	cps
Selenium	82-1	100	60	74	78	25.78	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	147	157	173	159	8.48	cps
Silicon	28-1	284578	283695	286292	284855	0.46	cps
Silver	107-1	110	90	130	110	18.18	cps
Silver	109-1	147	80	63	97	45.62	cps
Sodium	23-2	17737	17664	17337	17579	1.21	cps
Strontium	86-1	320	300	353	324	8.30	cps
Strontium	88-1	1453	1237	1157	1282	11.97	cps
Sulfur	34-1	169893	168359	167331	168528	0.76	cps
Terbium	159-1	4369520	4289286	4255356	4304721	1.36	cps
Terbium	159-2	2696077	2555018	2473175	2574756	4.38	cps
Thallium	203-1	100	103	123	109	11.59	cps
Thallium	205-1	210	210	240	220	7.87	cps
Tin	118-1	367	433	463	421	11.75	cps
Titanium	47-1	113	137	190	147	26.80	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:54:24	DataFile Name :	034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	63	30	43	46	36.83	cps
Vanadium	51-2	7	20	7	11	69.25	cps
Yttrium	89-1	4465656	4512622	4344402	4440893	1.95	cps
Yttrium	89-2	1037961	1001501	972765	1004076	3.25	cps
Zinc	66-2	337	357	230	308	22.13	cps
Zirconium	90-1	310	310	313	311	0.62	cps
Zirconium	91-1	37	53	100	63	51.83	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MSD	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:57:44	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	476734	481132	473758	477208	0.78	cps
Antimony	121-1	1357550	1386878	1398838	1381089	1.54	cps
Arsenic	75-2	79213	79987	78030	79077	1.25	cps
Barium	135-1	1328113	1349125	1332763	1336667	0.83	cps
Barium	137-1	2434550	2444389	2381708	2420216	1.39	cps
Beryllium	9-1	270410	282499	285659	279523	2.88	cps
Bismuth	209-1	2206549	2280629	2273959	2253712	1.82	cps
Bismuth	209-2	1516746	1523953	1509335	1516678	0.48	cps
Bromine	81-1	10434	12372	13566	12124	13.04	cps
Bromine	81-2	1937	1770	1860	1856	4.50	cps
Cadmium	108-1	24424	24164	24517	24368	0.75	cps
Cadmium	106-1	35356	36349	36218	35975	1.50	cps
Cadmium	111-1	312284	317603	311026	313638	1.11	cps
Calcium	43-1	478017	493763	494890	488890	1.93	cps
Calcium	44-1	6961091	7262103	7331237	7184811	2.74	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	464629	476359	472659	471216	1.27	cps
Cobalt	59-2	761837	756946	755937	758240	0.42	cps
Copper	63-2	4973053	5127343	4980319	5026905	1.73	cps
Dysprosium	156-1	210	137	163	170	21.83	cps
Dysprosium	156-2	110	140	147	132	14.77	cps
Erbium	164-1	223	207	187	206	8.93	cps
Erbium	164-2	120	87	133	113	21.21	cps
Gadolinium	160-1	137	127	187	150	21.43	cps
Gadolinium	160-2	190	190	243	208	14.82	cps
Holmium	165-1	3798150	4002791	3950082	3917008	2.71	cps
Holmium	165-2	2481339	2472376	2390162	2447959	2.05	cps
Indium	115-1	3158838	3298341	3215457	3224212	2.18	cps
Indium	115-2	935651	951143	949975	945590	0.91	cps
Iron	56-2	21580811	21380150	21423500	21461487	0.49	cps
Iron	57-2	568959	565431	568522	567637	0.34	cps
Iron	54-2	1248473	1264794	1251637	1254968	0.69	cps
Krypton	83-1	133	97	110	113	16.38	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MSD	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:57:44	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3781327	3859243	4016829	3885800	3.09	cps
Lead	207-1	3354932	3593376	3566092	3504800	3.72	cps
Lead	208-1	15362012	15826121	16038559	15742231	2.20	cps
Lithium	6-1	776706	796375	814515	795865	2.38	cps
Magnesium	24-2	4560146	4619719	4609972	4596612	0.70	cps
Manganese	55-2	3398966	3609778	3450969	3486571	3.15	cps
Molybdenum	94-1	5348020	5545573	5617888	5503827	2.54	cps
Molybdenum	95-1	8172332	8384288	8302781	8286467	1.29	cps
Molybdenum	96-1	8807680	9179855	9095268	9027601	2.16	cps
Molybdenum	97-1	4975166	5010567	5242846	5076193	2.86	cps
Molybdenum	98-1	13212279	13443735	13475420	13377144	1.07	cps
Neodymium	150-1	220	197	220	212	6.35	cps
Neodymium	150-2	103	67	117	96	27.09	cps
Nickel	60-2	192031	191339	191544	191638	0.19	cps
Phosphorus	31-2	510	470	403	461	11.69	cps
Potassium	39-2	2556872	2569694	2574998	2567188	0.36	cps
Rhodium	103-1	2993721	3082902	3068831	3048485	1.57	cps
Rhodium	103-2	1660667	1724955	1677718	1687780	1.97	cps
Scandium	45-1	1942214	1969191	1893712	1935039	1.98	cps
Scandium	45-2	151287	152953	152301	152180	0.55	cps
Selenium	82-1	23531	23662	23904	23699	0.80	cps
Selenium	77-2	2020	2043	1890	1985	4.16	cps
Selenium	78-2	6642	7132	7165	6979	4.20	cps
Silicon	28-1	4421598	4572023	4513429	4502350	1.68	cps
Silver	107-1	618417	932306	1104363	885028	27.84	cps
Silver	109-1	620540	687952	786421	698304	11.95	cps
Sodium	23-2	15307139	15200681	15626541	15378120	1.44	cps
Strontium	86-1	8156592	8401893	8557162	8371882	2.41	cps
Strontium	88-1	71083992	73910987	74755857	73250279	2.63	cps
Sulfur	34-1	202632	199808	196202	199547	1.61	cps
Terbium	159-1	4136254	4173864	4147088	4152402	0.47	cps
Terbium	159-2	2505903	2519723	2456351	2493992	1.34	cps
Thallium	203-1	893944	919650	926856	913483	1.89	cps
Thallium	205-1	2337386	2415347	2388416	2380383	1.66	cps
Tin	118-1	865315	891992	891510	882939	1.73	cps
Titanium	47-1	1796604	1818109	1933224	1849312	3.97	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02MSD	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDMS	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 15:57:44	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3073406	3249905	3286356	3203222	3.56	cps
Vanadium	51-2	439115	438265	442295	439892	0.48	cps
Yttrium	89-1	4064349	4276585	4269999	4203645	2.87	cps
Yttrium	89-2	949406	961517	961688	957537	0.74	cps
Zinc	66-2	883206	885259	871639	880035	0.83	cps
Zirconium	90-1	2165230	2208565	2166660	2180152	1.13	cps
Zirconium	91-1	480687	500436	497004	492709	2.14	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02A	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDA	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:00:44	DataFile Name :	036SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	482910	482915	483931	483252	0.12	cps
Antimony	121-1	1397001	1435956	1437552	1423503	1.61	cps
Arsenic	75-2	80607	80798	81231	80879	0.39	cps
Barium	135-1	1361668	1380903	1385351	1375974	0.91	cps
Barium	137-1	2417231	2390644	2410714	2406196	0.58	cps
Beryllium	9-1	289128	296433	294541	293367	1.29	cps
Bismuth	209-1	2287040	2401705	2355233	2347993	2.46	cps
Bismuth	209-2	1552837	1706547	1737875	1665753	5.95	cps
Bromine	81-1	10887	12379	13570	12279	10.95	cps
Bromine	81-2	1697	1720	1793	1737	2.90	cps
Cadmium	108-1	24644	25179	25192	25005	1.25	cps
Cadmium	106-1	36399	37007	36492	36633	0.89	cps
Cadmium	111-1	314997	324461	324995	321484	1.75	cps
Calcium	43-1	486498	498224	495306	493343	1.24	cps
Calcium	44-1	7097481	7155660	7144989	7132710	0.43	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	483830	484266	485118	484405	0.14	cps
Cobalt	59-2	773119	771067	769802	771329	0.22	cps
Copper	63-2	5080298	5100092	4988352	5056247	1.18	cps
Dysprosium	156-1	140	150	150	147	3.94	cps
Dysprosium	156-2	143	147	150	147	2.27	cps
Erbium	164-1	103	127	157	129	20.75	cps
Erbium	164-2	113	70	107	97	24.14	cps
Gadolinium	160-1	97	183	143	141	30.74	cps
Gadolinium	160-2	207	153	197	186	15.28	cps
Holmium	165-1	3942495	3996043	4051383	3996640	1.36	cps
Holmium	165-2	2510120	2498969	2501642	2503577	0.23	cps
Indium	115-1	3187955	3162260	3264941	3205052	1.67	cps
Indium	115-2	957768	954967	953119	955285	0.24	cps
Iron	56-2	21594412	21648402	21628637	21623817	0.13	cps
Iron	57-2	570940	576230	576460	574543	0.54	cps
Iron	54-2	1276312	1260457	1269106	1268625	0.63	cps
Krypton	83-1	100	117	120	112	9.55	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02A	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDA	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:00:44	DataFile Name :	036SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3935174	4141286	4183920	4086794	3.26	cps
Lead	207-1	3579084	3698065	3767451	3681533	2.59	cps
Lead	208-1	16166816	16784146	16942895	16631285	2.47	cps
Lithium	6-1	810086	830844	830065	823665	1.43	cps
Magnesium	24-2	4764515	4700230	4727675	4730807	0.68	cps
Manganese	55-2	3525784	3539543	3536123	3533817	0.20	cps
Molybdenum	94-1	5416140	5614591	5520793	5517175	1.80	cps
Molybdenum	95-1	8441276	8418773	8642545	8500865	1.45	cps
Molybdenum	96-1	8997830	9256220	9353510	9202520	2.00	cps
Molybdenum	97-1	4978104	5350148	5217030	5181761	3.64	cps
Molybdenum	98-1	13417145	13735997	13828192	13660445	1.58	cps
Neodymium	150-1	187	233	157	192	20.10	cps
Neodymium	150-2	90	120	67	92	28.99	cps
Nickel	60-2	191348	195004	196930	194427	1.46	cps
Phosphorus	31-2	413	323	370	369	12.20	cps
Potassium	39-2	2587118	2623857	2670678	2627218	1.59	cps
Rhodium	103-1	2935717	3135555	2976772	3016015	3.50	cps
Rhodium	103-2	1725129	1740057	1743081	1736089	0.55	cps
Scandium	45-1	1918783	1940266	1980320	1946456	1.60	cps
Scandium	45-2	152576	155799	154327	154234	1.05	cps
Selenium	82-1	24191	24740	24477	24469	1.12	cps
Selenium	77-2	1993	2023	2204	2074	5.48	cps
Selenium	78-2	7175	6942	7255	7124	2.29	cps
Silicon	28-1	4437809	4475672	4505443	4472975	0.76	cps
Silver	107-1	881627	1597143	881876	1120215	36.87	cps
Silver	109-1	691297	1645128	1000295	1112240	43.76	cps
Sodium	23-2	15310021	15340278	15530558	15393619	0.78	cps
Strontium	86-1	8556374	8788204	8886640	8743739	1.94	cps
Strontium	88-1	75710476	79175554	75819022	76901684	2.56	cps
Sulfur	34-1	195410	195278	194504	195064	0.25	cps
Terbium	159-1	4118942	4167142	4057616	4114566	1.33	cps
Terbium	159-2	2562028	2532623	2559380	2551344	0.64	cps
Thallium	203-1	936084	970943	980296	962441	2.42	cps
Thallium	205-1	2439220	2615456	2552955	2535877	3.52	cps
Tin	118-1	901595	906811	922658	910355	1.20	cps
Titanium	47-1	1809962	1888637	1847774	1848791	2.13	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3596-02A	Instrumnet Name :	P7
Client Sample ID :	918-J-WS-081324-FDA	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:00:44	DataFile Name :	036SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3381359	3432613	3440734	3418235	0.94	cps
Vanadium	51-2	451270	452264	447811	450448	0.52	cps
Yttrium	89-1	4206601	4383070	4274629	4288100	2.08	cps
Yttrium	89-2	978025	965571	969050	970882	0.66	cps
Zinc	66-2	901822	896844	907843	902170	0.61	cps
Zirconium	90-1	2214889	2278530	2262427	2251949	1.47	cps
Zirconium	91-1	498056	502889	506305	502417	0.82	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-01	Instrumnet Name :	P7
Client Sample ID :	915-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:03:42	DataFile Name :	037SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	41934	40928	40534	41132	1.76	cps
Antimony	121-1	2597	2550	2654	2600	1.99	cps
Arsenic	75-2	560	640	550	583	8.46	cps
Barium	135-1	35942	36697	36574	36404	1.11	cps
Barium	137-1	61509	63297	63059	62621	1.55	cps
Beryllium	9-1	203	153	120	159	26.40	cps
Bismuth	209-1	2309347	2334640	2354689	2332892	0.97	cps
Bismuth	209-2	1763406	1836689	1721759	1773952	3.28	cps
Bromine	81-1	12419	14627	15512	14186	11.23	cps
Bromine	81-2	1957	2220	2180	2119	6.70	cps
Cadmium	108-1	30	33	7	23	62.26	cps
Cadmium	106-1	1063	1053	993	1037	3.65	cps
Cadmium	111-1	299	192	191	227	27.17	cps
Calcium	43-1	137387	138011	137382	137593	0.26	cps
Calcium	44-1	2025646	2043490	2085581	2051572	1.50	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3784	3617	3831	3744	3.00	cps
Cobalt	59-2	1860	1870	1697	1809	5.38	cps
Copper	63-2	10671	10470	9877	10339	3.99	cps
Dysprosium	156-1	273	383	473	377	26.59	cps
Dysprosium	156-2	180	270	293	248	24.15	cps
Erbium	164-1	333	347	297	326	7.95	cps
Erbium	164-2	250	227	230	236	5.36	cps
Gadolinium	160-1	393	393	360	382	5.03	cps
Gadolinium	160-2	320	337	300	319	5.76	cps
Holmium	165-1	3899203	3912033	4017699	3942978	1.65	cps
Holmium	165-2	2452417	2511760	2489274	2484484	1.21	cps
Indium	115-1	3221081	3233888	3214165	3223045	0.31	cps
Indium	115-2	965597	987222	971593	974804	1.15	cps
Iron	56-2	4394678	4362600	4269630	4342303	1.50	cps
Iron	57-2	118217	119208	117008	118145	0.93	cps
Iron	54-2	256441	253503	251783	253909	0.93	cps
Krypton	83-1	133	110	127	123	9.75	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-01	Instrumnet Name :	P7
Client Sample ID :	915-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:03:42	DataFile Name :	037SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	9617	9196	8860	9224	4.11	cps
Lead	207-1	8143	7996	8062	8067	0.91	cps
Lead	208-1	38172	36770	35585	36842	3.51	cps
Lithium	6-1	795548	811275	822716	809846	1.68	cps
Magnesium	24-2	311065	319236	312806	314369	1.37	cps
Manganese	55-2	308222	310739	311855	310272	0.60	cps
Molybdenum	94-1	3124	2350	2084	2519	21.45	cps
Molybdenum	95-1	3510	2790	2070	2790	25.81	cps
Molybdenum	96-1	3984	2964	2637	3195	21.99	cps
Molybdenum	97-1	2027	1683	1253	1655	23.42	cps
Molybdenum	98-1	5508	4324	3317	4383	25.02	cps
Neodymium	150-1	530	517	490	512	3.98	cps
Neodymium	150-2	250	233	257	247	4.87	cps
Nickel	60-2	1137	1160	1040	1112	5.72	cps
Phosphorus	31-2	867	863	813	848	3.52	cps
Potassium	39-2	323349	326398	324935	324894	0.47	cps
Rhodium	103-1	3043759	3062269	3161592	3089207	2.05	cps
Rhodium	103-2	1722616	1754142	1709037	1728598	1.34	cps
Scandium	45-1	1878465	1900663	1943041	1907389	1.72	cps
Scandium	45-2	155920	157877	156587	156795	0.63	cps
Selenium	82-1	49	120	96	88	40.48	cps
Selenium	77-2	0	3	3	2	86.60	cps
Selenium	78-2	143	157	190	163	14.71	cps
Silicon	28-1	5383568	5424111	5413125	5406935	0.39	cps
Silver	107-1	740	607	647	664	10.30	cps
Silver	109-1	753	590	510	618	20.08	cps
Sodium	23-2	9689709	9683153	9530662	9634508	0.93	cps
Strontium	86-1	97500	100037	98671	98736	1.29	cps
Strontium	88-1	858284	867002	867209	864165	0.59	cps
Sulfur	34-1	198190	196179	196789	197053	0.52	cps
Terbium	159-1	4145379	4183046	4136686	4155037	0.59	cps
Terbium	159-2	2517263	2594888	2581426	2564526	1.62	cps
Thallium	203-1	430	370	247	349	26.79	cps
Thallium	205-1	987	820	643	817	21.02	cps
Tin	118-1	1863	1803	1963	1877	4.31	cps
Titanium	47-1	6625	7528	6515	6889	8.07	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-01	Instrumnet Name :	P7
Client Sample ID :	915-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:03:42	DataFile Name :	037SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1177	903	760	947	22.36	cps
Vanadium	51-2	2244	2224	2167	2211	1.80	cps
Yttrium	89-1	4112636	4228592	4259093	4200107	1.84	cps
Yttrium	89-2	961122	981939	971769	971610	1.07	cps
Zinc	66-2	9793	9983	10097	9958	1.54	cps
Zirconium	90-1	2180	2204	2087	2157	2.86	cps
Zirconium	91-1	573	463	537	524	10.68	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-02	Instrumnet Name :	P7
Client Sample ID :	920-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:07:02	DataFile Name :	038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6258	6168	6889	6438	6.10	cps
Antimony	121-1	883	850	1007	913	9.04	cps
Arsenic	75-2	343	313	323	327	4.68	cps
Barium	135-1	32811	33503	33710	33341	1.41	cps
Barium	137-1	57476	56887	58774	57712	1.67	cps
Beryllium	9-1	97	73	73	81	16.61	cps
Bismuth	209-1	2291151	2336088	2288921	2305387	1.15	cps
Bismuth	209-2	1733277	1791967	1726320	1750521	2.06	cps
Bromine	81-1	12389	14564	15685	14213	11.79	cps
Bromine	81-2	2134	2207	2114	2151	2.28	cps
Cadmium	108-1	13	3	0	6	124.93	cps
Cadmium	106-1	1143	897	910	983	14.11	cps
Cadmium	111-1	132	111	114	119	9.44	cps
Calcium	43-1	141130	141094	143587	141937	1.01	cps
Calcium	44-1	2063442	2140829	2112530	2105600	1.86	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1843	1883	1697	1808	5.44	cps
Cobalt	59-2	893	1140	960	998	12.79	cps
Copper	63-2	3710	3731	3587	3676	2.11	cps
Dysprosium	156-1	123	113	97	111	12.13	cps
Dysprosium	156-2	70	60	63	64	7.90	cps
Erbium	164-1	103	123	130	119	11.68	cps
Erbium	164-2	77	70	103	83	21.17	cps
Gadolinium	160-1	123	127	80	110	23.67	cps
Gadolinium	160-2	190	190	197	192	2.00	cps
Holmium	165-1	3967430	3938911	3972996	3959779	0.46	cps
Holmium	165-2	2487474	2596308	2524456	2536079	2.18	cps
Indium	115-1	3222375	3278807	3332700	3277960	1.68	cps
Indium	115-2	990575	975198	980404	982059	0.80	cps
Iron	56-2	2405061	2399970	2407009	2404013	0.15	cps
Iron	57-2	66168	65549	66480	66066	0.72	cps
Iron	54-2	140469	138820	138414	139234	0.78	cps
Krypton	83-1	100	123	97	107	13.62	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-02	Instrumnet Name :	P7
Client Sample ID :	920-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:07:02	DataFile Name :	038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2814	2557	2624	2665	5.00	cps
Lead	207-1	2494	2380	2250	2375	5.13	cps
Lead	208-1	11119	10715	10632	10822	2.41	cps
Lithium	6-1	811579	828025	832986	824196	1.36	cps
Magnesium	24-2	313286	309369	313904	312186	0.79	cps
Manganese	55-2	305020	302152	306012	304395	0.66	cps
Molybdenum	94-1	757	717	847	773	8.61	cps
Molybdenum	95-1	923	973	970	956	2.93	cps
Molybdenum	96-1	1070	1080	1053	1068	1.26	cps
Molybdenum	97-1	567	420	537	508	15.26	cps
Molybdenum	98-1	1400	1623	1527	1517	7.39	cps
Neodymium	150-1	137	147	137	140	4.12	cps
Neodymium	150-2	90	90	60	80	21.65	cps
Nickel	60-2	717	697	723	712	1.95	cps
Phosphorus	31-2	530	557	530	539	2.86	cps
Potassium	39-2	319258	325574	326644	323825	1.23	cps
Rhodium	103-1	3099412	3126589	3168469	3131490	1.11	cps
Rhodium	103-2	1793548	1746850	1770991	1770463	1.32	cps
Scandium	45-1	1936581	1985546	1977095	1966407	1.33	cps
Scandium	45-2	155860	158855	157208	157308	0.95	cps
Selenium	82-1	81	63	85	76	15.31	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	133	153	110	132	16.40	cps
Silicon	28-1	4030557	4042796	4044062	4039138	0.18	cps
Silver	107-1	253	243	220	239	7.16	cps
Silver	109-1	183	213	157	184	15.37	cps
Sodium	23-2	9985936	9759477	9878635	9874683	1.15	cps
Strontium	86-1	98671	99161	101588	99807	1.56	cps
Strontium	88-1	861954	867543	874322	867940	0.71	cps
Sulfur	34-1	198323	198785	197736	198281	0.27	cps
Terbium	159-1	4210066	4009434	4175629	4131710	2.60	cps
Terbium	159-2	2571529	2585217	2510335	2555694	1.56	cps
Thallium	203-1	93	110	73	92	19.91	cps
Thallium	205-1	250	277	257	261	5.31	cps
Tin	118-1	843	903	1080	942	13.06	cps
Titanium	47-1	987	950	1003	980	2.78	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3609-02	Instrumnet Name :	P7
Client Sample ID :	920-J-WS-081424	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:07:02	DataFile Name :	038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	180	183	210	191	8.60	cps
Vanadium	51-2	950	903	880	911	3.91	cps
Yttrium	89-1	4185555	4219691	4159145	4188130	0.72	cps
Yttrium	89-2	978387	1003081	986692	989386	1.27	cps
Zinc	66-2	2610	2794	2727	2710	3.42	cps
Zirconium	90-1	593	763	657	671	12.80	cps
Zirconium	91-1	97	143	120	120	19.45	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-01	Instrumnet Name :	P7
Client Sample ID :	914-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:10:19	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3600	3587	3340	3509	4.17	cps
Antimony	121-1	567	537	627	577	7.95	cps
Arsenic	75-2	863	793	883	847	5.58	cps
Barium	135-1	50443	51857	51208	51169	1.38	cps
Barium	137-1	88564	89386	88225	88725	0.67	cps
Beryllium	9-1	77	97	50	74	31.45	cps
Bismuth	209-1	2291942	2283228	2336259	2303810	1.23	cps
Bismuth	209-2	1798482	1774349	1711488	1761440	2.55	cps
Bromine	81-1	18158	22010	24123	21430	14.11	cps
Bromine	81-2	3650	3804	3707	3721	2.08	cps
Cadmium	108-1	10	7	13	10	33.30	cps
Cadmium	106-1	1107	1220	1010	1112	9.45	cps
Cadmium	111-1	130	147	115	131	12.36	cps
Calcium	43-1	230347	234356	234276	232993	0.98	cps
Calcium	44-1	3445891	3461398	3530667	3479319	1.30	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1937	1943	1840	1907	3.03	cps
Cobalt	59-2	6558	6141	6075	6258	4.19	cps
Copper	63-2	1890	1883	1730	1835	4.93	cps
Dysprosium	156-1	137	183	113	144	24.67	cps
Dysprosium	156-2	107	97	80	94	14.27	cps
Erbium	164-1	177	143	110	143	23.26	cps
Erbium	164-2	120	70	107	99	26.18	cps
Gadolinium	160-1	133	147	170	150	12.37	cps
Gadolinium	160-2	213	163	170	182	14.90	cps
Holmium	165-1	4028069	4033769	4025457	4029098	0.11	cps
Holmium	165-2	2555471	2483108	2555166	2531249	1.65	cps
Indium	115-1	3328258	3292361	3258154	3292924	1.06	cps
Indium	115-2	981872	989720	985478	985690	0.40	cps
Iron	56-2	4906880	5009173	4966391	4960815	1.04	cps
Iron	57-2	135922	133282	132397	133867	1.37	cps
Iron	54-2	286828	287551	287887	287422	0.19	cps
Krypton	83-1	127	60	97	94	35.35	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-01	Instrumnet Name :	P7
Client Sample ID :	914-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:10:19	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2320	2317	2300	2312	0.46	cps
Lead	207-1	1980	2084	2004	2022	2.68	cps
Lead	208-1	9445	9025	9385	9285	2.45	cps
Lithium	6-1	803976	810190	810369	808178	0.45	cps
Magnesium	24-2	578492	580111	578925	579176	0.14	cps
Manganese	55-2	1005489	997782	1001800	1001690	0.38	cps
Molybdenum	94-1	643	693	827	721	13.14	cps
Molybdenum	95-1	733	740	937	803	14.38	cps
Molybdenum	96-1	873	780	1120	925	19.01	cps
Molybdenum	97-1	463	477	507	482	4.60	cps
Molybdenum	98-1	1160	1113	1357	1210	10.67	cps
Neodymium	150-1	153	177	200	177	13.21	cps
Neodymium	150-2	100	93	43	79	39.26	cps
Nickel	60-2	1000	883	937	940	6.21	cps
Phosphorus	31-2	843	1013	947	934	9.17	cps
Potassium	39-2	514599	511832	512774	513068	0.27	cps
Rhodium	103-1	3129730	3189681	3100394	3139935	1.45	cps
Rhodium	103-2	1729342	1766660	1729757	1741920	1.23	cps
Scandium	45-1	1968673	2016390	1966178	1983747	1.43	cps
Scandium	45-2	158864	158658	158009	158510	0.28	cps
Selenium	82-1	102	115	90	102	12.51	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	120	193	120	144	29.31	cps
Silicon	28-1	7062813	7038643	7150458	7083971	0.83	cps
Silver	107-1	130	113	170	138	21.14	cps
Silver	109-1	140	140	123	134	7.15	cps
Sodium	23-2	22712737	22549171	22276253	22512720	0.98	cps
Strontium	86-1	170054	173803	172221	172026	1.09	cps
Strontium	88-1	1502751	1494579	1508743	1502024	0.47	cps
Sulfur	34-1	228653	227513	228493	228219	0.27	cps
Terbium	159-1	4224938	4243827	4255187	4241317	0.36	cps
Terbium	159-2	2610454	2634150	2563643	2602749	1.38	cps
Thallium	203-1	147	127	97	123	20.40	cps
Thallium	205-1	227	253	360	280	25.20	cps
Tin	118-1	807	847	1057	903	14.87	cps
Titanium	47-1	837	653	737	742	12.37	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-01	Instrumnet Name :	P7
Client Sample ID :	914-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:10:19	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	240	233	240	238	1.62	cps
Vanadium	51-2	1153	1183	1350	1229	8.62	cps
Yttrium	89-1	4352243	4400105	4262565	4338304	1.61	cps
Yttrium	89-2	990871	1013974	988993	997946	1.39	cps
Zinc	66-2	9740	9623	9850	9738	1.16	cps
Zirconium	90-1	767	890	880	846	8.10	cps
Zirconium	91-1	147	187	167	167	12.00	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-02	Instrumnet Name :	P7
Client Sample ID :	916-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:13:39	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2464	2524	2630	2539	3.32	cps
Antimony	121-1	583	550	637	590	7.41	cps
Arsenic	75-2	497	523	580	533	7.98	cps
Barium	135-1	38756	39254	39678	39229	1.18	cps
Barium	137-1	66729	67942	66458	67043	1.18	cps
Beryllium	9-1	70	57	73	67	13.22	cps
Bismuth	209-1	2334507	2296233	2339749	2323496	1.02	cps
Bismuth	209-2	1709706	1707673	1704442	1707274	0.16	cps
Bromine	81-1	14721	17283	17974	16660	10.29	cps
Bromine	81-2	2527	2597	2590	2571	1.50	cps
Cadmium	108-1	7	20	10	12	56.76	cps
Cadmium	106-1	947	1000	1013	987	3.58	cps
Cadmium	111-1	120	99	104	108	9.99	cps
Calcium	43-1	172667	179303	180036	177335	2.29	cps
Calcium	44-1	2610772	2587525	2597683	2598660	0.45	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1280	1317	1357	1318	2.91	cps
Cobalt	59-2	3527	3390	3370	3429	2.49	cps
Copper	63-2	1893	1997	2130	2007	5.91	cps
Dysprosium	156-1	97	107	93	99	7.02	cps
Dysprosium	156-2	90	43	83	72	34.95	cps
Erbium	164-1	110	110	153	124	20.11	cps
Erbium	164-2	70	97	87	84	15.95	cps
Gadolinium	160-1	103	133	120	119	12.65	cps
Gadolinium	160-2	200	127	170	166	22.27	cps
Holmium	165-1	3893084	3939255	3871581	3901306	0.89	cps
Holmium	165-2	2439816	2467362	2479462	2462213	0.83	cps
Indium	115-1	3191444	3308268	3372856	3290856	2.79	cps
Indium	115-2	987077	978492	980628	982066	0.46	cps
Iron	56-2	3102145	3176944	3242252	3173780	2.21	cps
Iron	57-2	85656	84479	85166	85100	0.69	cps
Iron	54-2	180321	179886	180799	180335	0.25	cps
Krypton	83-1	107	143	123	124	14.75	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-02	Instrumnet Name :	P7
Client Sample ID :	916-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:13:39	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1443	1600	1490	1511	5.32	cps
Lead	207-1	1290	1387	1273	1317	4.65	cps
Lead	208-1	5967	6254	6141	6121	2.36	cps
Lithium	6-1	804036	824596	807324	811986	1.36	cps
Magnesium	24-2	435787	427771	431403	431653	0.93	cps
Manganese	55-2	524203	522854	522375	523144	0.18	cps
Molybdenum	94-1	560	640	567	589	7.54	cps
Molybdenum	95-1	627	600	753	660	12.41	cps
Molybdenum	96-1	773	777	740	763	2.66	cps
Molybdenum	97-1	523	430	383	446	16.00	cps
Molybdenum	98-1	967	1170	1077	1071	9.50	cps
Neodymium	150-1	153	163	157	158	3.23	cps
Neodymium	150-2	63	73	47	61	22.04	cps
Nickel	60-2	667	750	673	697	6.65	cps
Phosphorus	31-2	577	550	637	588	7.55	cps
Potassium	39-2	389918	394668	389189	391258	0.76	cps
Rhodium	103-1	3130537	3187611	3142625	3153591	0.95	cps
Rhodium	103-2	1788157	1762264	1714765	1755062	2.12	cps
Scandium	45-1	1923039	1943532	1991081	1952550	1.79	cps
Scandium	45-2	157033	158251	155836	157040	0.77	cps
Selenium	82-1	79	71	99	83	17.15	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	137	183	127	149	20.32	cps
Silicon	28-1	5038869	5043069	5164257	5082065	1.40	cps
Silver	107-1	113	117	130	120	7.35	cps
Silver	109-1	77	83	100	87	13.87	cps
Sodium	23-2	15314026	15471669	15581169	15455621	0.87	cps
Strontium	86-1	126737	129480	127598	127938	1.10	cps
Strontium	88-1	1099523	1116359	1122553	1112812	1.07	cps
Sulfur	34-1	215701	214785	217472	215986	0.63	cps
Terbium	159-1	4096691	4225313	4123166	4148390	1.64	cps
Terbium	159-2	2524230	2501509	2555043	2526927	1.06	cps
Thallium	203-1	63	80	80	74	12.93	cps
Thallium	205-1	170	210	230	203	15.02	cps
Tin	118-1	707	787	767	753	5.53	cps
Titanium	47-1	380	403	357	380	6.14	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3645-02	Instrumnet Name :	P7
Client Sample ID :	916-J-WS-081524	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:13:39	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	187	120	200	169	25.38	cps
Vanadium	51-2	660	723	670	684	4.97	cps
Yttrium	89-1	4271841	4307543	4354933	4311439	0.97	cps
Yttrium	89-2	999110	969415	988056	985527	1.52	cps
Zinc	66-2	11965	11608	11825	11799	1.52	cps
Zirconium	90-1	560	610	620	597	5.39	cps
Zirconium	91-1	97	157	133	129	23.47	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3657-01	Instrumnet Name :	P7
Client Sample ID :	917-J-WS-081624	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:16:57	DataFile Name :	041SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4644	4437	4681	4587	2.86	cps
Antimony	121-1	683	617	667	656	5.29	cps
Arsenic	75-2	333	253	293	293	13.64	cps
Barium	135-1	32591	32868	33773	33077	1.87	cps
Barium	137-1	55796	57000	58068	56955	2.00	cps
Beryllium	9-1	63	50	43	52	19.50	cps
Bismuth	209-1	2323391	2331153	2339054	2331199	0.34	cps
Bismuth	209-2	1771238	1747090	1758157	1758828	0.69	cps
Bromine	81-1	12372	13623	14684	13560	8.53	cps
Bromine	81-2	1853	1847	1920	1873	2.16	cps
Cadmium	108-1	10	20	13	14	35.26	cps
Cadmium	106-1	1020	1030	1027	1026	0.50	cps
Cadmium	111-1	128	126	110	121	8.16	cps
Calcium	43-1	139576	144057	145064	142899	2.04	cps
Calcium	44-1	2067643	2089688	2158200	2105177	2.24	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1620	1620	1643	1628	0.83	cps
Cobalt	59-2	990	860	940	930	7.05	cps
Copper	63-2	3197	3310	3444	3317	3.72	cps
Dysprosium	156-1	127	117	127	123	4.68	cps
Dysprosium	156-2	57	87	73	72	20.81	cps
Erbium	164-1	90	100	80	90	11.11	cps
Erbium	164-2	60	93	80	78	21.57	cps
Gadolinium	160-1	130	107	137	124	12.66	cps
Gadolinium	160-2	207	117	137	153	30.82	cps
Holmium	165-1	3962550	3881227	3816108	3886628	1.89	cps
Holmium	165-2	2539590	2445958	2523350	2502966	2.00	cps
Indium	115-1	3290813	3232386	3309904	3277701	1.23	cps
Indium	115-2	992347	985426	997138	991637	0.59	cps
Iron	56-2	2196948	2188177	2170298	2185141	0.62	cps
Iron	57-2	60712	59828	61770	60770	1.60	cps
Iron	54-2	128782	126450	128442	127891	0.99	cps
Krypton	83-1	140	97	127	121	18.32	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3657-01	Instrumnet Name :	P7
Client Sample ID :	917-J-WS-081624	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:16:57	DataFile Name :	041SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2740	2667	3000	2803	6.25	cps
Lead	207-1	2410	2580	2557	2516	3.66	cps
Lead	208-1	10815	11399	11499	11237	3.29	cps
Lithium	6-1	803589	802752	819302	808548	1.15	cps
Magnesium	24-2	314489	316325	318115	316310	0.57	cps
Manganese	55-2	234581	237368	237094	236348	0.65	cps
Molybdenum	94-1	490	547	537	524	5.77	cps
Molybdenum	95-1	573	507	517	532	6.76	cps
Molybdenum	96-1	637	610	677	641	5.23	cps
Molybdenum	97-1	350	333	310	331	6.07	cps
Molybdenum	98-1	887	867	840	864	2.71	cps
Neodymium	150-1	120	140	130	130	7.69	cps
Neodymium	150-2	80	80	67	76	10.19	cps
Nickel	60-2	1123	1163	1183	1157	2.64	cps
Phosphorus	31-2	490	387	450	442	11.78	cps
Potassium	39-2	312781	310870	313576	312409	0.45	cps
Rhodium	103-1	3093113	3129765	3062059	3094979	1.10	cps
Rhodium	103-2	1756905	1818732	1755015	1776884	2.04	cps
Scandium	45-1	1919119	1944092	1989001	1950738	1.82	cps
Scandium	45-2	157803	154997	156010	156270	0.91	cps
Selenium	82-1	74	106	60	80	29.64	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	140	117	160	139	15.61	cps
Silicon	28-1	3001167	3169043	3112755	3094322	2.76	cps
Silver	107-1	93	127	107	109	15.41	cps
Silver	109-1	93	103	83	93	10.71	cps
Sodium	23-2	10251247	10140429	10299855	10230511	0.80	cps
Strontium	86-1	100853	101175	101950	101326	0.56	cps
Strontium	88-1	880779	890623	888337	886579	0.58	cps
Sulfur	34-1	199684	205513	204597	203265	1.54	cps
Terbium	159-1	4066929	4125701	4110229	4100953	0.74	cps
Terbium	159-2	2567360	2572725	2563835	2567974	0.17	cps
Thallium	203-1	100	73	50	74	33.61	cps
Thallium	205-1	173	157	173	168	5.74	cps
Tin	118-1	780	913	967	887	10.84	cps
Titanium	47-1	623	677	807	702	13.43	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3657-01	Instrumnet Name :	P7
Client Sample ID :	917-J-WS-081624	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:16:57	DataFile Name :	041SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	183	200	193	192	4.36	cps
Vanadium	51-2	790	847	797	811	3.82	cps
Yttrium	89-1	4353726	4337017	4245187	4311977	1.36	cps
Yttrium	89-2	996255	988093	1006910	997086	0.95	cps
Zinc	66-2	2280	2337	2417	2345	2.93	cps
Zirconium	90-1	520	537	784	613	24.06	cps
Zirconium	91-1	140	133	147	140	4.76	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:20:18	DataFile Name :	042SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1019216	1015710	1017823	1017583	0.17	cps
Antimony	121-1	12966	13436	13049	13151	1.91	cps
Arsenic	75-2	3184	2920	3174	3093	4.83	cps
Barium	135-1	922210	930452	921477	924713	0.54	cps
Barium	137-1	1652586	1649684	1726125	1676132	2.58	cps
Beryllium	9-1	3654	3917	3907	3826	3.90	cps
Bismuth	209-1	2363596	2417902	2389992	2390497	1.14	cps
Bismuth	209-2	1862295	1762833	1868968	1831365	3.25	cps
Bromine	81-1	20291	24944	27055	24097	14.36	cps
Bromine	81-2	4044	3967	4234	4082	3.36	cps
Cadmium	108-1	1120	1123	1103	1116	0.96	cps
Cadmium	106-1	2880	3024	2977	2960	2.47	cps
Cadmium	111-1	15299	15068	15337	15235	0.96	cps
Calcium	43-1	144457	145089	147176	145574	0.98	cps
Calcium	44-1	2120607	2173950	2150528	2148362	1.24	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	41738	40354	40320	40804	1.98	cps
Cobalt	59-2	100209	96656	97883	98249	1.84	cps
Copper	63-2	160730	161494	161107	161110	0.24	cps
Dysprosium	156-1	65070	66111	66105	65762	0.91	cps
Dysprosium	156-2	46734	46176	46220	46377	0.67	cps
Erbium	164-1	71016	74316	71847	72393	2.37	cps
Erbium	164-2	45347	45420	44872	45213	0.66	cps
Gadolinium	160-1	74299	75378	73743	74473	1.12	cps
Gadolinium	160-2	48584	49414	49249	49082	0.90	cps
Holmium	165-1	4041642	4163531	4000485	4068552	2.08	cps
Holmium	165-2	2602138	2507373	2643447	2584319	2.70	cps
Indium	115-1	3290749	3340220	3335739	3322236	0.82	cps
Indium	115-2	997880	985979	994712	992857	0.62	cps
Iron	56-2	15384234	15093348	15019300	15165627	1.27	cps
Iron	57-2	399778	393256	400055	397696	0.97	cps
Iron	54-2	875950	871633	885122	877568	0.78	cps
Krypton	83-1	200	173	170	181	9.08	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:20:18	DataFile Name :	042SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	867328	879824	879366	875506	0.81	cps
Lead	207-1	753037	760868	762450	758785	0.66	cps
Lead	208-1	3601547	3684534	3716872	3667651	1.62	cps
Lithium	6-1	828447	821579	831683	827236	0.62	cps
Magnesium	24-2	314551	313392	315406	314449	0.32	cps
Manganese	55-2	20453118	20264020	20460315	20392484	0.55	cps
Molybdenum	94-1	6855	7235	6908	7000	2.94	cps
Molybdenum	95-1	4117	4294	4017	4143	3.38	cps
Molybdenum	96-1	4481	4851	4617	4650	4.02	cps
Molybdenum	97-1	1980	2294	2244	2172	7.75	cps
Molybdenum	98-1	5588	5831	5494	5638	3.08	cps
Neodymium	150-1	91639	94662	92991	93097	1.63	cps
Neodymium	150-2	50346	48687	49152	49395	1.73	cps
Nickel	60-2	38991	39194	39251	39145	0.35	cps
Phosphorus	31-2	12412	11881	12335	12209	2.35	cps
Potassium	39-2	179023	176882	179788	178564	0.84	cps
Rhodium	103-1	3231385	3099184	3205085	3178552	2.20	cps
Rhodium	103-2	1762138	1753513	1802871	1772841	1.49	cps
Scandium	45-1	1986947	2015606	2022061	2008205	0.93	cps
Scandium	45-2	162360	159224	159389	160324	1.10	cps
Selenium	82-1	521	558	552	544	3.63	cps
Selenium	77-2	133	130	140	134	3.79	cps
Selenium	78-2	323	373	240	312	21.57	cps
Silicon	28-1	12973262	13123354	12842729	12979782	1.08	cps
Silver	107-1	1137	1193	1147	1159	2.61	cps
Silver	109-1	1120	1477	1203	1267	14.73	cps
Sodium	23-2	1052069	1039047	1043443	1044853	0.63	cps
Strontium	86-1	118661	120126	119366	119384	0.61	cps
Strontium	88-1	1015137	1036996	1039810	1030648	1.31	cps
Sulfur	34-1	272262	267608	267917	269262	0.97	cps
Terbium	159-1	4302637	4332305	4361315	4332085	0.68	cps
Terbium	159-2	2645285	2585874	2617439	2616199	1.14	cps
Thallium	203-1	1977	1887	1930	1931	2.33	cps
Thallium	205-1	4171	4157	4381	4236	2.96	cps
Tin	118-1	5338	5738	5574	5550	3.63	cps
Titanium	47-1	173116	178494	172677	174762	1.85	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:20:18	DataFile Name :	042SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	15132	15159	14922	15071	0.86	cps
Vanadium	51-2	60859	59025	59373	59752	1.63	cps
Yttrium	89-1	5869714	6043934	6078462	5997370	1.87	cps
Yttrium	89-2	1384183	1369190	1377943	1377106	0.55	cps
Zinc	66-2	108051	109223	107090	108121	0.99	cps
Zirconium	90-1	14184	13423	13560	13722	2.96	cps
Zirconium	91-1	3144	2934	2930	3003	4.07	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:23:35	DataFile Name :	043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	196731	196826	197444	197000	0.20	cps
Antimony	121-1	2644	2644	2764	2684	2.58	cps
Arsenic	75-2	670	603	577	617	7.80	cps
Barium	135-1	186109	181500	182697	183435	1.30	cps
Barium	137-1	316103	314251	315006	315120	0.30	cps
Beryllium	9-1	623	693	763	693	10.10	cps
Bismuth	209-1	2429114	2415253	2480395	2441588	1.41	cps
Bismuth	209-2	1820072	2120866	1891265	1944068	8.09	cps
Bromine	81-1	9200	10077	9893	9723	4.76	cps
Bromine	81-2	1100	1010	970	1027	6.49	cps
Cadmium	108-1	237	253	163	218	21.99	cps
Cadmium	106-1	1213	1430	1347	1330	8.22	cps
Cadmium	111-1	3089	2939	2937	2989	2.92	cps
Calcium	43-1	28170	28660	28741	28524	1.08	cps
Calcium	44-1	468515	470331	472657	470501	0.44	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8776	8366	8789	8644	2.79	cps
Cobalt	59-2	19156	19316	18735	19069	1.57	cps
Copper	63-2	32612	31804	33427	32614	2.49	cps
Dysprosium	156-1	12943	12733	12789	12822	0.85	cps
Dysprosium	156-2	9040	8910	9006	8985	0.75	cps
Erbium	164-1	13914	14017	14117	14016	0.73	cps
Erbium	164-2	8853	8886	8933	8891	0.45	cps
Gadolinium	160-1	14351	14187	14418	14319	0.83	cps
Gadolinium	160-2	10144	9450	9340	9645	4.52	cps
Holmium	165-1	4179410	4009159	4126834	4105134	2.12	cps
Holmium	165-2	2504573	2846449	2603796	2651606	6.63	cps
Indium	115-1	3492798	3329005	3363609	3395137	2.54	cps
Indium	115-2	1013415	1129361	1011891	1051556	6.41	cps
Iron	56-2	3070787	2937366	2987063	2998405	2.25	cps
Iron	57-2	80357	78172	78899	79143	1.41	cps
Iron	54-2	176061	171374	175387	174274	1.45	cps
Krypton	83-1	130	140	173	148	15.36	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:23:35	DataFile Name :	043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	176365	172763	172559	173896	1.23	cps
Lead	207-1	148636	147849	149668	148718	0.61	cps
Lead	208-1	688442	683508	687130	686360	0.37	cps
Lithium	6-1	856175	845500	827137	842937	1.74	cps
Magnesium	24-2	61994	62256	61847	62032	0.33	cps
Manganese	55-2	4108261	3987788	3984523	4026857	1.75	cps
Molybdenum	94-1	1207	1333	1257	1266	5.04	cps
Molybdenum	95-1	937	917	1007	953	4.96	cps
Molybdenum	96-1	1023	1003	1013	1013	0.99	cps
Molybdenum	97-1	427	510	470	469	8.89	cps
Molybdenum	98-1	1113	1143	1130	1129	1.33	cps
Neodymium	150-1	18706	18359	17818	18294	2.45	cps
Neodymium	150-2	9647	9370	9540	9519	1.47	cps
Nickel	60-2	8089	7912	8116	8039	1.38	cps
Phosphorus	31-2	2437	2427	2730	2531	6.81	cps
Potassium	39-2	71443	72243	71410	71699	0.66	cps
Rhodium	103-1	3302022	3279406	3148836	3243421	2.55	cps
Rhodium	103-2	1814283	2057238	1777738	1883086	8.07	cps
Scandium	45-1	2047123	2026256	2004997	2026125	1.04	cps
Scandium	45-2	160941	179778	163219	167979	6.12	cps
Selenium	82-1	186	154	162	167	9.96	cps
Selenium	77-2	53	27	23	34	47.73	cps
Selenium	78-2	160	167	177	168	5.00	cps
Silicon	28-1	2847742	2818945	2800747	2822478	0.84	cps
Silver	107-1	320	290	277	296	7.51	cps
Silver	109-1	333	263	260	286	14.50	cps
Sodium	23-2	215380	213210	214521	214370	0.51	cps
Strontium	86-1	23392	23776	23576	23581	0.81	cps
Strontium	88-1	202260	202645	204609	203171	0.62	cps
Sulfur	34-1	173323	169404	171355	171361	1.14	cps
Terbium	159-1	4421852	4197730	4275560	4298381	2.65	cps
Terbium	159-2	2643351	3011530	2571566	2742149	8.61	cps
Thallium	203-1	377	397	383	386	2.64	cps
Thallium	205-1	940	950	963	951	1.23	cps
Tin	118-1	1427	1367	1300	1365	4.64	cps
Titanium	47-1	34002	35358	34372	34577	2.03	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:23:35	DataFile Name :	043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	2894	2914	2854	2887	1.06	cps
Vanadium	51-2	11911	11248	11531	11563	2.88	cps
Yttrium	89-1	4781735	4626997	4711343	4706692	1.65	cps
Yttrium	89-2	1093348	1212696	1081661	1129235	6.42	cps
Zinc	66-2	21853	21205	21422	21493	1.53	cps
Zirconium	90-1	2514	2474	2494	2494	0.80	cps
Zirconium	91-1	560	563	543	556	1.93	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUP	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:26:57	DataFile Name :	044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1004890	1001841	999813	1002181	0.26	cps
Antimony	121-1	12626	13033	13306	12988	2.64	cps
Arsenic	75-2	2920	3110	2964	2998	3.32	cps
Barium	135-1	906085	906937	928625	913882	1.40	cps
Barium	137-1	1613263	1650322	1661655	1641747	1.54	cps
Beryllium	9-1	3814	3754	3557	3708	3.62	cps
Bismuth	209-1	2380572	2676400	2393505	2483493	6.73	cps
Bismuth	209-2	1732934	1855025	1829015	1805658	3.56	cps
Bromine	81-1	19663	23359	26417	23146	14.61	cps
Bromine	81-2	3947	4001	4247	4065	3.94	cps
Cadmium	108-1	1017	1097	1010	1041	4.63	cps
Cadmium	106-1	2644	2917	2824	2795	4.97	cps
Cadmium	111-1	14868	14405	15217	14830	2.75	cps
Calcium	43-1	138453	139771	144003	140742	2.06	cps
Calcium	44-1	2037533	2075869	2096307	2069903	1.44	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	40481	41383	40320	40728	1.41	cps
Cobalt	59-2	97776	97763	97649	97729	0.07	cps
Copper	63-2	162739	160879	160344	161320	0.78	cps
Dysprosium	156-1	63262	64303	64738	64101	1.18	cps
Dysprosium	156-2	47149	46744	47085	46993	0.46	cps
Erbium	164-1	70530	69123	71693	70449	1.83	cps
Erbium	164-2	44902	45634	44969	45168	0.90	cps
Gadolinium	160-1	71223	72272	73609	72368	1.65	cps
Gadolinium	160-2	48935	49427	47765	48709	1.75	cps
Holmium	165-1	4053747	4541721	4015621	4203696	6.98	cps
Holmium	165-2	2435565	2668667	2589499	2564577	4.62	cps
Indium	115-1	3229810	3813429	3412676	3485305	8.56	cps
Indium	115-2	969609	1022383	997963	996652	2.65	cps
Iron	56-2	15298977	14981164	15003215	15094452	1.18	cps
Iron	57-2	400300	398741	395593	398211	0.60	cps
Iron	54-2	872735	869576	862930	868413	0.58	cps
Krypton	83-1	197	237	210	214	9.50	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUP	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:26:57	DataFile Name :	044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	858224	861521	871402	863716	0.79	cps
Lead	207-1	738844	738091	759481	745472	1.63	cps
Lead	208-1	3533050	3581427	3655686	3590054	1.72	cps
Lithium	6-1	806656	798300	811562	805506	0.83	cps
Magnesium	24-2	313771	309476	314096	312448	0.83	cps
Manganese	55-2	20254595	20197315	20028863	20160257	0.58	cps
Molybdenum	94-1	6238	6305	6251	6265	0.56	cps
Molybdenum	95-1	3967	3921	4074	3987	1.97	cps
Molybdenum	96-1	4487	4344	4297	4376	2.26	cps
Molybdenum	97-1	2157	2184	2020	2120	4.13	cps
Molybdenum	98-1	5641	5341	5524	5502	2.75	cps
Neodymium	150-1	89814	91163	92857	91278	1.67	cps
Neodymium	150-2	49199	49289	47928	48805	1.56	cps
Nickel	60-2	40053	39275	39552	39627	1.00	cps
Phosphorus	31-2	12228	11711	12082	12007	2.22	cps
Potassium	39-2	181563	178587	176696	178949	1.37	cps
Rhodium	103-1	2990984	3523738	3085622	3200114	8.88	cps
Rhodium	103-2	1786182	1876333	1738452	1800322	3.89	cps
Scandium	45-1	2005782	2270506	2020959	2099082	7.08	cps
Scandium	45-2	157453	166125	160383	161321	2.73	cps
Selenium	82-1	524	567	480	524	8.30	cps
Selenium	77-2	147	93	137	126	22.58	cps
Selenium	78-2	317	327	353	332	5.71	cps
Silicon	28-1	12584101	12626044	13170376	12793507	2.56	cps
Silver	107-1	1313	1170	1287	1257	6.07	cps
Silver	109-1	1197	1962	1968	1709	25.95	cps
Sodium	23-2	1037682	1027739	1028232	1031218	0.54	cps
Strontium	86-1	115093	116853	117598	116515	1.10	cps
Strontium	88-1	1002460	1013568	1025028	1013685	1.11	cps
Sulfur	34-1	259414	261323	261573	260770	0.45	cps
Terbium	159-1	4246832	4861497	4263712	4457347	7.85	cps
Terbium	159-2	2569088	2677131	2596910	2614376	2.15	cps
Thallium	203-1	1900	1790	2044	1911	6.65	cps
Thallium	205-1	4387	4474	4404	4422	1.04	cps
Tin	118-1	5341	5398	5538	5426	1.87	cps
Titanium	47-1	165525	168444	170523	168164	1.49	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUP	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:26:57	DataFile Name :	044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	14662	14365	14688	14571	1.23	cps
Vanadium	51-2	60200	59798	58319	59439	1.67	cps
Yttrium	89-1	5593933	6526408	6024176	6048172	7.72	cps
Yttrium	89-2	1353214	1364700	1373576	1363830	0.75	cps
Zinc	66-2	106178	105966	104644	105596	0.79	cps
Zirconium	90-1	11418	11555	11978	11650	2.51	cps
Zirconium	91-1	2570	2584	2680	2611	2.30	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:30:13	DataFile Name :	045CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2621765	2567756	2526248	2571923	1.86	cps
Antimony	121-1	1446543	1438779	1451454	1445592	0.44	cps
Arsenic	75-2	77146	78375	78308	77943	0.89	cps
Barium	135-1	1558055	1577875	1495950	1543960	2.77	cps
Barium	137-1	2616442	2681796	2603534	2633924	1.59	cps
Beryllium	9-1	284293	291994	290527	288938	1.42	cps
Bismuth	209-1	2381681	2406783	2356645	2381703	1.05	cps
Bismuth	209-2	1762039	1791249	1762858	1772048	0.94	cps
Bromine	81-1	6488	6231	5908	6209	4.68	cps
Bromine	81-2	263	297	220	260	14.79	cps
Cadmium	108-1	23442	24307	23980	23910	1.83	cps
Cadmium	106-1	35336	34688	35985	35336	1.83	cps
Cadmium	111-1	307645	304078	310713	307479	1.08	cps
Calcium	43-1	1739220	1827047	1799009	1788426	2.51	cps
Calcium	44-1	27789237	28987720	27919415	28232124	2.33	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	488149	489996	489735	489293	0.20	cps
Cobalt	59-2	741305	742616	742313	742078	0.09	cps
Copper	63-2	5187891	5188449	5216536	5197626	0.32	cps
Dysprosium	156-1	120	123	103	116	9.28	cps
Dysprosium	156-2	97	97	113	102	9.41	cps
Erbium	164-1	167	153	143	154	7.58	cps
Erbium	164-2	83	27	67	59	49.45	cps
Gadolinium	160-1	117	77	87	93	22.30	cps
Gadolinium	160-2	170	193	147	170	13.73	cps
Holmium	165-1	4159489	4130285	4136385	4142053	0.37	cps
Holmium	165-2	2674005	2579777	2609057	2620946	1.84	cps
Indium	115-1	3347926	3312149	3405196	3355090	1.40	cps
Indium	115-2	969799	974139	979623	974521	0.51	cps
Iron	56-2	101586948	101730005	101244282	101520412	0.25	cps
Iron	57-2	2515527	2564059	2618495	2566027	2.01	cps
Iron	54-2	5483176	5514073	5535600	5510950	0.48	cps
Krypton	83-1	143	100	103	116	20.87	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:30:13	DataFile Name :	045CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4215630	4185800	4196516	4199316	0.36	cps
Lead	207-1	3851928	3789824	3860722	3834158	1.01	cps
Lead	208-1	17062277	17214704	17077839	17118273	0.49	cps
Lithium	6-1	849682	850503	846713	848966	0.23	cps
Magnesium	24-2	23720796	23376722	23498551	23532023	0.74	cps
Manganese	55-2	3378242	3412291	3332895	3374476	1.18	cps
Molybdenum	94-1	4813392	4815253	4823905	4817517	0.12	cps
Molybdenum	95-1	7062943	7090084	7066434	7073154	0.21	cps
Molybdenum	96-1	7708651	7799343	7717973	7741989	0.64	cps
Molybdenum	97-1	4288423	4322412	4380593	4330476	1.08	cps
Molybdenum	98-1	11219525	11272491	11283929	11258648	0.31	cps
Neodymium	150-1	130	110	160	133	18.87	cps
Neodymium	150-2	50	40	57	49	17.16	cps
Nickel	60-2	191842	190025	191215	191027	0.48	cps
Phosphorus	31-2	36330	35698	35585	35871	1.12	cps
Potassium	39-2	12394714	12391015	12751628	12512452	1.66	cps
Rhodium	103-1	3109711	3056550	3125238	3097166	1.16	cps
Rhodium	103-2	1684212	1705670	1721821	1703901	1.11	cps
Scandium	45-1	2078570	2003638	2071171	2051126	2.01	cps
Scandium	45-2	158993	160705	157479	159059	1.01	cps
Selenium	82-1	24314	24628	24853	24598	1.10	cps
Selenium	77-2	2044	2053	2024	2040	0.75	cps
Selenium	78-2	7128	6848	7065	7014	2.09	cps
Silicon	28-1	14785374	14839756	14897550	14840893	0.38	cps
Silver	107-1	1533905	1584815	1549932	1556217	1.67	cps
Silver	109-1	1466627	1458503	1460787	1461972	0.29	cps
Sodium	23-2	37134885	37703209	36877802	37238632	1.13	cps
Strontium	86-1	9737703	9864555	10182190	9928149	2.31	cps
Strontium	88-1	86729482	88504302	87176359	87470048	1.06	cps
Sulfur	34-1	286617	286962	288959	287513	0.44	cps
Terbium	159-1	4413609	4382514	4356001	4384041	0.66	cps
Terbium	159-2	2709803	2612472	2629730	2650668	1.96	cps
Thallium	203-1	970785	959143	974499	968142	0.83	cps
Thallium	205-1	2591585	2509005	2516756	2539115	1.80	cps
Tin	118-1	1008682	1006799	1016825	1010769	0.53	cps
Titanium	47-1	1849122	1874781	1904958	1876287	1.49	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:30:13	DataFile Name :	045CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3337754	3454899	3463061	3418571	2.05	cps
Vanadium	51-2	446206	442426	442259	443630	0.50	cps
Yttrium	89-1	4467172	4417858	4526364	4470465	1.22	cps
Yttrium	89-2	992290	997270	1012588	1000716	1.06	cps
Zinc	66-2	892953	897071	887071	892365	0.56	cps
Zirconium	90-1	2295839	2333686	2306815	2312113	0.84	cps
Zirconium	91-1	518452	519770	517226	518483	0.25	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:46:37	DataFile Name :	046CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	80	143	153	126	31.68	cps
Antimony	121-1	217	277	340	278	22.20	cps
Arsenic	75-2	7	3	3	4	43.40	cps
Barium	135-1	37	47	33	39	17.85	cps
Barium	137-1	73	53	50	59	21.43	cps
Beryllium	9-1	37	27	30	31	16.37	cps
Bismuth	209-1	2429010	2353422	2313941	2365457	2.47	cps
Bismuth	209-2	1782761	1556549	1726108	1688473	6.97	cps
Bromine	81-1	4077	4041	3967	4028	1.39	cps
Bromine	81-2	47	33	37	39	17.85	cps
Cadmium	108-1	7	3	3	4	43.40	cps
Cadmium	106-1	873	873	930	892	3.67	cps
Cadmium	111-1	93	92	94	93	1.25	cps
Calcium	43-1	267	227	223	239	10.09	cps
Calcium	44-1	8459	7949	8356	8255	3.27	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	573	677	730	660	12.07	cps
Cobalt	59-2	80	87	60	76	18.37	cps
Copper	63-2	823	1020	863	902	11.52	cps
Dysprosium	156-1	10	3	3	6	69.34	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	30	37	20	29	29.04	cps
Erbium	164-2	10	20	13	14	35.26	cps
Gadolinium	160-1	30	17	13	20	44.10	cps
Gadolinium	160-2	150	117	100	122	20.83	cps
Holmium	165-1	4006985	3962702	4010245	3993311	0.67	cps
Holmium	165-2	2537266	2502667	2464903	2501612	1.45	cps
Indium	115-1	3350001	3269798	3356367	3325389	1.45	cps
Indium	115-2	997833	991941	983150	990975	0.75	cps
Iron	56-2	8946	9536	9917	9466	5.17	cps
Iron	57-2	1417	1423	1683	1508	10.09	cps
Iron	54-2	1160	1253	1317	1243	6.34	cps
Krypton	83-1	130	147	137	138	6.09	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:46:37	DataFile Name :	046CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	230	187	187	201	12.44	cps
Lead	207-1	200	187	177	188	6.23	cps
Lead	208-1	910	790	773	824	9.04	cps
Lithium	6-1	752755	765967	754058	757593	0.96	cps
Magnesium	24-2	687	853	863	801	12.39	cps
Manganese	55-2	420	450	413	428	4.57	cps
Molybdenum	94-1	197	187	217	200	7.64	cps
Molybdenum	95-1	257	193	253	234	15.20	cps
Molybdenum	96-1	307	233	247	262	14.90	cps
Molybdenum	97-1	117	120	173	137	23.27	cps
Molybdenum	98-1	330	313	350	331	5.54	cps
Neodymium	150-1	7	10	13	10	33.30	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	183	207	170	187	9.94	cps
Phosphorus	31-2	183	180	203	189	6.68	cps
Potassium	39-2	48056	47771	48490	48106	0.75	cps
Rhodium	103-1	3238509	3203366	3191506	3211127	0.76	cps
Rhodium	103-2	1828160	1786323	1829215	1814566	1.35	cps
Scandium	45-1	1960769	2012116	1988362	1987082	1.29	cps
Scandium	45-2	161358	160447	160040	160615	0.42	cps
Selenium	82-1	68	80	83	77	10.82	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	123	197	180	167	23.07	cps
Silicon	28-1	283759	281975	282625	282786	0.32	cps
Silver	107-1	80	40	63	61	32.88	cps
Silver	109-1	60	43	30	44	33.82	cps
Sodium	23-2	14067	13760	14293	14040	1.91	cps
Strontium	86-1	290	427	350	356	19.27	cps
Strontium	88-1	1383	1287	1463	1378	6.42	cps
Sulfur	34-1	173371	172087	173708	173055	0.49	cps
Terbium	159-1	4166954	4158993	4079622	4135190	1.17	cps
Terbium	159-2	2569238	2567717	2498778	2545244	1.58	cps
Thallium	203-1	40	53	67	53	25.00	cps
Thallium	205-1	167	100	107	124	29.51	cps
Tin	118-1	247	303	237	262	13.71	cps
Titanium	47-1	93	97	123	104	15.74	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 16:46:37	DataFile Name :	046CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	53	30	53	46	29.57	cps
Vanadium	51-2	10	23	10	14	53.28	cps
Yttrium	89-1	4418331	4385287	4358649	4387422	0.68	cps
Yttrium	89-2	1001577	997496	1005401	1001491	0.39	cps
Zinc	66-2	263	253	267	261	2.66	cps
Zirconium	90-1	290	287	303	293	3.01	cps
Zirconium	91-1	43	63	97	68	39.76	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:52:59	DataFile Name :	047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	205553	201495	203063	203370	1.01	cps
Antimony	121-1	2607	2654	2827	2696	4.30	cps
Arsenic	75-2	593	603	610	602	1.39	cps
Barium	135-1	174976	178050	178126	177051	1.02	cps
Barium	137-1	300994	306608	308168	305257	1.24	cps
Beryllium	9-1	703	787	647	712	9.89	cps
Bismuth	209-1	2403281	2412756	2318073	2378037	2.19	cps
Bismuth	209-2	1751656	1772062	1809587	1777769	1.65	cps
Bromine	81-1	6682	7789	8302	7591	10.91	cps
Bromine	81-2	880	860	887	876	1.59	cps
Cadmium	108-1	240	243	240	241	0.80	cps
Cadmium	106-1	1337	1223	1277	1279	4.43	cps
Cadmium	111-1	2956	3009	3257	3074	5.22	cps
Calcium	43-1	28153	28100	28193	28148	0.17	cps
Calcium	44-1	455537	465060	457465	459354	1.10	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8823	8636	8593	8684	1.41	cps
Cobalt	59-2	19907	19566	19830	19768	0.90	cps
Copper	63-2	32652	32896	32138	32562	1.19	cps
Dysprosium	156-1	12379	12622	12382	12461	1.12	cps
Dysprosium	156-2	8950	8556	9026	8844	2.85	cps
Erbium	164-1	13810	13940	13670	13807	0.98	cps
Erbium	164-2	8606	8509	8783	8633	1.61	cps
Gadolinium	160-1	13854	14274	13754	13960	1.98	cps
Gadolinium	160-2	9740	9130	9000	9290	4.26	cps
Holmium	165-1	3957746	4179277	4036838	4057953	2.77	cps
Holmium	165-2	2501294	2430837	2567767	2499966	2.74	cps
Indium	115-1	3367551	3389946	3342596	3366698	0.70	cps
Indium	115-2	999641	1008197	1018497	1008778	0.94	cps
Iron	56-2	3001937	2951979	3022055	2991990	1.21	cps
Iron	57-2	81241	80082	79546	80290	1.08	cps
Iron	54-2	177099	177700	174065	176288	1.11	cps
Krypton	83-1	120	163	140	141	15.37	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:52:59	DataFile Name :	047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	165218	168060	169017	167431	1.18	cps
Lead	207-1	141727	145048	146312	144362	1.64	cps
Lead	208-1	651646	662998	667217	660620	1.22	cps
Lithium	6-1	775949	777544	756696	770063	1.51	cps
Magnesium	24-2	62235	62078	62577	62297	0.41	cps
Manganese	55-2	4104160	4049959	4013697	4055939	1.12	cps
Molybdenum	94-1	1320	1323	1647	1430	13.12	cps
Molybdenum	95-1	963	940	953	952	1.23	cps
Molybdenum	96-1	1100	973	947	1007	8.14	cps
Molybdenum	97-1	430	510	417	452	11.16	cps
Molybdenum	98-1	1210	1137	1190	1179	3.22	cps
Neodymium	150-1	17301	18262	17741	17768	2.71	cps
Neodymium	150-2	9837	9226	9430	9498	3.27	cps
Nickel	60-2	8086	7999	8182	8089	1.13	cps
Phosphorus	31-2	2714	2600	2377	2564	6.68	cps
Potassium	39-2	74930	75520	74551	75000	0.65	cps
Rhodium	103-1	3241912	3329199	3171013	3247375	2.44	cps
Rhodium	103-2	1812033	1840020	1832369	1828141	0.79	cps
Scandium	45-1	2048665	2095541	2016152	2053453	1.94	cps
Scandium	45-2	159467	163703	162208	161793	1.33	cps
Selenium	82-1	215	151	181	182	17.31	cps
Selenium	77-2	27	33	47	36	28.64	cps
Selenium	78-2	227	150	167	181	22.26	cps
Silicon	28-1	2650962	2744845	2687585	2694464	1.76	cps
Silver	107-1	353	243	263	287	20.44	cps
Silver	109-1	233	267	237	246	7.48	cps
Sodium	23-2	215355	216258	216603	216072	0.30	cps
Strontium	86-1	23272	23275	23682	23410	1.01	cps
Strontium	88-1	200668	201279	203320	201756	0.69	cps
Sulfur	34-1	185467	183538	181396	183467	1.11	cps
Terbium	159-1	4302806	4317471	4172963	4264413	1.87	cps
Terbium	159-2	2496402	2507950	2575716	2526689	1.70	cps
Thallium	203-1	437	383	433	418	7.15	cps
Thallium	205-1	913	873	867	884	2.85	cps
Tin	118-1	1213	1330	1317	1287	4.96	cps
Titanium	47-1	34276	34245	34366	34296	0.18	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:52:59	DataFile Name :	047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	2687	2727	2950	2788	5.09	cps
Vanadium	51-2	12202	12042	11771	12005	1.81	cps
Yttrium	89-1	4691618	4808845	4831815	4777426	1.57	cps
Yttrium	89-2	1074793	1093638	1100640	1089690	1.23	cps
Zinc	66-2	21275	21459	22030	21588	1.82	cps
Zirconium	90-1	2637	2747	2997	2794	6.60	cps
Zirconium	91-1	580	673	717	657	10.64	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:56:17	DataFile Name :	048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	201500	199953	199533	200329	0.52	cps
Antimony	121-1	2694	2660	2657	2670	0.76	cps
Arsenic	75-2	587	590	567	581	2.17	cps
Barium	135-1	177268	181740	180218	179742	1.26	cps
Barium	137-1	306959	312084	316414	311819	1.52	cps
Beryllium	9-1	653	733	630	672	8.06	cps
Bismuth	209-1	2336611	2370911	2365096	2357540	0.78	cps
Bismuth	209-2	1777958	1745958	1777905	1767274	1.04	cps
Bromine	81-1	7292	8092	8206	7863	6.33	cps
Bromine	81-2	817	847	910	858	5.56	cps
Cadmium	108-1	213	200	183	199	7.56	cps
Cadmium	106-1	1263	1287	1437	1329	7.08	cps
Cadmium	111-1	2987	3066	3132	3062	2.37	cps
Calcium	43-1	28079	28724	29111	28638	1.82	cps
Calcium	44-1	461805	465712	466995	464837	0.58	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8162	8232	8072	8156	0.98	cps
Cobalt	59-2	19793	19429	19139	19454	1.68	cps
Copper	63-2	31714	32205	33003	32307	2.01	cps
Dysprosium	156-1	12466	12893	12836	12731	1.82	cps
Dysprosium	156-2	8976	8970	8746	8897	1.47	cps
Erbium	164-1	13844	13834	13927	13868	0.37	cps
Erbium	164-2	8533	8449	8389	8457	0.85	cps
Gadolinium	160-1	14324	14044	14261	14210	1.03	cps
Gadolinium	160-2	9450	9697	9293	9480	2.15	cps
Holmium	165-1	4041890	4085391	4013314	4046865	0.90	cps
Holmium	165-2	2417779	2510159	2439244	2455727	1.97	cps
Indium	115-1	3319079	3385768	3295042	3333296	1.41	cps
Indium	115-2	993151	997995	989760	993635	0.42	cps
Iron	56-2	2997168	2978814	2999361	2991781	0.38	cps
Iron	57-2	79522	79921	79398	79614	0.34	cps
Iron	54-2	173892	173743	174357	173997	0.18	cps
Krypton	83-1	150	110	147	136	16.37	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:56:17	DataFile Name :	048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	167808	168154	169364	168442	0.49	cps
Lead	207-1	144475	143948	143965	144129	0.21	cps
Lead	208-1	662337	660880	665411	662876	0.35	cps
Lithium	6-1	771867	769568	768322	769919	0.23	cps
Magnesium	24-2	62359	63316	61693	62456	1.31	cps
Manganese	55-2	3905961	4098557	4058828	4021115	2.53	cps
Molybdenum	94-1	1293	1453	1323	1357	6.27	cps
Molybdenum	95-1	790	783	857	810	5.01	cps
Molybdenum	96-1	940	953	1003	966	3.46	cps
Molybdenum	97-1	370	437	400	402	8.30	cps
Molybdenum	98-1	1067	1217	1070	1118	7.66	cps
Neodymium	150-1	17708	18305	18362	18125	2.00	cps
Neodymium	150-2	9190	9500	9200	9296	1.90	cps
Nickel	60-2	7639	7952	7682	7758	2.19	cps
Phosphorus	31-2	2407	2530	2417	2451	2.79	cps
Potassium	39-2	75241	73593	73218	74018	1.45	cps
Rhodium	103-1	3257212	3244386	3292968	3264855	0.77	cps
Rhodium	103-2	1798750	1820929	1821381	1813687	0.71	cps
Scandium	45-1	2007351	2003904	2012747	2008001	0.22	cps
Scandium	45-2	160025	159635	160992	160218	0.44	cps
Selenium	82-1	148	179	147	158	11.54	cps
Selenium	77-2	37	27	27	30	19.24	cps
Selenium	78-2	237	223	200	220	8.44	cps
Silicon	28-1	2701277	2788161	2752311	2747250	1.59	cps
Silver	107-1	237	233	333	268	21.21	cps
Silver	109-1	193	190	177	187	4.72	cps
Sodium	23-2	214588	215671	211582	213947	0.99	cps
Strontium	86-1	24143	23031	23045	23407	2.73	cps
Strontium	88-1	203267	203168	202324	202920	0.26	cps
Sulfur	34-1	174874	177797	172003	174892	1.66	cps
Terbium	159-1	4192998	4253948	4267430	4238125	0.94	cps
Terbium	159-2	2557427	2528811	2512192	2532810	0.90	cps
Thallium	203-1	383	413	430	409	5.78	cps
Thallium	205-1	1013	863	910	929	8.26	cps
Tin	118-1	1473	1380	1377	1410	3.89	cps
Titanium	47-1	33624	34596	34563	34261	1.61	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 16:56:17	DataFile Name :	048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	2737	3080	2824	2880	6.20	cps
Vanadium	51-2	11615	11638	11384	11546	1.21	cps
Yttrium	89-1	4716739	4606472	4743784	4688999	1.55	cps
Yttrium	89-2	1063086	1088124	1071463	1074225	1.19	cps
Zinc	66-2	21873	21375	21759	21669	1.20	cps
Zirconium	90-1	2704	2614	2324	2547	7.80	cps
Zirconium	91-1	607	590	510	569	9.08	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	25
Date & Time Acquired ::	2024-09-04 16:59:37	DataFile Name :	049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	38335	38181	38107	38207	0.30	cps
Antimony	121-1	583	633	493	570	12.45	cps
Arsenic	75-2	157	143	113	138	16.11	cps
Barium	135-1	33834	34458	34064	34119	0.93	cps
Barium	137-1	57636	58999	58878	58504	1.29	cps
Beryllium	9-1	140	150	163	151	7.75	cps
Bismuth	209-1	2437186	2317000	2356894	2370360	2.58	cps
Bismuth	209-2	1837058	1773884	1795017	1801986	1.78	cps
Bromine	81-1	4891	5101	5234	5075	3.41	cps
Bromine	81-2	250	157	220	209	22.81	cps
Cadmium	108-1	50	43	40	44	11.46	cps
Cadmium	106-1	1150	1123	1080	1118	3.16	cps
Cadmium	111-1	687	652	667	668	2.60	cps
Calcium	43-1	5851	5811	5768	5810	0.72	cps
Calcium	44-1	93459	94874	94851	94395	0.86	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2310	2177	2244	2244	2.97	cps
Cobalt	59-2	3744	3580	3727	3684	2.44	cps
Copper	63-2	6748	6772	6702	6740	0.53	cps
Dysprosium	156-1	2404	2284	2540	2409	5.33	cps
Dysprosium	156-2	1667	1653	1653	1658	0.46	cps
Erbium	164-1	2507	2644	2660	2604	3.23	cps
Erbium	164-2	1700	1727	1657	1695	2.09	cps
Gadolinium	160-1	2567	2854	2844	2755	5.91	cps
Gadolinium	160-2	1833	1990	1817	1880	5.09	cps
Holmium	165-1	3995757	3946880	3972539	3971725	0.62	cps
Holmium	165-2	2615806	2523731	2441208	2526915	3.46	cps
Indium	115-1	3444148	3437235	3407779	3429721	0.56	cps
Indium	115-2	1015259	999057	1002733	1005683	0.84	cps
Iron	56-2	616709	600932	597526	605056	1.69	cps
Iron	57-2	16826	16376	16209	16470	1.94	cps
Iron	54-2	34810	33835	33704	34116	1.77	cps
Krypton	83-1	130	113	133	126	8.54	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	25
Date & Time Acquired ::	2024-09-04 16:59:37	DataFile Name :	049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	31807	32730	32710	32416	1.63	cps
Lead	207-1	27628	27308	27825	27587	0.95	cps
Lead	208-1	125554	126943	127804	126767	0.90	cps
Lithium	6-1	780702	769826	775576	775368	0.70	cps
Magnesium	24-2	11584	11751	11851	11729	1.15	cps
Manganese	55-2	796470	780686	781328	786161	1.14	cps
Molybdenum	94-1	357	287	303	316	11.59	cps
Molybdenum	95-1	250	233	287	257	10.63	cps
Molybdenum	96-1	320	307	220	282	19.24	cps
Molybdenum	97-1	107	163	130	133	21.36	cps
Molybdenum	98-1	340	333	337	337	0.99	cps
Neodymium	150-1	3284	3424	3507	3405	3.32	cps
Neodymium	150-2	1860	1937	1730	1842	5.67	cps
Nickel	60-2	1730	1643	1620	1665	3.48	cps
Phosphorus	31-2	663	720	620	668	7.51	cps
Potassium	39-2	52587	52406	51604	52199	1.00	cps
Rhodium	103-1	3329480	3305460	3229087	3288009	1.59	cps
Rhodium	103-2	1846838	1813670	1832587	1831032	0.91	cps
Scandium	45-1	1993113	1994444	2013153	2000237	0.56	cps
Scandium	45-2	166150	160514	160534	162399	2.00	cps
Selenium	82-1	82	103	110	98	14.52	cps
Selenium	77-2	3	7	7	6	34.70	cps
Selenium	78-2	150	187	153	163	12.41	cps
Silicon	28-1	761340	764305	765150	763598	0.26	cps
Silver	107-1	140	83	107	110	25.90	cps
Silver	109-1	90	43	53	62	39.49	cps
Sodium	23-2	49569	49917	49740	49742	0.35	cps
Strontium	86-1	4544	4661	4767	4657	2.40	cps
Strontium	88-1	38801	38524	39319	38881	1.04	cps
Sulfur	34-1	154539	157984	159068	157197	1.50	cps
Terbium	159-1	4254417	4347364	4283221	4295001	1.11	cps
Terbium	159-2	2655519	2608501	2541899	2601973	2.19	cps
Thallium	203-1	90	113	97	100	12.02	cps
Thallium	205-1	230	187	183	200	13.02	cps
Tin	118-1	457	457	437	450	2.57	cps
Titanium	47-1	6418	6558	6702	6559	2.16	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	25
Date & Time Acquired ::	2024-09-04 16:59:37	DataFile Name :	049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	497	547	537	527	5.02	cps
Vanadium	51-2	2264	2334	1980	2192	8.53	cps
Yttrium	89-1	4546856	4544199	4546986	4546014	0.03	cps
Yttrium	89-2	1052312	1023479	1029866	1035219	1.46	cps
Zinc	66-2	4351	4497	4244	4364	2.92	cps
Zirconium	90-1	630	623	703	652	6.81	cps
Zirconium	91-1	173	140	137	150	13.52	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:02:58	DataFile Name :	050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1341139	1352697	1308132	1333989	1.73	cps
Antimony	121-1	1458371	1491097	1562934	1504134	3.56	cps
Arsenic	75-2	89259	89548	87918	88909	0.98	cps
Barium	135-1	2370108	2340008	2436540	2382219	2.07	cps
Barium	137-1	3893810	4114413	4143838	4050687	3.37	cps
Beryllium	9-1	280445	290983	298329	289919	3.10	cps
Bismuth	209-1	2272003	2265394	2160713	2232704	2.80	cps
Bismuth	209-2	1688966	1698375	1736291	1707877	1.47	cps
Bromine	81-1	16830	20144	23041	20005	15.54	cps
Bromine	81-2	3597	3691	3564	3617	1.82	cps
Cadmium	108-1	26364	27065	27997	27142	3.02	cps
Cadmium	106-1	38808	39580	39701	39363	1.23	cps
Cadmium	111-1	335298	348055	351828	345061	2.51	cps
Calcium	43-1	495923	512921	516575	508473	2.17	cps
Calcium	44-1	7260118	7449014	7488457	7399196	1.65	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	548818	539946	538366	542377	1.04	cps
Cobalt	59-2	909693	917864	902279	909945	0.86	cps
Copper	63-2	5669613	5651945	5581778	5634445	0.82	cps
Dysprosium	156-1	57789	59733	61089	59537	2.79	cps
Dysprosium	156-2	43497	42668	42257	42807	1.48	cps
Erbium	164-1	64354	66494	67418	66089	2.38	cps
Erbium	164-2	40800	41585	40993	41126	1.00	cps
Gadolinium	160-1	65660	67907	68091	67219	2.01	cps
Gadolinium	160-2	44373	44163	44367	44301	0.27	cps
Holmium	165-1	4029613	4019319	3692922	3913952	4.89	cps
Holmium	165-2	2551201	2450862	2491102	2497722	2.02	cps
Indium	115-1	3176602	3237334	2984785	3132907	4.21	cps
Indium	115-2	970853	957079	964052	963995	0.71	cps
Iron	56-2	34960386	34720133	33936074	34538864	1.55	cps
Iron	57-2	897514	901142	900443	899700	0.21	cps
Iron	54-2	1921858	1861006	1864536	1882467	1.81	cps
Krypton	83-1	160	183	223	189	16.96	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:02:58	DataFile Name :	050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4909291	5025684	5187929	5040968	2.78	cps
Lead	207-1	4479910	4603319	4696212	4593147	2.36	cps
Lead	208-1	20104610	20408312	20809192	20440705	1.73	cps
Lithium	6-1	761377	768123	701971	743823	4.89	cps
Magnesium	24-2	5017891	4898965	5009393	4975416	1.33	cps
Manganese	55-2	23045160	22899088	22762023	22902090	0.62	cps
Molybdenum	94-1	6161771	6160661	6243081	6188504	0.76	cps
Molybdenum	95-1	8728314	9540996	9528080	9265797	5.02	cps
Molybdenum	96-1	9783981	10336770	10385432	10168727	3.29	cps
Molybdenum	97-1	5750108	5765043	5863909	5793020	1.07	cps
Molybdenum	98-1	14748989	15039739	15161959	14983562	1.42	cps
Neodymium	150-1	81102	83878	86803	83927	3.40	cps
Neodymium	150-2	45072	44661	44664	44799	0.53	cps
Nickel	60-2	244563	240518	239212	241431	1.16	cps
Phosphorus	31-2	11221	11328	11097	11215	1.03	cps
Potassium	39-2	2626530	2663862	2666832	2652408	0.85	cps
Rhodium	103-1	3140099	3029267	2885521	3018296	4.23	cps
Rhodium	103-2	1749630	1700342	1701001	1716991	1.65	cps
Scandium	45-1	1968673	1997766	1792257	1919565	5.79	cps
Scandium	45-2	160423	158935	155307	158222	1.66	cps
Selenium	82-1	25979	26872	26877	26576	1.95	cps
Selenium	77-2	2377	2397	2414	2396	0.77	cps
Selenium	78-2	7865	7505	7459	7610	2.93	cps
Silicon	28-1	11787808	12628830	12624964	12347201	3.92	cps
Silver	107-1	1365315	1206415	1308571	1293434	6.23	cps
Silver	109-1	1325173	1313216	1343309	1327233	1.14	cps
Sodium	23-2	8255449	8174375	8133313	8187713	0.76	cps
Strontium	86-1	8724107	8786963	9090070	8867047	2.21	cps
Strontium	88-1	74434784	79278157	77170771	76961237	3.16	cps
Sulfur	34-1	254896	258997	261352	258415	1.26	cps
Terbium	159-1	4190763	4208095	3948578	4115812	3.53	cps
Terbium	159-2	2601910	2552486	2523479	2559292	1.55	cps
Thallium	203-1	962701	996432	1002437	987190	2.17	cps
Thallium	205-1	2557701	2659652	2695421	2637591	2.71	cps
Tin	118-1	912013	954609	966944	944522	3.05	cps
Titanium	47-1	2179591	2212815	2265095	2219167	1.94	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:02:58	DataFile Name :	050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3488636	3521983	3475684	3495434	0.68	cps
Vanadium	51-2	528177	530044	519549	525924	1.06	cps
Yttrium	89-1	5833540	5728816	5458904	5673754	3.41	cps
Yttrium	89-2	1332892	1337182	1312518	1327531	0.99	cps
Zinc	66-2	1055253	1041796	1029035	1042028	1.26	cps
Zirconium	90-1	2218020	2328897	2394000	2313639	3.85	cps
Zirconium	91-1	503544	528946	524156	518882	2.60	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:05:55	DataFile Name :	051SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	283670	284825	281218	283237	0.65	cps
Antimony	121-1	305144	307434	307351	306643	0.42	cps
Arsenic	75-2	17634	17604	17914	17717	0.97	cps
Barium	135-1	460039	462512	460187	460913	0.30	cps
Barium	137-1	778301	789326	799616	789081	1.35	cps
Beryllium	9-1	59634	61086	61294	60671	1.49	cps
Bismuth	209-1	2394046	2395828	2475650	2421841	1.92	cps
Bismuth	209-2	1901265	1745072	1820140	1822159	4.29	cps
Bromine	81-1	8593	8986	9140	8906	3.17	cps
Bromine	81-2	840	940	923	901	5.95	cps
Cadmium	108-1	5838	5741	5775	5785	0.85	cps
Cadmium	106-1	9066	9406	9296	9256	1.88	cps
Cadmium	111-1	72872	72149	71971	72331	0.66	cps
Calcium	43-1	104057	106222	105500	105260	1.05	cps
Calcium	44-1	1526790	1580793	1575382	1560988	1.91	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	111284	112123	109444	110950	1.24	cps
Cobalt	59-2	187734	187142	182605	185827	1.51	cps
Copper	63-2	1152061	1156294	1136543	1148300	0.91	cps
Dysprosium	156-1	11922	11858	12282	12021	1.90	cps
Dysprosium	156-2	8963	8393	8252	8536	4.41	cps
Erbium	164-1	13814	13203	13637	13551	2.32	cps
Erbium	164-2	7906	8106	8169	8060	1.71	cps
Gadolinium	160-1	13884	13640	13980	13835	1.27	cps
Gadolinium	160-2	9417	8779	8890	9029	3.77	cps
Holmium	165-1	4198378	4040136	4218470	4152328	2.35	cps
Holmium	165-2	2534697	2567481	2464712	2522297	2.08	cps
Indium	115-1	3371389	3356533	3442850	3390257	1.36	cps
Indium	115-2	1000906	997949	984284	994379	0.89	cps
Iron	56-2	6959612	7175101	6849176	6994630	2.37	cps
Iron	57-2	185872	187638	181874	185128	1.59	cps
Iron	54-2	411550	412689	403145	409128	1.27	cps
Krypton	83-1	123	173	120	139	21.51	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:05:55	DataFile Name :	051SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	933975	945169	950649	943264	0.90	cps
Lead	207-1	829525	845708	846174	840469	1.13	cps
Lead	208-1	3990759	4072287	4056429	4039825	1.07	cps
Lithium	6-1	824144	808657	804409	812403	1.28	cps
Magnesium	24-2	1072878	1060091	1057162	1063377	0.79	cps
Manganese	55-2	4744041	4806754	4620225	4723673	2.01	cps
Molybdenum	94-1	1246403	1255617	1284717	1262246	1.58	cps
Molybdenum	95-1	1919669	1929364	1955752	1934928	0.97	cps
Molybdenum	96-1	2061021	2110523	2115031	2095525	1.43	cps
Molybdenum	97-1	1186429	1192789	1204372	1194530	0.76	cps
Molybdenum	98-1	3022344	2987948	3096511	3035601	1.83	cps
Neodymium	150-1	17150	17261	17421	17277	0.79	cps
Neodymium	150-2	8960	9133	8739	8944	2.21	cps
Nickel	60-2	49996	50495	49201	49897	1.31	cps
Phosphorus	31-2	2417	2247	2337	2334	3.65	cps
Potassium	39-2	614501	614181	605806	611496	0.81	cps
Rhodium	103-1	3210998	3199471	3261282	3223917	1.02	cps
Rhodium	103-2	1842008	1772060	1776461	1796843	2.18	cps
Scandium	45-1	2004074	2030474	1984032	2006194	1.16	cps
Scandium	45-2	162855	160430	157406	160230	1.70	cps
Selenium	82-1	5485	5682	5684	5617	2.03	cps
Selenium	77-2	410	450	487	449	8.54	cps
Selenium	78-2	1687	1773	1610	1690	4.84	cps
Silicon	28-1	2830837	2783135	2868420	2827464	1.51	cps
Silver	107-1	305870	306521	305825	306072	0.13	cps
Silver	109-1	287066	290181	292369	289872	0.92	cps
Sodium	23-2	1710780	1652733	1683515	1682343	1.73	cps
Strontium	86-1	2012229	2025911	2005277	2014472	0.52	cps
Strontium	88-1	17733339	17334731	17508235	17525435	1.14	cps
Sulfur	34-1	173317	170954	172077	172116	0.69	cps
Terbium	159-1	4243902	4366535	4371793	4327410	1.67	cps
Terbium	159-2	2584861	2605215	2473795	2554623	2.77	cps
Thallium	203-1	201532	201984	204628	202715	0.83	cps
Thallium	205-1	479296	483768	484124	482396	0.56	cps
Tin	118-1	194140	194923	198502	195855	1.19	cps
Titanium	47-1	470805	469351	473788	471315	0.48	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-02DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:05:55	DataFile Name :	051SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	624186	643822	641656	636555	1.69	cps
Vanadium	51-2	106546	104791	104458	105265	1.07	cps
Yttrium	89-1	4868527	4810541	4590790	4756619	3.08	cps
Yttrium	89-2	1077741	1083850	1056967	1072852	1.31	cps
Zinc	66-2	220323	218181	213446	217316	1.62	cps
Zirconium	90-1	467808	470790	477410	472002	1.04	cps
Zirconium	91-1	104849	106251	106620	105907	0.88	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:09:06	DataFile Name :	052SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1345450	1357161	1319969	1340860	1.42	cps
Antimony	121-1	1488893	1608803	1554737	1550811	3.87	cps
Arsenic	75-2	90222	90135	90349	90236	0.12	cps
Barium	135-1	2354862	2396632	2470369	2407288	2.43	cps
Barium	137-1	3981698	4222107	4097075	4100293	2.93	cps
Beryllium	9-1	294768	300256	302740	299255	1.36	cps
Bismuth	209-1	2370439	2250693	2400212	2340448	3.38	cps
Bismuth	209-2	1793582	1783461	1821706	1799583	1.10	cps
Bromine	81-1	17424	20758	22711	20298	13.17	cps
Bromine	81-2	3657	3657	3664	3659	0.11	cps
Cadmium	108-1	27947	28608	27573	28043	1.87	cps
Cadmium	106-1	39433	41155	40239	40276	2.14	cps
Cadmium	111-1	350898	353090	358306	354098	1.07	cps
Calcium	43-1	511656	519762	524364	518594	1.24	cps
Calcium	44-1	7421160	7519093	7719349	7553201	2.01	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	554501	548332	544563	549132	0.91	cps
Cobalt	59-2	922106	912415	918902	917808	0.54	cps
Copper	63-2	5685137	5743334	5645306	5691259	0.87	cps
Dysprosium	156-1	60684	61049	60998	60910	0.32	cps
Dysprosium	156-2	43932	43949	44039	43973	0.13	cps
Erbium	164-1	65285	66699	69093	67026	2.87	cps
Erbium	164-2	42936	42588	41762	42429	1.42	cps
Gadolinium	160-1	68265	68232	70402	68966	1.80	cps
Gadolinium	160-2	44982	45681	46176	45613	1.31	cps
Holmium	165-1	4013943	3781908	4093493	3963115	4.08	cps
Holmium	165-2	2587898	2500589	2626939	2571808	2.52	cps
Indium	115-1	3221155	3029291	3307603	3186017	4.47	cps
Indium	115-2	985243	971590	970821	975885	0.83	cps
Iron	56-2	34595005	34369244	34113534	34359261	0.70	cps
Iron	57-2	900623	896613	903523	900253	0.39	cps
Iron	54-2	1936434	1858645	1898263	1897780	2.05	cps
Krypton	83-1	217	213	183	204	8.98	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:09:06	DataFile Name :	052SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	5095663	5158601	5202781	5152348	1.04	cps
Lead	207-1	4594693	4585101	4715332	4631709	1.57	cps
Lead	208-1	20803722	20875618	21008773	20896037	0.50	cps
Lithium	6-1	774999	751376	785389	770588	2.26	cps
Magnesium	24-2	5000883	4925551	5107694	5011376	1.83	cps
Manganese	55-2	23502241	23582180	23422629	23502350	0.34	cps
Molybdenum	94-1	6242526	6396788	6346886	6328733	1.24	cps
Molybdenum	95-1	9357444	9681032	9677492	9571989	1.94	cps
Molybdenum	96-1	10184007	10237904	10303733	10241881	0.59	cps
Molybdenum	97-1	5806319	5992513	5942030	5913621	1.63	cps
Molybdenum	98-1	15076026	15775292	15497196	15449505	2.28	cps
Neodymium	150-1	84702	86141	85467	85437	0.84	cps
Neodymium	150-2	45085	46008	45467	45520	1.02	cps
Nickel	60-2	241467	243168	240850	241828	0.50	cps
Phosphorus	31-2	11378	10981	11121	11160	1.80	cps
Potassium	39-2	2717405	2681058	2634344	2677602	1.56	cps
Rhodium	103-1	3039601	3015512	3149117	3068077	2.32	cps
Rhodium	103-2	1770129	1785625	1746440	1767398	1.12	cps
Scandium	45-1	2001297	1882893	1992314	1958835	3.37	cps
Scandium	45-2	159689	156672	158237	158199	0.95	cps
Selenium	82-1	26569	27102	27547	27073	1.81	cps
Selenium	77-2	2360	2434	2310	2368	2.62	cps
Selenium	78-2	7939	7585	7792	7772	2.29	cps
Silicon	28-1	12448208	12443649	12398840	12430232	0.22	cps
Silver	107-1	1244454	1110574	1088275	1147768	7.36	cps
Silver	109-1	1105492	1119444	1286845	1170594	8.62	cps
Sodium	23-2	8322788	8345779	8215852	8294806	0.84	cps
Strontium	86-1	9403226	9583474	9628766	9538488	1.25	cps
Strontium	88-1	81984039	83602689	84795574	83460767	1.69	cps
Sulfur	34-1	252568	255282	252680	253510	0.61	cps
Terbium	159-1	4199852	4030727	4223342	4151307	2.53	cps
Terbium	159-2	2715962	2555550	2597591	2623034	3.17	cps
Thallium	203-1	996791	1018238	1021598	1012209	1.33	cps
Thallium	205-1	2725130	2714326	2674633	2704697	0.98	cps
Tin	118-1	946028	974943	966132	962368	1.54	cps
Titanium	47-1	2213396	2294876	2323708	2277327	2.51	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:09:06	DataFile Name :	052SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3518097	3472950	3642664	3544570	2.48	cps
Vanadium	51-2	533049	528063	524618	528577	0.80	cps
Yttrium	89-1	5734245	5697109	5919876	5783743	2.06	cps
Yttrium	89-2	1339688	1330218	1337698	1335868	0.37	cps
Zinc	66-2	1059144	1053175	1066295	1059538	0.62	cps
Zirconium	90-1	2370505	2368254	2447935	2395564	1.89	cps
Zirconium	91-1	527689	545047	539075	537270	1.64	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:12:04	DataFile Name :	053SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	320194	315014	319510	318239	0.88	cps
Antimony	121-1	349430	349946	351042	350139	0.24	cps
Arsenic	75-2	20741	20237	20441	20473	1.24	cps
Barium	135-1	517700	523908	524017	521875	0.69	cps
Barium	137-1	899415	918350	914153	910639	1.09	cps
Beryllium	9-1	69907	70318	70512	70246	0.44	cps
Bismuth	209-1	2420019	2429135	2428178	2425777	0.21	cps
Bismuth	209-2	1755976	1920201	1820723	1832300	4.51	cps
Bromine	81-1	8919	9253	9923	9365	5.46	cps
Bromine	81-2	997	1027	947	990	4.08	cps
Cadmium	108-1	6492	6445	6408	6448	0.65	cps
Cadmium	106-1	9960	10561	10334	10285	2.95	cps
Cadmium	111-1	80337	83051	82699	82029	1.80	cps
Calcium	43-1	115983	118404	120020	118136	1.72	cps
Calcium	44-1	1740129	1771736	1713031	1741632	1.69	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	126157	124446	125134	125246	0.69	cps
Cobalt	59-2	213082	209169	211241	211164	0.93	cps
Copper	63-2	1311153	1289610	1290414	1297059	0.94	cps
Dysprosium	156-1	13640	13296	14054	13663	2.78	cps
Dysprosium	156-2	9914	9750	10067	9910	1.60	cps
Erbium	164-1	15525	15532	15575	15544	0.17	cps
Erbium	164-2	9470	9183	9090	9248	2.14	cps
Gadolinium	160-1	15696	15719	15619	15678	0.33	cps
Gadolinium	160-2	10120	9994	10027	10047	0.65	cps
Holmium	165-1	4195995	4070503	4046808	4104435	1.95	cps
Holmium	165-2	2497507	2646247	2541517	2561757	2.98	cps
Indium	115-1	3318004	3396546	3413966	3376172	1.51	cps
Indium	115-2	981650	1044876	1005697	1010741	3.16	cps
Iron	56-2	7779904	7833573	7902300	7838593	0.78	cps
Iron	57-2	210271	206649	208407	208442	0.87	cps
Iron	54-2	461097	454945	459293	458445	0.69	cps
Krypton	83-1	150	137	150	146	5.29	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:12:04	DataFile Name :	053SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1067203	1073808	1081472	1074161	0.66	cps
Lead	207-1	955537	960016	957355	957636	0.24	cps
Lead	208-1	4536586	4581280	4619037	4578967	0.90	cps
Lithium	6-1	832702	825734	829377	829271	0.42	cps
Magnesium	24-2	1148440	1133574	1131991	1138002	0.80	cps
Manganese	55-2	5383427	5374156	5461152	5406245	0.88	cps
Molybdenum	94-1	1436596	1424943	1440522	1434021	0.57	cps
Molybdenum	95-1	2207882	2196391	2170282	2191518	0.88	cps
Molybdenum	96-1	2412039	2442828	2374981	2409949	1.41	cps
Molybdenum	97-1	1339653	1357273	1366014	1354313	0.99	cps
Molybdenum	98-1	3355231	3541165	3563121	3486506	3.28	cps
Neodymium	150-1	19711	19714	19457	19627	0.75	cps
Neodymium	150-2	10427	10361	9994	10260	2.28	cps
Nickel	60-2	56897	55626	56503	56342	1.16	cps
Phosphorus	31-2	2767	2474	2737	2659	6.07	cps
Potassium	39-2	691912	687840	688889	689547	0.31	cps
Rhodium	103-1	3169346	3255159	3196453	3206986	1.37	cps
Rhodium	103-2	1816298	1913491	1822890	1850893	2.93	cps
Scandium	45-1	1978314	2026088	2060254	2021552	2.04	cps
Scandium	45-2	156980	165379	156472	159610	3.13	cps
Selenium	82-1	6264	6149	6209	6207	0.93	cps
Selenium	77-2	510	530	497	512	3.28	cps
Selenium	78-2	1743	1823	2003	1857	7.17	cps
Silicon	28-1	3129500	3253288	3248875	3210554	2.19	cps
Silver	107-1	356074	355677	353690	355147	0.36	cps
Silver	109-1	329969	336280	333263	333171	0.95	cps
Sodium	23-2	1893368	1886921	1855383	1878557	1.08	cps
Strontium	86-1	1923841	1963491	1978137	1955157	1.44	cps
Strontium	88-1	16662674	17501391	17181978	17115348	2.47	cps
Sulfur	34-1	170610	170145	170802	170519	0.20	cps
Terbium	159-1	4355325	4468813	4383453	4402530	1.34	cps
Terbium	159-2	2582664	2755477	2646055	2661399	3.28	cps
Thallium	203-1	233402	233252	233989	233547	0.17	cps
Thallium	205-1	551150	552883	556162	553399	0.46	cps
Tin	118-1	225145	221377	223484	223335	0.85	cps
Titanium	47-1	531615	541767	537914	537099	0.95	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-03DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:12:04	DataFile Name :	053SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	724947	731440	727691	728026	0.45	cps
Vanadium	51-2	120305	118444	118941	119230	0.81	cps
Yttrium	89-1	4764700	4702752	4625187	4697546	1.49	cps
Yttrium	89-2	1071199	1134428	1097333	1100987	2.89	cps
Zinc	66-2	250533	243408	246836	246925	1.44	cps
Zirconium	90-1	532818	542338	543398	539518	1.08	cps
Zirconium	91-1	121720	122517	121051	121763	0.60	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01A	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:15:15	DataFile Name :	054SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1346524	1322584	1349070	1339393	1.09	cps
Antimony	121-1	1495808	1509166	1508812	1504595	0.51	cps
Arsenic	75-2	88710	88599	88330	88546	0.22	cps
Barium	135-1	2400771	2344102	2348673	2364515	1.33	cps
Barium	137-1	4138900	4087568	3984001	4070156	1.94	cps
Beryllium	9-1	298575	304647	300529	301250	1.03	cps
Bismuth	209-1	2386744	2339689	2352089	2359507	1.03	cps
Bismuth	209-2	1719080	1734517	1755379	1736326	1.05	cps
Bromine	81-1	17344	20842	22955	20380	13.90	cps
Bromine	81-2	3577	3430	3447	3485	2.31	cps
Cadmium	108-1	26958	27877	26999	27278	1.90	cps
Cadmium	106-1	39898	40155	39580	39878	0.72	cps
Cadmium	111-1	346369	353659	352467	350832	1.11	cps
Calcium	43-1	506950	519379	513696	513342	1.21	cps
Calcium	44-1	7510988	7662332	7528967	7567429	1.09	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	539946	536354	543005	539768	0.62	cps
Cobalt	59-2	897397	893327	890220	893648	0.40	cps
Copper	63-2	5658392	5596327	5537295	5597338	1.08	cps
Dysprosium	156-1	59077	59843	60115	59678	0.90	cps
Dysprosium	156-2	42695	42461	42578	42578	0.27	cps
Erbium	164-1	65355	66759	66092	66069	1.06	cps
Erbium	164-2	40348	40672	41037	40686	0.85	cps
Gadolinium	160-1	65985	67257	66714	66652	0.96	cps
Gadolinium	160-2	43618	44350	44410	44126	1.00	cps
Holmium	165-1	4155848	4128588	4124985	4136474	0.41	cps
Holmium	165-2	2515401	2556389	2579033	2550274	1.26	cps
Indium	115-1	3366470	3213754	3196983	3259069	2.87	cps
Indium	115-2	958722	959522	955799	958014	0.20	cps
Iron	56-2	35112146	33843347	33489825	34148439	2.50	cps
Iron	57-2	894785	894468	888429	892561	0.40	cps
Iron	54-2	1933766	1913233	1878362	1908454	1.47	cps
Krypton	83-1	130	200	187	172	21.58	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01A	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:15:15	DataFile Name :	054SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	5235849	5077426	5237666	5183647	1.77	cps
Lead	207-1	4626322	4721985	4676714	4675007	1.02	cps
Lead	208-1	20726644	20815267	20881857	20807923	0.37	cps
Lithium	6-1	799043	808278	813422	806914	0.90	cps
Magnesium	24-2	4924601	4911418	5003472	4946497	1.01	cps
Manganese	55-2	21623767	21779992	21660185	21687981	0.38	cps
Molybdenum	94-1	6255863	6334724	6261935	6284174	0.70	cps
Molybdenum	95-1	9453653	9582004	9623700	9553119	0.93	cps
Molybdenum	96-1	10175637	10333258	10387352	10298749	1.07	cps
Molybdenum	97-1	5826145	5846201	5848777	5840374	0.21	cps
Molybdenum	98-1	15188072	15282436	15131836	15200781	0.50	cps
Neodymium	150-1	84113	83750	85578	84480	1.15	cps
Neodymium	150-2	43597	44978	44426	44334	1.57	cps
Nickel	60-2	241849	235741	236348	237979	1.41	cps
Phosphorus	31-2	11074	11064	10831	10990	1.25	cps
Potassium	39-2	2646910	2611589	2625396	2627965	0.68	cps
Rhodium	103-1	3106974	3126484	3104272	3112576	0.39	cps
Rhodium	103-2	1743004	1701123	1693287	1712471	1.56	cps
Scandium	45-1	2032170	2017455	2010336	2019987	0.55	cps
Scandium	45-2	154439	153600	156961	155000	1.13	cps
Selenium	82-1	26728	26890	27127	26915	0.75	cps
Selenium	77-2	2310	2510	2257	2359	5.66	cps
Selenium	78-2	7709	7745	7622	7692	0.82	cps
Silicon	28-1	12242202	12527347	13397474	12722341	4.73	cps
Silver	107-1	1251131	1203834	1084735	1179900	7.27	cps
Silver	109-1	958068	1603750	1212723	1258180	25.85	cps
Sodium	23-2	8024693	7976549	8210468	8070570	1.53	cps
Strontium	86-1	8967965	9270955	8920324	9053081	2.10	cps
Strontium	88-1	79639797	79939229	77570216	79049747	1.63	cps
Sulfur	34-1	255591	255449	253693	254911	0.41	cps
Terbium	159-1	4413327	4284799	4238739	4312288	2.10	cps
Terbium	159-2	2607862	2618096	2593800	2606586	0.47	cps
Thallium	203-1	999013	996987	1026237	1007412	1.62	cps
Thallium	205-1	2647814	2667220	2645569	2653534	0.45	cps
Tin	118-1	942345	951791	962767	952301	1.07	cps
Titanium	47-1	2245401	2314343	2325096	2294947	1.88	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01A	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:15:15	DataFile Name :	054SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3473443	3533270	3685900	3564204	3.07	cps
Vanadium	51-2	525470	516741	518402	520204	0.89	cps
Yttrium	89-1	5960631	5921652	5740440	5874241	2.00	cps
Yttrium	89-2	1333787	1302525	1314118	1316810	1.20	cps
Zinc	66-2	1044618	1040132	1025161	1036637	0.98	cps
Zirconium	90-1	2327803	2389243	2357857	2358301	1.30	cps
Zirconium	91-1	527832	527028	528304	527721	0.12	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:18:12	DataFile Name :	055SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	280008	281130	277072	279404	0.75	cps
Antimony	121-1	303286	306295	302979	304187	0.60	cps
Arsenic	75-2	17674	17747	18151	17857	1.44	cps
Barium	135-1	450603	452195	449828	450875	0.27	cps
Barium	137-1	765875	781413	769338	772209	1.06	cps
Beryllium	9-1	61096	61789	61247	61377	0.59	cps
Bismuth	209-1	2410783	2431384	2404549	2415572	0.58	cps
Bismuth	209-2	1809665	1810464	1828124	1816084	0.57	cps
Bromine	81-1	8596	8989	8969	8852	2.50	cps
Bromine	81-2	867	853	893	871	2.34	cps
Cadmium	108-1	5598	5775	5544	5639	2.14	cps
Cadmium	106-1	8463	8736	8903	8700	2.55	cps
Cadmium	111-1	73137	73118	72123	72793	0.80	cps
Calcium	43-1	102715	104510	102836	103354	0.97	cps
Calcium	44-1	1542690	1500576	1524299	1522521	1.39	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	111029	110280	109424	110244	0.73	cps
Cobalt	59-2	183509	182341	180283	182044	0.90	cps
Copper	63-2	1141877	1139836	1128809	1136841	0.62	cps
Dysprosium	156-1	11842	11838	11565	11748	1.35	cps
Dysprosium	156-2	8363	8276	8903	8514	3.99	cps
Erbium	164-1	13563	13350	13410	13441	0.82	cps
Erbium	164-2	8169	7956	8569	8231	3.78	cps
Gadolinium	160-1	13487	13236	13730	13484	1.83	cps
Gadolinium	160-2	8946	8529	8806	8761	2.42	cps
Holmium	165-1	4047246	4110459	4034722	4064143	1.00	cps
Holmium	165-2	2568129	2489056	2562029	2539738	1.73	cps
Indium	115-1	3438188	3403516	3395661	3412455	0.66	cps
Indium	115-2	986090	980581	989699	985456	0.47	cps
Iron	56-2	6888937	6836756	6860523	6862072	0.38	cps
Iron	57-2	184567	181776	183815	183386	0.79	cps
Iron	54-2	407486	401212	400989	403229	0.91	cps
Krypton	83-1	130	140	123	131	6.40	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:18:12	DataFile Name :	055SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	943011	949163	930590	940921	1.01	cps
Lead	207-1	841286	833714	827685	834229	0.82	cps
Lead	208-1	3988323	3963542	3976798	3976221	0.31	cps
Lithium	6-1	797315	798027	820686	805343	1.65	cps
Magnesium	24-2	1047151	1041097	1036573	1041607	0.51	cps
Manganese	55-2	4347257	4381368	4394694	4374440	0.56	cps
Molybdenum	94-1	1226983	1241968	1242537	1237163	0.71	cps
Molybdenum	95-1	1855077	1870254	1889734	1871688	0.93	cps
Molybdenum	96-1	2046938	2074924	2030848	2050904	1.09	cps
Molybdenum	97-1	1165281	1180481	1176248	1174004	0.67	cps
Molybdenum	98-1	2972894	3044431	3081851	3033059	1.83	cps
Neodymium	150-1	16536	16597	16219	16451	1.23	cps
Neodymium	150-2	8649	8773	8669	8697	0.76	cps
Nickel	60-2	49639	48552	48605	48932	1.25	cps
Phosphorus	31-2	2400	2400	2374	2391	0.64	cps
Potassium	39-2	610087	601645	597876	603203	1.04	cps
Rhodium	103-1	3191821	3205138	3208875	3201945	0.28	cps
Rhodium	103-2	1767609	1806882	1795280	1789924	1.13	cps
Scandium	45-1	2023636	1972148	2010014	2001933	1.33	cps
Scandium	45-2	158537	156607	157763	157636	0.62	cps
Selenium	82-1	5520	5408	5543	5491	1.32	cps
Selenium	77-2	490	560	490	513	7.87	cps
Selenium	78-2	1693	1760	1740	1731	1.98	cps
Silicon	28-1	2795894	2843929	2766443	2802089	1.40	cps
Silver	107-1	303624	314090	308720	308811	1.69	cps
Silver	109-1	292119	292874	289505	291499	0.61	cps
Sodium	23-2	1645557	1655053	1594846	1631819	1.98	cps
Strontium	86-1	1954636	1979900	1996678	1977071	1.07	cps
Strontium	88-1	17278015	17444893	17572601	17431836	0.85	cps
Sulfur	34-1	165438	164878	167412	165909	0.80	cps
Terbium	159-1	4310467	4344566	4354236	4336423	0.53	cps
Terbium	159-2	2560300	2602023	2658110	2606811	1.88	cps
Thallium	203-1	201498	203730	202383	202537	0.55	cps
Thallium	205-1	476764	483877	482534	481059	0.79	cps
Tin	118-1	192387	192878	189453	191573	0.97	cps
Titanium	47-1	461982	468735	467147	465955	0.76	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:18:12	DataFile Name :	055SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	643013	636981	639124	639706	0.48	cps
Vanadium	51-2	104398	105250	104949	104866	0.41	cps
Yttrium	89-1	4574993	4594702	4632556	4600750	0.64	cps
Yttrium	89-2	1062243	1058221	1062536	1061000	0.23	cps
Zinc	66-2	215440	213575	213750	214255	0.48	cps
Zirconium	90-1	466984	472384	472727	470698	0.68	cps
Zirconium	91-1	103301	105533	104958	104597	1.11	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:21:24	DataFile Name :	056SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1277325	1277695	1240262	1265094	1.70	cps
Antimony	121-1	13083	13386	13570	13346	1.84	cps
Arsenic	75-2	4414	4474	4301	4396	2.00	cps
Barium	135-1	932687	931927	935303	933306	0.19	cps
Barium	137-1	1703207	1698573	1657577	1686452	1.49	cps
Beryllium	9-1	2870	3057	3104	3010	4.10	cps
Bismuth	209-1	2290138	2417439	2341205	2349594	2.73	cps
Bismuth	209-2	1779273	1761809	1740258	1760447	1.11	cps
Bromine	81-1	22885	29169	32238	28097	16.97	cps
Bromine	81-2	5161	4991	5268	5140	2.72	cps
Cadmium	108-1	807	887	850	848	4.72	cps
Cadmium	106-1	2370	2440	2290	2367	3.17	cps
Cadmium	111-1	11908	11735	12106	11916	1.56	cps
Calcium	43-1	237250	237945	241425	238874	0.94	cps
Calcium	44-1	3422346	3592317	3592601	3535755	2.78	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	46883	46866	48096	47282	1.49	cps
Cobalt	59-2	41397	41153	40217	40922	1.52	cps
Copper	63-2	209788	211242	209866	210299	0.39	cps
Dysprosium	156-1	34980	35308	35826	35371	1.21	cps
Dysprosium	156-2	24986	24598	25724	25103	2.28	cps
Erbium	164-1	36047	35839	37497	36461	2.48	cps
Erbium	164-2	23263	22929	22882	23025	0.90	cps
Gadolinium	160-1	36120	36888	38389	37132	3.11	cps
Gadolinium	160-2	24638	24869	25296	24935	1.34	cps
Holmium	165-1	3990782	3995395	3995452	3993876	0.07	cps
Holmium	165-2	2572720	2615520	2565594	2584611	1.04	cps
Indium	115-1	3179272	3222534	3226684	3209497	0.82	cps
Indium	115-2	976479	983009	987410	982299	0.56	cps
Iron	56-2	16518229	16345369	15957925	16273841	1.76	cps
Iron	57-2	426399	423731	419993	423374	0.76	cps
Iron	54-2	936261	932902	926712	931958	0.52	cps
Krypton	83-1	170	160	97	142	27.96	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:21:24	DataFile Name :	056SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1102843	1107551	1145396	1118597	2.09	cps
Lead	207-1	944421	961204	983919	963182	2.06	cps
Lead	208-1	4532997	4673335	4781863	4662732	2.68	cps
Lithium	6-1	779133	799980	787519	788877	1.33	cps
Magnesium	24-2	464800	467953	458312	463688	1.06	cps
Manganese	55-2	17407322	17683169	16976582	17355691	2.05	cps
Molybdenum	94-1	7705	7158	7405	7423	3.69	cps
Molybdenum	95-1	7062	6968	7325	7118	2.60	cps
Molybdenum	96-1	7856	7669	7519	7681	2.20	cps
Molybdenum	97-1	4091	4194	4211	4165	1.56	cps
Molybdenum	98-1	10150	10380	10337	10289	1.19	cps
Neodymium	150-1	50189	50490	51641	50773	1.51	cps
Neodymium	150-2	27313	26351	27076	26914	1.86	cps
Nickel	60-2	45964	46021	46204	46063	0.27	cps
Phosphorus	31-2	10574	10814	10317	10568	2.35	cps
Potassium	39-2	202380	204387	200090	202286	1.06	cps
Rhodium	103-1	3002985	3162206	3159468	3108220	2.93	cps
Rhodium	103-2	1763427	1765694	1743661	1757594	0.69	cps
Scandium	45-1	1976955	2035856	1936000	1982937	2.53	cps
Scandium	45-2	159338	160363	154946	158216	1.82	cps
Selenium	82-1	586	561	643	596	7.04	cps
Selenium	77-2	117	97	53	89	36.43	cps
Selenium	78-2	357	290	330	326	10.31	cps
Silicon	28-1	11254048	11247089	11156258	11219131	0.49	cps
Silver	107-1	2715	2734	1157	2202	41.11	cps
Silver	109-1	1384	1063	1137	1195	14.04	cps
Sodium	23-2	1354838	1370252	1350756	1358615	0.76	cps
Strontium	86-1	185265	185977	190560	187267	1.53	cps
Strontium	88-1	1616435	1655267	1631166	1634290	1.20	cps
Sulfur	34-1	284986	280985	281432	282468	0.78	cps
Terbium	159-1	4066685	4158523	4200584	4141931	1.65	cps
Terbium	159-2	2500402	2599582	2630282	2576755	2.63	cps
Thallium	203-1	1357	1387	1407	1383	1.82	cps
Thallium	205-1	3137	3184	3190	3170	0.92	cps
Tin	118-1	4647	4744	4984	4792	3.62	cps
Titanium	47-1	225257	231039	228118	228138	1.27	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:21:24	DataFile Name :	056SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	26390	26346	27018	26585	1.41	cps
Vanadium	51-2	80708	81492	79324	80508	1.36	cps
Yttrium	89-1	4858224	5157561	5205864	5073883	3.71	cps
Yttrium	89-2	1190463	1174660	1167041	1177388	1.01	cps
Zinc	66-2	119510	118479	118805	118932	0.44	cps
Zirconium	90-1	10491	10497	10277	10422	1.20	cps
Zirconium	91-1	2334	2414	2337	2361	1.92	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:28:27	DataFile Name :	058CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2619109	2613308	2570847	2601088	1.01	cps
Antimony	121-1	1432552	1433070	1420132	1428585	0.51	cps
Arsenic	75-2	78262	77930	77782	77991	0.31	cps
Barium	135-1	1593795	1532771	1459375	1528647	4.40	cps
Barium	137-1	2656867	2541710	2660920	2619832	2.58	cps
Beryllium	9-1	285419	281722	279745	282295	1.02	cps
Bismuth	209-1	2355481	2393884	2354417	2367927	0.95	cps
Bismuth	209-2	1531677	1729026	1522807	1594503	7.31	cps
Bromine	81-1	4594	4357	4144	4365	5.16	cps
Bromine	81-2	110	83	73	89	21.33	cps
Cadmium	108-1	23646	23479	23336	23487	0.66	cps
Cadmium	106-1	34591	35356	34695	34881	1.19	cps
Cadmium	111-1	304189	306301	303153	304547	0.53	cps
Calcium	43-1	1759327	1751961	1725985	1745757	1.00	cps
Calcium	44-1	28277050	28120346	28444847	28280748	0.57	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	488694	486217	488121	487677	0.27	cps
Cobalt	59-2	739320	732440	735547	735769	0.47	cps
Copper	63-2	5030500	4990059	5109379	5043313	1.20	cps
Dysprosium	156-1	90	113	127	110	16.87	cps
Dysprosium	156-2	97	157	103	119	27.66	cps
Erbium	164-1	67	117	60	81	38.18	cps
Erbium	164-2	47	63	43	51	20.96	cps
Gadolinium	160-1	100	90	110	100	10.00	cps
Gadolinium	160-2	127	180	177	161	18.54	cps
Holmium	165-1	4428716	4161472	4115301	4235163	4.00	cps
Holmium	165-2	2582898	2521978	2552936	2552604	1.19	cps
Indium	115-1	3394734	3248175	3358336	3333748	2.29	cps
Indium	115-2	964869	959842	952696	959136	0.64	cps
Iron	56-2	101655118	101863698	101428782	101649200	0.21	cps
Iron	57-2	2558631	2611994	2483035	2551220	2.54	cps
Iron	54-2	5572537	5460356	5417532	5483475	1.46	cps
Krypton	83-1	130	100	133	121	15.16	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:28:27	DataFile Name :	058CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4054764	4087977	4059526	4067422	0.44	cps
Lead	207-1	3743336	3767472	3815534	3775447	0.97	cps
Lead	208-1	16494315	17000632	16823407	16772785	1.53	cps
Lithium	6-1	838069	825898	807393	823786	1.88	cps
Magnesium	24-2	23841194	23441450	23239085	23507243	1.30	cps
Manganese	55-2	3381121	3316520	3408360	3368667	1.40	cps
Molybdenum	94-1	4827203	4906782	4950857	4894947	1.28	cps
Molybdenum	95-1	6960931	6961439	7076153	6999508	0.95	cps
Molybdenum	96-1	7558382	7556626	7648944	7587984	0.70	cps
Molybdenum	97-1	4383547	4376572	4282662	4347593	1.30	cps
Molybdenum	98-1	11338589	11358934	11500497	11399340	0.77	cps
Neodymium	150-1	137	130	93	120	19.45	cps
Neodymium	150-2	37	40	53	43	20.34	cps
Nickel	60-2	189904	187849	187467	188407	0.70	cps
Phosphorus	31-2	37015	36423	35033	36157	2.81	cps
Potassium	39-2	12840789	12296050	12285091	12473977	2.55	cps
Rhodium	103-1	3096605	3124010	3034337	3084984	1.49	cps
Rhodium	103-2	1674646	1682580	1654131	1670452	0.88	cps
Scandium	45-1	2064276	2005908	2061417	2043867	1.61	cps
Scandium	45-2	156102	154236	156550	155629	0.79	cps
Selenium	82-1	24160	24442	24166	24256	0.67	cps
Selenium	77-2	2174	2063	1943	2060	5.58	cps
Selenium	78-2	6765	6905	6845	6838	1.03	cps
Silicon	28-1	14446889	14362910	14509576	14439791	0.51	cps
Silver	107-1	1504477	1535196	1505022	1514898	1.16	cps
Silver	109-1	1441121	1465384	1433785	1446763	1.14	cps
Sodium	23-2	36972738	37375297	36044614	36797549	1.85	cps
Strontium	86-1	10081943	10100663	10062064	10081557	0.19	cps
Strontium	88-1	87599032	88601402	87362649	87854361	0.75	cps
Sulfur	34-1	287163	285317	283527	285336	0.64	cps
Terbium	159-1	4364808	4278734	4267242	4303594	1.24	cps
Terbium	159-2	2605008	2550499	2612613	2589373	1.31	cps
Thallium	203-1	952945	958200	957199	956115	0.29	cps
Thallium	205-1	2525036	2523527	2620420	2556327	2.17	cps
Tin	118-1	1011225	1012358	1009360	1010981	0.15	cps
Titanium	47-1	1883961	1860740	1878181	1874294	0.64	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:28:27	DataFile Name :	058CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3289173	3344065	3395812	3343017	1.60	cps
Vanadium	51-2	441112	438080	436035	438409	0.58	cps
Yttrium	89-1	4512605	4508318	4392003	4470976	1.53	cps
Yttrium	89-2	1002697	991476	979155	991109	1.19	cps
Zinc	66-2	876897	863366	876529	872264	0.88	cps
Zirconium	90-1	2373357	2342139	2381931	2365809	0.89	cps
Zirconium	91-1	517020	514417	519648	517029	0.51	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:36:04	DataFile Name :	059CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	97	123	137	119	17.13	cps
Antimony	121-1	420	513	617	517	19.04	cps
Arsenic	75-2	3	7	7	6	34.70	cps
Barium	135-1	53	40	70	54	27.61	cps
Barium	137-1	113	83	93	97	15.81	cps
Beryllium	9-1	80	50	47	59	31.17	cps
Bismuth	209-1	2310867	2292316	2408483	2337222	2.67	cps
Bismuth	209-2	1748475	1807828	1837155	1797820	2.51	cps
Bromine	81-1	3927	3904	4044	3958	1.90	cps
Bromine	81-2	30	50	43	41	24.77	cps
Cadmium	108-1	7	0	3	3	100.05	cps
Cadmium	106-1	940	873	983	932	5.94	cps
Cadmium	111-1	96	107	109	104	6.90	cps
Calcium	43-1	287	270	257	271	5.54	cps
Calcium	44-1	8036	7629	7785	7817	2.63	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	667	690	620	659	5.41	cps
Cobalt	59-2	80	80	87	82	4.68	cps
Copper	63-2	797	823	877	832	4.90	cps
Dysprosium	156-1	17	10	10	12	31.50	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	43	30	27	33	26.45	cps
Erbium	164-2	13	23	10	16	44.60	cps
Gadolinium	160-1	27	27	10	21	45.58	cps
Gadolinium	160-2	130	110	100	113	13.48	cps
Holmium	165-1	4029213	3857493	3963426	3950044	2.19	cps
Holmium	165-2	2552269	2555643	2593216	2567043	0.89	cps
Indium	115-1	3366248	3201852	3334308	3300803	2.64	cps
Indium	115-2	999310	987938	991214	992821	0.59	cps
Iron	56-2	10200	10761	10697	10553	2.91	cps
Iron	57-2	1463	1540	1450	1485	3.27	cps
Iron	54-2	1087	1160	1227	1158	6.05	cps
Krypton	83-1	133	107	127	122	11.36	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:36:04	DataFile Name :	059CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	377	417	437	410	7.45	cps
Lead	207-1	307	280	327	304	7.69	cps
Lead	208-1	1487	1553	1573	1538	2.95	cps
Lithium	6-1	757896	738610	771592	756033	2.19	cps
Magnesium	24-2	823	1027	1010	953	11.84	cps
Manganese	55-2	470	457	527	484	7.67	cps
Molybdenum	94-1	283	237	307	276	12.93	cps
Molybdenum	95-1	323	253	273	283	12.73	cps
Molybdenum	96-1	453	350	367	390	14.23	cps
Molybdenum	97-1	203	100	203	169	35.33	cps
Molybdenum	98-1	540	433	530	501	11.76	cps
Neodymium	150-1	3	10	7	7	50.03	cps
Neodymium	150-2	0	3	3	2	86.60	cps
Nickel	60-2	143	207	177	176	18.04	cps
Phosphorus	31-2	167	180	160	169	6.03	cps
Potassium	39-2	47504	46959	47875	47446	0.97	cps
Rhodium	103-1	3213279	3113448	3195225	3173984	1.68	cps
Rhodium	103-2	1797002	1778308	1785565	1786959	0.53	cps
Scandium	45-1	1939440	1926171	2029062	1964891	2.85	cps
Scandium	45-2	156738	156513	158854	157368	0.82	cps
Selenium	82-1	105	88	73	89	17.78	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	127	163	140	143	12.95	cps
Silicon	28-1	276679	278315	278478	277824	0.36	cps
Silver	107-1	137	117	80	111	25.87	cps
Silver	109-1	83	87	97	89	7.81	cps
Sodium	23-2	18551	18241	17984	18259	1.56	cps
Strontium	86-1	507	370	420	432	16.00	cps
Strontium	88-1	2420	2030	2047	2166	10.18	cps
Sulfur	34-1	163838	163746	162433	163339	0.48	cps
Terbium	159-1	4195120	4015612	4230402	4147044	2.78	cps
Terbium	159-2	2497660	2608257	2561653	2555857	2.17	cps
Thallium	203-1	67	83	77	76	11.10	cps
Thallium	205-1	223	183	200	202	9.94	cps
Tin	118-1	397	380	437	404	7.20	cps
Titanium	47-1	150	120	107	126	17.68	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:36:04	DataFile Name :	059CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	83	77	103	88	15.81	cps
Vanadium	51-2	13	17	33	21	50.75	cps
Yttrium	89-1	4333968	4164819	4343505	4280764	2.35	cps
Yttrium	89-2	994974	998195	993300	995490	0.25	cps
Zinc	66-2	290	283	330	301	8.38	cps
Zirconium	90-1	280	350	337	322	11.53	cps
Zirconium	91-1	63	60	83	69	18.32	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:39:28	DataFile Name :	060SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	273434	269542	273327	272101	0.81	cps
Antimony	121-1	2870	2964	2920	2918	1.60	cps
Arsenic	75-2	1007	857	793	886	12.37	cps
Barium	135-1	188680	191278	191894	190617	0.89	cps
Barium	137-1	328413	330337	328897	329216	0.30	cps
Beryllium	9-1	587	633	653	624	5.48	cps
Bismuth	209-1	2463059	2433050	2456156	2450755	0.64	cps
Bismuth	209-2	1858290	1837945	1743738	1813324	3.37	cps
Bromine	81-1	7599	8846	9800	8748	12.62	cps
Bromine	81-2	1063	1083	1083	1077	1.07	cps
Cadmium	108-1	177	170	160	169	4.97	cps
Cadmium	106-1	1383	1297	1410	1363	4.35	cps
Cadmium	111-1	2462	2484	2599	2515	2.94	cps
Calcium	43-1	48748	49327	49206	49094	0.62	cps
Calcium	44-1	787845	795197	796828	793290	0.60	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	10217	10314	10570	10367	1.76	cps
Cobalt	59-2	8302	8549	8376	8409	1.51	cps
Copper	63-2	43316	43403	45028	43915	2.20	cps
Dysprosium	156-1	7035	7008	6842	6962	1.51	cps
Dysprosium	156-2	5231	5051	5098	5127	1.82	cps
Erbium	164-1	7629	7329	7312	7423	2.40	cps
Erbium	164-2	4751	4674	4507	4644	2.68	cps
Gadolinium	160-1	7409	7535	7239	7394	2.01	cps
Gadolinium	160-2	4961	5188	5121	5090	2.29	cps
Holmium	165-1	4000714	3920763	4054834	3992104	1.69	cps
Holmium	165-2	2601800	2652159	2416369	2556776	4.86	cps
Indium	115-1	3337112	3365271	3403243	3368542	0.99	cps
Indium	115-2	1023952	1033098	980889	1012646	2.75	cps
Iron	56-2	3357226	3335038	3338656	3343640	0.36	cps
Iron	57-2	86558	87674	87503	87245	0.69	cps
Iron	54-2	188353	191973	190293	190206	0.95	cps
Krypton	83-1	140	137	173	150	13.52	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:39:28	DataFile Name :	060SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	220988	225171	227465	224541	1.46	cps
Lead	207-1	191782	195742	195942	194489	1.21	cps
Lead	208-1	874867	891866	897288	888007	1.32	cps
Lithium	6-1	779096	786792	792082	785990	0.83	cps
Magnesium	24-2	97195	95206	95886	96096	1.05	cps
Manganese	55-2	3499288	3555903	3515709	3523633	0.83	cps
Molybdenum	94-1	1753	1860	1917	1843	4.50	cps
Molybdenum	95-1	1450	1563	1560	1525	4.23	cps
Molybdenum	96-1	1697	1613	1677	1662	2.62	cps
Molybdenum	97-1	873	877	933	894	3.77	cps
Molybdenum	98-1	2210	2230	2310	2250	2.35	cps
Neodymium	150-1	10351	10070	10347	10256	1.57	cps
Neodymium	150-2	5524	5615	5451	5530	1.48	cps
Nickel	60-2	9460	9673	9430	9521	1.39	cps
Phosphorus	31-2	2167	2280	2350	2266	4.08	cps
Potassium	39-2	80314	79606	79161	79694	0.73	cps
Rhodium	103-1	3277564	3346796	3308513	3310958	1.05	cps
Rhodium	103-2	1861741	1864645	1776494	1834294	2.73	cps
Scandium	45-1	2062370	2060548	2068326	2063748	0.20	cps
Scandium	45-2	161121	161592	156843	159852	1.64	cps
Selenium	82-1	171	171	123	155	17.88	cps
Selenium	77-2	40	30	27	32	21.53	cps
Selenium	78-2	203	137	173	171	19.51	cps
Silicon	28-1	2445075	2426597	2486298	2452657	1.25	cps
Silver	107-1	290	283	230	268	12.28	cps
Silver	109-1	240	293	257	263	10.36	cps
Sodium	23-2	313563	309602	308861	310676	0.81	cps
Strontium	86-1	38587	38220	38844	38550	0.81	cps
Strontium	88-1	329891	331683	336549	332707	1.04	cps
Sulfur	34-1	185663	182044	179335	182347	1.74	cps
Terbium	159-1	4298694	4240936	4250268	4263299	0.73	cps
Terbium	159-2	2568723	2648734	2540528	2585995	2.17	cps
Thallium	203-1	280	327	347	318	10.76	cps
Thallium	205-1	717	673	710	700	3.33	cps
Tin	118-1	1133	1233	1327	1231	7.85	cps
Titanium	47-1	46675	45889	48344	46969	2.67	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-04DLX5	Instrumnet Name :	P7
Client Sample ID :	S-929-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:39:28	DataFile Name :	060SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	5061	5218	5238	5172	1.87	cps
Vanadium	51-2	16212	16102	15478	15931	2.49	cps
Yttrium	89-1	4715908	4683972	4602250	4667377	1.26	cps
Yttrium	89-2	1052695	1076300	1033864	1054287	2.02	cps
Zinc	66-2	24924	25041	24480	24815	1.19	cps
Zirconium	90-1	2820	3127	2927	2958	5.26	cps
Zirconium	91-1	567	633	643	614	6.78	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:42:47	DataFile Name :	061SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2738076	2684966	2756719	2726587	1.37	cps
Antimony	121-1	4217	4561	4537	4439	4.32	cps
Arsenic	75-2	2387	2244	2390	2340	3.58	cps
Barium	135-1	118626	120153	120445	119741	0.82	cps
Barium	137-1	208651	205291	211529	208490	1.50	cps
Beryllium	9-1	2597	2777	2674	2682	3.37	cps
Bismuth	209-1	2295692	2315008	2262145	2290948	1.17	cps
Bismuth	209-2	1718516	1511009	1723668	1651064	7.35	cps
Bromine	81-1	7469	7845	8239	7851	4.91	cps
Bromine	81-2	813	887	777	826	6.78	cps
Cadmium	108-1	243	213	187	214	13.22	cps
Cadmium	106-1	1527	1503	1540	1523	1.22	cps
Cadmium	111-1	1492	1554	1683	1577	6.18	cps
Calcium	43-1	73819	75336	77507	75554	2.45	cps
Calcium	44-1	1214826	1223242	1248106	1228725	1.41	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	261121	259970	256899	259330	0.84	cps
Cobalt	59-2	45515	45686	44991	45397	0.80	cps
Copper	63-2	149469	151920	150937	150775	0.82	cps
Dysprosium	156-1	33797	34706	34709	34404	1.53	cps
Dysprosium	156-2	24228	24602	24418	24416	0.77	cps
Erbium	164-1	29935	31746	30694	30792	2.95	cps
Erbium	164-2	20145	19551	19570	19755	1.71	cps
Gadolinium	160-1	32030	32685	33049	32588	1.58	cps
Gadolinium	160-2	21500	21533	21777	21603	0.70	cps
Holmium	165-1	3913176	3957212	3986340	3952243	0.93	cps
Holmium	165-2	2443915	2431219	2479299	2451477	1.02	cps
Indium	115-1	3169245	3226588	3404487	3266773	3.75	cps
Indium	115-2	970978	975458	987004	977813	0.85	cps
Iron	56-2	119223232	120833608	120934235	120330358	0.80	cps
Iron	57-2	3003363	3022255	3004529	3010049	0.35	cps
Iron	54-2	6812473	6540799	6564607	6639293	2.27	cps
Krypton	83-1	150	147	123	140	10.38	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:42:47	DataFile Name :	061SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	196067	199803	201508	199126	1.40	cps
Lead	207-1	167186	172315	173939	171147	2.06	cps
Lead	208-1	777079	792117	797258	788818	1.33	cps
Lithium	6-1	754311	767106	763351	761589	0.86	cps
Magnesium	24-2	612748	616160	622271	617060	0.78	cps
Manganese	55-2	779984	778185	773171	777113	0.45	cps
Molybdenum	94-1	46286	46270	47768	46774	1.84	cps
Molybdenum	95-1	2197	2287	2340	2275	3.19	cps
Molybdenum	96-1	11348	11488	11878	11571	2.38	cps
Molybdenum	97-1	1363	1353	1417	1378	2.47	cps
Molybdenum	98-1	3677	3734	3721	3711	0.80	cps
Neodymium	150-1	51611	52401	53478	52496	1.78	cps
Neodymium	150-2	27584	28068	28452	28035	1.55	cps
Nickel	60-2	16095	16626	16002	16241	2.07	cps
Phosphorus	31-2	14113	13886	13836	13945	1.06	cps
Potassium	39-2	859107	872080	874020	868402	0.93	cps
Rhodium	103-1	3138607	3118185	3156521	3137771	0.61	cps
Rhodium	103-2	1733769	1727981	1727028	1729593	0.21	cps
Scandium	45-1	2058600	2088380	2070877	2072619	0.72	cps
Scandium	45-2	167512	166242	166548	166767	0.40	cps
Selenium	82-1	143	160	225	176	24.72	cps
Selenium	77-2	70	100	57	76	29.37	cps
Selenium	78-2	217	203	210	210	3.17	cps
Silicon	28-1	44007768	45682111	46143106	45277662	2.48	cps
Silver	107-1	8886	9106	9653	9215	4.29	cps
Silver	109-1	8189	8716	8659	8521	3.39	cps
Sodium	23-2	85181	84775	85412	85123	0.38	cps
Strontium	86-1	44340	44818	44745	44634	0.58	cps
Strontium	88-1	378807	384873	386128	383269	1.02	cps
Sulfur	34-1	161813	161981	162743	162179	0.31	cps
Terbium	159-1	4033769	4175554	4298806	4169376	3.18	cps
Terbium	159-2	2509883	2464725	2590625	2521745	2.53	cps
Thallium	203-1	983	1037	1093	1038	5.30	cps
Thallium	205-1	2537	2320	2587	2481	5.71	cps
Tin	118-1	3977	4077	3897	3984	2.26	cps
Titanium	47-1	255096	261876	260887	259286	1.41	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:42:47	DataFile Name :	061SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	51390	54207	53166	52921	2.69	cps
Vanadium	51-2	218555	220657	221366	220193	0.66	cps
Yttrium	89-1	4695074	4705067	4888839	4762993	2.29	cps
Yttrium	89-2	1091327	1092141	1097992	1093820	0.33	cps
Zinc	66-2	88604	88866	89352	88941	0.43	cps
Zirconium	90-1	124789	125858	127072	125906	0.91	cps
Zirconium	91-1	27529	27960	28217	27902	1.25	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:46:08	DataFile Name :	062SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	560981	554264	563859	559702	0.88	cps
Antimony	121-1	927	970	953	950	2.30	cps
Arsenic	75-2	487	380	517	461	15.58	cps
Barium	135-1	24080	23309	24221	23870	2.06	cps
Barium	137-1	41330	41654	40752	41245	1.11	cps
Beryllium	9-1	563	593	600	586	3.34	cps
Bismuth	209-1	2389821	2382374	2374317	2382171	0.33	cps
Bismuth	209-2	1815256	1739959	1722646	1759287	2.80	cps
Bromine	81-1	4731	4908	4744	4794	2.05	cps
Bromine	81-2	200	217	217	211	4.56	cps
Cadmium	108-1	37	53	53	48	20.13	cps
Cadmium	106-1	1097	1037	1063	1066	2.82	cps
Cadmium	111-1	461	343	406	403	14.60	cps
Calcium	43-1	14694	15194	14711	14866	1.91	cps
Calcium	44-1	244973	248554	244142	245890	0.95	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	51173	50384	50912	50823	0.79	cps
Cobalt	59-2	8893	8806	9140	8946	1.93	cps
Copper	63-2	30591	29983	30521	30365	1.10	cps
Dysprosium	156-1	7025	6885	6718	6876	2.23	cps
Dysprosium	156-2	4808	4667	4748	4741	1.48	cps
Erbium	164-1	6218	6065	6158	6147	1.26	cps
Erbium	164-2	3971	3661	3667	3766	4.70	cps
Gadolinium	160-1	6818	6508	6635	6654	2.34	cps
Gadolinium	160-2	4294	4191	4127	4204	2.00	cps
Holmium	165-1	3975265	3986092	3936948	3966102	0.65	cps
Holmium	165-2	2538410	2435696	2475712	2483272	2.08	cps
Indium	115-1	3490002	3318838	3511378	3440072	3.07	cps
Indium	115-2	1011643	1000790	993223	1001885	0.92	cps
Iron	56-2	23956797	23754221	23519029	23743349	0.92	cps
Iron	57-2	625819	616847	620122	620930	0.73	cps
Iron	54-2	1362341	1356822	1296821	1338661	2.71	cps
Krypton	83-1	103	147	140	130	17.95	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:46:08	DataFile Name :	062SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	40230	39631	39257	39706	1.24	cps
Lead	207-1	34337	33719	33973	34009	0.91	cps
Lead	208-1	157879	155646	156394	156640	0.73	cps
Lithium	6-1	792715	775278	792560	786851	1.27	cps
Magnesium	24-2	121489	119735	121831	121018	0.93	cps
Manganese	55-2	152625	153838	154804	153756	0.71	cps
Molybdenum	94-1	9250	9530	9233	9337	1.79	cps
Molybdenum	95-1	537	530	537	534	0.72	cps
Molybdenum	96-1	2244	2377	2467	2362	4.76	cps
Molybdenum	97-1	327	397	290	338	16.04	cps
Molybdenum	98-1	870	850	753	824	7.57	cps
Neodymium	150-1	10414	10307	10617	10446	1.51	cps
Neodymium	150-2	5641	5491	5561	5564	1.35	cps
Nickel	60-2	3277	3294	3287	3286	0.26	cps
Phosphorus	31-2	2664	3087	2690	2814	8.43	cps
Potassium	39-2	208255	204103	208627	206995	1.21	cps
Rhodium	103-1	3244193	3209489	3190453	3214712	0.85	cps
Rhodium	103-2	1767312	1824179	1823540	1805010	1.81	cps
Scandium	45-1	2029620	2023106	2029676	2027467	0.19	cps
Scandium	45-2	164337	160295	161838	162157	1.26	cps
Selenium	82-1	129	93	79	100	25.88	cps
Selenium	77-2	7	7	0	4	86.60	cps
Selenium	78-2	157	193	173	174	10.52	cps
Silicon	28-1	9219478	9299030	9275472	9264660	0.44	cps
Silver	107-1	1820	1807	1913	1847	3.15	cps
Silver	109-1	1833	1680	1847	1787	5.18	cps
Sodium	23-2	26383	26810	26406	26533	0.91	cps
Strontium	86-1	8896	8923	8786	8868	0.82	cps
Strontium	88-1	76947	77030	75379	76452	1.22	cps
Sulfur	34-1	136729	138296	137582	137536	0.57	cps
Terbium	159-1	4245855	4272181	4227116	4248384	0.53	cps
Terbium	159-2	2627916	2531797	2458961	2539558	3.34	cps
Thallium	203-1	233	287	217	246	14.89	cps
Thallium	205-1	627	573	590	597	4.57	cps
Tin	118-1	1047	1063	1077	1062	1.41	cps
Titanium	47-1	50665	51457	52036	51386	1.34	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-05DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0-0.5-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:46:08	DataFile Name :	062SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	10691	10331	10654	10559	1.88	cps
Vanadium	51-2	43713	43008	42790	43171	1.12	cps
Yttrium	89-1	4652493	4531385	4428862	4537580	2.47	cps
Yttrium	89-2	1032565	1035800	1017172	1028512	0.97	cps
Zinc	66-2	17477	17804	18061	17781	1.65	cps
Zirconium	90-1	25205	25178	25372	25252	0.42	cps
Zirconium	91-1	5521	5554	5714	5597	1.85	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:49:27	DataFile Name :	063SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6122339	5865558	5993622	5993840	2.14	cps
Antimony	121-1	2400	2744	2717	2620	7.29	cps
Arsenic	75-2	1650	1590	1530	1590	3.77	cps
Barium	135-1	79759	82226	84234	82073	2.73	cps
Barium	137-1	137647	144171	145702	142506	3.00	cps
Beryllium	9-1	6408	6365	6325	6366	0.66	cps
Bismuth	209-1	2231795	2084060	2207324	2174393	3.64	cps
Bismuth	209-2	1717024	1712990	1711559	1713857	0.17	cps
Bromine	81-1	9386	10581	11248	10405	9.06	cps
Bromine	81-2	1430	1450	1440	1440	0.69	cps
Cadmium	108-1	197	217	260	224	14.43	cps
Cadmium	106-1	1647	1563	1597	1602	2.62	cps
Cadmium	111-1	477	518	464	486	5.77	cps
Calcium	43-1	47772	47217	47478	47489	0.58	cps
Calcium	44-1	769613	780371	778673	776219	0.75	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	634225	634194	629065	632495	0.47	cps
Cobalt	59-2	41985	41728	41340	41684	0.78	cps
Copper	63-2	87722	85831	85412	86322	1.43	cps
Dysprosium	156-1	66691	69675	68982	68449	2.28	cps
Dysprosium	156-2	49437	48333	49434	49068	1.30	cps
Erbium	164-1	63095	63982	65258	64112	1.70	cps
Erbium	164-2	40850	40937	40094	40627	1.14	cps
Gadolinium	160-1	67103	69635	69270	68670	1.99	cps
Gadolinium	160-2	45360	45454	44624	45146	1.01	cps
Holmium	165-1	3903759	3744850	3812600	3820403	2.09	cps
Holmium	165-2	2466714	2489132	2590147	2515331	2.61	cps
Indium	115-1	3119574	3062673	3258283	3146843	3.20	cps
Indium	115-2	989231	987165	991412	989269	0.21	cps
Iron	56-2	353346568	350866901	352274088	352162519	0.35	cps
Iron	57-2	8830253	8734538	8734967	8766586	0.63	cps
Iron	54-2	19517122	19108714	19517928	19381255	1.22	cps
Krypton	83-1	153	213	203	190	16.92	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:49:27	DataFile Name :	063SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	60193	61509	63324	61675	2.55	cps
Lead	207-1	51033	53161	53653	52615	2.65	cps
Lead	208-1	238664	244598	246878	243380	1.74	cps
Lithium	6-1	735675	676994	723401	712023	4.35	cps
Magnesium	24-2	670485	660853	660029	663789	0.88	cps
Manganese	55-2	310839	308475	311074	310129	0.46	cps
Molybdenum	94-1	77447	77829	80020	78432	1.77	cps
Molybdenum	95-1	990	893	867	917	7.08	cps
Molybdenum	96-1	17577	17477	18148	17734	2.04	cps
Molybdenum	97-1	643	617	750	670	10.53	cps
Molybdenum	98-1	1323	1390	1330	1348	2.72	cps
Neodymium	150-1	111675	114235	114091	113334	1.27	cps
Neodymium	150-2	61755	59458	61132	60781	1.95	cps
Nickel	60-2	24851	24557	24774	24727	0.62	cps
Phosphorus	31-2	34890	33560	34048	34166	1.97	cps
Potassium	39-2	1535122	1492269	1497239	1508210	1.55	cps
Rhodium	103-1	3018547	2892977	2970281	2960602	2.14	cps
Rhodium	103-2	1771072	1774923	1756175	1767390	0.56	cps
Scandium	45-1	2222550	2055027	2139700	2139092	3.92	cps
Scandium	45-2	181581	182369	180910	181620	0.40	cps
Selenium	82-1	191	182	162	178	8.30	cps
Selenium	77-2	143	160	173	159	9.46	cps
Selenium	78-2	233	267	303	268	13.08	cps
Silicon	28-1	57878596	58953004	58526961	58452854	0.93	cps
Silver	107-1	1647	1500	1653	1600	5.42	cps
Silver	109-1	1257	1333	1333	1308	3.39	cps
Sodium	23-2	36186	35735	35341	35754	1.18	cps
Strontium	86-1	38086	37220	38571	37959	1.80	cps
Strontium	88-1	324780	326815	326459	326018	0.33	cps
Sulfur	34-1	133242	126256	124831	128110	3.51	cps
Terbium	159-1	4138207	3886783	4004139	4009709	3.14	cps
Terbium	159-2	2582720	2642806	2559774	2595100	1.65	cps
Thallium	203-1	1130	1077	1223	1143	6.49	cps
Thallium	205-1	2640	2747	2824	2737	3.36	cps
Tin	118-1	1943	2247	2104	2098	7.23	cps
Titanium	47-1	305818	316019	313518	311785	1.71	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:49:27	DataFile Name :	063SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	144579	149400	150711	148230	2.18	cps
Vanadium	51-2	570467	562127	565407	566000	0.74	cps
Yttrium	89-1	5113220	4858387	5181656	5051088	3.37	cps
Yttrium	89-2	1221339	1224031	1222433	1222601	0.11	cps
Zinc	66-2	60217	59863	59541	59874	0.56	cps
Zirconium	90-1	209983	212497	213944	212141	0.94	cps
Zirconium	91-1	47487	47229	47821	47512	0.62	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:52:45	DataFile Name :	064SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1201765	1226298	1233001	1220354	1.35	cps
Antimony	121-1	597	573	573	581	2.32	cps
Arsenic	75-2	320	277	317	304	7.92	cps
Barium	135-1	16717	16593	17147	16819	1.73	cps
Barium	137-1	29304	29384	28078	28922	2.53	cps
Beryllium	9-1	1373	1233	1383	1330	6.31	cps
Bismuth	209-1	2310964	2351721	2358170	2340285	1.09	cps
Bismuth	209-2	1808912	1824747	1833954	1822538	0.69	cps
Bromine	81-1	5928	5841	6115	5961	2.34	cps
Bromine	81-2	397	330	327	351	11.25	cps
Cadmium	108-1	27	53	30	37	39.62	cps
Cadmium	106-1	1210	1130	1100	1147	4.96	cps
Cadmium	111-1	229	172	206	202	14.07	cps
Calcium	43-1	10007	10127	10214	10116	1.03	cps
Calcium	44-1	164648	168798	167006	166817	1.25	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	131138	130653	129763	130518	0.53	cps
Cobalt	59-2	8499	8556	8246	8434	1.96	cps
Copper	63-2	18505	17891	18328	18241	1.73	cps
Dysprosium	156-1	13266	14067	14187	13840	3.62	cps
Dysprosium	156-2	9844	9553	9920	9772	1.98	cps
Erbium	164-1	13019	13370	13256	13215	1.35	cps
Erbium	164-2	8032	7809	8419	8087	3.82	cps
Gadolinium	160-1	13827	14144	14244	14072	1.55	cps
Gadolinium	160-2	9213	8903	9493	9203	3.21	cps
Holmium	165-1	4087965	4110002	4141055	4113007	0.65	cps
Holmium	165-2	2567326	2588603	2527373	2561101	1.21	cps
Indium	115-1	3544679	3425316	3419063	3463020	2.04	cps
Indium	115-2	1045444	1019026	1030228	1031566	1.29	cps
Iron	56-2	73685622	72980876	70757852	72474783	2.11	cps
Iron	57-2	1846855	1796994	1793959	1812603	1.64	cps
Iron	54-2	3977287	4009082	3974016	3986795	0.49	cps
Krypton	83-1	160	167	120	149	16.95	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:52:45	DataFile Name :	064SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	12736	12693	12856	12762	0.66	cps
Lead	207-1	10578	10988	11145	10903	2.69	cps
Lead	208-1	49736	50367	50611	50238	0.90	cps
Lithium	6-1	763240	760969	764263	762824	0.22	cps
Magnesium	24-2	132814	134257	132589	133220	0.68	cps
Manganese	55-2	64183	64153	64337	64224	0.15	cps
Molybdenum	94-1	15932	16266	16409	16202	1.51	cps
Molybdenum	95-1	247	287	287	273	8.45	cps
Molybdenum	96-1	4014	3841	3724	3859	3.78	cps
Molybdenum	97-1	197	150	167	171	13.82	cps
Molybdenum	98-1	460	410	387	419	8.94	cps
Neodymium	150-1	22361	22755	23520	22879	2.57	cps
Neodymium	150-2	12446	12336	12175	12319	1.10	cps
Nickel	60-2	5284	5358	5241	5294	1.11	cps
Phosphorus	31-2	6858	7142	7425	7142	3.97	cps
Potassium	39-2	364710	364178	361331	363406	0.50	cps
Rhodium	103-1	3345445	3320918	3361639	3342668	0.61	cps
Rhodium	103-2	1872097	1863414	1836010	1857173	1.01	cps
Scandium	45-1	2123668	2155045	2093173	2123962	1.46	cps
Scandium	45-2	169151	171674	171212	170679	0.79	cps
Selenium	82-1	72	93	149	105	38.14	cps
Selenium	77-2	43	60	20	41	48.87	cps
Selenium	78-2	157	197	193	182	12.18	cps
Silicon	28-1	11763504	12348898	12082471	12064958	2.43	cps
Silver	107-1	380	363	373	372	2.25	cps
Silver	109-1	320	293	270	294	8.50	cps
Sodium	23-2	16556	16526	16409	16497	0.47	cps
Strontium	86-1	7679	8112	7916	7902	2.75	cps
Strontium	88-1	66818	68556	67702	67692	1.28	cps
Sulfur	34-1	119281	118905	119284	119157	0.18	cps
Terbium	159-1	4234420	4411581	4274471	4306824	2.16	cps
Terbium	159-2	2635352	2608670	2687211	2643744	1.51	cps
Thallium	203-1	170	283	240	231	24.75	cps
Thallium	205-1	703	717	617	679	8.00	cps
Tin	118-1	663	700	613	659	6.60	cps
Titanium	47-1	63118	64731	64226	64025	1.29	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-06DLX5	Instrumnet Name :	P7
Client Sample ID :	S-913-K1-SO-0.5-1-0820	Dilution Factor :	5
Date & Time Acquired ::	2024-09-04 17:52:45	DataFile Name :	064SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	29353	29723	29870	29649	0.90	cps
Vanadium	51-2	115240	113909	114725	114625	0.59	cps
Yttrium	89-1	4720570	4804362	4832320	4785751	1.22	cps
Yttrium	89-2	1089319	1066746	1084706	1080257	1.10	cps
Zinc	66-2	12916	12469	12662	12682	1.77	cps
Zirconium	90-1	43073	43691	43598	43454	0.77	cps
Zirconium	91-1	9590	9537	9506	9544	0.44	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-07	Instrumnet Name :	P7
Client Sample ID :	S-930-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:56:02	DataFile Name :	065SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2748766	2671593	2666445	2695601	1.71	cps
Antimony	121-1	3757	4101	4277	4045	6.54	cps
Arsenic	75-2	2544	2640	2510	2565	2.63	cps
Barium	135-1	211562	210001	213893	211819	0.92	cps
Barium	137-1	362732	365468	367962	365388	0.72	cps
Beryllium	9-1	1620	1683	1837	1713	6.50	cps
Bismuth	209-1	2197180	2164494	2195616	2185763	0.84	cps
Bismuth	209-2	1498597	1693801	1476260	1556219	7.69	cps
Bromine	81-1	11211	13436	14988	13212	14.37	cps
Bromine	81-2	1927	1897	1980	1935	2.18	cps
Cadmium	108-1	123	163	133	140	14.87	cps
Cadmium	106-1	1187	1297	1193	1226	5.03	cps
Cadmium	111-1	1156	1222	1323	1234	6.82	cps
Calcium	43-1	301993	306870	304285	304383	0.80	cps
Calcium	44-1	4459058	4586938	4575943	4540647	1.56	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	87512	87934	88504	87984	0.57	cps
Cobalt	59-2	33898	33578	33711	33729	0.48	cps
Copper	63-2	131109	131947	130336	131130	0.61	cps
Dysprosium	156-1	31726	31933	31626	31762	0.49	cps
Dysprosium	156-2	23376	22842	22969	23062	1.21	cps
Erbium	164-1	24288	24719	25493	24833	2.46	cps
Erbium	164-2	15579	15969	15122	15557	2.73	cps
Gadolinium	160-1	28927	29134	28259	28773	1.59	cps
Gadolinium	160-2	19300	19260	19200	19253	0.26	cps
Holmium	165-1	3900919	3841900	3885783	3876200	0.79	cps
Holmium	165-2	2409582	2452264	2398200	2420015	1.18	cps
Indium	115-1	3148190	3246459	3236317	3210322	1.68	cps
Indium	115-2	976136	959432	971456	969008	0.89	cps
Iron	56-2	45972791	45831041	45947211	45917014	0.16	cps
Iron	57-2	1172413	1186641	1191636	1183563	0.84	cps
Iron	54-2	2434308	2521859	2511210	2489126	1.92	cps
Krypton	83-1	150	170	137	152	11.02	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-07	Instrumnet Name :	P7
Client Sample ID :	S-930-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:56:02	DataFile Name :	065SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	316460	319712	325167	320446	1.37	cps
Lead	207-1	270921	273611	278232	274255	1.35	cps
Lead	208-1	1243331	1254266	1277190	1258262	1.37	cps
Lithium	6-1	732819	750751	761002	748191	1.91	cps
Magnesium	24-2	722786	726496	723449	724244	0.27	cps
Manganese	55-2	684044	696991	692089	691041	0.95	cps
Molybdenum	94-1	27209	27767	27940	27638	1.38	cps
Molybdenum	95-1	3304	3564	3497	3455	3.91	cps
Molybdenum	96-1	8356	8649	8326	8444	2.12	cps
Molybdenum	97-1	2137	2194	1943	2091	6.27	cps
Molybdenum	98-1	5498	5338	5728	5521	3.55	cps
Neodymium	150-1	52494	52568	53280	52781	0.82	cps
Neodymium	150-2	28111	28162	28001	28091	0.29	cps
Nickel	60-2	21128	21252	21212	21197	0.30	cps
Phosphorus	31-2	5488	5704	5584	5592	1.94	cps
Potassium	39-2	364471	363579	362132	363394	0.32	cps
Rhodium	103-1	3076761	3130133	3111395	3106097	0.87	cps
Rhodium	103-2	1733093	1695177	1713512	1713928	1.11	cps
Scandium	45-1	2041588	2051678	2007029	2033431	1.15	cps
Scandium	45-2	160605	162366	161063	161345	0.57	cps
Selenium	82-1	192	158	216	189	15.42	cps
Selenium	77-2	77	57	57	63	18.23	cps
Selenium	78-2	217	220	240	226	5.59	cps
Silicon	28-1	44169998	44522598	45534313	44742303	1.58	cps
Silver	107-1	7279	7916	7519	7571	4.25	cps
Silver	109-1	6982	7145	6952	7026	1.48	cps
Sodium	23-2	77366	78747	76814	77642	1.28	cps
Strontium	86-1	160783	162544	163834	162387	0.94	cps
Strontium	88-1	1394595	1394733	1411993	1400440	0.71	cps
Sulfur	34-1	139927	134593	133574	136031	2.51	cps
Terbium	159-1	4089124	4110191	4088842	4096052	0.30	cps
Terbium	159-2	2499200	2550949	2466227	2505459	1.70	cps
Thallium	203-1	1103	1083	1190	1126	5.04	cps
Thallium	205-1	2804	2730	2880	2805	2.67	cps
Tin	118-1	4164	4364	4397	4308	2.93	cps
Titanium	47-1	346441	353664	354426	351510	1.25	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	P3707-07	Instrumnet Name :	P7
Client Sample ID :	S-930-K1-SO-0-0.5-0820	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 17:56:02	DataFile Name :	065SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	21805	22045	22346	22065	1.23	cps
Vanadium	51-2	94695	94497	93260	94150	0.83	cps
Yttrium	89-1	4612178	4548649	4629051	4596626	0.92	cps
Yttrium	89-2	1072136	1060634	1052458	1061743	0.93	cps
Zinc	66-2	79075	77935	77175	78062	1.22	cps
Zirconium	90-1	68861	70903	71563	70442	2.00	cps
Zirconium	91-1	15532	15572	15882	15662	1.22	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-1	Instrumnet Name :	P7
Client Sample ID :	DOC-1	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:02:41	DataFile Name :	067SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	538215	534383	536087	536228	0.36	cps
Antimony	121-1	1432930	1447778	1446830	1442513	0.58	cps
Arsenic	75-2	82648	82136	81147	81977	0.93	cps
Barium	135-1	1440596	1476532	1460019	1459049	1.23	cps
Barium	137-1	2655429	2678110	2657364	2663635	0.47	cps
Beryllium	9-1	256747	265581	258907	260412	1.77	cps
Bismuth	209-1	2384756	2292088	2396556	2357800	2.43	cps
Bismuth	209-2	1813826	1775645	1789839	1793103	1.08	cps
Bromine	81-1	4501	4444	4347	4431	1.75	cps
Bromine	81-2	53	57	87	66	28.01	cps
Cadmium	108-1	24234	24618	24100	24317	1.10	cps
Cadmium	106-1	36095	35727	37485	36436	2.54	cps
Cadmium	111-1	310195	315034	320242	315157	1.59	cps
Calcium	43-1	396200	400859	398434	398498	0.58	cps
Calcium	44-1	5698903	5756218	5816248	5757123	1.02	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	510247	507586	505326	507720	0.49	cps
Cobalt	59-2	784305	794100	787280	788562	0.64	cps
Copper	63-2	5678743	5549370	5540013	5589375	1.39	cps
Dysprosium	156-1	63	60	43	56	19.29	cps
Dysprosium	156-2	70	60	100	77	27.15	cps
Erbium	164-1	67	57	70	64	10.76	cps
Erbium	164-2	50	43	60	51	16.42	cps
Gadolinium	160-1	23	83	53	53	56.25	cps
Gadolinium	160-2	123	150	153	142	11.56	cps
Holmium	165-1	4083905	4234045	4043358	4120436	2.44	cps
Holmium	165-2	2645487	2503811	2566642	2571980	2.76	cps
Indium	115-1	3447066	3418604	3429352	3431674	0.42	cps
Indium	115-2	1003504	1016187	1012676	1010789	0.65	cps
Iron	56-2	21787558	21569372	21575996	21644309	0.57	cps
Iron	57-2	566811	565401	566044	566085	0.12	cps
Iron	54-2	1255631	1235142	1246919	1245897	0.83	cps
Krypton	83-1	110	120	153	128	17.76	cps

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-1	Instrumnet Name :	P7
Client Sample ID :	DOC-1	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:02:41	DataFile Name :	067SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4075110	4069261	4057876	4067415	0.22	cps
Lead	207-1	3700331	3788124	3738718	3742391	1.18	cps
Lead	208-1	16336965	16830714	16791460	16653046	1.65	cps
Lithium	6-1	769963	777345	762615	769974	0.96	cps
Magnesium	24-2	4932760	4891261	4793924	4872648	1.46	cps
Manganese	55-2	3517520	3488810	3487603	3497977	0.48	cps
Molybdenum	94-1	4851248	5033685	5057289	4980741	2.26	cps
Molybdenum	95-1	7130633	7136550	7163380	7143521	0.24	cps
Molybdenum	96-1	7634353	7543743	7772887	7650328	1.51	cps
Molybdenum	97-1	4427465	4562700	4504963	4498376	1.51	cps
Molybdenum	98-1	11134133	11589585	11522058	11415259	2.15	cps
Neodymium	150-1	67	70	100	79	23.27	cps
Neodymium	150-2	13	27	10	17	52.93	cps
Nickel	60-2	204418	208121	201663	204734	1.58	cps
Phosphorus	31-2	37503	37272	37168	37314	0.46	cps
Potassium	39-2	2756047	2692814	2703152	2717337	1.25	cps
Rhodium	103-1	3264896	3317286	3316672	3299618	0.91	cps
Rhodium	103-2	1780361	1813449	1796270	1796693	0.92	cps
Scandium	45-1	2053570	2051061	2041363	2048665	0.31	cps
Scandium	45-2	163452	163991	164783	164075	0.41	cps
Selenium	82-1	24530	25608	25667	25268	2.53	cps
Selenium	77-2	2167	2184	2127	2159	1.35	cps
Selenium	78-2	7432	7202	7419	7351	1.76	cps
Silicon	28-1	13934793	13825457	14078179	13946143	0.91	cps
Silver	107-1	1655232	1671982	1672830	1666681	0.60	cps
Silver	109-1	1503599	1509943	1525614	1513052	0.75	cps
Sodium	23-2	7645975	7730713	7833997	7736895	1.22	cps
Strontium	86-1	9777694	10507474	10256688	10180619	3.64	cps
Strontium	88-1	84906702	87800549	88154195	86953815	2.05	cps
Sulfur	34-1	242583	248889	249296	246923	1.52	cps
Terbium	159-1	4208977	4367849	4294037	4290288	1.85	cps
Terbium	159-2	2719886	2677600	2680755	2692747	0.87	cps
Thallium	203-1	924373	935104	927580	929019	0.59	cps
Thallium	205-1	2405675	2498066	2387696	2430479	2.44	cps
Tin	118-1	1017068	1025347	1023065	1021827	0.42	cps
Titanium	47-1	1852934	1877444	1829599	1853325	1.29	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-1	Instrumnet Name :	P7
Client Sample ID :	DOC-1	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:02:41	DataFile Name :	067SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3093389	3245978	3163968	3167779	2.41	cps
Vanadium	51-2	459107	450309	456097	455171	0.98	cps
Yttrium	89-1	4458418	4628773	4488951	4525381	2.01	cps
Yttrium	89-2	1026277	1037946	1031116	1031780	0.57	cps
Zinc	66-2	952971	950419	944342	949244	0.47	cps
Zirconium	90-1	2319302	2358082	2353903	2343762	0.91	cps
Zirconium	91-1	510084	516419	517234	514579	0.76	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-2	Instrumnet Name :	P7
Client Sample ID :	DOC-2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:05:42	DataFile Name :	068SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	539977	543435	537768	540393	0.53	cps
Antimony	121-1	1458796	1461594	1487847	1469413	1.09	cps
Arsenic	75-2	82943	82859	82330	82711	0.40	cps
Barium	135-1	1476044	1581034	1493824	1516967	3.70	cps
Barium	137-1	2754003	2653532	2701227	2702921	1.86	cps
Beryllium	9-1	261435	264055	263002	262831	0.50	cps
Bismuth	209-1	2452412	2425674	2415019	2431035	0.79	cps
Bismuth	209-2	1891419	1813432	1846247	1850366	2.12	cps
Bromine	81-1	4127	4137	4141	4135	0.17	cps
Bromine	81-2	53	57	50	53	6.25	cps
Cadmium	108-1	24508	25179	24724	24804	1.38	cps
Cadmium	106-1	35457	36576	36813	36282	2.00	cps
Cadmium	111-1	316079	316830	322050	318320	1.02	cps
Calcium	43-1	397934	407384	399256	401525	1.27	cps
Calcium	44-1	5693757	6038806	5851760	5861441	2.95	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	517487	509598	510629	512572	0.84	cps
Cobalt	59-2	796079	784747	793433	791420	0.75	cps
Copper	63-2	5618334	5493108	5547331	5552924	1.13	cps
Dysprosium	156-1	63	47	27	46	40.29	cps
Dysprosium	156-2	50	47	63	53	16.53	cps
Erbium	164-1	57	60	60	59	3.26	cps
Erbium	164-2	47	30	27	34	31.11	cps
Gadolinium	160-1	53	37	47	46	18.41	cps
Gadolinium	160-2	123	93	113	110	13.89	cps
Holmium	165-1	4072009	4090577	4181126	4114571	1.42	cps
Holmium	165-2	2650143	2608238	2648718	2635700	0.90	cps
Indium	115-1	3489861	3492702	3469671	3484078	0.36	cps
Indium	115-2	1016431	1022853	1021809	1020364	0.34	cps
Iron	56-2	21643143	21613304	22118881	21791776	1.30	cps
Iron	57-2	575597	560487	562989	566358	1.43	cps
Iron	54-2	1269303	1240754	1256440	1255499	1.14	cps
Krypton	83-1	103	160	107	123	25.78	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-2	Instrumnet Name :	P7
Client Sample ID :	DOC-2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:05:42	DataFile Name :	068SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4241156	4161068	4198334	4200186	0.95	cps
Lead	207-1	3761826	3783297	3863828	3802984	1.41	cps
Lead	208-1	17041423	16991725	16956530	16996559	0.25	cps
Lithium	6-1	764731	767776	771970	768159	0.47	cps
Magnesium	24-2	4883375	4900214	4948896	4910828	0.69	cps
Manganese	55-2	3592351	3631461	3520754	3581522	1.57	cps
Molybdenum	94-1	4997250	4982640	5011239	4997043	0.29	cps
Molybdenum	95-1	7172608	7227859	7157300	7185922	0.52	cps
Molybdenum	96-1	7688431	8142666	7816921	7882673	2.97	cps
Molybdenum	97-1	4495444	4506243	4472024	4491237	0.39	cps
Molybdenum	98-1	11536553	11580415	11382452	11499806	0.90	cps
Neodymium	150-1	107	97	90	98	8.58	cps
Neodymium	150-2	17	23	20	20	16.65	cps
Nickel	60-2	205047	202793	203551	203797	0.56	cps
Phosphorus	31-2	37630	37583	37479	37564	0.20	cps
Potassium	39-2	2740377	2679451	2716919	2712249	1.13	cps
Rhodium	103-1	3294407	3233228	3280160	3269265	0.98	cps
Rhodium	103-2	1827734	1841309	1840428	1836491	0.41	cps
Scandium	45-1	2066392	2064675	2063519	2064862	0.07	cps
Scandium	45-2	163967	163843	165272	164361	0.48	cps
Selenium	82-1	25762	25676	25825	25754	0.29	cps
Selenium	77-2	1987	2160	2110	2086	4.28	cps
Selenium	78-2	7549	7509	7359	7472	1.34	cps
Silicon	28-1	13930406	13887544	14349338	14055763	1.82	cps
Silver	107-1	1634995	1661515	1680709	1659073	1.38	cps
Silver	109-1	1585415	1506763	1512353	1534844	2.86	cps
Sodium	23-2	7769565	7771079	7788832	7776492	0.14	cps
Strontium	86-1	10325280	10383322	10042773	10250458	1.78	cps
Strontium	88-1	87816502	88064019	89279232	88386584	0.89	cps
Sulfur	34-1	253224	260115	258493	257277	1.40	cps
Terbium	159-1	4493280	4429588	4387077	4436648	1.20	cps
Terbium	159-2	2666578	2640891	2600370	2635946	1.27	cps
Thallium	203-1	956186	962846	962068	960366	0.38	cps
Thallium	205-1	2520803	2526281	2541669	2529584	0.43	cps
Tin	118-1	1025544	1024051	1041055	1030217	0.91	cps
Titanium	47-1	1844433	1920895	1900085	1888471	2.09	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-2	Instrumnet Name :	P7
Client Sample ID :	DOC-2	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:05:42	DataFile Name :	068SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3232820	3203483	3425376	3287226	3.67	cps
Vanadium	51-2	465989	459541	455850	460460	1.11	cps
Yttrium	89-1	4548763	4636908	4460798	4548823	1.94	cps
Yttrium	89-2	1038087	1042118	1045149	1041785	0.34	cps
Zinc	66-2	951791	948203	949686	949894	0.19	cps
Zirconium	90-1	2359753	2409621	2369235	2379537	1.11	cps
Zirconium	91-1	518000	527568	520718	522095	0.94	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-3	Instrumnet Name :	P7
Client Sample ID :	DOC-3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:11:47	DataFile Name :	069SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	534403	530894	533073	532790	0.33	cps
Antimony	121-1	1462042	1481946	1465818	1469935	0.72	cps
Arsenic	75-2	82404	81217	79267	80963	1.96	cps
Barium	135-1	1610153	1480599	1548634	1546462	4.19	cps
Barium	137-1	2725352	2708070	2698986	2710803	0.49	cps
Beryllium	9-1	270114	272395	270588	271032	0.44	cps
Bismuth	209-1	2457543	2469073	2413592	2446736	1.20	cps
Bismuth	209-2	1874605	1875873	1898161	1882879	0.70	cps
Bromine	81-1	4134	4064	4001	4066	1.64	cps
Bromine	81-2	47	30	30	36	27.07	cps
Cadmium	108-1	25379	25185	24851	25138	1.06	cps
Cadmium	106-1	37037	37565	36275	36959	1.75	cps
Cadmium	111-1	318679	324157	318503	320446	1.00	cps
Calcium	43-1	405402	398629	396879	400303	1.12	cps
Calcium	44-1	5876128	5926743	5844331	5882401	0.71	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	503716	506106	499128	502983	0.71	cps
Cobalt	59-2	781701	771380	774387	775823	0.68	cps
Copper	63-2	5533078	5530639	5374921	5479546	1.65	cps
Dysprosium	156-1	83	43	43	57	40.76	cps
Dysprosium	156-2	77	47	60	61	24.60	cps
Erbium	164-1	63	67	47	59	18.19	cps
Erbium	164-2	33	40	33	36	10.83	cps
Gadolinium	160-1	53	40	43	46	15.23	cps
Gadolinium	160-2	113	177	140	143	22.19	cps
Holmium	165-1	4239058	4260599	4182746	4227468	0.95	cps
Holmium	165-2	2690533	2606941	2662682	2653385	1.60	cps
Indium	115-1	3360366	3384940	3408712	3384673	0.71	cps
Indium	115-2	1007488	992396	998367	999417	0.76	cps
Iron	56-2	20955368	20972833	21049211	20992471	0.24	cps
Iron	57-2	562001	556793	560447	559747	0.48	cps
Iron	54-2	1249801	1249830	1237306	1245646	0.58	cps
Krypton	83-1	133	120	150	134	11.18	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-3	Instrumnet Name :	P7
Client Sample ID :	DOC-3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:11:47	DataFile Name :	069SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4243600	4337413	4183920	4254978	1.82	cps
Lead	207-1	3912730	3908910	3880450	3900697	0.45	cps
Lead	208-1	17347991	17365938	17052093	17255341	1.02	cps
Lithium	6-1	783676	787190	792120	787662	0.54	cps
Magnesium	24-2	4889257	4862112	4846640	4866003	0.44	cps
Manganese	55-2	3556135	3470934	3456602	3494557	1.54	cps
Molybdenum	94-1	4925685	4971735	4782099	4893173	2.02	cps
Molybdenum	95-1	7280634	7184524	7267572	7244243	0.72	cps
Molybdenum	96-1	7899654	7885457	7840160	7875090	0.39	cps
Molybdenum	97-1	4449293	4546272	4385894	4460486	1.81	cps
Molybdenum	98-1	11732726	11253198	11402583	11462836	2.14	cps
Neodymium	150-1	80	77	87	81	6.28	cps
Neodymium	150-2	43	20	30	31	37.62	cps
Nickel	60-2	200621	201107	202372	201367	0.45	cps
Phosphorus	31-2	37513	36861	36580	36985	1.29	cps
Potassium	39-2	2661527	2622265	2646721	2643504	0.75	cps
Rhodium	103-1	3195190	3218806	3194787	3202927	0.43	cps
Rhodium	103-2	1856705	1758926	1788806	1801479	2.78	cps
Scandium	45-1	2050627	2052687	2008809	2037374	1.22	cps
Scandium	45-2	163459	159659	161632	161583	1.18	cps
Selenium	82-1	25486	25209	25481	25392	0.62	cps
Selenium	77-2	2114	2150	1937	2067	5.52	cps
Selenium	78-2	7122	7162	7255	7180	0.95	cps
Silicon	28-1	14334539	14139426	14329407	14267791	0.78	cps
Silver	107-1	1674767	1664949	1658144	1665953	0.50	cps
Silver	109-1	1567513	1525597	1514165	1535759	1.83	cps
Sodium	23-2	7649638	7587489	7790774	7675967	1.36	cps
Strontium	86-1	10226929	10151207	10077783	10151973	0.73	cps
Strontium	88-1	88400952	86908875	88561055	87956961	1.04	cps
Sulfur	34-1	267914	267653	268805	268124	0.23	cps
Terbium	159-1	4440535	4393574	4378515	4404208	0.73	cps
Terbium	159-2	2696997	2686275	2659931	2681068	0.71	cps
Thallium	203-1	961896	961272	956819	959996	0.29	cps
Thallium	205-1	2554687	2547625	2562283	2554865	0.29	cps
Tin	118-1	1028502	1036413	1036250	1033722	0.44	cps
Titanium	47-1	1920854	1859734	1863687	1881425	1.82	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-3	Instrumnet Name :	P7
Client Sample ID :	DOC-3	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:11:47	DataFile Name :	069SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3339275	3354283	3368469	3354009	0.44	cps
Vanadium	51-2	452344	454390	451931	452888	0.29	cps
Yttrium	89-1	4569728	4470856	4366686	4469090	2.27	cps
Yttrium	89-2	1027263	1014462	1017262	1019662	0.66	cps
Zinc	66-2	949499	932167	936758	939475	0.96	cps
Zirconium	90-1	2350850	2345964	2346141	2347652	0.12	cps
Zirconium	91-1	526650	517442	522733	522275	0.88	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-4	Instrumnet Name :	P7
Client Sample ID :	DOC-4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:14:44	DataFile Name :	070LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	532285	531140	533432	532286	0.22	cps
Antimony	121-1	1454499	1486562	1480391	1473817	1.15	cps
Arsenic	75-2	82253	82595	81948	82265	0.39	cps
Barium	135-1	1451836	1603783	1625325	1560314	6.06	cps
Barium	137-1	2666061	2723878	2760120	2716686	1.75	cps
Beryllium	9-1	265827	268200	273543	269190	1.47	cps
Bismuth	209-1	2479273	2466862	2510801	2485645	0.91	cps
Bismuth	209-2	1856630	1868790	1859767	1861729	0.34	cps
Bromine	81-1	3974	3771	4167	3971	5.00	cps
Bromine	81-2	7	17	17	13	43.29	cps
Cadmium	108-1	24528	25716	25680	25308	2.67	cps
Cadmium	106-1	36382	37325	37759	37155	1.89	cps
Cadmium	111-1	322762	323832	320225	322273	0.57	cps
Calcium	43-1	395923	405601	409240	403588	1.71	cps
Calcium	44-1	5649707	5896728	5954461	5833632	2.77	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	511881	504329	501669	505960	1.05	cps
Cobalt	59-2	788431	780697	775856	781661	0.81	cps
Copper	63-2	5445331	5509207	5494136	5482891	0.61	cps
Dysprosium	156-1	40	60	53	51	19.92	cps
Dysprosium	156-2	63	90	53	69	27.52	cps
Erbium	164-1	53	70	43	56	24.25	cps
Erbium	164-2	53	57	30	47	31.14	cps
Gadolinium	160-1	37	53	33	41	26.06	cps
Gadolinium	160-2	130	140	143	138	5.04	cps
Holmium	165-1	4298306	4196262	4122755	4205774	2.10	cps
Holmium	165-2	2678351	2623355	2605847	2635851	1.44	cps
Indium	115-1	3414342	3470167	3427217	3437242	0.85	cps
Indium	115-2	1009420	1004697	995315	1003144	0.72	cps
Iron	56-2	21900739	21583080	22088013	21857277	1.17	cps
Iron	57-2	561225	560021	560683	560643	0.11	cps
Iron	54-2	1244761	1242339	1234934	1240678	0.41	cps
Krypton	83-1	143	110	140	131	14.00	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-4	Instrumnet Name :	P7
Client Sample ID :	DOC-4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:14:44	DataFile Name :	070LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4337622	4396006	4250159	4327929	1.70	cps
Lead	207-1	3824118	3910862	3819018	3851333	1.34	cps
Lead	208-1	17180190	17582566	17027509	17263422	1.66	cps
Lithium	6-1	799586	781088	793331	791335	1.19	cps
Magnesium	24-2	4834811	4923364	4800730	4852968	1.30	cps
Manganese	55-2	3567928	3435925	3410419	3471424	2.44	cps
Molybdenum	94-1	4892564	4974119	5023727	4963470	1.33	cps
Molybdenum	95-1	7194653	7384121	7264966	7281246	1.32	cps
Molybdenum	96-1	8000686	7930229	7964973	7965296	0.44	cps
Molybdenum	97-1	4436262	4420769	4549735	4468922	1.58	cps
Molybdenum	98-1	11256287	11753926	11796916	11602376	2.59	cps
Neodymium	150-1	67	70	63	67	5.00	cps
Neodymium	150-2	7	23	30	20	60.08	cps
Nickel	60-2	203493	199942	202016	201817	0.88	cps
Phosphorus	31-2	36260	37259	36794	36771	1.36	cps
Potassium	39-2	2619417	2617271	2643927	2626872	0.56	cps
Rhodium	103-1	3269440	3135449	3257545	3220812	2.30	cps
Rhodium	103-2	1841195	1852484	1802316	1831998	1.44	cps
Scandium	45-1	2052518	2026410	2085143	2054691	1.43	cps
Scandium	45-2	161262	158499	161599	160453	1.06	cps
Selenium	82-1	25243	26002	25702	25649	1.49	cps
Selenium	77-2	2224	2120	2130	2158	2.64	cps
Selenium	78-2	7232	7699	6815	7249	6.10	cps
Silicon	28-1	14376109	14264306	14342925	14327780	0.40	cps
Silver	107-1	1693020	1681658	1721245	1698641	1.20	cps
Silver	109-1	1515062	1527967	1530479	1524503	0.54	cps
Sodium	23-2	7909760	7649626	7562202	7707196	2.35	cps
Strontium	86-1	10417661	10174188	10428346	10340065	1.39	cps
Strontium	88-1	91227439	88984769	90345042	90185750	1.25	cps
Sulfur	34-1	265795	269512	272904	269404	1.32	cps
Terbium	159-1	4349410	4473526	4365652	4396196	1.53	cps
Terbium	159-2	2707343	2701372	2717407	2708707	0.30	cps
Thallium	203-1	980408	976148	981571	979376	0.29	cps
Thallium	205-1	2509445	2623573	2564684	2565901	2.22	cps
Tin	118-1	1023029	1040959	1044016	1036002	1.09	cps
Titanium	47-1	1848981	1881680	1926026	1885562	2.05	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	DOC-4	Instrumnet Name :	P7
Client Sample ID :	DOC-4	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:14:44	DataFile Name :	070LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3329468	3300048	3412157	3347224	1.74	cps
Vanadium	51-2	453537	449395	453910	452281	0.55	cps
Yttrium	89-1	4661573	4459233	4553556	4558121	2.22	cps
Yttrium	89-2	1028124	1019215	1022539	1023293	0.44	cps
Zinc	66-2	948896	940860	943459	944405	0.43	cps
Zirconium	90-1	2316072	2358419	2411020	2361837	2.01	cps
Zirconium	91-1	517082	522506	526399	521996	0.90	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P7
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:17:45	DataFile Name :	071CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2611429	2605872	2603217	2606839	0.16	cps
Antimony	121-1	1438561	1448719	1450800	1446027	0.45	cps
Arsenic	75-2	79981	79293	79990	79755	0.50	cps
Barium	135-1	1469319	1484872	1566158	1506783	3.45	cps
Barium	137-1	2747025	2686457	2638939	2690807	2.01	cps
Beryllium	9-1	271695	278888	277201	275928	1.36	cps
Bismuth	209-1	2382674	2434463	2390024	2402387	1.17	cps
Bismuth	209-2	1781999	1845198	1820127	1815775	1.75	cps
Bromine	81-1	3831	3991	3917	3913	2.05	cps
Bromine	81-2	23	40	30	31	26.97	cps
Cadmium	108-1	23850	24147	23820	23939	0.76	cps
Cadmium	106-1	35246	36837	35634	35905	2.31	cps
Cadmium	111-1	304672	310281	309395	308116	0.98	cps
Calcium	43-1	1771264	1837927	1834630	1814607	2.07	cps
Calcium	44-1	28381173	29313573	29064785	28919843	1.67	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	496413	491311	492971	493565	0.53	cps
Cobalt	59-2	753780	746753	741225	747253	0.84	cps
Copper	63-2	5167575	5216989	5062317	5148960	1.53	cps
Dysprosium	156-1	97	80	90	89	9.44	cps
Dysprosium	156-2	120	153	133	136	12.38	cps
Erbium	164-1	140	127	110	126	11.97	cps
Erbium	164-2	37	63	70	57	31.12	cps
Gadolinium	160-1	93	77	80	83	10.58	cps
Gadolinium	160-2	137	143	147	142	3.58	cps
Holmium	165-1	4026697	4133545	4184252	4114831	1.95	cps
Holmium	165-2	2679133	2747817	2647960	2691637	1.90	cps
Indium	115-1	3283272	3338511	3306309	3309364	0.84	cps
Indium	115-2	971070	983318	972372	975587	0.69	cps
Iron	56-2	103313275	102527708	103409005	103083330	0.47	cps
Iron	57-2	2606305	2608559	2610813	2608559	0.09	cps
Iron	54-2	5678754	5619712	5617704	5638724	0.62	cps
Krypton	83-1	117	137	113	122	10.32	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P7
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:17:45	DataFile Name :	071CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4100761	4297661	4263675	4220699	2.49	cps
Lead	207-1	3749695	3877281	3813037	3813338	1.67	cps
Lead	208-1	16811649	17395952	17238084	17148562	1.76	cps
Lithium	6-1	782563	801212	794424	792733	1.19	cps
Magnesium	24-2	23954616	23958769	23842963	23918783	0.27	cps
Manganese	55-2	3374063	3347675	3358246	3359995	0.40	cps
Molybdenum	94-1	4925538	4857222	4881088	4887950	0.71	cps
Molybdenum	95-1	7039325	7143909	7168429	7117221	0.96	cps
Molybdenum	96-1	7601759	8113715	7919988	7878488	3.28	cps
Molybdenum	97-1	4353808	4588040	4521145	4487664	2.69	cps
Molybdenum	98-1	11534334	11561647	11318408	11471463	1.16	cps
Neodymium	150-1	123	123	153	133	12.99	cps
Neodymium	150-2	60	47	37	48	24.50	cps
Nickel	60-2	193341	189242	187924	190169	1.49	cps
Phosphorus	31-2	36062	36577	36417	36352	0.72	cps
Potassium	39-2	12720099	12810286	12782036	12770807	0.36	cps
Rhodium	103-1	3205401	3107255	3041601	3118086	2.64	cps
Rhodium	103-2	1732209	1718511	1715603	1722108	0.51	cps
Scandium	45-1	2077993	2004829	1997387	2026736	2.20	cps
Scandium	45-2	157082	156904	156967	156984	0.06	cps
Selenium	82-1	24360	24581	24732	24558	0.76	cps
Selenium	77-2	2057	1950	1983	1997	2.73	cps
Selenium	78-2	6852	6812	6968	6877	1.18	cps
Silicon	28-1	14643589	14496337	14509255	14549727	0.56	cps
Silver	107-1	1581706	1616263	1528441	1575470	2.81	cps
Silver	109-1	1451465	1454973	1452619	1453019	0.12	cps
Sodium	23-2	37661829	37696318	37058975	37472374	0.96	cps
Strontium	86-1	9964266	10290104	10284467	10179612	1.83	cps
Strontium	88-1	86920122	87581572	88136349	87546014	0.70	cps
Sulfur	34-1	273624	278021	274739	275461	0.83	cps
Terbium	159-1	4226383	4282320	4287709	4265471	0.80	cps
Terbium	159-2	2681787	2676812	2693392	2683997	0.32	cps
Thallium	203-1	956868	968532	963151	962850	0.61	cps
Thallium	205-1	2511368	2654663	2605889	2590640	2.81	cps
Tin	118-1	1012797	1029705	1010651	1017718	1.03	cps
Titanium	47-1	1901813	1882445	1887178	1890479	0.53	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P7
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:17:45	DataFile Name :	071CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3390590	3396059	3396881	3394510	0.10	cps
Vanadium	51-2	448144	445450	449466	447687	0.46	cps
Yttrium	89-1	4418950	4438692	4422700	4426781	0.24	cps
Yttrium	89-2	1003937	992138	997439	997838	0.59	cps
Zinc	66-2	890055	885898	885277	887077	0.29	cps
Zirconium	90-1	2359223	2305192	2301656	2322024	1.39	cps
Zirconium	91-1	513952	524831	514138	517640	1.20	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P7
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:24:40	DataFile Name :	072CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	120	120	140	127	9.12	cps
Antimony	121-1	643	673	783	700	10.53	cps
Arsenic	75-2	7	7	3	6	34.70	cps
Barium	135-1	67	53	60	60	11.12	cps
Barium	137-1	103	97	87	96	8.78	cps
Beryllium	9-1	93	100	70	88	17.95	cps
Bismuth	209-1	2469302	2403381	2327366	2400016	2.96	cps
Bismuth	209-2	1780759	1828805	1782185	1797249	1.52	cps
Bromine	81-1	3977	3847	3814	3879	2.23	cps
Bromine	81-2	30	23	23	26	15.07	cps
Cadmium	108-1	7	7	7	7	0.00	cps
Cadmium	106-1	923	867	847	879	4.52	cps
Cadmium	111-1	124	99	93	105	15.72	cps
Calcium	43-1	263	230	233	242	7.58	cps
Calcium	44-1	7442	7255	7519	7405	1.83	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	663	600	653	639	5.33	cps
Cobalt	59-2	93	93	93	93	0.00	cps
Copper	63-2	800	863	847	837	3.92	cps
Dysprosium	156-1	17	17	7	13	43.29	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	40	27	50	39	30.10	cps
Erbium	164-2	20	23	17	20	16.65	cps
Gadolinium	160-1	17	17	20	18	10.81	cps
Gadolinium	160-2	117	113	103	111	6.25	cps
Holmium	165-1	4058989	4001266	4100947	4053734	1.23	cps
Holmium	165-2	2554366	2580692	2564888	2566649	0.52	cps
Indium	115-1	3420147	3435760	3482032	3445980	0.93	cps
Indium	115-2	991936	1001806	979885	991209	1.11	cps
Iron	56-2	9730	9800	10053	9861	1.73	cps
Iron	57-2	1460	1580	1543	1528	4.03	cps
Iron	54-2	1223	1247	1220	1230	1.18	cps
Krypton	83-1	83	103	133	107	23.60	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P7
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:24:40	DataFile Name :	072CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	483	513	513	503	3.44	cps
Lead	207-1	507	410	343	420	19.55	cps
Lead	208-1	2077	2010	1843	1977	6.08	cps
Lithium	6-1	772930	773525	762515	769657	0.80	cps
Magnesium	24-2	847	893	760	833	8.12	cps
Manganese	55-2	423	347	310	360	16.06	cps
Molybdenum	94-1	330	350	377	352	6.65	cps
Molybdenum	95-1	407	333	337	359	11.54	cps
Molybdenum	96-1	440	430	393	421	5.83	cps
Molybdenum	97-1	250	183	230	221	15.47	cps
Molybdenum	98-1	570	503	717	597	18.29	cps
Neodymium	150-1	20	3	3	9	108.30	cps
Neodymium	150-2	7	0	3	3	100.05	cps
Nickel	60-2	213	177	183	191	10.22	cps
Phosphorus	31-2	153	200	133	162	21.09	cps
Potassium	39-2	47036	48407	46504	47316	2.08	cps
Rhodium	103-1	3219595	3332620	3233333	3261849	1.89	cps
Rhodium	103-2	1811684	1874078	1769683	1818482	2.89	cps
Scandium	45-1	2060408	1995453	2004815	2020226	1.74	cps
Scandium	45-2	159208	160887	155069	158388	1.89	cps
Selenium	82-1	134	119	93	115	18.18	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	120	150	117	129	14.24	cps
Silicon	28-1	277765	279313	278767	278615	0.28	cps
Silver	107-1	107	100	147	118	21.43	cps
Silver	109-1	63	67	93	74	22.09	cps
Sodium	23-2	18047	18775	18107	18310	2.21	cps
Strontium	86-1	530	450	540	507	9.74	cps
Strontium	88-1	2914	2707	2670	2764	4.75	cps
Sulfur	34-1	154633	155832	156549	155671	0.62	cps
Terbium	159-1	4342913	4214347	4171310	4242857	2.10	cps
Terbium	159-2	2641811	2591714	2553785	2595770	1.70	cps
Thallium	203-1	123	143	103	123	16.22	cps
Thallium	205-1	260	250	237	249	4.70	cps
Tin	118-1	377	407	460	414	10.18	cps
Titanium	47-1	193	120	153	156	23.61	cps

Reviewed By:Mohan
On:9/5/2024 2:37:39 AM
Inst Id :P7
LB :LB132280

LB Number :	LB132280	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P7
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired ::	2024-09-04 18:24:40	DataFile Name :	072CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	67	77	87	77	13.04	cps
Vanadium	51-2	23	3	10	12	83.33	cps
Yttrium	89-1	4493385	4417076	4390047	4433503	1.21	cps
Yttrium	89-2	997867	1005839	986218	996641	0.99	cps
Zinc	66-2	313	337	327	326	3.60	cps
Zirconium	90-1	253	287	300	280	8.58	cps
Zirconium	91-1	33	80	63	59	40.16	cps

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB162924

SOP ID : M7470A-Mercury-19

SDG No : NA

Matrix : WATER

Pippete ID: HG A

Balance ID : N/A

Filter paper ID : NA

pH Strip ID : M4909

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 08/21/2024 **Time :** 15:15 **Temp :** 94 °C

End Digest Date: 08/21/2024 **Time :** 17:15 **Temp :** 95 °C

Digestion tube ID: M5586

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: MC

Temp : 1. 94°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP81975
CCV	30mL	MP81977
CRA	30mL	MP81979
Blank Spike	0.48mL	MP81967
Matrix Spike	0.48mL	MP81967

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.5mL	MP81818
KMnO4	4.5mL	MP81819
K2S2O8	2.5mL	MP81820
Hydroxylamine HCL	2.0mL	MP81821
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
0.0 ppb	S0	30mL	MP81968
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP81970
2.5 ppb	S2.5	30mL	MP81971
5.0 ppb	S5.0	30mL	MP81972
7.5 ppb	S7.5	30mL	MP81973
10.0 ppb	S10.0	30mL	MP81974
ICV	ICV	30mL	MP81975
ICB	ICB	30mL	MP81976
CCV	CCV	30mL	MP81977
CCB	CCB	30mL	MP81978
CRI	CRI	30mL	MP81979
CHK STD	CHK STD	30mL	MP81980

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
8/21/24 @ 19:40	MB – HG Lab	MB-003 ETOH Lab
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB162924

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
P3657-01	917-J-WS-081624	30	30	<2	N/A	3-21
P3669-03	1027	30	30	<2	N/A	22
P3669-03DUP	1027DUP	30	30	<2	N/A	23
P3669-03MS	1027MS	30	30	<2	MP81967	24
P3669-03MSD	1027MSD	30	30	<2	MP81967	25
PB162924BL	PBW924	30	30	<2	N/A	26
PB162924BS	LCS924	30	30	<2	MP81967	27

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 082124_7470 **WorkList ID :** 182846 **Department :** Digestion **Date :** 08-21-2024 11:23:08

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P3657-01	917-J-WS-081624	Water	Mercury	1:1 HNO3 to pH < 2	JACO05	G11	08/16/2024	7470A
P3669-03	1027	Water	Mercury	1:1 HNO3 to pH < 2	PSEG03	G11	08/19/2024	7470A

Date/Time 8/21/24 @ 14:50

Raw Sample Received by: MB-DRG Labs

Raw Sample Relinquished by: MB-DRG Labs

Date/Time 8/21/24 @ 15:30

Raw Sample Received by: MB-DRG Labs

Raw Sample Relinquished by: MB-DRG Labs

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB163150

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pippete ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BLOCK #1 2. N/A

Start Digest Date: 09/04/2024 **Time :** 12:30 **Temp :** 95 °C

End Digest Date: 09/04/2024 **Time :** 14:45 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: JP

Supervisor Signature: JD

Temp : 1. 95°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
Spike Sol 1	0.50	MP82149
Spike Sol 2	1.00	MP82150
Spike Sol 3	1.00	MP82151
Spike Sol 4	1.00	MP82152
Spike Sol 5	0.50	MP82153

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6037
1:1 HCL	5.00	MP82127
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

Hot Block # 1 Cell # 42 Temp: 95 C
X*MP82151,MP82152,MP82153

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
09/04/24 14:50	JP / Metals Dig	JD (Metals Lab)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB163150

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
P3596-01	918-J-WS-081324	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	19
P3596-02	918-J-WS-081324-FD	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	20
P3596-02DUP	918-J-WS-081324-FDDUP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	21
P3596-02MS	918-J-WS-081324-FDMS	<2	50	50	Colorless	Colorless	Clear	Clear	MP82149, MP82150, X*	22
P3596-02MSD	918-J-WS-081324-FDMSD	<2	50	50	Colorless	Colorless	Clear	Clear	MP82149, MP82150, X*	23
P3609-01	915-J-WS-081424	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	24
P3609-02	920-J-WS-081424	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	25
P3645-01	914-J-WS-081524	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	26
P3645-02	916-J-WS-081524	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	27
P3657-01	917-J-WS-081624	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	28
PB163150BL	PBW150	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	29
PB163150BS	LCS150	<2	50	50	Colorless	Colorless	Clear	Clear	MP82149, MP82150, X*	30
DOC-1	DOC STUDY	<2	50	50	COLORLESS	COLORLESS	CLEAR	CLEAR	MP82149, MP82150, X	31
DOC-2	DOC STUDY	<2	50	50	COLORLESS	COLORLESS	CLEAR	CLEAR	MP82149, MP82150, X	32
DOC-3	DOC STUDY	<2	50	50	COLORLESS	COLORLESS	CLEAR	CLEAR	MP82149, MP82150, X	33
DOC-4	DOC STUDY	<2	50	50	COLORLESS	COLORLESS	CLEAR	CLEAR	MP82149, MP82150	34

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB163150 **WorkList ID :** 183164 **Department :** Digestion **Date :** 09-04-2024 12:06:52

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P3596-01	918-J-WS-081324	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	D21	08/13/2024	6020B
P3596-02	918-J-WS-081324-FD	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	D21	08/13/2024	6020B
P3609-01	915-J-WS-081424	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	D21	08/13/2024	6020B
P3609-02	920-J-WS-081424	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	D21	08/14/2024	6020B
P3645-01	914-J-WS-081524	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	D21	08/14/2024	6020B
P3645-02	916-J-WS-081524	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	G21	08/15/2024	6020B
P3657-01	917-J-WS-081624	Water	Metals Group4	1:1 HNO3 to pH < 2	JACO05	G21	08/15/2024	6020B
						G11	08/16/2024	6020B

Date/Time 09/09/24 12:10

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 09/09/24 15:00

Raw Sample Received by:

Raw Sample Relinquished by:

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB132130

Review By	jaswal	Review On	8/22/2024 11:59:38 PM
Supervise By	mohan	Supervise On	8/23/2024 12:00:44 AM

STD. NAME	STD REF.#
ICAL Standard	MP81968,MP81970,MP81971,MP81972,MP81973,MP81974
ICV Standard	MP81975
CCV Standard	MP81977
ICSA Standard	
CRI Standard	MP81979
LCS Standard	
Chk Standard	MP81976,MP81978,MP81980,MP81218

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	08/22/24 14:02		mohan	OK
2	S0.2	S0.2	CAL2	08/22/24 14:05		mohan	OK
3	S2.5	S2.5	CAL3	08/22/24 14:07		mohan	OK
4	S5	S5	CAL4	08/22/24 14:09		mohan	OK
5	S7.5	S7.5	CAL5	08/22/24 14:11		mohan	OK
6	S10	S10	CAL6	08/22/24 14:22		mohan	OK
7	ICV92	ICV92	ICV	08/22/24 14:26		mohan	OK
8	ICB92	ICB92	ICB	08/22/24 14:28		mohan	OK
9	CCV11	CCV11	CCV	08/22/24 14:30		mohan	OK
10	CCB11	CCB11	CCB	08/22/24 14:33		mohan	OK
11	CRA	CRA	CRDL	08/22/24 14:35		mohan	OK
12	HighStd	HighStd	HIGH STD	08/22/24 14:37		mohan	OK
13	ChkStd	ChkStd	SAM	08/22/24 14:39		mohan	OK
14	PB162892BL	PB162892BL	MB	08/22/24 14:42		mohan	OK
15	PB162892BS	PB162892BS	LCS	08/22/24 14:44		mohan	OK
16	P3669-05	20430	SAM	08/22/24 14:46		mohan	OK
17	P3684-03	D3646	SAM	08/22/24 14:48		mohan	OK
18	P3684-04	D3638	SAM	08/22/24 14:51		mohan	OK

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB132130

Review By	jaswal	Review On	8/22/2024 11:59:38 PM
Supervise By	mohan	Supervise On	8/23/2024 12:00:44 AM

STD. NAME	STD REF.#
ICAL Standard	MP81968,MP81970,MP81971,MP81972,MP81973,MP81974
ICV Standard	MP81975
CCV Standard	MP81977
ICSA Standard	
CRI Standard	MP81979
LCS Standard	
Chk Standard	MP81976,MP81978,MP81980,MP81218

19	P3684-06	D3564	SAM	08/22/24 14:53		mohan	OK
20	P3685-02	Stock Pile-1	SAM	08/22/24 14:55		mohan	OK
21	CCV12	CCV12	CCV	08/22/24 14:58		mohan	OK
22	CCB12	CCB12	CCB	08/22/24 15:00		mohan	OK
23	P3685-04	Stock Pile-2	SAM	08/22/24 15:02		mohan	OK
24	P3685-04DUP	Stock Pile-2DUP	DUP	08/22/24 15:04		mohan	OK
25	P3685-04MS	Stock Pile-2MS	MS	08/22/24 15:07		mohan	OK
26	P3685-04MSD	Stock Pile-2MSD	MSD	08/22/24 15:09		mohan	OK
27	PB162896BL	PB162896BL	MB	08/22/24 15:11		mohan	OK
28	P3684-08	T3650	SAM	08/22/24 15:16		mohan	OK
29	P3684-09	D3643	SAM	08/22/24 15:18		mohan	OK
30	P3684-10	D3637	SAM	08/22/24 15:20		mohan	OK
31	P3684-10DUP	D3637DUP	DUP	08/22/24 15:23		mohan	OK
32	CCV13	CCV13	CCV	08/22/24 15:25		mohan	OK
33	CCB13	CCB13	CCB	08/22/24 15:27		mohan	OK
34	P3684-10MS	D3637MS	MS	08/22/24 15:35		mohan	OK
35	P3684-10MSD	D3637MSD	MSD	08/22/24 15:37		mohan	OK
36	PB162924BL	PB162924BL	MB	08/22/24 15:39		mohan	OK
37	PB162924BS	PB162924BS	LCS	08/22/24 15:42		mohan	OK
38	P3669-03	1027	SAM	08/22/24 15:44		mohan	OK

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB132130

Review By	jaswal	Review On	8/22/2024 11:59:38 PM
Supervise By	mohan	Supervise On	8/23/2024 12:00:44 AM

STD. NAME	STD REF.#
ICAL Standard	MP81968,MP81970,MP81971,MP81972,MP81973,MP81974
ICV Standard	MP81975
CCV Standard	MP81977
ICSA Standard	
CRI Standard	MP81979
LCS Standard	
Chk Standard	MP81976,MP81978,MP81980,MP81218

39	P3669-03DUP	1027DUP	DUP	08/22/24 15:46		mohan	OK
40	P3669-03MS	1027MS	MS	08/22/24 15:49		mohan	OK
41	P3669-03MSD	1027MSD	MSD	08/22/24 15:51		mohan	OK
42	P3657-01	917-J-WS-081624	SAM	08/22/24 15:53		mohan	OK
43	PB162896BS	PB162896BS	LCS	08/22/24 15:55		mohan	OK
44	CCV14	CCV14	CCV	08/22/24 15:58		mohan	OK
45	CCB14	CCB14	CCB	08/22/24 16:00		mohan	OK
46	PB162871TB	PB162871TB	MB	08/22/24 16:02		mohan	OK
47	PB162873TB	PB162873TB	MB	08/22/24 16:05		mohan	OK
48	P3685-04L	Stock Pile-2L	SD	08/22/24 16:07		mohan	OK
49	P3685-04A	Stock Pile-2A	PS	08/22/24 16:09		mohan	OK
50	P3684-10L	D3637L	SD	08/22/24 16:11		mohan	OK
51	P3684-10A	D3637A	PS	08/22/24 16:14		mohan	OK
52	P3669-03L	1027L	SD	08/22/24 16:16		mohan	OK
53	P3669-03A	1027A	PS	08/22/24 16:18		mohan	OK
54	CCV15	CCV15	CCV	08/22/24 16:20		mohan	OK
55	CCB15	CCB15	CCB	08/22/24 16:23		mohan	OK

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB132280

Review By	Jaswal	Review On	9/5/2024 2:30:03 AM
Supervise By	Mohan	Supervise On	9/5/2024 2:37:39 AM

STD. NAME	STD REF.#
ICAL Standard	MP82148,MP82164,MP82163,MP82161,MP82160,MP82159,MP82158,MP82157,MP82155
ICV Standard	MP82165
CCV Standard	MP82166
ICSA Standard	MP82167,MP82168
CRI Standard	MP82163
LCS Standard	
Chk Standard	MP82194,MP82193

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE	TUNE	09/04/24 12:31		Jaswal	OK
2	S0	S0	CAL1	09/04/24 13:16		Jaswal	OK
3	S2	S2	CAL3	09/04/24 13:19		Jaswal	OK
4	S3	S3	CAL4	09/04/24 13:23		Jaswal	OK
5	S4	S4	CAL5	09/04/24 13:26		Jaswal	OK
6	S5	S5	CAL6	09/04/24 13:29		Jaswal	OK
7	S6	S6	CAL7	09/04/24 13:32		Jaswal	OK
8	S7	S7	CAL8	09/04/24 13:35		Jaswal	OK
9	S8	S8	CAL9	09/04/24 13:38		Jaswal	OK
10	ICV01	ICV01	ICV	09/04/24 13:51		Jaswal	OK
11	LLICV	LLICV	LLICV	09/04/24 14:06		Jaswal	OK
12	ICB01	ICB01	ICB	09/04/24 14:10		Jaswal	OK
13	ICSA01	ICSA01	ICSA	09/04/24 14:13		Jaswal	OK
14	ICSAB01	ICSAB01	ICSAB	09/04/24 14:17		Jaswal	OK
15	CCV01	CCV01	CCV	09/04/24 14:20		Jaswal	OK
16	CCB01	CCB01	CCB	09/04/24 14:34		Jaswal	OK
17	CRI	CRI	CRDL	09/04/24 14:40		Jaswal	OK
18	PB162911BL	PB162911BL	MB	09/04/24 14:44		Jaswal	OK

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB132280

Review By	Jaswal	Review On	9/5/2024 2:30:03 AM
Supervise By	Mohan	Supervise On	9/5/2024 2:37:39 AM

STD. NAME	STD REF.#
ICAL Standard	MP82148,MP82164,MP82163,MP82161,MP82160,MP82159,MP82158,MP82157,MP82155
ICV Standard	MP82165
CCV Standard	MP82166
ICSA Standard	MP82167,MP82168
CRI Standard	MP82163
LCS Standard	
Chk Standard	MP82194,MP82193

19	PB162911BS	PB162911BS	LCS	09/04/24 14:47		Jaswal	OK
20	PB163150BL	PB163150BL	MB	09/04/24 14:56		Jaswal	OK
21	PB163150BS	PB163150BS	LCS	09/04/24 15:12		Jaswal	OK
22	P3596-01	918-J-WS-081324	SAM	09/04/24 15:20		Jaswal	OK
23	P3596-02	918-J-WS-081324-FD	SAM	09/04/24 15:23		Jaswal	OK
24	P3596-02DUP	918-J-WS-081324-FD	DUP	09/04/24 15:26		Jaswal	OK
25	P3596-02L	918-J-WS-081324-FD	SD	09/04/24 15:30		Jaswal	OK
26	P3596-02MS	918-J-WS-081324-FD	MS	09/04/24 15:41		Jaswal	OK
27	CCV02	CCV02	CCV	09/04/24 15:47		Jaswal	OK
28	CCB02	CCB02	CCB	09/04/24 15:54		Jaswal	OK
29	P3596-02MSD	918-J-WS-081324-FD	MSD	09/04/24 15:57		Jaswal	OK
30	P3596-02A	918-J-WS-081324-FD	PS	09/04/24 16:00		Jaswal	OK
31	P3609-01	915-J-WS-081424	SAM	09/04/24 16:03		Jaswal	OK
32	P3609-02	920-J-WS-081424	SAM	09/04/24 16:07		Jaswal	OK
33	P3645-01	914-J-WS-081524	SAM	09/04/24 16:10		Jaswal	OK
34	P3645-02	916-J-WS-081524	SAM	09/04/24 16:13		Jaswal	OK
35	P3657-01	917-J-WS-081624	SAM	09/04/24 16:16		Jaswal	OK
36	P3707-01	S-929-K1-SO-0-0.5-08	SAM	09/04/24 16:20	Int Std fail 89Y (1) & Mn high,	Jaswal	Dilution
37	P3707-01DL	S-929-K1-SO-0-0.5-08	SAM	09/04/24 16:23	5x for Int Std 89Y (1), Mn	Jaswal	Confirms

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB132280

Review By	Jaswal	Review On	9/5/2024 2:30:03 AM
Supervise By	Mohan	Supervise On	9/5/2024 2:37:39 AM

STD. NAME	STD REF.#
ICAL Standard	MP82148,MP82164,MP82163,MP82161,MP82160,MP82159,MP82158,MP82157,MP82155
ICV Standard	MP82165
CCV Standard	MP82166
ICSA Standard	MP82167,MP82168
CRI Standard	MP82163
LCS Standard	
Chk Standard	MP82194,MP82193

38	P3707-01DUP	S-929-K1-SO-0-0.5-08	DUP	09/04/24 16:26	Int Std fail 89Y (1) & Mn high,	Jaswal	Dilution
39	CCV03	CCV03	CCV	09/04/24 16:30		Jaswal	OK
40	CCB03	CCB03	CCB	09/04/24 16:46		Jaswal	OK
41	P3707-01DUPDL	S-929-K1-SO-0-0.5-08	DUP	09/04/24 16:52	5x for Int Std 89Y (1), Mn	Jaswal	Confirms
42	P3707-01L	S-929-K1-SO-0-0.5-08	SD	09/04/24 16:56	Int Std fail 89Y (1) & Mn high,	Jaswal	Dilution
43	P3707-01LDL	S-929-K1-SO-0-0.5-08	SD	09/04/24 16:59	25x for Int Std 89Y (1), Mn	Jaswal	Confirms
44	P3707-02	S-929-K1-SO-0-0.5-08	MS	09/04/24 17:02	Int Std fail 89Y (1) & Mn high,	Jaswal	Dilution
45	P3707-02DL	S-929-K1-SO-0-0.5-08	MS	09/04/24 17:05	5x for Int Std 89Y (1), Mn	Jaswal	Confirms
46	P3707-03	S-929-K1-SO-0-0.5-08	MSD	09/04/24 17:09	Int Std fail 89Y (1) & Mn high,	Jaswal	Dilution
47	P3707-03DL	S-929-K1-SO-0-0.5-08	MSD	09/04/24 17:12	5x for Int Std 89Y (1), Mn	Jaswal	Confirms
48	P3707-01A	S-929-K1-SO-0-0.5-08	PS	09/04/24 17:15	Int Std 89Y (1)	Jaswal	Dilution
49	P3707-01ADL	S-929-K1-SO-0-0.5-08	PS	09/04/24 17:18	5x for Int Std 89Y (1)	Jaswal	Confirms
50	P3707-04	S-929-K1-SO-0.5-1-08	SAM	09/04/24 17:21	Mn high	Jaswal	Dilution
51	CCV04	CCV04	CCV	09/04/24 17:28		Jaswal	OK
52	CCB04	CCB04	CCB	09/04/24 17:36		Jaswal	OK
53	P3707-04DL	S-929-K1-SO-0.5-1-08	SAM	09/04/24 17:39	5x for Mn	Jaswal	Confirms
54	P3707-05	S-913-K1-SO-0-0.5-08	SAM	09/04/24 17:42		Jaswal	OK
55	P3707-05DL	S-913-K1-SO-0-0.5-08	SAM	09/04/24 17:46	NOT USE	Jaswal	Not Ok

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB132280

Review By	Jaswal	Review On	9/5/2024 2:30:03 AM
Supervise By	Mohan	Supervise On	9/5/2024 2:37:39 AM

STD. NAME	STD REF.#
ICAL Standard	MP82148,MP82164,MP82163,MP82161,MP82160,MP82159,MP82158,MP82157,MP82155
ICV Standard	MP82165
CCV Standard	MP82166
ICSA Standard	MP82167,MP82168
CRI Standard	MP82163
LCS Standard	
Chk Standard	MP82194,MP82193

56	P3707-06	S-913-K1-SO-0.5-1-08	SAM	09/04/24 17:49	Al,Fe high	Jaswal	Dilution
57	P3707-06DL	S-913-K1-SO-0.5-1-08	SAM	09/04/24 17:52	5x for Al,Fe	Jaswal	Confirms
58	P3707-07	S-930-K1-SO-0-0.5-08	SAM	09/04/24 17:56		Jaswal	OK
59	DOC-1	DOC-1	SAM	09/04/24 18:02		Jaswal	OK
60	DOC-2	DOC-2	SAM	09/04/24 18:05		Jaswal	OK
61	DOC-3	DOC-3	SAM	09/04/24 18:11		Jaswal	OK
62	DOC-4	DOC-4	SAM	09/04/24 18:14		Jaswal	OK
63	CCV05	CCV05	CCV	09/04/24 18:17		Jaswal	OK
64	CCB05	CCB05	CCB	09/04/24 18:24		Jaswal	OK

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Prep Standard - Chemical Standard Summary

Order ID : P3657

Test : Mercury,Metals Group4

Prepbatch ID : PB162924,PB163150,

Sequence ID/Qc Batch ID: LB132130,LB132280,

Standard ID :
MP81218,MP81818,MP81819,MP81820,MP81821,MP81967,MP81968,MP81970,MP81971,MP81972,MP81973,MP81974,
MP81975,MP81976,MP81977,MP81978,MP81979,MP81980,MP82127,MP82148,MP82149,MP82150,MP82151,MP82152,
MP82153,MP82155,MP82157,MP82158,MP82159,MP82160,MP82161,MP82162,MP82163,MP82164,MP82165,MP82166,
MP82167,MP82168,MP82192,MP82193,MP82194,

Chemical ID :
M4251,M4399,M4465,M4888,M4916,M5062,M5192,M5218,M5227,M5288,M5295,M5304,M5390,M5476,M5497,M5498,M5513,M5515,M5519,M5531,M5545,M5613,M5658,M5697,M5698,M5739,M5769,M5798,M5799,M5800,M5801,M5802,M5806,M5815,M5817,M5818,M5819,M5873,M5874,M5935,M5953,M5961,M5962,M5963,M5976,M5978,M5981,M5982,M5983,M6023,M6025,M6028,M6030,M6033,M6034,M6037,M6040,M6055,W2606,W3112,

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP81218	06/27/2024	06/28/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 06/27/2024

FROM 2.50000ml of M5531 + 2.50000ml of M5935 + 245.00000ml of W2606 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3965	2:1 H2SO4 : HNO3	MP81818	08/13/2024	01/04/2025	Mohan Bera	None	None	Sarabjit Jaswal 08/13/2024

FROM 1600.00000ml of M5613 + 800.00000ml of M5963 = Final Quantity: 3200.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP81819	08/13/2024	02/13/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 08/13/2024

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP81820	08/13/2024	02/13/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 08/13/2024

FROM 100.00000ml of M4465 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP81821	08/13/2024	02/14/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 08/13/2024

FROM 2000.00000ml of W3112 + 240.00000gram of M4251 + 240.00000gram of M4399 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP81967	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 1.00000ml of M6034 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP81968	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M6034 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1341	Hg 0.2 PPB STD	MP81970	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M6034 + 247.30000ml of W3112 + 0.20000ml of MP81967 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP81971	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M6034 + 245.00000ml of W3112 + 2.50000ml of MP81967 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP81972	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M6034 + 242.50000ml of W3112 + 5.00000ml of MP81967 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP81973	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M6034 + 240.00000ml of W3112 + 7.50000ml of MP81967 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP81974	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M6034 + 237.50000ml of W3112 + 10.00000ml of MP81967 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP81975	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M5953 + 2.50000ml of M6034 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP81976	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M6034 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP81977	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 485.00000ml of W3112 + 5.00000ml of M6034 + 10.00000ml of MP81967 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP81978	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 495.00000ml of W3112 + 5.00000ml of M6034 = Final Quantity: 500.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP81979	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M6034 + 247.30000ml of W3112 + 0.20000ml of MP81967 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP81980	08/21/2024	08/22/2024	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 08/21/2024

FROM 2.50000ml of M6034 + 240.50000ml of W3112 + 7.00000ml of MP81967 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP82127	09/03/2024	02/08/2025	Janvi Patel	None	None	Sarabjit Jaswal 09/03/2024

FROM 1250.00000ml of M6040 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP82148	09/04/2024	09/27/2024	Sarabjit Jaswal	None	None	Mohan Bera 09/04/2024

FROM 25.00000ml of M6040 + 4925.00000ml of W3112 + 50.00000ml of M6037 = Final Quantity: 5000.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3880	M&B SPIKE-1	MP82149	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 5.00000ml of M5227 + 5.00000ml of M5658 + 5.00000ml of M5798 + 5.00000ml of M5800 + 5.00000ml of M5802 + 5.00000ml of M5961 + 5.00000ml of M5962 + 5.00000ml of M5981 + 5.00000ml of M5982 + 5.00000ml of M5983 + 5.00000ml of M6023 + 5.00000ml of M6028 + 5.00000ml of M6030 + 35.00000ml of MP82148 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3881	M&B SPIKE-2	MP82150	09/04/2024	09/22/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 10.00000ml of M4888 + 10.00000ml of M5976 + 12.50000ml of M5390 + 12.50000ml of M5515 + 12.50000ml of M5519 + 2.50000ml of M5799 + 2.50000ml of M5818 + 5.00000ml of M6033 + 30.00000ml of MP82148 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3882	M&B SPIKE-3	MP82151	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.62500ml of M5513 + 12.50000ml of M5697 + 12.50000ml of M5698 + 12.50000ml of M5819 + 11.87500ml of MP82148 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3900	M&B SPIKE-4	MP82152	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 6.25000ml of M5497 + 6.25000ml of M5769 + 6.25000ml of M5806 + 6.25000ml of MP82148 = Final Quantity: 25.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4025	M&B SPIKE-5	MP82153	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 15.00000ml of M5192 + 15.00000ml of M5978 + 20.00000ml of MP82148 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2902	S8 ICPMS	MP82155	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 1.00000ml of M6033 + 2.50000ml of M5288 + 2.50000ml of M5515 + 5.00000ml of M5497 + 5.00000ml of M5769 + 5.00000ml of M5806 + 79.00000ml of MP82148 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3947	S7(SFAM,6020,200.8)	MP82157	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 1.00000ml of M5799 + 1.00000ml of M5818 + 1.00000ml of M5981 + 1.00000ml of M5983 + 1.90000ml of M6033 + 10.00000ml of M5976 + 10.00000ml of M5978 + 10.00000ml of M6037 + 2.00000ml of M5815 + 2.00000ml of M5817 + 2.50000ml of M5476 + 4.00000ml of M5390 + 4.00000ml of M6025 + 4.90000ml of M5515 + 4.90000ml of M5519 + 5.00000ml of M6040 + 50.00000ml of M5304 + 828.10000ml of W3112 + 9.00000ml of M5697 + 9.00000ml of M5698 + 9.00000ml of M5819 + 9.90000ml of M5497 + 9.90000ml of M5769 + 9.90000ml of M5806 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3948	S6(SFAM,6020,200.8)	MP82158	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 48.50000ml of W3112 + 50.00000ml of MP82157 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3949	S5(SFAM,6020,200.8)	MP82159	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 73.50000ml of W3112 + 25.00000ml of MP82157 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3954	S4(SFAM,6020,200.8)	MP82160	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 86.00000ml of W3112 + 12.50000ml of MP82157 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3951	S3(SFAM, 6020,200.8)	MP82161	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 88.50000ml of W3112 + 10.00000ml of MP82158 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3955	S2CONC(SFAM,6020,200.8)	MP82162	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.05000ml of M5476 + 0.05000ml of M5698 + 0.05000ml of M5798 + 0.05000ml of M5800 + 0.05000ml of M5801 + 0.05000ml of M5961 + 0.05000ml of M5981 + 0.05000ml of M5983 + 0.05000ml of M6023 + 0.05000ml of M6025 + 0.05000ml of M6028 + 0.05000ml of M6030 + 0.10000ml of M5658 + 0.10000ml of M5697 + 0.10000ml of M5802 + 0.10000ml of M6033 + 0.25000ml of M5227 + 0.25000ml of M5515 + 0.25000ml of M5799 + 0.25000ml of M5819 + 0.25000ml of M5962 + 0.25000ml of M5976 + 0.25000ml of M5978 + 0.50000ml of M5390 + 0.50000ml of M5818 + 1.25000ml of M5815 + 1.25000ml of M5817 + 2.50000ml of M5498 + 2.50000ml of M5519 + 2.50000ml of M5769 + 2.50000ml of M5806 + 2.50000ml of M6040 + 226.25000ml of W3112 + 5.00000ml of M6037 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3956	S2(SFAM,6020,200.8)	MP82163	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 98.00000ml of W3112 + 0.50000ml of MP82162 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3957	S1(SFAM,6020,200.8)	MP82164	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.50000ml of M6040 + 1.00000ml of M6037 + 88.50000ml of W3112 + 10.00000ml of MP82163 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3959	ICV(6020,200.8)	MP82165	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.05000ml of M5218 + 0.05000ml of M5981 + 0.05000ml of M5982 + 0.05000ml of M5983 + 0.45000ml of M5192 + 0.45000ml of M5545 + 2.00000ml of M5295 + 96.90000ml of MP82148 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3961	CCV	MP82166	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.20000ml of M5513 + 0.50000ml of M5799 + 0.50000ml of M5818 + 0.50000ml of M5981 + 0.50000ml of M5983 + 1.00000ml of M5815 + 1.00000ml of M5817 + 1.25000ml of M5476 + 10.00000ml of M6037 + 12.45000ml of M5515 + 12.45000ml of M5519 + 2.00000ml of M5390 + 24.95000ml of M5498 + 24.95000ml of M5769 + 24.95000ml of M5806 + 25.00000ml of M5304 + 4.50000ml of M5697 + 4.50000ml of M5698 + 4.50000ml of M5819 + 4.95000ml of M6033 + 5.00000ml of M6040 + 5.50000ml of M5976 + 5.50000ml of M5978 + 823.45000ml of W3112 = Final Quantity: 1000.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1142	ICSA ICPMS	MP82167	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 10.00000ml of M5873 + 90.00000ml of MP82148 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1143	ICSAB ICPMS	MP82168	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.00500ml of M5799 + 0.00500ml of M5981 + 0.00500ml of M5982 + 0.00500ml of M5983 + 10.00000ml of M5873 + 10.00000ml of M5874 + 79.98000ml of MP82148 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3962	MG 10PPM FOR TUNE	MP82192	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 0.01000ml of M5769 + 9.99000ml of MP82148 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3894	TUNE 200PPB	MP82193	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 2.00000ml of M6055 + 2.00000ml of MP82192 + 96.00000ml of MP82148 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3903	ISS 3PPM	MP82194	09/04/2024	09/27/2024	Sarabjit Jaswal	None	METALS_PIPETTE_3 (A)	Mohan Bera 09/04/2024

FROM 5.00000ml of M6037 + 75.00000ml of M5739 + 170.00000ml of MP82148 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	12/19/2018 / mohan	12/05/2018 / mohan	M4251

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000187425	08/16/2024	08/16/2019 / RICHARD	07/08/2019 / RICHARD	M4399

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3238-05 / Potassium Persulfate (2.5kg)	0000234156	08/06/2025	07/23/2019 / mohan	07/25/2019 / manojkumar	M4465

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57022 / Ti, 1000 PPM, 125 ml	070721	09/22/2024	08/06/2021 / jaswal	08/05/2021 / jaswal	M4888

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3227-05 / Potassium Permanganate (2.5kg)	210800	03/31/2026	11/30/2022 / mohan	07/28/2021 / mohan	M4916

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	MSHG-10PPM / MERCURY HCl 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57042 / Mo, 1000 PPM, 125 ml	051722	05/17/2025	07/01/2022 / bin	06/17/2022 / jaswal	M5192

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	S2-MEB711674	11/02/2026	07/01/2022 / bin	09/10/2021 / bin	M5218

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	100121	10/01/2024	07/01/2022 / bin	10/18/2021 / bin	M5227

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	071122	07/11/2025	09/01/2022 / jaswal	07/21/2022 / jaswal	M5288

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV-1014	02/05/2025	08/07/2024 / jaswal	02/20/2020 / bin	M5295

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020CAL-1 / Calibration Standard Method 6020	S2-MEB711244	10/20/2026	08/07/2024 / jaswal	04/01/2022 / jaswal	M5304

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	072122	07/21/2025	08/07/2024 / jaswal	09/18/2022 / bin	M5390

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57138 / Sr, 10000 PPM, 125 ml	082922	08/09/2025	07/29/2024 / jaswal	03/16/2023 / jaswal	M5476

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	03/18/2023 / bin	03/17/2023 / bin	M5497

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5498

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	061522	06/15/2025	03/19/2023 / bin	03/17/2023 / bin	M5513

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	092122	09/21/2025	08/01/2024 / Jaswal	03/17/2023 / bin	M5515

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	01/08/2024 / bin	03/17/2023 / bin	M5519

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV5-0415	06/30/2024	10/31/2023 / mohan	03/30/2023 / mohan	M5531

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57022 / Titanium (Ti) 1000PPM	050223	05/02/2026	05/08/2023 / jaswal	05/08/2023 / jaswal	M5545

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000265056	11/05/2025	07/13/2023 / mohan	07/07/2023 / mohan	M5613

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	102623	10/26/2026	04/18/2024 / jaswal	10/27/2023 / jaswal	M5698

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020ISS / 6020ISS, 10 ug/ml, Bi, Ho, In, 6Li, Rh, Sc, TB, Y	T2-MEB709511	09/03/2026	08/07/2024 / jaswal	04/11/2022 / jaswal	M5739

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	05/24/2024 / Jaswal	01/03/2024 / bin	M5769

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	120523	12/05/2026	08/07/2024 / jaswal	01/03/2024 / jaswal	M5802

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	122223	12/22/2026	08/01/2024 / Jaswal	01/03/2024 / jaswal	M5806

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57014 / Si, 1000 PPM, 125 ml	122023	12/20/2026	03/06/2024 / jaswal	02/09/2024 / jaswal	M5818

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	111623	11/16/2026	03/20/2024 / jaswal	02/09/2024 / jaswal	M5819

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICPMS) STOCK SOLN	CP-MS ICSA-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5873

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSB (ICPMS) STOCK SOLUTION	CP-MS ICSB-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5874

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	12/08/2024	06/21/2024 / Al-Terek	06/07/2024 / Al-Terek	M5935

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV5-0415	01/01/2025	07/01/2024 / mohan	03/30/2023 / mohan	M5953

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57028 / Ni, 1000 PPM, 125 ml	041124	04/11/2027	07/02/2024 / Jaswal	06/11/2024 / Jaswal	M5961

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24B1362001	01/04/2025	07/09/2024 / Al-Terek	07/03/2024 / Al-Terek	M5963

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGMO1-1 / MOLYBDENUM 125mL 1000ug/mL	T2-MO720876	07/17/2027	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5976

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5978

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57092 / U, 1000 PPM, 125 ml	060724	06/07/2027	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5981

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	031524	03/15/2027	07/01/2024 / Jaswal	06/11/2024 / Jaswal	M5982

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57040 / Zr, 1000 PPM, 125 ml	071423	07/14/2026	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / Tl, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57082 / Pb, 1000 PPM, 125 ml	061224	06/12/2027	08/05/2024 / Jaswal	08/05/2024 / Jaswal	M6025

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	01/25/2019 / Jaswal	M6028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/07/2024 / Jaswal	01/03/2024 / Jaswal	M6033

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	02/01/2025	08/06/2024 / Janvi	08/01/2024 / Janvi	M6034

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	02/02/2025	08/24/2024 / Janvi	08/01/2024 / Janvi	M6037

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	24D1562005	02/08/2025	08/09/2024 / jaswal	08/01/2024 / Janvi	M6040

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	IV-STOCK-12 / ICP-MS TUNING SOLUTION, 125mL	U2-MEB734294	06/21/2028	08/21/2024 / Jaswal	08/19/2024 / Jaswal	M6055

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	10/24/2024	10/24/2019 / apatel	10/24/2019 / apatel	W2606

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M5613
23

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 0000265056
Manufactured Date: 2020/05/12
Retest Date: 2025/05/11
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (H_2SO_4)	95.0 - 98.0 %	96.5
Appearance	Passes Test	PT
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	< 1
ACS - Substances Reducing Permanganate (as SO_2)	<= 2 ppm	< 2
Ammonium (NH_4)	<= 1 ppm	< 1
Chloride (Cl)	<= 0.1 ppm	< 0.1
Nitrate (NO_3)	<= 0.2 ppm	< 0.1
Phosphate (PO_4)	<= 0.5 ppm	< 0.1
Trace Impurities - Aluminum (Al)	<= 30.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 4 ppb	< 2
Trace Impurities - Barium (Ba)	<= 10.0 ppb	< 1.0
Trace Impurities - Beryllium (Be)	<= 10.0 ppb	< 1.0
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 10.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 2.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	< 1.0
Trace Impurities - Chromium (Cr)	<= 6.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 0.5 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 10.0 ppb	< 1.0
Trace Impurities - Germanium (Ge)	<= 10.0 ppb	< 10.0
Trace Impurities - Gold (Au)	<= 10.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 500 ppb	< 100

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9673-33
Batch No.: 0000265056

Test	Specification	Result
Trace Impurities - Iron (Fe)	<= 50.0 ppb	3.3
Trace Impurities - Lead (Pb)	<= 0.5 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 10.0 ppb	< 1.0
Trace Impurities - Magnesium (Mg)	<= 7.0 ppb	< 0.2
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	< 0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 2.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 10.0 ppb	< 1.0
Trace Impurities - Potassium (K)	<= 500.0 ppb	< 2.0
Trace Impurities - Selenium (Se)	<= 50.0 ppb	17.8
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 500.0 ppb	1.5
Trace Impurities - Strontium (Sr)	<= 5.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 10.0 ppb	< 5.0
Trace Impurities - Thallium (Tl)	<= 20.0 ppb	< 5.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 10.0 ppb	< 1.0
Trace Impurities - Vanadium (V)	<= 10.0 ppb	< 1.0
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.4
Trace Impurities - Zirconium (Zr)	<= 10.0 ppb	< 1.0

For Laboratory, Research or Manufacturing Use

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6028

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

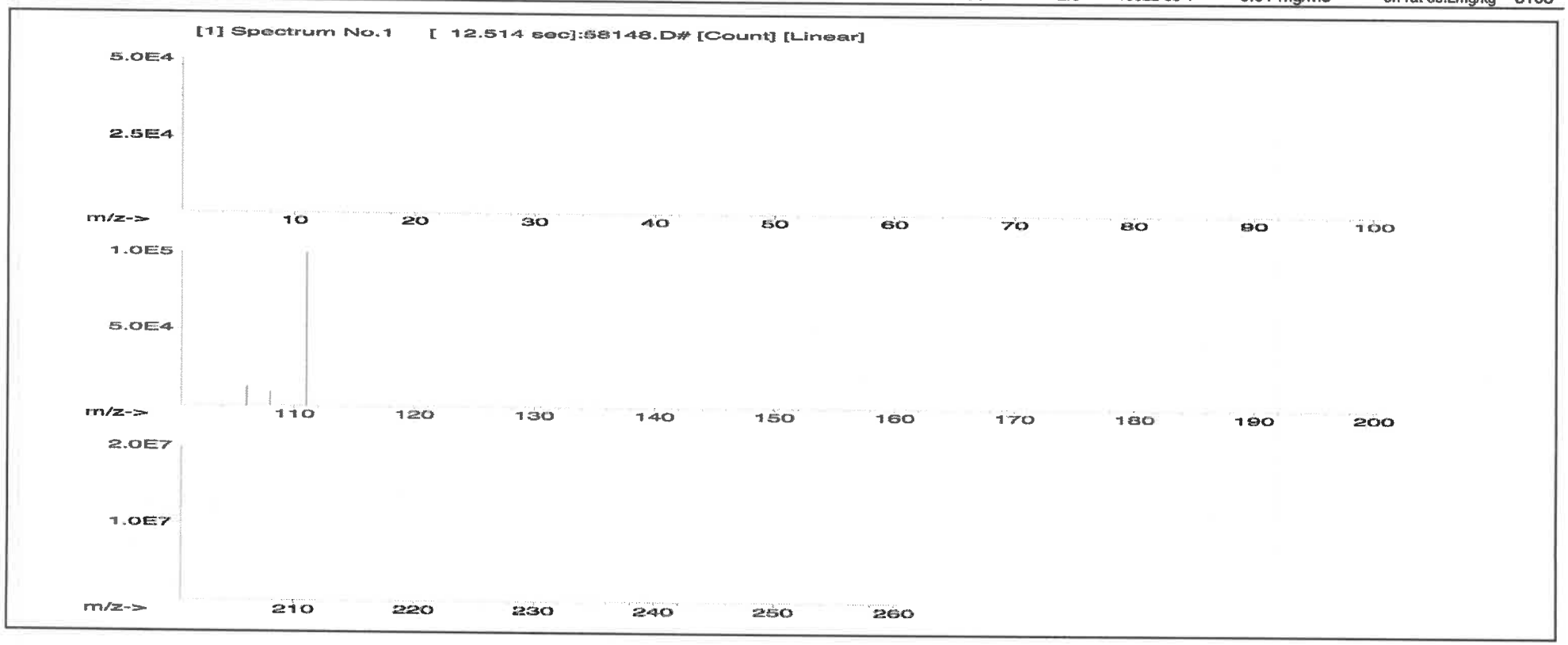
CERTIFIED WEIGHT REPORT:

Part Number:	**57048**			**Lot #**	
Lot Number:	**070124**		**Solvent:**	24002546	Nitric Acid
Description:	**Cadmium (Cd)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	070127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	070124
Reviewed By:	Pedro L. Rentas	070124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cadmium nitrate tetrahydrate (Cd)	IN024	CDM092021A1	1000	99.999	0.10	36.5	5.4797	5.4804	**1000.1**	**2.0**	10022-68-1	0.01 mg/m3	orl-rat 60.2mg/kg	3108



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	T	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

R: 8/5/24

CERTIFIED WEIGHT REPORT:

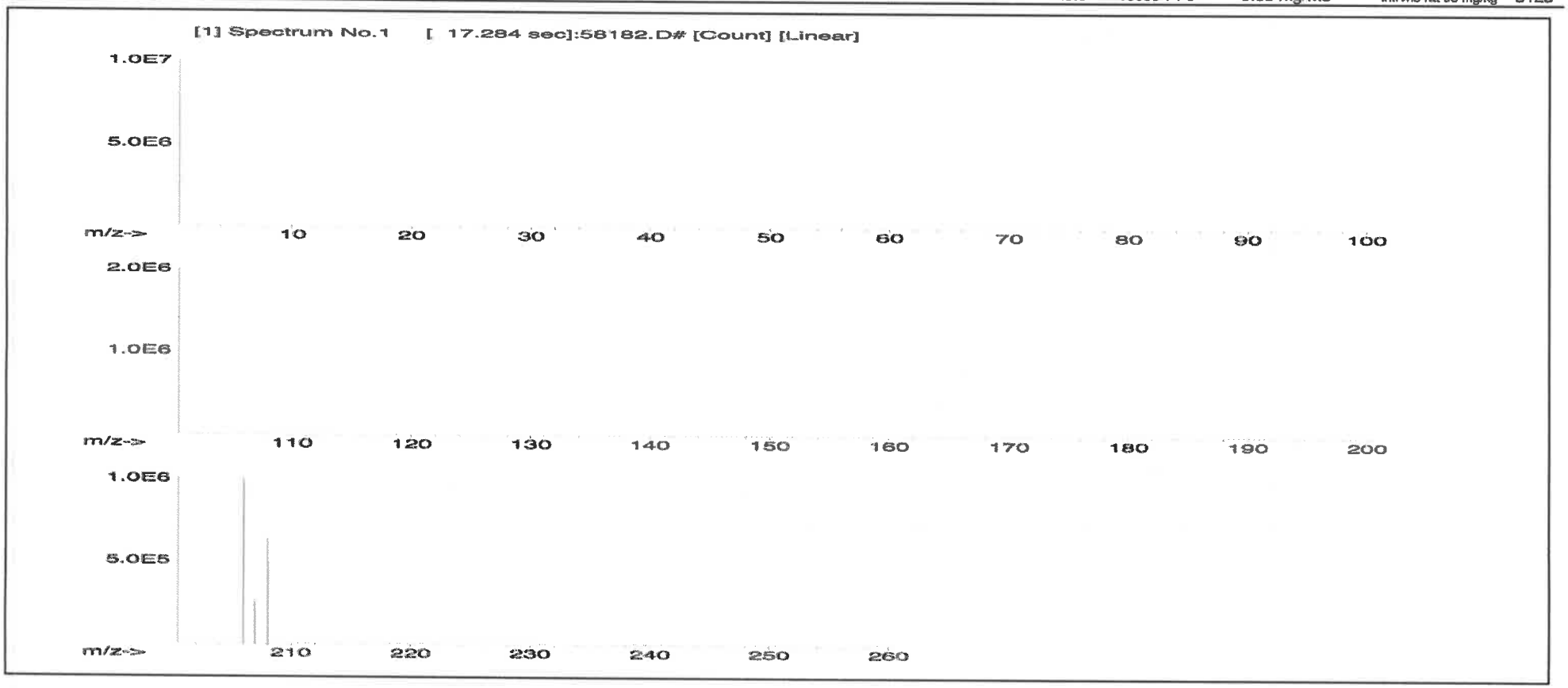
Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

Expiration Date: 110926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawence Barry	110923
Reviewed By:	Pedro L. Rentas	110923

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0040	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

M4251
JB

Material No.: 2196-01
Batch No.: 0000215387
Manufactured Date: 2018/06/27
Retest Date: 2025/06/25
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NH_2OH \cdot HCl$) (by $KMnO_4$ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH_4)	Passes Test	PT
Sulfur Compounds (as SO_4)	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

IM4399

Supplied – 07.08.19

Material No.: 3624-05
Batch No.: 0000187425
Manufactured Date: 2017/08/03
Retest Date: 2024/08/01

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	>= 99.0 %	99.8
pH of 5% Solution at 25°C	5.0 - 9.0	5.8
ACS - Insoluble Matter	<= 0.005 %	0.003
Iodide (I)	<= 0.002 %	< 0.002
Bromide (Br)	<= 0.01 %	< 0.01
Chlorate and Nitrate (as NO_3)	<= 0.003 %	< 0.003
ACS - Phosphate (PO_4)	<= 5 ppm	< 5
Sulfate (SO_4)	<= 0.004 %	< 0.004
Barium (Ba)	Passes Test	PT
ACS - Heavy Metals (as Pb)	<= 5 ppm	< 5
Iron (Fe)	<= 2 ppm	< 2
Calcium (Ca)	<= 0.002 %	< 0.002
Magnesium (Mg)	<= 0.001 %	< 0.001
Potassium (K)	<= 0.005 %	< 0.005

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

RS 08.16.19

ISO
Phillipsburg, NJ 9001:2008, 14001:2004, FSSC 22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003
Gliwice, Poland 9001:2008, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2008
Panoli, India 9001:2008

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600
Avantor Performance Materials, LLC.
3477 Corporate Parkway. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

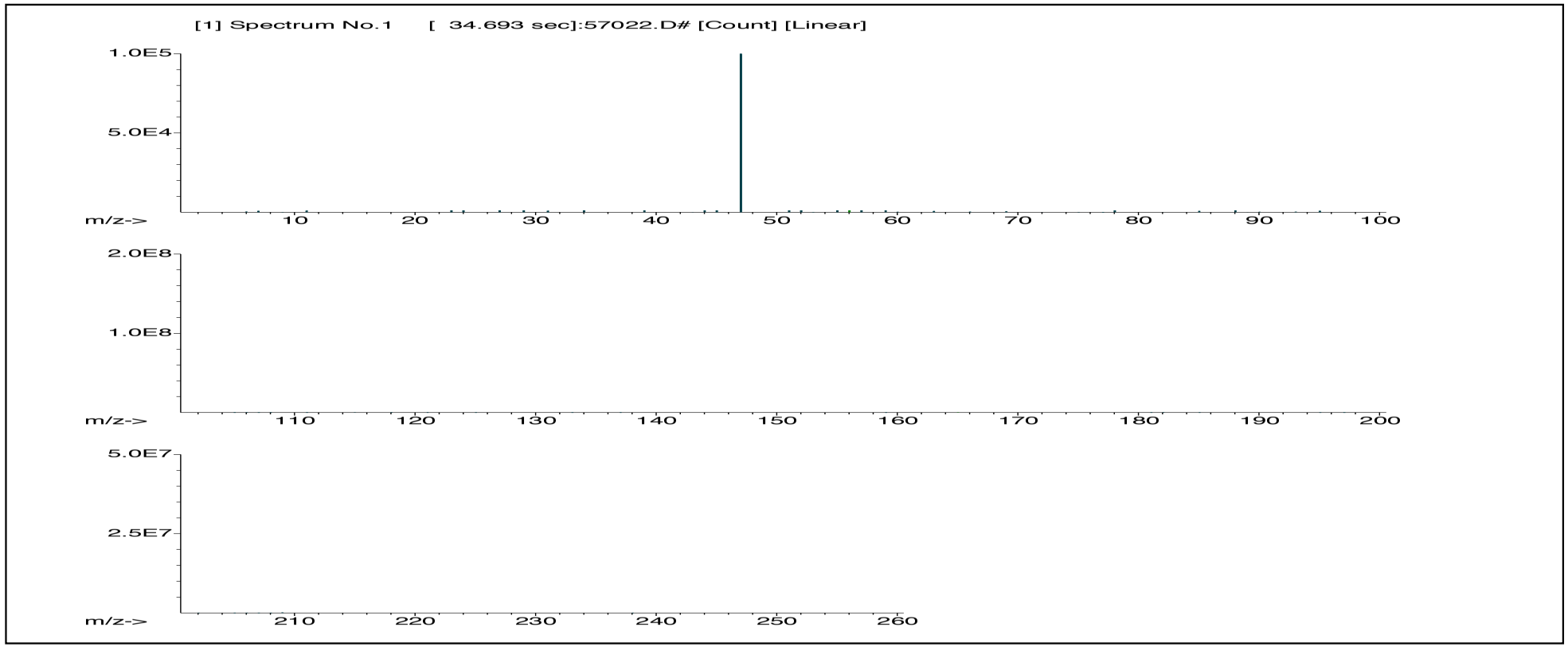
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57022**	20370011	Nitric Acid	
Lot Number:	**070721**			
Description:	**Titanium (Ti)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	070724			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	070721
Reviewed By:	Pedro L. Rentas	070721

	Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	**Final Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1.	Ammonium hexafluorotitanate (Ti)	58122	070120	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	16962-40-6	2.5 (F) mg/m3	NA	3162a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com



Certified Reference Material CRM



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	T	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

ThermoFisher SCIENTIFIC

M4913-16

MB

Certificate of Analysis

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

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

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. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P279	Quality Test / Release Date	01/12/2021
Lot Number	210306		
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jan/2026

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Dark purple to purple green crystals
ASSAY	%	>= 99	99.3
CHLORIDE & CHLORATE	%	<= 0.005	<0.005
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
INSOLUBLE MATTER	%	<= 0.2	<0.2
MERCURY (Hg)	ppm	<= 0.05	<0.004
SULFATE (SO4)	%	<= 0.02	<0.02

Julian Burton

Julian Burton - Quality Control Manager – 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.

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

M5062
M5063
M3

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:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	S2-HG709270
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.001 ± 0.053 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

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.

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

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

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

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

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.

O	Ag		0.000011	M	Eu	<	0.000201	O	Na		0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al		0.000001	O	Fe		0.000001	M	Nb	<	0.000201	O	Si		0.000005	M	Zr	<	0.000201
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201				
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007				
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201				
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201				
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201				
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216				
O	Ca		0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201				
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402				
M	Ce	<	0.000201	O	K		0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508				
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201				
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058				
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201				
M	Cu	<	0.000402	O	Mg		0.000001	O	S	<	0.053950	M	W	<	0.000604				
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201				
M	Er	<	0.000201	M	Mo		0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201				

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**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2021

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

11.2 Lot Expiration Date

- September 22, 2026

- 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
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5192 R: 06/17/22

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

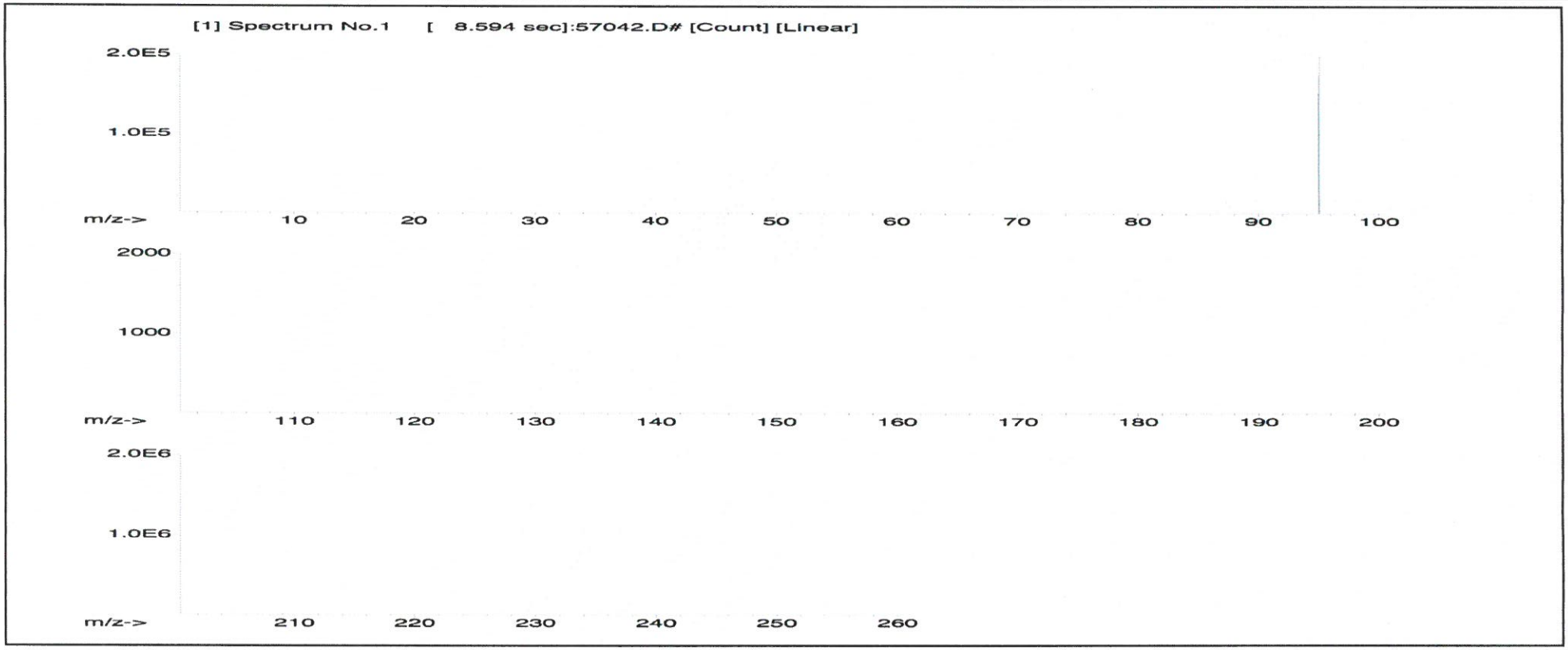
Part Number: 57042
Lot Number: 051722
Description: Molybdenum (Mo)
Expiration Date: 051725
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 3000.41

Lot #	Solvent:		
MKBQ8597V	Ammonium hydroxide		
0.5%	15.0 (mL)	Ammonium hydroxide	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By: Lawrence Barry 051722

Reviewed By: Pedro L. Rentas 051722

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium molybdate (Mo)	58142	022222	0.1000	300.0	0.084	1000	10001.0	**1000.0**	**2.1**	13106-76-8	5 mg(Mo)/m3	orl-rat 333 mg/kg	3134



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	T	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

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:	CHEM-QC-4
Lot Number:	S2-MEB711674
Matrix:	3% (v/v) HNO3 3% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Boron, Molybdenum, Silicon, Tin, Titanium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	**1 000 ± 7 µg/mL**	**Molybdenum, Mo**	**1 000 ± 5 µg/mL**
Silicon, Si	**1 000 ± 7 µg/mL**	**Tin, Sn**	**1 000 ± 5 µg/mL**
Titanium, Ti	**1 001 ± 6 µg/mL**		

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	140917
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:

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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ 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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 02, 2021

- 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

- **November 02, 2026**

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



M5227 R: 10/18/2021

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**	20370011	Nitric Acid	
Lot Number:	**100121**			
Description:	**Vanadium (V)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	100124			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.4	0.06	Flask Uncertainty	

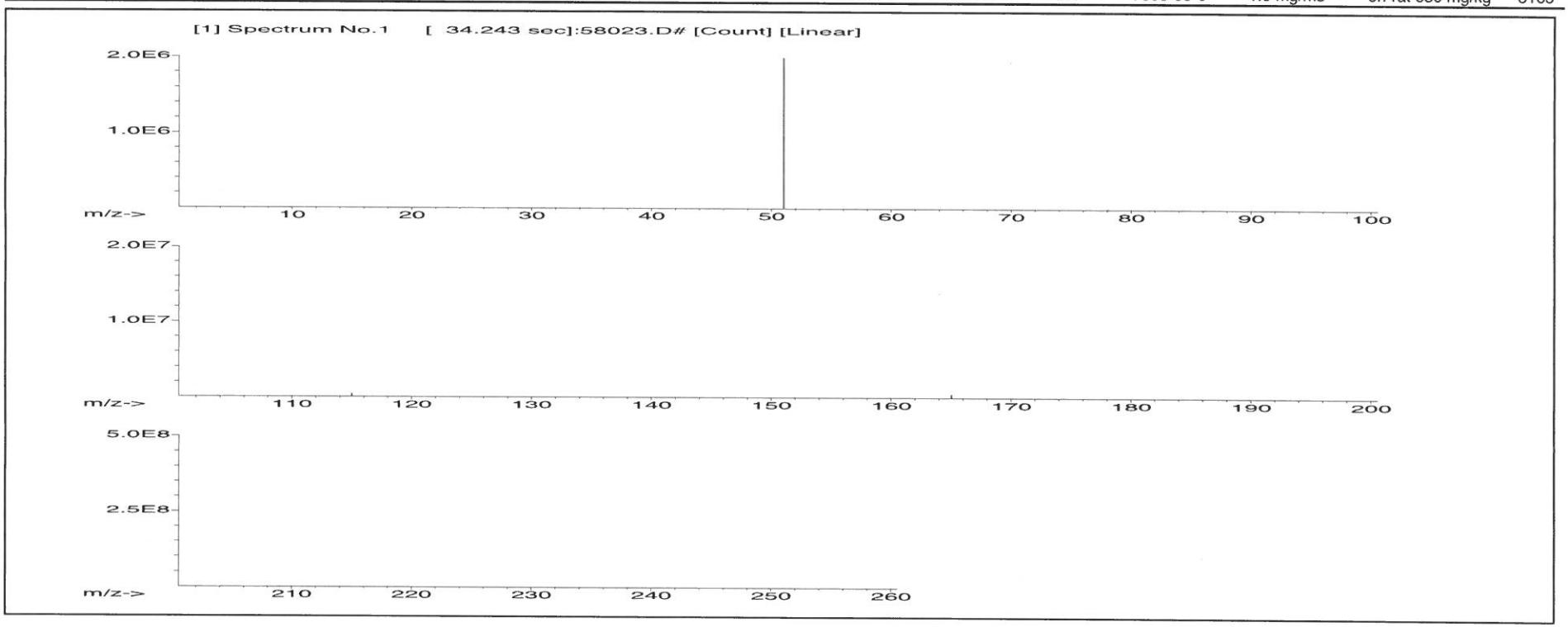
Giovanni Esposito

Formulated By:	Giovanni Esposito	100121

Pedro Rentas

Reviewed By:	Pedro L. Rentas	100121

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	**Final Conc. (µg/mL)**	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium Metavanadate (V)	58123	070721	0.1000	300.0	0.084	1000	10000.4	**1000.0**	**2.1**	7803-55-6	1.0 mg/m3	orl-rat 630 mg/kg	3165



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

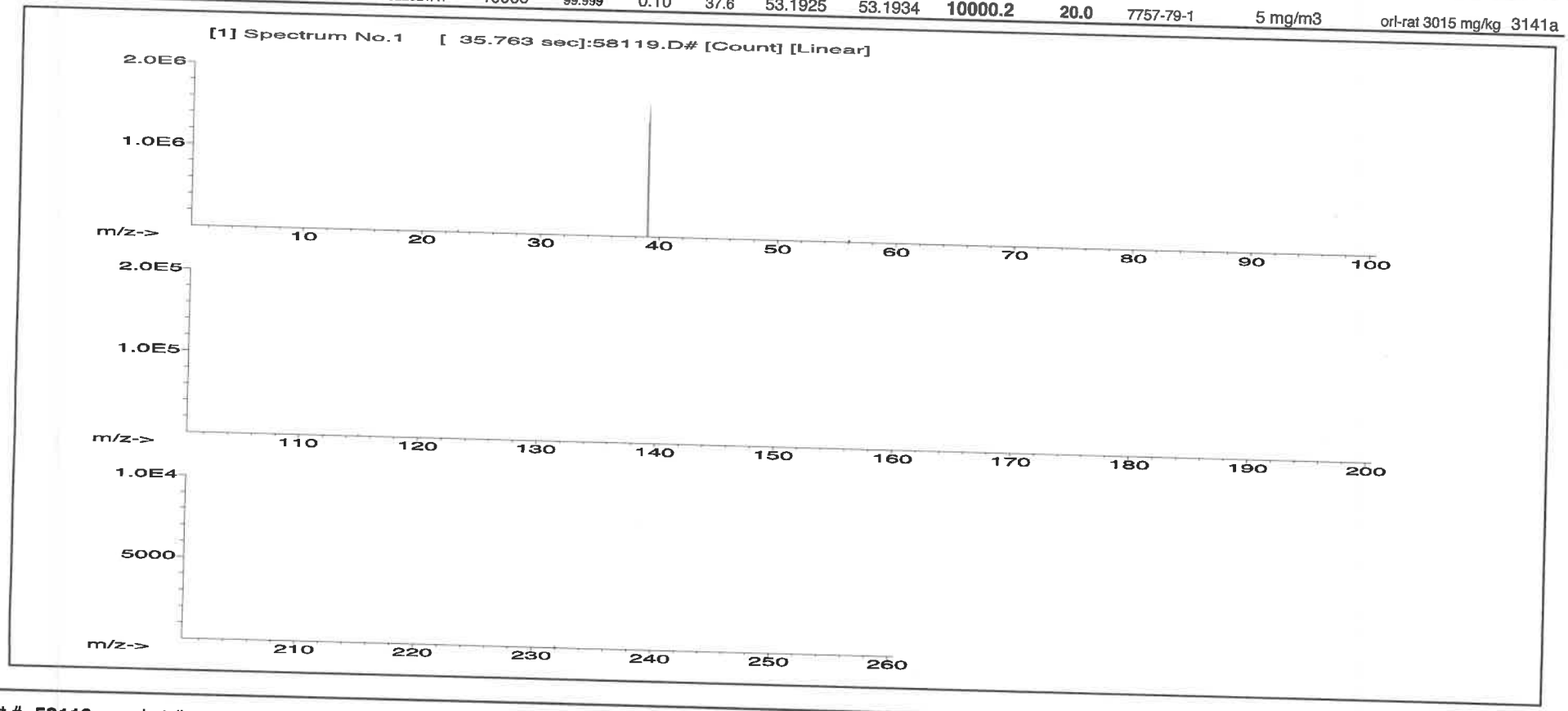
Part Number: 58119
Lot Number: 071122
Description: Potassium (K)

Expiration Date: 071125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

		Lot #	
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
5E-05	Balance Uncertainty		
0.058	Flask Uncertainty		

Formulated By: Lawrence Barry 071122
Reviewed By: Pedro L. Rentas 071122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD022021A1	10000	99.999	0.10	37.6	53.1925	53.1934	**10000.2**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 mg/kg	3141a



P3657-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

R : 4/20/21

QATS LABORATORY INORGANIC REFERENCE MATERIAL
INITIAL CALIBRATION VERIFICATION SOLUTIONS
(ICV1, ICV5, AND ICV6)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or
Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

M5291
M5292
M5293
M5294
M5295

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

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:	6020CAL-1
Lot Number:	S2-MEB711244
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	20 µg/mL ea:

Silver,	Aluminum,
Arsenic,	Barium,
Beryllium,	Calcium,
Cadmium,	Cobalt,
Chromium,	Copper,
Iron,	Potassium,
Magnesium,	Manganese,
Sodium,	Nickel,
Lead,	Antimony,
Selenium,	Thallium,
Vanadium,	Zinc

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**20.01 ± 0.08 µg/mL**	**Antimony, Sb**	**20.01 ± 0.12 µg/mL**
Arsenic, As	**20.01 ± 0.18 µg/mL**	**Barium, Ba**	**20.01 ± 0.11 µg/mL**
Beryllium, Be	**20.01 ± 0.14 µg/mL**	**Cadmium, Cd**	**20.01 ± 0.11 µg/mL**
Calcium, Ca	**20.01 ± 0.10 µg/mL**	**Chromium, Cr**	**20.01 ± 0.16 µg/mL**
Cobalt, Co	**20.01 ± 0.11 µg/mL**	**Copper, Cu**	**20.01 ± 0.10 µg/mL**
Iron, Fe	**20.01 ± 0.09 µg/mL**	**Lead, Pb**	**20.01 ± 0.11 µg/mL**
Magnesium, Mg	**19.99 ± 0.10 µg/mL**	**Manganese, Mn**	**20.01 ± 0.10 µg/mL**
Nickel, Ni	**20.01 ± 0.11 µg/mL**	**Potassium, K**	**20.01 ± 0.10 µg/mL**
Selenium, Se	**20.02 ± 0.14 µg/mL**	**Silver, Ag**	**20.02 ± 0.09 µg/mL**
Sodium, Na	**20.01 ± 0.10 µg/mL**	**Thallium, Tl**	**20.01 ± 0.13 µg/mL**
Vanadium, V	**20.01 ± 0.11 µg/mL**	**Zinc, Zn**	**20.01 ± 0.11 µg/mL**

Density: 1.026 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Fe	Calculated		See Sec. 4.2
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

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

Characterization of CRM/RM by Two or More Methods

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

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

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

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

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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ 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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

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

u_{bb} = bottle to bottle homogeneity standard uncertainty

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

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 20, 2021

- 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

- **October 20, 2026**

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

R:09/08/22 (BA)

Certified Reference Material CRM

M5387 . M5389 . M5390 . M5391 . M5392

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

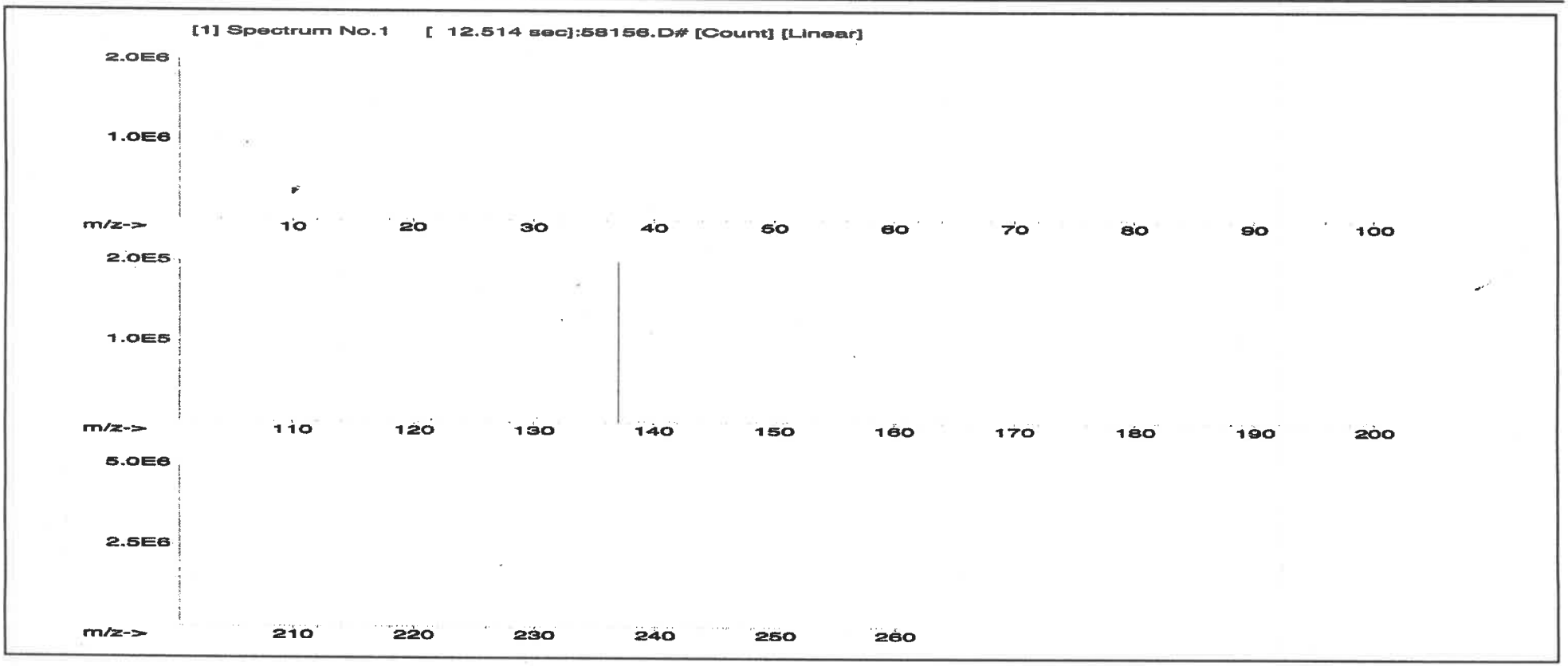
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**072122**	**Solvent:**	20510011	Nitric Acid	
Description:	**Barium (Ba)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	072125				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	072122
Reviewed By:	Pedro L. Rentas	072122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82426	**1000.0**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



A3651-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5497 - M5498 R: 03/17/23 (BF)

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

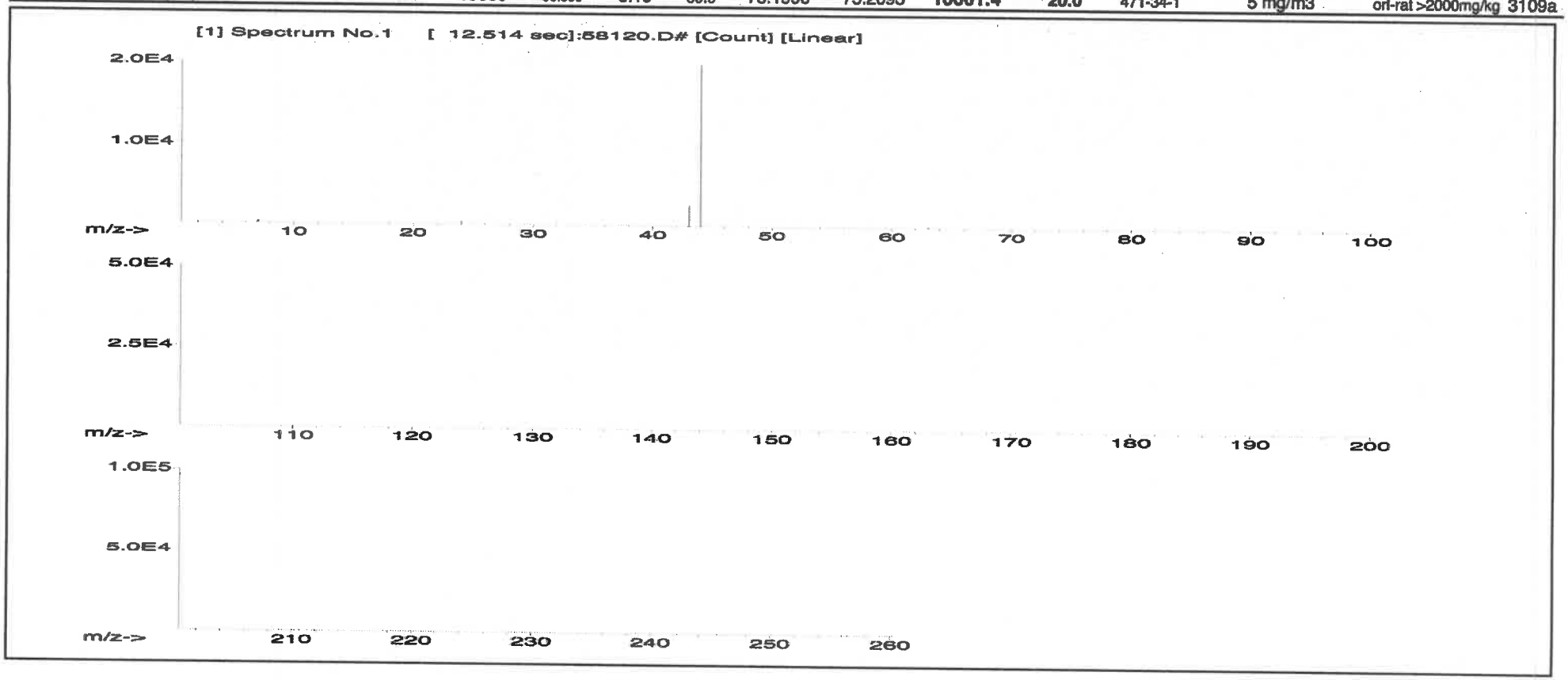
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

Lot #			
Solvent:	21110221	Nitric Acid	
	2%	60.0 (mL)	Nitric Acid
		5E-05	Balance Uncertainty
		0.058	Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5497 - M5498 R: 03/17/23 (BP)

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

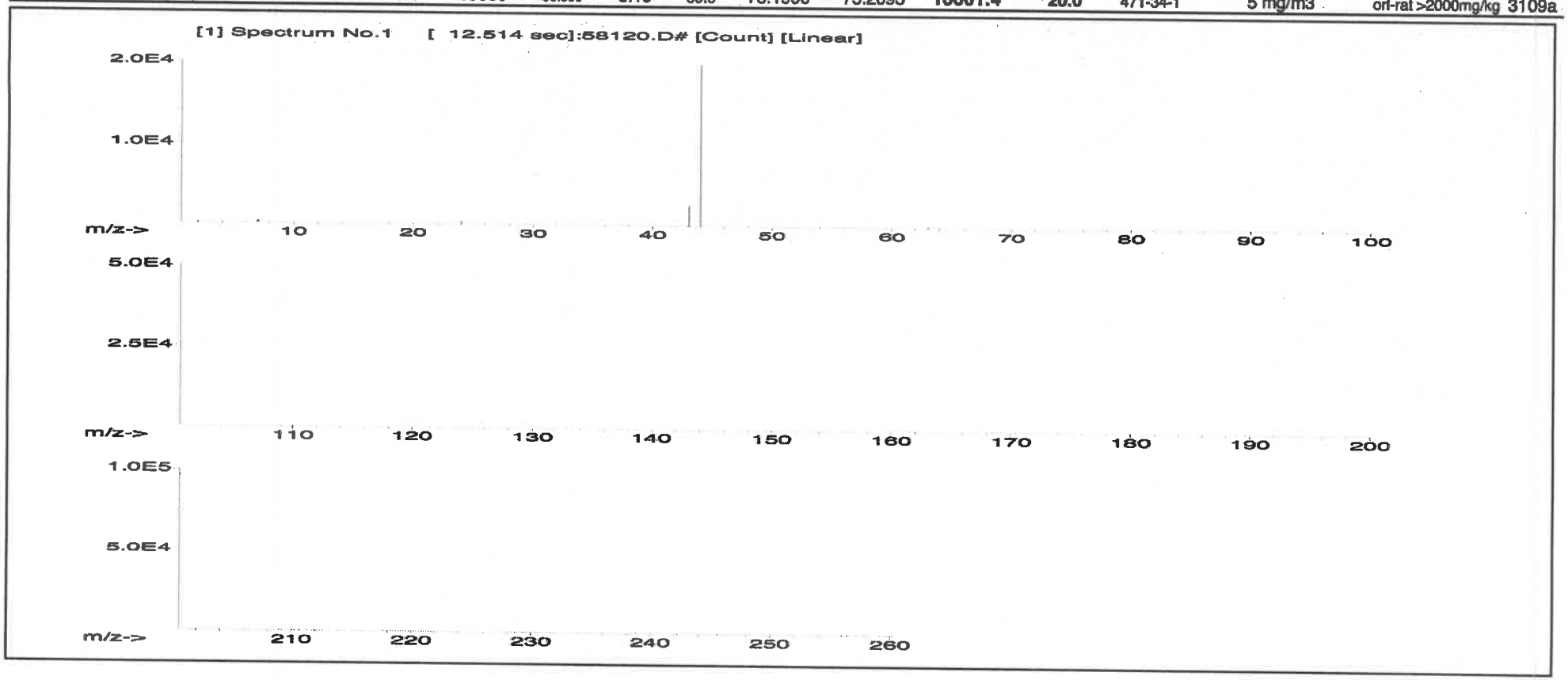
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

	Lot #		
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	031523
Reviewed By:	Pedro L. Rentas	031523

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

MS513 R:03/17/23 BE

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 061522
Description: Lead (Pb)

Expiration Date: 061525
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

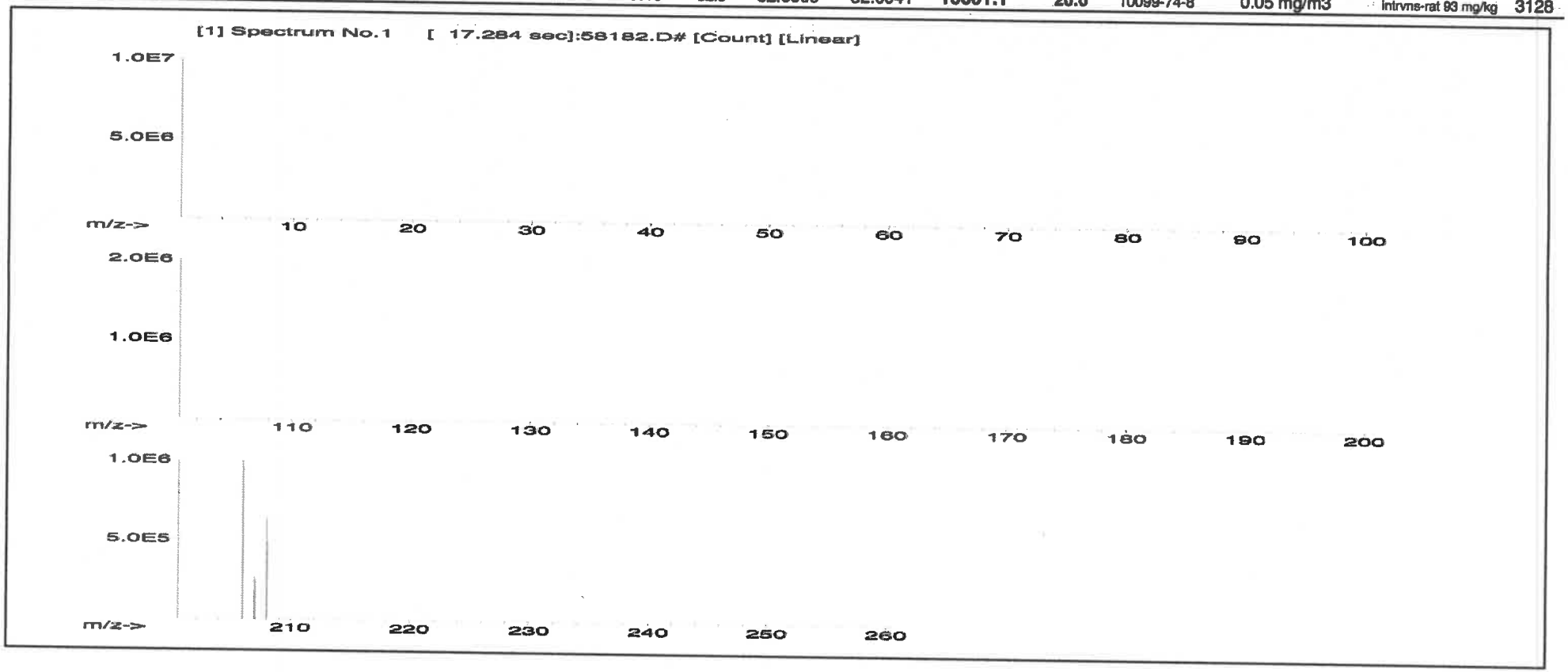
	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	061522
Reviewed By:	Pedro L. Rentas	061522

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0041	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	Intrvns-rat 93 mg/kg	3128



3653-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5514 - M5515 R: 03/17/22

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 092122
Description: Iron (Fe)

Expiration Date: 092125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

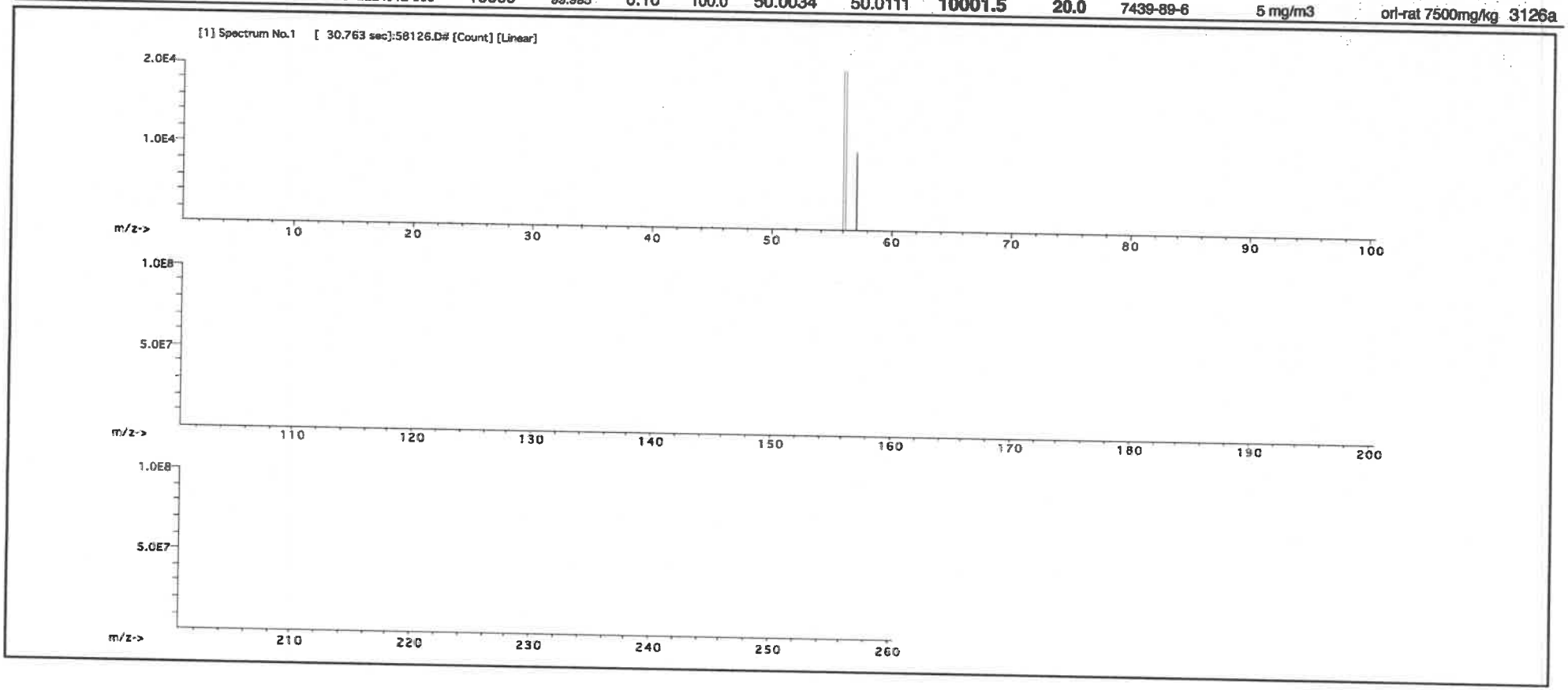
Weight shown below was diluted to (mL): 5000.1 | 0.12 Flask Uncertainty | 5E-05 Balance Uncertainty

	Lot #	
Solvent:	20510011	Nitric Acid
7.0%	350.0 (mL)	Nitric Acid

Giovanni Esposito

Formulated By:	Giovanni Esposito	092122
Reviewed By:	Pedro L. Rentas	092122

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Iron (Fe)	IN346	2224912-500	10000	99.995	0.10	100.0	50.0034	50.0111	**10001.5**	**20.0**	7439-89-6	5 mg/m3	orl-rat 7500mg/kg	3126a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																			
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.10	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.05	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.10	Ge	<0.10	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.05
B	<0.02	Cu	<0.10	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5519. M5520 (BH) R:03/17/23

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58119
Lot Number: 120822
Description: Potassium (K)

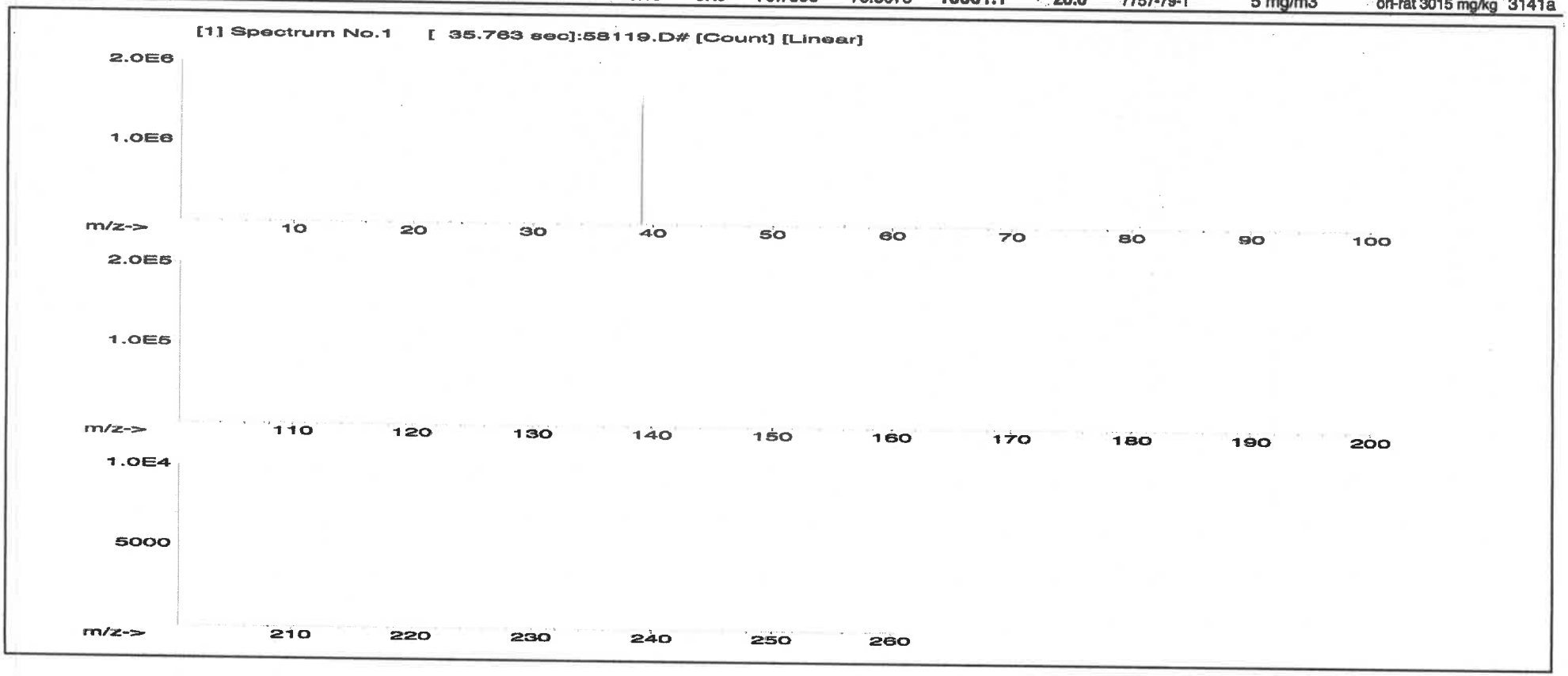
Expiration Date: 120825
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.4

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
5E-05	Balance Uncertainty		
0.06	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	120822
Reviewed By:	Pedro L. Rentas	120822

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD022021A1	10000	99.999	0.10	37.6	79.7990	79.8075	**10001.1**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 mg/kg	3141a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	T	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

MSS28-37
MB

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5658 R ! 8/25/23

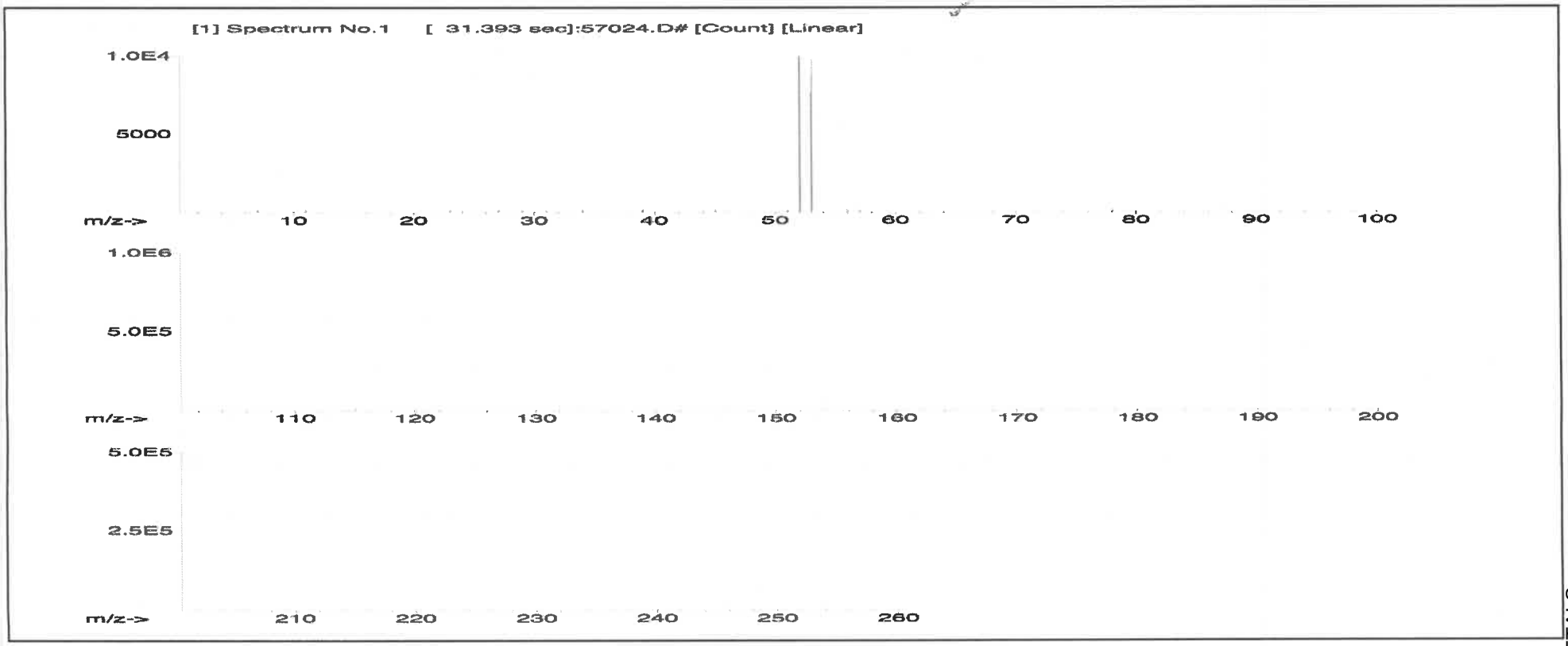
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58024**	21110221	Nitric Acid	
Lot Number:	**060523**			
Description:	**Chromium (Cr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Chromium(III) nitrate nonahydrate (Cr)	58124	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	7789-02-8	0.5 mg(Cr)/m3	orl-rat 3250 mg/kg	3112a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5697 R: 10/27/23

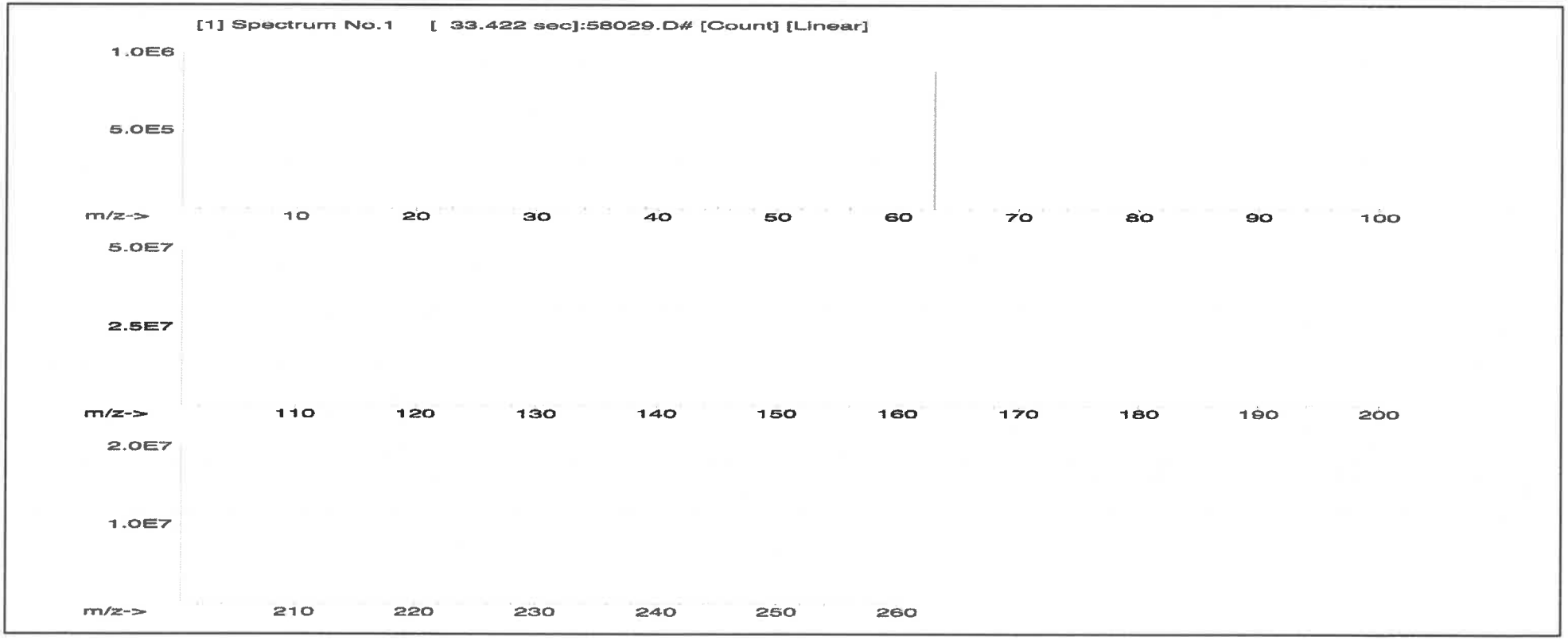
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:
Part Number:	**58029**	24002546	Nitric Acid
Lot Number:	**102523**		
Description:	**Copper (Cu)**		
		2.0%	40.0 (mL) Nitric Acid
Expiration Date:	102526		
Recommended Storage:	Ambient (20 °C)		
Nominal Concentration (µg/mL):	**1000**		
NIST Test Number:	6UTB	5E-05	Balance Uncertainty
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



Absolute Standards, Inc.
304-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																			
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5648 R: 10/27/23

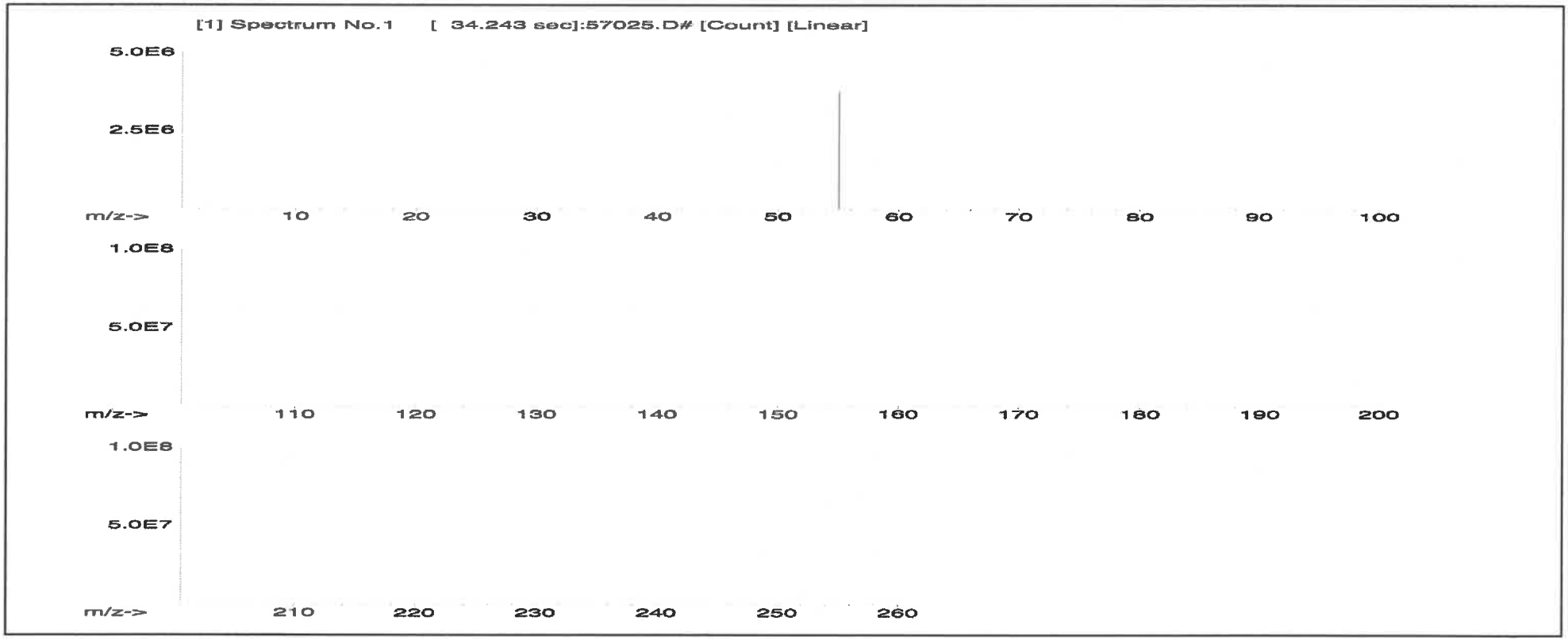
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58025**	24002546	Nitric Acid	
Lot Number:	**102623**			
Description:	**Manganese (Mn)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	102626			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102623
Reviewed By:	Pedro L. Rentas	102623

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Manganese(II) nitrate tetrahydrate (Mn)	58125	071123	0.1000	300.0	0.084	1000	10000.1	**1000.0**	**2.1**	20694-39-7	5 mg/m3	orl-rat >300mg/kg	3132



Absolute Standards, Inc.
308-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

art # **58025** Lot # **102623**

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M5768 M5769 BH R:1/3/24

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02 ± 0.058 Flask Uncertainty

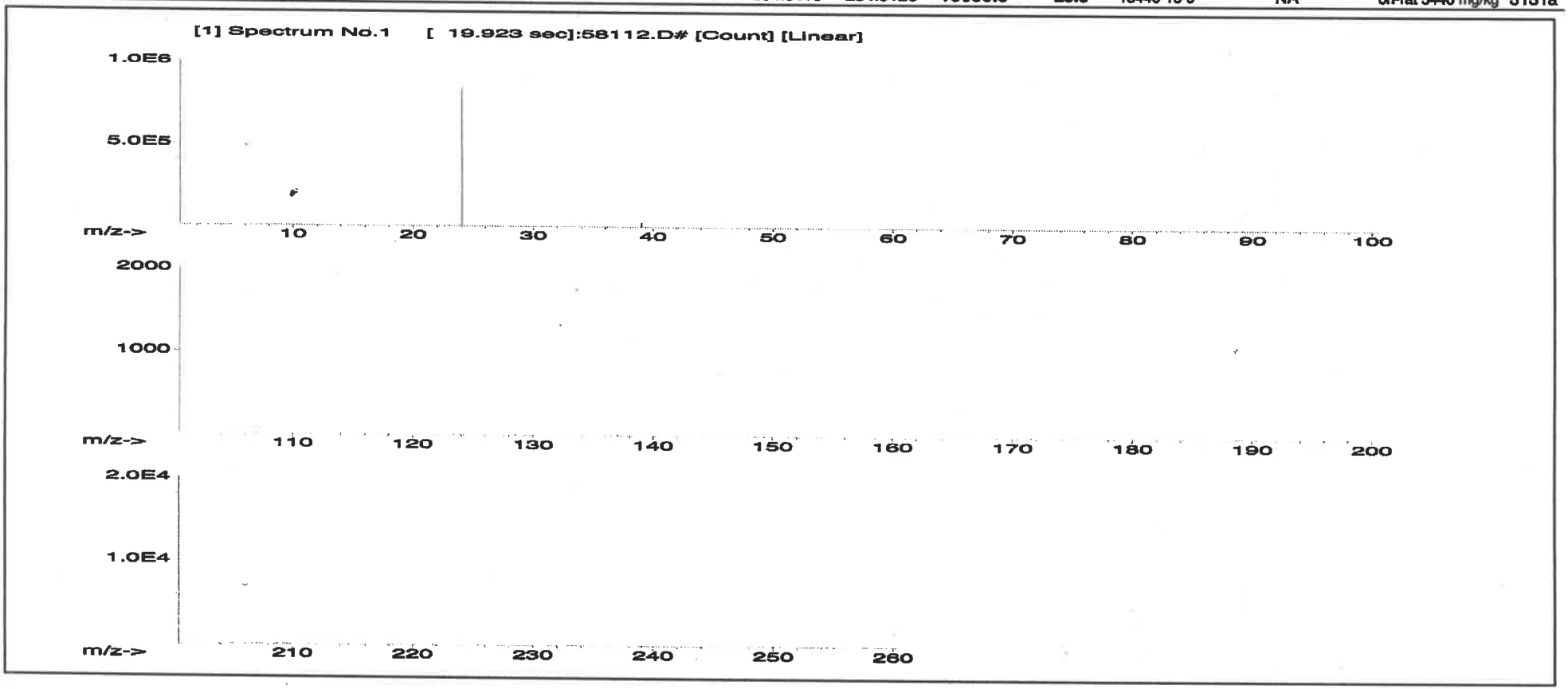
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

M5768, M5769 BH R: 1/3/24

Formulated By:	Lawrence Barry	091823
Reviewed By:	Pedro L. Rentas	091823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ori-rat 5440 mg/kg	3131a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5798

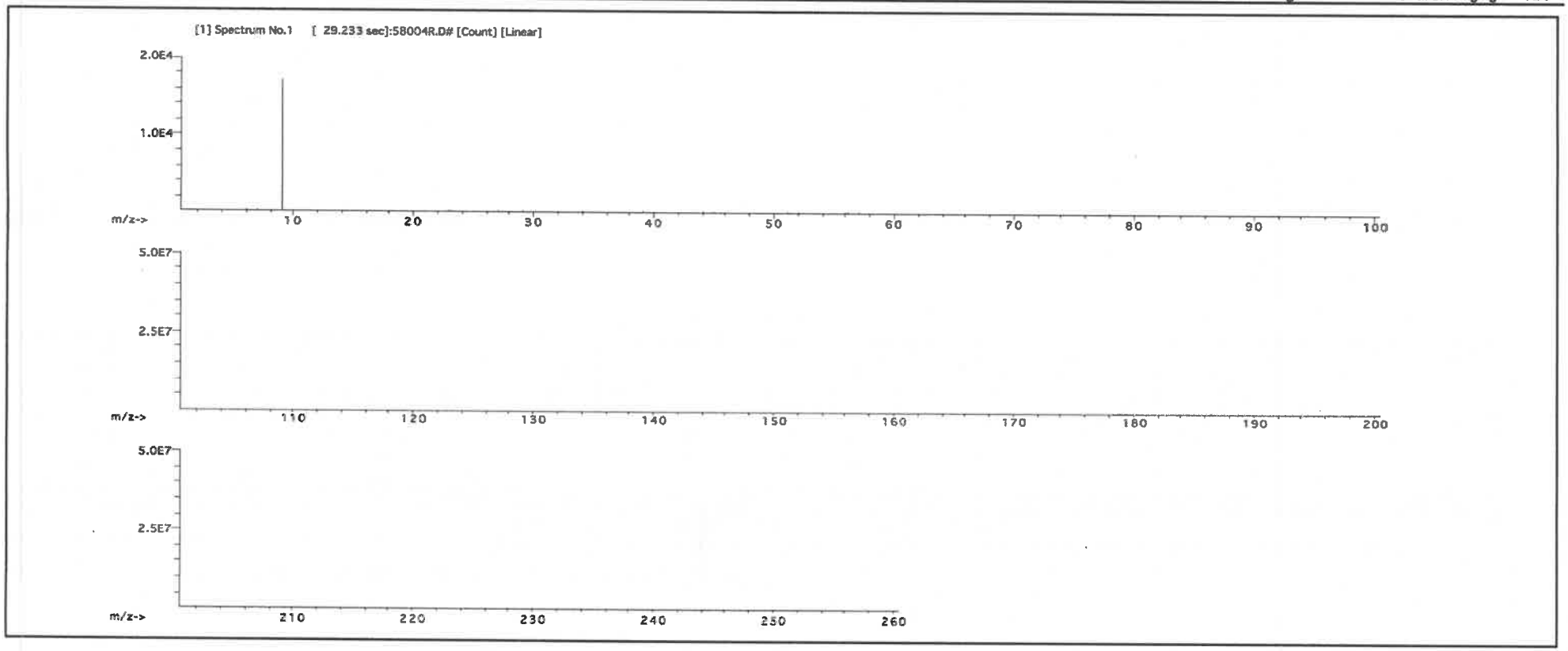
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57004**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Beryllium (Be)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-rat 3.16mg/kg	NA



A3657-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R? 02/09/24 IV15799 BA

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

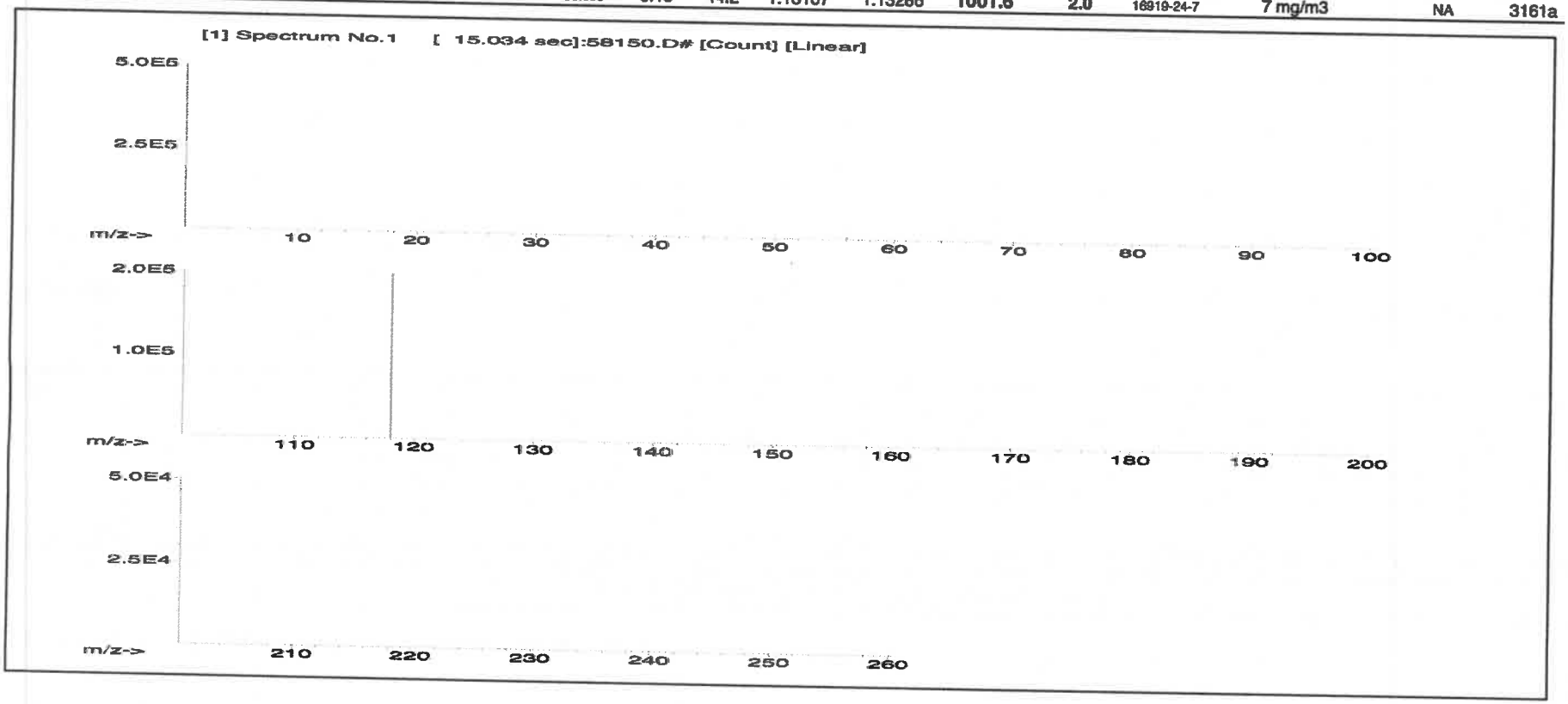
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	T	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 IM5800 BH

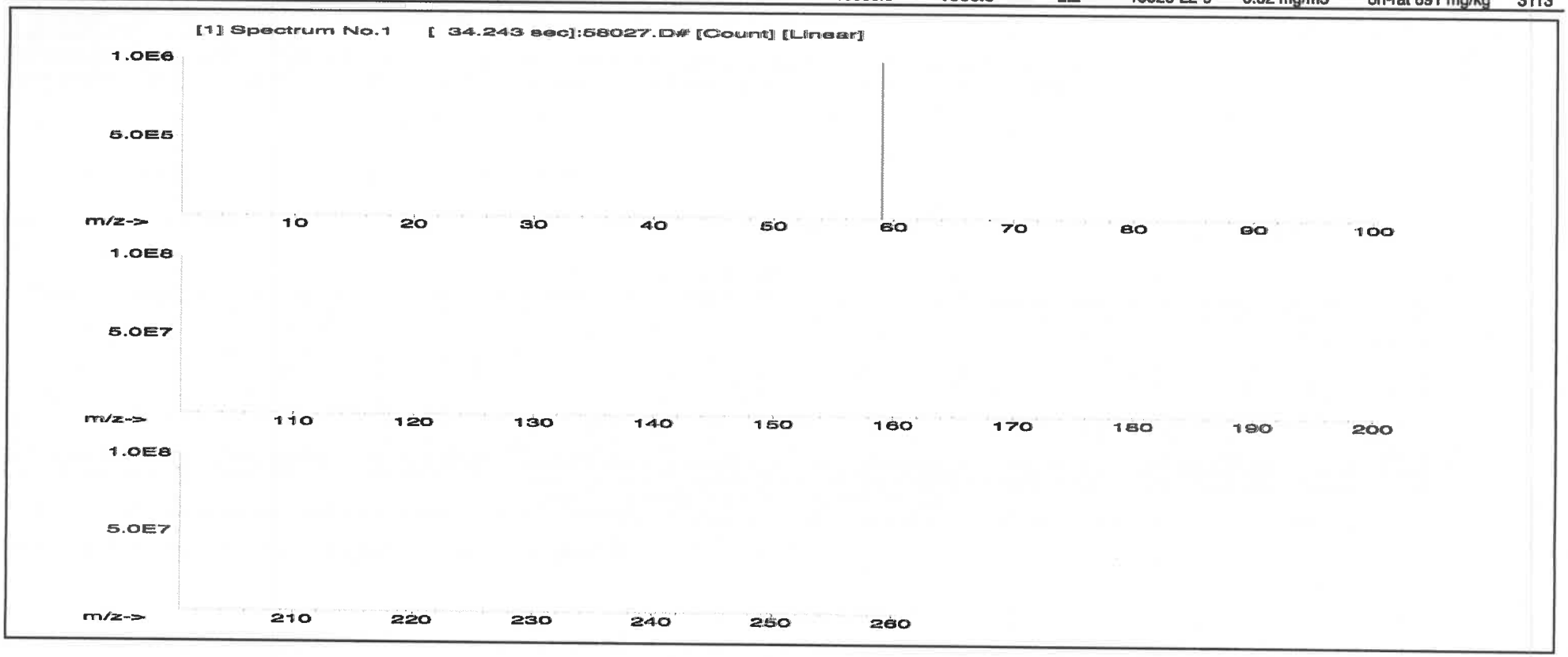
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	57027	24002546	Nitric Acid		
Lot Number:	091923				
Description:	Cobalt (Co)	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	1000				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	091923
Reviewed By:	Pedro L. Rentas	091923

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cobalt(II) nitrate hexahydrate (Co)	58127	050923	0.1000	200.0	0.084	1000	10000.0	**1000.0**	2.2	10026-22-9	0.02 mg/m3	orl-rat 691 mg/kg	3113



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Gé	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5801 BH

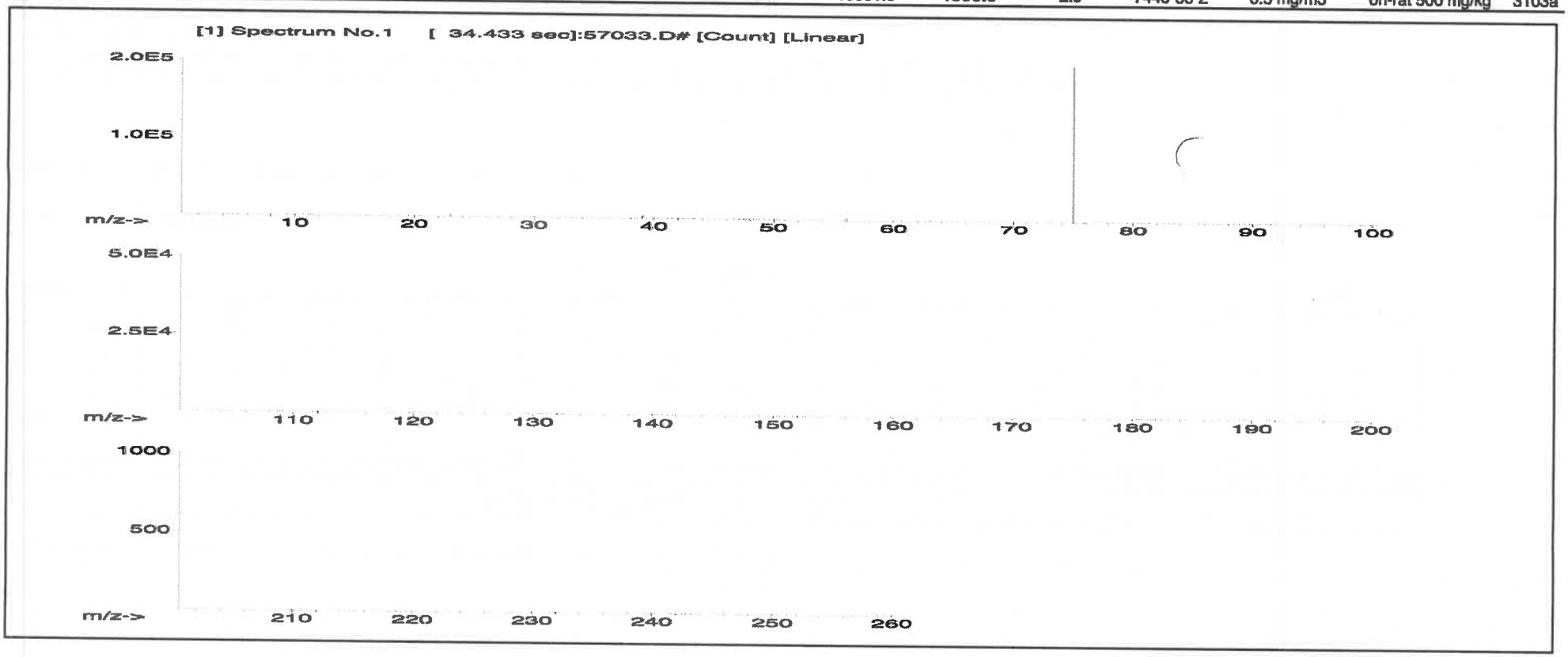
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**				
Lot Number:	**111323**	24002546	Nitric Acid		
Description:	**Arsenic (As)**				
		2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	**1000.0**	2.0	7440-38-2	0.5 mg/m3	orl-rat 500 mg/kg	3103a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R1 02/09/24. M58165

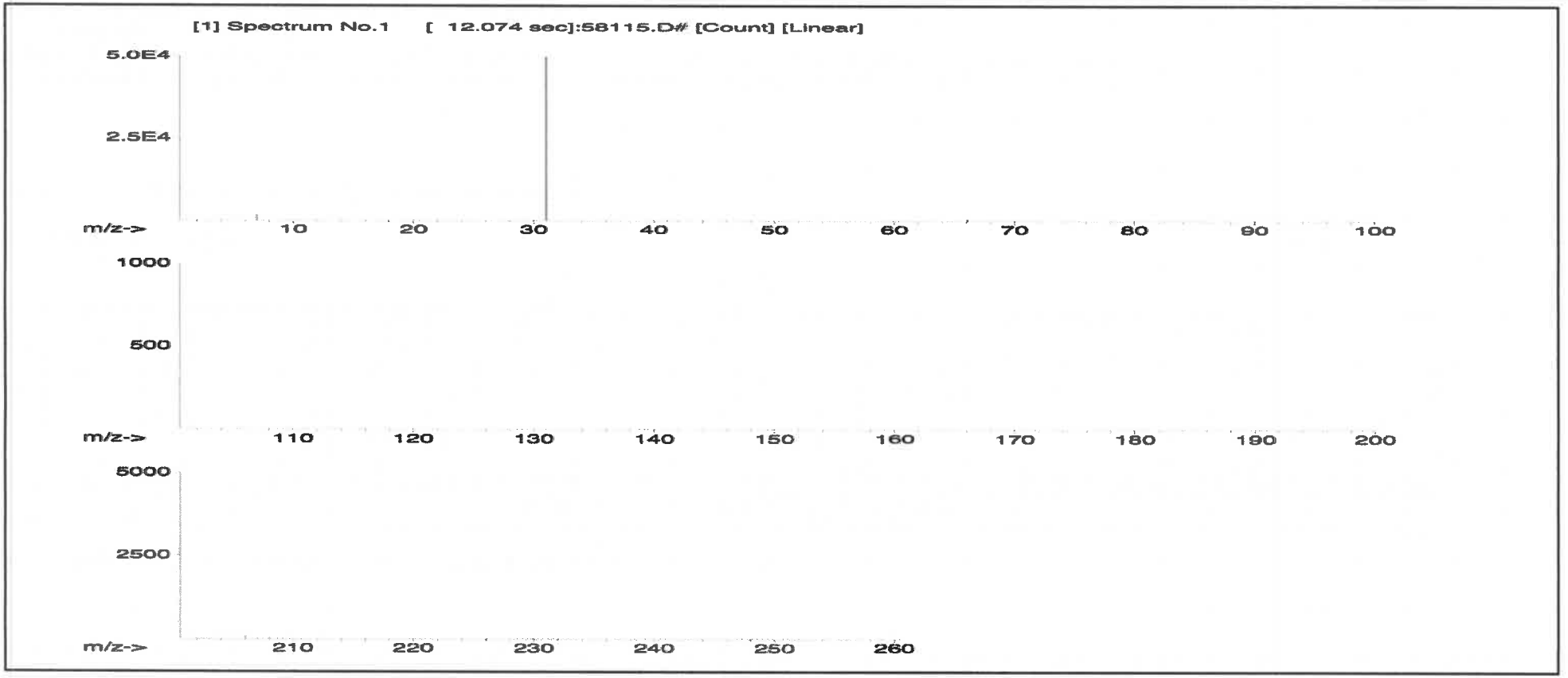
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57115**			**Lot #**	
Lot Number:	**041723**		**Solvent:**	21110221	Nitric Acid
Description:	**Phosphorous (P)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	041726				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	10000	99.999	0.10	27.5	72.7287	72.7289	**10000.0**	**20.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/kg	3186



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5817

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

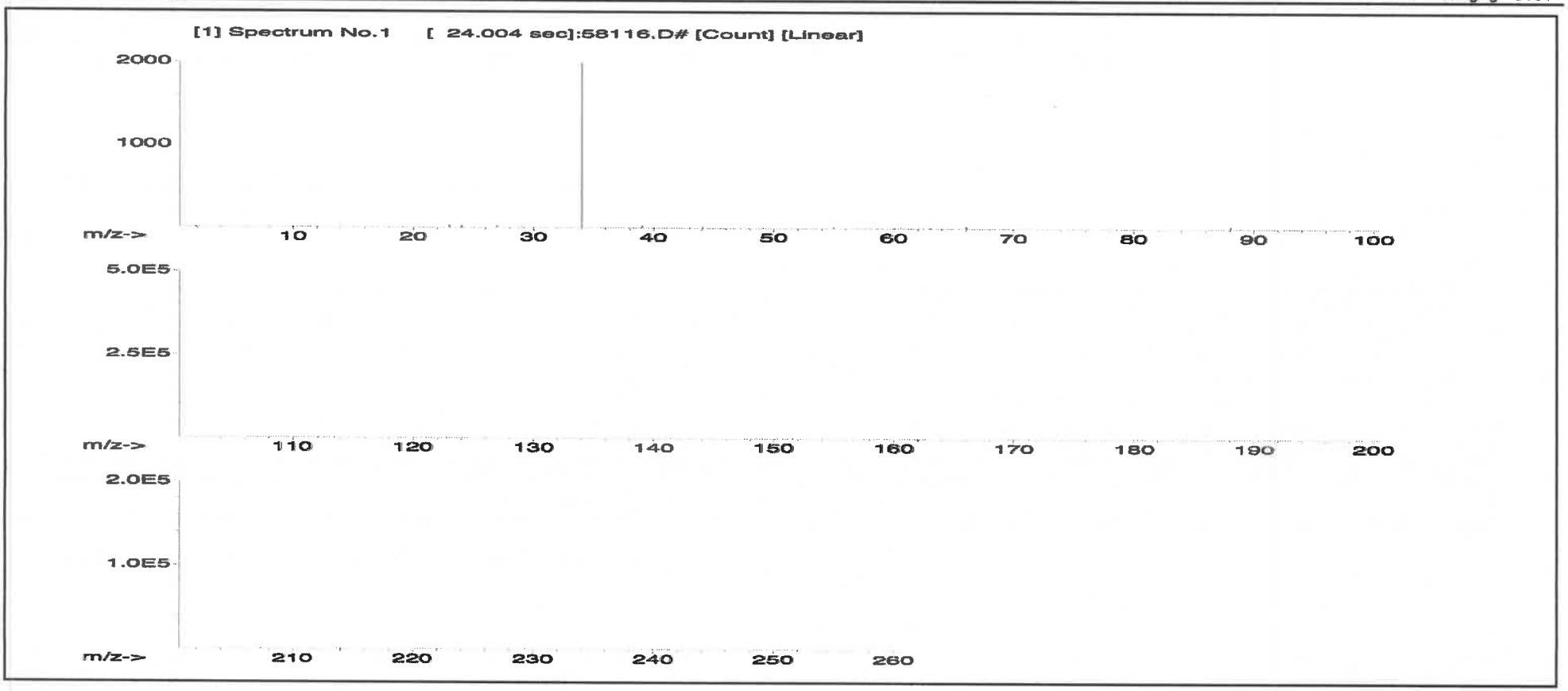
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Lot #
Solvent: 071123 ASTM Type 1 Water

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB 5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	orl-rat 4250mg/kg	3181



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M.5818

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57014
Lot Number: 122023
Description: Silicon (Si)

Expiration Date: 122026
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1999.48 ± 0.058 Flask Uncertainty

Solvent: 24002546 Nitric Acid

2% 40.0 (mL) Nitric Acid

5E-05 Balance Uncertainty

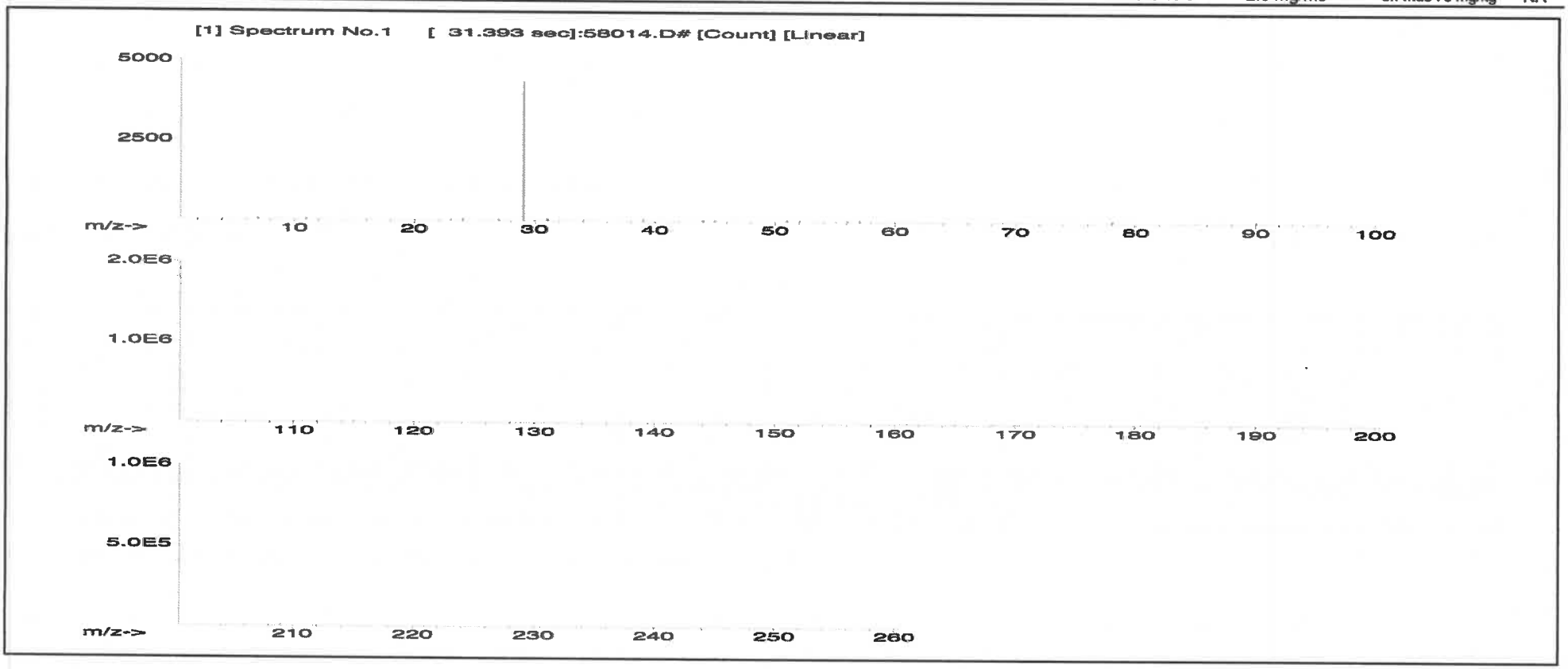
Aleah O'Brady

Formulated By:	Aleah O'Brady	122023

Pedro Rentas

Reviewed By:	Pedro L. Rentas	122023

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorosilicate (Si)	IN009	SID082022A1	1000	99.999	0.10	14.4	13.8854	13.8855	**1000.0**	**2.0**	16919-19-0	2.5 mg/m3	orl-mus 70 mg/kg	NA



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	T	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5819

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 111623
Description: Zinc (Zn)

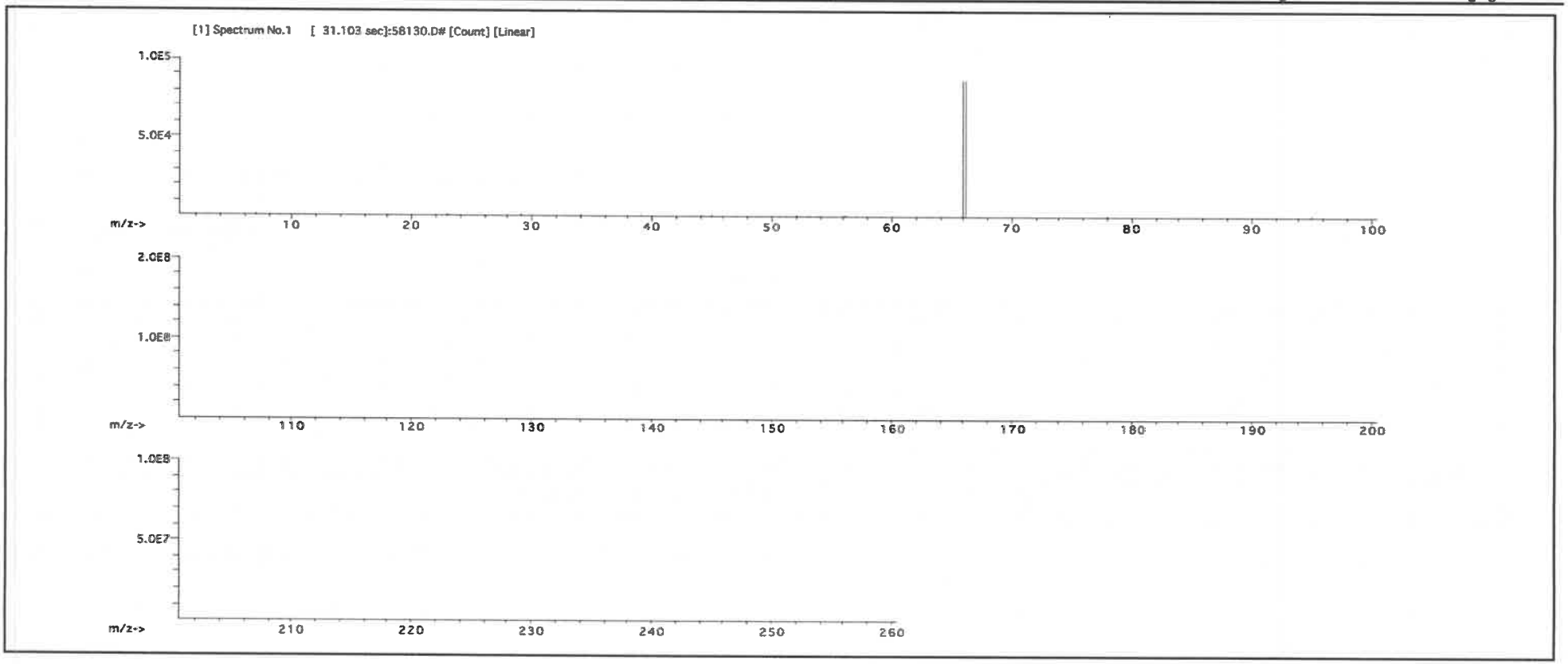
Expiration Date: 111626
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 3000.4 ± 0.06 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	

Formulated By:	Benson Chan	111623
Reviewed By:	Pedro L. Rentas	111623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	12.3475	12.3502	**1000.2**	**2.0**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	T
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

MTS28 - 32
MTS53
3/30/23

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5961 R: 6/11/24

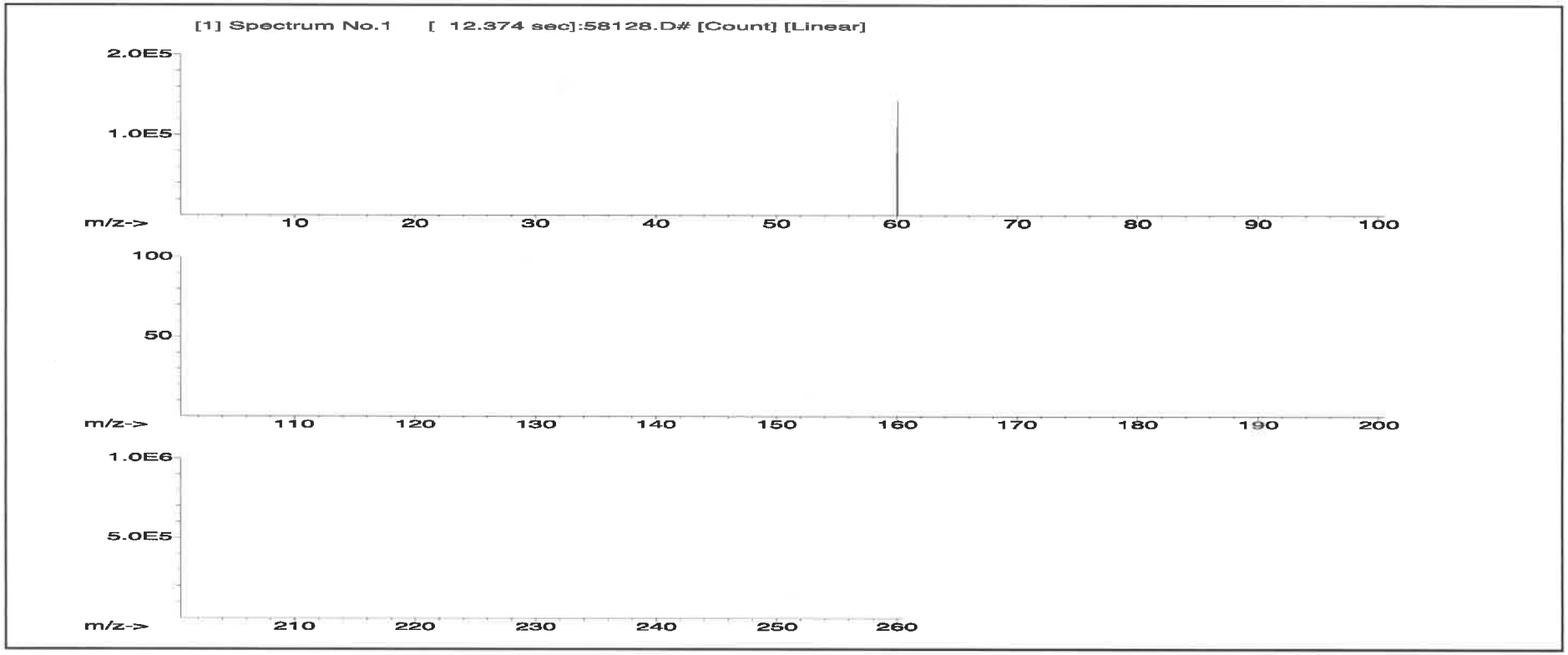
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57028**		**Lot #**		
Lot Number:	**041124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Nickel (Ni)**				
		2%	5.0 (mL)	Nitric Acid	
Expiration Date:	041127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	249.85	0.002	Flask Uncertainty		

Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	IN033	NIM052023A1	1000	99.999	0.10	20.2	1.2369	1.2369	**1000.0**	**2.0**	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5962 R! 06/14/24.

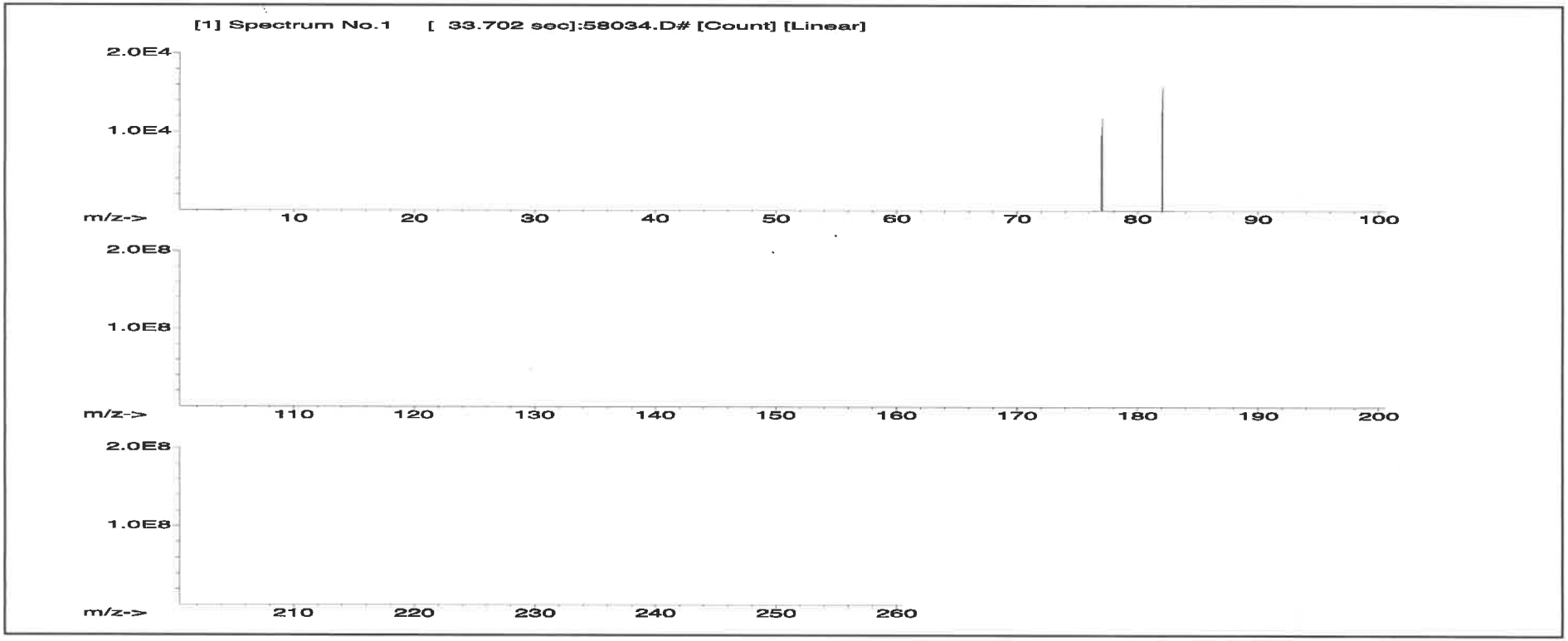
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium (Se)	58134	071223	0.1000	200.0	0.084	1000	10002.5	**1000.0**	**2.2**	7782-49-2	0.2 mg/m3	orl-rat 6700 mg/kg	3149



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	T	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

MS963 MS964 MS965
MS966 MS967 MS968

Material No.: 9606-03
Batch No.: 24B1362001
Manufactured Date: 2024-01-25
Retest Date: 2029-01-23
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.6 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	< 1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	< 0.2 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	3 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	1 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

M5976, M5977
R: 02/22/24

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO1
Lot Number:	T2-MO720876
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	1 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 7 µg/mL

Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ 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 (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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	<	0.000590	M	Eu	<	0.000300	M	Na		0.000879	M	Se	<	0.008000	M	Zn		0.000598
M	Al		0.000563	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.000175				
M	Ba		0.001689	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.006334	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Tl	<	0.032000				
M	Ce	<	0.008300	M	K		0.130213	M	Rb		0.004575	M	Tl		0.001266				
M	Co		0.000598	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.000527	O	Li		0.000059	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.000527	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.002252	M	Mg		0.000563	i	S	<		M	W		0.087982				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.001513	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

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**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br1 6O,190Os2+,190Pt 2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

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

July 17, 2022

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

11.2 Lot Expiration Date

- July 17, 2027

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



MS978, MS979

INORGANIC VENTURES

Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

R: 2/22/24

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 865.01 — ACCREDITED Reference Material Producer Certificate 865.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
Lot Number:	T2-TI719972
Matrix:	2% (v/v) HNO3 tr. HF
Value / Analyte(s):	1 000 µg/mL ea: Titanium
Starting Material:	TI Metal
Starting Material Lot#:	2094
Starting Material Purity:	99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL

Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **1002 ± 4 µg/mL**

ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

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, $X_{CRM/MM}$, 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 ($\pm$) = $U_{CRM/RM} = k\,(u^2_{Char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

$u_{Char} = [\Sigma(w_i)^2\,(u_{Char\ i})^2]^{½}$ 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

k = coverage factor = 2

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:

$$X_{CRM/RM} = (\Sigma x_a)\,(n_{Char\ a})$$

X_a = mean of Assay Method A with $n_{Char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{Char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

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**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

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

11.2 Lot Expiration Date

- June 17, 2027

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

H5981 R:6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57092**	24002546	Nitric Acid		
Lot Number:	**060724**				
Description:	**Uranium (U)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	060727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

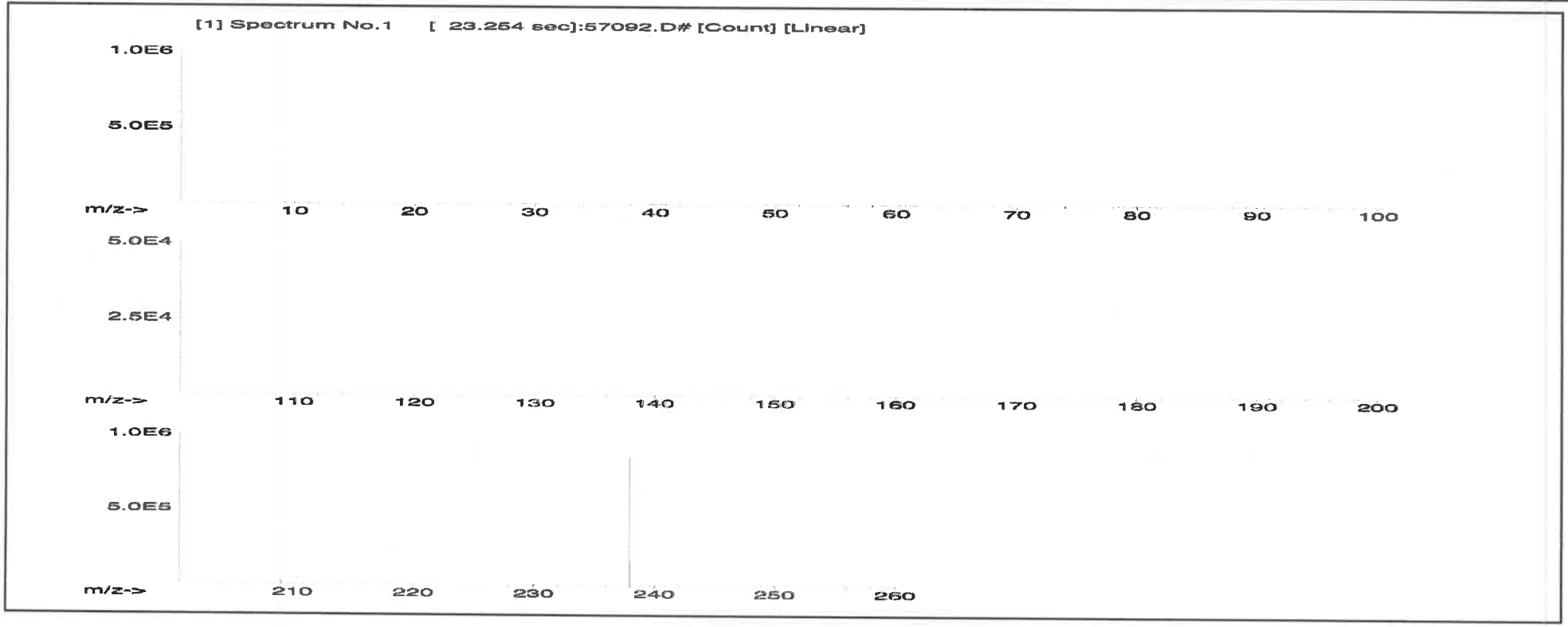
Giovanni Esposito

Formulated By:	Giovanni Esposito	060724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	060724

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Uranyl nitrate hexahydrate (U)	58192	041524	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13520-83-7	0.05 mg/m3	orl-rat 1040 mg/kg	3164



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	T
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Part # **57092** Lot # **060724**

Printed: 6/7/2024, 3:58:45 PM

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

45982 R: 6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57038
Lot Number: 031524
Description: Strontium (Sr)

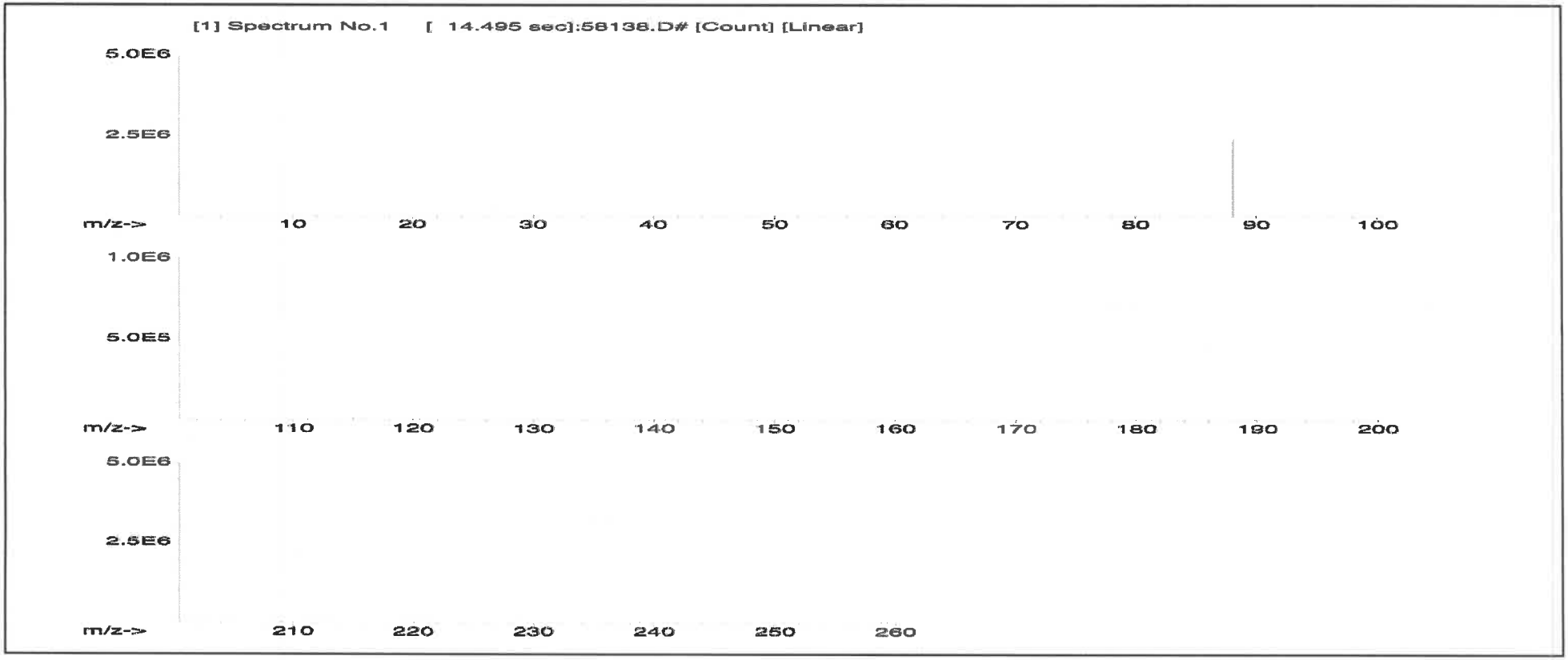
Expiration Date: 031527
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.07

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
5E-05	Balance Uncertainty		
0.100	Flask Uncertainty		

Formulated By: Benson Chan 031524

Reviewed By: Pedro L. Rentas 031524

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	1000	99.997	0.10	41.2	4.85470	4.85502	**1000.1**	**2.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



P-3657-METALS

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5983 R: 6/11/24

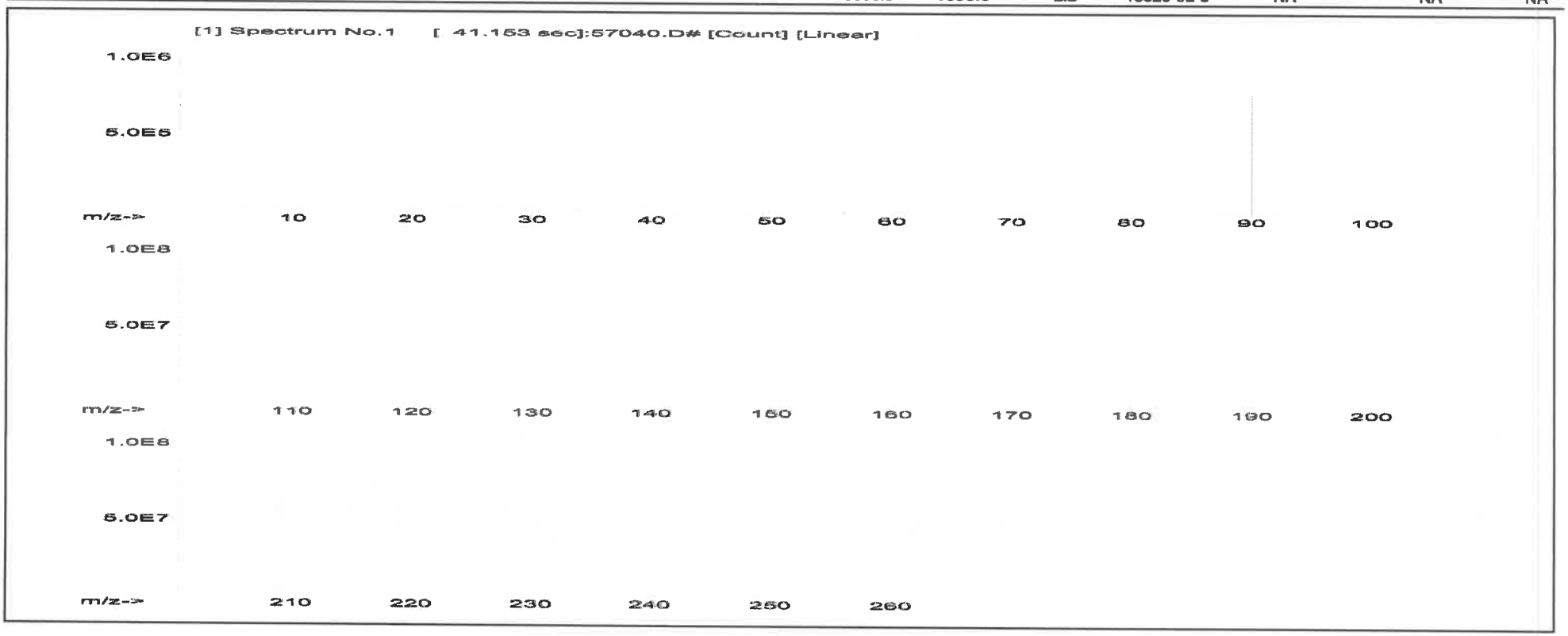
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57040**	21110221	Nitric Acid	
Lot Number:	**071423**			
Description:	**Zirconium (Zr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071426			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	071423
Reviewed By:	Pedro L. Rentas	071423

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zirconyl chloride octahydrate (Zr)	58140	070621	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	13520-92-8	NA	NA	NA



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	T

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M6033

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**58113**		**Solvent:**	20510011	Nitric Acid
Lot Number:	**011623**				
Description:	**Aluminum (Al)**		2%	40.0 (mL)	Nitric Acid
Expiration Date:	011626				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

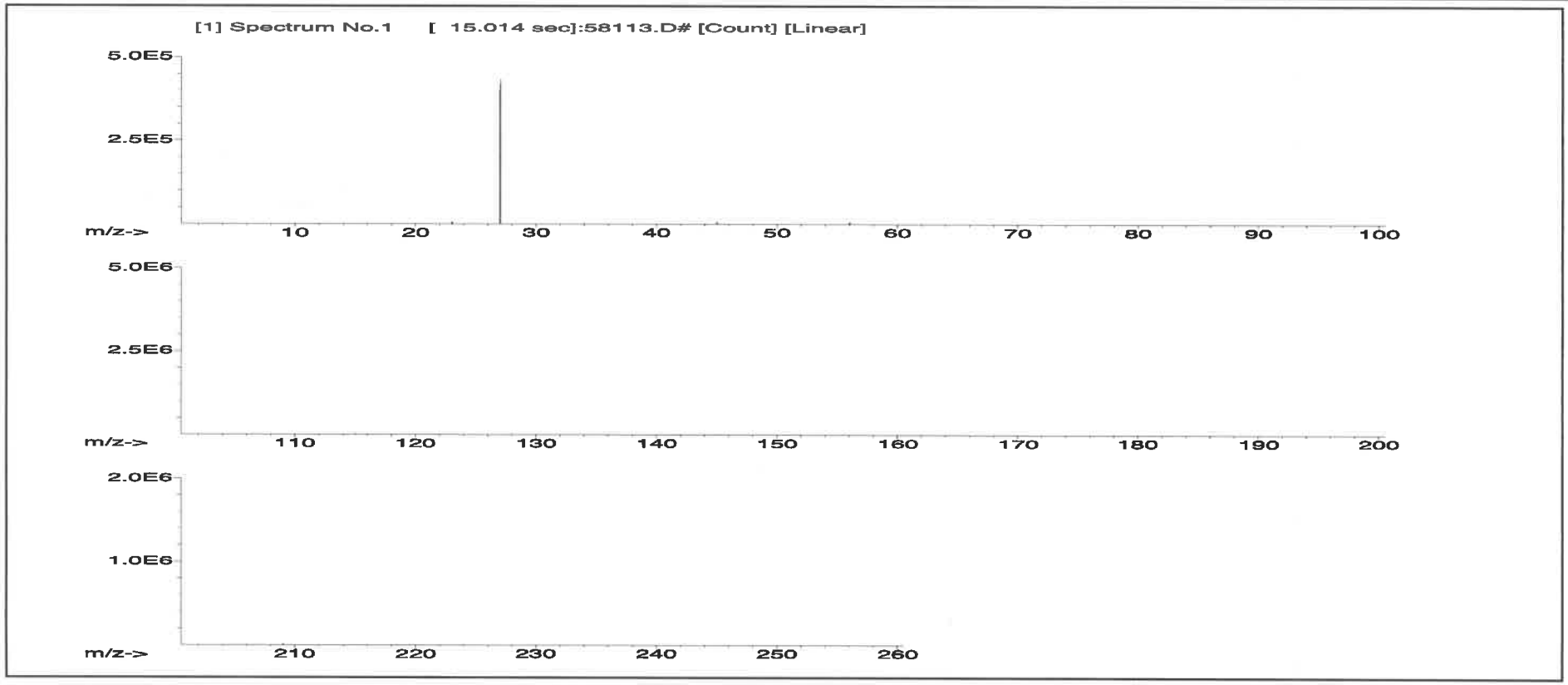
Giovanni Esposito

Formulated By:	Giovanni Esposito	011623

Pedro Rentas

Reviewed By:	Pedro L. Rentas	011623

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Aluminum nitrate nonahydrate (Al)	IN022	ALM112021A1	10000	99.999	0.10	7.30	273.9779	274.0078	**10001.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



Nitric Acid 69%
CMOS

Recv date: 1.1.—08/01/2023

M6034, M6037
M6035, M6038,
M6036,

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Nitric Acid 69%
CMOS

Recv date: 1.1.—08/01/2023

M6034, M6037
M6035, M6038,
M6036,

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Received — 08/01/2024
paper
M6039
M6040

Material No.: 9530-33
Batch No.: 24D1562005
Manufactured Date: 2024-03-18
Retest Date: 2029-03-17
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6 %
ACS - Color (APHA)	≤ 10	5
ACS - Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.192
ACS - Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS - Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS - Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities - Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities - Aluminum (Al)	≤ 10.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities - Barium (Ba)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 20.0 ppb	2.2 ppb
Trace Impurities - Cadmium (Cd)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	31.0 ppb
Trace Impurities - Chromium (Cr)	≤ 1.0 ppb	0.5 ppb
Trace Impurities - Cobalt (Co)	≤ 1.0 ppb	0.2 ppb
Trace Impurities - Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities - Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities - Gold (Au)	≤ 4.0 ppb	< 0.2 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities - Iron (Fe)	≤ 15 ppb	3 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 24D1562005

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.2 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	0.2 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 1.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.0 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	< 0.9 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.4 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	< 0.1 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 24D1562005

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

R 18/19/24, M60055

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	IV-STOCK-12
Lot Number:	U2-MEB734294
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 µg/mL ea:

Barium, Beryllium,
Bismuth, Cerium,
Cobalt, Indium,
Lithium, Nickel,
Lead, Uranium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Barium, Ba	10.01 ± 0.04 µg/mL	Beryllium, Be	10.01 ± 0.05 µg/mL
Bismuth, Bi	10.01 ± 0.06 µg/mL	Cerium, Ce	10.01 ± 0.04 µg/mL
Cobalt, Co	10.01 ± 0.05 µg/mL	Indium, In	10.01 ± 0.04 µg/mL
Lead, Pb	10.00 ± 0.04 µg/mL	Lithium, Li	10.01 ± 0.04 µg/mL
Nickel, Ni	10.01 ± 0.04 µg/mL	Uranium, U	10.01 ± 0.05 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Bi	ICP Assay	3106	180815
Ce	ICP Assay	3110	160830
Ce	EDTA	928	928
Ce	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
In	ICP Assay	3124a	110516
In	EDTA	928	928
In	Calculated		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Calculated		See Sec. 4.2
Li	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
U	ICP Assay	traceable to 3164	R2-U689597
U	Calculated		See Sec. 4.2

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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ 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 (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

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

June 21, 2023

- 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

- June 21, 2028

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M5806, M5807

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 122223
Description: Sodium (Na)

Expiration Date: 122226
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 3000.4 | 0.06 Flask Uncertainty

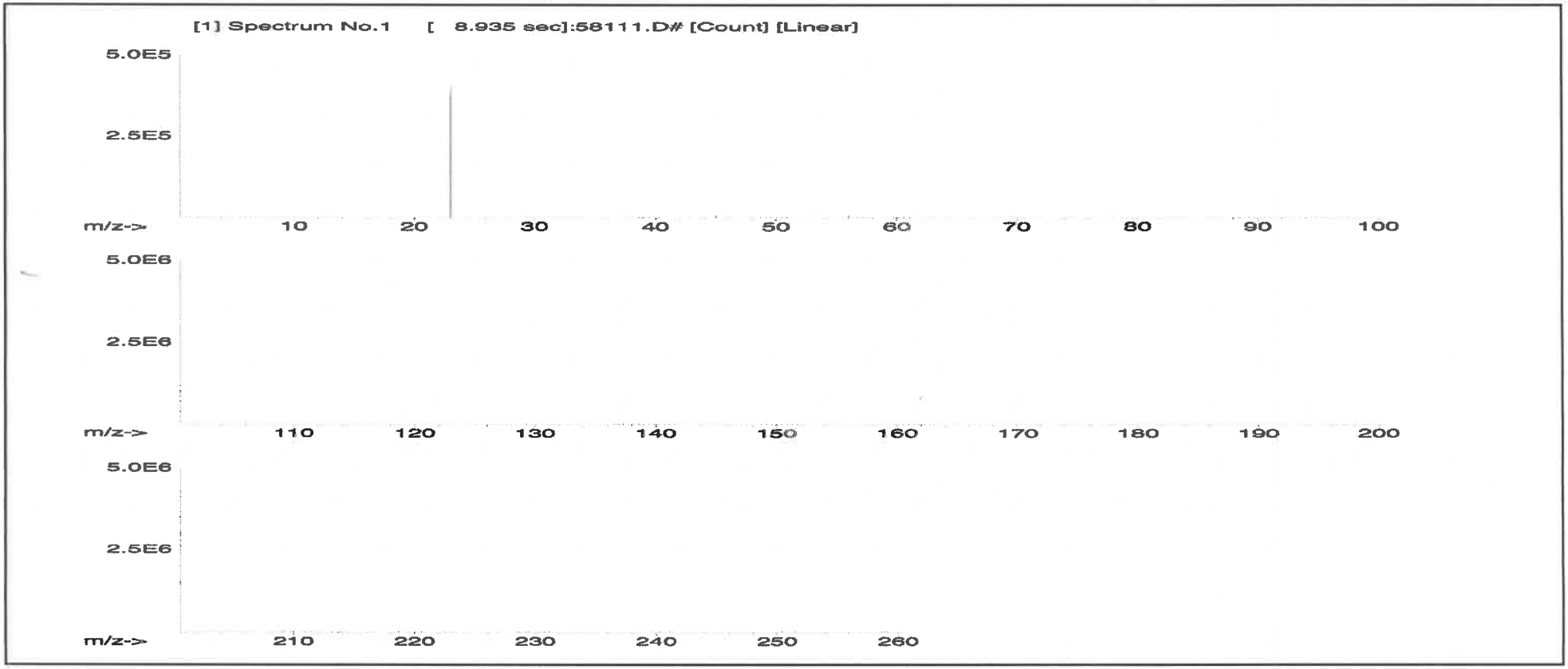
	Lot #	
Solvent:	24002546	Nitric Acid
2%	60.0 (mL)	Nitric Acid
	5E-05	Balance Uncertainty

Aleah O'Brady

Formulated By: Aleah O'Brady 122223

Reviewed By: Pedro L. Rentas 122223

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	111.5406	111.5479	**10000.7**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™

Refine your results. Redefine your industry.

A: 4/11/22

Certificate of Analysis

M5738, M5739, M5740, M5741, M5742, M5743

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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

1.0 ACCREDITATION / REGISTRATION

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

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	6020ISS
Lot Number:	S2-MEB709511
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 µg/mL ea:

Bismuth, Holmium,
Indium, 6-Lithium,
Rhodium, Scandium,
Terbium, Yttrium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
6-Lithium, Li6	10.00 ± 0.03 µg/mL	Bismuth, Bi	10.00 ± 0.05 µg/mL
Holmium, Ho	10.00 ± 0.05 µg/mL	Indium, In	10.00 ± 0.04 µg/mL
Rhodium, Rh	10.00 ± 0.07 µg/mL	Scandium, Sc	10.00 ± 0.04 µg/mL
Terbium, Tb	10.00 ± 0.04 µg/mL	Yttrium, Y	10.00 ± 0.04 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Bi	ICP Assay	3106	180815
Bi	Calculated		See Sec. 4.2
Ho	ICP Assay	3123a	090408
Ho	EDTA	928	928
In	ICP Assay	3124a	110516
In	EDTA	928	928
In	Calculated		See Sec. 4.2
Li6	Gravimetric		See Sec. 4.2
Rh	ICP Assay	3144	070619
Sc	ICP Assay	3148a	100701
Sc	EDTA	928	928
Tb	ICP Assay	3157a	100518
Tb	EDTA	928	928
Tb	Calculated		See Sec. 4.2
Y	ICP Assay	3167a	120314
Y	EDTA	928	928
Y	Calculated		See Sec. 4.2

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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ 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 (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Lithium Li6	95.6 ± 0.3
Lithium Li7	4.4 ± 0.1

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

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

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

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

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

8.0 HAZARDOUS INFORMATION

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

9.0 HOMOGENEITY

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 03, 2021

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

11.2 Lot Expiration Date

- September 03, 2026

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

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

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

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

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of an Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix**. For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to the Contracting Officer, Ross Miller at miller.ross@epa.gov. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-0803, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this ICSAB solution by ICP-MS.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803

ICSA: M5873

ICSB: M5874

Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.
The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (ICSA WITH ICSB)

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of an Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix**. For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to the Contracting Officer, Ross Miller at miller.ross@epa.gov. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS OF SAMPLES*

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-0803, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this ICSAB solution by ICP-MS.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803

ICSA: M5873

ICSB: M5874

Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.
The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 01/03/24 M5802, M5803

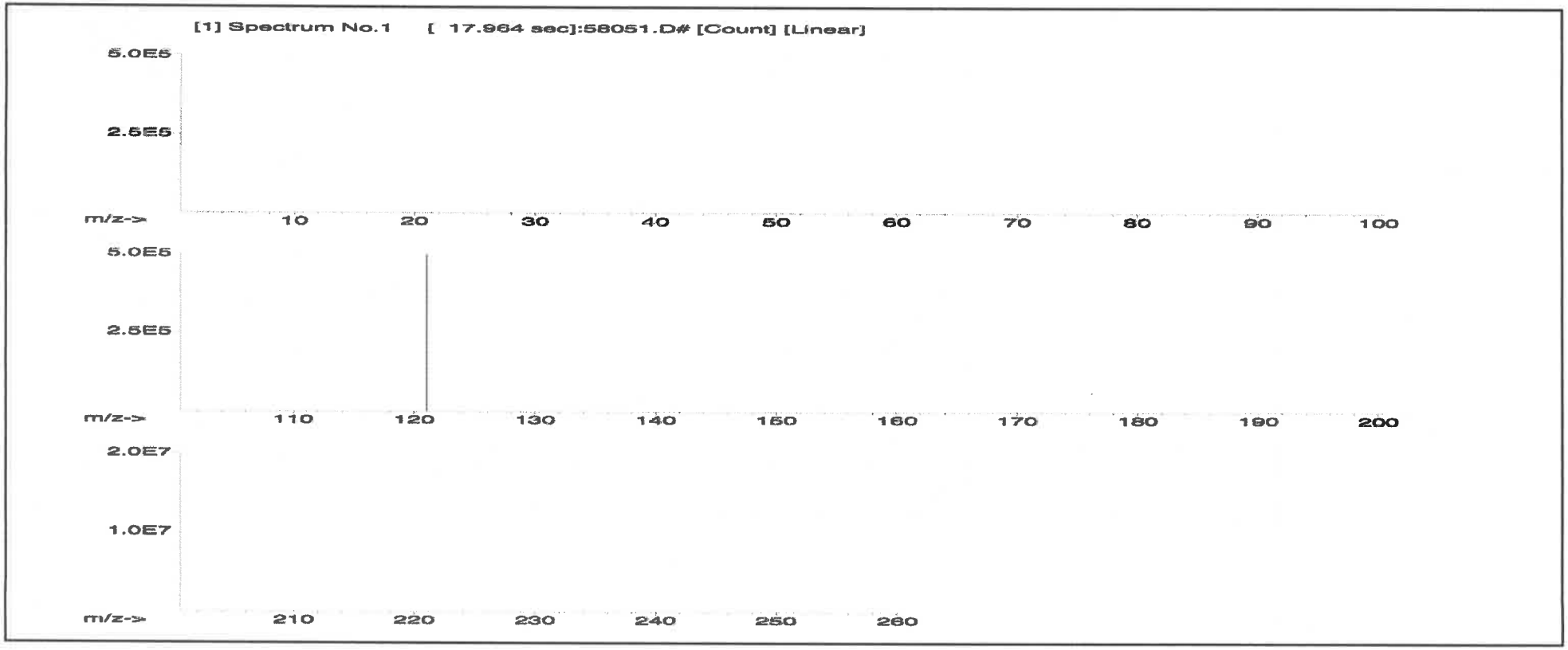
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57051**	24002546	Nitric Acid	
Lot Number:	**120523**			
Description:	**Antimony (Sb)**			
		2.0%	60.0 (mL)	Nitric Acid
Expiration Date:	120526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	120523
Reviewed By:	Pedro L. Rentas	120523

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Antimony (Sb)	58151	100923	0.1000	300.0	0.084	1000	10001.4	**1000.0**	2.1	7440-36-0	0.5 mg/m3	orl-rat 7000 mg/kg	3102a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6030

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57047
Lot Number: 122823
Description: Silver (Ag)

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

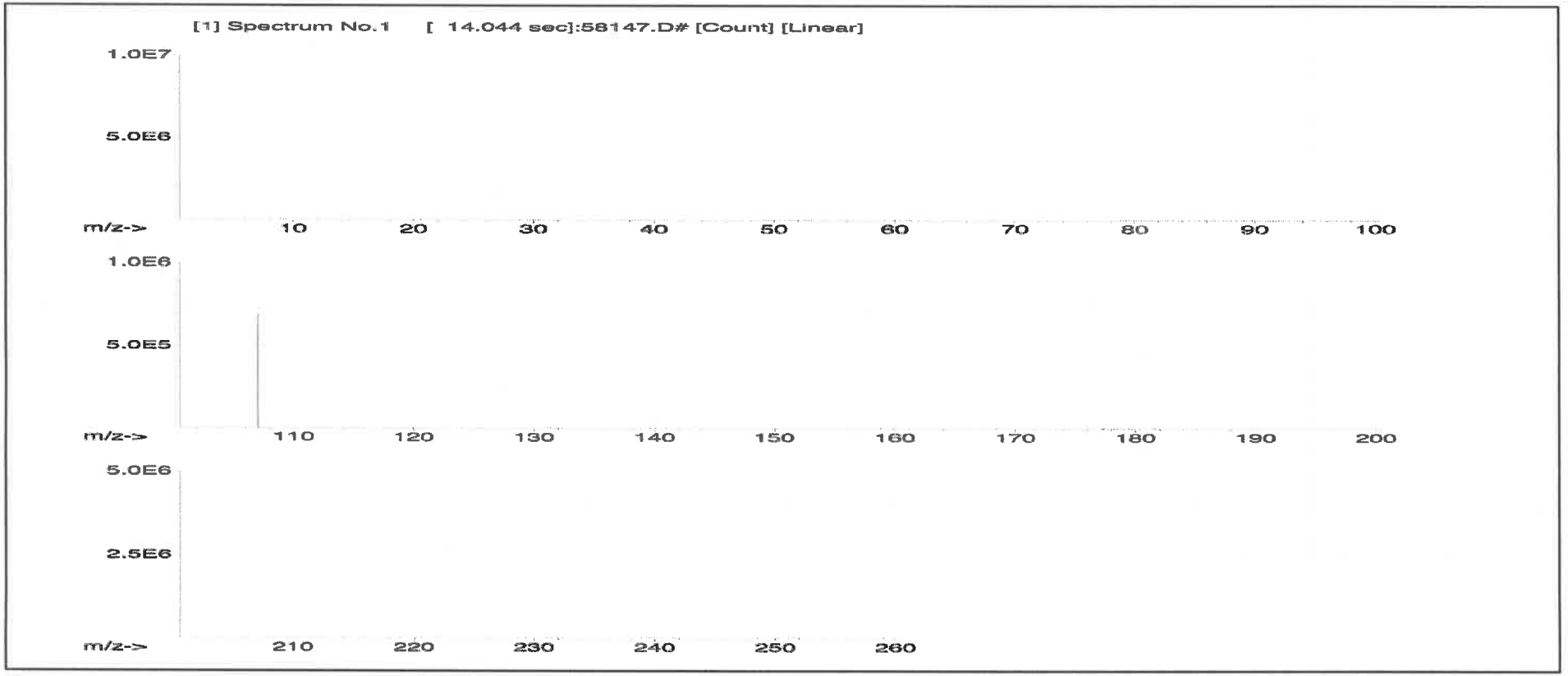
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 03/16/23 M5473, M5474, M5475, M5476

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

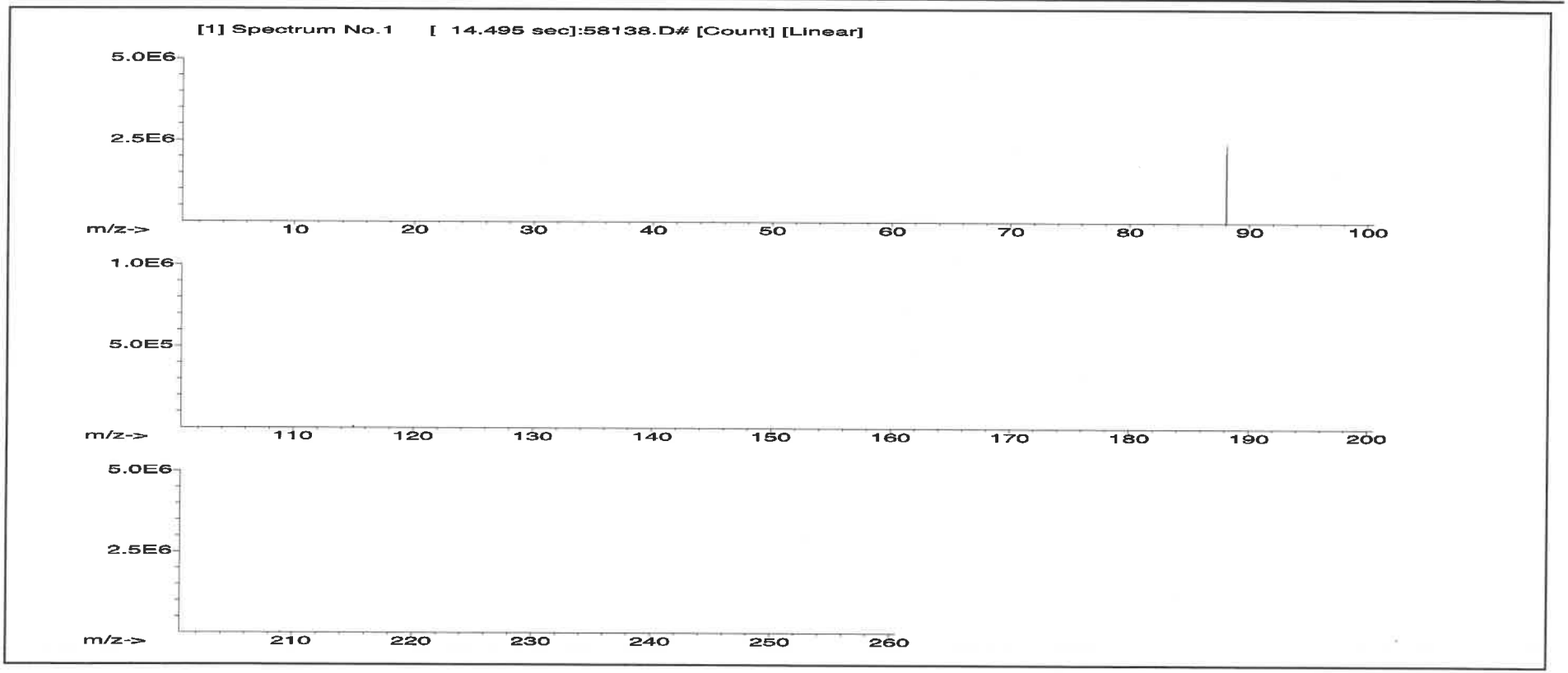
Part Number: 56138
Lot Number: 082922
Description: Strontium (Sr)

Expiration Date: 082925
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	082922
Reviewed By:	Pedro L. Rentas	082922

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Strontium nitrate (Sr)	IN017	SRZ022018A1	10000	99.997	0.10	41.2	24.2756	24.2758	**10000.1**	**20.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	T	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6023

B ! 8/5/24

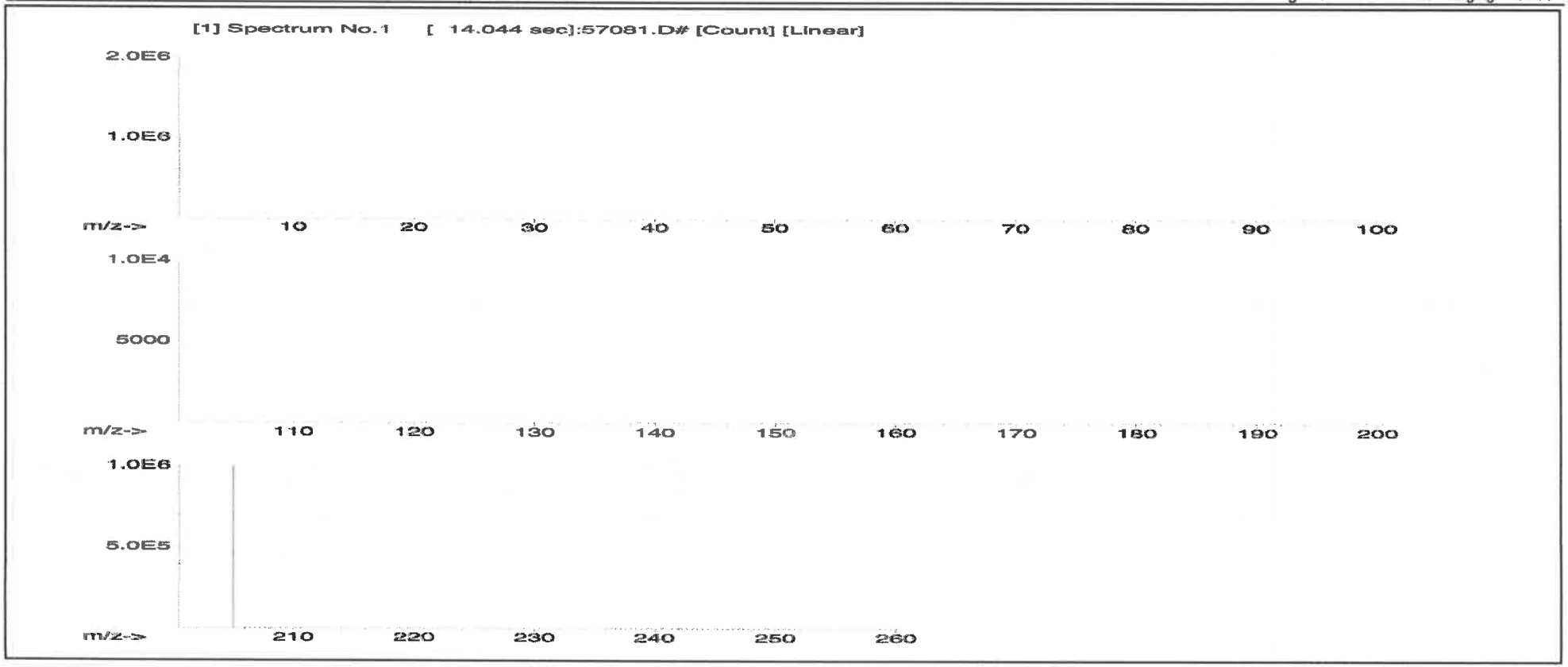
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57081**		**Lot #**		
Lot Number:	**062724**	**Solvent:**	24002546	Nitric Acid	
Description:	**Thallium (Tl)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	062727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.1	0.10	Flask Uncertainty		

Aleah O'Brady		
Formulated By:	Aleah O'Brady	062724
Reviewed By:	Pedro L. Rentas	062724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM
M5545,M5546,M5547,M5548 RD:05/08/2023

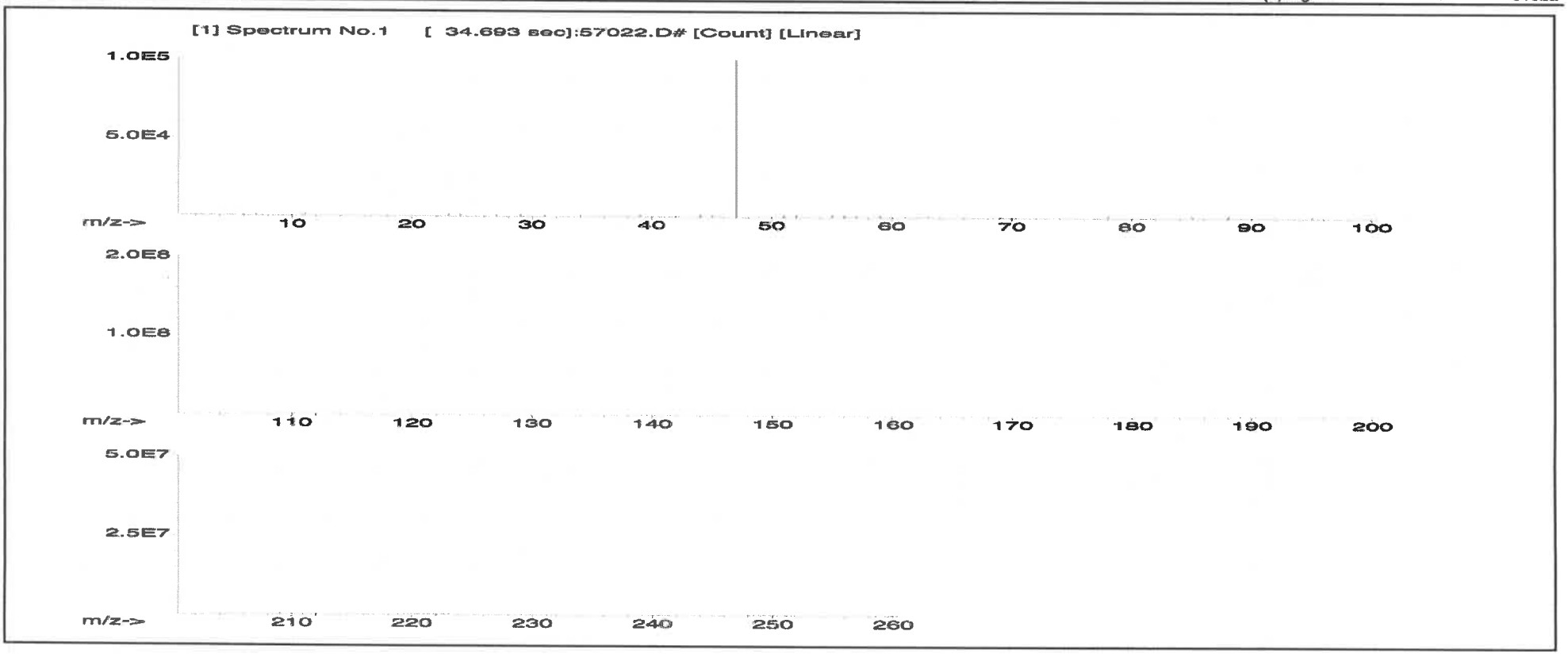
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57022**	21110221	Nitric Acid	
Lot Number:	**050223**			
Description:	**Titanium (Ti)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	050226			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry 050223
Reviewed By:	Pedro L. Rentas 050223

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorotitanate (Ti)	58122	071122	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	16962-40-6	2.5 (F) mg/m3	NA	3162a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	T	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. P3657
QUOTE NO.
COC Number 2041316

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 412 Mt Kemble Ave Suite H100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Yuhanta
PHONE: (281) 414-1719 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC
PROJECT NO.: D3779922 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: (201) 936-0586 FAX:

CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Standard TAT DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☒ Level 3 (Results + QC + Raw Data)
- ☐ EDD FORMAT
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced ☐ US EPA CLP
- ☐ NYS ASP A ☐ NYS ASP B
- ☐ Other

ANALYSIS

1 VOCs 8260D
2 SVOCs - 8270E; PAHs - 8270E SIM
3 Metals 6020B, Hg 7473
4 Cr(VI) 7196A
5 Siw 3060A
6
7
8
9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								A/E	E	B/E	E						← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
1.	917-J-WS-081624	WS		X	8-16-24	0930	8	2	4	1	1						
2.	TB-01-081624	DI		X	8-16-24	1055	1	1									TB is unpreserved!
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	8-16-24 1245	1.
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☒ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP 2-4 °C
Comments: See attached table for the required analytes list

Page 1 of 1

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☒ Picked Up ☐ Field Sampling

Shipment Complete ☒ YES ☐ NO

Copyright © 2023

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

Table 3. Surface Water Target Analytes, Methods, Action Levels, and Control Limits

Site Sampling Plan for Ecological Evaluation

Princeton Technology Center, West Windsor Township, New Jersey

Method	Analyte	CAS Number	Units	Higher of PQL and Ground Water Quality Criterion[a]	Fresh Surface Water Chronic NJDEP Ecological Criterion[b]
ECO-SVOCs					
SW8270E	1,4-Dioxane	123-91-1	µg/L	0.4	--
SW8270E	1-Methylnaphthalene	90-12-0	µg/L	--	
SW8270E	2,4,5-Trichlorophenol	95-95-4	µg/L	700	
SW8270E	2,4,6-Trichlorophenol	88-06-2	µg/L	20	
SW8270E	2,4-Dinitrotoluene	121-14-2	µg/L	10	
SW8270E	2-Methylnaphthalene	91-57-6	µg/L	30	
SW8270E	2-Methylphenol	95-48-7	µg/L	--	
SW8270E	3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	µg/L	--	
SW8270E	Acenaphthene	83-32-9	µg/L	400	
SW8270E	Acenaphthylene	208-96-8	µg/L	--	
SW8270E	Anthracene	120-12-7	µg/L	2000	
SW8270E	Benzaldehyde	100-52-7	µg/L	--	
SW8270E	Benzo(a)anthracene	56-55-3	µg/L	--	
SW8270E	Benzo(a)pyrene	50-32-8	µg/L	0.1	
SW8270E	Benzo(b)fluoranthene	205-99-2	µg/L	0.5	
SW8270E	Benzo(g,h,i)perylene	191-24-2	µg/L	--	
SW8270E	Benzo(k)fluoranthene	207-08-9	µg/L	0.5	
SW8270E	Bis (2-ethylhexyl) phthalate	117-81-7	µg/L	--	
SW8270E	Carbazole	86-74-8	µg/L	--	
SW8270E	Chrysene	218-01-9	µg/L	5	
SW8270E	Dibenzo(a,h)anthracene	53-70-3	µg/L	0.3	
SW8270E	Dibenzofuran	132-64-9	µg/L	--	
SW8270E	Di-N-Butylphthalate	84-74-2	µg/L	--	
SW8270E	Fluoranthene	206-44-0	µg/L	300	
SW8270E	Fluorene	86-73-7	µg/L	300	
SW8270E	Hexachlorobenzene	118-74-1	µg/L	0.02	
SW8270E	Hexachlorobutadiene	87-68-3	µg/L	1	
SW8270E	Hexachloroethane	67-72-1	µg/L	7	
SW8270E	Indeno(1,2,3-Cd)Pyrene	193-39-5	µg/L	0.2	
SW8270E	Naphthalene	91-20-3	µg/L	300	
SW8270E	Nitrobenzene	98-95-3	µg/L	6	
SW8270E	Pentachlorophenol	87-86-5	µg/L	0.3	
SW8270E	Phenanthrene	85-01-8	µg/L	--	
SW8270E	Pyrene	129-00-0	µg/L	200	
SW8270E	Pyridine	110-86-1	µg/L	--	
ECO-VOCs					
SW8260D	1,1,1-Trichloroethane	71-55-6	µg/L	30	76

Table 3. Surface Water Target Analytes, Methods, Action Levels, and Control Limits

Site Sampling Plan for Ecological Evaluation

Princeton Technology Center, West Windsor Township, New Jersey

Method	Analyte	CAS Number	Units	Higher of PQL and Ground Water Quality Criterion[a]	Fresh Surface Water Chronic NJDEP Ecological Criterion[b]
SW8260D	1,1,2-Trichloroethane	79-00-5	µg/L	3	500
SW8260D	1,1-Dichloroethane	75-34-3	µg/L	50	--
SW8260D	1,1-Dichloroethene	75-35-4	µg/L	1	65
SW8260D	1,2-Dichlorobenzene	95-50-1	µg/L	600	14
SW8260D	1,2-Dichloroethane	107-06-2	µg/L	2	910
SW8260D	1,2-Dichloroethene (Total)	540-59-0	µg/L		
SW8260D	1,4-Dichlorobenzene	106-46-7	µg/L	75	9.4
SW8260D	2-Butanone	78-93-3	µg/L	300	--
SW8260D	Acetone	67-64-1	µg/L	6000	--
SW8260D	Benzene	71-43-2	µg/L	1	114
SW8260D	Bromodichloromethane	75-27-4	µg/L	1	--
SW8260D	Bromomethane	74-83-9	µg/L	10	--
SW8260D	Carbon disulfide	75-15-0	µg/L	700	--
SW8260D	Carbon tetrachloride	56-23-5	µg/L	1	240
SW8260D	Chlorobenzene	108-90-7	µg/L	50	47
SW8260D	Chloroethane	75-00-3	µg/L	--	--
SW8260D	Chloroform	67-66-3	µg/L	70	140
SW8260D	Chloromethane	74-87-3	µg/L	--	--
SW8260D	cis-1,2-Dichloroethene	156-59-2	µg/L	70	--
SW8260D	Cyclohexane	110-82-7	µg/L	--	--
SW8260D	Dibromochloromethane	124-48-1	µg/L	1	--
SW8260D	Dichlorodifluoromethane	75-71-8	µg/L	1000	--
SW8260D	Ethylbenzene	100-41-4	µg/L	700	14
SW8260D	Freon TF	76-13-1	µg/L	20000	--
SW8260D	Isopropylbenzene	98-82-8	µg/L	700	--
SW8260D	m&p-Xylene	179601-23-1	µg/L	1000	27
SW8260D	Methylcyclohexane	108-87-2	µg/L	--	--
SW8260D	Methylene Chloride	75-09-2	µg/L	3	940
SW8260D	MTBE	1634-04-4	µg/L	70	51000
SW8260D	o-Xylene	95-47-6	µg/L	1000	27
SW8260D	Tetrachloroethene	127-18-4	µg/L	1	45
SW8260D	Toluene	108-88-3	µg/L	600	253
SW8260D	trans-1,2-Dichloroethene	156-60-5	µg/L	100	970
SW8260D	Trichloroethene	79-01-6	µg/L	1	47
SW8260D	Vinyl chloride	75-01-4	µg/L	1	930
SW8260D	Xylenes, Total	1330-20-7	µg/L		
ECO-PAHs					
SW8270E SIM	1,4-Dioxane	123-91-1	µg/L	0.4	--

Table 3. Surface Water Target Analytes, Methods, Action Levels, and Control Limits

Site Sampling Plan for Ecological Evaluation

Princeton Technology Center, West Windsor Township, New Jersey

Method	Analyte	CAS Number	Units	Higher of PQL and Ground Water Quality Criterion[a]	Fresh Surface Water Chronic NJDEP Ecological Criterion[b]
SW8270E SIM	2-Methylnaphthalene	91-57-6	µg/L	30	330
SW8270E SIM	Acenaphthene	83-32-9	µg/L	400	38
SW8270E SIM	Acenaphthylene	208-96-8	µg/L	--	4840
SW8270E SIM	Anthracene	120-12-7	µg/L	2000	0.035
SW8270E SIM	Benzo(a)anthracene	56-55-3	µg/L	0.1	0.025
SW8270E SIM	Benzo(a)pyrene	50-32-8	µg/L	0.1	0.014
SW8270E SIM	Benzo(b)fluoroanthene	205-99-2	µg/L	0.2	9.07
SW8270E SIM	Benzo(g,h,i)perylene	191-24-2	µg/L	--	7.64
SW8270E SIM	Benzo(k)fluoroanthene	207-08-9	µg/L	0.5	--
SW8270E SIM	Chrysene	218-01-9	µg/L	5	--
SW8270E SIM	Dibenz(a,h)anthracene	53-70-3	µg/L	0.3	--
SW8270E SIM	Fluoroanthene	206-44-0	µg/L	300	1.9
SW8270E SIM	Fluorene	86-73-7	µg/L	300	19
SW8270E SIM	Indeno[1,2,3-cd]pyrene	193-39-5	µg/L	0.2	4.31
SW8270E SIM	Naphthalene	91-20-3	µg/L	300	13
SW8270E SIM	Phenanthrene	85-01-8	µg/L	--	3.6
SW8270E SIM	Pyrene	129-00-0	µg/L	200	0.3
ECO-Metals					
SW3060A/7196A	Hexavalent Chromium	18540-29-9	µg/L	--	10
SW7470A	Mercury	7439-97-6	µg/L	2	0.77
SW6020B	Aluminum	7429-90-5	µg/L	--	--
SW6020B	Antimony	7440-36-0	µg/L	6	80
SW6020B	Arsenic	7440-38-2	µg/L	3	150
SW6020B	Barium	7440-39-3	µg/L	6000	220
SW6020B	Beryllium	7440-41-7	µg/L	1	3.6
SW6020B	Cadmium	7440-43-9	µg/L	4	--
SW6020B	Calcium	7440-70-2	µg/L	--	--
SW6020B	Chromium	7440-47-3	µg/L	--	42
SW6020B	Cobalt	7440-48-4	µg/L	100	24
SW6020B	Copper	7440-50-8	µg/L	1300	--
SW6020B	Iron	7439-89-6	µg/L	--	--
SW6020B	Lead	7439-92-1	µg/L	5	5.4
SW6020B	Magnesium	7439-95-4	µg/L	--	--
SW6020B	Manganese	7439-96-5	µg/L	--	--
SW6020B	Nickel	7440-02-0	µg/L	100	--
SW6020B	Potassium	7440-09-7	µg/L	--	--
SW6020B	Selenium	7782-49-2	µg/L	40	5
EPA 200.7	Silica	7631-86-9	µg/L	--	--

Table 3. Surface Water Target Analytes, Methods, Action Levels, and Control Limits

Site Sampling Plan for Ecological Evaluation

Princeton Technology Center, West Windsor Township, New Jersey

Method	Analyte	CAS Number	Units	Higher of PQL and Ground Water Quality Criterion[a]	Fresh Surface Water Chronic NJDEP Ecological Criterion[b]
SW6020B	Silver	7440-22-4	µg/L	40	**0.12**
SW6020B	Sodium	7440-23-5	µg/L	--	--
SW6020B	Thallium	7440-28-0	µg/L	--	10
SW6020B	Vanadium	7440-62-2	µg/L	--	12
SW6020B	Zinc	7440-66-6	µg/L	2000	--

Notes:

[a] New Jersey Department of Environmental Protection (NJDEP) Ground Water Quality Standards - Class IIA by Constituent. May 2021. New Jersey Administration Code 7:9C-1.4: Remediation Standards.

[b] NJDEP Ground Water Quality Standards - Class IIA by Constituent. May 2021. New Jersey Administration Code 7:9C-1.4: Remediation Standards. NJDEP Ecological Surface Water SSLs. March 2009.

Bold = MDL and RL exceed screening criteria.

-- = not available (no standard)

µg/L = microgram(s) per liter

CAS = Chemical Abstracts Service

Freon TF = 1,1,2-Trichloro-1,2,2-trifluoroethane

MDL = method detection limit

MTBE = methyl tert butyl ether

NJDEP = New Jersey Department of Environmental Protection

PAH = polycyclic aromatic hydrocarbon

PQL = Practical Quantitation Level as defined in N.J.A.C. 7:9C-1.4

RL = reporting limit

SIM = selected ion method

SVOC = semivolatile organic compound

VOC = volatile organic compound

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P3657 JACO05
Client Name : JACOBS Engineering Grou
Client Contact : Mary I. Murphy
Invoice Name : JACOBS Engineering Grou
Invoice Contact : Mary I. Murphy

Order Date : 8/16/2024 2:45:00 PM
Project Name : Former Schlumberger Site I
Receive DateTime : 8/16/2024 ~~12:00:00 AM~~ 12:45
Purchase Order :

Project Mgr :
Report Type : Level 4
EDD Type : CH2MHILL
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P3657-01	~~717~~-J-WS-O81624 917	Water	08/16/2024	09:30					
					VOCMS Group6		8260-Low		10 Bus. Days
P3657-02	TB-01-081624	Water	08/16/2024	10:55					
					VOCMS Group6		8260-Low		10 Bus. Days

Relinguished By : JM
Date / Time : 08-16-24 1524

Received By : Sam
Date / Time : 8/16/24 15:24 Cooler 4

Storage Area : VOA Refridgerator Room